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Product Overview 2009/2010

SYSTEM AND CONNECTION TECHNOLOGY



SYSTEM AND CONNECTION TECHNOLOGY

Product Overview 2009/2010

SANHA®

Application overview

| Pipe material no Application | Drinking water | Rain water | Purified water | Heating water | Solar systems thermal | Steam condensate | Open cooling water systems |
|---|---------------------------|---------------------------|---------------------------|---------------------------|-------------------------|------------------|----------------------------|
| NiroSan® 1.4404 AISI 316 L | NiroSan®-Press | NiroSan®-Press | NiroSan®-Press | NiroSan®-Press | NiroSan®-Press Industry | NiroSan®-Press | NiroSan®-Press |
| NiroSan®-F 1.4521 AISI 443/444 | NiroSan®-Press | NiroSan®-Press | NiroSan®-Press | NiroSan®-Press | NiroSan®-Press Industry | NiroSan®-Press | NiroSan®-Press |
| NiroSan®-ECO 1.4404 AISI 316 L | NiroSan®-Press | NiroSan®-Press | NiroSan®-Press | NiroSan®-Press | NiroSan®-Press Industry | NiroSan®-Press | NiroSan®-Press |
| NiroTherm® 1.4301 AISI 304 | | NiroSan®-Press | | NiroSan®-Press | NiroSan®-Press Industry | NiroSan®-Press | NiroSan®-Press |
| SANHA®-Therm Carbon steel 1.0034 | | | | SANHA®-Therm | SANHA®-Press Solar | | |
| Copper pipe DIN EN 1057/DVGW-GW 392 | SANHA®-Press | SANHA®-Press | SANHA®-Press | SANHA®-Press | SANHA®-Press Solar | SANHA®-Press | SANHA®-Press |
| MultiFit®-Flex PE-RT Al PE-HD | 3fit®-Press 3fit®-Push | 3fit®-Press 3fit®-Push | 3fit®-Press 3fit®-Push | 3fit®-Press 3fit®-Push | | | 3fit®-Press 3fit®-Push |



recommended



on demand only



not suitable

| Closed cooling water systems | Fire sprinklers | Natural gas plants | Liquid gas plants | Fuel oil plants | Shipbuilding plants | Industrial applications | Compressed air units | Technical gases |
|------------------------------|-------------------------|--------------------|--------------------|-------------------------|---------------------|---------------------------|---------------------------|---------------------------|
| NiroSan®-Press | NiroSan®-Press Industry | NiroSan®-Press Gas | NiroSan®-Press Gas | NiroSan®-Press Industry | NiroSan®-Press | NiroSan®-Press Industry | NiroSan®-Press Industry | NiroSan®-Press |
| NiroSan®-Press | NiroSan®-Press Industry | | | NiroSan®-Press Industry | NiroSan®-Press | NiroSan®-Press Industry | NiroSan®-Press Industry | NiroSan®-Press |
| NiroSan®-Press | | | | NiroSan®-Press Industry | NiroSan®-Press | NiroSan®-Press Industry | NiroSan®-Press Industry | NiroSan®-Press |
| NiroSan®-Press | | | | NiroSan®-Press Industry | NiroSan®-Press | NiroSan®-Press Industry | NiroSan®-Press Industry | NiroSan®-Press |
| SANHA®-Therm | | | | | | | SANHA®-Therm | |
| SANHA®-Press | | SANHA®-Press Gas | SANHA®-Press Gas | SANHA®-Press Gas | | SANHA®-Press | SANHA®-Press Solar | SANHA®-Press Gas |
| 3fit®-Press 3fit®-Push | | | | | | 3fit®-Press 3fit®-Push | 3fit®-Press 3fit®-Push | 3fit®-Press 3fit®-Push |

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TECHNICAL SUPPORT

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1.1. Press connection




In the press fitting technology, a form-fitting connection is manufactured by common radial deformation of fittings and pipe. An additionally inserted ring gasket made of elastic polymer ensures the sealing function against leaks of the conducted medium

The special features of both the SANHA press fittings of copper and copper alloys and the NiroSan® press systems of stainless steel are the construction and manufacture of the socket couplings. They enable reliable processing and

ensure a permanently sealed connection. With both systems, the main feature in the development was that all pressing jaws employed for press connections, Type M-MM (mechanical connector of metal for metal pipes) and pressing tools can be approved. This applies in particular from the viewpoint of security. For the craftsman this means that there is no loss of the system guarantee due to a change of the pressing jaws in case of utilization of SANHA products - which is different from products by other manufacturers.



1.1. NiroSan® press fitting system

Quick reference guide to NiroSan® press fitting system of stainless steel, Material No. 1.4404

| Field of application | Dim./Nominal pressure | Seal | Tool |
|--|--|---|--|
| NiroSan®-Press* (Series 9000) – Drinking water – Processed water – Heating system – Cooling water – Condensate – Utility and rain water | d = 15 – 22 mm PN 40 d = 28 – 35 mm PN 25 d = 42 – 108 mm PN 16 | EPDM Color: black Max. continuous temp.: -30°C up to 120°C (short time up to 150°C) Requirements according to KTW satisfied | d = 15 – 54 mm Free selection of pressing tools and jaws and/or slings (see chapter 1.7) d = 76.1 – 108 mm ECO 3/ECO 301 (see chapter 1.7) |
| NiroSan®-Press Gas (Series 17000) – Flammable gases according to DVGW G 260 and G 262 | d = 15 – 108 mm PN 5 / GT 5 Underground laying not admissible  | HNBR Color: yellow Max. continuous temp.: -20°C to 70°C Requirements according to DVGW VP 614 satisfied | d = 15 – 54 mm Free selection of pressing tools and jaws and/or slings (see chapter 1.7) d = 76.1 – 108 mm ECO 3/ECO 301 (see chapter 1.7) |
| NiroSan®-Press Industry* (Series 18000) – Compressed air – Solar thermal power – Cooling water – Bulk goods – Applications in industry | d = 15 – 22 mm PN 40 d = 28 – 35 mm PN 25 d = 42 – 108 mm PN 16  | Special sealing ring Color: red Max. continuous temp.: -20°C to 200°C (according to medium) Solar thermal power up to 200°C (short time up to 280°C) Resistant against oils and water-glycol mixture | d = 15 – 54 mm Free selection of pressing tools and jaws and/or slings (see chapter 1.7) d = 76.1 – 108 mm ECO 3/ECO 301 (see chapter 1.7) |
| NiroSan®-Press SF* (Series 19000) – Applications, which must be free of paint-wetting disturbing substances (automobile industry, paint industry, paint work, aircraft industry, etc.) | d = 15 – 22 mm PN 40 d = 28 – 35 mm PN 25 d = 42 – 108 mm PN 16  | Special sealing ring Max. continuous temp.: -20°C to 200°C (according to medium) Solar thermal power to 200°C (short time up to 280°C) Resistant against oils and water-glycol mixture | d = 15 – 54 mm Free selection of pressing tools and jaws and/or slings (see chapter 1.7) d = 76.1 – 108 mm ECO 3/ECO 301 (see chapter 1.7) |
| Materials: Fittings from pipe: Threaded fittings: Stainless steel parts: Pipes: Pipe inside surface: | Material No.: 1.4404 according to EN 10088 Material No.: 1.4571 according to EN 10088 Material No.: 1.4408 according to EN 10283 Material No.: 1.4404 according to EN 10088 Pipe dimensions according to EN 10312 and DVGW-GW 541 bright-annealed and solution-heat-treated, strength limited in upper values according to EN 10312, free of harmful component parts and according to the special requirements of GW DVGW-Code of Practice 541 | | |

1.2. SANHA® press fittings of copper and copper alloys

Quick reference guide to SANHA press fittings of copper and copper alloys

| Field of application | Dim./Nominal pressure | Seal | Tool |
|--|--|---|--|
| SANHA®-Press (Series 6000/8000) – Drinking water – Heating system – Cooling water – Utility and rain water | d = 12 – 108 mm PN 16 Fittings without additional colored exterior identification | EPDM Max. continuous temp.: -30°C up to 120°C (short time up to 150°C) Requirements according to KTW satisfied | d = 12 – 54 mm selection of pressing tools and jaws and/or slings (see chapter 1.7) d = 64 – 108 mm ECO 3/ ECO 301 (see chapter 1.7) |
| SANHA®-Press Gas (Series 10000/11000) – Flammable gases according to G DVGW 260 | d = 12 – 54 mm PN 5 / GT 5 Soil transfer not admissible  | HNBR Color: yellow Max. continuous temp.: -20°C up to 70°C Requirements met to DVGW VP in 614 satisfied | d = 12 – 54 mm free selection of pressing tools and jaws and/or slings (see chapter 1.7) |
| SANHA®-Press Solar (Series 12000/13000) – Solar thermal power – Cooling water – Compressed air – Applications in industry | d = 12 – 54 mm PN 16  | Special sealing ring colour :red Max. continuous temp.: -20 °C bis 200 °C (depends on medium) Solar thermal power up to 200 °C (short time up to 280 °C) Resistant against oils and water-glycol mixture | d = 12 – 54 mm free selection of pressing tools and jaws and/or slings (see chapter 1.7) |
| Materials: Copperfittings: Fittings of copper alloys: Pipes: | Material No.: CW024A (Cu-DHP) according to EN 1254 Material No.: CC491 (CuSn5Zn5Pb5-C) according to EN 1282 with restrictions in accordance with DIN 50930-6 Material No.: CW024A (Cu-DHP) according to EN 1057 (See table in Chapter 1.5 "Approved copper pipes") | | |

Outer diameters and wall thicknesses correspond to EN 1057, Table 3

| D (mm) | S (mm) | | | | | | | | | | |
|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 0,6 | 0,7 | 0,8 | 0,9 | 1,0 | 1,1 | 1,2 | 1,5 | 2,0 | 2,5 | 3,0 |
| 12 | X | X | X | | X | | | | | | |
| 14 | | X | X | | X | | | | | | |
| 15 | | X | X | | X | | X | X | | | |
| 16 | | | X | | X | | X | | | | |
| 18 | | | X | | X | | X | X | | | |
| 22 | | | | X | X | X | X | X | | | |
| 28 | | | | X | X | | X | X | | | |
| 35 | | | | | X | X | X | X | X | | |
| 42 | | | | | (1) | (1) | X | X | | | |
| 54 | | | | | | (1) | X | X | | | |
| 64 | | | | | | | | X | | | |
| 66,7 | | | | | | | | X | | | |
| 76,1 | | | | | | | | X | X | X | |
| 88,9 | | | | | | | | | X | X | X |
| 108 | | | | | | | (2) | (2) | X | X | X |

(1) Only with pressing jaws and slings, whose pressing tracks are cleaned and lubricated.

(2) Only with "Copper only" press sling (SANHA® Type No.: 16934)

1.3. NiroTherm® press system


Quick reference guide NiroTherm® press systems of rustproof steel (not suitable for drinking water)

| Field of application | Dim./Nominal pressure | Seal | Tool |
|---|---|--|---|
| NiroTherm®* – Heating system – Cooling water – Condensate – Compressed air – Industry | d = 15 – 22 mm PN 40 d = 28 – 35 mm PN 25 d = 42 – 108 mm PN 16 Provide pipes with red longitudinal strip | EPDM Color: black Max. continuous temp -30°C to 120°C (short-term to 150°C) | d = 12 – 54 mm free selection of presses and jaws and/or loops (see chapter 1.7) d = 64 – 108 mm ECO 3/ECO 301 (see chapter 1.7) |
| Materials: Fittings from pipe: Threaded fitting's: Stainless steel parts: Pipes: Pipe inside surface: | Material No.: 1.4404 according to EN 10088 Material No.: 1.4571 according to EN 10088 Material No.: 1.4408 according to EN 10283 Material-No.: 1.4301 according to EN 10088, pipe dimensions according to EN 10312 Clean and solution-heat-treated, strength limited to upper value, Marked with red longitudinal stripe and (among other things) the labeling heating, compressed air According to EN 10312, free from harmful component parts | | |

The NiroTherm® system pipe can also be connected directly with the SANHA Therm® press fittings.

1.4. SANHA Therm pressing systems

Quick reference guide NiroTherm® pressing systems of unalloyed steel and SANHA Therm® press fittings (not suitable for drinking water)

| Field of application | Dim./Nominal pressure | Seal | Tool |
|--|--|---|--|
| SANHA®-Therm – Heating system – Cooling water – Compressed air (dry) – Industry | d = 15 – 108 mm PN 16  | EPDM Color: black Max. continuous temp -30°C to 120°C (short-term up to 150°C) | d = 12 – 54 mm free selection of presses and jaws and/or loops (see chapter 1.7) d = 78.1 – 108 mm ECO 3/ECO 301 (see chapter 1.7) |
| Materials: Copper fittings: Fittings of copper alloys: Pipes: | Material-N.: CW024A (Cu-DHP) according to EN 1254, outside and inside surface refined Material No.: CC491 (CuSn5Zn5Pb5 C) according to EN 1282 Exterior and inside surface refined Material No.: 1.0034 (E 195) galvanized according to EN 10305 Pipe dimensions according to EN 10312 Externally zinc galvanized, layer thickness between. 7 - 15 µm | | |

The NiroTherm® press fittings can also be connected directly with the SANHA Therm system pipe.

1.5. 3fit®-Press system

Short overview of the 3fit®-Press system consisting of MultiFit®-Flex system pipe and the 3fit®-Press system pipe fitting of copper alloys

| Field of application | Dimension/Nominal pressure | Gasket | Tool |
|--|---|---|---|
| 3fit®-Press – Drinking water – Heating – Cooling water – Compressed air (oil free) | d = 16 – 63 mm PN 10 (at 70 °C) | EPDM Colour: black Max. cont. temp.: -30 °C to 70 °C (shortly up to 95 °C) | d = 16 mm – 63 mm free selection of pressing tools with TH-pressing profile (see chapter 1.7) |
| Materials: Fittings: Pipes: | Material no: CW 602N (CuZn36Pb2As) according to EN 12164 Multilayer pipe according to DIN 16833 – 34 consisting of: Material of the inliner: PE-RT Stabilising pipe: Aluminium section Material of the outer casting: PE-HD | | |

1.6. 3fit®-Push system

Short overview of the 3fit®-Push system consisting of MultiFit®-Flex system pipe and the 3fit®-Push system pipe fitting of copper alloys

| Field of application | Dimension/Nominal pressure | Gasket | Tool |
|---|---|---|---|
| 3fit®-Push – Drinking water – Heating – Cooling water – Compressed air (oil free) | d = 16 – 20 mm PN 10 (at 70 °C) | EPDM Colour: black Max. cont. temp.: -30 °C to 70 °C (shortly up to 95 °C) | No pressing tool required due to push fitting system |
| Materials: Fittings: Pipes: | Material no: CC499K (CuSn5Zn5Pb2-C) according to EN 1282 Multilayer pipe according to DIN 16833 – 34 consisting of: Material of the inliner: PE-RT Stabilising pipe: Aluminium section Material of the outer casting: PE-HD | | |

1.7. Appropriate and recommended pressing tools

SANHA ist the only manufacturer that gives guarantee for the leak tightness of the pressing joints, regardless of the manufacturer of the pressing tools, insofar the pressing machines and pressing jaws and/or slings fulfil the following standards:

- The pressing tools must be maintained and used according to the respective manufacturer's guidelines.
- Compact pressing machines up to including 28 mm must exhibit a minimum pressing force of 19 kN and a bolt diameter of 10 mm.
- Pressing machines up to including 54 mm and up to including 108 mm (electronically controlled) must exhibit a minimum pressing force of 30 kN

and a bolt diameter of 14 mm.

- For multilayer pipe connections up to including 54 mm in diameter, the pressing jaws and slings for press joints of type M-MM must have the original SA, M or V profiles.
- For multilayer pipe connections larger than 54 mm in diameter, the pressing jaws and pressing slings for press joints of type M-MM must have the original SA or M profiles.
- For multilayer pipe connections, the pressing jaws and slings must have the original TH profile.
- SANHA assembly instructions for the implemented system must be observed at all times.

2. Processing directives

2.1. Storage and transport of pipes and fittings

In case of storage and transport of pipes and fittings, damage and contamination through e.g. mortar, soil, sludge, rain or dirt water must be avoided.

It is recommended to transport and to store the pipes in a suitable manner. They are to be laid effectively on squared timbers on the loading space of the truck, both during the transport as well as in case of storage. In this way it is assured that the pipes and fittings are stored dry and not placed directly on the ground. Fittings are to be taken from the original packing only directly prior to installation.

2.2. Bending of stainless steel, carbon steel and copper pipes

The hot bending of stainless steel pipes is not allowed. Copper pipes in drinking water installations up to dimension 28 mm (inclusive) may not be hot bent.

SANHA NiroSan® system pipes up to dimension 28 mm and copper pipes according to EN 1057 must be cold bent with suitable bending tools up to dimension 18 mm.

The system pipe NiroTherm® and the SANHA Therm® system pipe can be cold bent up to dimension 28 mm. In this case, a bending radius, measured in the neutral axis of the bend, of at least $R = 3.5 \times d$ for SANHA system pipe of stainless steel and unalloyed steel and for copper of at least $R = 3 \times d$, is to be kept.

It is to be ensured that, after the bending, a sufficiently long cylindrical pipe piece is available for further processing. In case of items larger than the above-mentioned dimensions, the manufacturer of the bending device is responsible for a successful bending result.

2.3. Cutting of stainless steel, carbon steel and copper pipe

The cutting of stainless steel, carbon steel and copper pipes is implemented preferably with a fine-toothed metal saw or a pipe cutter. If electrically driven saws are employed for the cutting of stainless steel pipes, the cutting speed may be only so high that no annealing colors arise at the interface, in order to



avoid a sensitization of the material. If, contrary to expectations, annealing colors should arise, these must be eliminated on the inside and outside surface of the stainless steel pipes. Experience indicates that even a straw-yellow discoloration of the stainless steel can lead to a sensitization of the material. Particularly suitable for the cutting of pipes of stainless steel or copper is the planetary saw RA 21 +GF+, with which the outside cut edges are also deburred simultaneously with the cutting.

The utilization of cutting disks (flexible) or even flame cutter is not permissible for the shortening of stainless steel pipes.

Caution:

After shortening, the pipe ends are to be carefully deburred inside and outside.

2.4. Sealing materials and sealing auxiliary materials

Sealing materials and sealing auxiliary materials may not give off chloride ions in case of utilization of stainless steel pipes and fittings. With the employment of copper pipes and fittings, no ammonium ions may be released.

In drinking water installations, compressed air installations etc. (however not in gas installations according to TRGI and according to TRF), it is recommended to employ a permanently elastic screw thread caulking material instead of the time-consuming hemp-insertion.

2.5. Electrical trace heating

Shut off lines which do not possess their own safety systems must not be heated, in order to avoid inadmissible increases of pressure in these areas. In connection with electrical trace heating, it is absolutely necessary that EN 1717 and the state of the art of the technology be observed.

In case of stainless steel lines which are equipped with electrical trace heating, it is to be ensured that the pipe inside-wall temperature does not exceed 60°C for a long period.

Short-term temperature exceedings of approx. 70°C are permissible for the purpose of thermal disinfection. In case of copper lines, there are no temperature restrictions in connection with electrical trace heating, provided that inadmissible increase of pressure is avoided.

2.6. Electrical protective measures

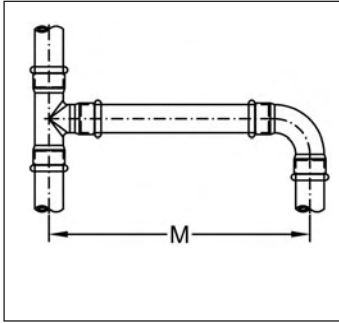
Equipotential bonding is to be carried for all electrically conducting pipes. Stainless steel and copper pipes form, with their corresponding fittings (also using press fittings), a continuous electrically conducting connection and the equipotential bonding must be included.

The installer of the electric systems is responsible for the implementation of the electrical protective measures.

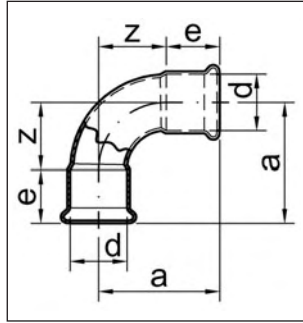
2.7. Z-dimension method and fitting combinations

The z-dimension method is a prefabrication method which is described more detailed in the SANHA specialist manual.

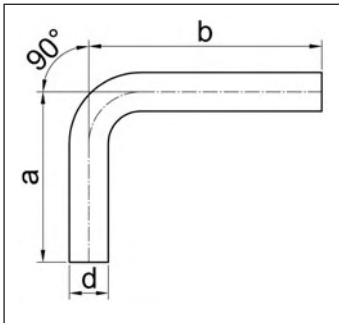
These z-dimensions of the SANHA products can be found on the Internet under: www.sanha.com/catalog/index.html, the tables of the associated



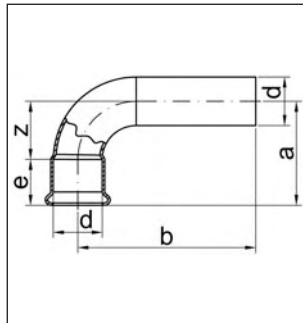
Illus. 2.1: Measurement method in case of the z-dimension method



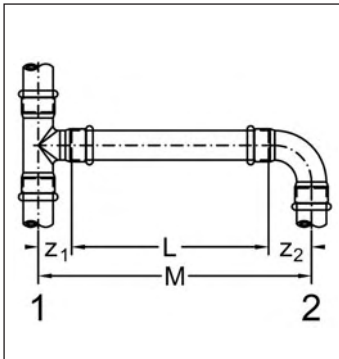
Illus.2.2: Socket-coupling special fitting



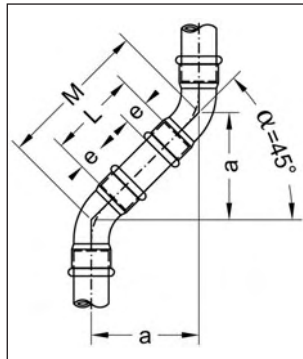
Illus. 2.3: Nozzle special fitting



Illus. 2.4: Socket-coupling nozzle special fitting



Illus. 2.5: Determination of the pipe length



Illus 2.6: Calculation of off-set bends

SANHA product overview (please request separately). In case of application of the z-dimension method, both planners, as well as fitters, by all means must request the valid z-dimension from the parts' manufacturer.

The >center-to-center< measurement method (Illustration 2.1) is the basis of the z-dimension installation. The measurement of pipe axis to pipe axis allows the precise stipulation of the corresponding pipe lengths with the knowledge of the z-dimension.

The z-dimension >z< in case of socket-coupling special fittings results as a difference from the structural length >a< minus the socket insertion depth >e<. The nozzle dimension is always the structural length of the special fitting (see Illustration 2.2 - 2.3).

The following applies:

$$z = a - e$$

The pipe length >L< is determined from the center-to-center measurement >M< minus the z-dimension >z< of the fittings involved (Illustration 2.2 - 2.3).

The following applies:

$$L = M - (z_1 + z_2)$$

If a certain misalignment "a" is required (as in case of an off-set bend) (see Illustration 2.5) and 45° bends should be employed for that to avoid unnecessary pressure losses, the measure >M< is to be calculated thus.

The following applies:

$$\sin \alpha = \frac{a}{M} \quad \sin \alpha_{45^\circ} = 0,7071$$

$$M = \frac{a}{0,7071}$$

Some of the most important fitting combinations used in practice for the application are listed in the following tables.

2.8. Fire protection

The fire protection is to be implemented according to the respective national regulatory works and/or specifications.

2.9. Acoustic insulation

The acoustic insulation is to be implemented according to the respective national regulatory works and/or specifications.

Pipes including fittings itself generate no noise.

But armatures that are poorly constructed or poor dimensioned can generate flow noise that will be transmitted on the pipework.

Pipes should always be acoustically insulated against structure-borne noise in wall break-through penetrations, or on installation walls (clamps with acoustic insulation liner, SANHA Catalog No. 9918) or should be laid in utility shafts.

2.10. Thermal insulation

Thermal insulation of pipes is appropriate for reasons of cost-effectiveness and environmental protection (decrease of CO₂ emissions). This is stipulated in the respective nationally applicable regulatory works.

Pipelines for cold drinking water are to be laid so that the drinking water quality is not impaired by the heat influence of the environment. A sufficient separation distance to heat sources is to be maintained (hot water and heating lines, chimneys etc.), so that the lines are not influenced by these heat sources. If this is not possible, the cold water lines must be insulated against inadmissible heating.

Standard values for the minimum insulation layer thickness for the insulation of tubes for drinking water cold according to DIN 1988-2, scale 9

| Installation location | Insulation layer thickness with a thermal conductivity of $\lambda = 0,04 \text{ W m}^{-1} \text{ K}^{-1}$ |
|--|--|
| Pipe work single laid in not heated rooms | 4 mm |
| Pipe work single laid in heated rooms | 9 mm |
| Pipe work in a duct, without warm pipes | 4 mm |
| Pipe work in a duct, beside warm pipes | 13 mm |
| Pipe work in a wall slot, riser pipes | 4 mm |
| Pipe work in wall cut-outs, beside warm pipes | 13 mm |
| Pipe work on the concrete floor | 4 mm |
| *) For other thermal conductivities the insulation thickness must be converted, based on a diameter of $d = 20 \text{ mm}$. | |

In case of operating conditions usual in residential buildings, sufficient insulation thickness is to be selected in such cases (see above table). In case of stagnated flow of the drinking water, thermal insulation also cannot offer any permanent protection against heating. The specifications in the table can also be employed for protection against water condensate on the insulation material surface, with assumption of a drinking water temperature of 10°C.

Protection against water condensate is not necessary if the pipe has a suitable jacket covering (e.g. **WICU**[®] pipe).

Standard values according to EnEV for NiroSan[®], NiroTherm[®], SANHA Therm[®] system pipes and copper pipes can be taken from the following table.

Insulation thickness for NiroSan[®]-, NiroTherm[®]-, **SANHA**[®]-Therm System pipes

| Tube outside diameter d [mm] | Insulation thickness 100 % $\lambda = 0,035 \text{ W m}^{-1} \text{ K}^{-1}$ | Total outside diameter D [mm] |
|--|--|---------------------------------|
| 12/15/18/22 | 20 mm | 52/55/58/62 |
| 28/35 | 30 mm | 88/95 |
| 42/54/76,1/88,9/108 | same as DN | 122/154/216/249/308 |
| Tube outside diameter d [mm] | Insulation thickness 100 % $\lambda = 0,04 \text{ W m}^{-1} \text{ K}^{-1}$ | Total outside diameter D [mm] |
| 12/15/18/22 | 26 mm | 64/67/70/74 |
| 28/35 | 38 mm | 104/111 |
| *) Measurements refer to a ROCKWOOL insulation jacket RS 800 und RS 835, by usage of insulation materials of other producers (Missel, Armaflex etc.) the diameters must be verified by the producer informations | | |

In refrigeration systems **cooling water pipes** are frequently operated with temperatures from 4°C to 6°C. To decrease the energy losses and for avoidance of water condensate (undershooting of the dew-point temperature of

the ambient air), these lines must be water-blocking thermally-insulated. These requirements apply not only for newly built systems, but also for those laid during renovation in existing buildings.

2.11. Pipe Mountings

Mounting distances for pipes with SANHA products

| NiroSan®-, NiroTherm®-, SANHA-Therm system pipes and copper pipes | | MultiFit®-Flex system pipes | |
|---|-----------------------|-----------------------------|-----------------------|
| Pipe outer dimension [mm] | Mounting distance [m] | Pipe outer dimension [mm] | Mounting distance [m] |
| 12 | 1,25 | | |
| 15 | 1,25 | 16 | 1,00 |
| 18 | 1,50 | 20 | 1,50 |
| 22 | 2,00 | 26 | 1,50 |
| 28 | 2,25 | 32 | 2,00 |
| 35 | 2,75 | 40 | 2,25 |
| 42 | 3,00 | 50 | 2,50 |
| 54 | 3,50 | 63 | 2,75 |
| 64 / 66,7 | 4,00 | | |
| 76,1 | 4,25 | | |
| 88,9 | 4,75 | | |
| 108 | 5,00 | | |

Pipes are to be connected directly to building by means of standard clamps and must not be attached to other lines. In order to fulfill the acoustic protection requirements, clamps with rubber inserts are to be employed (SANHA Catalog No. 9918). The maximum clamp separations are stipulated for the different applications in the respective regulatory works. If no specifications are

available in this connection, these can be taken from the above table. Clamps are always to be attached on the pipe only, not on the fittings. With the arrangement of pipe fastening - in particular in the area of pipe by-passes and branches (bends, T-joints etc.) - the references of the Chapter "Thermally caused change in length of pipes" are to be considered.

2.12. Thermally caused changes in length of pipes

Heat transition pipes and lines which are exposed to a high level of heat radiation (e.g. solar radiation etc.), expand differently according to material.

If the lines are hindered in case of this thermally caused change in length, then damage can arise (mostly in the form of fatigue failures). In order to avoid this, sufficient space for expansion must be allowed for the pipe.

To achieve this, the elasticity of the pipe network can frequently be exploited. For this it is necessary to obtain sufficiently easily bent line sections in the area of line by-passes through correct arrangement of the pipe brackets.

The basic principle is that sufficient expansion possibility must always be available between two fixed points.

Provided that the natural line routing does not enable sufficient compensation of the thermal expansion, this must be realised through the installation of special component parts, such as e.g. metal bellows compensators (SANHA Catalog No. 9872, see Illustration 2.6). If sufficient space is available, a U-pipe compensator can also be employed, as indicated in Illustration 2.11.



Illustration 2.7: Axial compensator with NiroSan® press sockets (SANHA Catalog No. 9872)

In case of concealed installation, the unobstructed thermal expansion is to be ensured such that the lines are coated with elastic material of sufficient thickness. In particular, ceiling penetrations are to be cushioned carefully - provided that a fixed point has not been intentionally placed there (see Illustrations 2.8 - 2.10).

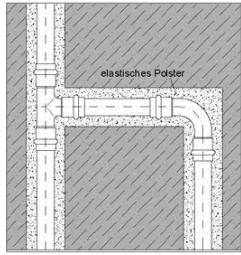


Illustration 2.8:
Pipes under
plaster

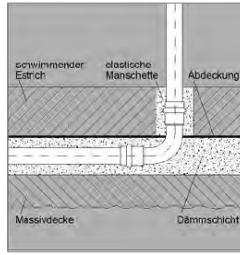


Illustration 2.9:
Pipes under
composition
floor (in thermal
and footfall
acoustic insula-
tion)

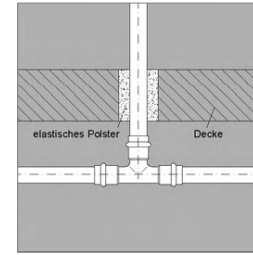


Illustration
2.10: Pipes
in ceiling
penetrations

2.12 Thermal caused change of length of pipes

Thermal expansion "Δl" of NiroSan®, NiroTherm®, system pipes and copper pipes

| Thermal expansion "Δl" of high-grade steel and copper [mm] | | | | | | | |
|--|------|------|------|------|------|------|-------|
| l [m] \ Δt [K] | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| 1 | 0,17 | 0,33 | 0,50 | 0,66 | 0,83 | 0,99 | 1,16 |
| 2 | 0,33 | 0,66 | 0,99 | 1,32 | 1,65 | 1,98 | 2,31 |
| 3 | 0,50 | 0,99 | 1,49 | 1,98 | 2,48 | 2,97 | 3,47 |
| 4 | 0,66 | 1,32 | 1,98 | 2,64 | 3,30 | 3,96 | 4,62 |
| 5 | 0,83 | 1,65 | 2,48 | 3,30 | 4,13 | 4,95 | 5,72 |
| 6 | 1,00 | 1,98 | 2,97 | 3,96 | 4,95 | 5,94 | 6,93 |
| 7 | 1,16 | 2,31 | 3,47 | 4,62 | 5,78 | 6,93 | 8,09 |
| 8 | 1,33 | 2,64 | 3,96 | 5,28 | 6,60 | 7,92 | 9,24 |
| 9 | 1,49 | 2,97 | 4,46 | 5,94 | 7,43 | 8,91 | 10,40 |
| 10 | 1,66 | 3,30 | 4,95 | 6,60 | 8,25 | 9,90 | 11,55 |

Thermal expansion "Δl" of SANHA-Therm system pipes

| Thermal expansion "Δl" of C-steel [mm] | | | | | | | |
|--|------|------|------|------|------|------|------|
| l [m] \ Δt [K] | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| 1 | 0,12 | 0,24 | 0,36 | 0,48 | 0,60 | 0,72 | 0,84 |
| 2 | 0,24 | 0,48 | 0,72 | 0,96 | 1,20 | 1,44 | 1,68 |
| 3 | 0,36 | 0,72 | 1,08 | 1,44 | 1,80 | 2,16 | 2,52 |
| 4 | 0,48 | 0,96 | 1,44 | 1,92 | 2,40 | 2,88 | 3,36 |
| 5 | 0,60 | 1,20 | 1,80 | 2,40 | 3,00 | 3,60 | 4,20 |
| 6 | 0,72 | 1,44 | 2,16 | 2,88 | 3,60 | 4,32 | 5,04 |
| 7 | 0,84 | 1,68 | 2,56 | 3,36 | 4,20 | 5,04 | 5,88 |
| 8 | 0,96 | 1,92 | 2,88 | 3,84 | 4,80 | 5,76 | 6,72 |
| 9 | 1,08 | 2,16 | 3,24 | 4,32 | 5,40 | 6,48 | 7,56 |
| 10 | 1,20 | 2,40 | 3,60 | 4,80 | 6,00 | 7,20 | 8,40 |

Thermal expansion "Δl" of MultiFit®-Flex system pipes

| Thermal expansion "Δl" of multilayer pipe | | | | | | | |
|---|------|------|------|------|-------|-------|-------|
| l [m] \ Δt [K] | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| 1 | 0,23 | 0,46 | 0,69 | 0,92 | 1,15 | 1,38 | 1,61 |
| 2 | 0,46 | 0,92 | 1,38 | 1,84 | 2,30 | 2,76 | 3,22 |
| 3 | 0,69 | 1,38 | 2,07 | 2,76 | 3,45 | 4,14 | 4,83 |
| 4 | 0,92 | 1,84 | 2,76 | 3,68 | 4,60 | 5,52 | 6,44 |
| 5 | 1,15 | 2,30 | 3,45 | 4,60 | 5,75 | 6,90 | 8,05 |
| 6 | 1,38 | 2,76 | 4,14 | 5,52 | 6,90 | 8,28 | 9,66 |
| 7 | 1,61 | 3,22 | 4,83 | 6,44 | 8,05 | 9,66 | 11,27 |
| 8 | 1,84 | 3,68 | 5,52 | 7,36 | 9,20 | 11,04 | 12,88 |
| 9 | 2,07 | 4,14 | 6,21 | 8,28 | 10,35 | 12,42 | 14,49 |
| 10 | 2,30 | 4,60 | 6,90 | 9,20 | 11,50 | 13,80 | 16,10 |

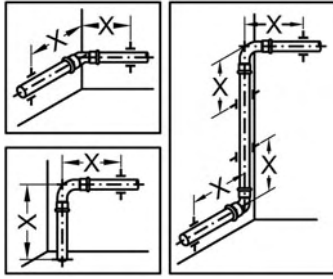


Illustration 2.11:
Minimum separation distance "X" of the clamps to the shaped pieces with heating pipes
(see Table A 3.3 and A 3.4)

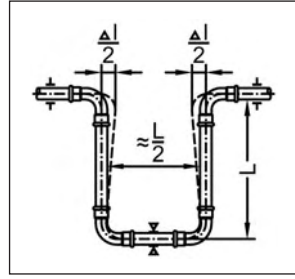


Illustration 2.12:
Necessary length of leg "L" of the double U-bend, as expansion compensating element, to take up the thermal expansion
(see Table A 3.5 and A 3.6)

Minimum distance "X" of the clamps to the fittings in dependence to the length change of high temperature pipes (see image 2.11)

| Necessary side length "X" of the NiroSan® -, NiroTherm® -, SANHA-Therm press systems | | | | | | | |
|--|------|------|------|------|------|------|------|
| Δl [mm] | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| d [mm] | | | | | | | |
| 15 | 0,57 | 0,80 | 0,98 | 1,13 | 1,27 | 1,39 | 1,50 |
| 18 | 0,62 | 0,88 | 1,08 | 1,24 | 1,39 | 1,52 | 1,64 |
| 22 | 0,69 | 0,97 | 1,19 | 1,37 | 1,54 | 1,68 | 1,82 |
| 28 | 0,77 | 1,10 | 1,34 | 1,55 | 1,73 | 1,90 | 2,05 |
| 35 | 0,87 | 1,22 | 1,50 | 1,73 | 1,94 | 2,12 | 2,29 |
| 42 | 0,95 | 1,35 | 1,64 | 1,90 | 2,12 | 2,32 | 2,51 |
| 54 | 1,08 | 1,52 | 1,86 | 2,15 | 2,41 | 2,63 | 2,85 |
| 76,1 | 1,28 | 1,81 | 2,21 | 2,55 | 2,86 | 3,13 | 3,38 |
| 88,9 | 1,38 | 1,95 | 2,39 | 2,76 | 3,09 | 3,38 | 3,65 |
| 108 | 1,52 | 2,15 | 2,63 | 3,04 | 3,40 | 3,73 | 4,02 |

| Necessary side length "X" for copper pipes with SANHA press fittings of copper and copper alloys [m] | | | | | | | |
|--|------|------|------|------|------|------|------|
| Δl [mm] | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| d [mm] | | | | | | | |
| 12 | 0,67 | 0,94 | 1,16 | 1,34 | 1,49 | 1,64 | 1,77 |
| 14 | 0,72 | 1,02 | 1,25 | 1,44 | 1,61 | 1,77 | 1,91 |
| 15 | 0,75 | 1,06 | 1,29 | 1,49 | 1,67 | 1,83 | 1,98 |
| 16 | 0,77 | 1,09 | 1,34 | 1,54 | 1,72 | 1,89 | 2,04 |
| 18 | 0,82 | 1,16 | 1,42 | 1,64 | 1,83 | 2,00 | 2,16 |
| 22 | 0,90 | 1,28 | 1,57 | 1,81 | 2,02 | 2,21 | 2,39 |
| 28 | 1,02 | 1,44 | 1,77 | 2,04 | 2,28 | 2,50 | 2,70 |
| 35 | 1,14 | 1,61 | 1,98 | 2,28 | 2,55 | 2,79 | 3,02 |
| 42 | 1,25 | 1,77 | 2,16 | 2,50 | 2,79 | 3,06 | 3,31 |
| 54 | 1,42 | 2,00 | 2,45 | 2,83 | 3,17 | 3,47 | 3,75 |
| 64 | 1,54 | 2,18 | 2,67 | 3,08 | 3,45 | 3,78 | 4,08 |
| 66,7 | 1,57 | 2,23 | 2,73 | 3,15 | 3,52 | 3,86 | 4,17 |
| 76,1 | 1,68 | 2,38 | 2,91 | 3,36 | 3,76 | 4,12 | 4,45 |
| 88,9 | 1,82 | 2,57 | 3,15 | 3,64 | 4,06 | 4,45 | 4,81 |
| 108 | 2,00 | 2,83 | 3,47 | 4,01 | 4,48 | 4,91 | 5,30 |

Necessary side length "L" of the U-bend expansion joint for thermal expansion absorption (see image 2.12)

| Necessary side length "L" of the NiroSan [®] -, NiroTherm [®] -, SANHA-Therm press systems [m] | | | | | | | |
|--|------|------|------|------|------|------|------|
| Δl [mm] d [mm] | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| 15 | 0,33 | 0,46 | 0,57 | 0,65 | 0,73 | 0,80 | 0,87 |
| 18 | 0,36 | 0,51 | 0,62 | 0,72 | 0,80 | 0,88 | 0,95 |
| 22 | 0,40 | 0,56 | 0,69 | 0,79 | 0,89 | 0,97 | 1,05 |
| 28 | 0,45 | 0,63 | 0,77 | 0,89 | 1,00 | 1,10 | 1,18 |
| 35 | 0,50 | 0,71 | 0,87 | 1,00 | 1,12 | 1,22 | 1,32 |
| 42 | 0,55 | 0,77 | 0,95 | 1,10 | 1,22 | 1,34 | 1,45 |
| 54 | 0,62 | 0,88 | 1,08 | 1,24 | 1,39 | 1,52 | 1,64 |
| 76,1 | 0,74 | 1,04 | 1,28 | 1,47 | 1,65 | 1,81 | 1,95 |
| 88,9 | 0,80 | 1,13 | 1,38 | 1,59 | 1,78 | 1,95 | 2,11 |
| 108 | 0,88 | 1,24 | 1,52 | 1,76 | 1,96 | 2,15 | 2,32 |

| Necessary side length "L" for copper pipes with SANHA press fittings of copper and copper alloys [m] | | | | | | | |
|--|------|------|------|------|------|------|------|
| Δl [mm] d [mm] | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| 12 | 0,39 | 0,55 | 0,67 | 0,77 | 0,86 | 0,94 | 1,02 |
| 14 | 0,42 | 0,59 | 0,72 | 0,83 | 0,93 | 1,02 | 1,10 |
| 15 | 0,43 | 0,61 | 0,75 | 0,86 | 0,96 | 1,06 | 1,14 |
| 16 | 0,45 | 0,63 | 0,77 | 0,89 | 1,00 | 1,09 | 1,18 |
| 18 | 0,47 | 0,67 | 0,82 | 0,94 | 1,06 | 1,16 | 1,25 |
| 22 | 0,52 | 0,74 | 0,90 | 1,04 | 1,17 | 1,28 | 1,38 |
| 28 | 0,59 | 0,83 | 1,02 | 1,18 | 1,32 | 1,44 | 1,56 |
| 35 | 0,66 | 0,93 | 1,14 | 1,32 | 1,47 | 1,61 | 1,74 |
| 42 | 0,72 | 1,02 | 1,25 | 1,44 | 1,61 | 1,77 | 1,91 |
| 54 | 0,82 | 1,16 | 1,42 | 1,64 | 1,83 | 2,00 | 2,16 |
| 64 | 0,89 | 1,26 | 1,54 | 1,78 | 1,99 | 2,18 | 2,36 |
| 66,7 | 0,91 | 1,29 | 1,57 | 1,82 | 2,03 | 2,23 | 2,40 |
| 76,1 | 0,97 | 1,37 | 1,68 | 1,94 | 2,17 | 2,38 | 2,57 |
| 88,9 | 1,05 | 1,48 | 1,82 | 2,10 | 2,35 | 2,57 | 2,78 |
| 108 | 1,16 | 1,64 | 2,00 | 2,31 | 2,59 | 2,83 | 3,06 |

2.14. Pressure test

| Designation | | Test conditions with | |
|--|---|--|--|
| | | Water | Inert gas |
| Drinking water installations DIN 1988 (D) | Preliminary test (applies also for non-pressed, non-sealed press fittings) | $p_{\text{test}} = 1 \text{ bar}$ with $t_{\text{test}} \geq 10 \text{ min}$ (with moderate flow velocity) | $p_{\text{test}} = 110 \text{ mbar}$ with $V_{\text{pipe}} \leq 100 \text{ l}$ of $t_{\text{test}} \geq 30 \text{ min}$ (for every further 100 l, increase $t_{\text{test}} \geq 10 \text{ min}$ in each case) |
| | Final test | $p_{\text{test}} = p_{\text{allowed}} \times 1,5$ with $\Delta\vartheta < 10 \text{ K}$ of 10 min and $\Delta\vartheta \geq 10 \text{ K}$ of $t_{\text{test}} \geq 10 \text{ min}$ | $p_{\text{test}} = 3 \text{ bar}$ (up to DN 50) and $p_{\text{test}} = 1 \text{ bar}$ (greater than DN 50) with $V_{\text{pipe}} \geq 100 \text{ l}$ of $t_{\text{test}} \geq 30 \text{ min}$ (for every further 100 l, increase $t_{\text{test}} \geq 10 \text{ min}$ in each case) |
| Heating installations | Preliminary test (applies also for non-pressed, non-sealed press fittings) | $p_{\text{test}} = 1 \text{ bar}$ with $t_{\text{test}} \geq 10 \text{ min}$ (with moderate flow velocity) | $p_{\text{test}} = 110 \text{ mbar}$ with $V_{\text{pipe}} \leq 100 \text{ l}$ of $t_{\text{test}} \geq 30 \text{ min}$ (for every further 100 l, increase $t_{\text{pruf}} \geq 10 \text{ min}$ in each case) |
| | Final test | $p_{\text{test}} = p_{\text{allowed}} \times 1,3$ with $\Delta\vartheta < 10 \text{ K}$ of $t_{\text{test}} \geq 10 \text{ min}$ | $p_{\text{test}} = p_{\text{allowed}} \times 1,3$ or $p_{\text{test,max}} = 3 \text{ bar}$ from $t_{\text{test}} \geq 30 \text{ min}$ |

The times for the equalization of temperature are not included in the minimum test times indicated in the above table and these minimum test times thus have to be added. Measuring devices which enable a sufficient accuracy of reading

are to be employed for the pressure test. According to the areas of application, the implementation regulations for the pressure test described in the respective national regulatory works and standards are to be considered.

2.15. Flushing

Drinking water lines are to be flushed thoroughly with filtered drinking water immediately after the pressure test, independent of the type of material employed. The cold and hot water lines are to be flushed separately with an air-water mixture, intermittently under pressure. The flushing with drinking water is to be implemented so that a minimum flow velocity of 0.5 m/s is achieved in the lar-

gest pipe to be flushed. A minimum number of extraction points must be opened for this purpose (see the following tables).

The process for line flushing is to be coordinated beforehand with the builder and carried out and recorded in the presence of the builder and/or one of his agents.

Basically, the respective national regulatory works are to be considered in the flushing of drinking water lines.

Minimum number of the extraction points to be opened for the flushing system, with a minimum flow velocity of 0.5 m/s

| Nominal diameter DN | Largest dimension of the distribution line | | | | | | |
|--|--|----|----|----|------|------|-----|
| | 25 | 32 | 40 | 50 | 65 | 80 | 100 |
| Outside diameter [mm] | 28 | 35 | 42 | 54 | 76,1 | 88,9 | 108 |
| Minimum volume flow at full filling of the distribution line [l/min] | 15 | 25 | 38 | 59 | 100 | 151 | 236 |
| Minimum number of extraction points DN 15 to be opened | 1 | 2 | 3 | 4 | 6 | 9 | 14 |

Minimum quantity of the tapping points to be opened for the flushing acc. to ZVSHK-leaflet with a flush duration of 5 minutes at the last opened tapping point

| Largest dimension of the distribution line | | | | | | | |
|--|----|----|----|----|------|------|-----|
| Nominal diameter DN | 25 | 32 | 40 | 50 | 65 | 80 | 100 |
| Outside diameter [mm] | 28 | 35 | 42 | 54 | 76,1 | 88,9 | 108 |
| Minimum number of extraction points DN 15 to be opened | 2 | 4 | 6 | 8 | 12 | 18 | 28 |

2.16. Disinfection

Disinfection of drinking water pipes

Drinking water installations are to be flushed thoroughly with filtered drinking water before operational startup, to establish hygienically trouble-free conditions.

If a disinfection of drinking water pipes is necessary, the respective national regulatory works and/or specifications are to be considered.

An intensive flushing with clear drinking water must be carried out directly after the disinfection. No remains of disinfection agents may be measured in the drinking water at the tappings and respectively the tapping measure values may not be higher than the values at the hand over point (house service connection). It is essential for the success of the flushing that the flow rate in each pipe section is high enough. Intermitted flushing is recommended the mixture of air and water. After the flushing cycle the pipe work must be exhausted from air.

The implementation of a thermal disinfection of the drinking water lines with hot water, at a temperature between 70°C and 95°C, and a disinfection time of approx. 1 hour in every line section, is sufficient in most cases.

The thermal disinfection of stainless steel and copper lines can be implemented with considerably higher temperatures. The temperature is limited to 120°C in case of press fittings because of the elastomer. However, there is no restriction on the disinfection duration.

Disinfection of drinking water

The disinfection of drinking water is to be implemented according to the respective national regulatory work and/or specifications

2.17. Inner corrosion protection in open systems

Stainless steel

Stainless steel forms a passive layer (chromic oxide layer for the most part) on contact with oxygen and/or oxygenated water (e.g. drinking water). This passive layer prevents any reaction between the material and the water and its material contents. In this way, the water is not influenced in any manner by the pipe material.

Since stainless CrNiMo steels do not add any materials to the drinking water due to the passive layer formed, they can be connected with all other materials authorized for drinking water installation, without compliance with a flow-direction regulation, i.e. in arbitrary precedence. For this reason, the Ni-roSan® press system is also particularly suitable for partial clean-ups of existing drinking water installations - independent of their pipe materials.

However, stainless steel and carbon steel must not be connected directly with each other. Rather a bracket is to be installed of non-ferrous heavy metal, through which the separation distance between the component part of carbon steel and the component part of stainless steel corresponds to the pipe outside diameter at least (see Illustration 6.110). This is achieved e.g. through the installation of a non-ferrous metal valve (brass or red brass) between the stainless steel and carbon steel materials.

In case of the installation of stainless steel with copper materials, experience indicates that a minimum relationship of the water-contacting surfaces between copper materials (copper and brass and red brass together) and stainless steel should not be fallen below considerably.

A sensitization of the stainless steel is possible through oxide layers, annealing colours, incorrect heat treatment (e.g. during the welding, separation

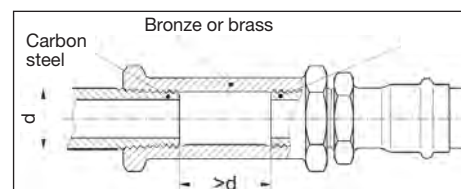


Illustration 2.20:
Permissible connection between stainless steel and carbon steel

with fast-running saws or with cutting disks) of the component parts, and must be securely avoided. The hot bending of the pipes is not permissible.

$$\left(\frac{A_{\text{copper}}}{A_{\text{Stainless Steel}}}_{\text{min}} \right) = 0,02$$

In case of an impact chlorination for the disinfection of a pipe, the national standards and regulatory works are to be considered, since strong oxidizing agents, as they are used in this case, can damage the passive layer in case of non-professional application.

Copper

Direct connection of copper with carbon steel is possible, subject to observation of the flow regulation which states that copper is always to be arranged downstream of component parts of carbon steel, seen in the direction of flow of the water. Otherwise the carbon steel would be prone to hole-corrosion through the precipitation of copper ions on the surface of the carbon steel pipes.

The assembling of stainless steel and copper is possible for stainless steel as described above.

2.18 Inner corrosion protection in closed systems

In closed systems which are operated with water which is approximately oxygen-free, such as e.g. heating plant, solar energy plants etc., no corrosion processes can take place on metal pipe materials. For this reason, all usual pipe materials, as well as unalloyed steel, can be employed in heating plants. The combination of the different metal pipe materials (copper, unalloyed steel, stainless steel etc.) is possible in arbitrary precedence without restrictions. However, in closed systems no oxygen must then penetrate. Zinc can erode with higher pH-values - as they generally occur in heating plants - also with absence of oxygen and with hydrogen formation. This leads to the separation of the zinc layer in case of carbon steel pipes, however not to damage to the pipe, since the unalloyed steel is not attacked. However, the hydrogen formation generally leads to plant malfunctions (gas cushion formation). For this reason galvanized ferrous materials are to be dispensed with in heating plants.

2.19. External corrosion protection

In some in the following cases, which are described in detail, suitable coatings (subsequently applied protective paint coats) are permissible. However, it is to be considered that e.g. in the area of the pipe fixing and/or pipe passages, a continuously trouble-free surface paint coating can be achieved in rare cases only. Improperly protected spots are generally exposed to a concentrated corrosion attack. Subsequent paint coating of already installed pipes is thus not to be recommended.

Underground Pipes

Basically, pipes and pipe connectors and valves laid underground must be protected against mechanical action (e.g. through laying in a protective conduit). Metal pipes additionally require protection against external corrosion attacks. For **stainless steel** and **copper pipelines**, anti-corrosive tape and heat-shrinkable sleeves, in accordance with DIN 30672, Class A (non-corrosive ground), Class B (corrosive ground), can be employed as subsequent external corrosion protection. Copper pipes coated by the manufacturer can also be employed in case of copper pipes, provided that the requirements on DIN 30672, Class B (except for the peeling resistance) (e.g. WICU pipe), are satisfied. In every case, the fittings are to be provided with anti-corrosive tapes or heat-shrinkable sleeves.

The pipes of unalloyed steel are to be provided with a subsequent external corrosion protection in accordance with DIN 30672 of the Contamination Class C.

Below the pavement, pipes laid (not in the pavement, but within the thermal and footfall acoustic insulation and/or in recesses in the unfinished ceiling) are to be protected as described above for underground pipes.

Exterior installed pipe work

Basically, metal pipes and pipe connectors and, where appropriate, valves laid in the open must be protected against mechanical action and (provided the danger exists) against the admission of halogens (fluorine, chlorine, bromide and iodine).

Stainless steel pipelines do not require any additional corrosion protection.

Copper pipes generally do not require any additional corrosion protection, except where gas conduits according to TRGI are involved. In this case, the line is to be protected as described above for underground pipes.

Pipes of unalloyed steel are to be protected against corrosive damages as described in the section "Underground pipes". Alternatively suitable corrosion coatings and/or zinc coatings can be employed. The hot-dip gal-

vanizing can be used in this case on the exterior surface which, depending on the type of atmosphere, represents a long-term corrosion protection. As equivalent corrosion protection with respect to the hot-dip galvanizing, the galvanized pipe surface with a coating thickness of 7 - 15 mm can be considered.

Pipes laid concealed

Stainless steel pipelines do not require any additional corrosion protection, provided that the surrounding materials do not include any chloride-content additives (e.g. frost protection additive). In the latter case, direct contact of the material with the pipe material must be avoided through suitable coatings or jacketing.

Copper pipes do not require any additional corrosion protection, provided that the surrounding materials do not include any ammonium-content additives (e.g. retarding admixtures). In the latter case, direct contact of the material with the pipe material must be avoided through suitable coatings or jacketing.

Galvanized steel pipes do not require in general any additional corrosion protection, except where action from moisture is expected over a longer period or additives are employed in the covering material that can cause corrosion processes at the galvanized steel. In these cases, an additional corrosion protection is to be implemented as described in the Section "Underground pipe".

Surface-mounting laid pipes

Stainless steel pipelines do not require any additional corrosion protection, except in chlorine-content atmospheres (e.g. swimming pool). In the latter case the pipes must be provided with suitable coatings or jacketing.

Copper pipes generally do not require any additional corrosion protection, except for ammonia, (pipes laid in animal stables) or bivalent sulfur (e.g. hydrogen sulfide of biogases) existing in the room air. This applies also for lines in rooms of the meat processing industry (also e.g. cold shelf), since animal protein can convert into sulfidic products. In these cases, the lines are to be protected as described above for underground pipes.

Galvanized steel pipes do not require in general any additional corrosion protection, except where action from moisture is expected over a longer period or additives are employed in the covering material that can cause corrosion processes at the galvanized steel. In these cases, an additional corrosion protection is to be implemented as described in the Section "Underground pipe".

Suitable insulation materials

Thermal insulation is to be kept permanently dry in order to retain the thermal insulation effect. For this reason, they are always to be implemented water-blocking. In this connection, closed-cell insulation materials are especially to be recommended.

Insulation materials for **stainless steel pipelines** must not exceed a mass content of 0.05% of water-soluble chloride ions. Insulation materials in AS quality (AS = Austenitic Steels), fall significantly below this mass content and are therefore particularly suited for stainless steel.

Insulation materials for **copper pipes** must be nitrite-free and must not exceed a mass content of 0.02% ammonia.

2.20. Manufacture of the press connections

The procedure for the manufacture of a press connection is indicated below in the example of the SANHA press fittings of copper, in association with copper pipes approved by SANHA (see table in the Chapter "Approved to header pipes").

For the press system NiroSan®, NiroTherm® and the connecting of the NiroTherm® and SANHA Therm® system pipe with the SANHA Therm® press fittings, the same procedure applies.

The pipe ends must be clean for the manufacture of trouble-free press connections. The pipe exterior surfaces may indicate no scratches or grooves over

a length which corresponds to the inserted length at least. In case of dismantling of works-coated plastic pipes, it is to be particularly ensured that the pipe surface is not damaged in this area. Through visually identifiable, in part only scarcely identifiable, incisions with the fitting knife, such damage can easily arise.

Dimension to d = 54 mm



1. Cut off pipes with fine-toothed hacksaw in right-angled form



4. Select press jaw according to the fitting dimension and employ in the press machine. Close the retention bolts of the machine.



- Alternative:
Separate pipes with a pipe cutter.



5. Check whether fitting outer edge lines up with the marker. Open press jaw and place at right angles on to the SANHA press fitting unit such that the bead of the fittings inserts into the slot of the press jaw.



2. Deburr pipes carefully inside and outside



6. Release pressing procedure through actuating the start key. In case of compatible machines, the pressing procedure cannot be interrupted prematurely. In this way, it is ensured that a tight, permanently sealed form and longitudinal force-closed connection always results. In case of danger, an interruption of the pressing procedure is possible through actuation of the Emergency Off button¹⁾.



3. Mark the insertion depth on the pipe with felt-tipped pen and template (SANHA Catalog No. 4980

for the SANHA Therm® and SANHA press fittings of copper and copper alloys [green color] - SANHA Catalog No. 4981 for NiroSan® and NiroTherm® pressing system of stainless steel [black color]). The marker must be water-proof. Check SANHA press fittings for correct seating of the ring gasket and insert pipes into the fittings coupling up to the stop, using slight rotation. The fitting outer edge must line up with the marker.

¹⁾ After reset of the Emergency Off situation, a post-pressing or, where appropriate, a new pressing must be implemented

In case of the dimensions 42 mm and 54 mm, press slings are preferably employed because of the easier handling. The installation is implemented first of all as described above for the steps 1 to 3, Section "Dimension to 54 mm". Then the procedure is continued with the dimensions 42 mm and 54 mm with the operation steps 4. to 7.



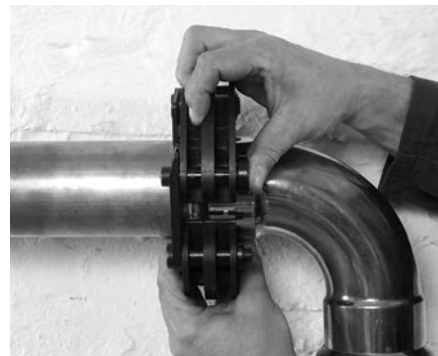
4. Select the appropriate press sling. Ensure that the marker strokes form a line on the slide segments and the clamps. If this is not the case, make the slide segments movable. Then place the press sling around the SANHA press fitting such that the bead of the fitting is inserted into the slot of the press sling. Close press sling. Shift lock strap into locking pins. Note that the press sling fits closely on the fittings. Then rotate the press sling into position, so that the press can be applied properly.



5. Select appropriate intermediate jaw for the dimension: In case of electronic pressing tools for the dimensions 42 mm and 54 mm, insert the intermediate jaw ZB 302 (SANHA Catalog No. 6931.1) - and for conventional press tools, the intermediate jaw ZB 202 (SANHA Catalog No. 6930), into the press tool and close the retention bolts.



6. Open the intermediate jaw by depressing the jaw levers and attach to the press sling so that the claws of the intermediate jaw grip around the pins of the press sling. Check whether fittings outer edge lines up with the marker of the insertion depth - release pressing procedure through actuating the start key. The pressing procedure cannot be interrupted prematurely. In this way, it is ensured that a permanently sealed connection always results. An interruption of the pressing procedure in the case of danger is possible through pressing the Emergency Off button¹⁾.



7. Loosen the press sling through strip-piping the lock strap. In this case, locking pins protrude from the opposite side.

¹⁾ After reset of the Emergency Off situation, a post-pressing or, where appropriate, a new pressing must be implemented

Dimensions $d = 64$ mm up to $d = 108$ mm

For the dimensions from 64 mm to 108 mm, the electronic press tool (see "Suitable and recommended pressing tools") from SANHA (SANHA Catalog No. 6900 and as a set in a casing with 6 press jaws 12 mm to 35 mm SANHA Catalog No. 6901) or Mapress is required. In addition, press slings of the corresponding dimensions (SANHA Catalog No. 6933) are required, as well as the intermediate jaw ZB 302 (SANHA Catalog No. 6931.1) for the dimensions 64 mm and 66.7 mm and the intermediate jaw ZB 321 (SANHA Catalog No.

6931.2) for the dimensions 76.1 mm and 88.9 mm. Alternatively, press slings and intermediate jaws from Mapress can also be employed.

For the dimension 108 mm, as well as the corresponding press sling (SANHA Catalog No. 6933) in addition to the intermediate jaw ZB 321 (SANHA Catalog No. 6931.2), the intermediate jaw ZB 322 (SANHA Catalog No. 6931.3) and corresponding press sling and intermediate jaws are required by Mapress.



1. Cut off pipes to size: Preferably with a planetary saw (Illustration) or miter saw.



2. Deburr cut edges on the outside carefully. Preferably with special deburring device (Illustration: Novopress RE1 pipe deburrer, SANHA Catalog No. 4984). Alternative: Semi-circular smooth file.

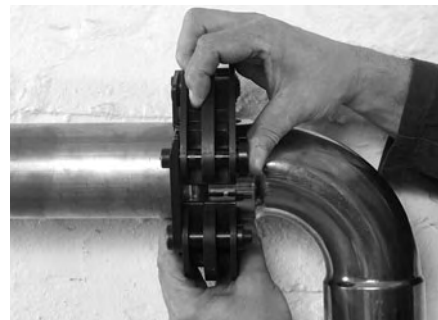


Alternative: cut pipes with a pipe cutter.



Alternative: cut off pipes with fine-toothed hacksaw at right-angles.

Dimensions $d = 64$ mm up to $d = 88,9$ mm



3. Insert pipe end into the fittings coupling up to the stop, with slight rotation. The fitting outer edge must line up with the marker. Select appropriate press sling. The marker must be waterproof the clamps. If this is not the case, make slide segments movable.

Place press sling around the SANHA press fitting so that the bead of the fittings is inserted into the slot of the press sling and, in this case, the centering-plate of the press sling must always point in the direction of the insertion of the press fitting (e.g. 45° bend with internal and external pressing end). Close press sling. Shift lock strap into locking pins. Note that the press sling fits closely on the fittings. Rotate press sling into position so that the pressing can be applied properly.



4. **Dimensions 64 mm and 66,7 mm:**
 Insert intermediate jaw with the designation ZB 302 (SANHA Catalog No. 6931.1) in the press tool and close retention bolts.
- Dimensions 76.1 mm and 88.9 mm:**
 Insert intermediate jaw with the designation ZB 321 (SANHA Catalog No. 6931.2) in the press tool and close retention bolts.



5. Open the intermediate jaw by depressing the jaw levers and attach to the press sling so that the claws of the intermediate jaw grip around the pins of the press sling. Check whether fitting outer edge lines up with the marker of the insertion depth - release the pressing procedure through actuation of the start push button. The pressing procedure cannot be interrupted prematurely. In this way, it is ensured that a permanently sealed connection is always created. In case of danger an interruption of the pressing procedure is possible through actuation of the Emergency Off button¹⁾.

¹⁾ After reset of the Emergency Off situation, a post-pressing or, where appropriate, a new pressing must be implemented

Dimension d = 108 mm

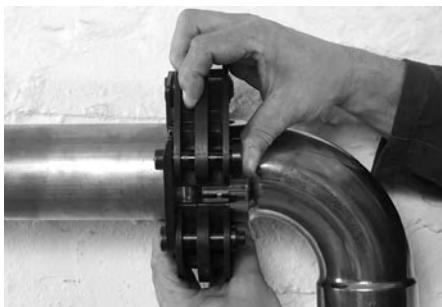


5. Apply press sling of the dimension 108 mm as described in Step 3. of the Section "Dimension 64 mm up to 88.9 mm". Ensure the marker strokes form a line on the slide segments and the clamps. If this is not the case, make the slide segments movable. Press in the press sling first of all with intermediate jaw ZB 321 (SANHA Catalog No. 6931.2) as described in Step 3. Remove intermediate jaws ZB 321 by depressing of a jaw lever of the press sling. The press sling remains at the pressing location (press sling can not be detached).



6. Put intermediate jaw ZB 322 (see SANHA Catalog No. 6931.3) into the press tool and carry out the second pressing procedure. The pressing procedure cannot be interrupted prematurely. In this way it is ensured that a permanently sealed connection always results. An interruption of the pressing procedure in case of danger is possible through pressing the Emergency Off button¹⁾.

¹⁾ After reset of the Emergency Off situation, a post-pressing or, where appropriate, a new pressing must be implemented



6. Loosen the press sling through stripping the lock strap. In this case locking pins protrude from the opposite side.



7. Open the press sling by depressing the lock lever and remove from the connection point.

NOTE: Installation tube made of copper d = 108 mm with a wallthickness of 1.2 mm or 1.5 mm must be used with press slings marked "COPPER ONLY", article number 16934, only.

SYSTEM TECHNOLOGY

SANHA-Press Copper and gunmetal pressfittings for the drinking water and heating installation

Series 6000 and 8000



HK / W / 0403 / 01 / 99



40 582 01 HH



1005R01F4P5-bpr
1005R01F4P5-rpr



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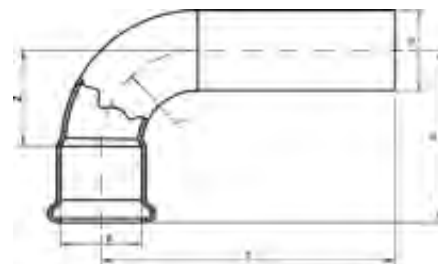
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W-1.340



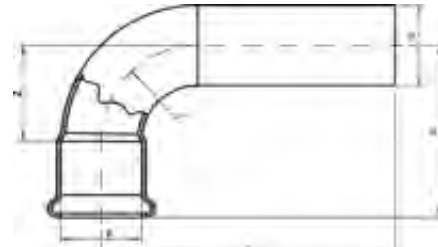
DW-8511AU2076



Catalog-no. and -description

6001A – Bend 90° female/male

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|-----|-----|-----|
| 16001A12 | 12 | 10 | 500 | 4021343127953 | 30 | 40 | 15 |
| 16001A14 | 14 | 10 | 400 | 4021343163173 | 36 | 44 | 18 |
| 16001A15 | 15 | 10 | 350 | 4021343127960 | 36 | 44 | 18 |
| 16001A16 | 16 | 10 | 300 | 4021343163180 | 36 | 44 | 18 |
| 16001A18 | 18 | 10 | 250 | 4021343127977 | 42 | 50 | 22 |
| 16001A22 | 22 | 10 | 130 | 4021343127984 | 50 | 58 | 27 |
| 16001A28 | 28 | 5 | 75 | 4021343127991 | 61 | 68 | 34 |
| 16001A35 | 35 | 2 | 40 | 4021343128004 | 75 | 82 | 43 |
| 16001A42 | 42 | 2 | 22 | 4021343128011 | 89 | 103 | 51 |
| 16001A54 | 54 | 1 | 12 | 4021343128028 | 108 | 123 | 65 |
| 16001A64 | 64 | 1 | 8 | 4021343194894 | 125 | 142 | 78 |
| 16001A67 | 66,7 | 1 | 8 | 4021343194900 | 129 | 147 | 81 |
| 16001A76 | 76,1 | 1 | 5 | 4021343176289 | 142 | 160 | 92 |
| 16001A89 | 88,9 | 1 | 3 | 4021343176296 | 164 | 184 | 108 |
| 16001A108 | 108 | 1 | 1 | 4021343176302 | 200 | 227 | 131 |



Catalog-no. and -description

6001L – Bend 90° female/male - long

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|----|----|----|
| 16001L15 | 15 | 10 | 250 | 4021343158407 | 36 | 64 | 18 |



Catalog-no. and -description

6002A – Bend 90° female/female

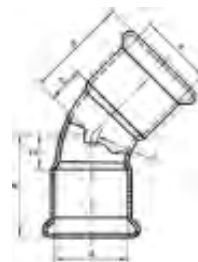
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|-------------|----------------|-----|-----|---------------|-----|-----|
| 16002A12 | 12 | 10 | 500 | 4021343128035 | 30 | 15 |
| 16002A14 | 14 | 10 | 350 | 4021343163197 | 36 | 18 |
| 16002A15 | 15 | 10 | 300 | 4021343128042 | 36 | 18 |
| 16002A16 | 16 | 10 | 300 | 4021343163203 | 36 | 18 |
| 16002A18 | 18 | 10 | 200 | 4021343128059 | 42 | 22 |
| 16002A22 | 22 | 10 | 130 | 4021343128066 | 50 | 27 |
| 16002A28 | 28 | 5 | 80 | 4021343128073 | 61 | 34 |
| 16002A35 | 35 | 2 | 40 | 4021343128080 | 75 | 43 |
| 16002A42 | 42 | 2 | 24 | 4021343128097 | 89 | 51 |
| 16002A54 | 54 | 2 | 12 | 4021343128103 | 108 | 65 |
| 16002A64 | 64 | 1 | 8 | 4021343194917 | 125 | 78 |
| 16002A67 | 66,7 | 1 | 8 | 4021343194924 | 129 | 81 |
| 16002A76 | 76,1 | 1 | 4 | 4021343176319 | 142 | 92 |
| 16002A89 | 88,9 | 1 | 2 | 4021343176326 | 164 | 108 |
| 16002A108 | 108 | 1 | 1 | 4021343176333 | 200 | 131 |



Catalog-no. and -description

6040 – Bend 45° female/male

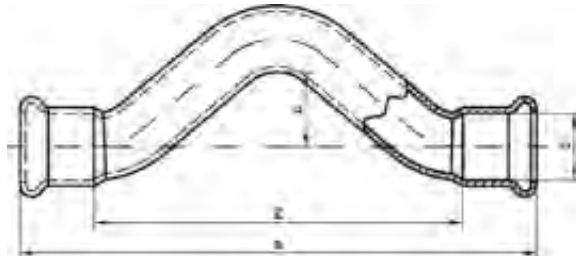
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|-----|-----|----|
| 1604012 | 12 | 10 | 600 | 4021343128110 | 22 | 30 | 6 |
| 1604014 | 14 | 10 | 400 | 4021343163258 | 26 | 34 | 8 |
| 1604015 | 15 | 10 | 400 | 4021343128127 | 26 | 34 | 8 |
| 1604016 | 16 | 10 | 400 | 4021343163265 | 26 | 34 | 8 |
| 1604018 | 18 | 10 | 300 | 4021343128134 | 29 | 37 | 9 |
| 1604022 | 22 | 10 | 180 | 4021343128141 | 35 | 43 | 11 |
| 1604028 | 28 | 5 | 90 | 4021343128158 | 41 | 49 | 14 |
| 1604035 | 35 | 2 | 50 | 4021343128165 | 50 | 58 | 18 |
| 1604042 | 42 | 2 | 30 | 4021343128172 | 59 | 74 | 21 |
| 1604054 | 54 | 2 | 18 | 4021343128189 | 70 | 85 | 27 |
| 1604064 | 64 | 1 | 12 | 4021343194795 | 80 | 97 | 33 |
| 1604067 | 66,7 | 1 | 10 | 4021343200090 | 82 | 100 | 34 |
| 1604076 | 76,1 | 1 | 6 | 4021343176340 | 89 | 105 | 39 |
| 1604089 | 88,9 | 1 | 3 | 4021343176357 | 101 | 119 | 45 |
| 16040108 | 108 | 1 | 2 | 4021343176364 | 124 | 145 | 55 |



Catalog-no. and -description

6041 – Bend 45° female/female

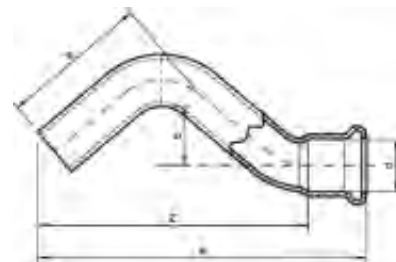
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|-------------|----------------|-----|-----|---------------|-----|----|
| 1604112 | 12 | 10 | 600 | 4021343128196 | 22 | 6 |
| 1604114 | 14 | 10 | 400 | 4021343163272 | 26 | 8 |
| 1604115 | 15 | 10 | 350 | 4021343128202 | 26 | 8 |
| 1604116 | 16 | 10 | 400 | 4021343163289 | 26 | 8 |
| 1604118 | 18 | 10 | 250 | 4021343128219 | 29 | 9 |
| 1604122 | 22 | 10 | 160 | 4021343128226 | 35 | 11 |
| 1604128 | 28 | 5 | 100 | 4021343128233 | 41 | 14 |
| 1604135 | 35 | 2 | 50 | 4021343128240 | 50 | 18 |
| 1604142 | 42 | 2 | 30 | 4021343128257 | 59 | 21 |
| 1604154 | 54 | 2 | 18 | 4021343128264 | 70 | 27 |
| 1604164 | 64 | 1 | 10 | 4021343194801 | 80 | 33 |
| 1604167 | 66,7 | 1 | 12 | 4021343194818 | 82 | 34 |
| 1604176 | 76,1 | 1 | 6 | 4021343176371 | 89 | 39 |
| 1604189 | 88,9 | 1 | 3 | 4021343176388 | 101 | 45 |
| 16041108 | 108 | 1 | 2 | 4021343176395 | 124 | 55 |



Catalog-no. and -description

6085 – Full crossover

| Article-no. | Dimension d | Bag | Box | EAN code | a | c | z |
|-------------|----------------|-----|-----|---------------|-----|----|-----|
| 1608512 | 12 | 10 | 200 | 4021343148682 | 110 | 18 | 78 |
| 1608514 | 14 | 10 | 200 | 4021343163210 | 124 | 19 | 89 |
| 1608515 | 15 | 10 | 150 | 4021343148699 | 124 | 19 | 89 |
| 1608516 | 16 | 10 | 150 | 4021343163227 | 124 | 18 | 89 |
| 1608518 | 18 | 10 | 90 | 4021343148705 | 142 | 21 | 102 |
| 1608522 | 22 | 10 | 50 | 4021343148712 | 172 | 25 | 125 |
| 1608528 | 28 | 5 | 35 | 4021343164033 | 203 | 28 | 150 |



Catalog-no. and -description

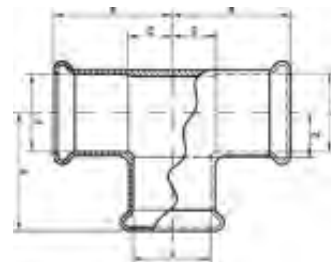
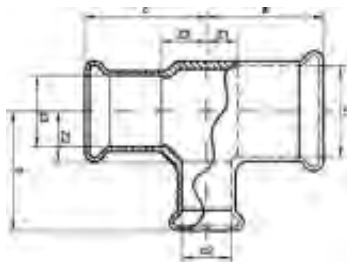
6086 – Partial crossover

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | c | z |
|-------------|----------------|-----|-----|---------------|-----|----|----|-----|
| 1608612 | 12 | 10 | 300 | 4021343148729 | 87 | 40 | 18 | 71 |
| 1608614 | 14 | 10 | 200 | 4021343163234 | 97 | 44 | 19 | 80 |
| 1608615 | 15 | 10 | 200 | 4021343148736 | 98 | 44 | 19 | 80 |
| 1608616 | 16 | 10 | 200 | 4021343163241 | 98 | 44 | 18 | 80 |
| 1608618 | 18 | 10 | 150 | 4021343148743 | 111 | 49 | 21 | 92 |
| 1608622 | 22 | 10 | 80 | 4021343148750 | 136 | 61 | 25 | 112 |
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3
(Branch)

1 **2**



Catalog-no. and -description

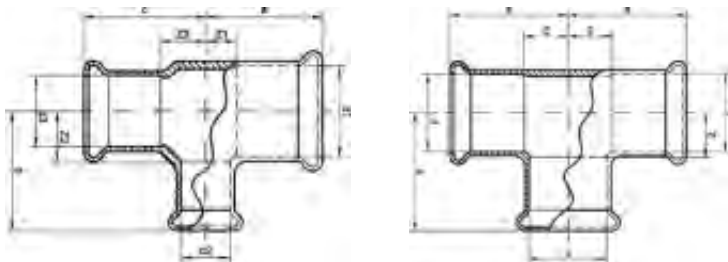
6130 – Tee

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|-------------|---------------------------|-----|-----|---------------|-----|-----|-----|----|----|----|----|
| 1613012 | 12 | 10 | 350 | 4021343128356 | 23 | 23 | 23 | 8 | | | |
| 1613014 | 14 | 10 | 250 | 4021343163296 | 27 | 27 | 27 | 9 | | | |
| 1613015 | 15 | 10 | 200 | 4021343128370 | 34 | 27 | 34 | 9 | | | |
| 1613016 | 16 | 10 | 200 | 4021343163302 | 28 | 28 | 28 | 10 | | | |
| 1613018 | 18 | 10 | 150 | 4021343128431 | 36 | 31 | 36 | 11 | | | |
| 1613022 | 22 | 10 | 80 | 4021343128509 | 39 | 37 | 39 | 13 | | | |
| 1613028 | 28 | 5 | 60 | 4021343128608 | 43 | 43 | 43 | 17 | | | |
| 1613035 | 35 | 2 | 30 | 4021343128684 | 53 | 53 | 53 | 21 | | | |
| 1613042 | 42 | 2 | 22 | 4021343128738 | 63 | 63 | 63 | 25 | | | |
| 1613054 | 54 | 2 | 12 | 4021343128776 | 73 | 73 | 73 | 31 | | | |
| 1613064 | 64 | 1 | 6 | 4021343194825 | 86 | 98 | 86 | | 39 | 51 | 39 |
| 1613067 | 66,7 | 1 | 6 | 4021343194832 | 89 | 100 | 89 | | 41 | 51 | 41 |
| 1613076 | 76,1 | 1 | 3 | 4021343176401 | 97 | 106 | 97 | | 47 | 57 | 47 |
| 1613089 | 88,9 | 1 | 2 | 4021343176418 | 111 | 121 | 111 | | 55 | 65 | 55 |
| 16130108 | 108 | 1 | 1 | 4021343176425 | 135 | 145 | 135 | | 65 | 75 | 65 |
| 16130121512 | 12 x 12 x 15 | 10 | 300 | 4021343128363 | 28 | 27 | 28 | 12 | 9 | 12 | |
| 16130141214 | 14 x 14 x 12 | 10 | 300 | 4021343163319 | 26 | 25 | 26 | 8 | 9 | 8 | |
| 16130151212 | 15 x 12 x 12 | 10 | 300 | 4021343128387 | 26 | 25 | 25 | 8 | 9 | 10 | |
| 16130151512 | 15 x 12 x 15 | 10 | 250 | 4021343128400 | 27 | 27 | 28 | 9 | 9 | 12 | |
| 16130151812 | 15 x 12 x 18 | 10 | 170 | 4021343137945 | 31 | 31 | 30 | 13 | 11 | 15 | |
| 16130151215 | 15 x 15 x 12 | 10 | 280 | 4021343128394 | 26 | 25 | 26 | 8 | 9 | 8 | |
| 16130151815 | 15 x 15 x 18 | 10 | 180 | 4021343128417 | 31 | 31 | 31 | 13 | 11 | 13 | |
| 16130152215 | 15 x 15 x 22 | 10 | 120 | 4021343128424 | 35 | 37 | 35 | 17 | 13 | 17 | |
| 16130161414 | 16 x 14 x 14 | 10 | 250 | 4021343163333 | 27 | 28 | 28 | 9 | 10 | 10 | |
| 16130161216 | 16 x 16 x 12 | 10 | 250 | 4021343163326 | 26 | 26 | 26 | 8 | 10 | 8 | |
| 16130161416 | 16 x 16 x 14 | 10 | 250 | 4021343163340 | 27 | 28 | 27 | 9 | 10 | 9 | |
| 16130181215 | 18 x 15 x 12 | 10 | 200 | 4021343128448 | 28 | 27 | 28 | 8 | 11 | 10 | |
| 16130181515 | 18 x 15 x 15 | 10 | 200 | 4021343128462 | 30 | 29 | 30 | 10 | 11 | 12 | |
| 16130181815 | 18 x 15 x 18 | 10 | 180 | 4021343128486 | 31 | 31 | 31 | 11 | 11 | 13 | |
| 16130181218 | 18 x 18 x 12 | 10 | 200 | 4021343128455 | 28 | 27 | 28 | 8 | 11 | 8 | |
| 16130181418 | 18 x 18 x 14 | 10 | 200 | 4021343163357 | 29 | 29 | 29 | 9 | 11 | 9 | |
| 16130181518 | 18 x 18 x 15 | 10 | 180 | 4021343128479 | 30 | 29 | 30 | 10 | 11 | 10 | |
| 16130181618 | 18 x 18 x 16 | 10 | 180 | 4021343163364 | 30 | 29 | 30 | 10 | 11 | 10 | |
| 16130182218 | 18 x 18 x 22 | 10 | 90 | 4021343128493 | 36 | 37 | 36 | 16 | 13 | 16 | |
| 16130221515 | 22 x 15 x 15 | 10 | 150 | 4021343128516 | 33 | 31 | 32 | 10 | 13 | 14 | |
| 16130221815 | 22 x 15 x 18 | 10 | 140 | 4021343128547 | 35 | 33 | 33 | 11 | 13 | 15 | |
| 16130222215 | 22 x 15 x 22 | 10 | 100 | 4021343128578 | 37 | 37 | 35 | 13 | 13 | 17 | |
| 16130221518 | 22 x 18 x 15 | 10 | 150 | 4021343128523 | 33 | 31 | 32 | 10 | 13 | 12 | |
| 16130221818 | 22 x 18 x 18 | 10 | 130 | 4021343128554 | 35 | 33 | 34 | 11 | 13 | 14 | |
| 16130222218 | 22 x 18 x 22 | 10 | 100 | 4021343128585 | 37 | 37 | 36 | 13 | 13 | 16 | |
| 16130221222 | 22 x 22 x 12 | 10 | 130 | 4021343137952 | 32 | 29 | 32 | 8 | 13 | 8 | |
| 16130221422 | 22 x 22 x 14 | 10 | 120 | 4021343163371 | 33 | 31 | 33 | 9 | 13 | 9 | |
| 16130221522 | 22 x 22 x 15 | 10 | 120 | 4021343128530 | 33 | 31 | 33 | 10 | 13 | 10 | |
| 16130221622 | 22 x 22 x 16 | 10 | 120 | 4021343163388 | 34 | 31 | 34 | 10 | 13 | 10 | |
| 16130221822 | 22 x 22 x 18 | 10 | 120 | 4021343128561 | 35 | 33 | 35 | 11 | 13 | 11 | |
| 16130222822 | 22 x 22 x 28 | 5 | 70 | 4021343128592 | 43 | 43 | 43 | 20 | 17 | 20 | |
| 16130282815 | 28 x 15 x 28 | 5 | 60 | 4021343137976 | 43 | 43 | 42 | 17 | 17 | 24 | |
| 16130281818 | 28 x 18 x 18 | 5 | 100 | 4021343137969 | 38 | 36 | 37 | 12 | 16 | 17 | |
| 16130282818 | 28 x 18 x 28 | 5 | 60 | 4021343137983 | 43 | 43 | 42 | 17 | 17 | 22 | |



3
(Branch)

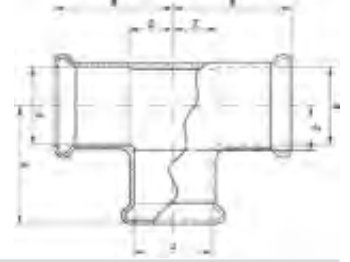
1 **2**



Catalog-no. and -description

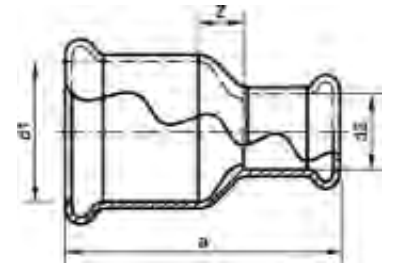
6130 – Tee (continued)

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|---------------|---------------------------|-----|-----|---------------|-----|-----|-----|----|----|----|----|
| 16130281522 | 28 x 22 x 15 | 5 | 80 | 4021343128615 | 37 | 34 | 37 | 10 | 16 | 13 | |
| 16130281822 | 28 x 22 x 18 | 5 | 90 | 4021343128639 | 38 | 36 | 38 | 12 | 16 | 15 | |
| 16130282222 | 28 x 22 x 22 | 5 | 70 | 4021343128653 | 40 | 40 | 40 | 14 | 16 | 17 | |
| 16130282822 | 28 x 22 x 28 | 5 | 70 | 4021343128677 | 43 | 43 | 43 | 17 | 17 | 20 | |
| 16130281428 | 28 x 28 x 14 | 5 | 80 | 4021343163395 | 36 | 34 | 36 | 10 | 16 | 10 | |
| 16130281528 | 28 x 28 x 15 | 5 | 80 | 4021343128622 | 37 | 34 | 37 | 10 | 16 | 10 | |
| 16130281628 | 28 x 28 x 16 | 5 | 80 | 4021343163401 | 37 | 34 | 37 | 11 | 16 | 11 | |
| 16130281828 | 28 x 28 x 18 | 5 | 70 | 4021343128646 | 38 | 36 | 38 | 12 | 16 | 12 | |
| 16130282228 | 28 x 28 x 22 | 5 | 60 | 4021343128660 | 40 | 40 | 40 | 14 | 16 | 14 | |
| 16130283528 | 28 x 28 x 35 | 2 | 40 | 4021343137990 | 53 | 53 | 53 | 25 | 21 | 25 | |
| 16130352222 | 35 x 22 x 22 | 2 | 50 | 4021343138003 | 46 | 44 | 45 | 14 | 20 | 21 | |
| 16130353522 | 35 x 22 x 35 | 2 | 40 | 4021343138034 | 53 | 53 | 51 | 21 | 21 | 28 | |
| 16130352228 | 35 x 28 x 22 | 2 | 40 | 4021343138010 | 46 | 44 | 45 | 14 | 20 | 19 | |
| 16130352828 | 35 x 28 x 28 | 2 | 44 | 4021343138027 | 49 | 47 | 48 | 17 | 21 | 22 | |
| 16130353528 | 35 x 28 x 35 | 2 | 30 | 4021343138041 | 53 | 53 | 52 | 21 | 21 | 25 | |
| 16130351535 | 35 x 35 x 15 | 2 | 50 | 4021343128691 | 43 | 38 | 43 | 11 | 20 | 11 | |
| 16130351835 | 35 x 35 x 18 | 2 | 50 | 4021343128707 | 44 | 40 | 44 | 12 | 20 | 12 | |
| 16130352235 | 35 x 35 x 22 | 2 | 50 | 4021343128714 | 46 | 44 | 46 | 14 | 20 | 14 | |
| 16130352835 | 35 x 35 x 28 | 2 | 36 | 4021343128721 | 49 | 47 | 49 | 17 | 21 | 17 | |
| 16130423535 | 42 x 35 x 35 | 2 | 24 | 4021343138065 | 59 | 57 | 57 | 21 | 25 | 25 | |
| 16130421542 | 42 x 42 x 15 | 2 | 30 | 4021343138058 | 49 | 51 | 49 | 11 | 34 | 11 | |
| 16130422242 | 42 x 42 x 22 | 2 | 30 | 4021343128745 | 53 | 48 | 53 | 15 | 24 | 15 | |
| 16130422842 | 42 x 42 x 28 | 2 | 26 | 4021343128752 | 56 | 51 | 56 | 18 | 25 | 18 | |
| 16130423542 | 42 x 42 x 35 | 2 | 24 | 4021343128769 | 59 | 57 | 59 | 21 | 25 | 21 | |
| 16130542254 | 54 x 54 x 22 | 2 | 18 | 4021343128783 | 57 | 54 | 57 | 15 | 30 | 15 | |
| 16130542854 | 54 x 54 x 28 | 2 | 14 | 4021343128790 | 60 | 68 | 60 | 18 | 41 | 18 | |
| 16130543554 | 54 x 54 x 35 | 2 | 14 | 4021343128806 | 64 | 63 | 64 | 21 | 31 | 21 | |
| 16130544254 | 54 x 54 x 42 | 2 | 14 | 4021343128813 | 67 | 69 | 67 | 25 | 31 | 25 | |
| 16130644264 | 64 x 64 x 42 | 1 | 10 | 4021343194849 | 77 | 86 | 77 | 30 | 48 | 30 | |
| 16130645464 | 64 x 64 x 54 | 1 | 8 | 4021343194856 | 82 | 91 | 82 | 35 | 48 | 35 | |
| 16130672867 | 66,7 x 66,7 x 28 | 1 | 10 | 4021343200106 | 70 | 76 | 70 | 22 | 49 | 22 | |
| 16130673567 | 66,7 x 66,7 x 35 | 1 | 10 | 4021343200113 | 75 | 81 | 75 | 27 | 49 | 27 | |
| 16130674267 | 66,7 x 66,7 x 42 | 1 | 8 | 4021343200120 | 78 | 87 | 78 | 30 | 49 | 30 | |
| 16130675467 | 66,7 x 66,7 x 54 | 1 | 8 | 4021343200137 | 83 | 92 | 83 | 35 | 49 | 35 | |
| 16130762276 | 76,1 x 76,1 x 22 | 1 | 8 | 4021343206764 | 76 | 87 | 76 | 27 | 63 | 27 | |
| 16130762876 | 76,1 x 76,1 x 28 | 1 | 8 | 4021343206771 | 76 | 87 | 76 | 27 | 60 | 27 | |
| 16130763576 | 76,1 x 76,1 x 35 | 1 | 6 | 4021343206788 | 76 | 86 | 76 | 27 | 54 | 27 | |
| 16130764276 | 76,1 x 76,1 x 42 | 1 | 6 | 4021343206795 | 80 | 92 | 80 | 30 | 54 | 30 | |
| 16130765476 | 76,1 x 76,1 x 54 | 1 | 6 | 4021343176432 | 86 | 97 | 86 | 36 | 54 | 36 | |
| 16130766476 | 76,1 x 76,1 x 64 | 1 | 6 | 4021343205330 | 91 | 104 | 91 | 41 | 57 | 41 | |
| 16130766776 | 76,1 x 76,1 x 66,7 | 1 | 6 | 4021343200144 | 91 | 105 | 91 | 41 | 57 | 41 | |
| 16130895489 | 88,9 x 88,9 x 54 | 1 | 3 | 4021343176449 | 94 | 105 | 94 | 38 | 62 | 38 | |
| 16130896489 | 88,9 x 88,9 x 64 | 1 | 3 | 4021343205347 | 99 | 112 | 99 | 43 | 65 | 43 | |
| 16130897689 | 88,9 x 88,9 x 76,1 | 1 | 2 | 4021343176456 | 105 | 115 | 105 | 49 | 65 | 49 | |
| 1613010854108 | 108 x 108 x 54 | 1 | 2 | 4021343176463 | 108 | 115 | 108 | 38 | 72 | 38 | |
| 1613010864108 | 108 x 108 x 64 | 1 | 2 | 4021343205354 | 113 | 122 | 113 | 43 | 75 | 43 | |
| 1613010867108 | 108 x 108 x 66,7 | 1 | 2 | 4021343200151 | 113 | 123 | 113 | 43 | 75 | 43 | |
| 1613010876108 | 108 x 108 x 76,1 | 1 | 2 | 4021343176470 | 119 | 125 | 119 | 49 | 75 | 49 | |
| 1613010889108 | 108 x 108 x 88,9 | 1 | 1 | 4021343176487 | 125 | 131 | 125 | 56 | 75 | 56 | |



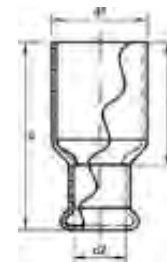
Catalog-no. and -description
6130L – Tee - long

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|----|----|
| 16130L15 | 15 | 10 | 200 | 4021343169243 | 35 | 17 |



Catalog-no. and -description
6240 – Reducing coupling

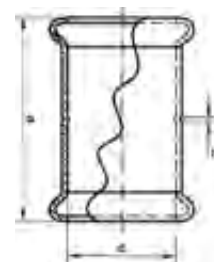
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 162401412 | 14 x 12 | 10 | 500 | 4021343163418 | 37 | 4 |
| 162401512 | 15 x 12 | 10 | 600 | 4021343128820 | 34 | 4 |
| 162401514 | 15 x 14 | 10 | 400 | 4021343163425 | 38 | 3 |
| 162401614 | 16 x 14 | 10 | 400 | 4021343163432 | 39 | 4 |
| 162401812 | 18 x 12 | 10 | 400 | 4021343128837 | 41 | 6 |
| 162401814 | 18 x 14 | 10 | 350 | 4021343163449 | 42 | 5 |
| 162401815 | 18 x 15 | 10 | 350 | 4021343128844 | 42 | 4 |
| 162401816 | 18 x 16 | 10 | 350 | 4021343163456 | 41 | 4 |
| 162402214 | 22 x 14 | 10 | 250 | 4021343163463 | 49 | 8 |
| 162402215 | 22 x 15 | 10 | 250 | 4021343128851 | 48 | 6 |
| 162402216 | 22 x 16 | 10 | 250 | 4021343163470 | 47 | 6 |
| 162402218 | 22 x 18 | 10 | 250 | 4021343128868 | 48 | 5 |
| 162402814 | 28 x 14 | 5 | 180 | 4021343163487 | 55 | 10 |
| 162402815 | 28 x 15 | 5 | 160 | 4021343128875 | 54 | 10 |
| 162402816 | 28 x 16 | 5 | 160 | 4021343163494 | 54 | 9 |
| 162402818 | 28 x 18 | 5 | 150 | 4021343128882 | 55 | 8 |
| 162402822 | 28 x 22 | 5 | 125 | 4021343128899 | 56 | 6 |
| 162403522 | 35 x 22 | 2 | 100 | 4021343128905 | 65 | 10 |
| 162403528 | 35 x 28 | 2 | 80 | 4021343128912 | 65 | 7 |
| 162404222 | 42 x 22 | 2 | 70 | 4021343128929 | 75 | 13 |
| 162404228 | 42 x 28 | 2 | 60 | 4021343128936 | 75 | 10 |
| 162404235 | 42 x 35 | 2 | 44 | 4021343128943 | 77 | 7 |
| 162405428 | 54 x 28 | 2 | 40 | 4021343128950 | 86 | 16 |
| 162405435 | 54 x 35 | 2 | 40 | 4021343128967 | 88 | 13 |
| 162405442 | 54 x 42 | 2 | 30 | 4021343128974 | 90 | 9 |



Catalog-no. and -description

6243 – Reducer

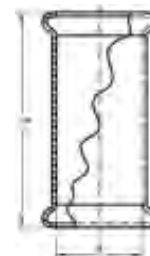
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|
| 162431412 | 14a x 12 | 10 | 600 | 4021343163500 | 40 | 25 |
| 162431512 | 15a x 12 | 10 | 600 | 4021343128981 | 40 | 24 |
| 162431514 | 15a x 14 | 10 | 550 | 4021343163517 | 50 | 32 |
| 162431612 | 16a x 12 | 10 | 600 | 4021343163524 | 41 | 26 |
| 162431614 | 16a x 14 | 10 | 500 | 4021343163531 | 43 | 25 |
| 162431812 | 18a x 12 | 10 | 500 | 4021343128998 | 44 | 28 |
| 162431814 | 18a x 14 | 10 | 500 | 4021343163548 | 45 | 27 |
| 162431815 | 18a x 15 | 10 | 360 | 4021343129001 | 44 | 26 |
| 162431816 | 18a x 16 | 10 | 360 | 4021343163555 | 45 | 27 |
| 162432214 | 22a x 14 | 10 | 350 | 4021343163562 | 51 | 33 |
| 162432215 | 22a x 15 | 10 | 350 | 4021343129018 | 51 | 33 |
| 162432216 | 22a x 16 | 10 | 350 | 4021343163579 | 50 | 32 |
| 162432218 | 22a x 18 | 10 | 300 | 4021343129025 | 50 | 30 |
| 162432814 | 28a x 14 | 5 | 250 | 4021343163586 | 59 | 41 |
| 162432815 | 28a x 15 | 5 | 200 | 4021343129032 | 57 | 39 |
| 162432816 | 28a x 16 | 5 | 250 | 4021343163593 | 58 | 40 |
| 162432818 | 28a x 18 | 5 | 200 | 4021343129049 | 57 | 37 |
| 162432822 | 28a x 22 | 5 | 150 | 4021343129056 | 58 | 34 |
| 162433522 | 35a x 22 | 2 | 100 | 4021343129063 | 68 | 44 |
| 162433528 | 35a x 28 | 2 | 100 | 4021343129070 | 67 | 40 |
| 162434222 | 42a x 22 | 2 | 70 | 4021343129087 | 77 | 54 |
| 162434228 | 42a x 28 | 2 | 70 | 4021343129094 | 77 | 51 |
| 162434235 | 42a x 35 | 2 | 60 | 4021343129100 | 78 | 46 |
| 162435435 | 54a x 35 | 2 | 40 | 4021343129117 | 90 | 58 |
| 162435442 | 54a x 42 | 2 | 36 | 4021343129124 | 91 | 53 |
| 162436442 | 64a x 42 | 1 | 24 | 4021343194931 | 127 | 89 |
| 162436454 | 64a x 54 | 1 | 15 | 4021343194948 | 124 | 81 |
| 162436728 | 66,7a x 28 | 1 | 20 | 4021343194955 | 124 | 98 |
| 162436735 | 66,7a x 35 | 1 | 20 | 4021343194962 | 126 | 94 |
| 162436742 | 66,7a x 42 | 1 | 18 | 4021343200168 | 129 | 91 |
| 162436754 | 66,7a x 54 | 1 | 20 | 4021343194979 | 128 | 85 |
| 162437635 | 76,1a x 35 | 1 | 15 | 4021343206801 | 131 | 99 |
| 162437642 | 76,1a x 42 | 1 | 15 | 4021343206818 | 133 | 95 |
| 162437654 | 76,1a x 54 | 1 | 15 | 4021343176555 | 133 | 90 |
| 162437664 | 76,1a x 64 | 1 | 15 | 4021343205316 | 130 | 83 |
| 162437667 | 76,1a x 66,7 | 1 | 15 | 4021343200175 | 129 | 81 |
| 162438954 | 88,9a x 54 | 1 | 10 | 4021343176562 | 149 | 106 |
| 162438964 | 88,9a x 64 | 1 | 10 | 4021343205309 | 148 | 101 |
| 162438976 | 88,9a x 76,1 | 1 | 10 | 4021343176609 | 145 | 95 |
| 1624310842 | 108a x 42 | 1 | 4 | 4021343206825 | 179 | 141 |
| 1624310854 | 108a x 54 | 1 | 4 | 4021343176579 | 179 | 136 |
| 1624310864 | 108a x 64 | 1 | 4 | 4021343205323 | 178 | 131 |
| 1624310867 | 108a x 66,7 | 1 | 4 | 4021343200182 | 178 | 129 |
| 1624310876 | 108a x 76,1 | 1 | 4 | 4021343176586 | 174 | 124 |
| 1624310889 | 108a x 88,9 | 1 | 4 | 4021343176593 | 174 | 118 |



Catalog-no. and -description

6270 – Coupling

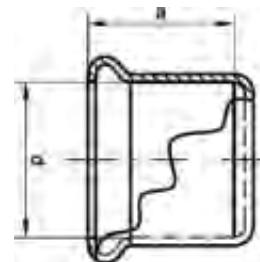
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|-----|----|
| 1627012 | 12 | 10 | 600 | 4021343129209 | 33 | 2 |
| 1627014 | 14 | 10 | 550 | 4021343163609 | 37 | 2 |
| 1627015 | 15 | 10 | 500 | 4021343129216 | 38 | 2 |
| 1627016 | 16 | 10 | 400 | 4021343163616 | 37 | 2 |
| 1627018 | 18 | 10 | 300 | 4021343129223 | 42 | 2 |
| 1627022 | 22 | 10 | 200 | 4021343129230 | 49 | 2 |
| 1627028 | 28 | 5 | 125 | 4021343129247 | 55 | 2 |
| 1627035 | 35 | 2 | 80 | 4021343129254 | 66 | 2 |
| 1627042 | 42 | 2 | 40 | 4021343129261 | 79 | 3 |
| 1627054 | 54 | 2 | 32 | 4021343129278 | 88 | 3 |
| 1627064 | 64 | 1 | 20 | 4021343194863 | 111 | 17 |
| 1627067 | 66,7 | 1 | 14 | 4021343194870 | 113 | 17 |
| 1627076 | 76,1 | 1 | 10 | 4021343176494 | 117 | 17 |
| 1627089 | 88,9 | 1 | 6 | 4021343176500 | 129 | 17 |
| 16270108 | 108 | 1 | 4 | 4021343176517 | 156 | 17 |



Catalog-no. and -description

6270S – Slip coupling

| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 16270S12 | 12 | 10 | 700 | 4021343131240 | 41 |
| 16270S15 | 15 | 10 | 300 | 4021343129131 | 47 |
| 16270S18 | 18 | 10 | 250 | 4021343129148 | 53 |
| 16270S22 | 22 | 10 | 150 | 4021343129155 | 64 |
| 16270S28 | 28 | 5 | 100 | 4021343129162 | 72 |
| 16270S35 | 35 | 2 | 50 | 4021343129179 | 88 |
| 16270S42 | 42 | 2 | 40 | 4021343129186 | 104 |
| 16270S54 | 54 | 2 | 24 | 4021343129193 | 119 |
| 16270S64 | 64 | 1 | 20 | 4021343194887 | 110 |
| 16270S67 | 66,7 | 1 | 15 | 4021343206757 | 112 |
| 16270S76 | 76,1 | 1 | 10 | 4021343176524 | 116 |
| 16270S89 | 88,9 | 1 | 6 | 4021343176531 | 128 |
| 16270S108 | 108 | 1 | 4 | 4021343176548 | 155 |



Catalog-no. and -description

6301 – Endcap

| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|------|---------------|----|
| 1630112 | 12 | 10 | 1000 | 4021343137808 | 16 |
| 1630114 | 14 | 10 | 900 | 4021343163159 | 18 |
| 1630115 | 15 | 10 | 800 | 4021343137815 | 18 |
| 1630116 | 16 | 10 | 800 | 4021343163166 | 18 |
| 1630118 | 18 | 10 | 700 | 4021343137822 | 20 |
| 1630122 | 22 | 10 | 300 | 4021343137839 | 24 |
| 1630128 | 28 | 5 | 250 | 4021343137846 | 27 |
| 1630135 | 35 | 2 | 120 | 4021343137853 | 32 |
| 1630142 | 42 | 2 | 90 | 4021343137860 | 38 |
| 1630154 | 54 | 2 | 50 | 4021343137877 | 43 |
| 1630164 | 64 | 1 | 30 | 4021343194986 | 47 |
| 1630167 | 66,7 | 1 | 30 | 4021343194993 | 48 |
| 1630176 | 76,1 | 1 | 20 | 4021343176616 | 50 |
| 1630189 | 88,9 | 1 | 14 | 4021343176623 | 56 |
| 16301108 | 108 | 1 | 10 | 4021343177330 | 70 |



Catalog-no. and -description

8090g – Female elbow 90°

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|
| 180901238 | 12 x 3/8 | 10 | 150 | 4021343139970 | 27 | 18 | 11 | 8 | 21 |
| 180901212 | 12 x 1/2 | 10 | 150 | 4021343139987 | 30 | 22 | 14 | 8 | 26 |
| 180901412 | 14 x 1/2 | 10 | 150 | 4021343163623 | 31 | 23 | 13 | 9 | 26 |
| 180901538 | 15 x 3/8 | 10 | 150 | 4021343139994 | 29 | 19 | 11 | 9 | 22 |
| 180901512 | 15 x 1/2 | 10 | 150 | 4021343140006 | 33 | 23 | 15 | 10 | 26 |
| 180901534 | 15 x 3/4 | 10 | 100 | 4021343140013 | 36 | 25 | 18 | 9 | 32 |
| 180901612 | 16 x 1/2 | 10 | 150 | 4021343163630 | 33 | 23 | 15 | 10 | 26 |
| 180901812 | 18 x 1/2 | 10 | 150 | 4021343140020 | 33 | 25 | 13 | 11 | 26 |
| 180901834 | 18 x 3/4 | 10 | 100 | 4021343140037 | 36 | 27 | 16 | 11 | 32 |
| 180902212 | 22 x 1/2 | 10 | 100 | 4021343140044 | 37 | 27 | 13 | 14 | 26 |
| 180902234 | 22 x 3/4 | 10 | 80 | 4021343140051 | 40 | 29 | 16 | 14 | 32 |
| 18090221 | 22 x 1 | 10 | 40 | 4021343140068 | 44 | 30 | 20 | 13 | 39 |
| 180902812 | 28 x 1/2 | 5 | 80 | 4021343198069 | 40 | 29 | 14 | 16 | 27 |
| 180902834 | 28 x 3/4 | 5 | 50 | 4021343198083 | 44 | 31 | 18 | 16 | 32 |
| 18090281 | 28 x 1 | 5 | 30 | 4021343140075 | 46 | 33 | 20 | 16 | 39 |
| 1809035114 | 35 x 1 1/4 | 2 | 20 | 4021343140082 | 57 | 42 | 25 | 20 | 49 |
| 1809042112 | 42 x 1 1/2 | 2 | 12 | 4021343140099 | 65 | 45 | 27 | 23 | 56 |
| 18090542 | 54 x 2 | 2 | 6 | 4021343140105 | 78 | 55 | 36 | 31 | 68 |



Catalog-no. and -description

8092g – Male elbow 90°

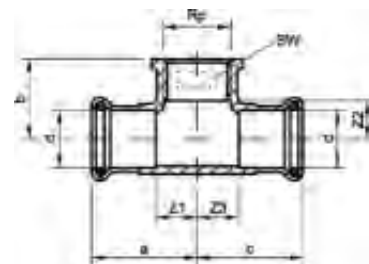
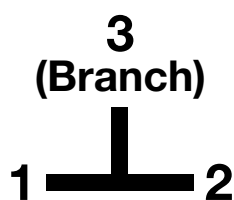
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | b | z | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|----|
| 180921238 | 12 x 3/8 | 10 | 250 | 4021343140747 | 24 | 22 | 8 | 16 |
| 180921212 | 12 x 1/2 | 10 | 250 | 4021343140754 | 26 | 25 | 10 | 19 |
| 180921412 | 14 x 1/2 | 10 | 250 | 4021343163654 | 26 | 26 | 8 | 19 |
| 180921538 | 15 x 3/8 | 10 | 200 | 4021343140761 | 26 | 23 | 8 | 18 |
| 180921512 | 15 x 1/2 | 10 | 200 | 4021343140778 | 27 | 26 | 9 | 19 |
| 180921534 | 15 x 3/4 | 10 | 150 | 4021343180088 | 30 | 28 | 12 | 24 |
| 180921612 | 16 x 1/2 | 10 | 150 | 4021343163661 | 27 | 26 | 9 | 20 |
| 180921812 | 18 x 1/2 | 10 | 160 | 4021343140785 | 30 | 28 | 10 | 20 |
| 180921834 | 18 x 3/4 | 10 | 120 | 4021343140792 | 32 | 30 | 12 | 24 |
| 180922212 | 22 x 1/2 | 10 | 100 | 4021343141546 | 33 | 30 | 9 | 22 |
| 180922234 | 22 x 3/4 | 10 | 80 | 4021343140808 | 36 | 33 | 12 | 26 |
| 18092221 | 22 x 1 | 10 | 50 | 4021343172571 | 40 | 35 | 16 | 30 |
| 18092281 | 28 x 1 | 5 | 50 | 4021343140815 | 42 | 38 | 16 | 32 |
| 1809235114 | 35 x 1 1/4 | 2 | 30 | 4021343140839 | 52 | 45 | 20 | 39 |
| 1809242112 | 42 x 1 1/2 | 2 | 12 | 4021343140846 | 59 | 48 | 21 | 45 |
| 18092542 | 54 x 2 | 2 | 10 | 4021343140853 | 70 | 59 | 28 | 57 |



Catalog-no. and -description

8096g – Elbow union, female, flat sealing

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|----|----|----|-----|-----|
| 180961212 | 12 x 1/2 | 5 | 120 | 4021343137457 | 47 | 20 | 31 | 9 | 24 | 26 |
| 180961512 | 15 x 1/2 | 5 | 100 | 4021343137464 | 51 | 22 | 33 | 11 | 30 | 26 |
| 180961812 | 18 x 1/2 | 5 | 80 | 4021343137471 | 65 | 22 | 45 | 11 | 30 | 26 |
| 180961834 | 18 x 3/4 | 5 | 50 | 4021343137488 | 70 | 24 | 50 | 11 | 30 | 32 |
| 180962234 | 22 x 3/4 | 5 | 50 | 4021343142642 | 65 | 26 | 41 | 13 | 37 | 32 |
| 18096221 | 22 x 1 | 5 | 25 | 4021343137495 | 72 | 39 | 48 | 25 | 46 | 40 |
| 18096281 | 28 x 1 | 5 | 25 | 4021343137501 | 78 | 39 | 51 | 25 | 46 | 40 |
| 1809635114 | 35 x 1 1/4 | 2 | 16 | 4021343137518 | 83 | 38 | 51 | 21 | 52 | 48 |
| 1809642112 | 42 x 1 1/2 | 2 | 10 | 4021343137525 | 95 | 41 | 57 | 24 | 59 | 54 |
| 18096542 | 54 x 2 | 2 | 6 | 4021343137532 | 109 | 51 | 66 | 30 | 75 | 66 |



Catalog-no. and -description

8130g – Female branch tee

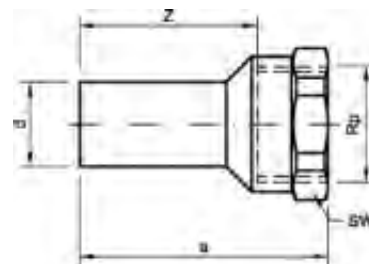
| Article-no. | Dimension d x d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | z3 | SW |
|-------------|-------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 181301212 | 12 x 12 x 1/2 | 10 | 150 | 4021343140112 | 29 | 22 | 29 | 13 | 9 | 13 | 26 |
| 181301412 | 14 x 14 x 1/2 | 10 | 120 | 4021343163678 | 31 | 23 | 31 | 13 | 10 | 13 | 26 |
| 181301538 | 15 x 15 x 3/8 | 10 | 100 | 4021343140129 | 29 | 19 | 29 | 11 | 9 | 11 | 22 |
| 181301512 | 15 x 15 x 1/2 | 10 | 100 | 4021343140136 | 31 | 23 | 31 | 13 | 10 | 13 | 26 |
| 181301612 | 16 x 16 x 1/2 | 10 | 100 | 4021343163685 | 33 | 23 | 33 | 15 | 10 | 15 | 26 |
| 181301812 | 18 x 18 x 1/2 | 10 | 90 | 4021343140143 | 33 | 25 | 33 | 13 | 12 | 13 | 26 |
| 181302212 | 22 x 22 x 1/2 | 10 | 60 | 4021343140150 | 37 | 27 | 37 | 13 | 14 | 13 | 26 |
| 181302234 | 22 x 22 x 3/4 | 10 | 50 | 4021343140167 | 40 | 29 | 40 | 16 | 14 | 16 | 32 |
| 181302812 | 28 x 28 x 1/2 | 5 | 40 | 4021343140174 | 40 | 29 | 40 | 14 | 16 | 14 | 32 |
| 181302834 | 28 x 28 x 3/4 | 5 | 40 | 4021343140181 | 42 | 31 | 42 | 16 | 16 | 16 | 32 |
| 181303512 | 35 x 35 x 1/2 | 2 | 30 | 4021343140198 | 45 | 32 | 45 | 13 | 19 | 13 | 39 |
| 18130351 | 35 x 35 x 1 | 2 | 20 | 4021343140204 | 52 | 37 | 52 | 20 | 20 | 20 | 39 |
| 181304212 | 42 x 42 x 1/2 | 2 | 18 | 4021343140211 | 51 | 36 | 51 | 13 | 23 | 13 | 47 |
| 18130421 | 42 x 42 x 1 | 2 | 16 | 4021343140228 | 57 | 40 | 57 | 19 | 23 | 19 | 47 |
| 181305412 | 54 x 54 x 1/2 | 2 | 10 | 4021343140235 | 56 | 42 | 56 | 14 | 29 | 14 | 59 |



Catalog-no. and -description

8243g – Male adaptor

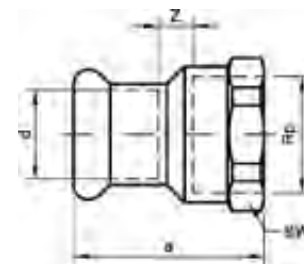
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW |
|-------------|--------------------|-----|-----|---------------|-----|----|-----|
| 182431238 | 12 x 3/8 | 10 | 400 | 4021343135965 | 30 | 14 | 16 |
| 182431212 | 12 x 1/2 | 10 | 350 | 4021343137921 | 33 | 17 | 18 |
| 182431438 | 14 x 3/8 | 10 | 500 | 4021343203480 | 31 | 12 | 19 |
| 182431412 | 14 x 1/2 | 10 | 300 | 4021343163739 | 33 | 14 | 19 |
| 182431538 | 15 x 3/8 | 10 | 400 | 4021343135972 | 31 | 12 | 18 |
| 182431512 | 15 x 1/2 | 10 | 300 | 4021343131257 | 33 | 14 | 19 |
| 182431534 | 15 x 3/4 | 10 | 200 | 4021343131264 | 36 | 18 | 19 |
| 182431612 | 16 x 1/2 | 10 | 300 | 4021343163753 | 33 | 14 | 19 |
| 182431634 | 16 x 3/4 | 10 | 200 | 4021343163777 | 36 | 18 | 20 |
| 182431812 | 18 x 1/2 | 10 | 200 | 4021343131271 | 37 | 17 | 21 |
| 182431834 | 18 x 3/4 | 10 | 200 | 4021343131288 | 38 | 17 | 22 |
| 182432212 | 22 x 1/2 | 10 | 150 | 4021343135989 | 40 | 16 | 26 |
| 182432234 | 22 x 3/4 | 10 | 120 | 4021343131301 | 41 | 17 | 28 |
| 18243221 | 22 x 1 | 10 | 100 | 4021343131295 | 44 | 20 | 28 |
| 182432834 | 28 x 3/4 | 5 | 100 | 4021343135996 | 45 | 18 | 32 |
| 18243281 | 28 x 1 | 5 | 100 | 4021343129728 | 46 | 19 | 36 |
| 1824328114 | 28 x 11/4 | 5 | 70 | 4021343136009 | 47 | 20 | 34 |
| 18243351 | 35 x 1 | 2 | 70 | 4021343136016 | 52 | 20 | 39 |
| 1824335114 | 35 x 11/4 | 2 | 50 | 4021343136023 | 53 | 21 | 40 |
| 1824335112 | 35 x 11/2 | 2 | 50 | 4021343136030 | 52 | 20 | 40 |
| 1824342114 | 42 x 11/4 | 2 | 40 | 4021343136047 | 60 | 23 | 46 |
| 1824342112 | 42 x 11/2 | 2 | 40 | 4021343136054 | 60 | 23 | 50 |
| 1824354112 | 54 x 11/2 | 2 | 20 | 4021343136061 | 70 | 28 | 60 |
| 18243542 | 54 x 2 | 2 | 16 | 4021343136078 | 71 | 29 | 60 |
| 1824364212 | 64 x 21/2 | 1 | 10 | 4021343196355 | 83 | 34 | 71 |
| 1824367212 | 66,7 x 21/2 | 1 | 10 | 4021343195334 | 85 | 37 | 77 |
| 1824376212 | 76,1 x 21/2 | 1 | 5 | 4021343176661 | 88 | 38 | 82 |
| 18243763 | 76,1 x 3 | 1 | 5 | 4021343176678 | 92 | 42 | 90 |
| 18243893 | 88,9 x 3 | 1 | 4 | 4021343176685 | 97 | 41 | 95 |
| 182431084 | 108 x 4 | 1 | 2 | 4021343176692 | 120 | 50 | 117 |



Catalog-no. and -description

8246g – Plug-in adaptor, female

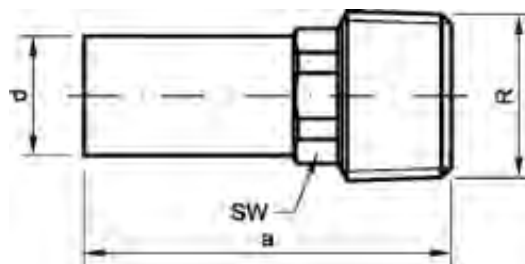
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 182461212 | 12a x 1/2 | 10 | 250 | 4021343137044 | 42 | 29 | 25 |
| 182461538 | 15a x 3/8 | 10 | 250 | 4021343131318 | 39 | 38 | 20 |
| 182461512 | 15a x 1/2 | 10 | 200 | 4021343129650 | 44 | 31 | 25 |
| 182461812 | 18a x 1/2 | 10 | 200 | 4021343129667 | 45 | 32 | 25 |
| 182461834 | 18a x 3/4 | 10 | 150 | 4021343131325 | 50 | 35 | 30 |
| 182462212 | 22a x 1/2 | 10 | 200 | 4021343131332 | 46 | 33 | 25 |
| 182462234 | 22a x 3/4 | 10 | 150 | 4021343129674 | 51 | 38 | 30 |
| 182462834 | 28a x 3/4 | 5 | 120 | 4021343131349 | 51 | 36 | 30 |
| 18246281 | 28a x 1 | 5 | 80 | 4021343129681 | 55 | 38 | 38 |
| 1824635114 | 35a x 11/4 | 2 | 40 | 4021343137051 | 69 | 47 | 46 |
| 1824642112 | 42a x 11/2 | 2 | 26 | 4021343137068 | 80 | 58 | 55 |
| 18246542 | 54a x 2 | 2 | 16 | 4021343137075 | 94 | 70 | 60 |



Catalog-no. and -description

8270g – Female adaptor

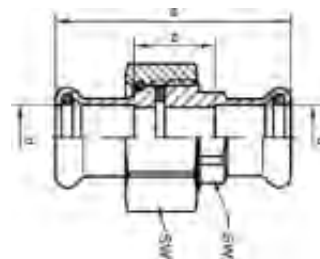
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|---|----|
| 182701238 | 12 x 3/8 | 10 | 400 | 4021343136191 | 30 | 4 | 20 |
| 182701212 | 12 x 1/2 | 10 | 300 | 4021343132063 | 34 | 5 | 25 |
| 182701438 | 14 x 3/8 | 10 | 300 | 4021343163814 | 30 | 2 | 20 |
| 182701412 | 14 x 1/2 | 10 | 250 | 4021343163791 | 33 | 2 | 28 |
| 182701538 | 15 x 3/8 | 10 | 300 | 4021343131363 | 30 | 2 | 20 |
| 182701512 | 15 x 1/2 | 10 | 250 | 4021343131356 | 33 | 2 | 25 |
| 182701534 | 15 x 3/4 | 10 | 150 | 4021343136207 | 40 | 7 | 30 |
| 182701612 | 16 x 1/2 | 10 | 250 | 4021343163838 | 33 | 2 | 25 |
| 182701634 | 16 x 3/4 | 10 | 150 | 4021343163852 | 40 | 7 | 30 |
| 182701812 | 18 x 1/2 | 10 | 200 | 4021343131370 | 35 | 2 | 25 |
| 182701834 | 18 x 3/4 | 10 | 150 | 4021343131387 | 40 | 5 | 30 |
| 182702212 | 22 x 1/2 | 10 | 150 | 4021343131394 | 39 | 2 | 25 |
| 182702234 | 22 x 3/4 | 10 | 120 | 4021343131400 | 42 | 3 | 30 |
| 18270221 | 22 x 1 | 10 | 80 | 4021343136214 | 48 | 7 | 37 |
| 182702834 | 28 x 3/4 | 5 | 100 | 4021343131417 | 44 | 2 | 32 |
| 18270281 | 28 x 1 | 5 | 80 | 4021343136221 | 48 | 7 | 37 |
| 1827028114 | 28 x 1 1/4 | 5 | 40 | 4021343136238 | 55 | 6 | 46 |
| 18270351 | 35 x 1 | 2 | 60 | 4021343136245 | 49 | | 39 |
| 1827035114 | 35 x 1 1/4 | 2 | 40 | 4021343131547 | 58 | 4 | 46 |
| 1827035112 | 35 x 1 1/2 | 2 | 30 | 4021343136252 | 59 | 5 | 55 |
| 1827042114 | 42 x 1 1/4 | 2 | 30 | 4021343136269 | 62 | 3 | 46 |
| 1827042112 | 42 x 1 1/2 | 2 | 30 | 4021343136276 | 63 | 4 | 55 |
| 1827054112 | 54 x 1 1/2 | 2 | 24 | 4021343136283 | 67 | 3 | 55 |
| 18270542 | 54 x 2 | 2 | 20 | 4021343133831 | 74 | 8 | 60 |
| 1827064212 | 64 x 2 1/2 | 1 | 10 | 4021343196379 | 84 | 9 | 85 |
| 1827067212 | 66,7 x 2 1/2 | 1 | 10 | 4021343195358 | 85 | 7 | 85 |
| 1827076212 | 76,1 x 2 1/2 | 1 | 5 | 4021343176708 | 86 | 6 | 85 |
| 18270893 | 88,9 x 3 | 1 | 3 | 4021343176715 | 96 | 7 | 95 |



Catalog-no. and -description

8280g – Plug-in adaptor, male

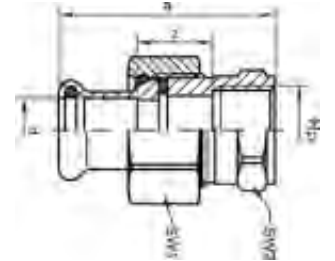
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 182801212 | 12a x 1/2 | 10 | 350 | 4021343134456 | 44 | 16 |
| 182801538 | 15a x 3/8 | 10 | 350 | 4021343137105 | 42 | 16 |
| 182801512 | 15a x 1/2 | 10 | 350 | 4021343131424 | 46 | 16 |
| 182801812 | 18a x 1/2 | 10 | 250 | 4021343131431 | 47 | 19 |
| 182801834 | 18a x 3/4 | 10 | 150 | 4021343131448 | 51 | 19 |
| 182802212 | 22a x 1/2 | 10 | 150 | 4021343131455 | 52 | 22 |
| 182802234 | 22a x 3/4 | 10 | 150 | 4021343129698 | 52 | 22 |
| 182802834 | 28a x 3/4 | 5 | 100 | 4021343137112 | 60 | 27 |
| 18280281 | 28a x 1 | 5 | 60 | 4021343131462 | 64 | 34 |
| 1828035114 | 35a x 1 1/4 | 2 | 40 | 4021343137082 | 72 | 40 |
| 1828042112 | 42a x 1 1/2 | 2 | 30 | 4021343137099 | 80 | 46 |
| 18280542 | 54a x 2 | 2 | 16 | 4021343132339 | 92 | 60 |



Catalog-no. and -description

8330 – Union, flat sealing

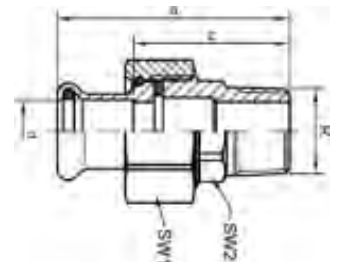
| Article-no. | Dimension d | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|-----|----|-----|-----|
| 1833012 | 12 | 5 | 180 | 4021343137259 | 50 | 18 | 24 | 16 |
| 1833015 | 15 | 5 | 100 | 4021343137266 | 54 | 18 | 30 | 19 |
| 1833018 | 18 | 5 | 100 | 4021343137273 | 70 | 30 | 30 | 22 |
| 1833022 | 22 | 5 | 60 | 4021343137280 | 66 | 18 | 37 | 26 |
| 1833028 | 28 | 5 | 40 | 4021343137297 | 71 | 17 | 46 | 34 |
| 1833035 | 35 | 2 | 30 | 4021343137303 | 82 | 18 | 52 | 40 |
| 1833042 | 42 | 2 | 18 | 4021343137310 | 94 | 19 | 59 | 46 |
| 1833054 | 54 | 2 | 10 | 4021343137327 | 102 | 17 | 75 | 60 |



Catalog-no. and -description

8330g – Union, female, flat sealing

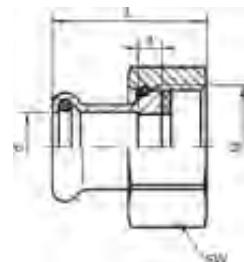
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 183301212 | 12 x 1/2 | 5 | 150 | 4021343137334 | 51 | 21 | 24 | 25 |
| 183301512 | 15 x 1/2 | 5 | 120 | 4021343137341 | 49 | 16 | 30 | 25 |
| 183301534 | 15 x 3/4 | 5 | 80 | 4021343137358 | 55 | 21 | 30 | 30 |
| 183301812 | 18 x 1/2 | 5 | 120 | 4021343137365 | 63 | 28 | 30 | 25 |
| 183301834 | 18 x 3/4 | 5 | 80 | 4021343137372 | 69 | 33 | 30 | 30 |
| 183302234 | 22 x 3/4 | 5 | 60 | 4021343137389 | 62 | 21 | 37 | 30 |
| 18330221 | 22 x 1 | 5 | 50 | 4021343137396 | 66 | 20 | 37 | 39 |
| 183302834 | 28 x 3/4 | 5 | 40 | 4021343137402 | 62 | 20 | 46 | 30 |
| 18330281 | 28 x 1 | 5 | 40 | 4021343137419 | 66 | 20 | 46 | 39 |
| 1833035114 | 35 x 11/4 | 2 | 30 | 4021343137426 | 80 | 27 | 52 | 46 |
| 1833042112 | 42 x 11/2 | 2 | 20 | 4021343137433 | 85 | 28 | 59 | 54 |
| 18330542 | 54 x 2 | 2 | 10 | 4021343137440 | 94 | 24 | 75 | 66 |



Catalog-no. and -description

8333g – Union, male, flat sealing

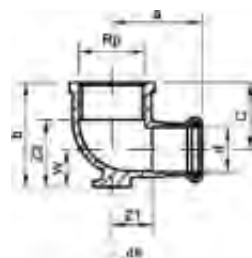
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|-----|----|-----|-----|
| 183331238 | 12 x 3/8 | 5 | 150 | 4021343137549 | 51 | 35 | 30 | 17 |
| 183331212 | 12 x 1/2 | 5 | 150 | 4021343137556 | 53 | 37 | 30 | 22 |
| 183331512 | 15 x 1/2 | 5 | 120 | 4021343137563 | 55 | 37 | 30 | 22 |
| 183331534 | 15 x 3/4 | 5 | 100 | 4021343137570 | 60 | 42 | 30 | 27 |
| 183331812 | 18 x 1/2 | 5 | 100 | 4021343137587 | 69 | 49 | 30 | 22 |
| 183331834 | 18 x 3/4 | 5 | 80 | 4021343137594 | 74 | 54 | 30 | 27 |
| 183332212 | 22 x 1/2 | 5 | 60 | 4021343137600 | 71 | 47 | 37 | 23 |
| 183332234 | 22 x 3/4 | 5 | 60 | 4021343137617 | 66 | 42 | 37 | 27 |
| 18333221 | 22 x 1 | 5 | 60 | 4021343137624 | 70 | 46 | 37 | 34 |
| 183332834 | 28 x 3/4 | 5 | 40 | 4021343137631 | 78 | 51 | 46 | 28 |
| 18333281 | 28 x 1 | 5 | 40 | 4021343137648 | 74 | 47 | 46 | 34 |
| 1833335114 | 35 x 11/4 | 2 | 20 | 4021343137655 | 95 | 63 | 52 | 46 |
| 1833342112 | 42 x 11/2 | 2 | 12 | 4021343137662 | 102 | 64 | 59 | 50 |
| 18333542 | 54 x 2 | 2 | 8 | 4021343137679 | 116 | 73 | 75 | 60 |



Catalog-no. and -description

8359g – Union adaptor, flat sealing

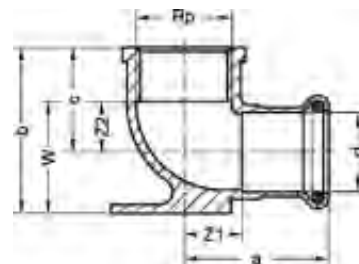
| Article-no. | Dimension d x G | Bag | Box | EAN code | L | SW |
|-------------|--------------------|-----|-----|---------------|----|-----|
| 183591212 | 12 x 1/2 | 5 | 350 | 4021343137686 | 30 | 24 |
| 183591234 | 12 x 3/4 | 5 | 200 | 4021343137693 | 30 | 30 |
| 183591438 | 14 x 3/8 | 5 | 300 | 4021343208393 | 47 | 19 |
| 183591412 | 14 x 1/2 | 5 | 300 | 4021343204371 | 44 | 24 |
| 183591534 | 15 x 3/4 | 5 | 200 | 4021343137709 | 32 | 30 |
| 18359151 | 15 x 1 | 5 | 120 | 4021343137716 | 34 | 37 |
| 183591634 | 16 x 3/4 | 5 | 200 | 4021343207662 | 33 | 30 |
| 183591834 | 18 x 3/4 | 5 | 160 | 4021343137723 | 46 | 30 |
| 18359181 | 18 x 1 | 5 | 120 | 4021343137730 | 36 | 37 |
| 183592234 | 22 x 3/4 | 5 | 120 | 4021343137747 | 51 | 30 |
| 18359221 | 22 x 1 | 5 | 100 | 4021343137754 | 42 | 37 |
| 1835922114 | 22 x 1 1/4 | 5 | 80 | 4021343156168 | 38 | 46 |
| 1835922112 | 22 x 1 1/2 | 5 | 60 | 4021343137761 | 43 | 52 |
| 1835928114 | 28 x 1 1/4 | 5 | 80 | 4021343137778 | 46 | 46 |
| 1835928112 | 28 x 1 1/2 | 5 | 50 | 4021343137785 | 45 | 52 |
| 1835935112 | 35 x 1 1/2 | 2 | 40 | 4021343137792 | 52 | 52 |
| 18359352 | 35 x 2 | 2 | 30 | 4021343137884 | 54 | 64 |
| 1835942134 | 42 x 1 3/4 | 2 | 30 | 4021343137891 | 60 | 59 |
| 18359422 | 42 x 2 | 2 | 30 | 4021343137907 | 62 | 64 |
| 1835954238 | 54 x 2 3/8 | 2 | 16 | 4021343137914 | 68 | 75 |
| 18359763 | 76,1 x 3 | 1 | 10 | 4021343200229 | 84 | 94 |
| 1835989312 | 88,9 x 3 1/2 | 1 | 6 | 4021343200236 | 94 | 110 |



Catalog-no. and -description

8472g – Wall plate elbow

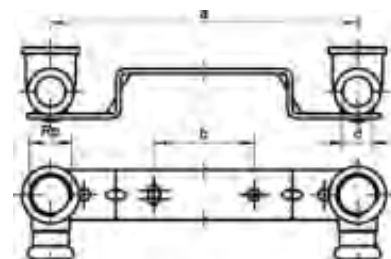
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | dk | W |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 184721212 | 12 x 1/2 | 10 | 120 | 4021343140877 | 31 | 33 | 22 | 15 | 9 | 35 | 11 |
| 184721412 | 14 x 1/2 | 10 | 100 | 4021343163715 | 33 | 33 | 22 | 15 | 9 | 35 | 11 |
| 184721512 | 15 x 1/2 | 10 | 100 | 4021343140884 | 33 | 36 | 23 | 15 | 10 | 35 | 13 |
| 184721612 | 16 x 1/2 | 10 | 100 | 4021343163722 | 33 | 36 | 23 | 15 | 10 | 35 | 13 |
| 184721812 | 18 x 1/2 | 10 | 90 | 4021343140891 | 33 | 39 | 25 | 13 | 12 | 35 | 14 |
| 184721834 | 18 x 3/4 | 10 | 60 | 4021343140907 | 36 | 42 | 27 | 16 | 12 | 40 | 15 |
| 184722212 | 22 x 1/2 | 10 | 60 | 4021343140914 | 37 | 43 | 26 | 13 | 13 | 35 | 17 |
| 184722234 | 22 x 3/4 | 10 | 60 | 4021343140921 | 40 | 46 | 29 | 16 | 14 | 40 | 17 |



Catalog-no. and -description

8473g – Wall plate elbow, with universal flange

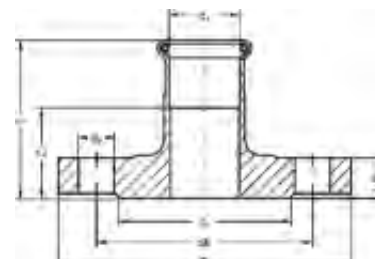
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | dk | W |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 184731512 | 15 x 1/2 | 10 | 100 | 4021343198762 | 33 | 36 | 23 | 15 | 9 | 40 | 13 |
| 184732234 | 22 x 3/4 | 10 | 60 | 4021343198809 | 40 | 46 | 29 | 16 | 14 | 40 | 16 |



Catalog-no. and -description

8976g – Installation set

| Article-no. | Dimension d x Rp x a | Bag | Box | EAN code | a | b |
|-------------|-------------------------|-----|-----|---------------|-----|----|
| 189761512 | 15 x 1/2 x 153 mm | | 20 | 4021343141157 | 153 | 50 |



Catalog-no. and -description

RG-PF – crimping flange, PN 10/16

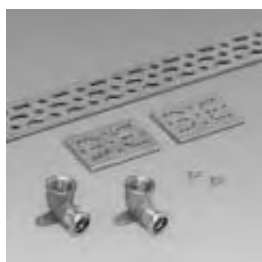
| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | b | d2 | d3 | z | L | dk | D | Az |
|--------------|----------------------|-----|-----|---------------|----|----|-----|----|----|-----|-----|----|
| 1RGPF28 | DN 25 / 28 mm | | 6 | 4021343179754 | 16 | 14 | 68 | 36 | 62 | 85 | 115 | 4 |
| 1RGPF35 | DN 32 / 35 mm | | 4 | 4021343179761 | 16 | 18 | 78 | 30 | 62 | 100 | 140 | 4 |
| 1RGPF42 | DN 40 / 42 mm | | 3 | 4021343179778 | 16 | 18 | 88 | 25 | 63 | 110 | 150 | 4 |
| 1RGPF54 | DN 50 / 54 mm | | 2 | 4021343179785 | 18 | 18 | 102 | 23 | 65 | 125 | 165 | 4 |
| 1RGPF64 | DN -- / 64 mm | | 2 | 4021343203879 | 18 | 18 | 122 | 24 | 67 | 145 | 185 | 4 |
| 1RGPF67 | DN -- / 66,7 mm | | 2 | 4021343198878 | 18 | 18 | 122 | 19 | 67 | 145 | 185 | 4 |
| 1RGPF76 | DN 65 / 76,1 mm | | 3 | 4021343176630 | 18 | 18 | 122 | 28 | 78 | 145 | 185 | 4 |
| 1RGPF76_DN80 | DN 80 / 76,1 mm | | 2 | 4021343198885 | 20 | 18 | 138 | 30 | 80 | 160 | 200 | 8 |
| 1RGPF89 | DN 80 / 88,9 mm | | 2 | 4021343176647 | 20 | 18 | 138 | 24 | 80 | 160 | 200 | 8 |
| 1RGPF108 | DN 100 / 108 mm | | 2 | 4021343176654 | 20 | 18 | 158 | 11 | 80 | 180 | 220 | 8 |



Catalog-no. and -description

FL-D – Flange sealing, asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|-----------------|-----|-----|---------------|
| 1D25 | 25 | | 160 | 4021343001093 |
| 1D32 | 32 | | 120 | 4021343001123 |
| 1D40 | 40 | | 100 | 4021343001154 |
| 1D50 | 50 | | 120 | 4021343001161 |
| 1D65 | 65 | | 100 | 4021343001185 |
| 1D80 | 80 | | 80 | 4021343001192 |
| 1D100 | 100 | | 60 | 4021343000935 |



Catalog-no. and -description

8980g – Installation set for wall plates

| Article-no. | Dimension d x Rp | Bag | Box | EAN code |
|-------------|---------------------|-----|-----|---------------|
| 189801512 | 15 x 1/2 | | 1 | 4021343200373 |



Catalog-no. and -description

8981 – Insulation plate for 8980g and 9880g

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 88981 | | | 30 | 4021343200403 |



Catalog-no. and -description

4991 – Bending clamp

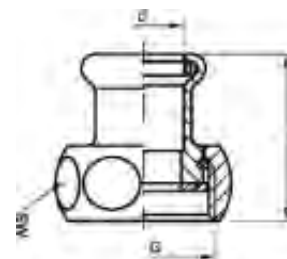
| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84991 | | | 1 | 4021343200397 |



Catalog-no. and -description

ORT – Sealing element for drinking water and heating pressfittings, made of EPDM

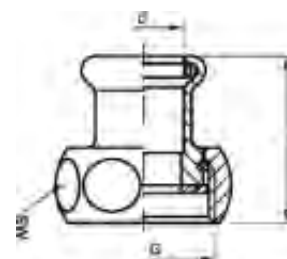
| Article-no. | Dimension D | Bag | Box | EAN code |
|---------------|-------------------|-----|-----|----------|
| 1ORT1210250 | 12,10x2,50 | | | |
| 1ORT1420250 | 14,20x2,50 | | | |
| 1ORT1510260 | 15,10x2,60 | | | |
| 1ORT1620250 | 16,20x2,50 | | | |
| 1ORT1820265 | 18,20x2,65 | | | |
| 1ORT2220310 | 22,20x3,10 | | | |
| 1ORT2830310 | 28,30x3,10 | | | |
| 1ORT3540325 | 35,40x3,25 | | | |
| 1ORT4240413 | 42,40x4,13 | | | |
| 1ORT5440413 | 54,40x4,13 | | | |
| 1ORT6500600 | 65,00x6,00 | | | |
| 1ORT6800600 | 68,00x6,00 | | | |
| 1ORT7700700 | 77,00x7,00 | | | |
| 1ORT9000760 | 90,00x7,60 (CU) | | | |
| 1ORT9000800 | 90,00x8,00 (VA) | | | |
| 1ORT11000900 | 110,00x9,00 (CU) | | | |
| 1ORT110001000 | 110,00x10,00 (VA) | | | |



Catalog-no. and -description

970 – Press union with gasket, DVGW tested (asbestos-free), for heating and process water pumps; every set consists of 2 union pieces, 2 brass nuts, 2 gaskets (WS 3820) up to 200°C

| Article-no. | Dimension d x G | Bag | Box | EAN code |
|-------------|--------------------|-----|-----|---------------|
| 39701534 | 15 x 3/4 | 1 | 100 | 4021343135767 |
| 3970221 | 22 x 1 | 1 | 50 | 4021343135798 |
| 397022112 | 22 x 11/2 | 1 | 30 | 4021343135804 |
| 397028114 | 28 x 11/4 | 1 | 40 | 4021343135811 |
| 397028112 | 28 x 11/2 | 1 | 25 | 4021343135835 |



Catalog-no. and -description

971 – Press union without gasket, DVGW tested (asbestos-free), for heating and process water pumps; every set consists of 2 union pieces, 2 brass nuts

| Article-no. | Dimension d x G | Bag | Box | EAN code |
|-------------|--------------------|-----|-----|---------------|
| 39711534 | 15 x 3/4 | 1 | 100 | 4021343135842 |
| 3971151 | 15 x 1 | 1 | 60 | 4021343135859 |
| 39711834 | 18 x 3/4 | 1 | 100 | 4021343135866 |
| 3971181 | 18 x 1 | 1 | 60 | 4021343135873 |
| 3971221 | 22 x 1 | 1 | 50 | 4021343135880 |
| 397122112 | 22 x 11/2 | 1 | 30 | 4021343135897 |
| 397128114 | 28 x 11/4 | 1 | 40 | 4021343135903 |
| 397128112 | 28 x 11/2 | 1 | 25 | 4021343135910 |



Catalog-no. and -description

4980 – Plastic measure tool for SANHA®-Press, with bottle opener and water level, 12 - 54 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84980 | 12-54 mm | | 30 | 4021343140297 |



Catalog-no. and -description

4990 – Plastic measure tool for SANHA-Press, with bottle opener and waterlevel, 76,1 - 108mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84990 | 76,1-108 mm | | 20 | 4021343194511 |

SYSTEM TECHNOLOGY

SANHA-Press „Pb-free“
Lead free gunmetall
pressfittings for the drinking
water and heating installation

Series 80000

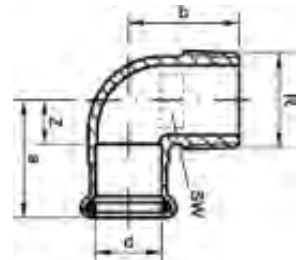




Catalog-no. and -description

80090g – Female elbow 90°

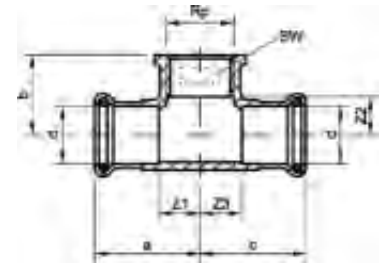
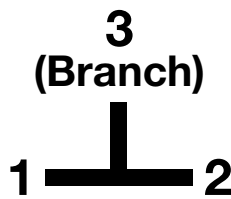
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|
| 1800901212 | 12 x 1/2 | 10 | 150 | 4021343352874 | 30 | 22 | 14 | 8 | 26 |
| 1800901512 | 15 x 1/2 | 10 | 150 | 4021343352881 | 33 | 23 | 15 | 10 | 26 |
| 1800901812 | 18 x 1/2 | 10 | 150 | 4021343352898 | 33 | 25 | 13 | 11 | 26 |
| 1800901834 | 18 x 3/4 | 10 | 100 | 4021343352904 | 36 | 27 | 16 | 11 | 32 |
| 1800902212 | 22 x 1/2 | 10 | 100 | 4021343352911 | 37 | 27 | 13 | 14 | 26 |
| 1800902234 | 22 x 3/4 | 10 | 80 | 4021343352928 | 40 | 29 | 16 | 14 | 32 |
| 180090221 | 22 x 1 | 10 | 40 | 4021343352935 | 44 | 30 | 20 | 13 | 39 |
| 180090281 | 28 x 1 | 5 | 30 | 4021343352942 | 46 | 33 | 20 | 16 | 39 |



Catalog-no. and -description

80092g – Male elbow 90°

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | b | z | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|----|
| 1800921212 | 12 x 1/2 | 10 | 250 | 4021343352959 | 26 | 25 | 10 | 19 |
| 1800921512 | 15 x 1/2 | 10 | 200 | 4021343352966 | 27 | 26 | 9 | 19 |
| 1800921812 | 18 x 1/2 | 10 | 160 | 4021343352973 | 30 | 28 | 10 | 20 |
| 1800922234 | 22 x 3/4 | 10 | 80 | 4021343352980 | 36 | 33 | 12 | 26 |
| 180092281 | 28 x 1 | 5 | 50 | 4021343352997 | 42 | 38 | 16 | 32 |
| 18009235114 | 35 x 1 1/4 | 2 | 30 | 4021343353000 | 52 | 45 | 20 | 39 |



Catalog-no. and -description

80130g – Tee

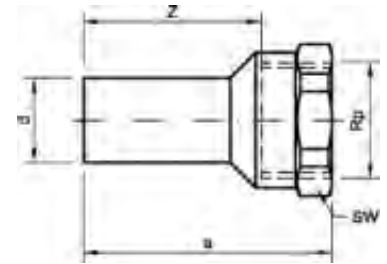
| Article-no. | Dimension d x d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | z3 | SW |
|-------------|-------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 1801301212 | 12 x 12 x 1/2 | 10 | 150 | 4021343353017 | 29 | 22 | 29 | 13 | 9 | 13 | 26 |
| 1801301512 | 15 x 15 x 1/2 | 10 | 100 | 4021343353024 | 31 | 23 | 31 | 13 | 10 | 13 | 26 |
| 1801301812 | 18 x 18 x 1/2 | 10 | 90 | 4021343353031 | 33 | 25 | 33 | 13 | 12 | 13 | 26 |
| 1801302212 | 22 x 22 x 1/2 | 10 | 60 | 4021343353048 | 37 | 27 | 37 | 13 | 14 | 13 | 26 |
| 1801302234 | 22 x 22 x 3/4 | 10 | 50 | 4021343353055 | 40 | 29 | 40 | 16 | 14 | 16 | 32 |
| 1801302812 | 28 x 28 x 1/2 | 5 | 40 | 4021343353062 | 40 | 29 | 40 | 14 | 16 | 14 | 32 |
| 1801302834 | 28 x 28 x 3/4 | 5 | 40 | 4021343353079 | 42 | 31 | 42 | 16 | 16 | 16 | 32 |
| 1801303512 | 35 x 35 x 1/2 | 2 | 30 | 4021343353086 | 45 | 32 | 45 | 13 | 19 | 13 | 39 |
| 1801304212 | 42 x 42 x 1/2 | 2 | 18 | 4021343353093 | 51 | 36 | 51 | 13 | 23 | 13 | 47 |
| 1801305412 | 54 x 54 x 1/2 | 2 | 10 | 4021343353109 | 56 | 42 | 56 | 14 | 29 | 14 | 59 |



Catalog-no. and -description

80243g – Male adaptor

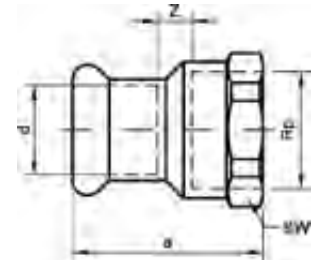
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 1802431238 | 12 x 3/8 | 10 | 400 | 4021343353116 | 30 | 14 | 16 |
| 1802431212 | 12 x 1/2 | 10 | 350 | 4021343353123 | 33 | 17 | 18 |
| 1802431538 | 15 x 3/8 | 10 | 400 | 4021343353130 | 31 | 12 | 18 |
| 1802431512 | 15 x 1/2 | 10 | 300 | 4021343353147 | 33 | 14 | 19 |
| 1802431534 | 15 x 3/4 | 10 | 200 | 4021343353154 | 36 | 18 | 19 |
| 1802431812 | 18 x 1/2 | 10 | 200 | 4021343353161 | 37 | 17 | 21 |
| 1802431834 | 18 x 3/4 | 10 | 200 | 4021343353178 | 38 | 17 | 22 |
| 1802432212 | 22 x 1/2 | 10 | 150 | 4021343353185 | 40 | 16 | 26 |
| 1802432234 | 22 x 3/4 | 10 | 120 | 4021343353192 | 41 | 17 | 28 |
| 180243221 | 22 x 1 | 10 | 100 | 4021343353208 | 44 | 20 | 28 |
| 1802432834 | 28 x 3/4 | 5 | 100 | 4021343353215 | 45 | 18 | 32 |
| 180243281 | 28 x 1 | 5 | 100 | 4021343353222 | 46 | 19 | 36 |
| 18024328114 | 28 x 11/4 | 5 | 70 | 4021343353239 | 47 | 20 | 34 |
| 180243351 | 35 x 1 | 2 | 70 | 4021343353246 | 52 | 20 | 39 |
| 18024335114 | 35 x 11/4 | 2 | 50 | 4021343353253 | 53 | 21 | 40 |
| 18024342114 | 42 x 11/4 | 2 | 40 | 4021343353260 | 60 | 23 | 46 |
| 18024342112 | 42 x 11/2 | 2 | 40 | 4021343353277 | 60 | 23 | 50 |
| 18024354112 | 54 x 11/2 | 2 | 20 | 4021343353284 | 70 | 28 | 60 |
| 180243542 | 54 x 2 | 2 | 16 | 4021343353291 | 71 | 29 | 60 |



Catalog-no. and -description

80246g – Plug-in adaptor, female

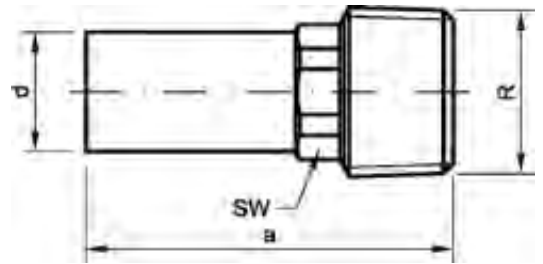
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 1802461512 | 15a x 1/2 | 10 | 200 | 4021343353499 | 44 | 31 | 25 |
| 1802461812 | 18a x 1/2 | 10 | 200 | 4021343353536 | 45 | 32 | 25 |
| 1802462212 | 22a x 1/2 | 10 | 200 | 4021343353505 | 46 | 33 | 25 |
| 1802462234 | 22a x 3/4 | 10 | 150 | 4021343353512 | 51 | 38 | 30 |
| 180246281 | 28a x 1 | 5 | 80 | 4021343353529 | 55 | 38 | 38 |



Catalog-no. and -description

80270g – Female adaptor

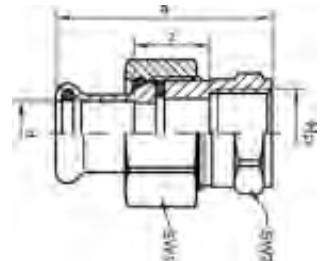
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|---|----|
| 1802701238 | 12 x 3/8 | 10 | 400 | 4021343353307 | 30 | 4 | 20 |
| 1802701212 | 12 x 1/2 | 10 | 300 | 4021343353314 | 34 | 5 | 25 |
| 1802701538 | 15 x 3/8 | 10 | 300 | 4021343353321 | 30 | 2 | 20 |
| 1802701512 | 15 x 1/2 | 10 | 250 | 4021343353338 | 33 | 2 | 25 |
| 1802701534 | 15 x 3/4 | 10 | 150 | 4021343353345 | 40 | 7 | 30 |
| 1802701812 | 18 x 1/2 | 10 | 200 | 4021343353352 | 35 | 2 | 25 |
| 1802701834 | 18 x 3/4 | 10 | 150 | 4021343353369 | 40 | 5 | 30 |
| 1802702212 | 22 x 1/2 | 10 | 150 | 4021343353376 | 39 | 2 | 25 |
| 1802702234 | 22 x 3/4 | 10 | 120 | 4021343353383 | 42 | 3 | 30 |
| 180270221 | 22 x 1 | 10 | 80 | 4021343353390 | 48 | 7 | 37 |
| 1802702834 | 28 x 3/4 | 5 | 100 | 4021343353406 | 44 | 2 | 32 |
| 180270281 | 28 x 1 | 5 | 80 | 4021343353413 | 48 | 7 | 37 |
| 18027028114 | 28 x 11/4 | 5 | 40 | 4021343353420 | 55 | 6 | 46 |
| 180270351 | 35 x 1 | 2 | 60 | 4021343353437 | 49 | | 39 |
| 18027035114 | 35 x 11/4 | 2 | 40 | 4021343353444 | 58 | 4 | 46 |
| 18027042114 | 42 x 11/4 | 2 | 30 | 4021343353451 | 62 | 3 | 46 |
| 18027042112 | 42 x 11/2 | 2 | 30 | 4021343353468 | 63 | 4 | 55 |
| 18027054112 | 54 x 11/2 | 2 | 24 | 4021343353475 | 67 | 3 | 55 |
| 180270542 | 54 x 2 | 2 | 20 | 4021343353482 | 74 | 8 | 60 |



Catalog-no. and -description

80280g – Plug-in adaptor, male

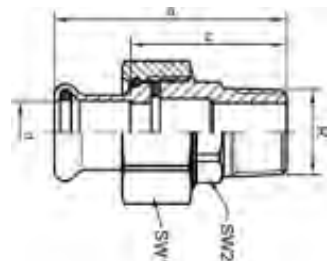
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 1802801512 | 15a x 1/2 | 10 | 350 | 4021343353543 | 46 | 16 |
| 1802802212 | 22a x 1/2 | 10 | 150 | 4021343353550 | 52 | 22 |
| 1802802234 | 22a x 3/4 | 10 | 150 | 4021343353567 | 52 | 22 |
| 180280281 | 28a x 1 | 5 | 60 | 4021343353574 | 64 | 34 |



Catalog-no. and -description

80330g – Union, female, flat sealing

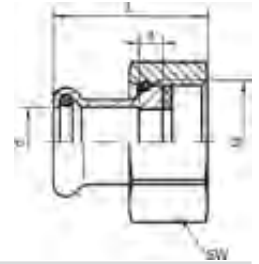
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 1803301512 | 15 x 1/2 | 5 | 120 | 4021343353604 | 49 | 16 | 30 | 25 |
| 1803302234 | 22 x 3/4 | 5 | 60 | 4021343353611 | 62 | 21 | 37 | 30 |
| 180330221 | 22 x 1 | 5 | 50 | 4021343353628 | 66 | 20 | 37 | 39 |
| 180330281 | 28 x 1 | 5 | 40 | 4021343353635 | 66 | 20 | 46 | 39 |
| 18033035114 | 35 x 11/4 | 2 | 30 | 4021343353642 | 80 | 27 | 52 | 46 |



Catalog-no. and -description

80333g – Union, male, flat sealing

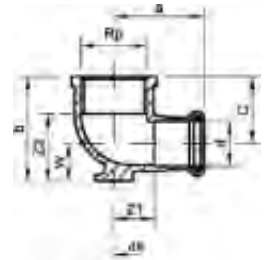
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|-----|----|-----|-----|
| 1803331512 | 15 x 1/2 | 5 | 120 | 4021343353659 | 55 | 37 | 30 | 22 |
| 1803331812 | 18 x 1/2 | 5 | 100 | 4021343353666 | 69 | 49 | 30 | 22 |
| 1803331834 | 18 x 3/4 | 5 | 80 | 4021343353673 | 74 | 54 | 30 | 27 |
| 1803332234 | 22 x 3/4 | 5 | 60 | 4021343353680 | 66 | 42 | 37 | 27 |
| 180333221 | 22 x 1 | 5 | 60 | 4021343353697 | 70 | 46 | 37 | 34 |
| 180333281 | 28 x 1 | 5 | 40 | 4021343353703 | 74 | 47 | 46 | 34 |
| 18033335114 | 35 x 11/4 | 2 | 20 | 4021343353710 | 95 | 63 | 52 | 46 |
| 18033342112 | 42 x 11/2 | 2 | 12 | 4021343353727 | 102 | 64 | 59 | 50 |



Catalog-no. and -description

80359g – Union adaptor, flat sealing

| Article-no. | Dimension d x G | Bag | Box | EAN code | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 1803591212 | 12 x 1/2 | 5 | 350 | 4021343353734 | 30 | 24 |
| 1803591534 | 15 x 3/4 | 5 | 200 | 4021343353741 | 32 | 30 |
| 1803591834 | 18 x 3/4 | 5 | 160 | 4021343353758 | 46 | 30 |
| 180359181 | 18 x 1 | 5 | 120 | 4021343353765 | 36 | 37 |
| 1803592234 | 22 x 3/4 | 5 | 120 | 4021343353772 | 51 | 30 |
| 180359221 | 22 x 1 | 5 | 100 | 4021343353789 | 42 | 37 |
| 18035922114 | 22 x 11/4 | 5 | 80 | 4021343353796 | 38 | 46 |
| 18035928114 | 28 x 11/4 | 5 | 80 | 4021343353802 | 46 | 46 |
| 18035928112 | 28 x 11/2 | 5 | 50 | 4021343353819 | 45 | 52 |
| 18035935112 | 35 x 11/2 | 2 | 40 | 4021343353826 | 52 | 52 |
| 18035942134 | 42 x 13/4 | 2 | 30 | 4021343353833 | 60 | 59 |
| 18035954238 | 54 x 23/8 | 2 | 16 | 4021343353840 | 68 | 75 |



Catalog-no. and -description

80472g – Wall plate elbow

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | dk | W |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 1804721512 | 15 x 1/2 | 10 | 100 | 4021343353581 | 33 | 36 | 23 | 15 | 10 | 35 | 13 |
| 1804721812 | 18 x 1/2 | 10 | 90 | 4021343353598 | 33 | 39 | 25 | 13 | 12 | 35 | 14 |

SANHA[®]

SANHA[®]-Press „Pb-free“

Lead free gunmetal
pressfittings for the drinking water and heating installation
Series 80000

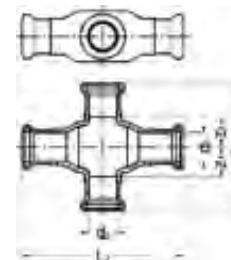


SYSTEM TECHNOLOGY

SANHA-Press Heat Heating assembly elements



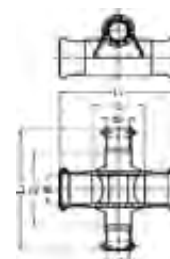
AT / 2001-02-1068-02



Catalog-no. and -description

8180 – Junction piece, single level

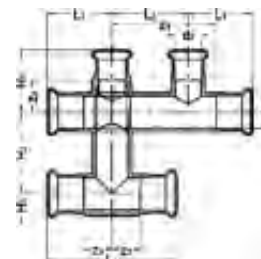
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | L1 | L2 | z1 | z2 |
|-------------|----------------------|-----|-----|---------------|----|----|----|----|
| 1818015 | 15 | 1 | 25 | 4021343195402 | 85 | 71 | 18 | 18 |
| 181801512 | 15 x 12 | 1 | 30 | 4021343195396 | 85 | 70 | 19 | 19 |
| 181801812 | 18 x 12 | 1 | 25 | 4021343195419 | 85 | 74 | 21 | 21 |
| 181801815 | 18 x 15 | 1 | 20 | 4021343195426 | 85 | 71 | 18 | 18 |
| 181802212 | 22 x 12 | 1 | 20 | 4021343195433 | 85 | 70 | 19 | 19 |
| 181802215 | 22 x 15 | 1 | 20 | 4021343195440 | 85 | 79 | 22 | 22 |



Catalog-no. and -description

8181 – Junction piece, two levels

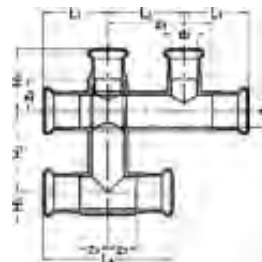
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | L1 | L2 | z1 | z2 |
|-------------|----------------------|-----|-----|---------------|----|----|----|----|
| 1818115 | 15 | 1 | 20 | 4021343195457 | 84 | 84 | 49 | 49 |
| 181811815 | 18 x 15 | 1 | 20 | 4021343195464 | 84 | 84 | 49 | 45 |
| 181812215 | 22 x 15 | 1 | 15 | 4021343195471 | 87 | 90 | 55 | 40 |
| 181812815 | 28 x 15 | 1 | 15 | 4021343195488 | 88 | 91 | 56 | 35 |



Catalog-no. and -description

8580 – Junction T-piece, with insulating box

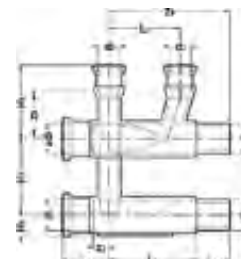
| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code | L1 | L2 | L3 | L4 | H1 | H2 | H3 | z1 | z2 | z3 | z4 |
|-------------|---------------------------|-----|-----|---------------|----|----|----|-----|----|----|----|----|----|-----|----|
| 1858015 | 15 | 5 | | 4021343195495 | 43 | 50 | 43 | 100 | 43 | 55 | 15 | 80 | 25 | 100 | 65 |
| 18580151215 | 15 x 15 x 12 | 5 | | 4021343195501 | 43 | 50 | 43 | 100 | 45 | 55 | 15 | 84 | 29 | 100 | 65 |
| 18580181218 | 18 x 18 x 12 | 5 | | 4021343195518 | 43 | 50 | 43 | 100 | 45 | 55 | 15 | 84 | 29 | 100 | 61 |
| 18580181518 | 18 x 18 x 15 | 5 | | 4021343195525 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 77 | 22 | 96 | 61 |
| 18580221522 | 22 x 22 x 15 | 5 | | 4021343195532 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 77 | 22 | 88 | 53 |
| 18580221822 | 22 x 22 x 18 | 5 | | 4021343195549 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 75 | 20 | 88 | 53 |



Catalog-no. and -description

8580.1 – Junction T-piece like catalogue no. 8580, without insulating box

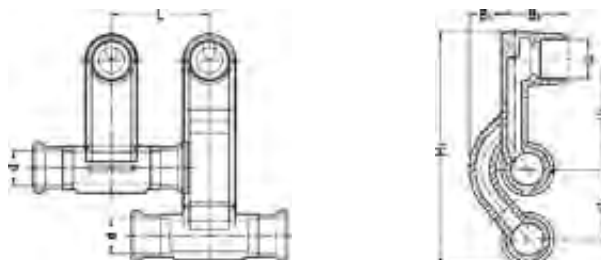
| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code | L1 | L2 | L3 | L4 | H1 | H2 | H3 | z1 | z2 | z3 | z4 |
|--------------|---------------------------|-----|-----|---------------|----|----|----|-----|----|----|----|----|----|-----|----|
| 18580115 | 15 | | 10 | 4021343202988 | 43 | 50 | 43 | 100 | 43 | 55 | 15 | 80 | 25 | 100 | 65 |
| 185801151215 | 15 x 15 x 12 | | 10 | 4021343202995 | 43 | 50 | 43 | 100 | 45 | 55 | 15 | 84 | 29 | 100 | 65 |
| 185801181218 | 18 x 18 x 12 | | 10 | 4021343203008 | 43 | 50 | 43 | 100 | 45 | 55 | 15 | 84 | 29 | 100 | 61 |
| 185801181518 | 18 x 18 x 15 | | 10 | 4021343203015 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 77 | 22 | 96 | 61 |
| 185801221522 | 22 x 22 x 15 | | 10 | 4021343203022 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 77 | 22 | 88 | 53 |
| 185801221822 | 22 x 22 x 18 | | 10 | 4021343203039 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 75 | 20 | 88 | 53 |



Catalog-no. and -description

8581 – Plaster distributor, with insulating box

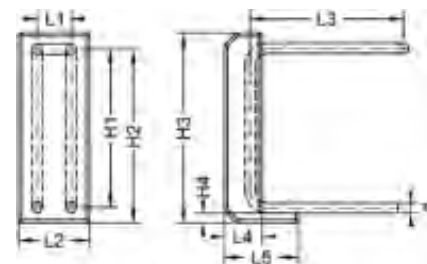
| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code | L1 | L2 | L3 | L4 | H1 | H2 | H3 | z1 | z2 | z3 |
|-------------|---------------------------|-----|-----|---------------|----|----|----|----|----|----|----|----|----|----|
| 18581221222 | 22 x 22 x 12 | | 5 | 4021343195563 | 50 | 33 | 62 | 32 | 45 | 55 | 15 | 93 | 9 | 30 |
| 18581221522 | 22 x 22 x 15 | | 5 | 4021343195556 | 50 | 33 | 62 | 32 | 51 | 55 | 15 | 93 | 9 | 33 |



Catalog-no. and -description

8590 – Skirting rail radiator connector, nickel-plated, with compression union 1/2 x 15 mm

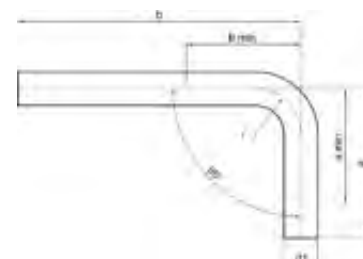
| Article-no. | Dimension d1 x G x d1 | Bag | Box | EAN code | B1 | B2 | L | H1 | H2 | H3 |
|-------------|--------------------------|-----|-----|---------------|----|----|----|----|----|-----|
| 185901512 | 15 x 15 x 1/2 | 1 | 10 | 4021343195570 | 16 | 42 | 50 | 55 | 35 | 117 |
| 185901812 | 18 x 18 x 1/2 | 1 | 10 | 4021343195587 | 16 | 42 | 50 | 55 | 35 | 117 |



Catalog-no. and -description

8620 – CU-VN block for radiatorconnection, nickel plated, with insulation box

| Article-no. | Dimension d x H | Bag | Box | EAN code | d | L1 | L2 | L3 | L4 | L5 | H1 | H2 | H3 | H4 |
|-------------|--------------------|-----|-----|---------------|----|----|-----|-----|----|-----|-----|-----|-----|----|
| 18620185 | 15 x 185 | | 2 | 4021343344817 | 15 | 50 | 105 | 225 | 56 | 110 | 165 | 184 | 210 | 15 |
| 18620255 | 15 x 255 | | 2 | 4021343344824 | 15 | 50 | 105 | 225 | 56 | 110 | 235 | 252 | 280 | 15 |



Catalog-no. and -description

16003 – Bend with plain ends 90°

| Article-no. | Dimension d | Bag | Box | EAN code | a | a min | b | b min |
|-------------|----------------|-----|-----|---------------|----|-------|-----|-------|
| 11600315125 | 15 x 125 | 10 | 100 | 4021343337888 | 62 | 55 | 125 | 55 |
| 11600315300 | 15 x 300 | 10 | 50 | 4021343337895 | 62 | 55 | 300 | 55 |



Catalog-no. and -description

DKHV CU R – Compression fittings set, for copper and softsteel pipes, with euroconus, suitable for the VVN block 8620 and bend 90° with plain ends no. 16003, raw

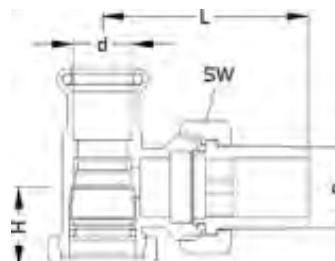
| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code |
|---------------|---------------------------|-----|-----|---------------|
| 3DKHVUCU3412R | 3/4 x 12 | 10 | 150 | 4021343337970 |
| 3DKHVUCU3415R | 3/4 x 15 | 10 | 150 | 4021343337987 |
| 3DKHVUCU3418R | 3/4 x 18 | 10 | 150 | 4021343337994 |



Catalog-no. and -description

DKHV CU – Compression fittings set, for copper and softsteel pipes, with euroconus, suitable for the VN block 8620 and bend 90° with plain ends no. 16003, chrome plated

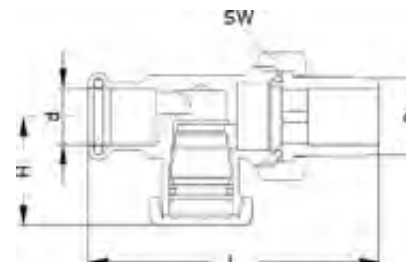
| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code |
|-------------|---------------------------|-----|-----|---------------|
| 3DKHVCU3412 | 3/4 x 12 | 2 | 150 | 4021343337970 |
| 3DKHVCU3415 | 3/4 x 15 | 2 | 150 | 4021343337987 |
| 3DKHVCU3418 | 3/4 x 18 | 2 | 150 | 4021343337994 |



Catalog-no. and -description

14APV – Radiator union, corner form, forged brass, nickel-plated, PN 10 max. 100°C

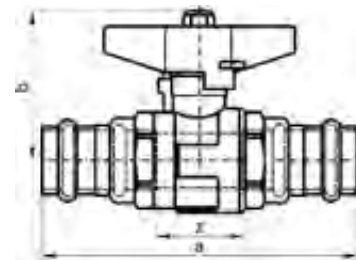
| Article-no. | Dimension d x R | Bag | Box | EAN code | H | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 314APV1512 | 15 x 1/2 | | 70 | 4021343207990 | 20 | 52 | 30 |



Catalog-no. and -description

15APV – Radiator union , passage form, forged brass, nickel-plated, PN 10 max. 100°C

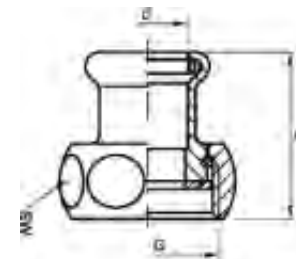
| Article-no. | Dimension d x R | Bag | Box | EAN code | H | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 315APV1512 | 15 x 1/2 | | 70 | 4021343208003 | 29 | 78 | 30 |



Catalog-no. and -description

8850 – Ball valve PN 16; max. operating temperature 130°C

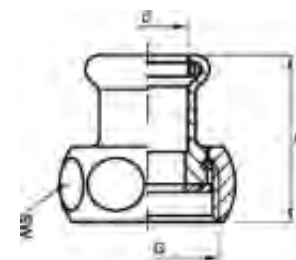
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|-------------|-----|-----|---------------|-----|----|----|
| 1885015 | 15 | 40 | 40 | 4021343215667 | 107 | 52 | 26 |
| 1885018 | 18 | 30 | 30 | 4021343215674 | 115 | 56 | 32 |
| 1885022 | 22 | 25 | 25 | 4021343215681 | 120 | 56 | 32 |
| 1885028 | 28 | 15 | 15 | 4021343215698 | 128 | 60 | 40 |



Catalog-no. and -description

970 – Press union with gasket, DVGW tested (asbestos-free), for heating and process water pumps; every set consists of 2 union pieces, 2 brass nuts, 2 gaskets (WS 3820) up to 200°C

| Article-no. | Dimension d x G | Bag | Box | EAN code | a | SW |
|-------------|-----------------|-----|-----|---------------|----|----|
| 39701534 | 15 x 3/4 | 1 | 100 | 4021343135767 | 32 | 30 |
| 3970221 | 22 x 1 | 1 | 50 | 4021343135798 | 42 | 37 |
| 397022112 | 22 x 11/2 | 1 | 30 | 4021343135804 | 43 | 52 |
| 397028114 | 28 x 11/4 | 1 | 40 | 4021343135811 | 46 | 46 |
| 397028112 | 28 x 11/2 | 1 | 25 | 4021343135835 | 45 | 52 |



Catalog-no. and -description

971 – Press union without gasket, DVGW tested (asbestos-free), for heating and process water pumps; every set consists of 2 union pieces, 2 brass nuts

| Article-no. | Dimension d x G | Bag | Box | EAN code | a | SW |
|-------------|-----------------|-----|-----|---------------|----|----|
| 39711534 | 15 x 3/4 | 1 | 100 | 4021343135842 | 32 | 30 |
| 3971151 | 15 x 1 | 1 | 60 | 4021343135859 | 34 | 37 |
| 39711834 | 18 x 3/4 | 1 | 100 | 4021343135866 | 46 | 30 |
| 3971181 | 18 x 1 | 1 | 60 | 4021343135873 | 36 | 37 |
| 3971221 | 22 x 1 | 1 | 50 | 4021343135880 | 42 | 37 |
| 397122112 | 22 x 11/2 | 1 | 30 | 4021343135897 | 43 | 52 |
| 397128114 | 28 x 11/4 | 1 | 40 | 4021343135903 | 46 | 46 |
| 397128112 | 28 x 11/2 | 1 | 25 | 4021343135910 | 45 | 52 |

SYSTEM TECHNOLOGY

SANHA-Press Gas Copper and gunmetal pressfittings for the gas installation

Series 10000 and 11000



G 2.780



TV-00133



02-030-6



3141



Z-38.4-193



A-764/2004



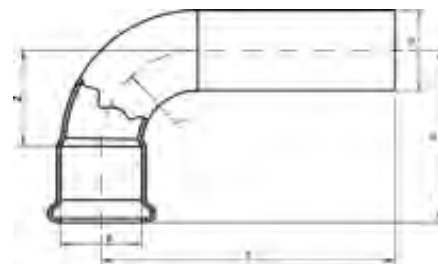
DG-4550BM0412
DG-4550BM7030



Q 97 / 019



POCC DE.AIO3I.H08582



Catalog-no. and -description

10001A – Bend 90° female/male

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|-----|-----|----|
| 110001A12 | 12 | 10 | 250 | 4021343144141 | 30 | 40 | 15 |
| 110001A14 | 14 | 10 | 180 | 4021343167782 | 36 | 44 | 18 |
| 110001A15 | 15 | 10 | 180 | 4021343144158 | 36 | 44 | 18 |
| 110001A16 | 16 | 10 | 150 | 4021343167775 | 36 | 44 | 18 |
| 110001A18 | 18 | 10 | 120 | 4021343144165 | 42 | 50 | 22 |
| 110001A22 | 22 | 10 | 60 | 4021343144172 | 50 | 58 | 27 |
| 110001A28 | 28 | 5 | 40 | 4021343144189 | 61 | 68 | 34 |
| 110001A35 | 35 | 2 | 20 | 4021343144196 | 75 | 82 | 43 |
| 110001A42 | 42 | 2 | 12 | 4021343144202 | 89 | 103 | 51 |
| 110001A54 | 54 | 2 | 6 | 4021343144219 | 108 | 123 | 65 |



Catalog-no. and -description

10002A – Bend 90° female/female

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|-----|----|
| 110002A12 | 12 | 10 | 250 | 4021343144226 | 30 | 15 |
| 110002A14 | 14 | 10 | 180 | 4021343167805 | 36 | 18 |
| 110002A15 | 15 | 10 | 170 | 4021343144233 | 36 | 18 |
| 110002A16 | 16 | 10 | 150 | 4021343167799 | 36 | 18 |
| 110002A18 | 18 | 10 | 120 | 4021343144240 | 42 | 22 |
| 110002A22 | 22 | 10 | 70 | 4021343144257 | 50 | 27 |
| 110002A28 | 28 | 5 | 35 | 4021343144264 | 61 | 34 |
| 110002A35 | 35 | 2 | 20 | 4021343144271 | 75 | 43 |
| 110002A42 | 42 | 2 | 12 | 4021343144288 | 89 | 51 |
| 110002A54 | 54 | 2 | 6 | 4021343144295 | 108 | 65 |



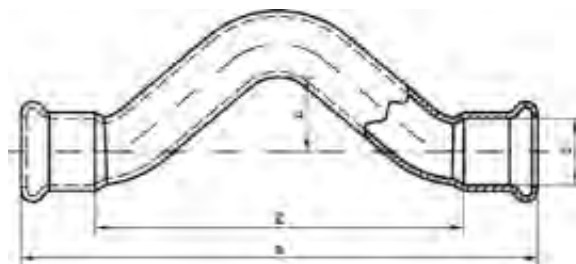
Catalog-no. and -description
10040 – Bend 45° female/male

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|----|----|----|
| 11004012 | 12 | 10 | 350 | 4021343144301 | 22 | 30 | 6 |
| 11004014 | 14 | 10 | 200 | 4021343167812 | 26 | 34 | 8 |
| 11004015 | 15 | 10 | 200 | 4021343144318 | 26 | 34 | 8 |
| 11004016 | 16 | 10 | 200 | 4021343167829 | 26 | 34 | 8 |
| 11004018 | 18 | 10 | 130 | 4021343144325 | 29 | 37 | 9 |
| 11004022 | 22 | 10 | 80 | 4021343144332 | 35 | 43 | 11 |
| 11004028 | 28 | 5 | 50 | 4021343144349 | 41 | 49 | 14 |
| 11004035 | 35 | 2 | 28 | 4021343144356 | 50 | 58 | 18 |
| 11004042 | 42 | 2 | 16 | 4021343144363 | 59 | 74 | 21 |
| 11004054 | 54 | 2 | 8 | 4021343144370 | 70 | 85 | 27 |



Catalog-no. and -description
10041 – Bend 45° female/female

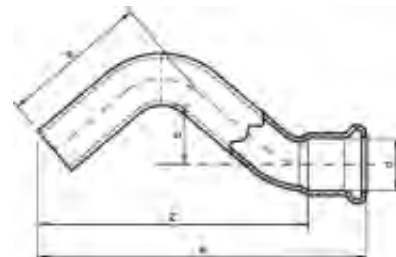
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|----|----|
| 11004112 | 12 | 10 | 350 | 4021343144387 | 22 | 6 |
| 11004114 | 14 | 10 | 200 | 4021343167836 | 26 | 8 |
| 11004115 | 15 | 10 | 200 | 4021343144394 | 26 | 8 |
| 11004116 | 16 | 10 | 200 | 4021343167843 | 26 | 8 |
| 11004118 | 18 | 10 | 150 | 4021343144400 | 29 | 9 |
| 11004122 | 22 | 10 | 80 | 4021343144417 | 35 | 11 |
| 11004128 | 28 | 5 | 50 | 4021343144424 | 41 | 14 |
| 11004135 | 35 | 2 | 24 | 4021343144431 | 50 | 18 |
| 11004142 | 42 | 2 | 16 | 4021343144448 | 59 | 21 |
| 11004154 | 54 | 2 | 8 | 4021343144455 | 70 | 27 |



Catalog-no. and -description

10085 – Full crossover

| Article-no. | Dimension d | Bag | Box | EAN code | a | c | z |
|-------------|----------------|-----|-----|---------------|-----|----|-----|
| 11008512 | 12 | 10 | 110 | 4021343169311 | 110 | 18 | 78 |
| 11008514 | 14 | 10 | 80 | 4021343167867 | 124 | 19 | 89 |
| 11008515 | 15 | 10 | 70 | 4021343169328 | 124 | 19 | 89 |
| 11008516 | 16 | 10 | 70 | 4021343167850 | 124 | 18 | 89 |
| 11008518 | 18 | 10 | 50 | 4021343169335 | 142 | 21 | 102 |
| 11008522 | 22 | 10 | 20 | 4021343169342 | 172 | 25 | 125 |
| 11008528 | 28 | 5 | 15 | 4021343169359 | 203 | 28 | 150 |



Catalog-no. and -description

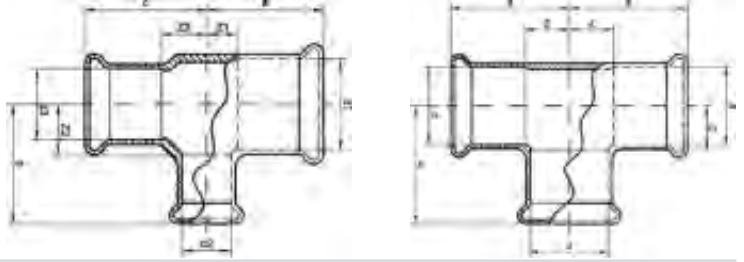
10086 – Partial crossover

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | c | z |
|-------------|----------------|-----|-----|---------------|-----|----|----|-----|
| 11008612 | 12 | 10 | 200 | 4021343169366 | 87 | 40 | 18 | 71 |
| 11008614 | 14 | 10 | 120 | 4021343167874 | 97 | 44 | 19 | 80 |
| 11008615 | 15 | 10 | 100 | 4021343169373 | 98 | 44 | 19 | 80 |
| 11008616 | 16 | 10 | 90 | 4021343167881 | 98 | 44 | 18 | 80 |
| 11008618 | 18 | 10 | 90 | 4021343169380 | 111 | 49 | 21 | 92 |
| 11008622 | 22 | 10 | 40 | 4021343169397 | 136 | 61 | 25 | 112 |
| 11008628 | 28 | 5 | 25 | 4021343169403 | 161 | 72 | 28 | 134 |



3
(Branch)

1 **2**



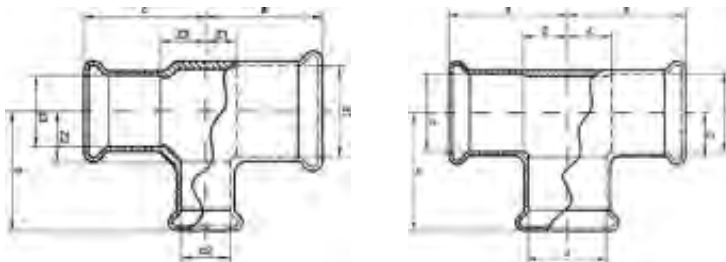
Catalog-no. and -description
10130 – Tee

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|--------------|---------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 11013012 | 12 | 10 | 200 | 4021343144622 | 23 | 23 | 23 | 8 | | | |
| 11013014 | 14 | 10 | 120 | 4021343171130 | 27 | 27 | 27 | 9 | | | |
| 11013015 | 15 | 10 | 100 | 4021343144639 | 34 | 27 | 34 | 9 | | | |
| 11013016 | 16 | 10 | 100 | 4021343167898 | 28 | 28 | 28 | 10 | | | |
| 11013018 | 18 | 10 | 80 | 4021343144646 | 36 | 31 | 36 | 11 | | | |
| 11013022 | 22 | 10 | 50 | 4021343144653 | 39 | 37 | 39 | 13 | | | |
| 11013028 | 28 | 5 | 30 | 4021343144660 | 43 | 43 | 43 | 17 | | | |
| 11013035 | 35 | 2 | 16 | 4021343144677 | 53 | 53 | 53 | 21 | | | |
| 11013042 | 42 | 2 | 10 | 4021343144684 | 63 | 63 | 63 | 25 | | | |
| 11013054 | 54 | 2 | 6 | 4021343144691 | 73 | 73 | 73 | 31 | | | |
| 110130141214 | 14 x 14 x 12 | 10 | 150 | 4021343167904 | 26 | 25 | 26 | | 8 | 9 | 8 |
| 110130151215 | 15 x 15 x 12 | 10 | 150 | 4021343172649 | 26 | 25 | 26 | | 8 | 9 | 8 |
| 110130151815 | 15 x 15 x 18 | 10 | 100 | 4021343172656 | 31 | 31 | 31 | | 13 | 11 | 13 |
| 110130152215 | 15 x 15 x 22 | 10 | 60 | 4021343166761 | 35 | 37 | 35 | | 17 | 13 | 17 |
| 110130161414 | 16 x 14 x 14 | 10 | 120 | 4021343167928 | 27 | 28 | 28 | | 9 | 10 | 10 |
| 110130161216 | 16 x 16 x 12 | 10 | 120 | 4021343167911 | 26 | 26 | 26 | | 8 | 10 | 8 |
| 110130161416 | 16 x 16 x 14 | 10 | 120 | 4021343167935 | 27 | 28 | 27 | | 9 | 10 | 9 |
| 110130181515 | 18 x 15 x 15 | 10 | 100 | 4021343172687 | 30 | 29 | 30 | | 10 | 11 | 12 |
| 110130181815 | 18 x 15 x 18 | 10 | 80 | 4021343185670 | 31 | 31 | 31 | | 11 | 11 | 13 |
| 110130181218 | 18 x 18 x 12 | 10 | 100 | 4021343172670 | 28 | 27 | 28 | | 8 | 11 | 8 |
| 110130181418 | 18 x 18 x 14 | 10 | 100 | 4021343167942 | 29 | 29 | 29 | | 9 | 11 | 9 |
| 110130181518 | 18 x 18 x 15 | 10 | 90 | 4021343144806 | 30 | 29 | 30 | | 10 | 11 | 10 |
| 110130181618 | 18 x 18 x 16 | 10 | 90 | 4021343171147 | 30 | 29 | 30 | | 10 | 11 | 10 |
| 110130182218 | 18 x 18 x 22 | 10 | 50 | 4021343172694 | 36 | 37 | 36 | | 16 | 13 | 16 |
| 110130221515 | 22 x 15 x 15 | 10 | 70 | 4021343144844 | 33 | 31 | 32 | | 10 | 13 | 14 |
| 110130221815 | 22 x 15 x 18 | 10 | 60 | 4021343172724 | 35 | 33 | 33 | | 11 | 13 | 15 |
| 110130222215 | 22 x 15 x 22 | 10 | 50 | 4021343144905 | 37 | 37 | 35 | | 13 | 13 | 17 |
| 110130221518 | 22 x 18 x 15 | 10 | 80 | 4021343172717 | 33 | 31 | 32 | | 10 | 13 | 12 |
| 110130221818 | 22 x 18 x 18 | 10 | 60 | 4021343172731 | 35 | 33 | 34 | | 11 | 13 | 14 |
| 110130222218 | 22 x 18 x 22 | 10 | 50 | 4021343192739 | 37 | 37 | 36 | | 13 | 13 | 16 |
| 110130221422 | 22 x 22 x 14 | 10 | 70 | 4021343171154 | 33 | 31 | 33 | | 9 | 13 | 9 |
| 110130221522 | 22 x 22 x 15 | 10 | 60 | 4021343144868 | 33 | 31 | 33 | | 10 | 13 | 10 |
| 110130221622 | 22 x 22 x 16 | 10 | 60 | 4021343167959 | 34 | 31 | 34 | | 10 | 13 | 10 |
| 110130221822 | 22 x 22 x 18 | 10 | 60 | 4021343144899 | 35 | 33 | 35 | | 11 | 13 | 11 |
| 110130222822 | 22 x 22 x 28 | 5 | 35 | 4021343166785 | 43 | 43 | 43 | | 20 | 17 | 20 |
| 110130282815 | 28 x 15 x 28 | 5 | 30 | 4021343166808 | 43 | 43 | 42 | | 17 | 17 | 24 |
| 110130281818 | 28 x 18 x 18 | 5 | 40 | 4021343206276 | 38 | 36 | 37 | | 12 | 16 | 17 |
| 110130282818 | 28 x 18 x 28 | 5 | 30 | 4021343172755 | 43 | 43 | 43 | | 17 | 17 | 22 |
| 110130281522 | 28 x 22 x 15 | 5 | 40 | 4021343166792 | 37 | 34 | 37 | | 10 | 16 | 13 |
| 110130281822 | 28 x 22 x 18 | 5 | 40 | 4021343166907 | 38 | 36 | 38 | | 12 | 16 | 15 |
| 110130282222 | 28 x 22 x 22 | 5 | 35 | 4021343166914 | 40 | 40 | 40 | | 14 | 16 | 17 |
| 110130282822 | 28 x 22 x 28 | 5 | 30 | 4021343166815 | 43 | 43 | 43 | | 17 | 17 | 20 |
| 110130281428 | 28 x 28 x 14 | 5 | 40 | 4021343167966 | 36 | 34 | 36 | | 10 | 16 | 10 |
| 110130281528 | 28 x 28 x 15 | 5 | 40 | 4021343144943 | 37 | 34 | 37 | | 10 | 16 | 10 |
| 110130281628 | 28 x 28 x 16 | 5 | 40 | 4021343167973 | 37 | 34 | 37 | | 11 | 16 | 11 |
| 110130281828 | 28 x 28 x 18 | 5 | 40 | 4021343172748 | 38 | 36 | 38 | | 12 | 16 | 12 |
| 110130282228 | 28 x 28 x 22 | 5 | 35 | 4021343144998 | 40 | 40 | 40 | | 14 | 16 | 14 |
| 110130352222 | 35 x 22 x 22 | 2 | 20 | 4021343172786 | 46 | 44 | 45 | | 14 | 20 | 21 |
| 110130352228 | 35 x 28 x 22 | 2 | 20 | 4021343172793 | 46 | 44 | 45 | | 14 | 20 | 19 |



3
(Branch)

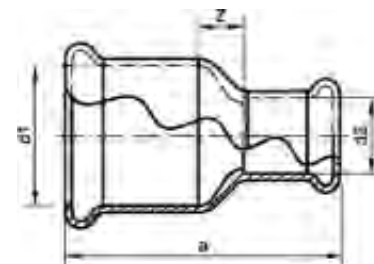
1 **2**



Catalog-no. and -description

10130 – Tee (continued)

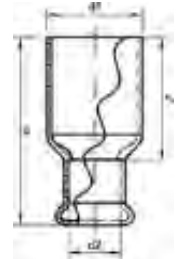
| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|--------------|---------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 110130352828 | 35 x 28 x 28 | 2 | 20 | 4021343166921 | 49 | 47 | 48 | 17 | 21 | 22 | |
| 110130353528 | 35 x 28 x 35 | 2 | 18 | 4021343171376 | 53 | 53 | 52 | 21 | 21 | 25 | |
| 110130351535 | 35 x 35 x 15 | 2 | 24 | 4021343172762 | 43 | 38 | 43 | 11 | 20 | 11 | |
| 110130351835 | 35 x 35 x 18 | 2 | 24 | 4021343172779 | 44 | 40 | 44 | 12 | 20 | 12 | |
| 110130352235 | 35 x 35 x 22 | 2 | 20 | 4021343145087 | 46 | 44 | 46 | 14 | 20 | 14 | |
| 110130352835 | 35 x 35 x 28 | 2 | 20 | 4021343145100 | 49 | 47 | 49 | 17 | 21 | 17 | |
| 110130423535 | 42 x 35 x 35 | 2 | 12 | 4021343172823 | 59 | 57 | 57 | 21 | 25 | 25 | |
| 110130421542 | 42 x 42 x 15 | 2 | 16 | 4021343197659 | 49 | 51 | 49 | 11 | 34 | 11 | |
| 110130422242 | 42 x 42 x 22 | 2 | 14 | 4021343172816 | 53 | 48 | 53 | 15 | 24 | 15 | |
| 110130422842 | 42 x 42 x 28 | 2 | 12 | 4021343145155 | 56 | 51 | 56 | 18 | 25 | 18 | |
| 110130423542 | 42 x 42 x 35 | 2 | 12 | 4021343145179 | 59 | 57 | 59 | 21 | 25 | 21 | |
| 110130542254 | 54 x 54 x 22 | 2 | 8 | 4021343197666 | 57 | 54 | 57 | 15 | 30 | 15 | |
| 110130542854 | 54 x 54 x 28 | 2 | 8 | 4021343172830 | 60 | 68 | 60 | 18 | 41 | 18 | |
| 110130543554 | 54 x 54 x 35 | 2 | 8 | 4021343172847 | 64 | 63 | 64 | 21 | 31 | 21 | |
| 110130544254 | 54 x 54 x 42 | 2 | 6 | 4021343145216 | 67 | 69 | 67 | 25 | 31 | 25 | |



Catalog-no. and -description

10240 – Reducing coupling

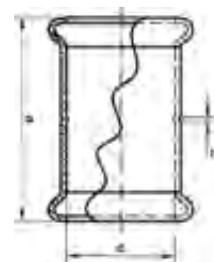
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 1102401412 | 14 x 12 | 10 | 250 | 4021343167997 | 37 | 4 |
| 1102401512 | 15 x 12 | 10 | 250 | 4021343145308 | 34 | 4 |
| 1102401514 | 15 x 14 | 10 | 250 | 4021343171161 | 38 | 3 |
| 1102401614 | 16 x 14 | 10 | 250 | 4021343171178 | 39 | 4 |
| 1102401812 | 18 x 12 | 10 | 200 | 4021343145315 | 41 | 6 |
| 1102401814 | 18 x 14 | 10 | 180 | 4021343168000 | 42 | 5 |
| 1102401815 | 18 x 15 | 10 | 180 | 4021343145322 | 42 | 4 |
| 1102401816 | 18 x 16 | 10 | 180 | 4021343168017 | 41 | 4 |
| 1102402214 | 22 x 14 | 10 | 150 | 4021343171185 | 49 | 8 |
| 1102402215 | 22 x 15 | 10 | 150 | 4021343145339 | 48 | 6 |
| 1102402216 | 22 x 16 | 10 | 150 | 4021343168024 | 47 | 6 |
| 1102402218 | 22 x 18 | 10 | 120 | 4021343145346 | 48 | 5 |
| 1102402814 | 28 x 14 | 5 | 80 | 4021343168031 | 55 | 10 |
| 1102402815 | 28 x 15 | 5 | 100 | 4021343145353 | 54 | 10 |
| 1102402816 | 28 x 16 | 5 | 80 | 4021343168048 | 54 | 9 |
| 1102402818 | 28 x 18 | 5 | 80 | 4021343145360 | 55 | 8 |
| 1102402822 | 28 x 22 | 5 | 70 | 4021343145377 | 56 | 6 |
| 1102403522 | 35 x 22 | 2 | 50 | 4021343145384 | 65 | 10 |
| 1102403528 | 35 x 28 | 2 | 40 | 4021343145391 | 65 | 7 |
| 1102404222 | 42 x 22 | 2 | 30 | 4021343145407 | 75 | 13 |
| 1102404228 | 42 x 28 | 2 | 30 | 4021343145414 | 75 | 10 |
| 1102404235 | 42 x 35 | 2 | 30 | 4021343145421 | 77 | 7 |
| 1102405428 | 54 x 28 | 2 | 20 | 4021343145438 | 86 | 16 |
| 1102405435 | 54 x 35 | 2 | 20 | 4021343145445 | 88 | 13 |
| 1102405442 | 54 x 42 | 2 | 16 | 4021343145452 | 90 | 9 |



Catalog-no. and -description

10243 – Reducer

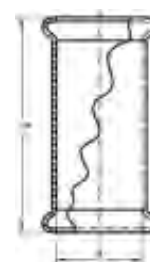
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 1102431412 | 14a x 12 | 10 | 350 | 4021343171192 | 40 | 25 |
| 1102431512 | 15a x 12 | 10 | 350 | 4021343145469 | 40 | 24 |
| 1102431514 | 15a x 14 | 10 | 350 | 4021343168055 | 50 | 32 |
| 1102431612 | 16a x 12 | 10 | 300 | 4021343171208 | 41 | 26 |
| 1102431614 | 16a x 14 | 10 | 300 | 4021343168062 | 43 | 25 |
| 1102431812 | 18a x 12 | 10 | 250 | 4021343145476 | 44 | 28 |
| 1102431814 | 18a x 14 | 10 | 200 | 4021343171215 | 45 | 27 |
| 1102431815 | 18a x 15 | 10 | 220 | 4021343145483 | 44 | 26 |
| 1102431816 | 18a x 16 | 10 | 200 | 4021343171222 | 45 | 27 |
| 1102432214 | 22a x 14 | 10 | 180 | 4021343171369 | 51 | 33 |
| 1102432215 | 22a x 15 | 10 | 150 | 4021343145490 | 51 | 33 |
| 1102432216 | 22a x 16 | 10 | 150 | 4021343168079 | 50 | 32 |
| 1102432218 | 22a x 18 | 10 | 150 | 4021343145506 | 50 | 30 |
| 1102432814 | 28a x 14 | 5 | 100 | 4021343168086 | 59 | 41 |
| 1102432815 | 28a x 15 | 5 | 100 | 4021343145513 | 57 | 39 |
| 1102432816 | 28a x 16 | 5 | 100 | 4021343171239 | 58 | 40 |
| 1102432818 | 28a x 18 | 5 | 100 | 4021343145520 | 57 | 37 |
| 1102432822 | 28a x 22 | 5 | 90 | 4021343145537 | 58 | 34 |
| 1102433522 | 35a x 22 | 2 | 50 | 4021343145544 | 68 | 44 |
| 1102433528 | 35a x 28 | 2 | 40 | 4021343145551 | 67 | 40 |
| 1102434222 | 42a x 22 | 2 | 36 | 4021343145568 | 77 | 54 |
| 1102434228 | 42a x 28 | 2 | 36 | 4021343145575 | 77 | 51 |
| 1102434235 | 42a x 35 | 2 | 30 | 4021343145582 | 78 | 46 |
| 1102435435 | 54a x 35 | 2 | 20 | 4021343145599 | 90 | 58 |
| 1102435442 | 54a x 42 | 2 | 20 | 4021343145605 | 91 | 53 |



Catalog-no. and -description

10270 – Coupling

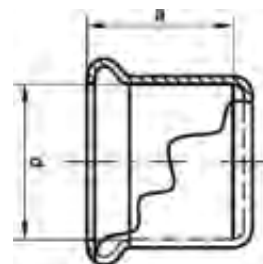
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|----|---|
| 11027012 | 12 | 10 | 350 | 4021343144462 | 33 | 2 |
| 11027014 | 14 | 10 | 200 | 4021343167980 | 37 | 2 |
| 11027015 | 15 | 10 | 240 | 4021343144479 | 38 | 2 |
| 11027016 | 16 | 10 | 200 | 4021343171246 | 37 | 2 |
| 11027018 | 18 | 10 | 170 | 4021343144486 | 42 | 2 |
| 11027022 | 22 | 10 | 100 | 4021343144493 | 49 | 2 |
| 11027028 | 28 | 5 | 60 | 4021343144509 | 55 | 2 |
| 11027035 | 35 | 2 | 40 | 4021343144516 | 66 | 2 |
| 11027042 | 42 | 2 | 24 | 4021343144523 | 79 | 3 |
| 11027054 | 54 | 2 | 16 | 4021343144530 | 88 | 3 |



Catalog-no. and -description

10270S – Slip coupling

| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 110270S15 | 15 | 10 | 200 | 4021343144554 | 47 |
| 110270S18 | 18 | 10 | 140 | 4021343144561 | 53 |
| 110270S22 | 22 | 10 | 80 | 4021343144578 | 64 |
| 110270S28 | 28 | 5 | 50 | 4021343144585 | 72 |
| 110270S35 | 35 | 2 | 30 | 4021343144592 | 88 |
| 110270S42 | 42 | 2 | 20 | 4021343144608 | 104 |
| 110270S54 | 54 | 2 | 10 | 4021343144615 | 119 |



Catalog-no. and -description

10301 – Endcap

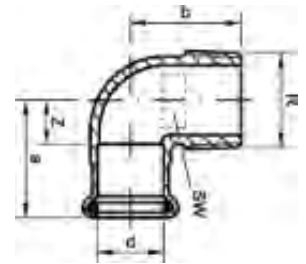
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 11030112 | 12 | 10 | 500 | 4021343145223 | 16 |
| 11030114 | 14 | 10 | 450 | 4021343168109 | 18 |
| 11030115 | 15 | 10 | 400 | 4021343145230 | 18 |
| 11030116 | 16 | 10 | 400 | 4021343168093 | 18 |
| 11030118 | 18 | 10 | 350 | 4021343145247 | 20 |
| 11030122 | 22 | 10 | 200 | 4021343145254 | 24 |
| 11030128 | 28 | 5 | 110 | 4021343145261 | 27 |
| 11030135 | 35 | 2 | 60 | 4021343145278 | 32 |
| 11030142 | 42 | 2 | 40 | 4021343145285 | 38 |
| 11030154 | 54 | 2 | 16 | 4021343145292 | 43 |



Catalog-no. and -description

11090g – Female elbow 90°

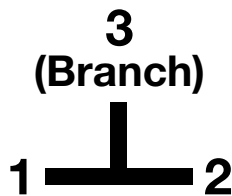
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|
| 1110901238 | 12 x 3/8 | 10 | 150 | 4021343172236 | 27 | 18 | 11 | 8 | 21 |
| 1110901212 | 12 x 1/2 | 10 | 150 | 4021343172243 | 30 | 22 | 14 | 9 | 26 |
| 1110901412 | 14 x 1/2 | 10 | 150 | 4021343167485 | 31 | 23 | 13 | 10 | 26 |
| 1110901538 | 15 x 3/8 | 10 | 150 | 4021343172250 | 29 | 19 | 11 | 9 | 22 |
| 1110901512 | 15 x 1/2 | 10 | 150 | 4021343156885 | 33 | 23 | 15 | 10 | 26 |
| 1110901534 | 15 x 3/4 | 10 | 100 | 4021343156892 | 36 | 25 | 18 | 10 | 32 |
| 1110901612 | 16 x 1/2 | 10 | 150 | 4021343167492 | 33 | 23 | 15 | 10 | 26 |
| 1110901812 | 18 x 1/2 | 10 | 150 | 4021343156908 | 33 | 25 | 13 | 12 | 26 |
| 1110901834 | 18 x 3/4 | 10 | 100 | 4021343156915 | 36 | 27 | 16 | 12 | 32 |
| 1110902212 | 22 x 1/2 | 10 | 100 | 4021343156922 | 37 | 27 | 13 | 14 | 26 |
| 1110902234 | 22 x 3/4 | 10 | 80 | 4021343156939 | 40 | 29 | 16 | 14 | 32 |
| 111090221 | 22 x 1 | 10 | 40 | 4021343156946 | 44 | 30 | 20 | 13 | 39 |
| 1110902812 | 28 x 1/2 | 5 | 80 | 4021343198113 | 40 | 29 | 14 | 16 | 27 |
| 1110902834 | 28 x 3/4 | 5 | 50 | 4021343198106 | 44 | 31 | 18 | 16 | 32 |
| 111090281 | 28 x 1 | 5 | 30 | 4021343156953 | 46 | 33 | 20 | 16 | 39 |
| 11109035114 | 35 x 1 1/4 | 2 | 20 | 4021343156960 | 57 | 42 | 25 | 20 | 49 |
| 11109042112 | 42 x 1 1/2 | 2 | 12 | 4021343156977 | 65 | 45 | 27 | 23 | 56 |
| 111090542 | 54 x 2 | 2 | 6 | 4021343156984 | 78 | 55 | 36 | 31 | 68 |



Catalog-no. and -description

11092g – Male elbow 90°

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | b | z | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|----|
| 1110921238 | 12 x 3/8 | 10 | 250 | 4021343172229 | 24 | 22 | 8 | 16 |
| 1110921212 | 12 x 1/2 | 10 | 250 | 4021343167515 | 26 | 25 | 10 | 19 |
| 1110921412 | 14 x 1/2 | 10 | 250 | 4021343167522 | 26 | 26 | 8 | 19 |
| 1110921538 | 15 x 3/8 | 10 | 200 | 4021343167539 | 26 | 23 | 8 | 18 |
| 1110921512 | 15 x 1/2 | 10 | 200 | 4021343167546 | 27 | 26 | 9 | 19 |
| 1110921534 | 15 x 3/4 | 10 | 150 | 4021343180095 | 30 | 28 | 12 | 24 |
| 1110921612 | 16 x 1/2 | 10 | 150 | 4021343167553 | 27 | 26 | 9 | 20 |
| 1110921812 | 18 x 1/2 | 10 | 160 | 4021343167577 | 30 | 28 | 10 | 20 |
| 1110921834 | 18 x 3/4 | 10 | 120 | 4021343167584 | 32 | 30 | 12 | 24 |
| 1110922212 | 22 x 1/2 | 10 | 100 | 4021343167591 | 33 | 30 | 9 | 22 |
| 1110922234 | 22 x 3/4 | 10 | 80 | 4021343167607 | 36 | 33 | 12 | 26 |
| 111092221 | 22 x 1 | 10 | 50 | 4021343167614 | 40 | 35 | 16 | 30 |
| 111092281 | 28 x 1 | 5 | 50 | 4021343167621 | 42 | 38 | 16 | 32 |
| 11109235114 | 35 x 1 1/4 | 2 | 30 | 4021343167638 | 52 | 45 | 20 | 39 |
| 11109242112 | 42 x 1 1/2 | 2 | 12 | 4021343167645 | 59 | 48 | 21 | 45 |
| 111092542 | 54 x 2 | 2 | 10 | 4021343167652 | 70 | 59 | 28 | 57 |



Catalog-no. and -description

11130g – Female branch tee

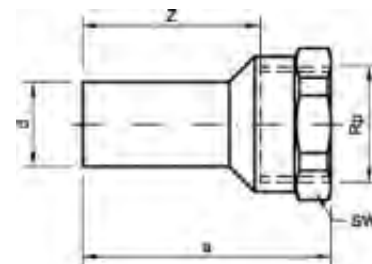
| Article-no. | Dimension d x dx Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | z3 | SW |
|-------------|------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 1111301212 | 12 x 12 x 1/2 | 10 | 150 | 4021343168512 | 29 | 22 | 29 | 13 | 9 | 13 | 26 |
| 1111301412 | 14 x 14 x 1/2 | 10 | 120 | 4021343167720 | 31 | 23 | 31 | 13 | 10 | 13 | 26 |
| 1111301512 | 15 x 15 x 1/2 | 10 | 100 | 4021343156991 | 31 | 23 | 31 | 13 | 10 | 13 | 26 |
| 1111301612 | 16 x 16 x 1/2 | 10 | 100 | 4021343167737 | 33 | 23 | 33 | 15 | 10 | 15 | 26 |
| 1111301812 | 18 x 18 x 1/2 | 10 | 90 | 4021343157004 | 33 | 25 | 33 | 13 | 12 | 13 | 26 |
| 1111302212 | 22 x 22 x 1/2 | 10 | 60 | 4021343157011 | 37 | 27 | 37 | 13 | 14 | 13 | 26 |
| 1111302234 | 22 x 22 x 3/4 | 10 | 50 | 4021343157028 | 40 | 29 | 40 | 16 | 14 | 16 | 32 |
| 1111302812 | 28 x 28 x 1/2 | 5 | 40 | 4021343157035 | 40 | 29 | 40 | 14 | 16 | 14 | 32 |
| 1111302834 | 28 x 28 x 3/4 | 5 | 40 | 4021343157042 | 42 | 31 | 42 | 16 | 16 | 16 | 32 |
| 1111303512 | 35 x 35 x 1/2 | 2 | 30 | 4021343157059 | 45 | 32 | 45 | 13 | 19 | 13 | 39 |
| 111130351 | 35 x 35 x 1 | 2 | 20 | 4021343157066 | 52 | 37 | 52 | 20 | 20 | 20 | 39 |
| 1111304212 | 42 x 42 x 1/2 | 2 | 18 | 4021343157073 | 51 | 36 | 51 | 13 | 23 | 13 | 47 |
| 111130421 | 42 x 42 x 1 | 2 | 16 | 4021343157080 | 57 | 40 | 57 | 19 | 23 | 19 | 47 |
| 1111305412 | 54 x 54 x 1/2 | 2 | 10 | 4021343157097 | 56 | 42 | 56 | 14 | 29 | 14 | 59 |



Catalog-no. and -description

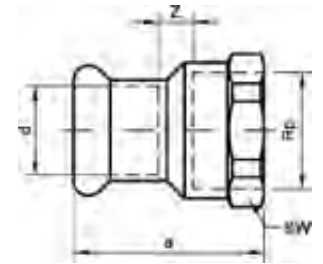
11243g – Male adaptor

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 1112431238 | 12 x 3/8 | 10 | 400 | 4021343168307 | 30 | 14 | 16 |
| 1112431212 | 12 x 1/2 | 10 | 350 | 4021343168291 | 33 | 17 | 18 |
| 1112431412 | 14 x 1/2 | 10 | 300 | 4021343167669 | 33 | 14 | 19 |
| 1112431538 | 15 x 3/8 | 10 | 400 | 4021343168314 | 31 | 12 | 18 |
| 1112431512 | 15 x 1/2 | 10 | 300 | 4021343147029 | 33 | 14 | 19 |
| 1112431534 | 15 x 3/4 | 10 | 200 | 4021343147036 | 36 | 18 | 19 |
| 1112431612 | 16 x 1/2 | 10 | 300 | 4021343167676 | 33 | 14 | 19 |
| 1112431634 | 16 x 3/4 | 10 | 200 | 4021343167683 | 36 | 18 | 20 |
| 1112431812 | 18 x 1/2 | 10 | 200 | 4021343147043 | 37 | 17 | 21 |
| 1112431834 | 18 x 3/4 | 10 | 200 | 4021343147050 | 38 | 17 | 22 |
| 1112432212 | 22 x 1/2 | 10 | 150 | 4021343147067 | 40 | 16 | 26 |
| 1112432234 | 22 x 3/4 | 10 | 120 | 4021343147074 | 41 | 17 | 28 |
| 111243221 | 22 x 1 | 10 | 100 | 4021343147081 | 44 | 20 | 28 |
| 1112432834 | 28 x 3/4 | 5 | 100 | 4021343147098 | 45 | 18 | 32 |
| 111243281 | 28 x 1 | 5 | 100 | 4021343147104 | 46 | 19 | 36 |
| 11124328114 | 28 x 11/4 | 5 | 70 | 4021343147111 | 47 | 20 | 34 |
| 111243351 | 35 x 1 | 2 | 70 | 4021343147128 | 52 | 20 | 39 |
| 11124335114 | 35 x 11/4 | 2 | 50 | 4021343147135 | 53 | 21 | 40 |
| 11124335112 | 35 x 11/2 | 2 | 50 | 4021343147142 | 52 | 20 | 40 |
| 11124342114 | 42 x 11/4 | 2 | 40 | 4021343147159 | 60 | 23 | 46 |
| 11124342112 | 42 x 11/2 | 2 | 40 | 4021343147166 | 60 | 23 | 50 |
| 11124354112 | 54 x 11/2 | 2 | 20 | 4021343147173 | 70 | 28 | 60 |
| 111243542 | 54 x 2 | 2 | 16 | 4021343147180 | 71 | 29 | 60 |



Catalog-no. and -description
8246g – Plug-in adaptor, female

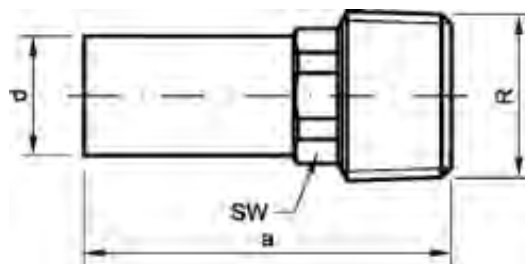
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 182461212 | 12a x 1/2 | 10 | 250 | 4021343137044 | 42 | 29 | 25 |
| 182461538 | 15a x 3/8 | 10 | 250 | 4021343131318 | 39 | 38 | 20 |
| 182461512 | 15a x 1/2 | 10 | 200 | 4021343129650 | 44 | 31 | 25 |
| 182461812 | 18a x 1/2 | 10 | 200 | 4021343129667 | 45 | 32 | 25 |
| 182461834 | 18a x 3/4 | 10 | 150 | 4021343131325 | 50 | 35 | 30 |
| 182462212 | 22a x 1/2 | 10 | 200 | 4021343131332 | 46 | 33 | 25 |
| 182462234 | 22a x 3/4 | 10 | 150 | 4021343129674 | 51 | 38 | 30 |
| 182462834 | 28a x 3/4 | 5 | 120 | 4021343131349 | 51 | 36 | 30 |
| 18246281 | 28a x 1 | 5 | 80 | 4021343129681 | 55 | 38 | 38 |
| 1824635114 | 35a x 1 1/4 | 2 | 40 | 4021343137051 | 69 | 47 | 46 |
| 1824642112 | 42a x 1 1/2 | 2 | 26 | 4021343137068 | 80 | 58 | 55 |
| 18246542 | 54a x 2 | 2 | 16 | 4021343137075 | 94 | 70 | 60 |



Catalog-no. and -description

11270g – Female adaptor

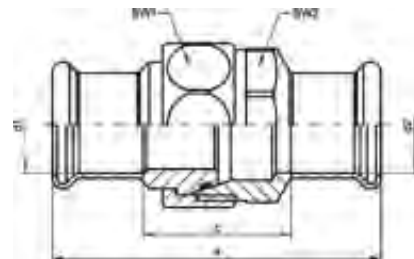
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|---|----|
| 1112701238 | 12 x 3/8 | 10 | 400 | 4021343168338 | 30 | 4 | 20 |
| 1112701212 | 12 x 1/2 | 10 | 300 | 4021343168321 | 34 | 5 | 25 |
| 1112701412 | 14 x 1/2 | 10 | 250 | 4021343167706 | 33 | 2 | 25 |
| 1112701538 | 15 x 3/8 | 10 | 300 | 4021343168345 | 30 | 2 | 20 |
| 1112701512 | 15 x 1/2 | 10 | 250 | 4021343147227 | 33 | 2 | 28 |
| 1112701534 | 15 x 3/4 | 10 | 150 | 4021343147234 | 40 | 7 | 30 |
| 1112701612 | 16 x 1/2 | 10 | 250 | 4021343167690 | 33 | 2 | 25 |
| 1112701634 | 16 x 3/4 | 10 | 150 | 4021343167713 | 40 | 7 | 30 |
| 1112701812 | 18 x 1/2 | 10 | 200 | 4021343147241 | 35 | 2 | 25 |
| 1112701834 | 18 x 3/4 | 10 | 150 | 4021343147258 | 40 | 5 | 30 |
| 1112702212 | 22 x 1/2 | 10 | 150 | 4021343147265 | 39 | 2 | 25 |
| 1112702234 | 22 x 3/4 | 10 | 120 | 4021343147272 | 42 | 3 | 30 |
| 111270221 | 22 x 1 | 10 | 80 | 4021343168352 | 48 | 7 | 37 |
| 1112702834 | 28 x 3/4 | 5 | 100 | 4021343168376 | 44 | 2 | 32 |
| 111270281 | 28 x 1 | 5 | 80 | 4021343147302 | 48 | 7 | 37 |
| 11127028114 | 28 x 1 1/4 | 5 | 40 | 4021343168369 | 55 | 6 | 46 |
| 111270351 | 35 x 1 | 2 | 60 | 4021343168383 | 49 | | 39 |
| 11127035114 | 35 x 1 1/4 | 2 | 40 | 4021343147333 | 58 | 4 | 46 |
| 11127042114 | 42 x 1 1/4 | 2 | 30 | 4021343168390 | 62 | 4 | 55 |
| 11127042112 | 42 x 1 1/2 | 2 | 30 | 4021343147364 | 63 | 3 | 46 |
| 11127054112 | 54 x 1 1/2 | 2 | 24 | 4021343172274 | 67 | 3 | 55 |
| 111270542 | 54 x 2 | 2 | 20 | 4021343147388 | 74 | 8 | 60 |



Catalog-no. and -description

8280g – Plug-in adaptor, male

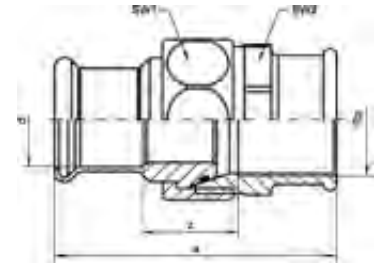
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 182801212 | 12a x 1/2 | 10 | 350 | 4021343134456 | 44 | 16 |
| 182801538 | 15a x 3/8 | 10 | 350 | 4021343137105 | 42 | 16 |
| 182801512 | 15a x 1/2 | 10 | 350 | 4021343131424 | 46 | 16 |
| 182801812 | 18a x 1/2 | 10 | 250 | 4021343131431 | 47 | 19 |
| 182801834 | 18a x 3/4 | 10 | 150 | 4021343131448 | 51 | 19 |
| 182802212 | 22a x 1/2 | 10 | 150 | 4021343131455 | 52 | 22 |
| 182802234 | 22a x 3/4 | 10 | 150 | 4021343129698 | 52 | 22 |
| 182802834 | 28a x 3/4 | 5 | 100 | 4021343137112 | 60 | 27 |
| 18280281 | 28a x 1 | 5 | 60 | 4021343131462 | 64 | 34 |
| 1828035114 | 35a x 1 1/4 | 2 | 40 | 4021343137082 | 72 | 40 |
| 1828042112 | 42a x 1 1/2 | 2 | 30 | 4021343137099 | 80 | 46 |
| 18280542 | 54a x 2 | 2 | 16 | 4021343132339 | 92 | 60 |



Catalog-no. and -description

11340 – Union, conical sealing

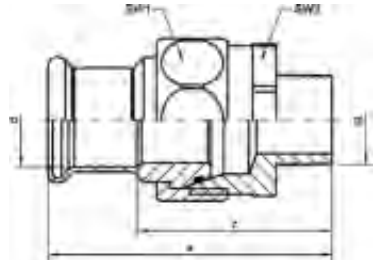
| Article-no. | Dimension d | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|-----|----|-----|-----|
| 11134015 | 15 | 5 | 80 | 4021343196560 | 66 | 30 | 34 | 31 |
| 11134018 | 18 | 5 | 40 | 4021343196577 | 77 | 37 | 40 | 40 |
| 11134022 | 22 | 5 | 40 | 4021343196584 | 82 | 34 | 40 | 40 |
| 11134028 | 28 | 5 | 30 | 4021343196591 | 94 | 40 | 48 | 45 |
| 11134035 | 35 | 2 | 16 | 4021343196607 | 102 | 38 | 59 | 55 |
| 11134042 | 42 | 2 | 10 | 4021343196614 | 125 | 50 | 72 | 68 |
| 11134054 | 54 | 2 | 6 | 4021343196621 | 132 | 47 | 80 | 76 |



Catalog-no. and -description

11340g – Union, female, conical sealing

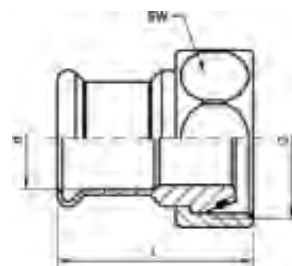
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|----|-----|-----|
| 1113401512 | 15 x 1/2 | 5 | 80 | 4021343196638 | 60 | 27 | 34 | 31 |
| 1113401812 | 18 x 1/2 | 5 | 60 | 4021343206634 | 63 | 29 | 40 | 40 |
| 1113402234 | 22 x 3/4 | 5 | 50 | 4021343196645 | 65 | 27 | 40 | 40 |
| 111340281 | 28 x 1 | 5 | 30 | 4021343196652 | 83 | 31 | 48 | 45 |
| 11134035114 | 35 x 1 1/4 | 2 | 20 | 4021343196669 | 84 | 27 | 59 | 55 |
| 11134042112 | 42 x 1 1/2 | 2 | 10 | 4021343196676 | 97 | 32 | 72 | 68 |
| 111340542 | 54 x 2 | 2 | 8 | 4021343196683 | 101 | 30 | 80 | 76 |



Catalog-no. and -description

11343g – Union, male, conical sealing

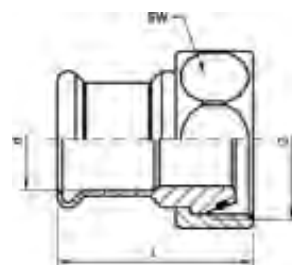
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|-----|----|-----|-----|
| 1113431512 | 15 x 1/2 | 5 | 80 | 4021343196690 | 61 | 43 | 34 | 31 |
| 1113431534 | 15 x 3/4 | 5 | 80 | 4021343196706 | 61 | 43 | 34 | 31 |
| 1113431812 | 18 x 1/2 | 5 | 50 | 4021343196713 | 75 | 54 | 40 | 40 |
| 1113431834 | 18 x 3/4 | 5 | 50 | 4021343196720 | 70 | 49 | 40 | 40 |
| 1113432234 | 22 x 3/4 | 5 | 50 | 4021343196737 | 71 | 46 | 40 | 40 |
| 111343221 | 22 x 1 | 5 | 50 | 4021343196744 | 77 | 51 | 40 | 40 |
| 1113432834 | 28 x 3/4 | 5 | 30 | 4021343196751 | 83 | 54 | 48 | 45 |
| 111343281 | 28 x 1 | 5 | 30 | 4021343196768 | 83 | 54 | 48 | 45 |
| 11134335114 | 35 x 1 1/4 | 2 | 20 | 4021343196775 | 93 | 61 | 59 | 55 |
| 11134342112 | 42 x 1 1/2 | 2 | 10 | 4021343196782 | 104 | 67 | 72 | 68 |
| 111343542 | 54 x 2 | 2 | 8 | 4021343196799 | 113 | 70 | 80 | 76 |



Catalog-no. and -description

11359g – Union adaptor, flat sealing

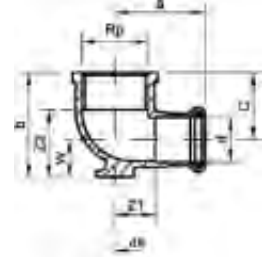
| Article-no. | Dimension d x G | Bag | Box | EAN code | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 1113591212 | 12 x 1/2 | 5 | 350 | 4021343168451 | 30 | 24 |
| 1113591234 | 12 x 3/4 | 5 | 200 | 4021343172304 | 30 | 30 |
| 1113591534 | 15 x 3/4 | 5 | 200 | 4021343172311 | 32 | 30 |
| 111359151 | 15 x 1 | 5 | 120 | 4021343168468 | 34 | 37 |
| 1113591834 | 18 x 3/4 | 5 | 200 | 4021343172328 | 46 | 30 |
| 111359181 | 18 x 1 | 5 | 120 | 4021343172335 | 36 | 37 |
| 1113592234 | 22 x 3/4 | 5 | 120 | 4021343168475 | 51 | 30 |
| 111359221 | 22 x 1 | 5 | 100 | 4021343172342 | 42 | 37 |
| 11135922114 | 22 x 11/4 | 5 | 80 | 4021343172359 | 38 | 46 |
| 11135922112 | 22 x 11/2 | 5 | 60 | 4021343172366 | 43 | 52 |
| 11135928114 | 28 x 11/4 | 5 | 80 | 4021343172373 | 46 | 46 |
| 11135928112 | 28 x 11/2 | 5 | 50 | 4021343172380 | 45 | 52 |
| 11135935112 | 35 x 11/2 | 2 | 40 | 4021343172397 | 52 | 52 |
| 111359352 | 35 x 2 | 2 | 30 | 4021343172403 | 54 | 64 |
| 111359422 | 42 x 2 | 2 | 30 | 4021343172427 | 62 | 64 |
| 11135954238 | 54 x 23/8 | 2 | 16 | 4021343172434 | 68 | 75 |



Catalog-no. and -description

11360g – Union adaptor, conical sealing

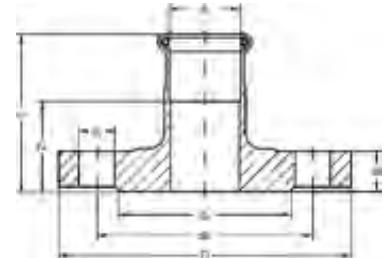
| Article-no. | Dimension d x G | Bag | Box | EAN code | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 1113601578 | 15 x 7/8 | 5 | 120 | 4021343196539 | 37 | 34 |
| 11136018118 | 18 x 11/8 | 5 | 80 | 4021343206641 | 42 | 40 |
| 11136022118 | 22 x 11/8 | 5 | 80 | 4021343196546 | 44 | 40 |
| 11136028138 | 28 x 13/8 | 5 | 60 | 4021343196553 | 52 | 48 |



Catalog-no. and -description

11472g – Wall plate elbow

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | dk | W |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 1114721212 | 12 x 1/2 | 10 | 120 | 4021343168581 | 31 | 33 | 22 | 15 | 9 | 35 | 11 |
| 1114721412 | 14 x 1/2 | 10 | 100 | 4021343171260 | 33 | 33 | 22 | 15 | 9 | 35 | 11 |
| 1114721512 | 15 x 1/2 | 10 | 100 | 4021343148309 | 33 | 36 | 23 | 15 | 10 | 35 | 13 |
| 1114721612 | 16 x 1/2 | 10 | 100 | 4021343167768 | 33 | 36 | 23 | 15 | 10 | 35 | 13 |
| 1114721812 | 18 x 1/2 | 10 | 90 | 4021343148323 | 33 | 39 | 25 | 13 | 12 | 35 | 14 |
| 1114721834 | 18 x 3/4 | 10 | 60 | 4021343148330 | 36 | 42 | 27 | 16 | 12 | 40 | 15 |
| 1114722212 | 22 x 1/2 | 10 | 60 | 4021343168628 | 37 | 43 | 26 | 13 | 13 | 35 | 17 |
| 1114722234 | 22 x 3/4 | 10 | 60 | 4021343156816 | 40 | 46 | 29 | 16 | 14 | 40 | 17 |



Catalog-no. and -description

10-RG-PF – Crimpingflange, PN 5

| Article-no. | Dimension DN x d | Bag | Box | EAN code | b | d2 | d3 | z | L | dk | D | Az |
|-------------|---------------------|-----|---------------|----------|----|-----|----|----|-----|-----|---|----|
| 110RGPF28 | DN 25/28 mm | 6 | 4021343200311 | 16 | 14 | 68 | 36 | 62 | 85 | 115 | 4 | |
| 110RGPF35 | DN 32/35 mm | 4 | 4021343200328 | 16 | 18 | 78 | 30 | 62 | 100 | 140 | 4 | |
| 110RGPF42 | DN 40/42 mm | 4 | 4021343204340 | 16 | 18 | 88 | 25 | 63 | 110 | 150 | 4 | |
| 110RGPF54 | DN 50/54 mm | 2 | 4021343204357 | 18 | 18 | 102 | 23 | 65 | 125 | 165 | 4 | |



Catalog-no. and -description

FL-D – Flange sealing, asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|-----------------|-----|---------------|----------|
| 1D25 | 25 | 160 | 4021343001093 | |
| 1D32 | 32 | 120 | 4021343001123 | |
| 1D40 | 40 | 100 | 4021343001154 | |
| 1D50 | 50 | 120 | 4021343001161 | |



Catalog-no. and -description

4980 – Plastic measure tool for SANHA®-Press, with bottle opener and water level, 12 - 54 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84980 | 12 - 54 mm | | 30 | 4021343140297 |

SANHA[®]

SANHA[®]-Press Gas

Copper and gunmetal
pressfittings for the gas installation
Series 10000 and 11000

SYSTEM TECHNOLOGY

SANHA-Press Solar
Copper and gunmetal
pressfittings for the solar and
compressed air installation

Series 12000 and 13000



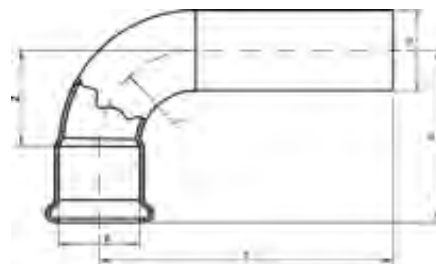
AT / 2001-02-1068-02



1005R01F4P5-bpr
1005R01F4P5-rpr



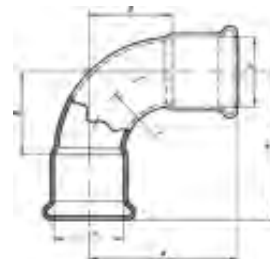
A-770 / 2003



Catalog-no. and -description

12001A – Bend 90° female/male

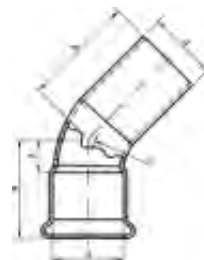
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|-----|-----|----|
| 112001A15 | 15 | 10 | 180 | 4021343142697 | 36 | 44 | 18 |
| 112001A18 | 18 | 10 | 120 | 4021343142703 | 42 | 50 | 22 |
| 112001A22 | 22 | 10 | 60 | 4021343142710 | 50 | 58 | 27 |
| 112001A28 | 28 | 5 | 40 | 4021343142727 | 61 | 68 | 34 |
| 112001A35 | 35 | 2 | 20 | 4021343142734 | 75 | 82 | 43 |
| 112001A42 | 42 | 2 | 12 | 4021343142741 | 89 | 103 | 51 |
| 112001A54 | 54 | 2 | 6 | 4021343163081 | 108 | 123 | 65 |



Catalog-no. and -description

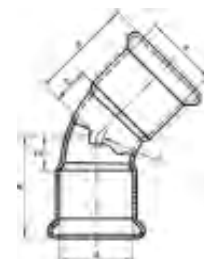
12002A – Bend 90° female/female

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|-----|----|
| 112002A12 | 12 | 10 | 250 | 4021343142758 | 30 | 15 |
| 112002A15 | 15 | 10 | 170 | 4021343142765 | 36 | 18 |
| 112002A18 | 18 | 10 | 120 | 4021343142772 | 42 | 22 |
| 112002A22 | 22 | 10 | 70 | 4021343142789 | 50 | 27 |
| 112002A28 | 28 | 5 | 35 | 4021343142796 | 61 | 34 |
| 112002A35 | 35 | 2 | 20 | 4021343142802 | 75 | 43 |
| 112002A42 | 42 | 2 | 12 | 4021343142819 | 89 | 51 |
| 112002A54 | 54 | 2 | 6 | 4021343142826 | 108 | 65 |



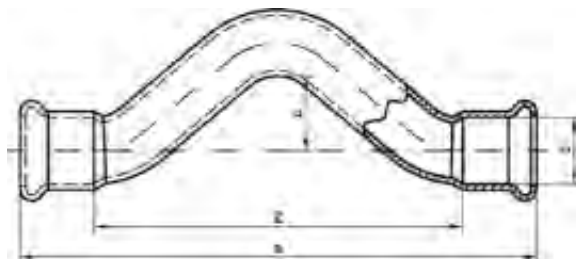
Catalog-no. and -description
12040 – Bend 45° female/male

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|-------------|-----|-----|---------------|----|----|----|
| 11204015 | 15 | 10 | 200 | 4021343142840 | 26 | 34 | 8 |
| 11204018 | 18 | 10 | 130 | 4021343142857 | 29 | 37 | 9 |
| 11204022 | 22 | 10 | 80 | 4021343142864 | 35 | 43 | 11 |
| 11204028 | 28 | 5 | 50 | 4021343142871 | 41 | 49 | 14 |
| 11204035 | 35 | 2 | 28 | 4021343142888 | 50 | 58 | 18 |
| 11204042 | 42 | 2 | 16 | 4021343142895 | 59 | 74 | 21 |
| 11204054 | 54 | 2 | 8 | 4021343142901 | 70 | 85 | 27 |



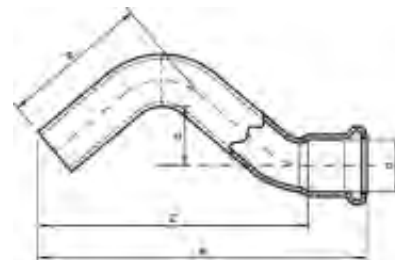
Catalog-no. and -description
12041 – Bend 45° female/female

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|-------------|-----|-----|---------------|----|----|
| 11204115 | 15 | 10 | 200 | 4021343142925 | 26 | 8 |
| 11204118 | 18 | 10 | 150 | 4021343142932 | 29 | 9 |
| 11204122 | 22 | 10 | 80 | 4021343142949 | 35 | 11 |
| 11204128 | 28 | 5 | 50 | 4021343142956 | 41 | 14 |
| 11204135 | 35 | 2 | 24 | 4021343142963 | 50 | 18 |
| 11204142 | 42 | 2 | 16 | 4021343142970 | 59 | 21 |
| 11204154 | 54 | 2 | 8 | 4021343142987 | 70 | 27 |



Catalog-no. and -description
12085 – Full crossover

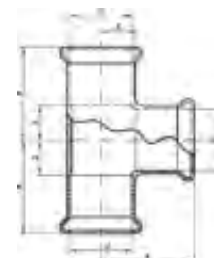
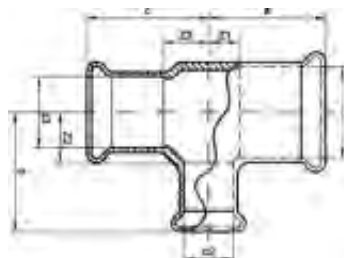
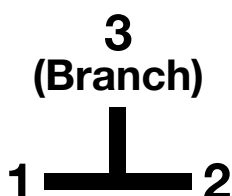
| Article-no. | Dimension d | Bag | Box | EAN code | a | c | z |
|-------------|-------------|-----|-----|---------------|-----|----|-----|
| 11208515 | 15 | 10 | 70 | 4021343169427 | 124 | 19 | 89 |
| 11208518 | 18 | 10 | 50 | 4021343169434 | 142 | 21 | 102 |
| 11208522 | 22 | 10 | 20 | 4021343169441 | 172 | 25 | 125 |



Catalog-no. and -description

12086 – Partial crossover

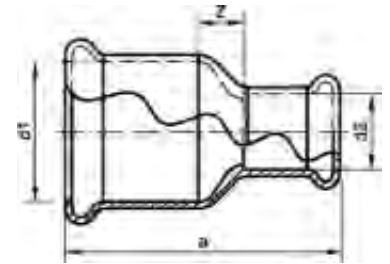
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | c | z |
|-------------|----------------|-----|-----|---------------|-----|----|----|-----|
| 11208615 | 15 | 10 | 100 | 4021343169472 | 98 | 44 | 19 | 80 |
| 11208618 | 18 | 10 | 90 | 4021343169489 | 111 | 49 | 21 | 92 |
| 11208622 | 22 | 10 | 40 | 4021343169496 | 136 | 61 | 25 | 112 |



Catalog-no. and -description

12130 – Tee

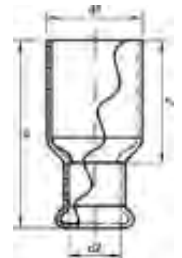
| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|--------------|---------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 11213015 | 15 | 10 | 100 | 4021343143168 | 34 | 27 | 34 | 9 | | | |
| 11213018 | 18 | 10 | 80 | 4021343143175 | 36 | 31 | 36 | 11 | | | |
| 11213022 | 22 | 10 | 50 | 4021343143182 | 39 | 37 | 39 | 13 | | | |
| 11213028 | 28 | 5 | 30 | 4021343143199 | 43 | 43 | 43 | 17 | | | |
| 11213035 | 35 | 2 | 16 | 4021343143205 | 53 | 53 | 53 | 21 | | | |
| 11213042 | 42 | 2 | 10 | 4021343143212 | 63 | 63 | 63 | 25 | | | |
| 11213054 | 54 | 2 | 6 | 4021343143229 | 73 | 73 | 73 | 31 | | | |
| 112130181518 | 18 x 18 x 15 | 10 | 90 | 4021343143335 | 30 | 29 | 30 | | 10 | 11 | 10 |
| 112130221818 | 22 x 18 x 18 | 10 | 60 | 4021343143410 | 35 | 33 | 34 | | 11 | 13 | 14 |
| 112130222218 | 22 x 18 x 22 | 10 | 50 | 4021343143441 | 37 | 37 | 36 | | 13 | 13 | 16 |
| 112130221522 | 22 x 22 x 15 | 10 | 60 | 4021343143397 | 33 | 31 | 33 | | 10 | 13 | 10 |
| 112130221822 | 22 x 22 x 18 | 10 | 60 | 4021343143427 | 35 | 33 | 35 | | 11 | 13 | 11 |
| 112130222822 | 22 x 22 x 28 | 5 | 35 | 4021343143458 | 43 | 43 | 43 | | 20 | 17 | 20 |
| 112130281818 | 28 x 18 x 18 | 5 | 40 | 4021343143489 | 38 | 36 | 37 | | 12 | 16 | 17 |
| 112130282222 | 28 x 22 x 22 | 5 | 35 | 4021343143519 | 40 | 40 | 40 | | 14 | 16 | 17 |
| 112130281528 | 28 x 28 x 15 | 5 | 40 | 4021343143472 | 37 | 34 | 37 | | 10 | 16 | 10 |
| 112130281828 | 28 x 28 x 18 | 5 | 40 | 4021343143502 | 38 | 36 | 38 | | 12 | 16 | 12 |
| 112130282228 | 28 x 28 x 22 | 5 | 35 | 4021343143526 | 40 | 40 | 40 | | 14 | 16 | 14 |
| 112130351535 | 35 x 35 x 15 | 2 | 24 | 4021343143571 | 43 | 38 | 43 | | 11 | 20 | 11 |
| 112130351835 | 35 x 35 x 18 | 2 | 24 | 4021343143588 | 44 | 40 | 44 | | 12 | 20 | 12 |
| 112130352235 | 35 x 35 x 22 | 2 | 20 | 4021343143618 | 46 | 44 | 46 | | 14 | 20 | 14 |
| 112130352835 | 35 x 35 x 28 | 2 | 20 | 4021343143632 | 49 | 47 | 49 | | 17 | 21 | 17 |
| 112130542854 | 54 x 54 x 28 | 2 | 8 | 4021343143724 | 60 | 68 | 60 | | 18 | 41 | 18 |
| 112130543554 | 54 x 54 x 35 | 2 | 8 | 4021343143731 | 64 | 63 | 64 | | 21 | 31 | 21 |
| 112130544254 | 54 x 54 x 42 | 2 | 6 | 4021343143748 | 67 | 69 | 67 | | 25 | 31 | 25 |



Catalog-no. and -description

12240 – Reducing coupling

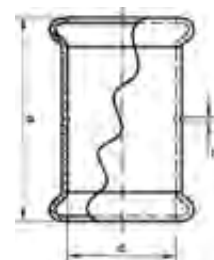
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 1122401512 | 15 x 12 | 10 | 250 | 4021343143830 | 34 | 4 |
| 1122401812 | 18 x 12 | 10 | 200 | 4021343143847 | 41 | 6 |
| 1122401815 | 18 x 15 | 10 | 180 | 4021343143854 | 42 | 4 |
| 1122402215 | 22 x 15 | 10 | 150 | 4021343143861 | 48 | 6 |
| 1122402218 | 22 x 18 | 10 | 120 | 4021343143878 | 48 | 5 |
| 1122402815 | 28 x 15 | 5 | 100 | 4021343143885 | 54 | 10 |
| 1122402818 | 28 x 18 | 5 | 80 | 4021343143892 | 55 | 8 |
| 1122402822 | 28 x 22 | 5 | 70 | 4021343143908 | 56 | 6 |
| 1122403522 | 35 x 22 | 2 | 50 | 4021343143915 | 65 | 10 |
| 1122403528 | 35 x 28 | 2 | 40 | 4021343143922 | 65 | 7 |
| 1122404228 | 42 x 28 | 2 | 30 | 4021343143946 | 75 | 10 |
| 1122404235 | 42 x 35 | 2 | 30 | 4021343143953 | 77 | 7 |
| 1122405428 | 54 x 28 | 2 | 20 | 4021343143960 | 86 | 16 |
| 1122405442 | 54 x 42 | 2 | 16 | 4021343143984 | 90 | 9 |



Catalog-no. and -description

12243 – Reducer

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 1122431512 | 15a x 12 | 10 | 350 | 4021343143991 | 40 | 24 |
| 1122431812 | 18a x 12 | 10 | 250 | 4021343144004 | 44 | 28 |
| 1122431815 | 18a x 15 | 10 | 220 | 4021343144011 | 44 | 26 |
| 1122432215 | 22a x 15 | 10 | 150 | 4021343144028 | 51 | 33 |
| 1122432218 | 22a x 18 | 10 | 150 | 4021343144035 | 50 | 30 |
| 1122432815 | 28a x 15 | 5 | 100 | 4021343144042 | 57 | 39 |
| 1122432818 | 28a x 18 | 5 | 100 | 4021343144059 | 57 | 37 |
| 1122432822 | 28a x 22 | 5 | 90 | 4021343144066 | 58 | 34 |
| 1122433522 | 35a x 22 | 2 | 50 | 4021343144073 | 68 | 44 |
| 1122433528 | 35a x 28 | 2 | 40 | 4021343144080 | 67 | 40 |
| 1122434222 | 42a x 22 | 2 | 36 | 4021343144097 | 77 | 54 |
| 1122434228 | 42a x 28 | 2 | 36 | 4021343144103 | 77 | 51 |
| 1122434235 | 42a x 35 | 2 | 30 | 4021343144110 | 78 | 46 |
| 1122435435 | 54a x 35 | 2 | 20 | 4021343144127 | 90 | 58 |
| 1122435442 | 54a x 42 | 2 | 20 | 4021343144134 | 91 | 53 |



Catalog-no. and -description

12270 – Coupling

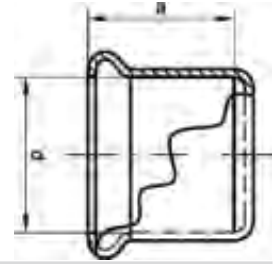
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|----|---|
| 11227015 | 15 | 10 | 240 | 4021343143007 | 38 | 2 |
| 11227018 | 18 | 10 | 170 | 4021343143014 | 42 | 2 |
| 11227022 | 22 | 10 | 100 | 4021343143021 | 49 | 2 |
| 11227028 | 28 | 5 | 60 | 4021343143038 | 55 | 2 |
| 11227035 | 35 | 2 | 40 | 4021343143045 | 66 | 2 |
| 11227042 | 42 | 2 | 24 | 4021343143052 | 79 | 3 |
| 11227054 | 54 | 2 | 16 | 4021343143069 | 88 | 3 |



Catalog-no. and -description

12270S – Slip coupling

| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 112270S15 | 15 | 10 | 200 | 4021343143083 | 47 |
| 112270S18 | 18 | 10 | 140 | 4021343143090 | 53 |
| 112270S22 | 22 | 10 | 80 | 4021343143106 | 64 |
| 112270S28 | 28 | 5 | 50 | 4021343143113 | 72 |
| 112270S35 | 35 | 2 | 30 | 4021343143120 | 88 |
| 112270S42 | 42 | 2 | 20 | 4021343143137 | 104 |
| 112270S54 | 54 | 2 | 10 | 4021343143144 | 119 |



Catalog-no. and -description

12301 – Endcap

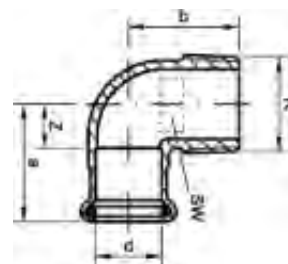
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 11230115 | 15 | 10 | 400 | 4021343143762 | 18 |
| 11230118 | 18 | 10 | 350 | 4021343143779 | 20 |
| 11230122 | 22 | 10 | 200 | 4021343143786 | 24 |
| 11230128 | 28 | 5 | 110 | 4021343143793 | 27 |
| 11230135 | 35 | 2 | 60 | 4021343143809 | 32 |
| 11230142 | 42 | 2 | 40 | 4021343143816 | 38 |
| 11230154 | 54 | 2 | 16 | 4021343143823 | 43 |



Catalog-no. and -description

13090g – Female elbow 90°

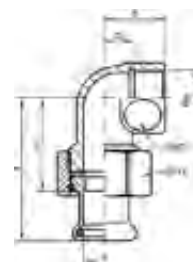
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|
| 1130901512 | 15 x 1/2 | 10 | 150 | 4021343158827 | 33 | 23 | 15 | 10 | 26 |
| 1130901534 | 15 x 3/4 | 10 | 100 | 4021343158841 | 36 | 25 | 18 | 10 | 32 |
| 1130901812 | 18 x 1/2 | 10 | 150 | 4021343158858 | 33 | 25 | 13 | 12 | 26 |
| 1130901834 | 18 x 3/4 | 10 | 100 | 4021343158865 | 36 | 27 | 16 | 12 | 32 |
| 1130902212 | 22 x 1/2 | 10 | 100 | 4021343158872 | 37 | 27 | 13 | 14 | 26 |
| 1130902234 | 22 x 3/4 | 10 | 80 | 4021343158889 | 40 | 29 | 16 | 14 | 32 |
| 113090221 | 22 x 1 | 10 | 40 | 4021343158896 | 44 | 30 | 20 | 13 | 39 |
| 1130902834 | 28 x 3/4 | 5 | 50 | 4021343198120 | 44 | 31 | 18 | 16 | 32 |
| 113090281 | 28 x 1 | 5 | 30 | 4021343158902 | 46 | 33 | 20 | 16 | 39 |
| 11309035114 | 35 x 1 1/4 | 2 | 20 | 4021343158919 | 57 | 42 | 25 | 20 | 49 |
| 11309042112 | 42 x 1 1/2 | 2 | 12 | 4021343158926 | 65 | 45 | 27 | 23 | 56 |
| 113090542 | 54 x 2 | 2 | 6 | 4021343158933 | 78 | 55 | 36 | 31 | 68 |



Catalog-no. and -description

13092g – Male elbow 90°

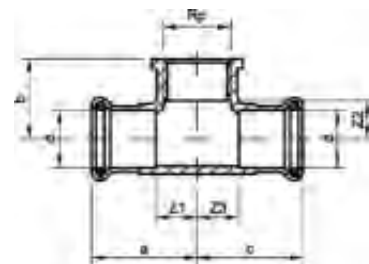
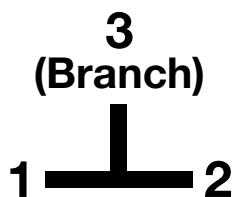
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | b | z1 | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|----|
| 1130921512 | 15 x 1/2 | 10 | 200 | 4021343158971 | 27 | 26 | 9 | 19 |
| 1130921534 | 15 x 3/4 | 10 | 150 | 4021343180101 | 30 | 28 | 12 | 24 |
| 1130921812 | 18 x 1/2 | 10 | 160 | 4021343158988 | 30 | 28 | 10 | 20 |
| 1130921834 | 18 x 3/4 | 10 | 120 | 4021343158995 | 32 | 30 | 12 | 24 |
| 1130922234 | 22 x 3/4 | 10 | 80 | 4021343159015 | 36 | 33 | 12 | 26 |
| 113092221 | 22 x 1 | 10 | 50 | 4021343172588 | 40 | 35 | 16 | 30 |
| 113092281 | 28 x 1 | 5 | 50 | 4021343159022 | 42 | 38 | 16 | 32 |
| 11309235114 | 35 x 1 1/4 | 2 | 30 | 4021343159039 | 52 | 45 | 20 | 39 |
| 11309242112 | 42 x 1 1/2 | 2 | 12 | 4021343159046 | 59 | 48 | 21 | 45 |
| 113092542 | 54 x 2 | 2 | 10 | 4021343159053 | 70 | 59 | 28 | 57 |



Catalog-no. and -description

13096g – Elbow union, female, flat sealing

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|----|----|----|-----|-----|
| 1130961834 | 18 x 3/4 | 5 | 50 | 4021343146862 | 70 | 24 | 50 | 11 | 30 | 32 |
| 1130962234 | 22 x 3/4 | 5 | 50 | 4021343197673 | 65 | 26 | 41 | 13 | 37 | 32 |
| 113096221 | 22 x 1 | 5 | 25 | 4021343146879 | 72 | 39 | 48 | 25 | 46 | 40 |
| 113096281 | 28 x 1 | 5 | 25 | 4021343146886 | 78 | 39 | 51 | 25 | 46 | 40 |
| 11309635114 | 35 x 1 1/4 | 2 | 16 | 4021343146893 | 83 | 38 | 51 | 21 | 52 | 48 |
| 11309642112 | 42 x 1 1/2 | 2 | 10 | 4021343146909 | 95 | 41 | 57 | 24 | 59 | 54 |
| 113096542 | 54 x 2 | 2 | 6 | 4021343146916 | 109 | 51 | 66 | 30 | 75 | 66 |



Catalog-no. and -description

13130g – Female branch tee

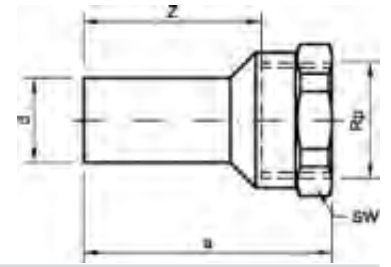
| Article-no. | Dimension d x dx Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | z3 | SW |
|-------------|------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 1131301512 | 15 x 15 x 1/2 | 10 | 100 | 4021343159091 | 31 | 23 | 31 | 13 | 10 | 13 | 26 |
| 1131301812 | 18 x 18 x 1/2 | 10 | 90 | 4021343159107 | 33 | 25 | 33 | 13 | 12 | 13 | 26 |
| 1131302212 | 22 x 22 x 1/2 | 10 | 60 | 4021343159114 | 37 | 27 | 37 | 13 | 14 | 13 | 26 |
| 1131302234 | 22 x 22 x 3/4 | 10 | 50 | 4021343159121 | 40 | 29 | 40 | 16 | 14 | 16 | 32 |
| 1131302812 | 28 x 28 x 1/2 | 5 | 40 | 4021343159138 | 40 | 29 | 40 | 14 | 16 | 14 | 32 |
| 1131302834 | 28 x 28 x 3/4 | 5 | 40 | 4021343159145 | 42 | 31 | 42 | 16 | 16 | 16 | 32 |
| 1131303512 | 35 x 35 x 1/2 | 2 | 30 | 4021343159152 | 45 | 32 | 45 | 13 | 19 | 13 | 39 |
| 113130351 | 35 x 35 x 1 | 2 | 20 | 4021343159169 | 52 | 37 | 52 | 20 | 20 | 20 | 39 |
| 1131304212 | 42 x 42 x 1/2 | 2 | 18 | 4021343159176 | 51 | 36 | 51 | 13 | 23 | 13 | 47 |
| 113130421 | 42 x 42 x 1 | 2 | 16 | 4021343159183 | 57 | 40 | 57 | 19 | 23 | 19 | 47 |
| 1131305412 | 54 x 54 x 1/2 | 2 | 10 | 4021343159190 | 56 | 42 | 56 | 14 | 29 | 14 | 49 |



Catalog-no. and -description

13243g – Male adaptor

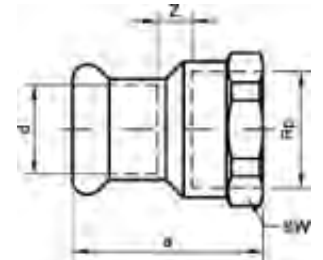
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 1132431512 | 15 x 1/2 | 10 | 300 | 4021343145674 | 33 | 14 | 19 |
| 1132431534 | 15 x 3/4 | 10 | 200 | 4021343145681 | 36 | 18 | 19 |
| 1132431812 | 18 x 1/2 | 10 | 200 | 4021343145698 | 37 | 17 | 21 |
| 1132431834 | 18 x 3/4 | 10 | 200 | 4021343145704 | 38 | 17 | 22 |
| 1132432212 | 22 x 1/2 | 10 | 150 | 4021343145711 | 40 | 16 | 26 |
| 1132432234 | 22 x 3/4 | 10 | 120 | 4021343145728 | 41 | 17 | 28 |
| 113243221 | 22 x 1 | 10 | 100 | 4021343145735 | 44 | 20 | 28 |
| 1132432834 | 28 x 3/4 | 5 | 100 | 4021343145742 | 45 | 18 | 32 |
| 113243281 | 28 x 1 | 5 | 100 | 4021343145759 | 46 | 19 | 36 |
| 11324328114 | 28 x 11/4 | 5 | 70 | 4021343145766 | 47 | 20 | 34 |
| 113243351 | 35 x 1 | 2 | 70 | 4021343145773 | 52 | 20 | 39 |
| 11324335114 | 35 x 11/4 | 2 | 50 | 4021343145780 | 53 | 21 | 40 |
| 11324342114 | 42 x 11/4 | 2 | 40 | 4021343145803 | 60 | 23 | 46 |
| 11324342112 | 42 x 11/2 | 2 | 40 | 4021343145810 | 60 | 23 | 50 |
| 11324354112 | 54 x 11/2 | 2 | 20 | 4021343145827 | 70 | 28 | 60 |
| 113243542 | 54 x 2 | 2 | 16 | 4021343145834 | 71 | 29 | 60 |



Catalog-no. and -description

8246g – Plug-in adaptor, female

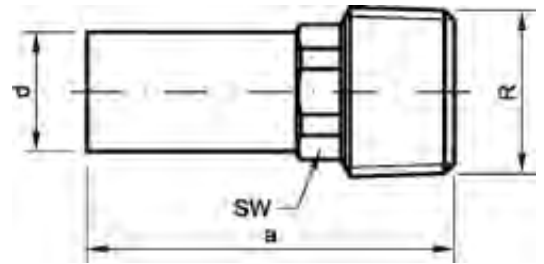
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 182461212 | 12a x 1/2 | 10 | 250 | 4021343137044 | 42 | 29 | 25 |
| 182461538 | 15a x 3/8 | 10 | 250 | 4021343131318 | 39 | 38 | 20 |
| 182461512 | 15a x 1/2 | 10 | 200 | 4021343129650 | 44 | 31 | 25 |
| 182461812 | 18a x 1/2 | 10 | 200 | 4021343129667 | 45 | 32 | 25 |
| 182461834 | 18a x 3/4 | 10 | 150 | 4021343131325 | 50 | 35 | 30 |
| 182462212 | 22a x 1/2 | 10 | 200 | 4021343131332 | 46 | 33 | 25 |
| 182462234 | 22a x 3/4 | 10 | 150 | 4021343129674 | 51 | 38 | 30 |
| 182462834 | 28a x 3/4 | 5 | 120 | 4021343131349 | 51 | 36 | 30 |
| 18246281 | 28a x 1 | 5 | 80 | 4021343129681 | 55 | 38 | 38 |
| 1824635114 | 35a x 11/4 | 2 | 40 | 4021343137051 | 69 | 47 | 46 |
| 1824642112 | 42a x 11/2 | 2 | 26 | 4021343137068 | 80 | 58 | 55 |
| 18246542 | 54a x 2 | 2 | 16 | 4021343137075 | 94 | 70 | 60 |



Catalog-no. and -description

13270g – Female adaptor

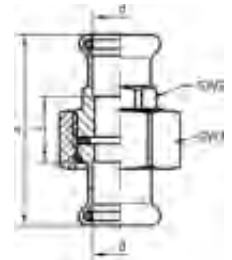
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|---|----|
| 1132701538 | 15 x 3/8 | 10 | 300 | 4021343145988 | 30 | 2 | 20 |
| 1132701512 | 15 x 1/2 | 10 | 250 | 4021343145995 | 33 | 2 | 25 |
| 1132701534 | 15 x 3/4 | 10 | 150 | 4021343146008 | 40 | 7 | 30 |
| 1132701812 | 18 x 1/2 | 10 | 200 | 4021343146015 | 35 | 2 | 25 |
| 1132701834 | 18 x 3/4 | 10 | 150 | 4021343146022 | 40 | 5 | 30 |
| 1132702212 | 22 x 1/2 | 10 | 150 | 4021343146039 | 39 | 2 | 25 |
| 1132702234 | 22 x 3/4 | 10 | 120 | 4021343146046 | 42 | 3 | 30 |
| 113270221 | 22 x 1 | 10 | 80 | 4021343146053 | 48 | 7 | 37 |
| 1132702834 | 28 x 3/4 | 5 | 100 | 4021343146060 | 44 | 2 | 32 |
| 113270281 | 28 x 1 | 5 | 80 | 4021343146077 | 48 | 7 | 37 |
| 11327028114 | 28 x 11/4 | 5 | 40 | 4021343146084 | 55 | 6 | 46 |
| 113270351 | 35 x 1 | 2 | 60 | 4021343146091 | 49 | 3 | 39 |
| 11327035114 | 35 x 11/4 | 2 | 40 | 4021343146107 | 58 | 4 | 46 |
| 11327042114 | 42 x 11/4 | 2 | 30 | 4021343146121 | 62 | 3 | 46 |
| 11327042112 | 42 x 11/2 | 2 | 30 | 4021343155048 | 63 | 4 | 55 |
| 11327054112 | 54 x 11/2 | 2 | 24 | 4021343146138 | 67 | 3 | 55 |
| 113270542 | 54 x 2 | 2 | 20 | 4021343146145 | 74 | 8 | 60 |



Catalog-no. and -description

8280g – Plug-in adaptor, male

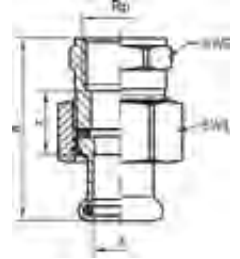
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 182801212 | 12a x 1/2 | 10 | 350 | 4021343134456 | 44 | 16 |
| 182801538 | 15a x 3/8 | 10 | 350 | 4021343137105 | 42 | 16 |
| 182801512 | 15a x 1/2 | 10 | 350 | 4021343131424 | 46 | 16 |
| 182801812 | 18a x 1/2 | 10 | 250 | 4021343131431 | 47 | 19 |
| 182801834 | 18a x 3/4 | 10 | 150 | 4021343131448 | 51 | 19 |
| 182802212 | 22a x 1/2 | 10 | 150 | 4021343131455 | 52 | 22 |
| 182802234 | 22a x 3/4 | 10 | 150 | 4021343129698 | 52 | 22 |
| 182802834 | 28a x 3/4 | 5 | 100 | 4021343137112 | 60 | 27 |
| 18280281 | 28a x 1 | 5 | 60 | 4021343131462 | 64 | 34 |
| 1828035114 | 35a x 11/4 | 2 | 40 | 4021343137082 | 72 | 40 |
| 1828042112 | 42a x 11/2 | 2 | 30 | 4021343137099 | 80 | 46 |
| 18280542 | 54a x 2 | 2 | 16 | 4021343132339 | 92 | 60 |



Catalog-no. and -description

13330 – Union, flat sealing

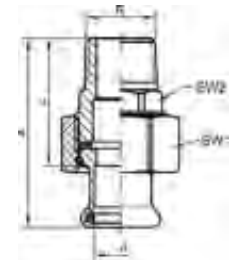
| Article-no. | Dimension d | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|-----|----|-----|-----|
| 11333015 | 15 | 5 | 100 | 4021343146282 | 54 | 18 | 30 | 19 |
| 11333018 | 18 | 5 | 100 | 4021343146299 | 70 | 30 | 30 | 22 |
| 11333022 | 22 | 5 | 60 | 4021343146305 | 66 | 18 | 37 | 26 |
| 11333028 | 28 | 5 | 40 | 4021343146312 | 71 | 17 | 46 | 34 |
| 11333035 | 35 | 2 | 30 | 4021343146329 | 82 | 18 | 52 | 40 |
| 11333042 | 42 | 2 | 18 | 4021343146336 | 94 | 19 | 59 | 46 |
| 11333054 | 54 | 2 | 10 | 4021343146343 | 102 | 17 | 75 | 60 |



Catalog-no. and -description

13330g – Union, female, flat sealing

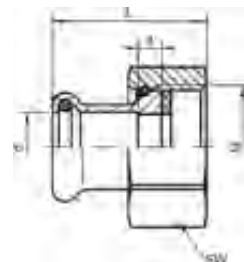
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 1133301534 | 15 x 3/4 | 5 | 80 | 4021343146374 | 55 | 21 | 30 | 30 |
| 1133301834 | 18 x 3/4 | 5 | 80 | 4021343146398 | 69 | 33 | 30 | 30 |
| 1133302234 | 22 x 3/4 | 5 | 60 | 4021343146404 | 62 | 21 | 37 | 30 |
| 113330221 | 22 x 1 | 5 | 50 | 4021343146411 | 66 | 20 | 37 | 39 |
| 113330281 | 28 x 1 | 5 | 40 | 4021343146435 | 66 | 20 | 46 | 39 |
| 11333035114 | 35 x 11/4 | 2 | 30 | 4021343146442 | 80 | 27 | 52 | 46 |
| 11333042112 | 42 x 11/2 | 2 | 20 | 4021343146459 | 85 | 28 | 59 | 54 |
| 113330542 | 54 x 2 | 2 | 10 | 4021343146466 | 94 | 24 | 75 | 66 |



Catalog-no. and -description

13333g – Union, male, flat sealing

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|-----|----|-----|-----|
| 1133331512 | 15 x 1/2 | 5 | 120 | 4021343146497 | 55 | 37 | 30 | 22 |
| 1133331534 | 15 x 3/4 | 5 | 100 | 4021343146503 | 60 | 42 | 30 | 27 |
| 1133331812 | 18 x 1/2 | 5 | 100 | 4021343146510 | 69 | 49 | 30 | 22 |
| 1133331834 | 18 x 3/4 | 5 | 80 | 4021343146527 | 74 | 54 | 30 | 27 |
| 1133332212 | 22 x 1/2 | 5 | 60 | 4021343146534 | 71 | 47 | 37 | 23 |
| 1133332234 | 22 x 3/4 | 5 | 60 | 4021343146541 | 66 | 42 | 37 | 27 |
| 113333221 | 22 x 1 | 5 | 60 | 4021343146558 | 70 | 46 | 37 | 34 |
| 1133332834 | 28 x 3/4 | 5 | 40 | 4021343146565 | 78 | 51 | 46 | 28 |
| 113333281 | 28 x 1 | 5 | 40 | 4021343146572 | 74 | 47 | 46 | 34 |
| 11333335114 | 35 x 11/4 | 2 | 20 | 4021343146589 | 95 | 63 | 52 | 46 |
| 11333342112 | 42 x 11/2 | 2 | 12 | 4021343146596 | 102 | 64 | 59 | 50 |
| 113333542 | 54 x 2 | 2 | 8 | 4021343146602 | 116 | 73 | 75 | 60 |



Catalog-no. and -description

13359g – Union adaptor, flat sealing

| Article-no. | Dimension d x G | Bag | Box | EAN code | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 1133591534 | 15 x 3/4 | 5 | 200 | 4021343146633 | 32 | 30 |
| 113359151 | 15 x 1 | 5 | 120 | 4021343146640 | 34 | 37 |
| 1133591834 | 18 x 3/4 | 5 | 200 | 4021343146657 | 46 | 30 |
| 113359181 | 18 x 1 | 5 | 120 | 4021343146664 | 36 | 37 |
| 1133592234 | 22 x 3/4 | 5 | 120 | 4021343146671 | 51 | 30 |
| 113359221 | 22 x 1 | 5 | 100 | 4021343146688 | 42 | 37 |
| 11335922114 | 22 x 11/4 | 5 | 80 | 4021343171413 | 38 | 46 |
| 11335922112 | 22 x 11/2 | 5 | 60 | 4021343146695 | 43 | 52 |
| 11335928114 | 28 x 11/4 | 5 | 80 | 4021343146701 | 46 | 46 |
| 11335928112 | 28 x 11/2 | 5 | 50 | 4021343146718 | 45 | 52 |
| 11335935112 | 35 x 11/2 | 2 | 40 | 4021343146725 | 52 | 52 |
| 113359422 | 42 x 2 | 2 | 30 | 4021343146756 | 62 | 64 |
| 11335954238 | 54 x 23/8 | 2 | 16 | 4021343146763 | 68 | 75 |



Catalog-no. and -description

ORS – O-ring for solar pressfittings, material FPM

| Article-no. | Dimension d | Bag | Box | EAN code |
|---------------|----------------|-----|-----|----------|
| 1ORS110001000 | 110,00x10,00 | | | |
| 1ORS1210250 | 12,10x2,50 | | | |
| 1ORS1510260 | 15,10x2,60 | | | |
| 1ORS1820265 | 18,20x2,65 | | | |
| 1ORS2220310 | 22,20x3,10 | | | |
| 1ORS2830310 | 28,30x3,10 | | | |
| 1ORS3540325 | 35,40x3,25 | | | |
| 1ORS4240413 | 42,40x4,13 | | | |
| 1ORS5440413 | 54,40x4,13 | | | |
| 1ORS7700700 | 77,00x7,00 | | | |
| 1ORS9000800 | 90,00x8,00 | | | |



Catalog-no. and -description

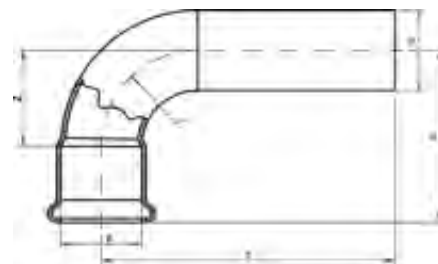
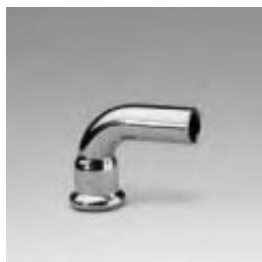
4980 – Plastic measure tool for SANHA[®]-Press, with bottle opener and water level 12 - 54 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84980 | 12-54 mm | | 30 | 4021343140297 |

SYSTEM TECHNOLOGY

SANHA-Press Chrom
Copper and gunmetal
pressfittings, chromeplated
for the visible heating
installation

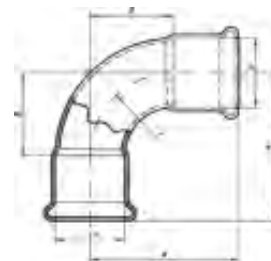
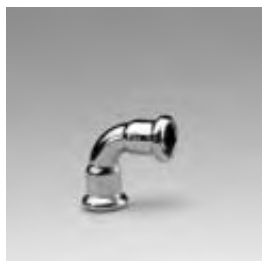
Series 16000



Catalog-no. and -description

16001A – Bend 90° female/male

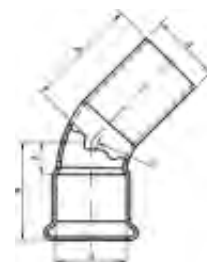
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|----|----|----|
| 116001A12 | 12 | 10 | 250 | 4021343219191 | 30 | 40 | 15 |
| 116001A15 | 15 | 10 | 180 | 4021343219207 | 36 | 44 | 18 |
| 116001A22 | 22 | 10 | 60 | 4021343348037 | 50 | 58 | 27 |
| 116001A28 | 28 | 5 | 40 | 4021343348044 | 61 | 68 | 34 |



Catalog-no. and -description

16002A – Bend 90° female/female

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|----|----|
| 116002A12 | 12 | 10 | 250 | 4021343219214 | 30 | 15 |
| 116002A15 | 15 | 10 | 170 | 4021343219221 | 36 | 18 |
| 116002A22 | 22 | 10 | 70 | 4021343348051 | 50 | 27 |
| 116002A28 | 28 | 5 | 35 | 4021343348068 | 61 | 34 |



Catalog-no. and -description

16040 – Bend 45° female/male

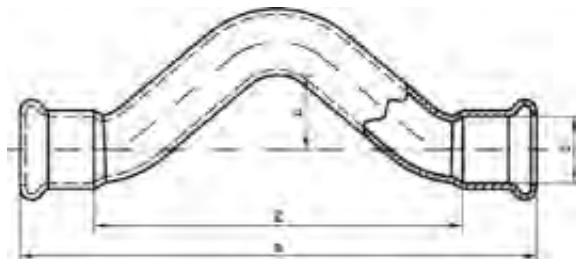
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|----|----|----|
| 11604012 | 12 | 10 | 350 | 4021343219368 | 22 | 30 | 6 |
| 11604015 | 15 | 10 | 200 | 4021343219375 | 26 | 34 | 8 |
| 11604022 | 22 | 10 | 80 | 4021343348075 | 35 | 43 | 11 |
| 11604028 | 28 | 5 | 50 | 4021343348082 | 41 | 49 | 14 |



Catalog-no. and -description

16041 – Bend 45° female/female

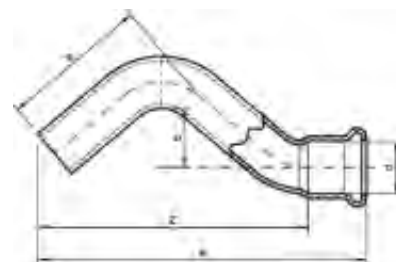
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|----|----|
| 11604112 | 12 | 10 | 350 | 4021343250590 | 22 | 6 |
| 11604115 | 15 | 10 | 200 | 4021343250606 | 26 | 8 |
| 11604122 | 22 | 10 | 80 | 4021343348099 | 35 | 11 |
| 11604128 | 28 | 5 | 50 | 4021343348105 | 41 | 14 |



Catalog-no. and -description

16085 – Full crossover

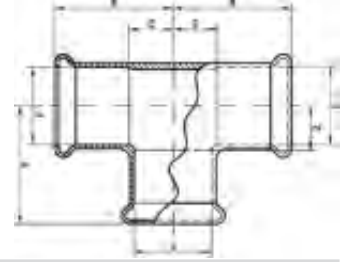
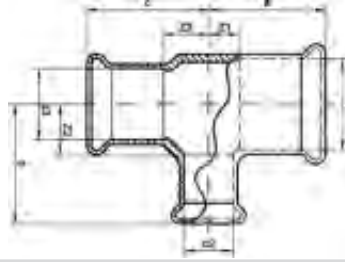
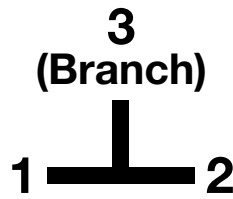
| Article-no. | Dimension d | Bag | Box | EAN code | a | c | z |
|-------------|----------------|-----|-----|---------------|-----|----|-----|
| 11608512 | 12 | 10 | 110 | 4021343251542 | 110 | 18 | 78 |
| 11608515 | 15 | 10 | 70 | 4021343251559 | 124 | 19 | 89 |
| 11608522 | 22 | 10 | 20 | 4021343348112 | 172 | 25 | 125 |
| 11608528 | 28 | 5 | 15 | 4021343348129 | 203 | 28 | 150 |



Catalog-no. and -description

16086 – Partial crossover

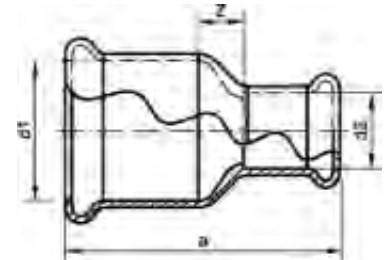
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | c | z |
|-------------|----------------|-----|-----|---------------|-----|----|----|-----|
| 11608612 | 12 | 10 | 200 | 4021343219382 | 87 | 40 | 18 | 71 |
| 11608615 | 15 | 10 | 100 | 4021343219399 | 98 | 44 | 19 | 80 |
| 11608622 | 22 | 10 | 40 | 4021343348136 | 136 | 61 | 25 | 112 |
| 11608628 | 28 | 5 | 25 | 4021343348143 | 161 | 72 | 28 | 134 |



Catalog-no. and -description

16130 – Tee

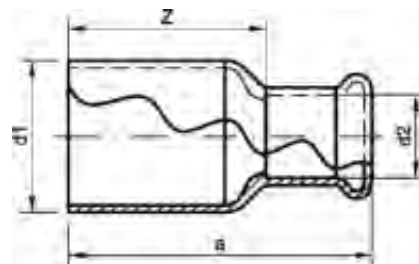
| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|--------------|---------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 11613012 | 12 | 10 | 200 | 4021343219405 | 23 | 23 | 23 | 8 | | | |
| 11613015 | 15 | 10 | 120 | 4021343219412 | 34 | 27 | 34 | 9 | | | |
| 11613022 | 22 | 10 | 50 | 4021343348150 | 39 | 37 | 39 | 15 | 13 | | |
| 11613028 | 28 | 5 | 30 | 4021343348211 | 43 | 43 | 43 | 17 | | | |
| 116130121512 | 12 x 12 x 15 | 10 | 150 | 4021343219429 | 28 | 27 | 28 | | 12 | 9 | 12 |
| 116130151212 | 15 x 12 x 12 | 10 | 150 | 4021343219436 | 26 | 25 | 25 | | 8 | 9 | 10 |
| 116130151512 | 15 x 12 x 15 | 10 | 150 | 4021343219450 | 27 | 27 | 28 | | 9 | 9 | 12 |
| 116130151215 | 15 x 15 x 12 | 10 | 150 | 4021343219443 | 26 | 25 | 26 | | 8 | 9 | 8 |
| 116130221515 | 22 x 15 x 15 | 10 | 70 | 4021343348174 | 33 | 31 | 32 | 10 | 13 | | |
| 116130222215 | 22 x 15 x 22 | 10 | 50 | 4021343348198 | 37 | 37 | 35 | 13 | 13 | | |
| 116130221222 | 22 x 22 x 12 | 10 | 70 | 4021343348167 | 32 | 29 | 32 | 8 | 13 | | |
| 116130221522 | 22 x 22 x 15 | 10 | 60 | 4021343348181 | 33 | 31 | 33 | 10 | 13 | | |
| 116130222822 | 22 x 22 x 28 | 5 | 35 | 4021343348204 | 43 | 43 | 43 | 20 | 17 | | |
| 116130282815 | 28 x 15 x 28 | 5 | 30 | 4021343348266 | 43 | 43 | 42 | 17 | 17 | | |
| 116130281522 | 28 x 22 x 15 | 5 | 40 | 4021343348228 | 37 | 34 | 37 | 10 | 16 | | |
| 116130282222 | 28 x 22 x 22 | 5 | 35 | 4021343348242 | 40 | 40 | 40 | 14 | 16 | | |
| 116130282822 | 28 x 22 x 28 | 5 | 30 | 4021343348273 | 43 | 43 | 43 | 17 | 17 | | |
| 116130281528 | 28 x 28 x 15 | 5 | 40 | 4021343348235 | 37 | 34 | 37 | 10 | 16 | | |
| 116130282228 | 28 x 28 x 22 | 5 | 35 | 4021343348259 | 40 | 40 | 40 | 14 | 16 | | |



Catalog-no. and -description

16240 – Reducing coupling

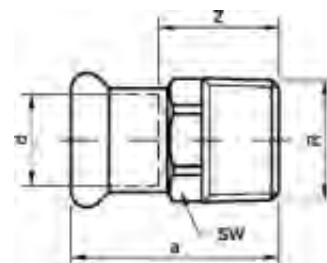
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 1162401512 | 15x12 | 10 | 250 | 4021343219726 | 34 | 4 |
| 1162402215 | 22x15 | 10 | 150 | 4021343219733 | 48 | 6 |
| 1162402815 | 28x15 | 5 | 100 | 4021343348280 | 54 | 10 |
| 1162402822 | 28x22 | 5 | 70 | 4021343348303 | 56 | 6 |



Catalog-no. and -description

16243 – Reducer

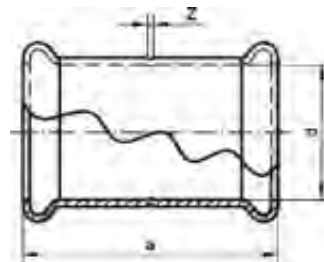
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 1162431512 | 15x12 | 10 | 350 | 4021343219740 | 40 | 24 |
| 1162431812 | 18x12 | 10 | 250 | 4021343219757 | 44 | 28 |
| 1162431815 | 18x15 | 10 | 220 | 4021343219764 | 44 | 26 |
| 1162432215 | 22x15 | 10 | 150 | 4021343219771 | 51 | 33 |
| 1162432815 | 28x15 | 5 | 100 | 4021343348310 | 57 | 39 |
| 1162432822 | 28x22 | 5 | 90 | 4021343348327 | 58 | 34 |



Catalog-no. and -description

16243G – Male adaptor

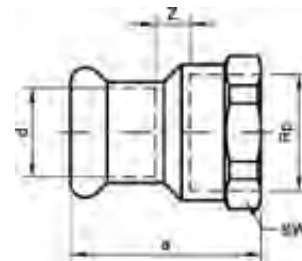
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW |
|--------------|--------------------|-----|-----|---------------|----|----|----|
| 116243G1238 | 12x3/8 | 10 | 400 | 4021343219863 | 30 | 14 | 16 |
| 116243G1212 | 12x1/2 | 10 | 350 | 4021343219634 | 33 | 17 | 18 |
| 116243G1538 | 15x3/8 | 10 | 400 | 4021343219870 | 31 | 12 | 18 |
| 116243G1512 | 15x1/2 | 10 | 300 | 4021343219641 | 33 | 14 | 19 |
| 116243G2212 | 22x1/2 | 10 | 150 | 4021343348334 | 40 | 16 | 26 |
| 116243G2234 | 22x3/4 | 10 | 120 | 4021343348341 | 41 | 17 | 28 |
| 116243G221 | 22x1 | 10 | 100 | 4021343348358 | 44 | 20 | 28 |
| 116243G2834 | 28x3/4 | 5 | 100 | 4021343348365 | 45 | 18 | 32 |
| 116243G281 | 28x1 | 5 | 100 | 4021343348372 | 46 | 19 | 36 |
| 116243G28114 | 28x1 1/4 | 5 | 70 | 4021343348389 | 47 | 20 | 34 |



Catalog-no. and -description

16270 – Coupling

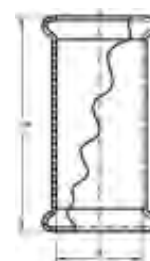
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|----|---|
| 11627012 | 12 | 10 | 350 | 4021343219467 | 33 | 2 |
| 11627015 | 15 | 10 | 240 | 4021343219719 | 38 | 2 |
| 11627022 | 22 | 10 | 100 | 4021343348396 | 49 | 2 |
| 11627028 | 28 | 5 | 60 | 4021343348402 | 55 | 2 |



Catalog-no. and -description

16270G – Female adaptor

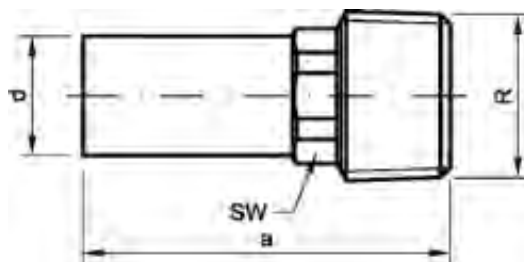
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|--------------|---------------------|-----|-----|---------------|----|---|----|
| 116270G1238 | 12x3/8 | 10 | 400 | 4021343219887 | 30 | 4 | 20 |
| 116270G1212 | 12x1/2 | 10 | 300 | 4021343219658 | 34 | 5 | 25 |
| 116270G1538 | 15x3/8 | 10 | 300 | 4021343219894 | 30 | 2 | 20 |
| 116270G1512 | 15x1/2 | 10 | 250 | 4021343219665 | 33 | 2 | 25 |
| 116270G2212 | 22x1/2 | 10 | 150 | 4021343348419 | | | |
| 116270G2234 | 22x3/4 | 10 | 120 | 4021343348426 | | | |
| 116270G221 | 22x1 | 10 | 80 | 4021343348433 | | | |
| 116270G2834 | 28x3/4 | 5 | 100 | 4021343348440 | | | |
| 116270G281 | 28x1 | 5 | 80 | 4021343348457 | | | |
| 116270G28114 | 28x11/4 | 5 | 40 | 4021343348464 | | | |



Catalog-no. and -description

16270S – Slip coupling

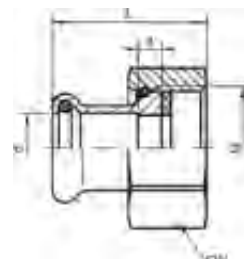
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 116270S12 | 12 | 10 | 300 | 4021343344862 | 41 |
| 116270S15 | 15 | 10 | 200 | 4021343344879 | 47 |
| 116270S22 | 18 | 10 | 80 | 4021343348570 | 53 |
| 116270S28 | 22 | 5 | 50 | 4021343348587 | 64 |



Catalog-no. and -description

16280G – Plug-in adaptor, male

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 116280G1212 | 12x1/2 | 10 | 350 | 4021343219672 | 44 | 16 |
| 116280G1512 | 15x1/2 | 10 | 350 | 4021343219689 | 46 | 16 |
| 116280G2212 | 22x1/2 | 10 | 150 | 4021343348471 | 52 | 22 |
| 116280G2234 | 22x3/4 | 10 | 150 | 4021343348488 | 52 | 22 |
| 116280G2834 | 28x3/4 | 5 | 100 | 4021343348495 | 60 | 27 |
| 116280G281 | 28x1 | 5 | 60 | 4021343348501 | 64 | 34 |



Catalog-no. and -description

16359G – Union adaptor, flat sealing

| Article-no. | Dimension d x G | Bag | Box | EAN code | L | SW |
|--------------|--------------------|-----|-----|---------------|----|----|
| 116359G1212 | 12x1/2 | 5 | 350 | 4021343219696 | 30 | 24 |
| 116359G1534 | 15x3/4 | 5 | 200 | 4021343219702 | 32 | 30 |
| 116359G2234 | 22x3/4 | 5 | 120 | 4021343348518 | 45 | 52 |
| 116359G221 | 22x1 | 5 | 100 | 4021343348525 | 42 | 37 |
| 116359G22112 | 22x1 1/2 | 5 | 60 | 4021343348549 | 43 | 52 |
| 116359G22114 | 28x1 1/4 | 5 | 80 | 4021343348556 | 51 | 30 |
| 116359G28114 | 28x1 1/4 | 5 | 80 | 4021343348556 | 46 | 46 |
| 116359G28112 | 28x1 1/2 | 5 | 50 | 4021343348563 | 46 | 46 |

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k 21775 / 01



317-105-1145



A-770/2003



No. 0212103



AT / 2001-02-1062-01



YM 242 / 6221 / 2003



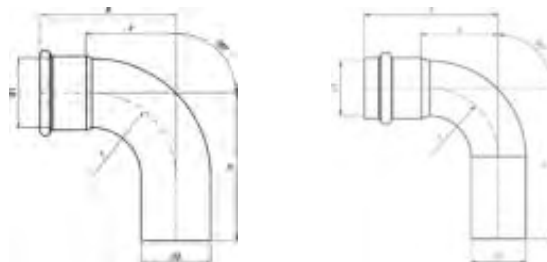
Nr. 0275



W-1.287



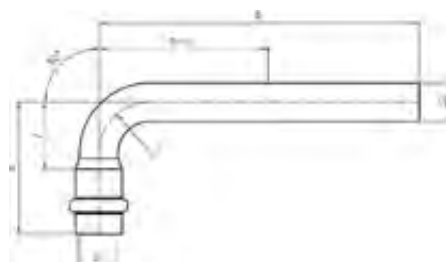
DW-8511AU2127



Catalog-no. and -description

9001A – Bend 90° female/male

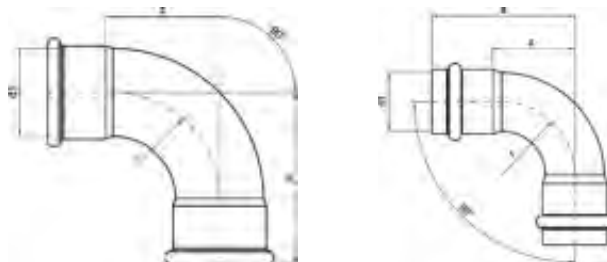
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|-----|
| 69001A15 | 15 | 10 | 200 | 4021343148538 | 48 | 60 | 22 |
| 69001A18 | 18 | 10 | 150 | 4021343148545 | 53 | 62 | 27 |
| 69001A22 | 22 | 10 | 100 | 4021343148552 | 63 | 72 | 34 |
| 69001A28 | 28 | 5 | 60 | 4021343148569 | 68 | 77 | 39 |
| 69001A35 | 35 | 2 | 30 | 4021343148576 | 87 | 93 | 56 |
| 69001A42 | 42 | 2 | 20 | 4021343148583 | 103 | 113 | 64 |
| 69001A54 | 54 | 2 | 10 | 4021343148590 | 125 | 131 | 80 |
| 69001A64 | 64 | 1 | 5 | 4021343329036 | 128 | 137 | 80 |
| 69001A76 | 76,1 | 1 | 3 | 4021343177156 | 143 | 162 | 92 |
| 69001A89 | 88,9 | 1 | 2 | 4021343177163 | 165 | 186 | 107 |
| 69001A108 | 108 | 1 | 1 | 4021343177200 | 201 | 231 | 131 |



Catalog-no. and -description

9001L – Bend 90° female/male - long

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|----|
| 69001L15 | 15 | 10 | 150 | 4021343156083 | 52 | 125 | 26 |
| 69001L18 | 18 | 10 | 100 | 4021343156090 | 60 | 125 | 34 |
| 69001L22 | 22 | 10 | 60 | 4021343156106 | 63 | 150 | 34 |
| 69001L28 | 28 | 5 | 30 | 4021343156113 | 75 | 200 | 45 |
| 69001L35 | 35 | 2 | 16 | 4021343156120 | 87 | 225 | 56 |
| 69001L42 | 42 | 2 | 10 | 4021343156137 | 103 | 250 | 64 |
| 69001L54 | 54 | 2 | 6 | 4021343156144 | 125 | 300 | 80 |



Catalog-no. and -description

9002A – Bend 90° female/female

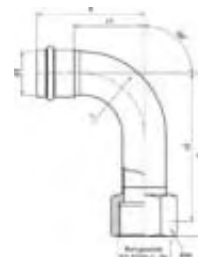
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|-----|
| 69002A15 | 15 | 10 | 200 | 4021343148460 | 48 | 22 |
| 69002A18 | 18 | 10 | 150 | 4021343148477 | 53 | 27 |
| 69002A22 | 22 | 10 | 100 | 4021343148484 | 63 | 34 |
| 69002A28 | 28 | 5 | 60 | 4021343148491 | 68 | 39 |
| 69002A35 | 35 | 2 | 30 | 4021343148507 | 87 | 56 |
| 69002A42 | 42 | 2 | 20 | 4021343148514 | 103 | 64 |
| 69002A54 | 54 | 2 | 10 | 4021343148521 | 125 | 80 |
| 69002A64 | 64 | 1 | 5 | 4021343329043 | 128 | 80 |
| 69002A76 | 76,1 | 1 | 4 | 4021343176791 | 143 | 92 |
| 69002A89 | 88,9 | 1 | 2 | 4021343176807 | 165 | 107 |
| 69002A108 | 108 | 1 | 1 | 4021343176814 | 201 | 131 |



Catalog-no. and -description

9002AG – Bend 90° with male thread

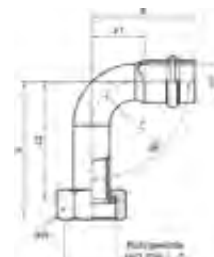
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | b | z | SW |
|--------------|---------------------|-----|-----|---------------|-----|-----|----|----|
| 69002AG1512 | 15 x 1/2 | 10 | 120 | 4021343148606 | 48 | 84 | 22 | 22 |
| 69002AG1812 | 18 x 1/2 | 10 | 100 | 4021343166822 | 53 | 86 | 27 | 22 |
| 69002AG1834 | 18 x 3/4 | 10 | 80 | 4021343148620 | 52 | 90 | 26 | 30 |
| 69002AG2234 | 22 x 3/4 | 10 | 80 | 4021343148637 | 63 | 100 | 34 | 30 |
| 69002AG281 | 28 x 1 | 5 | 40 | 4021343148644 | 68 | 108 | 39 | 36 |
| 69002AG35114 | 35 x 1 1/4 | 2 | 20 | 4021343148651 | 87 | 128 | 56 | 46 |
| 69002AG42112 | 42 x 1 1/2 | 2 | 10 | 4021343148668 | 103 | 149 | 64 | 55 |
| 69002AG542 | 54 x 2 | 2 | 6 | 4021343148675 | 125 | 173 | 80 | 65 |



Catalog-no. and -description

9002G – Bend 90° with female thread

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-------------|----------------------|-----|-----|---------------|----|-----|----|-----|----|
| 69002G1512 | 15 x 1/2 | 10 | 100 | 4021343148781 | 48 | 91 | 22 | 77 | 24 |
| 69002G1812 | 18 x 1/2 | 10 | 70 | 4021343251368 | 53 | 93 | 27 | 79 | 24 |
| 69002G1834 | 18 x 3/4 | 10 | 70 | 4021343148798 | 53 | 95 | 27 | 80 | 32 |
| 69002G2234 | 22 x 3/4 | 10 | 60 | 4021343148804 | 63 | 105 | 34 | 90 | 32 |
| 69002G281 | 28 x 1 | 5 | 30 | 4021343148811 | 69 | 113 | 39 | 96 | 38 |
| 69002G35114 | 35 x 1 1/4 | 2 | 20 | 4021343148828 | 87 | 133 | 56 | 113 | 46 |



Catalog-no. and -description

9002M – Bend 90° with union nut

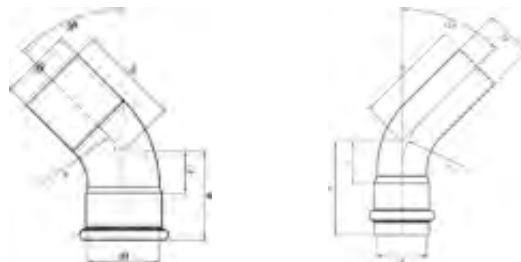
| Article-no. | Dimension d1 x G | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|
| 69002M1534 | 15 x 3/4 | 10 | 100 | 4021343148835 | 48 | 65 | 23 | 55 | 30 |
| 69002M1834 | 18 x 3/4 | 10 | 100 | 4021343148842 | 53 | 69 | 28 | 59 | 30 |
| 69002M221 | 22 x 1 | 10 | 50 | 4021343148859 | 63 | 80 | 35 | 68 | 38 |
| 69002M28114 | 28 x 1 1/4 | 5 | 40 | 4021343148866 | 69 | 88 | 40 | 73 | 50 |



Catalog-no. and -description

9002MG – Bend 90° with male thread and union nut

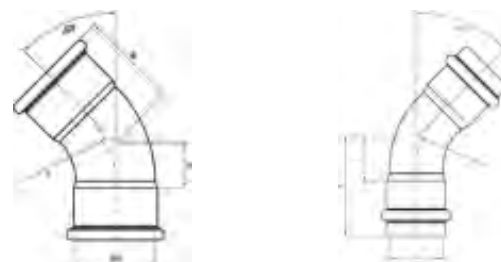
| Article-no. | Dimension R x G | Bag | Box | EAN code | a | b | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|-----|----|----|-----|-----|
| 69002MG3434 | 3/4 x 3/4 | 10 | 60 | 4021343148873 | 98 | 76 | 66 | 30 | 30 |
| 69002MG11 | 1 x 1 | 10 | 40 | 4021343148880 | 112 | 89 | 75 | 38 | 38 |



Catalog-no. and -description

9040 – Bend 45° female/male

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | b | z |
|-------------|-----------------|-----|-----|---------------|-----|-----|----|
| 6904015 | 15 | 10 | 250 | 4021343148965 | 37 | 47 | 12 |
| 6904018 | 18 | 10 | 200 | 4021343148972 | 39 | 48 | 14 |
| 6904022 | 22 | 10 | 120 | 4021343148989 | 48 | 56 | 19 |
| 6904028 | 28 | 5 | 80 | 4021343148996 | 53 | 60 | 24 |
| 6904035 | 35 | 2 | 50 | 4021343149009 | 58 | 64 | 27 |
| 6904042 | 42 | 2 | 26 | 4021343149016 | 68 | 79 | 30 |
| 6904054 | 54 | 2 | 14 | 4021343149023 | 83 | 89 | 38 |
| 6904064 | 64 | 1 | 10 | 4021343329050 | 83 | 91 | 35 |
| 6904076 | 76,1 | 1 | 5 | 4021343176852 | 89 | 108 | 38 |
| 6904089 | 88,9 | 1 | 3 | 4021343176869 | 101 | 122 | 43 |
| 69040108 | 108 | 1 | 2 | 4021343176876 | 124 | 150 | 54 |



Catalog-no. and -description

9041 – Bend 45° female/female

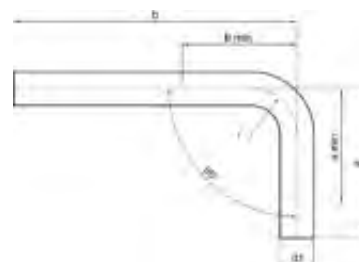
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 6904115 | 15 | 10 | 250 | 4021343148897 | 37 | 12 |
| 6904118 | 18 | 10 | 200 | 4021343148903 | 39 | 14 |
| 6904122 | 22 | 10 | 120 | 4021343148910 | 48 | 19 |
| 6904128 | 28 | 5 | 80 | 4021343148927 | 53 | 24 |
| 6904135 | 35 | 2 | 50 | 4021343148934 | 58 | 27 |
| 6904142 | 42 | 2 | 26 | 4021343148941 | 68 | 29 |
| 6904154 | 54 | 2 | 14 | 4021343148958 | 83 | 38 |
| 6904164 | 64 | 1 | 10 | 4021343329067 | 83 | 35 |
| 6904176 | 76,1 | 1 | 5 | 4021343176821 | 89 | 38 |
| 6904189 | 88,9 | 1 | 3 | 4021343176838 | 101 | 43 |
| 69041108 | 108 | 1 | 2 | 4021343176845 | 124 | 54 |



Catalog-no. and -description

9003G – Bend 90° with plain end and female thread

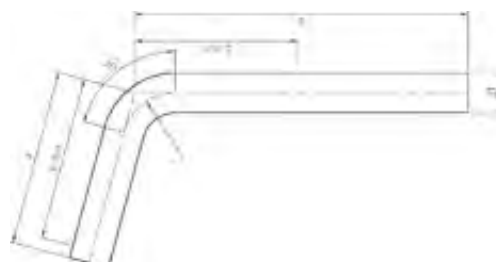
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z | SW |
|-------------|----------------------|-----|-----|---------------|-----|----|----|----|
| 69003G1812 | 18 x 1/2 | 10 | 80 | 4021343149030 | 101 | 70 | 87 | 24 |



Catalog-no. and -description

9003 – Bend with plain ends 90°

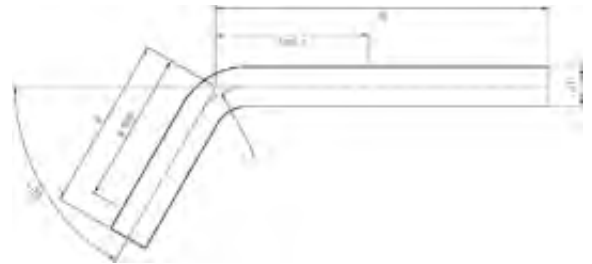
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6900315 | 15 | 10 | 100 | 4021343148392 | 62 | 55 | 125 | 55 |
| 6900318 | 18 | 10 | 80 | 4021343148408 | 62 | 57 | 125 | 57 |
| 6900322 | 22 | 10 | 70 | 4021343148415 | 73 | 65 | 150 | 65 |
| 6900328 | 28 | 5 | 30 | 4021343148422 | 85 | 80 | 200 | 80 |
| 6900335 | 35 | 2 | 20 | 4021343148439 | 92 | 92 | 225 | 92 |
| 6900342 | 42 | 2 | 10 | 4021343148446 | 113 | | 250 | 113 |
| 6900354 | 54 | 2 | 6 | 4021343148453 | 131 | | 300 | 131 |



Catalog-no. and -description

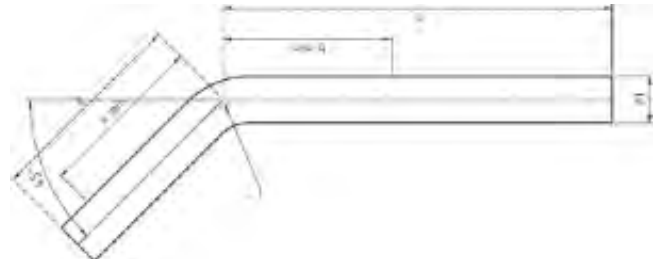
9045 – Bend with plain ends 75°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904515 | 15 | 10 | 130 | 4021343155949 | 66 | 55 | 125 | 55 |
| 6904518 | 18 | 10 | 80 | 4021343155956 | 62 | 57 | 125 | 57 |
| 6904522 | 22 | 10 | 60 | 4021343155963 | 75 | 65 | 150 | 65 |
| 6904528 | 28 | 5 | 50 | 4021343155970 | 85 | 76 | 200 | 76 |
| 6904535 | 35 | 2 | 20 | 4021343155987 | 92 | 81 | 225 | 81 |
| 6904542 | 42 | 2 | 10 | 4021343155994 | 113 | 100 | 250 | 100 |
| 6904554 | 54 | 2 | 4 | 4021343156007 | 131 | 120 | 300 | 120 |



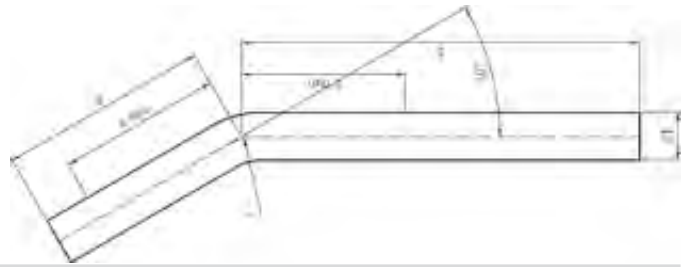
Catalog-no. and -description
9058 – Bend with plain ends 60°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6905815 | 15 | 10 | 100 | 4021343149047 | 66 | 55 | 125 | 55 |
| 6905818 | 18 | 10 | 80 | 4021343149054 | 62 | 57 | 125 | 57 |
| 6905822 | 22 | 10 | 60 | 4021343149061 | 75 | 65 | 150 | 65 |
| 6905828 | 28 | 5 | 40 | 4021343149078 | 85 | 62 | 200 | 62 |
| 6905835 | 35 | 2 | 20 | 4021343149085 | 92 | 71 | 225 | 71 |
| 6905842 | 42 | 2 | 10 | 4021343149092 | 113 | 85 | 250 | 85 |
| 6905854 | 54 | 2 | 4 | 4021343149108 | 131 | 105 | 300 | 105 |
| 6905876 | 76,1 | 1 | 6 | 4021343177248 | 162 | 130 | 350 | 130 |
| 6905889 | 88,9 | 1 | 3 | 4021343177255 | 185 | 150 | 350 | 150 |
| 69058108 | 108 | 1 | 1 | 4021343177262 | 231 | 160 | 350 | 160 |



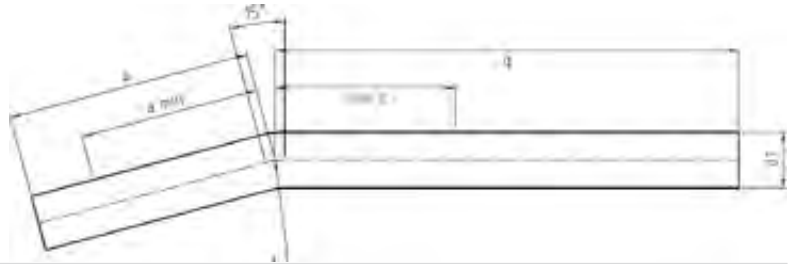
Catalog-no. and -description
9042 – Bend with plain ends 45°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904215 | 15 | 10 | 100 | 4021343149115 | 66 | 55 | 125 | 55 |
| 6904218 | 18 | 10 | 90 | 4021343149122 | 62 | 57 | 125 | 57 |
| 6904222 | 22 | 10 | 70 | 4021343149139 | 75 | 60 | 150 | 60 |
| 6904228 | 28 | 5 | 40 | 4021343149146 | 85 | 62 | 200 | 62 |
| 6904235 | 35 | 2 | 20 | 4021343149153 | 92 | 70 | 225 | 70 |
| 6904242 | 42 | 2 | 6 | 4021343149160 | 113 | 75 | 250 | 75 |
| 6904254 | 54 | 2 | 24 | 4021343149177 | 131 | 100 | 300 | 100 |



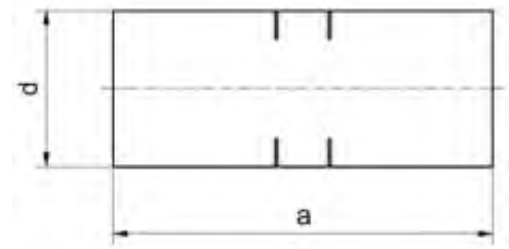
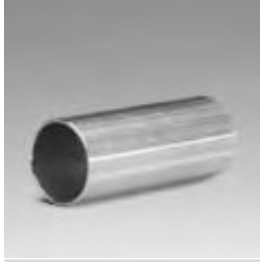
Catalog-no. and -description
9044 – Bend with plain ends 30°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904415 | 15 | 10 | 100 | 4021343155864 | 66 | 52 | 125 | 52 |
| 6904418 | 18 | 10 | 90 | 4021343155871 | 62 | 55 | 125 | 55 |
| 6904422 | 22 | 10 | 70 | 4021343155888 | 75 | 55 | 150 | 55 |
| 6904428 | 28 | 5 | 40 | 4021343155895 | 85 | 55 | 200 | 55 |
| 6904435 | 35 | 2 | 20 | 4021343155901 | 92 | 55 | 225 | 55 |
| 6904442 | 42 | 2 | 20 | 4021343155918 | 113 | 67 | 250 | 67 |
| 6904454 | 54 | 2 | 20 | 4021343155925 | 131 | 77 | 300 | 77 |
| 6904476 | 76,1 | 1 | 6 | 4021343177170 | 162 | 130 | 350 | 130 |
| 6904489 | 88,9 | 1 | 4 | 4021343177187 | 186 | 150 | 350 | 150 |
| 69044108 | 108 | 1 | 4 | 4021343177194 | 231 | 160 | 350 | 160 |



Catalog-no. and -description
9043 – Bend with plain ends 15°

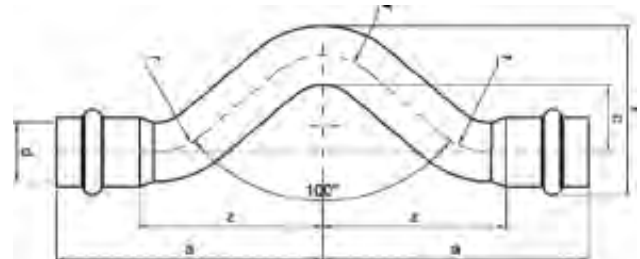
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904315 | 15 | 10 | 100 | 4021343155789 | 66 | 49 | 125 | 49 |
| 6904318 | 18 | 10 | 90 | 4021343155796 | 62 | 52 | 125 | 52 |
| 6904322 | 22 | 10 | 70 | 4021343155802 | 75 | 52 | 150 | 52 |
| 6904328 | 28 | 5 | 40 | 4021343155819 | 85 | 51 | 200 | 51 |
| 6904335 | 35 | 2 | 20 | 4021343155826 | 92 | 50 | 225 | 50 |
| 6904342 | 42 | 2 | 12 | 4021343155833 | 113 | 55 | 250 | 55 |
| 6904354 | 54 | 1 | 2 | 4021343155840 | 131 | 65 | 300 | 65 |
| 6904376 | 76,1 | 1 | 6 | 4021343177217 | 162 | 130 | 350 | 130 |
| 6904389 | 88,9 | 1 | 4 | 4021343177224 | 186 | 150 | 350 | 150 |
| 69043108 | 108 | 1 | 1 | 4021343177231 | 231 | 160 | 350 | 160 |



Catalog-no. and -description

9050 – Adaptor with minimum pipe length between two fittings

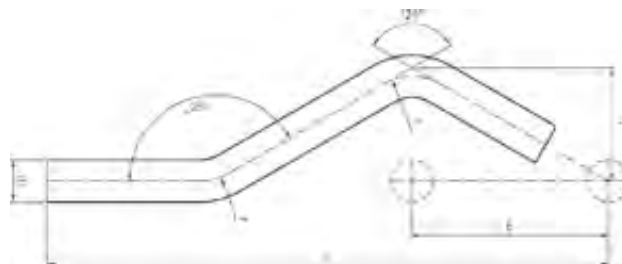
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 6905015 | 15 | 10 | 400 | 4021343217470 | 60 |
| 6905018 | 18 | 10 | 400 | 4021343217487 | 60 |
| 6905022 | 22 | 10 | 200 | 4021343217494 | 66 |
| 6905028 | 28 | 5 | 100 | 4021343217500 | 68 |
| 6905035 | 35 | 2 | 60 | 4021343217517 | 70 |
| 6905042 | 42 | 2 | 40 | 4021343217524 | 98 |
| 6905054 | 54 | 2 | 20 | 4021343217531 | 108 |
| 6905064 | 64 | 1 | 15 | 4021343329074 | 124 |
| 6905076 | 76,1 | 1 | 10 | 4021343217548 | 130 |
| 6905089 | 88,9 | 1 | 10 | 4021343217555 | 144 |
| 69050108 | 108 | 1 | 4 | 4021343217562 | 168 |



Catalog-no. and -description

9085 – Full crossover

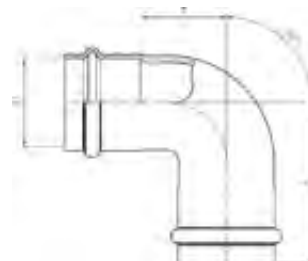
| Article-no. | Dimension d | Bag | Box | EAN code | a | c | h | z |
|-------------|----------------|-----|-----|---------------|-----|----|---|----|
| 6908515 | 15 | 10 | 120 | 4021343171628 | 79 | 21 | 8 | 53 |
| 6908518 | 18 | 10 | 80 | 4021343171635 | 81 | 21 | 8 | 55 |
| 6908522 | 22 | 10 | 60 | 4021343171642 | 93 | 26 | 7 | 64 |
| 6908528 | 28 | 5 | 30 | 4021343171659 | 105 | 28 | 9 | 84 |



Catalog-no. and -description

9087 – Crossover

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | b | c |
|-------------|--------------|-----|-----|---------------|-----|----|----|
| 6908715 | 15 | 10 | 120 | 4021343149184 | 200 | 70 | 41 |
| 6908718 | 18 | 10 | 80 | 4021343149191 | 216 | 70 | 50 |
| 6908722 | 22 | 10 | 50 | 4021343149207 | 216 | 78 | 45 |
| 6908728 | 28 | 5 | 40 | 4021343149214 | 244 | 87 | 50 |



Catalog-no. and -description

9090 – Elbow 90°

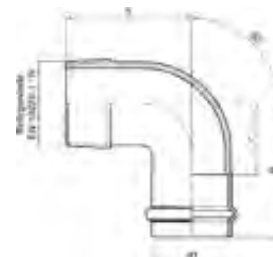
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|--------------|-----|-----|---------------|----|----|
| 6909022 | 22 | 10 | 100 | 4021343155628 | 55 | 27 |
| 6909028 | 28 | 5 | 60 | 4021343155635 | 59 | 30 |



Catalog-no. and -description

9090IG – Male elbow 90°

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z1 | z2 |
|--------------|-------------------|-----|-----|---------------|----|----|----|----|
| 69090IG1512 | 15 x 1/2 | 10 | 180 | 4021343155666 | 52 | 31 | 27 | 17 |
| 69090IG1834 | 18 x 3/4 | 10 | 120 | 4021343155673 | 55 | 35 | 30 | 20 |
| 69090IG2234 | 22 x 3/4 | 10 | 100 | 4021343155680 | 56 | 37 | 28 | 22 |
| 69090IG281 | 28 x 1 | 5 | 50 | 4021343155697 | 61 | 43 | 32 | 26 |
| 69090IG35114 | 35 x 1 1/4 | 2 | 30 | 4021343155703 | 67 | 51 | 37 | 31 |



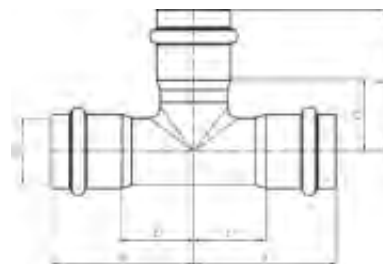
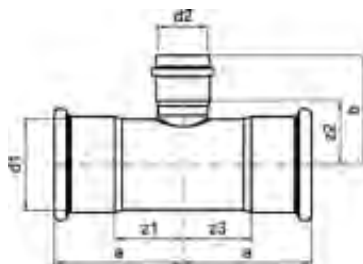
Catalog-no. and -description
9092AG – Female elbow 90°

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | b | z |
|--------------|---------------------|-----|-----|---------------|----|----|----|
| 69092AG1512 | 15 x 1/2 | 10 | 200 | 4021343155727 | 50 | 37 | 25 |
| 69092AG1812 | 18x1/2 | 5 | 80 | 4021343357138 | 41 | 32 | 16 |
| 69092AG1834 | 18 x 3/4 | 10 | 120 | 4021343155734 | 53 | 43 | 28 |
| 69092AG2234 | 22 x 3/4 | 10 | 100 | 4021343155741 | 54 | 43 | 26 |
| 69092AG281 | 28 x 1 | 5 | 50 | 4021343155758 | 58 | 52 | 29 |
| 69092AG35114 | 35 x 11/4 | 2 | 40 | 4021343155765 | 64 | 60 | 34 |
| 69092AG42112 | 42 x 11/2 | 2 | 30 | 4021343219177 | 80 | 52 | 41 |
| 69092AG542 | 54 x 2 | 2 | 16 | 4021343219184 | 96 | 62 | 51 |



3
(Branch)

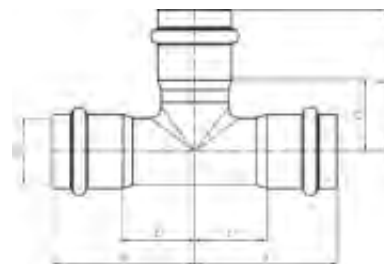
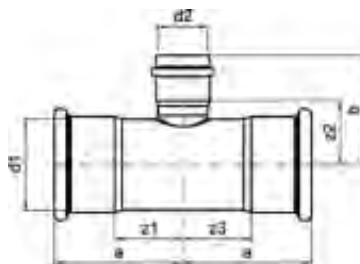
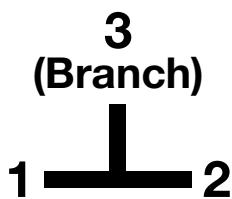
1 **2**



Catalog-no. and -description

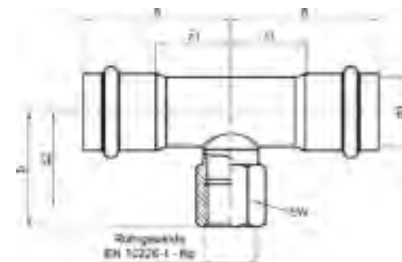
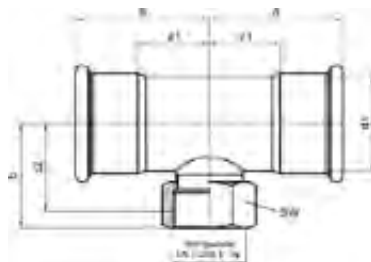
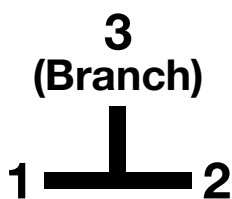
9130 – Tee

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | z1 | z2 | z3 |
|-------------|---------------------------|-----|-----|---------------|-----|-----|----|----|----|
| 6913015 | 15 | 10 | 120 | 4021343149221 | 48 | 46 | 22 | 21 | 22 |
| 6913018 | 18 | 10 | 100 | 4021343149238 | 49 | 49 | 24 | 24 | 24 |
| 6913022 | 22 | 10 | 60 | 4021343149245 | 54 | 53 | 26 | 25 | 26 |
| 6913028 | 28 | 5 | 40 | 4021343149252 | 60 | 59 | 30 | 30 | 30 |
| 6913035 | 35 | 2 | 24 | 4021343149269 | 65 | 65 | 35 | 35 | 35 |
| 6913042 | 42 | 2 | 16 | 4021343149276 | 77 | 77 | 39 | 38 | 39 |
| 6913054 | 54 | 2 | 8 | 4021343149283 | 89 | 90 | 45 | 46 | 45 |
| 6913064 | 64 | 1 | 5 | 4021343329081 | 94 | 94 | 46 | 46 | 46 |
| 6913076 | 76,1 | 1 | 3 | 4021343176883 | 108 | 106 | 57 | 55 | 57 |
| 6913089 | 88,9 | 1 | 2 | 4021343176890 | 120 | 120 | 63 | 62 | 63 |
| 69130108 | 108 | 1 | 1 | 4021343176906 | 144 | 144 | 74 | 74 | 74 |
| 69130181515 | 18 x 15 x 15 | 10 | 120 | 4021343153747 | 41 | 41 | 15 | 15 | 15 |
| 69130181518 | 18 x 18 x 15 | 10 | 100 | 4021343153563 | 49 | 53 | 24 | 16 | 24 |
| 69130221515 | 22 x 15 x 15 | 10 | 100 | 4021343153754 | 44 | 44 | 15 | 18 | 15 |
| 69130221818 | 22 x 18 x 18 | 10 | 80 | 4021343153761 | 44 | 44 | 15 | 18 | 15 |
| 69130221522 | 22 x 22 x 15 | 10 | 80 | 4021343153624 | 55 | 51 | 27 | 25 | 27 |
| 69130221822 | 22 x 22 x 18 | 10 | 80 | 4021343153570 | 55 | 49 | 27 | 24 | 27 |
| 69130282222 | 28 x 22 x 22 | 5 | 60 | 4021343153778 | 49 | 49 | 19 | 20 | 19 |
| 69130281528 | 28 x 28 x 15 | 5 | 50 | 4021343153679 | 60 | 54 | 30 | 28 | 30 |
| 69130281828 | 28 x 28 x 18 | 5 | 40 | 4021343153631 | 60 | 53 | 30 | 27 | 30 |
| 69130282228 | 28 x 28 x 22 | 5 | 40 | 4021343153587 | 60 | 56 | 30 | 27 | 30 |
| 69130351535 | 35 x 35 x 15 | 2 | 30 | 4021343153716 | 65 | 58 | 35 | 33 | 35 |
| 69130351835 | 35 x 35 x 18 | 2 | 30 | 4021343153686 | 65 | 55 | 35 | 32 | 35 |
| 69130352235 | 35 x 35 x 22 | 2 | 26 | 4021343153648 | 65 | 59 | 35 | 31 | 35 |
| 69130352835 | 35 x 35 x 28 | 2 | 26 | 4021343153594 | 65 | 62 | 35 | 33 | 35 |
| 69130421842 | 42 x 42 x 18 | 2 | 22 | 4021343153723 | 77 | 60 | 39 | 35 | 39 |
| 69130422242 | 42 x 42 x 22 | 2 | 18 | 4021343153693 | 77 | 63 | 39 | 34 | 39 |
| 69130422842 | 42 x 42 x 28 | 2 | 18 | 4021343153655 | 77 | 64 | 39 | 35 | 39 |
| 69130423542 | 42 x 42 x 35 | 2 | 16 | 4021343153600 | 77 | 67 | 39 | 37 | 39 |
| 69130542254 | 54 x 54 x 22 | 2 | 10 | 4021343153730 | 89 | 69 | 45 | 40 | 45 |
| 69130542854 | 54 x 54 x 28 | 2 | 10 | 4021343153709 | 89 | 70 | 45 | 41 | 45 |
| 69130543554 | 54 x 54 x 35 | 2 | 8 | 4021343153662 | 89 | 74 | 45 | 42 | 45 |
| 69130544254 | 54 x 54 x 42 | 2 | 8 | 4021343153617 | 89 | 81 | 45 | 42 | 45 |
| 69130642264 | 64 x 64 x 22 | 1 | 6 | 4021343329098 | 77 | 76 | 29 | 48 | 29 |
| 69130642864 | 64 x 64 x 28 | 1 | 6 | 4021343329104 | 77 | 78 | 29 | 49 | 29 |
| 69130643564 | 64 x 64 x 35 | 1 | 6 | 4021343329111 | 77 | 80 | 29 | 50 | 29 |
| 69130644264 | 64 x 64 x 42 | 1 | 6 | 4021343329128 | 77 | 85 | 29 | 47 | 29 |
| 69130645464 | 64 x 64 x 54 | 1 | 6 | 4021343329135 | 94 | 95 | 46 | 50 | 46 |
| 69130762276 | 76,1 x 76,1 x 22 | 1 | 5 | 4021343176975 | 108 | 83 | 57 | 55 | 57 |
| 69130762876 | 76,1 x 76,1 x 28 | 1 | 5 | 4021343177002 | 108 | 85 | 57 | 56 | 57 |
| 69130763576 | 76,1 x 76,1 x 35 | 1 | 5 | 4021343177033 | 108 | 87 | 57 | 57 | 57 |
| 69130764276 | 76,1 x 76,1 x 42 | 1 | 5 | 4021343177064 | 108 | 95 | 57 | 57 | 57 |
| 69130765476 | 76,1 x 76,1 x 54 | 1 | 4 | 4021343177095 | 108 | 102 | 57 | 57 | 57 |
| 69130766476 | 76,1 x 76,1 x 64 | 1 | 4 | 4021343329142 | 108 | 100 | 56 | 52 | 56 |
| 69130892289 | 88,9 x 88,9 x 22 | 1 | 4 | 4021343176982 | 120 | 90 | 63 | 61 | 63 |
| 69130892889 | 88,9 x 88,9 x 28 | 1 | 4 | 4021343177019 | 120 | 92 | 63 | 62 | 63 |
| 69130893589 | 88,9 x 88,9 x 35 | 1 | 4 | 4021343177040 | 120 | 94 | 63 | 63 | 63 |
| 69130894289 | 88,9 x 88,9 x 42 | 1 | 3 | 4021343177071 | 120 | 102 | 63 | 63 | 63 |
| 69130895489 | 88,9 x 88,9 x 54 | 1 | 3 | 4021343177101 | 120 | 108 | 63 | 64 | 63 |



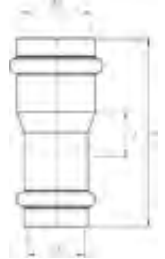
Catalog-no. and -description
9130 – Tee (continued)

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | z1 | z2 | z3 |
|---------------|---------------------------|-----|-----|---------------|-----|-----|----|----|----|
| 69130896489 | 88,9 x 88,9 x 64 | 1 | 2 | 4021343329159 | 120 | 106 | 62 | 58 | 62 |
| 69130897689 | 88,9 x 88,9 x 76,1 | 1 | 2 | 4021343177149 | 120 | 112 | 63 | 62 | 63 |
| 6913010822108 | 108 x 108 x 22 | 1 | 2 | 4021343176999 | 144 | 99 | 74 | 70 | 74 |
| 6913010828108 | 108 x 108 x 28 | 1 | 2 | 4021343177026 | 144 | 101 | 74 | 72 | 74 |
| 6913010835108 | 108 x 108 x 35 | 1 | 2 | 4021343177057 | 144 | 103 | 74 | 73 | 74 |
| 6913010842108 | 108 x 108 x 42 | 1 | 2 | 4021343177088 | 144 | 111 | 74 | 73 | 74 |
| 6913010854108 | 108 x 108 x 54 | 1 | 1 | 4021343177118 | 144 | 118 | 74 | 73 | 74 |
| 6913010864108 | 108 x 108 x 64 | 1 | 1 | 4021343329166 | 144 | 116 | 73 | 68 | 74 |
| 6913010876108 | 108 x 108 x 76,1 | 1 | 1 | 4021343177125 | 144 | 122 | 74 | 71 | 74 |
| 6913010889108 | 108 x 108 x 88,9 | 1 | 1 | 4021343177132 | 144 | 129 | 74 | 72 | 74 |



Catalog-no. and -description
9130G – Female branch tee

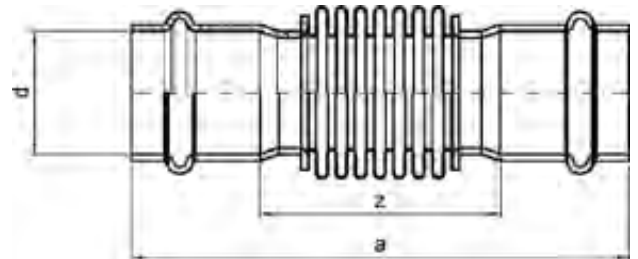
| Article-no. | Dimension d1 x d1x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|----------------|--------------------------|-----|-----|---------------|-----|-----|----|----|----|
| 69130G151215 | 15 x 15 x 1/2 | 10 | 80 | 4021343149511 | 48 | 45 | 22 | 32 | 24 |
| 69130G181218 | 18 x 18 x 1/2 | 10 | 80 | 4021343153785 | 49 | 47 | 24 | 34 | 24 |
| 69130G183418 | 18 x 18 x 3/4 | 10 | 70 | 4021343149535 | 49 | 49 | 24 | 34 | 32 |
| 69130G221222 | 22 x 22 x 1/2 | 5 | 60 | 4021343153792 | 54 | 48 | 26 | 35 | 24 |
| 69130G223422 | 22 x 22 x 3/4 | 10 | 50 | 4021343149559 | 54 | 50 | 26 | 35 | 32 |
| 69130G281228 | 28 x 28 x 1/2 | 5 | 40 | 4021343153808 | 60 | 46 | 30 | 32 | 24 |
| 69130G283428 | 28 x 28 x 3/4 | 5 | 40 | 4021343153815 | 60 | 54 | 30 | 39 | 32 |
| 69130G28128 | 28 x 28 x 1 | 5 | 40 | 4021343149580 | 60 | 57 | 30 | 40 | 38 |
| 69130G351235 | 35 x 35 x 1/2 | 2 | 30 | 4021343153822 | 65 | 49 | 35 | 36 | 24 |
| 69130G353435 | 35 x 35 x 3/4 | 2 | 30 | 4021343168833 | 65 | 51 | 35 | 36 | 32 |
| 69130G3511435 | 35 x 35 x 1 1/4 | 2 | 24 | 4021343149603 | 65 | 65 | 35 | 45 | 46 |
| 69130G421242 | 42 x 42 x 1/2 | 2 | 20 | 4021343158506 | 77 | 54 | 39 | 40 | 24 |
| 69130G423442 | 42 x 42 x 3/4 | 2 | 20 | 4021343168840 | 77 | 56 | 39 | 41 | 32 |
| 69130G4211242 | 42 x 42 x 1 1/2 | 2 | 12 | 4021343149610 | 77 | 68 | 39 | 48 | 55 |
| 69130G541254 | 54 x 54 x 1/2 | 2 | 12 | 4021343158513 | 89 | 60 | 45 | 46 | 24 |
| 69130G543454 | 54 x 54 x 3/4 | 2 | 12 | 4021343168857 | 89 | 62 | 45 | 47 | 32 |
| 69130G54254 | 54 x 54 x 2 | 2 | 8 | 4021343149627 | 89 | 80 | 45 | 56 | 65 |
| 69130G763476 | 76,1 x 76,1 x 3/4 | 1 | 4 | 4021343176913 | 108 | 75 | 57 | 60 | 32 |
| 69130G76276 | 76,1 x 76,1 x 2 | 1 | 4 | 4021343176944 | 108 | 85 | 57 | 61 | 65 |
| 69130G893489 | 88,9 x 88,9 x 3/4 | 1 | 4 | 4021343176920 | 120 | 82 | 63 | 67 | 32 |
| 69130G89289 | 88,9 x 88,9 x 2 | 1 | 4 | 4021343176951 | 120 | 91 | 63 | 67 | 65 |
| 69130G10834108 | 108 x 108 x 3/4 | 1 | 2 | 4021343176937 | 144 | 91 | 74 | 76 | 32 |
| 69130G1082108 | 108 x 108 x 2 | 1 | 2 | 4021343176968 | 144 | 101 | 74 | 77 | 65 |



Catalog-no. and -description

9240 – Reducing coupling

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 692401815 | 18 x 15 | 10 | 200 | 4021343171543 | 61 | 10 |
| 692402215 | 22 x 15 | 10 | 150 | 4021343171550 | 71 | 17 |
| 692402218 | 22 x 18 | 10 | 150 | 4021343171567 | 67 | 13 |
| 692402822 | 28 x 22 | 10 | 100 | 4021343171574 | 75 | 17 |



Catalog-no. and -description

9872 – Axial compensator

| Article-no. | Dimension d | Bag | Box | EAN code | a | z | GDK |
|-------------|----------------|-----|-----|---------------|-----|----|-----|
| 6987215 | 15 | 1 | 50 | 4021343197376 | 106 | 45 | 10 |
| 6987218 | 18 | 1 | 50 | 4021343197383 | 108 | 47 | 10 |
| 6987222 | 22 | 1 | 40 | 4021343197390 | 108 | 37 | 14 |
| 6987228 | 28 | 1 | 40 | 4021343197406 | 113 | 42 | 12 |
| 6987235 | 35 | 1 | 30 | 4021343197413 | 124 | 49 | 14 |
| 6987242 | 42 | 1 | 16 | 4021343197420 | 146 | 53 | 16 |
| 6987254 | 54 | 1 | 14 | 4021343197437 | 165 | 56 | 20 |
| 6987264 | 64 | 1 | 10 | 4021343329265 | 200 | 81 | 20 |
| 6987276 | 76,1 | 1 | 5 | 4021343197444 | 201 | 76 | 24 |
| 6987289 | 88,9 | 1 | 4 | 4021343197451 | 226 | 83 | 28 |
| 69872108 | 108 | 1 | 2 | 4021343197468 | 265 | 92 | 34 |

* no maintenance necessary

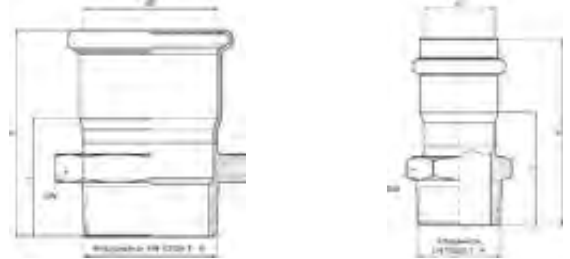
Installation must be visible and easily accessible



Catalog-no. and -description

9243 – Reducer

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|
| 692431815 | 18a x 15 | 10 | 300 | 4021343149832 | 58 | 32 |
| 692432215 | 22a x 15 | 10 | 200 | 4021343149887 | 73 | 47 |
| 692432218 | 22a x 18 | 10 | 200 | 4021343149825 | 74 | 48 |
| 692432815 | 28a x 15 | 5 | 120 | 4021343149931 | 78 | 52 |
| 692432818 | 28a x 18 | 5 | 100 | 4021343149894 | 79 | 53 |
| 692432822 | 28a x 22 | 5 | 120 | 4021343149849 | 77 | 48 |
| 692433518 | 35a x 18 | 2 | 70 | 4021343149948 | 78 | 52 |
| 692433522 | 35a x 22 | 2 | 70 | 4021343149900 | 84 | 55 |
| 692433528 | 35a x 28 | 2 | 60 | 4021343149856 | 85 | 55 |
| 692434222 | 42a x 22 | 2 | 40 | 4021343149955 | 95 | 66 |
| 692434228 | 42a x 28 | 2 | 40 | 4021343149917 | 97 | 67 |
| 692434235 | 42a x 35 | 2 | 40 | 4021343149863 | 95 | 64 |
| 692435428 | 54a x 28 | 2 | 30 | 4021343149962 | 106 | 76 |
| 692435435 | 54a x 35 | 2 | 30 | 4021343149924 | 106 | 75 |
| 692435442 | 54a x 42 | 2 | 30 | 4021343149870 | 112 | 73 |
| 692436442 | 64a x 42 | 2 | 20 | 4021343329180 | 126 | 87 |
| 692436454 | 64a x 54 | 2 | 20 | 4021343329197 | 129 | 84 |
| 692437654 | 76,1a x 54 | 2 | 16 | 4021343177279 | 141 | 96 |
| 692437664 | 76,1a x 64 | 2 | 12 | 4021343329203 | 141 | 92 |
| 692438954 | 88,9a x 54 | 2 | 8 | 4021343177293 | 160 | 115 |
| 692438964 | 88,9a x 64 | 2 | 8 | 4021343329210 | 160 | 105 |
| 692438976 | 88,9a x 76,1 | 2 | 8 | 4021343177286 | 151 | 100 |
| 6924310854 | 108a x 54 | 2 | 4 | 4021343177323 | 180 | 135 |
| 6924310864 | 108a x 64 | 2 | 4 | 4021343329227 | 180 | 133 |
| 6924310876 | 108a x 76,1 | 2 | 4 | 4021343177316 | 181 | 130 |
| 6924310889 | 108a x 88,9 | 2 | 4 | 4021343177309 | 181 | 123 |



Catalog-no. and -description
9243G – Male adaptor

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|-----|----|-----|
| 69243G1538 | 15 x 3/8 | 10 | 300 | 4021343149979 | 41 | 15 | 19 |
| 69243G1512 | 15 x 1/2 | 10 | 250 | 4021343149986 | 46 | 20 | 24 |
| 69243G1534 | 15 x 3/4 | 10 | 200 | 4021343166778 | 63 | 37 | 30 |
| 69243G1812 | 18 x 1/2 | 10 | 250 | 4021343149993 | 46 | 20 | 24 |
| 69243G1834 | 18 x 3/4 | 10 | 200 | 4021343150005 | 48 | 22 | 30 |
| 69243G2212 | 22 x 1/2 | 10 | 180 | 4021343150012 | 51 | 22 | 27 |
| 69243G2234 | 22 x 3/4 | 10 | 200 | 4021343150029 | 51 | 22 | 30 |
| 69243G221 | 22 x 1 | 10 | 150 | 4021343150036 | 52 | 23 | 36 |
| 69243G2834 | 28 x 3/4 | 5 | 100 | 4021343150043 | 72 | 42 | 30 |
| 69243G281 | 28 x 1 | 5 | 90 | 4021343150050 | 74 | 44 | 36 |
| 69243G351 | 35 x 1 | 2 | 60 | 4021343150067 | 80 | 49 | 36 |
| 69243G35114 | 35 x 1 1/4 | 2 | 40 | 4021343150074 | 84 | 53 | 46 |
| 69243G42112 | 42 x 1 1/2 | 2 | 30 | 4021343150081 | 94 | 55 | 55 |
| 69243G542 | 54 x 2 | 2 | 20 | 4021343150098 | 107 | 62 | 65 |
| 69243G64212 | 64 x 2 1/2 | 1 | 14 | 4021343329234 | 111 | 63 | 80 |
| 69243G76212 | 76,1 x 2 1/2 | 1 | 8 | 4021343176753 | 117 | 65 | 100 |
| 69243G893 | 88,9 x 3 | 1 | 6 | 4021343177347 | 136 | 78 | 105 |
| 69243G1084 | 108 x 4 | 1 | 4 | 4021343180118 | 155 | 84 | 125 |



Catalog-no. and -description
9246G – Plug-in adaptor, female

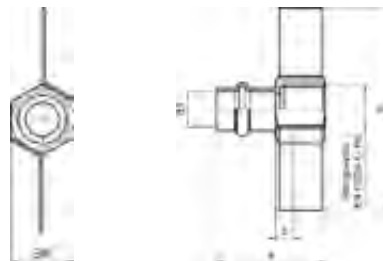
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|----------------------|-----|-----|---------------|----|----|----|
| 69246G1512 | 15a x 1/2 | 10 | 200 | 4021343150333 | 66 | 53 | 24 |
| 69246G1812 | 18a x 1/2 | 10 | 200 | 4021343150340 | 66 | 53 | 24 |
| 69246G1834 | 18a x 3/4 | 10 | 150 | 4021343150357 | 68 | 53 | 32 |
| 69246G2212 | 22a x 1/2 | 10 | 180 | 4021343150364 | 71 | 58 | 24 |
| 69246G2234 | 22a x 3/4 | 10 | 120 | 4021343150371 | 73 | 58 | 32 |
| 69246G2834 | 28a x 3/4 | 5 | 100 | 4021343150388 | 78 | 63 | 32 |



Catalog-no. and -description

9270 – Coupling

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 6927015 | 15 | 10 | 300 | 4021343149689 | 56 | 6 |
| 6927018 | 18 | 10 | 200 | 4021343149696 | 67 | 17 |
| 6927022 | 22 | 10 | 150 | 4021343149702 | 76 | 20 |
| 6927028 | 28 | 5 | 80 | 4021343149719 | 78 | 19 |
| 6927035 | 35 | 2 | 50 | 4021343149726 | 78 | 17 |
| 6927042 | 42 | 2 | 30 | 4021343149733 | 94 | 18 |
| 6927054 | 54 | 2 | 24 | 4021343149740 | 106 | 18 |
| 6927064 | 64 | 1 | 20 | 4021343329241 | 106 | 11 |
| 6927076 | 76,1 | 1 | 10 | 4021343176722 | 132 | 31 |
| 6927089 | 88,9 | 1 | 6 | 4021343176739 | 145 | 30 |
| 69270108 | 108 | 1 | 4 | 4021343176746 | 170 | 31 |



Catalog-no. and -description

9270F – Female adaptor

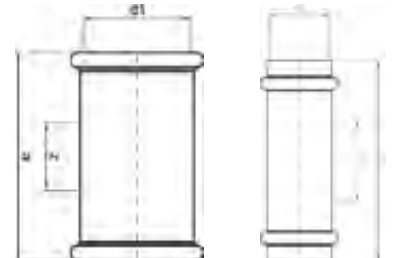
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | h | SW |
|-------------|----------------------|-----|-----|---------------|----|---|----|----|
| 69270F1512 | 15 x 1/2 | 10 | 150 | 4021343150227 | 46 | 7 | 86 | 24 |



Catalog-no. and -description

9270G – Female adaptor

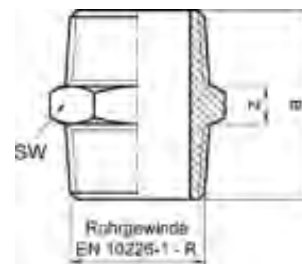
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|----------------------|-----|-----|---------------|-----|----|----|
| 69270G1512 | 15 x 1/2 | 10 | 200 | 4021343150104 | 46 | 7 | 24 |
| 69270G1534 | 15 x 3/4 | 10 | 180 | 4021343150111 | 49 | 9 | 30 |
| 69270G1812 | 18 x 1/2 | 10 | 200 | 4021343150128 | 47 | 9 | 24 |
| 69270G1834 | 18 x 3/4 | 10 | 170 | 4021343150135 | 49 | 9 | 30 |
| 69270G2212 | 22 x 1/2 | 10 | 170 | 4021343150142 | 50 | 8 | 24 |
| 69270G2234 | 22 x 3/4 | 10 | 150 | 4021343150159 | 52 | 9 | 30 |
| 69270G221 | 22 x 1 | 10 | 120 | 4021343150166 | 55 | 9 | 38 |
| 69270G2834 | 28 x 3/4 | 5 | 100 | 4021343150173 | 76 | 32 | 32 |
| 69270G281 | 28 x 1 | 5 | 80 | 4021343150180 | 79 | 32 | 38 |
| 69270G35114 | 35 x 1 1/4 | 2 | 36 | 4021343150197 | 89 | 39 | 46 |
| 69270G42112 | 42 x 1 1/2 | 2 | 28 | 4021343150203 | 98 | 40 | 55 |
| 69270G542 | 54 x 2 | 2 | 20 | 4021343150210 | 107 | 39 | 65 |



Catalog-no. and -description

9270S – Slip coupling

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 69270S15 | 15 | 10 | 200 | 4021343149757 | 78 | 27 |
| 69270S18 | 18 | 10 | 150 | 4021343149764 | 78 | 27 |
| 69270S22 | 22 | 10 | 100 | 4021343149771 | 84 | 27 |
| 69270S28 | 28 | 5 | 80 | 4021343149788 | 96 | 37 |
| 69270S35 | 35 | 2 | 50 | 4021343149795 | 98 | 37 |
| 69270S42 | 42 | 2 | 40 | 4021343149801 | 114 | 37 |
| 69270S54 | 54 | 2 | 20 | 4021343149818 | 131 | 42 |
| 69270S64 | 64 | 1 | 14 | 4021343329258 | 141 | 46 |
| 69270S76 | 76,1 | 1 | 10 | 4021343176760 | 148 | 47 |
| 69270S89 | 88,9 | 1 | 4 | 4021343176777 | 161 | 46 |
| 69270S108 | 108 | 1 | 3 | 4021343176784 | 210 | 71 |



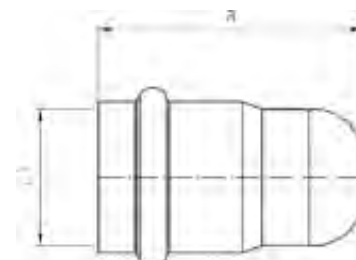
Catalog-no. and -description
9280 – Double nipple, male

| Article-no. | Dimension R | Bag | Box | EAN code | a | SW |
|-------------|-------------|-----|-----|---------------|----|----|
| 6928012 | 1/2 | 10 | 230 | 4021343150517 | 34 | 22 |
| 6928034 | 3/4 | 10 | 140 | 4021343150524 | 39 | 30 |
| 692801 | 1 | 5 | 120 | 4021343150531 | 45 | 36 |



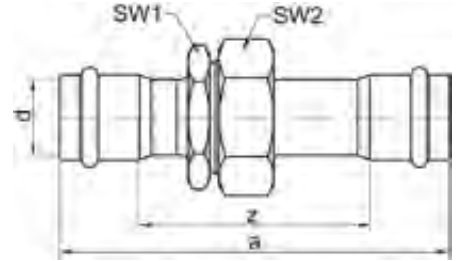
Catalog-no. and -description
9280G – Plug-in adaptor, male

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | SW |
|-------------|------------------|-----|-----|---------------|----|----|
| 69280G1512 | 15a x 1/2 | 10 | 200 | 4021343150272 | 59 | 22 |
| 69280G1812 | 18a x 1/2 | 10 | 150 | 4021343150289 | 59 | 22 |
| 69280G1834 | 18a x 3/4 | 10 | 180 | 4021343150296 | 63 | 30 |
| 69280G2212 | 22a x 1/2 | 10 | 120 | 4021343150302 | 64 | 24 |
| 69280G2234 | 22a x 3/4 | 10 | 100 | 4021343150319 | 68 | 30 |
| 69280G281 | 28a x 1 | 5 | 100 | 4021343150326 | 76 | 36 |



Catalog-no. and -description
9301 – Endcap

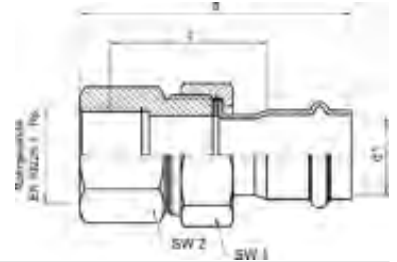
| Article-no. | Dimension d1 | Bag | Box | EAN code | a |
|-------------|--------------|-----|-----|---------------|----|
| 6930115 | 15 | 10 | 400 | 4021343171703 | 47 |
| 6930118 | 18 | 10 | 300 | 4021343171710 | 47 |
| 6930122 | 22 | 10 | 200 | 4021343171727 | 51 |
| 6930128 | 28 | 5 | 150 | 4021343171734 | 54 |
| 6930135 | 35 | 2 | 80 | 4021343172854 | 57 |
| 6930142 | 42 | 2 | 50 | 4021343172861 | 68 |
| 6930154 | 54 | 2 | 30 | 4021343172878 | 82 |



Catalog-no. and -description

9330 – Union, flat sealing, stainless steel nut

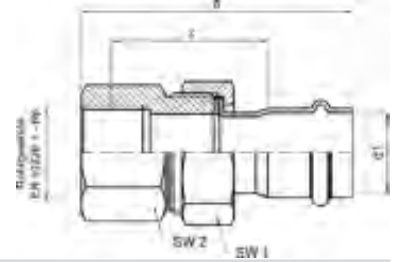
| Article-no. | Dimension d | Bag | Box | EAN code | a | z | G | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|-----|----|-------|-----|-----|
| 6933015 | 15 | 5 | 120 | 4021343217685 | 111 | 60 | 1/2 | 24 | 24 |
| 6933018 | 18 | 5 | 80 | 4021343217692 | 117 | 65 | 3/4 | 27 | 30 |
| 6933022 | 22 | 5 | 50 | 4021343217708 | 127 | 70 | 1 | 36 | 38 |
| 6933028 | 28 | 5 | 35 | 4021343217715 | 143 | 84 | 1 1/4 | 46 | 50 |
| 6933035 | 35 | 2 | 30 | 4021343217722 | 146 | 85 | 1 1/2 | 50 | 55 |
| 6933042 | 42 | 2 | 20 | 4021343217739 | 158 | 81 | 1 3/4 | 55 | 58 |
| 6933054 | 54 | 2 | 12 | 4021343217746 | 175 | 85 | 2 3/8 | 70 | 75 |



Catalog-no. and -description

9330G – Union, female, flat sealing, brass nut

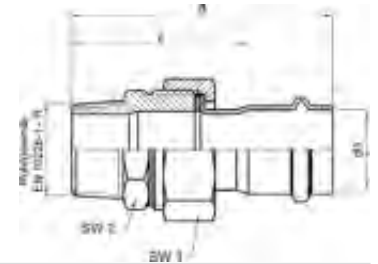
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------------|-----|-----|---------------|-----|----|-----|-----|
| 69330G1512 | 15 x 1/2 | 5 | 120 | 4021343177392 | 93 | 53 | 24 | 24 |
| 69330G1534 | 15 x 3/4 | 5 | 100 | 4021343177408 | 94 | 53 | 32 | 30 |
| 69330G1834 | 18 x 3/4 | 5 | 80 | 4021343177415 | 96 | 55 | 32 | 30 |
| 69330G2234 | 22 x 3/4 | 5 | 50 | 4021343177422 | 104 | 60 | 36 | 32 |
| 69330G221 | 22 x 1 | 5 | 50 | 4021343177439 | 107 | 60 | 38 | 36 |
| 69330G2834 | 28 x 3/4 | 5 | 50 | 4021343177453 | 92 | 47 | 46 | 32 |
| 69330G281 | 28 x 1 | 5 | 40 | 4021343177446 | 96 | 49 | 46 | 41 |
| 69330G35114 | 35 x 1 1/4 | 2 | 30 | 4021343177460 | 88 | 37 | 52 | 46 |
| 69330G42112 | 42 x 1 1/2 | 2 | 20 | 4021343177477 | 100 | 41 | 59 | 55 |
| 69330G542 | 54 x 2 | 2 | 12 | 4021343177484 | 109 | 40 | 75 | 70 |



Catalog-no. and -description

9330GMVA – Union, female, flat sealing, stainless steel nut

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|----------------|----------------------|-----|-----|---------------|-----|----|-----|-----|
| 69330GMVA1512 | 15 x 1/2 | 5 | 120 | 4021343177576 | 93 | 53 | 27 | 24 |
| 69330GMVA1534 | 15 x 3/4 | 5 | 100 | 4021343177606 | 94 | 53 | 32 | 30 |
| 69330GMVA1834 | 18 x 3/4 | 5 | 80 | 4021343177583 | 98 | 57 | 32 | 30 |
| 69330GMVA2234 | 22 x 3/4 | 5 | 50 | 4021343177590 | 104 | 60 | 38 | 32 |
| 69330GMVA221 | 22 x 1 | 5 | 50 | 4021343177613 | 107 | 60 | 38 | 38 |
| 69330GMVA2834 | 28 x 3/4 | 5 | 50 | 4021343177637 | 114 | 69 | 50 | 32 |
| 69330GMVA281 | 28 x 1 | 5 | 40 | 4021343177620 | 118 | 71 | 40 | 41 |
| 69330GMVA35114 | 35 x 11/4 | 2 | 30 | 4021343177644 | 113 | 62 | 55 | 46 |
| 69330GMVA42112 | 42 x 11/2 | 2 | 20 | 4021343177651 | 115 | 57 | 58 | 55 |
| 69330GMVA542 | 54 x 2 | 2 | 12 | 4021343177668 | 126 | 57 | 75 | 70 |



Catalog-no. and -description

9333G – Union, male, flat sealing, brass nut

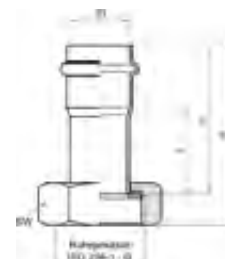
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|----|-----|-----|
| 69333G1512 | 15 x 1/2 | 5 | 150 | 4021343177491 | 88 | 61 | 24 | 22 |
| 69333G1534 | 15 x 3/4 | 5 | 120 | 4021343177507 | 90 | 63 | 30 | 30 |
| 69333G1812 | 18 x 1/2 | 5 | 100 | 4021343177514 | 92 | 66 | 30 | 30 |
| 69333G2234 | 22 x 3/4 | 5 | 60 | 4021343177521 | 101 | 71 | 38 | 36 |
| 69333G281 | 28 x 1 | 5 | 50 | 4021343177538 | 91 | 61 | 41 | 32 |
| 69333G35114 | 35 x 11/4 | 2 | 40 | 4021343177545 | 98 | 67 | 52 | 46 |
| 69333G42112 | 42 x 11/2 | 2 | 20 | 4021343177552 | 111 | 72 | 59 | 55 |
| 69333G542 | 54 x 2 | 2 | 12 | 4021343177569 | 121 | 75 | 75 | 70 |



Catalog-no. and -description

9333GMVA – Union, male, flat sealing, stainless steel nut

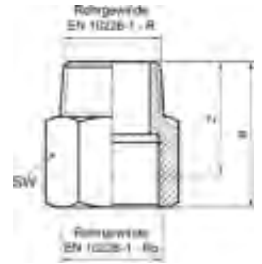
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|----------------|---------------------|-----|-----|---------------|-----|----|-----|-----|
| 69333GMVA1512 | 15 x 1/2 | 5 | 150 | 4021343180156 | 90 | 63 | 30 | 27 |
| 69333GMVA1534 | 15 x 3/4 | 5 | 120 | 4021343180163 | 91 | 64 | 30 | 30 |
| 69333GMVA1812 | 18 x 1/2 | 5 | 100 | 4021343180170 | 94 | 68 | 30 | 30 |
| 69333GMVA2234 | 22 x 3/4 | 5 | 60 | 4021343180187 | 101 | 71 | 38 | 36 |
| 69333GMVA281 | 28 x 1 | 5 | 50 | 4021343180194 | 115 | 85 | 50 | 36 |
| 69333GMVA35114 | 35 x 1 1/4 | 2 | 40 | 4021343180200 | 124 | 92 | 55 | 46 |
| 69333GMVA42112 | 42 x 1 1/2 | 2 | 20 | 4021343180217 | 126 | 87 | 58 | 55 |
| 69333GMVA542 | 54 x 2 | 2 | 12 | 4021343180224 | 138 | 93 | 75 | 70 |



Catalog-no. and -description

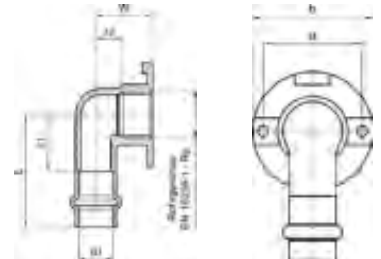
9359M – Union adaptor, flat sealing, stainless steel nut

| Article-no. | Dimension d1 x G | Bag | Box | EAN code | a | c | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|
| 69359M1512 | 15 x 1/2 | 5 | 250 | 4021343168994 | 63 | 55 | 29 | 24 |
| 69359M1534 | 15 x 3/4 | 5 | 200 | 4021343150234 | 61 | 51 | 25 | 30 |
| 69359M1834 | 18 x 3/4 | 5 | 200 | 4021343150241 | 65 | 55 | 29 | 30 |
| 69359M221 | 22 x 1 | 5 | 130 | 4021343150258 | 72 | 60 | 31 | 38 |
| 69359M28114 | 28 x 1 1/4 | 5 | 50 | 4021343150265 | 85 | 70 | 40 | 50 |
| 69359M35112 | 35 x 1 1/2 | 2 | 50 | 4021343155390 | 85 | 71 | 40 | 55 |
| 69359M42134 | 42 x 1 3/4 | 2 | 34 | 4021343155406 | 93 | 75 | 36 | 58 |
| 69359M54238 | 54 x 2 3/8 | 2 | 20 | 4021343155413 | 96 | 78 | 33 | 75 |



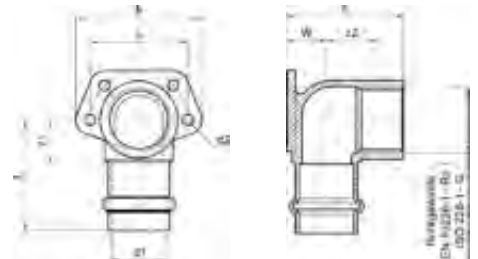
Catalog-no. and -description
9370G – Hexagon nipple

| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 69370G1212 | 1/2 x 1/2 | 10 | 200 | 4021343150487 | 39 | 31 | 24 |
| 69370G3434 | 3/4 x 3/4 | 5 | 120 | 4021343150494 | 42 | 33 | 32 |
| 69370G11 | 1 x 1 | 5 | 100 | 4021343150500 | 48 | 38 | 38 |



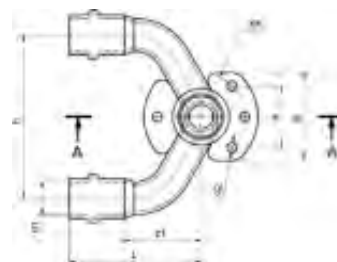
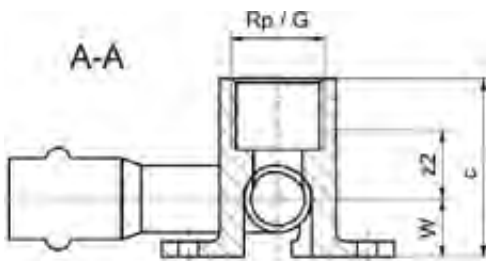
Catalog-no. and -description
9471 – Wall plate elbow, with sound insulation

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z1 | z2 | L | W | d1 |
|-------------|----------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 694711512 | 15 x 1/2 | 2 | 30 | 4021343150432 | 38 | 46 | 25 | 12 | 50 | 25 | 13 |



Catalog-no. and -description
9472G – Wall plate elbow, with universal flange

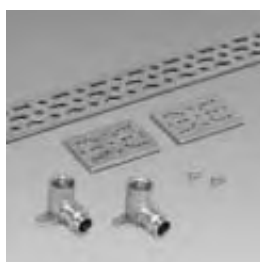
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | L | W | d2 |
|-------------|----------------------|-----|-----|---------------|----|----|----|----|----|----|----|----|
| 69472G1512 | 15 x 1/2 | 10 | 90 | 4021343150401 | 40 | 55 | 40 | 15 | 14 | 40 | 13 | 5 |
| 69472G1812 | 18 x 1/2 | 10 | 80 | 4021343150418 | 40 | 55 | 46 | 15 | 17 | 40 | 16 | 5 |
| 69472G2234 | 22 x 3/4 | 10 | 60 | 4021343150425 | 46 | 55 | 47 | 18 | 16 | 46 | 16 | 5 |
| 69472G281 | 28 x 1 | 5 | 40 | 4021343155420 | 55 | 70 | 58 | 22 | 21 | 51 | 20 | 5 |



Catalog-no. and -description

9478G – Wall plate, female with female thread

| Article-no. | Dimension d1 x d1 x Rp / G | Bag | Box | EAN code | a | b | c | z1 | z2 | h | L | W |
|--------------|-------------------------------|-----|-----|---------------|----|----|----|----|----|----|----|----|
| 69478G151512 | 15 x 15 x 1/2 | 5 | 60 | 4021343208300 | 28 | 40 | 40 | 35 | 13 | 75 | 60 | 13 |



Catalog-no. and -description

9980G – Mounting set for wall plates

| Article-no. | Dimension d x Rp | Bag | Box | EAN code |
|-------------|---------------------|-----|-----|---------------|
| 699801512 | 15 x 1/2 | | 1 | 4021343200380 |



Catalog-no. and -description

4991 – Bending clamp

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84991 | | | 1 | 4021343200397 |



Catalog-no. and -description

8981 – Insulation plate for 8980g and 9880g

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 8981 | | | 30 | 4021343200403 |



Catalog-no. and -description

8982 – Distance plate for 9472g

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|--------------------|-----|-----|---------------|
| 898218 | 18 mm für 22 x 3/4 | 1 | 400 | 4021343217333 |
| 898219 | 19 mm für 18 x 1/2 | 1 | 400 | 4021343217326 |
| 898225 | 25 mm für 15 x 1/2 | 1 | 400 | 4021343217319 |



Catalog-no. and -description

FL-D – Flange sealing, asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|--------------|-----|-----|---------------|
| 1D15 | 15 | | 240 | 4021343001017 |
| 1D20 | 20 | | 200 | 4021343001048 |
| 1D25 | 25 | | 160 | 4021343001093 |
| 1D32 | 32 | | 120 | 4021343001123 |
| 1D40 | 40 | | 100 | 4021343001154 |
| 1D50 | 50 | | 120 | 4021343001161 |
| 1D65 | 65 | | 100 | 4021343001185 |
| 1D80 | 80 | | 80 | 4021343001192 |
| 1D100 | 100 | | 60 | 4021343000935 |



Catalog-no. and -description

ORT – O-ring for drinking water and heating pressfittings, material: EPDM

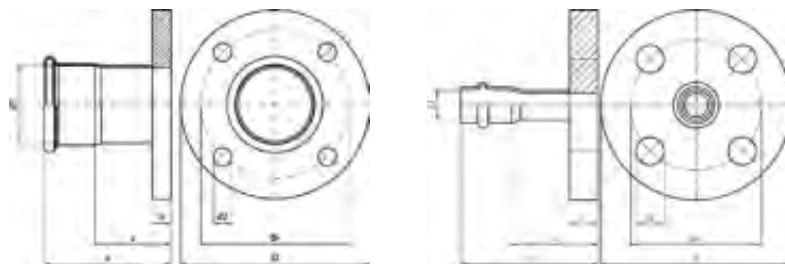
| Article-no. | Dimension D | Bag | Box | EAN code |
|---------------|-------------------|-----|-----|----------|
| 1ORT1210250 | 12,10x2,50 | | | |
| 1ORT1420250 | 14,20x2,50 | | | |
| 1ORT1510260 | 15,10x2,60 | | | |
| 1ORT1620250 | 16,20x2,50 | | | |
| 1ORT1820265 | 18,20x2,65 | | | |
| 1ORT2220310 | 22,20x3,10 | | | |
| 1ORT2830310 | 28,30x3,10 | | | |
| 1ORT3540325 | 35,40x3,25 | | | |
| 1ORT4240413 | 42,40x4,13 | | | |
| 1ORT5440413 | 54,40x4,13 | | | |
| 1ORT6500600 | 65,00x6,00 | | | |
| 1ORT6800600 | 68,00x6,00 | | | |
| 1ORT7700700 | 77,00x7,00 | | | |
| 1ORT9000760 | 90,00x7,60 (CU) | | | |
| 1ORT9000800 | 90,00x8,00 (VA) | | | |
| 1ORT11000900 | 110,00x9,00 (CU) | | | |
| 1ORT110001000 | 110,00x10,00 (VA) | | | |



Catalog-no. and -description

9005 – Pipe element with flare for melting water line

| Article-no. | Dimension d x G x L | Bag | Box | EAN code |
|--------------|------------------------|-----|-----|---------------|
| 690052850034 | 28 x 500 x 3/4 | | 28 | 4021343203947 |



Catalog-no. and -description

VA-PF – Crimpingflange, PN 10/16

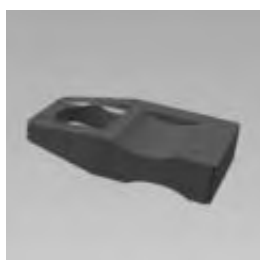
| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | a | z | h | dk | d2 | D | Az |
|-------------|----------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 6VAPF15 | DN 12 / 15 mm | 1 | 25 | 4021343177675 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 6VAPF18 | DN 15 / 18 mm | 1 | 20 | 4021343177699 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 6VAPF22 | DN 20 / 22 mm | 1 | 16 | 4021343177705 | 69 | 40 | 14 | 75 | 14 | 105 | 4 |
| 6VAPF28 | DN 25 / 28 mm | 1 | 14 | 4021343177712 | 75 | 45 | 16 | 85 | 14 | 115 | 4 |
| 6VAPF35 | DN 32 / 35 mm | 1 | 10 | 4021343177729 | 78 | 47 | 16 | 100 | 18 | 140 | 4 |
| 6VAPF42 | DN 40 / 42 mm | 1 | 8 | 4021343177736 | 87 | 48 | 16 | 110 | 18 | 150 | 4 |
| 6VAPF54 | DN 50 / 54 mm | 1 | 5 | 4021343177743 | 100 | 55 | 18 | 125 | 18 | 165 | 4 |
| 6VAPF64 | DN - - / 64 mm | 1 | 4 | 4021343329272 | 93 | 45 | 15 | 125 | 18 | 165 | 4 |
| 6VAPF76 | DN 65 / 76,1 mm | 1 | 2 | 4021343177750 | 124 | 73 | 18 | 145 | 18 | 185 | 4 |
| 6VAPF89 | DN 80 / 88,9 mm | 1 | 2 | 4021343180125 | 137 | 79 | 18 | 160 | 18 | 200 | 8 |
| 6VAPF108 | DN 100 /108 mm | 1 | 1 | 4021343177767 | 162 | 92 | 20 | 180 | 18 | 220 | 8 |



Catalog-no. and -description

4981 – Plastic measure tool for NiroSan®-Press with bottle opener and water level, 15 - 54 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84981 | 15 - 54 mm | | 30 | 4021343142673 |



Catalog-no. and -description

4989 – Plastic measure tool for NiroSan®-Press with bottle opener and water level, 64 mm and 67 mm

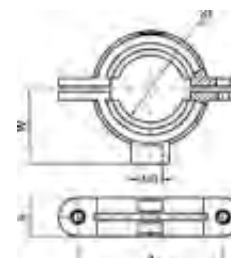
| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84989 | 64 + 67 mm | | | 4021343356889 |



Catalog-no. and -description

4990 – Plastic measure tool for NiroSan®-Press, with bottle opener and water level, 76,1 - 108 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84990 | 76,1-108 mm | | 20 | 4021343194511 |



Catalog-no. and -description

9918 – Pipe ring with sound insulation

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | W |
|-------------|----------------|-----|-----|---------------|----|----|----|
| 6991812 | 12 | 10 | 400 | 4021343155291 | 44 | 18 | 23 |
| 6991815 | 15 | 10 | 300 | 4021343150968 | 47 | 18 | 25 |
| 6991818 | 18 | 10 | 200 | 4021343150975 | 50 | 18 | 26 |
| 6991822 | 22 | 10 | 180 | 4021343150982 | 54 | 18 | 28 |
| 6991828 | 28 | 5 | 150 | 4021343150999 | 60 | 18 | 31 |
| 6991835 | 35 | 2 | 100 | 4021343151002 | 67 | 18 | 35 |
| 6991842 | 42 | 2 | 100 | 4021343151019 | 74 | 18 | 38 |
| 6991854 | 54 | 2 | 80 | 4021343151026 | 86 | 18 | 44 |

SYSTEM TECHNOLOGY

NiroSan[®]-Press Gas
Stainless steel (316L)
pressfittings for the gas
installation

Series 17000



05-018-6



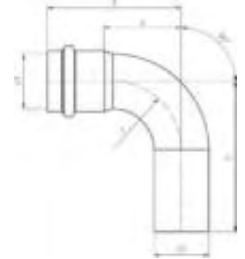
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DG-4550BP0188

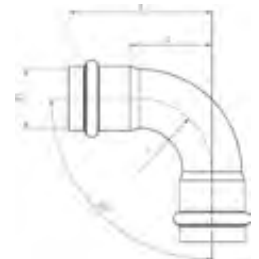


POCC DE.AIO31.H08581



Catalog-no. and -description
17001A – Bend 90° female/male

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|-----|
| 617001A15 | 15 | 10 | 200 | 4021343200816 | 48 | 60 | 22 |
| 617001A18 | 18 | 10 | 150 | 4021343200823 | 53 | 62 | 27 |
| 617001A22 | 22 | 10 | 100 | 4021343200830 | 63 | 72 | 34 |
| 617001A28 | 28 | 5 | 60 | 4021343200847 | 68 | 77 | 39 |
| 617001A35 | 35 | 2 | 30 | 4021343200854 | 87 | 93 | 56 |
| 617001A42 | 42 | 2 | 20 | 4021343200861 | 103 | 113 | 64 |
| 617001A54 | 54 | 2 | 10 | 4021343200878 | 125 | 131 | 80 |
| 617001A76 | 76,1 | 1 | 3 | 4021343335174 | 143 | 162 | 92 |
| 617001A89 | 88,9 | 1 | 2 | 4021343335181 | 165 | 186 | 107 |
| 617001A108 | 108 | 1 | 1 | 4021343335198 | 201 | 231 | 131 |



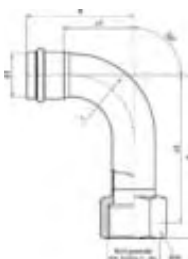
Catalog-no. and -description
17002A – Bend 90° female/female

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | b | z |
|-------------|-----------------|-----|-----|---------------|-----|----|-----|
| 617002A15 | 15 | 10 | 200 | 4021343200885 | 48 | 18 | 22 |
| 617002A18 | 18 | 10 | 150 | 4021343200892 | 53 | 22 | 27 |
| 617002A22 | 22 | 10 | 100 | 4021343200908 | 63 | 30 | 34 |
| 617002A28 | 28 | 5 | 60 | 4021343200915 | 68 | 35 | 39 |
| 617002A35 | 35 | 2 | 30 | 4021343200922 | 87 | 50 | 56 |
| 617002A42 | 42 | 2 | 20 | 4021343200939 | 103 | 60 | 64 |
| 617002A54 | 54 | 2 | 10 | 4021343200946 | 125 | 75 | 80 |
| 617002A76 | 76,1 | 1 | 3 | 4021343335204 | 143 | | 92 |
| 617002A89 | 88,9 | 1 | 2 | 4021343335211 | 165 | | 107 |
| 617002A108 | 108 | 1 | 1 | 4021343335228 | 201 | | 131 |



Catalog-no. and -description
17002AG – Bend 90° with male thread

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | b | z | SW |
|---------------|---------------------|-----|-----|---------------|-----|-----|----|----|
| 617002AG1512 | 15 x 1/2 | 10 | 120 | 4021343200953 | 48 | 84 | 22 | 22 |
| 617002AG1812 | 18 x 1/2 | 10 | 100 | 4021343200960 | 53 | 86 | 27 | 22 |
| 617002AG1834 | 18 x 3/4 | 10 | 80 | 4021343200977 | 52 | 90 | 26 | 30 |
| 617002AG2234 | 22 x 3/4 | 10 | 80 | 4021343200984 | 63 | 100 | 34 | 30 |
| 617002AG281 | 28 x 1 | 5 | 40 | 4021343200991 | 68 | 108 | 39 | 36 |
| 617002AG35114 | 35 x 11/4 | 2 | 20 | 4021343201004 | 87 | 128 | 56 | 46 |
| 617002AG42112 | 42 x 11/2 | 2 | 10 | 4021343201011 | 103 | 149 | 64 | 55 |
| 617002AG542 | 54 x 2 | 2 | 6 | 4021343201028 | 125 | 173 | 80 | 65 |



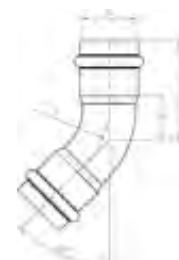
Catalog-no. and -description
17002G – Bend 90° with female thread

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|--------------|----------------------|-----|-----|---------------|----|-----|----|-----|----|
| 617002G1512 | 15 x 1/2 | 10 | 100 | 4021343201035 | 48 | 91 | 22 | 77 | 24 |
| 617002G1834 | 18 x 3/4 | 10 | 70 | 4021343201042 | 53 | 95 | 27 | 80 | 32 |
| 617002G2234 | 22 x 3/4 | 10 | 60 | 4021343201059 | 63 | 105 | 34 | 90 | 32 |
| 617002G281 | 28 x 1 | 5 | 30 | 4021343201066 | 69 | 113 | 39 | 96 | 38 |
| 617002G35114 | 35 x 11/4 | 2 | 20 | 4021343201073 | 87 | 133 | 56 | 113 | 46 |



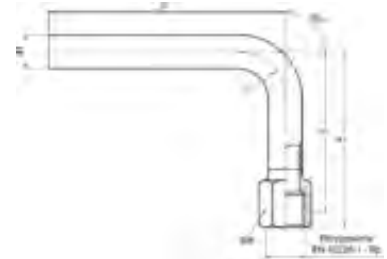
Catalog-no. and -description
17040 – Bend 45° female/male

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | b | z |
|-------------|-----------------|-----|-----|---------------|-----|-----|----|
| 61704015 | 15 | 10 | 250 | 4021343201080 | 37 | 47 | 12 |
| 61704018 | 18 | 10 | 200 | 4021343201097 | 39 | 48 | 14 |
| 61704022 | 22 | 10 | 120 | 4021343201103 | 48 | 56 | 19 |
| 61704028 | 28 | 5 | 80 | 4021343201110 | 53 | 60 | 24 |
| 61704035 | 35 | 2 | 50 | 4021343201127 | 58 | 64 | 27 |
| 61704042 | 42 | 2 | 26 | 4021343201134 | 68 | 79 | 30 |
| 61704054 | 54 | 2 | 14 | 4021343201141 | 83 | 89 | 38 |
| 61704076 | 76,1 | 1 | 5 | 4021343335235 | 89 | 108 | 38 |
| 61704089 | 88,9 | 1 | 3 | 4021343335242 | 101 | 122 | 43 |
| 617040108 | 108 | 1 | 2 | 4021343335259 | 124 | 150 | 54 |



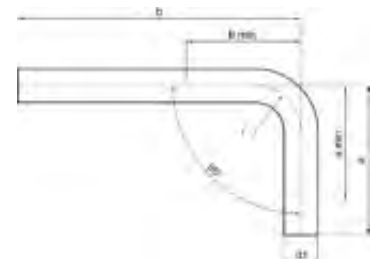
Catalog-no. and -description
17041 – Bend 45° female/female

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 61704115 | 15 | 10 | 250 | 4021343201158 | 37 | 12 |
| 61704118 | 18 | 10 | 200 | 4021343201165 | 39 | 14 |
| 61704122 | 22 | 10 | 120 | 4021343201172 | 48 | 19 |
| 61704128 | 28 | 5 | 80 | 4021343201189 | 53 | 24 |
| 61704135 | 35 | 2 | 50 | 4021343201196 | 58 | 27 |
| 61704142 | 42 | 2 | 26 | 4021343201202 | 68 | 29 |
| 61704154 | 54 | 2 | 14 | 4021343201219 | 83 | 38 |
| 61704176 | 76,1 | 1 | 5 | 4021343335266 | 89 | 38 |
| 61704189 | 88,9 | 1 | 3 | 4021343335273 | 101 | 43 |
| 617041108 | 108 | 1 | 2 | 4021343335280 | 124 | 54 |



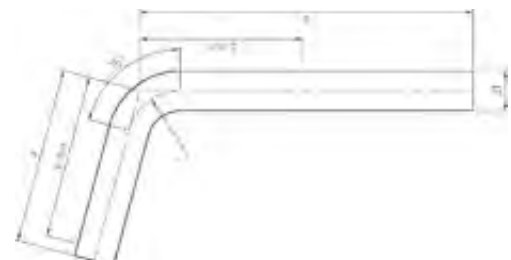
Catalog-no. and -description
9003G – Bend 90° with plain end and female thread

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z | SW |
|-------------|----------------------|-----|-----|---------------|-----|----|----|----|
| 69003G1812 | 18 x 1/2 | 10 | 80 | 4021343149030 | 101 | 70 | 87 | 24 |



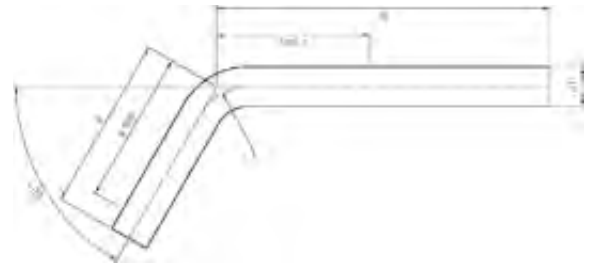
Catalog-no. and -description
9003 – Bend with plain ends 90°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6900315 | 15 | 10 | 100 | 4021343148392 | 62 | 55 | 125 | 55 |
| 6900318 | 18 | 10 | 80 | 4021343148408 | 62 | 57 | 125 | 57 |
| 6900322 | 22 | 10 | 70 | 4021343148415 | 73 | 65 | 150 | 65 |
| 6900328 | 28 | 5 | 30 | 4021343148422 | 85 | 80 | 200 | 80 |
| 6900335 | 35 | 2 | 20 | 4021343148439 | 92 | 92 | 225 | 92 |
| 6900342 | 42 | 2 | 10 | 4021343148446 | 113 | | 250 | 113 |
| 6900354 | 54 | 2 | 6 | 4021343148453 | 131 | | 300 | 131 |



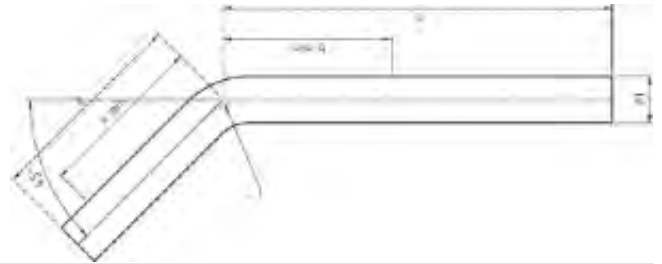
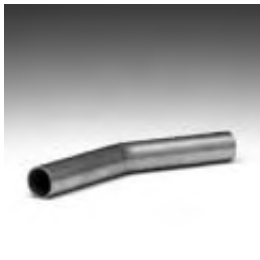
Catalog-no. and -description
9045 – Bend with plain ends 75°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904515 | 15 | 10 | 130 | 4021343155949 | 66 | 55 | 125 | 55 |
| 6904518 | 18 | 10 | 80 | 4021343155956 | 62 | 57 | 125 | 57 |
| 6904522 | 22 | 10 | 60 | 4021343155963 | 75 | 65 | 150 | 65 |
| 6904528 | 28 | 5 | 50 | 4021343155970 | 85 | 76 | 200 | 76 |
| 6904535 | 35 | 2 | 20 | 4021343155987 | 92 | 81 | 225 | 81 |
| 6904542 | 42 | 2 | 10 | 4021343155994 | 113 | 100 | 250 | 100 |
| 6904554 | 54 | 2 | 4 | 4021343156007 | 131 | 120 | 300 | 120 |



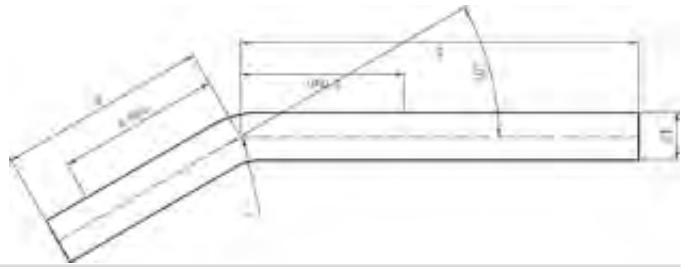
Catalog-no. and -description
9058 – Bend with plain ends 60°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|--------------|-----|-----|---------------|-----|-------|-----|-------|
| 6905815 | 15 | 10 | 100 | 4021343149047 | 66 | 55 | 125 | 55 |
| 6905818 | 18 | 10 | 80 | 4021343149054 | 62 | 57 | 125 | 57 |
| 6905822 | 22 | 10 | 60 | 4021343149061 | 75 | 65 | 150 | 65 |
| 6905828 | 28 | 5 | 40 | 4021343149078 | 85 | 62 | 200 | 62 |
| 6905835 | 35 | 2 | 20 | 4021343149085 | 92 | 71 | 225 | 71 |
| 6905842 | 42 | 2 | 10 | 4021343149092 | 113 | 85 | 250 | 85 |
| 6905854 | 54 | 2 | 4 | 4021343149108 | 131 | 105 | 300 | 105 |



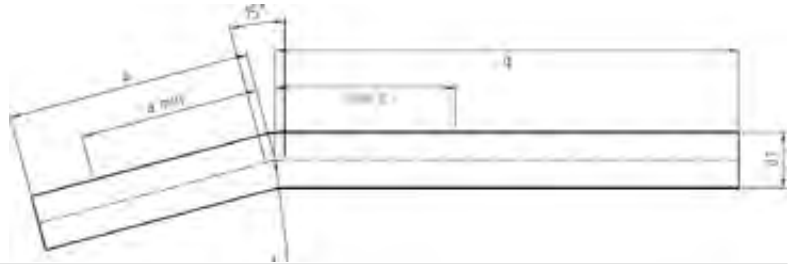
Catalog-no. and -description
9042 – Bend with plain ends 45°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|--------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904215 | 15 | 10 | 100 | 4021343149115 | 66 | 55 | 125 | 55 |
| 6904218 | 18 | 10 | 90 | 4021343149122 | 62 | 57 | 125 | 57 |
| 6904222 | 22 | 10 | 70 | 4021343149139 | 75 | 60 | 150 | 60 |
| 6904228 | 28 | 5 | 40 | 4021343149146 | 85 | 65 | 200 | 62 |
| 6904235 | 35 | 2 | 20 | 4021343149153 | 92 | 70 | 225 | 70 |
| 6904242 | 42 | 2 | 6 | 4021343149160 | 113 | 75 | 250 | 75 |
| 6904254 | 54 | 2 | 24 | 4021343149177 | 131 | 100 | 300 | 100 |



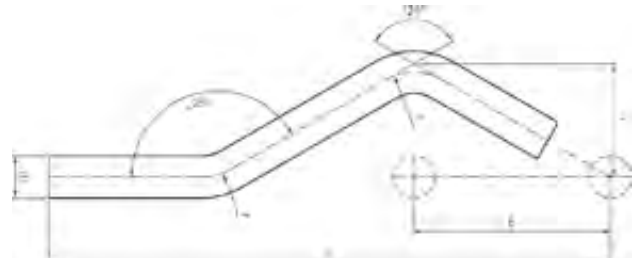
Catalog-no. and -description
9044 – Bend with plain ends 30°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|--------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904415 | 15 | 10 | 100 | 4021343155864 | 66 | 52 | 125 | 52 |
| 6904418 | 18 | 10 | 90 | 4021343155871 | 62 | 55 | 125 | 55 |
| 6904422 | 22 | 10 | 70 | 4021343155888 | 75 | 55 | 150 | 55 |
| 6904428 | 28 | 5 | 40 | 4021343155895 | 85 | 55 | 200 | 55 |
| 6904435 | 35 | 2 | 20 | 4021343155901 | 92 | 55 | 225 | 55 |
| 6904442 | 42 | 2 | 20 | 4021343155918 | 113 | 67 | 250 | 67 |
| 6904454 | 54 | 2 | 20 | 4021343155925 | 131 | 77 | 300 | 77 |



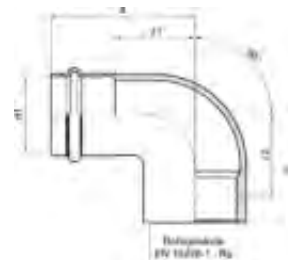
Catalog-no. and -description
9043 – Bend with plain ends 15°

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|--------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904315 | 15 | 10 | 100 | 4021343155789 | 66 | 49 | 125 | 49 |
| 6904318 | 18 | 10 | 90 | 4021343155796 | 62 | 52 | 125 | 52 |
| 6904322 | 22 | 10 | 70 | 4021343155802 | 75 | 52 | 150 | 52 |
| 6904328 | 28 | 5 | 40 | 4021343155819 | 85 | 51 | 200 | 51 |
| 6904335 | 35 | 2 | 20 | 4021343155826 | 92 | 50 | 225 | 50 |
| 6904342 | 42 | 2 | 12 | 4021343155833 | 113 | 55 | 250 | 55 |
| 6904354 | 54 | 1 | 2 | 4021343155840 | 131 | 65 | 300 | 65 |



Catalog-no. and -description
9087 – Crossover

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | b | c |
|-------------|--------------|-----|-----|---------------|-----|----|----|
| 6908715 | 15 | 10 | 120 | 4021343149184 | 200 | 70 | 41 |
| 6908718 | 18 | 10 | 80 | 4021343149191 | 216 | 70 | 50 |
| 6908722 | 22 | 10 | 50 | 4021343149207 | 216 | 78 | 45 |
| 6908728 | 28 | 5 | 40 | 4021343149214 | 244 | 87 | 50 |



Catalog-no. and -description
17090IG – Female elbow 90°

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z1 | z2 |
|---------------|----------------------|-----|-----|---------------|----|----|----|----|
| 617090IG1512 | 15 x 1/2 | 10 | 180 | 4021343201226 | 52 | 31 | 27 | 17 |
| 617090IG1834 | 18 x 3/4 | 10 | 120 | 4021343201233 | 55 | 35 | 30 | 20 |
| 617090IG2234 | 22 x 3/4 | 10 | 100 | 4021343201240 | 56 | 37 | 28 | 22 |
| 617090IG281 | 28 x 1 | 5 | 50 | 4021343201257 | 61 | 43 | 32 | 26 |
| 617090IG35114 | 35 x 1 1/4 | 2 | 30 | 4021343201264 | 67 | 51 | 37 | 31 |



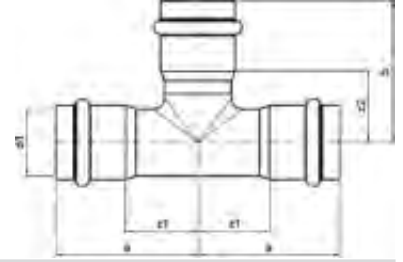
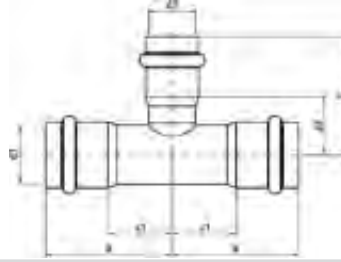
Catalog-no. and -description
17092AG – Male elbow 90°

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | b | z |
|---------------|---------------------|-----|-----|---------------|----|----|----|
| 617092AG1512 | 15 x 1/2 | 10 | 200 | 4021343201271 | 50 | 37 | 25 |
| 617092AG1834 | 18 x 3/4 | 10 | 120 | 4021343201288 | 53 | 43 | 28 |
| 617092AG2234 | 22 x 3/4 | 10 | 100 | 4021343201295 | 54 | 43 | 26 |
| 617092AG281 | 28 x 1 | 5 | 50 | 4021343201301 | 58 | 52 | 29 |
| 617092AG35114 | 35 x 1 1/4 | 2 | 40 | 4021343201318 | 64 | 60 | 34 |



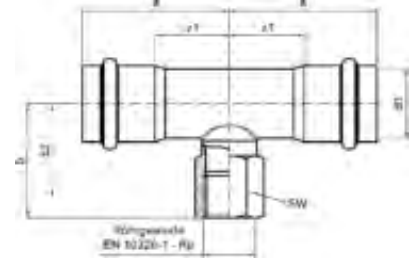
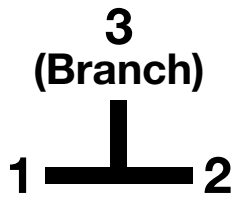
3
(Branch)

1 **2**



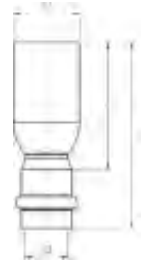
Catalog-no. and -description
17130 – Tee

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | z1 | z2 | z3 |
|----------------|---------------------------|-----|-----|---------------|-----|-----|----|----|----|
| 61713015 | 15 | 10 | 120 | 4021343201325 | 48 | 46 | 22 | 21 | 21 |
| 61713018 | 18 | 10 | 100 | 4021343201332 | 49 | 49 | 24 | 24 | 24 |
| 61713022 | 22 | 10 | 60 | 4021343201349 | 54 | 53 | 26 | 25 | 26 |
| 61713028 | 28 | 5 | 40 | 4021343201356 | 60 | 59 | 30 | 30 | 30 |
| 61713035 | 35 | 2 | 24 | 4021343201363 | 65 | 65 | 35 | 35 | 35 |
| 61713042 | 42 | 2 | 16 | 4021343201370 | 77 | 77 | 39 | 38 | 39 |
| 61713054 | 54 | 2 | 8 | 4021343201387 | 89 | 90 | 45 | 46 | 45 |
| 61713076 | 76,1 | 1 | 3 | 4021343335297 | 108 | 106 | 57 | 55 | 57 |
| 61713089 | 88,9 | 1 | 2 | 4021343335303 | 120 | 120 | 63 | 62 | 63 |
| 617130108 | 108 | 1 | 1 | 4021343335310 | 144 | 144 | 74 | 74 | 74 |
| 617130181515 | 18 x 15 x 15 | 10 | 120 | 4021343201394 | 41 | 41 | 15 | 15 | 15 |
| 617130181518 | 18 x 18 x 15 | 10 | 100 | 4021343201400 | 49 | 53 | 24 | 16 | 24 |
| 617130221515 | 22 x 15 x 15 | 10 | 100 | 4021343201417 | 44 | 44 | 15 | 18 | 15 |
| 617130221818 | 22 x 18 x 18 | 10 | 80 | 4021343201431 | 44 | 44 | 15 | 18 | 15 |
| 617130221522 | 22 x 22 x 15 | 10 | 80 | 4021343201424 | 55 | 51 | 27 | 25 | 27 |
| 617130221822 | 22 x 22 x 18 | 10 | 80 | 4021343201448 | 55 | 49 | 27 | 24 | 27 |
| 617130282222 | 28 x 22 x 22 | 5 | 60 | 4021343201479 | 49 | 49 | 19 | 20 | 19 |
| 617130281528 | 28 x 28 x 15 | 5 | 50 | 4021343201455 | 60 | 54 | 30 | 28 | 30 |
| 617130281828 | 28 x 28 x 18 | 5 | 40 | 4021343201462 | 60 | 53 | 30 | 27 | 30 |
| 617130282228 | 28 x 28 x 22 | 5 | 40 | 4021343201486 | 60 | 56 | 30 | 27 | 30 |
| 617130351535 | 35 x 35 x 15 | 2 | 30 | 4021343201493 | 65 | 58 | 35 | 33 | 35 |
| 617130351835 | 35 x 35 x 18 | 2 | 30 | 4021343201509 | 65 | 55 | 35 | 32 | 35 |
| 617130352235 | 35 x 35 x 22 | 2 | 26 | 4021343201516 | 65 | 59 | 35 | 31 | 35 |
| 617130352835 | 35 x 35 x 28 | 2 | 26 | 4021343201523 | 65 | 62 | 35 | 33 | 35 |
| 617130421842 | 42 x 42 x 18 | 2 | 22 | 4021343201530 | 77 | 60 | 39 | 35 | 39 |
| 617130422242 | 42 x 42 x 22 | 2 | 18 | 4021343201547 | 77 | 63 | 39 | 34 | 39 |
| 617130422842 | 42 x 42 x 28 | 2 | 18 | 4021343201554 | 77 | 64 | 39 | 35 | 39 |
| 617130423542 | 42 x 42 x 35 | 2 | 16 | 4021343201561 | 77 | 67 | 39 | 37 | 39 |
| 617130542254 | 54 x 54 x 22 | 2 | 10 | 4021343201578 | 89 | 69 | 45 | 40 | 45 |
| 617130542854 | 54 x 54 x 28 | 2 | 10 | 4021343201585 | 89 | 70 | 45 | 41 | 45 |
| 617130543554 | 54 x 54 x 35 | 2 | 8 | 4021343201592 | 89 | 74 | 45 | 42 | 45 |
| 617130544254 | 54 x 54 x 42 | 2 | 8 | 4021343201608 | 89 | 81 | 45 | 42 | 45 |
| 617130765476 | 76,1 x 76,1 x 54 | 1 | 4 | 4021343335327 | 108 | 102 | 57 | 57 | 57 |
| 617130897689 | 88,9 x 88,9 x 76,1 | 1 | 2 | 4021343335334 | 120 | 112 | 63 | 62 | 63 |
| 61713010889108 | 108 x 108 x 88,9 | 1 | 1 | 4021343335341 | 144 | 129 | 74 | 72 | 74 |



Catalog-no. and -description
17130G – Female branch tee

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | z1 | z2 | z3 | SW |
|-----------------|---------------------------|-----|-----|---------------|-----|-----|----|----|----|----|
| 617130G151215 | 15 x 15 x 1/2 | 10 | 80 | 4021343201615 | 48 | 45 | 22 | 32 | 22 | 24 |
| 617130G181218 | 18 x 18 x 1/2 | 10 | 80 | 4021343201622 | 49 | 47 | 24 | 34 | 24 | 24 |
| 617130G183418 | 18 x 18 x 3/4 | 10 | 70 | 4021343201639 | 49 | 49 | 24 | 34 | 24 | 32 |
| 617130G221222 | 22 x 22 x 1/2 | 5 | 60 | 4021343201646 | 54 | 48 | 26 | 35 | 26 | 24 |
| 617130G223422 | 22 x 22 x 3/4 | 10 | 50 | 4021343201653 | 54 | 50 | 26 | 35 | 26 | 32 |
| 617130G281228 | 28 x 28 x 1/2 | 5 | 40 | 4021343201660 | 60 | 46 | 30 | 32 | 30 | 24 |
| 617130G283428 | 28 x 28 x 3/4 | 5 | 40 | 4021343201677 | 60 | 54 | 30 | 39 | 30 | 32 |
| 617130G28128 | 28 x 28 x 1 | 5 | 40 | 4021343201684 | 60 | 57 | 30 | 40 | 30 | 38 |
| 617130G351235 | 35 x 35 x 1/2 | 2 | 30 | 4021343201691 | 65 | 49 | 35 | 36 | 35 | 24 |
| 617130G353435 | 35 x 35 x 3/4 | 2 | 30 | 4021343201707 | 65 | 51 | 35 | 36 | 35 | 32 |
| 617130G3511435 | 35 x 35 x 1 1/4 | 2 | 24 | 4021343201714 | 65 | 65 | 35 | 45 | 35 | 46 |
| 617130G421242 | 42 x 42 x 1/2 | 2 | 20 | 4021343201721 | 77 | 54 | 39 | 40 | 39 | 24 |
| 617130G423442 | 42 x 42 x 3/4 | 2 | 20 | 4021343201738 | 77 | 56 | 39 | 41 | 39 | 32 |
| 617130G4211242 | 42 x 42 x 1 1/2 | 2 | 12 | 4021343201745 | 77 | 68 | 39 | 48 | 39 | 55 |
| 617130G541254 | 54 x 54 x 1/2 | 2 | 12 | 4021343201752 | 89 | 60 | 45 | 46 | 45 | 24 |
| 617130G543454 | 54 x 54 x 3/4 | 2 | 12 | 4021343201769 | 89 | 62 | 45 | 47 | 45 | 32 |
| 617130G54254 | 54 x 54 x 2 | 2 | 8 | 4021343201776 | 89 | 80 | 45 | 56 | 45 | 65 |
| 617130G763476 | 76,1 x 76,1 x 3/4 | 1 | 4 | 4021343335358 | 108 | 75 | 57 | 60 | | 32 |
| 617130G76276 | 76,1 x 76,1 x 2 | 1 | 4 | 4021343335365 | 108 | 85 | 57 | 61 | | 65 |
| 617130G893489 | 88,9 x 88,9 x 3/4 | 1 | 4 | 4021343335372 | 120 | 82 | 63 | 67 | | 32 |
| 617130G89289 | 88,9 x 88,9 x 2 | 1 | 4 | 4021343335389 | 120 | 91 | 63 | 67 | | 65 |
| 617130G10834108 | 108 x 108 x 3/4 | 1 | 2 | 4021343335396 | 144 | 91 | 74 | 76 | | 32 |
| 617130G1082108 | 108 x 108 x 2 | 1 | 2 | 4021343335402 | 144 | 101 | 74 | 77 | | 65 |



Catalog-no. and -description

17243 – Reducer

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|
| 6172431815 | 18a x 15 | 10 | 300 | 4021343201783 | 58 | 32 |
| 6172432215 | 22a x 15 | 10 | 200 | 4021343201790 | 73 | 47 |
| 6172432218 | 22a x 18 | 10 | 200 | 4021343201806 | 74 | 48 |
| 6172432815 | 28a x 15 | 5 | 120 | 4021343201813 | 78 | 52 |
| 6172432818 | 28a x 18 | 5 | 100 | 4021343201820 | 79 | 53 |
| 6172432822 | 28a x 22 | 5 | 120 | 4021343201837 | 77 | 48 |
| 6172433518 | 35a x 18 | 2 | 70 | 4021343202490 | 78 | 52 |
| 6172433522 | 35a x 22 | 2 | 70 | 4021343201844 | 84 | 55 |
| 6172433528 | 35a x 28 | 2 | 60 | 4021343201851 | 85 | 55 |
| 6172434222 | 42a x 22 | 2 | 40 | 4021343202506 | 95 | 66 |
| 6172434228 | 42a x 28 | 2 | 40 | 4021343201868 | 97 | 67 |
| 6172434235 | 42a x 35 | 2 | 40 | 4021343201875 | 95 | 64 |
| 6172435428 | 54a x 28 | 2 | 30 | 4021343201882 | 106 | 76 |
| 6172435435 | 54a x 35 | 2 | 30 | 4021343201899 | 106 | 75 |
| 6172435442 | 54a x 42 | 2 | 30 | 4021343201905 | 112 | 73 |
| 6172437654 | 76,1a x 54 | 2 | 16 | 4021343335419 | 141 | 96 |
| 6172438954 | 88,9a x 54 | 2 | 8 | 4021343335426 | 160 | 115 |
| 6172438976 | 88,9a x 76,1 | 2 | 8 | 4021343335433 | 151 | 100 |
| 61724310876 | 88,9a x 76,1 | 2 | 4 | 4021343335457 | 181 | 130 |
| 61724310854 | 108a x 54 | 2 | 4 | 4021343335440 | 180 | 135 |
| 61724310889 | 108a x 88,9 | 2 | 4 | 4021343335464 | 181 | 123 |



Catalog-no. and -description

17243G – Male adaptor

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW |
|--------------|---------------------|-----|-----|---------------|-----|----|-----|
| 617243G1538 | 15 x 3/8 | 10 | 300 | 4021343201912 | 41 | 15 | 19 |
| 617243G1512 | 15 x 1/2 | 10 | 250 | 4021343201929 | 46 | 20 | 24 |
| 617243G1534 | 15 x 3/4 | 10 | 200 | 4021343201936 | 63 | 37 | 30 |
| 617243G1812 | 18 x 1/2 | 10 | 250 | 4021343201943 | 46 | 20 | 24 |
| 617243G1834 | 18 x 3/4 | 10 | 200 | 4021343201950 | 48 | 22 | 30 |
| 617243G2212 | 22 x 1/2 | 10 | 180 | 4021343201967 | 51 | 22 | 27 |
| 617243G2234 | 22 x 3/4 | 10 | 180 | 4021343201974 | 51 | 22 | 30 |
| 617243G221 | 22 x 1 | 10 | 150 | 4021343201981 | 52 | 23 | 36 |
| 617243G2834 | 28 x 3/4 | 5 | 100 | 4021343201998 | 72 | 42 | 30 |
| 617243G281 | 28 x 1 | 5 | 90 | 4021343202001 | 74 | 44 | 36 |
| 617243G351 | 35 x 1 | 2 | 60 | 4021343202018 | 80 | 49 | 36 |
| 617243G35114 | 35 x 1 1/4 | 2 | 40 | 4021343202025 | 84 | 53 | 46 |
| 617243G42112 | 42 x 1 1/2 | 2 | 30 | 4021343202032 | 94 | 55 | 55 |
| 617243G542 | 54 x 2 | 2 | 20 | 4021343202049 | 107 | 62 | 65 |
| 617243G76212 | 76,1 x 2 1/2 | 1 | 8 | 4021343335501 | 117 | 65 | 100 |
| 617243G893 | 88,9 x 3 | 1 | 6 | 4021343335518 | 136 | 78 | 105 |
| 617243G1084 | 108 x 4 | 1 | 4 | 4021343335525 | 155 | 84 | 125 |



Catalog-no. and -description

9246G – Plug-in adaptor, female

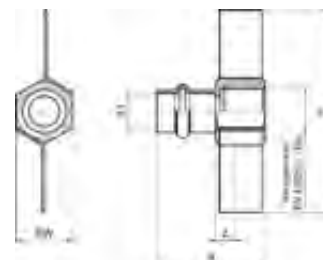
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|----------------------|-----|-----|---------------|----|----|----|
| 69246G1512 | 15a x 1/2 | 10 | 200 | 4021343150333 | 66 | 53 | 24 |
| 69246G1812 | 18a x 1/2 | 10 | 200 | 4021343150340 | 66 | 53 | 24 |
| 69246G1834 | 18a x 3/4 | 10 | 150 | 4021343150357 | 68 | 53 | 32 |
| 69246G2212 | 22a x 1/2 | 10 | 180 | 4021343150364 | 71 | 58 | 24 |
| 69246G2234 | 22a x 3/4 | 10 | 120 | 4021343150371 | 73 | 58 | 32 |
| 69246G2834 | 28a x 3/4 | 5 | 100 | 4021343150388 | 78 | 63 | 32 |



Catalog-no. and -description

17270 – Coupling

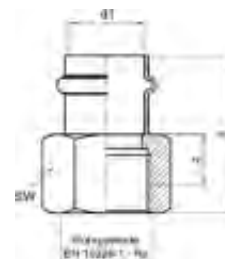
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 61727015 | 15 | 10 | 300 | 4021343202056 | 56 | 6 |
| 61727018 | 18 | 10 | 200 | 4021343202063 | 67 | 17 |
| 61727022 | 22 | 10 | 150 | 4021343202070 | 76 | 20 |
| 61727028 | 28 | 5 | 80 | 4021343202087 | 78 | 19 |
| 61727035 | 35 | 2 | 50 | 4021343202094 | 78 | 17 |
| 61727042 | 42 | 2 | 30 | 4021343202100 | 94 | 18 |
| 61727054 | 54 | 2 | 24 | 4021343202117 | 106 | 18 |
| 61727076 | 76,1 | 1 | 10 | 4021343335471 | 132 | 31 |
| 61727089 | 88,9 | 1 | 6 | 4021343335488 | 145 | 30 |
| 617270108 | 108 | 1 | 4 | 4021343335495 | 170 | 31 |



Catalog-no. and -description

17270F – Female adaptor

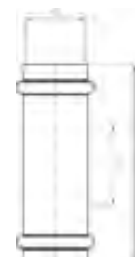
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | h | SW |
|-------------|----------------------|-----|-----|---------------|----|---|----|----|
| 617270F1512 | 15 x 1/2 | 10 | 150 | 4021343202124 | 46 | 7 | 86 | 24 |



Catalog-no. and -description

17270G – Female adaptor

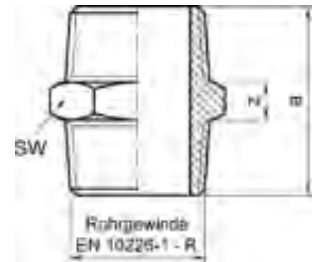
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW |
|--------------|----------------------|-----|-----|---------------|-----|----|----|
| 617270G1512 | 15 x 1/2 | 10 | 200 | 4021343202131 | 46 | 7 | 24 |
| 617270G1534 | 15 x 3/4 | 10 | 180 | 4021343202148 | 49 | 9 | 30 |
| 617270G1812 | 18 x 1/2 | 10 | 200 | 4021343202155 | 47 | 9 | 24 |
| 617270G1834 | 18 x 3/4 | 10 | 170 | 4021343202162 | 49 | 9 | 30 |
| 617270G2212 | 22 x 1/2 | 10 | 170 | 4021343202179 | 50 | 8 | 24 |
| 617270G2234 | 22 x 3/4 | 10 | 150 | 4021343202186 | 52 | 9 | 30 |
| 617270G221 | 22 x 1 | 10 | 120 | 4021343202193 | 55 | 9 | 38 |
| 617270G2834 | 28 x 3/4 | 5 | 100 | 4021343202209 | 76 | 32 | 32 |
| 617270G281 | 28 x 1 | 5 | 80 | 4021343202216 | 79 | 32 | 38 |
| 617270G35114 | 35 x 11/4 | 2 | 36 | 4021343202223 | 89 | 39 | 46 |
| 617270G42112 | 42 x 11/2 | 2 | 28 | 4021343202230 | 98 | 40 | 55 |
| 617270G542 | 54 x 2 | 2 | 20 | 4021343202247 | 107 | 39 | 65 |



Catalog-no. and -description

17270S – Slip coupling

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 617270S15 | 15 | 10 | 200 | 4021343202254 | 78 | 27 |
| 617270S18 | 18 | 10 | 150 | 4021343202261 | 78 | 27 |
| 617270S22 | 22 | 10 | 100 | 4021343202278 | 84 | 27 |
| 617270S28 | 28 | 5 | 80 | 4021343202285 | 96 | 37 |
| 617270S35 | 35 | 2 | 50 | 4021343202292 | 98 | 37 |
| 617270S42 | 42 | 2 | 40 | 4021343202308 | 114 | 37 |
| 617270S54 | 54 | 2 | 20 | 4021343202315 | 131 | 42 |
| 617270S76 | 76,1 | 1 | 10 | 4021343335532 | 148 | 47 |
| 617270S89 | 88,9 | 1 | 4 | 4021343335549 | 161 | 46 |
| 617270S108 | 108 | 1 | 3 | 4021343335556 | 210 | 71 |



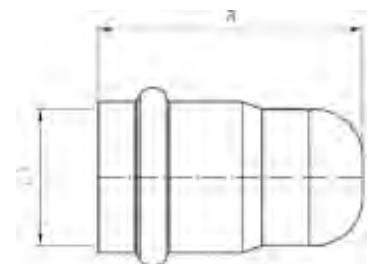
Catalog-no. and -description
9280 – Double nipple, male

| Article-no. | Dimension R | Bag | Box | EAN code | a | SW |
|-------------|-------------|-----|-----|---------------|----|----|
| 6928012 | 1/2 | 10 | 230 | 4021343150517 | 34 | 22 |
| 6928034 | 3/4 | 10 | 140 | 4021343150524 | 39 | 30 |
| 692801 | 1 | 5 | 120 | 4021343150531 | 45 | 36 |



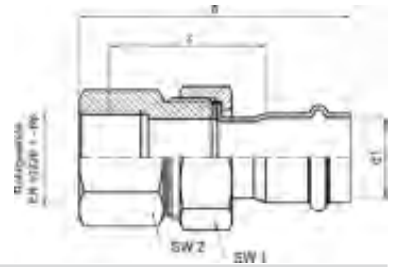
Catalog-no. and -description
9280G – Plug-in adaptor, male

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | SW |
|-------------|------------------|-----|-----|---------------|----|----|
| 69280G1512 | 15a x 1/2 | 10 | 200 | 4021343150272 | 59 | 22 |
| 69280G1812 | 18a x 1/2 | 10 | 150 | 4021343150289 | 59 | 22 |
| 69280G1834 | 18a x 3/4 | 10 | 180 | 4021343150296 | 63 | 30 |
| 69280G2212 | 22a x 1/2 | 10 | 120 | 4021343150302 | 64 | 24 |
| 69280G2234 | 22a x 3/4 | 10 | 100 | 4021343150319 | 68 | 30 |
| 69280G281 | 28a x 1 | 5 | 100 | 4021343150326 | 76 | 36 |



Catalog-no. and -description
17301 – Endcap

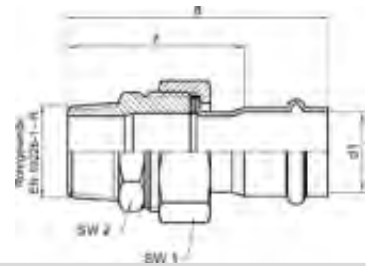
| Article-no. | Dimension d1 | Bag | Box | EAN code | a |
|-------------|--------------|-----|-----|---------------|----|
| 61730115 | 15 | 10 | 400 | 4021343202322 | 47 |
| 61730118 | 18 | 10 | 300 | 4021343202339 | 47 |
| 61730122 | 22 | 10 | 200 | 4021343202346 | 51 |
| 61730128 | 28 | 5 | 150 | 4021343202353 | 54 |
| 61730135 | 35 | 2 | 80 | 4021343202360 | 57 |
| 61730142 | 42 | 2 | 50 | 4021343202377 | 68 |
| 61730154 | 54 | 2 | 30 | 4021343202384 | 82 |



Catalog-no. and -description

17330GMVA – Union, female, flat sealing, stainless steel nut

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-----------------|----------------------|-----|-----|---------------|-----|----|-----|-----|
| 617330GMVA1512 | 15 x 1/2 | 5 | 120 | 4021343202513 | 93 | 53 | 27 | 24 |
| 617330GMVA1534 | 15 x 3/4 | 5 | 100 | 4021343202520 | 94 | 53 | 32 | 30 |
| 617330GMVA1834 | 18 x 3/4 | 5 | 80 | 4021343202537 | 98 | 57 | 32 | 30 |
| 617330GMVA2234 | 22 x 3/4 | 5 | 50 | 4021343202544 | 104 | 60 | 38 | 32 |
| 617330GMVA221 | 22 x 1 | 5 | 50 | 4021343202551 | 107 | 60 | 38 | 38 |
| 617330GMVA2834 | 28 x 3/4 | 5 | 50 | 4021343202568 | 114 | 69 | 50 | 32 |
| 617330GMVA281 | 28 x 1 | 5 | 40 | 4021343202575 | 118 | 71 | 40 | 41 |
| 617330GMVA35114 | 35 x 11/4 | 2 | 30 | 4021343202582 | 113 | 62 | 55 | 46 |
| 617330GMVA42112 | 42 x 11/2 | 2 | 20 | 4021343202599 | 115 | 57 | 58 | 55 |
| 617330GMVA542 | 54 x 2 | 2 | 12 | 4021343202605 | 126 | 57 | 75 | 70 |



Catalog-no. and -description

17333GMVA – Union, male, flat sealing, stainless steel nut

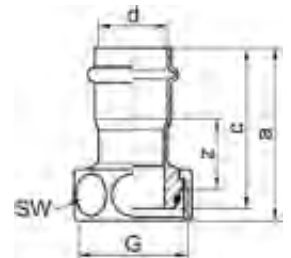
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-----------------|---------------------|-----|-----|---------------|-----|----|-----|-----|
| 617333GMVA1512 | 15 x 1/2 | 5 | 150 | 4021343202612 | 90 | 63 | 30 | 27 |
| 617333GMVA1534 | 15 x 3/4 | 5 | 120 | 4021343202629 | 91 | 64 | 30 | 30 |
| 617333GMVA1812 | 18 x 1/2 | 5 | 100 | 4021343202636 | 94 | 68 | 30 | 30 |
| 617333GMVA2234 | 22 x 3/4 | 5 | 60 | 4021343202643 | 101 | 71 | 38 | 36 |
| 617333GMVA281 | 28 x 1 | 5 | 50 | 4021343202650 | 115 | 85 | 50 | 36 |
| 617333GMVA35114 | 35 x 11/4 | 2 | 40 | 4021343202667 | 124 | 92 | 55 | 46 |
| 617333GMVA42112 | 42 x 11/2 | 2 | 20 | 4021343202674 | 126 | 87 | 58 | 55 |
| 617333GMVA542 | 54 x 2 | 2 | 12 | 4021343202681 | 138 | 93 | 75 | 70 |



Catalog-no. and -description

17359M – Union adaptor, flat sealing, stainless steel nut

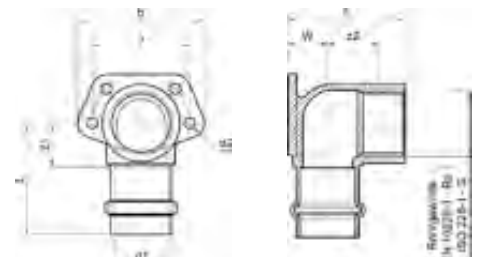
| Article-no. | Dimension d1 x G | Bag | Box | EAN code | a | c | z | SW2 |
|--------------|---------------------|-----|-----|---------------|----|----|----|-----|
| 617359M1512 | 15 x 1/2 | 5 | 250 | 4021343202698 | 63 | 55 | 29 | 24 |
| 617359M1534 | 15 x 3/4 | 5 | 200 | 4021343202704 | 61 | 51 | 25 | 30 |
| 617359M1834 | 18 x 3/4 | 5 | 200 | 4021343202711 | 65 | 55 | 29 | 30 |
| 617359M221 | 22 x 1 | 5 | 130 | 4021343202728 | 72 | 60 | 31 | 38 |
| 617359M28114 | 28 x 1 1/4 | 5 | 50 | 4021343202735 | 85 | 70 | 40 | 50 |
| 617359M35112 | 35 x 1 1/2 | 5 | 50 | 4021343202742 | 85 | 71 | 40 | 55 |
| 617359M42134 | 42 x 1 3/4 | 2 | 34 | 4021343202759 | 93 | 75 | 36 | 58 |
| 617359M54238 | 54 x 2 3/8 | 2 | 20 | 4021343202766 | 96 | 78 | 33 | 75 |



Catalog-no. and -description

17360G – Union adaptor, conical sealing, stainless steel nut

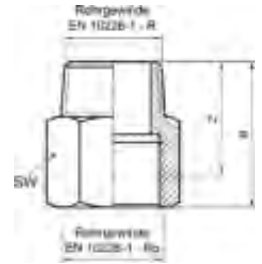
| Article-no. | Dimension d x G | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|----|----|-----|-----|
| 6173601578 | 15 x 7/8 | 5 | 150 | 4021343219009 | 57 | 53 | 21 | 34 |
| 61736022118 | 22 x 1 1/8 | 5 | 100 | 4021343219016 | 66 | 61 | 25 | 40 |
| 61736028138 | 28 x 1 3/8 | 5 | 50 | 4021343219030 | 71 | 66 | 28 | 48 |



Catalog-no. and -description

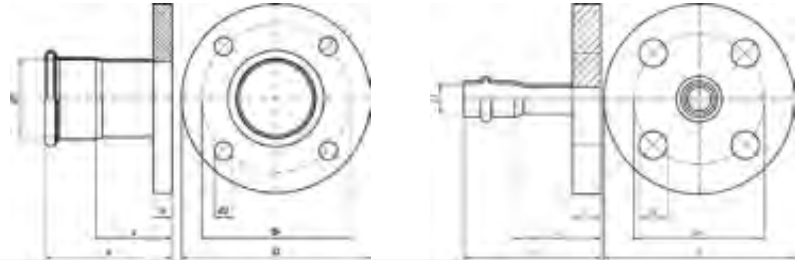
17472G – Wall plate elbow, with universal flange

| Article-no. | Dimension d1 x Rp / G | Bag | Box | EAN code | a | b | c | z1 | z2 | L | W | d2 |
|-------------|--------------------------|-----|-----|---------------|----|----|----|----|----|----|----|----|
| 617472G1512 | 15 x 1/2 | 10 | 90 | 4021343202391 | 40 | 55 | 40 | 15 | 14 | 40 | 13 | 5 |
| 617472G1812 | 18 x 1/2 | 10 | 80 | 4021343202407 | 40 | 55 | 46 | 15 | 17 | 40 | 16 | 5 |
| 617472G2234 | 22 x 3/4 | 10 | 60 | 4021343202414 | 46 | 55 | 47 | 18 | 16 | 46 | 16 | 5 |



Catalog-no. and -description
9370G – Hexagon nipple

| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 69370G1212 | 1/2 x 1/2 | 10 | 200 | 4021343150487 | 39 | 31 | 24 |
| 69370G3434 | 3/4 x 3/4 | 5 | 120 | 4021343150494 | 42 | 33 | 32 |
| 69370G11 | 1 x 1 | 5 | 100 | 4021343150500 | 48 | 38 | 38 |



Catalog-no. and -description
17-VA-PF – Crimping flange, PN 5

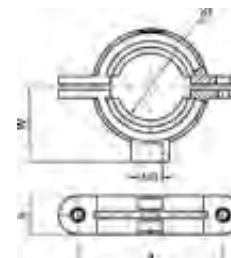
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z | h | dk | d2 | D | Az |
|-------------|---------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 617VAPF15 | DN 12 / 15 mm | 1 | 25 | 4021343202421 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 617VAPF18 | DN 15 / 18 mm | 1 | 20 | 4021343202438 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 617VAPF22 | DN 20 / 22 mm | 1 | 16 | 4021343202445 | 69 | 40 | 14 | 75 | 14 | 105 | 4 |
| 617VAPF28 | DN 25 / 28 mm | 1 | 14 | 4021343202452 | 75 | 45 | 16 | 85 | 14 | 115 | 4 |
| 617VAPF35 | DN 32 / 35 mm | 1 | 10 | 4021343202469 | 78 | 47 | 16 | 100 | 18 | 140 | 4 |
| 617VAPF42 | DN 40 / 42 mm | 1 | 8 | 4021343202476 | 87 | 48 | 16 | 110 | 18 | 150 | 4 |
| 617VAPF54 | DN 50 / 54 mm | 1 | 5 | 4021343202483 | 100 | 55 | 18 | 125 | 18 | 165 | 4 |
| 617VAPF76 | DN 65 / 76,1 mm | 1 | 2 | 4021343335563 | 124 | 73 | 18 | 145 | 18 | 185 | 4 |
| 617VAPF89 | DN 80/ 88,9 mm | 1 | 2 | 4021343335570 | 137 | 79 | 18 | 160 | 18 | 200 | 8 |
| 617VAPF108 | DN 100/ 108 mm | 1 | 1 | 4021343335587 | 162 | 92 | 20 | 180 | 18 | 220 | 8 |



Catalog-no. and -description

FL-D – Flange sealing, asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|--------------|-----|-----|---------------|
| 1D15 | 15 | | 240 | 4021343001017 |
| 1D20 | 20 | | 200 | 4021343001048 |
| 1D25 | 25 | | 160 | 4021343001093 |
| 1D32 | 32 | | 120 | 4021343001123 |
| 1D40 | 40 | | 100 | 4021343001154 |
| 1D50 | 50 | | 120 | 4021343001161 |



Catalog-no. and -description

9918 – Pipe ring with sound insulation

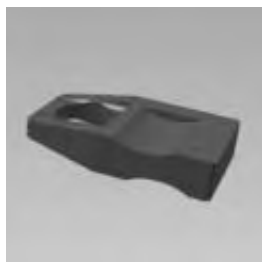
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | W |
|-------------|-------------|-----|-----|---------------|----|----|----|
| 6991812 | 12 | 10 | 400 | 4021343155291 | 44 | 18 | 23 |
| 6991815 | 15 | 10 | 300 | 4021343150968 | 47 | 18 | 25 |
| 6991818 | 18 | 10 | 200 | 4021343150975 | 50 | 18 | 26 |
| 6991822 | 22 | 10 | 180 | 4021343150982 | 54 | 18 | 28 |
| 6991828 | 28 | 5 | 150 | 4021343150999 | 60 | 18 | 31 |
| 6991835 | 35 | 2 | 100 | 4021343151002 | 67 | 18 | 35 |
| 6991842 | 42 | 2 | 100 | 4021343151019 | 74 | 18 | 38 |
| 6991854 | 54 | 2 | 80 | 4021343151026 | 86 | 18 | 44 |



Catalog-no. and -description

4981 – Plastic measure tool for NiroSan®-Press, with bottle opener and water level, 15 - 54 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|-------------|-----|-----|---------------|
| 84981 | 15-54 mm | | 30 | 4021343142673 |



Catalog-no. and -description

4989 – Plastic measure tool for NiroSan-Press, with bottle opener and water level, 64 and 67 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84989 | 64 + 67 mm | | | 4021343356889 |

SANHA[®]

NiroSan[®]-Press Gas

Stainless steel (316L) pressfittings for the
gas installation
Series 17000

SYSTEM TECHNOLOGY

NiroSan®-Press Industry
Stainless steel (316L)
pressfittings for the industrial
and high temperature
installation

Series 18000



AT / 2001-02-1062-01



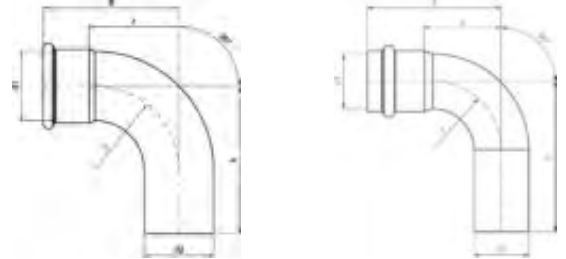
1005R01F4P5-apr



HK / W / 0403 / 01 / 99



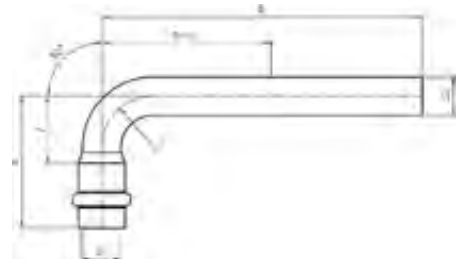
G 4040057



Catalog-no. and -description

18001A – Bend 90° female/male

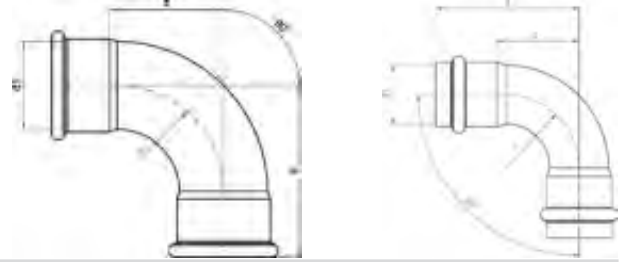
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|-----|
| 618001A15 | 15 | 10 | 200 | 4021343165825 | 48 | 60 | 22 |
| 618001A18 | 18 | 10 | 150 | 4021343165832 | 53 | 62 | 27 |
| 618001A22 | 22 | 10 | 100 | 4021343165849 | 63 | 72 | 34 |
| 618001A28 | 28 | 5 | 60 | 4021343165856 | 68 | 77 | 39 |
| 618001A35 | 35 | 2 | 30 | 4021343165863 | 87 | 93 | 56 |
| 618001A42 | 42 | 2 | 20 | 4021343165870 | 103 | 113 | 64 |
| 618001A54 | 54 | 2 | 10 | 4021343165887 | 125 | 131 | 80 |
| 618001A76 | 76,1 | 1 | 3 | 4021343200557 | 143 | 162 | 92 |
| 618001A89 | 88,9 | 1 | 2 | 4021343200564 | 165 | 186 | 107 |
| 618001A108 | 108 | 1 | 1 | 4021343203404 | 201 | 231 | 131 |



Catalog-no. and -description

18001L – Bend 90° female/male - long

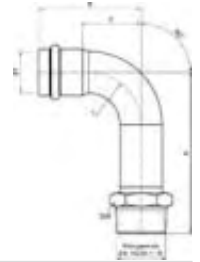
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|----|
| 618001L15 | 15 | 10 | 150 | 4021343159947 | 52 | 125 | 26 |
| 618001L18 | 18 | 10 | 100 | 4021343159954 | 60 | 125 | 34 |
| 618001L22 | 22 | 10 | 60 | 4021343159961 | 63 | 150 | 34 |
| 618001L28 | 28 | 5 | 30 | 4021343159978 | 75 | 200 | 45 |
| 618001L35 | 35 | 2 | 16 | 4021343159985 | 87 | 225 | 56 |
| 618001L42 | 42 | 2 | 10 | 4021343159992 | 103 | 250 | 64 |
| 618001L54 | 54 | 2 | 6 | 4021343160004 | 125 | 300 | 80 |



Catalog-no. and -description

18002A – Bend 90° female/female

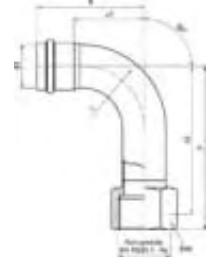
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|-----|
| 618002A15 | 15 | 10 | 200 | 4021343159879 | 48 | 22 |
| 618002A18 | 18 | 10 | 150 | 4021343159886 | 53 | 27 |
| 618002A22 | 22 | 10 | 100 | 4021343159893 | 63 | 34 |
| 618002A28 | 28 | 5 | 60 | 4021343159909 | 68 | 39 |
| 618002A35 | 35 | 2 | 30 | 4021343159916 | 87 | 56 |
| 618002A42 | 42 | 2 | 20 | 4021343159923 | 103 | 64 |
| 618002A54 | 54 | 2 | 10 | 4021343159930 | 125 | 80 |
| 618002A76 | 76,1 | 1 | 3 | 4021343194030 | 143 | 92 |
| 618002A89 | 88,9 | 1 | 2 | 4021343200540 | 165 | 107 |
| 618002A108 | 108 | 1 | 1 | 4021343195945 | 201 | 131 |



Catalog-no. and -description

18002AG – Bend 90° with male thread

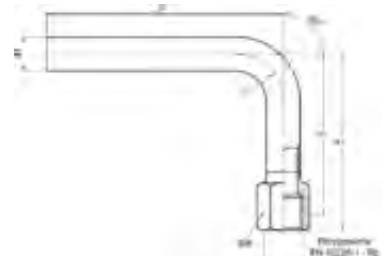
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | b | z | SW |
|---------------|---------------------|-----|-----|---------------|-----|-----|----|----|
| 618002AG1512 | 15 x 1/2 | 10 | 120 | 4021343160240 | 48 | 84 | 22 | 22 |
| 618002AG1812 | 18 x 1/2 | 10 | 100 | 4021343160257 | 53 | 86 | 27 | 22 |
| 618002AG1834 | 18 x 3/4 | 10 | 80 | 4021343160264 | 52 | 90 | 26 | 30 |
| 618002AG2234 | 22 x 3/4 | 10 | 80 | 4021343160271 | 63 | 100 | 34 | 30 |
| 618002AG281 | 28 x 1 | 5 | 40 | 4021343164385 | 68 | 108 | 39 | 36 |
| 618002AG35114 | 35 x 1 1/4 | 2 | 20 | 4021343160288 | 87 | 128 | 56 | 46 |
| 618002AG42112 | 42 x 1 1/2 | 2 | 10 | 4021343160295 | 103 | 149 | 64 | 55 |
| 618002AG542 | 54 x 2 | 2 | 6 | 4021343160301 | 125 | 173 | 80 | 65 |



Catalog-no. and -description

18002G – Bend 90° with female thread

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|--------------|----------------------|-----|-----|---------------|----|-----|----|-----|----|
| 618002G1512 | 15 x 1/2 | 10 | 100 | 4021343160196 | 48 | 91 | 22 | 77 | 24 |
| 618002G1834 | 18 x 3/4 | 10 | 70 | 4021343160202 | 53 | 95 | 27 | 80 | 32 |
| 618002G2234 | 22 x 3/4 | 10 | 60 | 4021343160219 | 63 | 105 | 34 | 90 | 32 |
| 618002G281 | 28 x 1 | 5 | 30 | 4021343160226 | 69 | 113 | 39 | 96 | 38 |
| 618002G35114 | 35 x 1 1/4 | 2 | 20 | 4021343160233 | 87 | 133 | 56 | 113 | 46 |



Catalog-no. and -description

9003G – Bend 90° with plain end and female thread

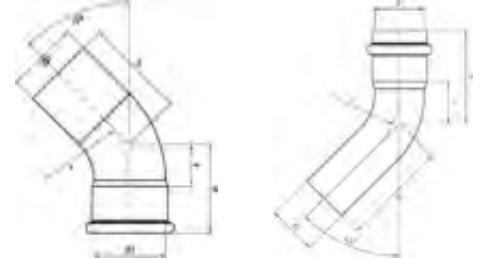
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z | SW |
|-------------|----------------------|-----|-----|---------------|-----|----|----|----|
| 69003G1812 | 18 x 1/2 | 10 | 80 | 4021343149030 | 101 | 70 | 87 | 24 |



Catalog-no. and -description

18002M – Bend 90° with union nut

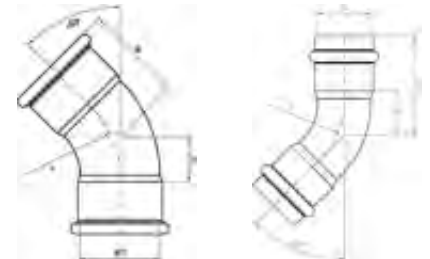
| Article-no. | Dimension d1 x G | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|--------------|---------------------|-----|-----|---------------|----|----|----|----|----|
| 618002M1534 | 15 x 3/4 | 10 | 100 | 4021343160011 | 48 | 65 | 23 | 55 | 30 |
| 618002M1834 | 18 x 3/4 | 10 | 100 | 4021343160028 | 53 | 69 | 28 | 59 | 30 |
| 618002M221 | 22 x 1 | 10 | 50 | 4021343160035 | 63 | 80 | 35 | 68 | 38 |
| 618002M28114 | 28 x 1 1/4 | 5 | 40 | 4021343160042 | 69 | 88 | 40 | 73 | 50 |



Catalog-no. and -description

18040 – Bend 45° female/male

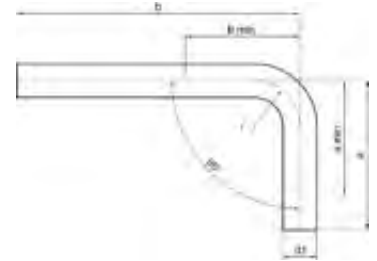
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | b | z |
|-------------|--------------|-----|-----|---------------|-----|-----|----|
| 61804015 | 15 | 10 | 250 | 4021343160127 | 37 | 47 | 12 |
| 61804018 | 18 | 10 | 200 | 4021343160134 | 39 | 48 | 14 |
| 61804022 | 22 | 10 | 120 | 4021343160141 | 48 | 56 | 19 |
| 61804028 | 28 | 5 | 80 | 4021343160158 | 53 | 60 | 24 |
| 61804035 | 35 | 2 | 50 | 4021343160165 | 58 | 64 | 27 |
| 61804042 | 42 | 2 | 26 | 4021343160172 | 68 | 79 | 30 |
| 61804054 | 54 | 2 | 14 | 4021343160189 | 83 | 89 | 38 |
| 61804076 | 76,1 | 1 | 5 | 4021343195853 | 89 | 108 | 38 |
| 61804089 | 88,9 | 1 | 3 | 4021343200588 | 101 | 122 | 43 |
| 618040108 | 108 | 1 | 2 | 4021343203770 | 124 | 150 | 54 |



Catalog-no. and -description

18041 – Bend 45° female/female

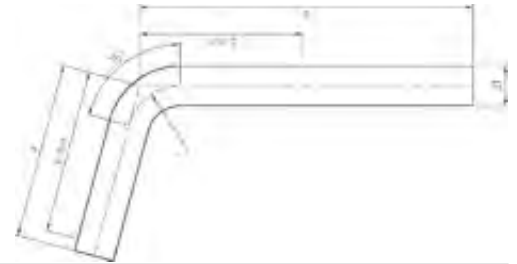
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|--------------|-----|-----|---------------|-----|----|
| 61804115 | 15 | 10 | 250 | 4021343160059 | 37 | 12 |
| 61804118 | 18 | 10 | 200 | 4021343160066 | 39 | 14 |
| 61804122 | 22 | 10 | 120 | 4021343160073 | 48 | 19 |
| 61804128 | 28 | 5 | 80 | 4021343160080 | 53 | 24 |
| 61804135 | 35 | 2 | 50 | 4021343160097 | 58 | 27 |
| 61804142 | 42 | 2 | 26 | 4021343160103 | 68 | 29 |
| 61804154 | 54 | 2 | 14 | 4021343160110 | 83 | 38 |
| 61804176 | 76,1 | 1 | 5 | 4021343195860 | 89 | 38 |
| 61804189 | 88,9 | 1 | 3 | 4021343200571 | 101 | 43 |
| 618041108 | 108 | 1 | 2 | 4021343204074 | 124 | 54 |



Catalog-no. and -description

9003 – Bend with plain ends 90°

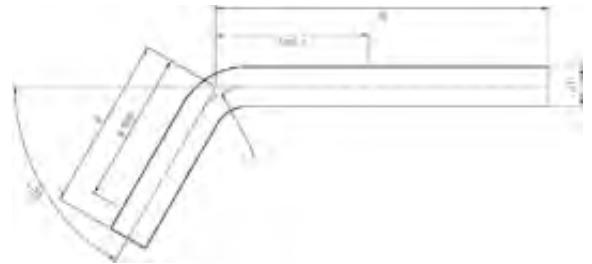
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|--------------|-----|-----|---------------|-----|-------|-----|-------|
| 6900315 | 15 | 10 | 100 | 4021343148392 | 62 | 55 | 125 | 55 |
| 6900318 | 18 | 10 | 80 | 4021343148408 | 62 | 57 | 125 | 57 |
| 6900322 | 22 | 10 | 70 | 4021343148415 | 73 | 65 | 150 | 65 |
| 6900328 | 28 | 5 | 30 | 4021343148422 | 85 | 80 | 200 | 80 |
| 6900335 | 35 | 2 | 20 | 4021343148439 | 92 | 92 | 225 | 92 |
| 6900342 | 42 | 2 | 10 | 4021343148446 | 113 | | 250 | 113 |
| 6900354 | 54 | 2 | 6 | 4021343148453 | 131 | | 300 | 131 |



Catalog-no. and -description

9045 – Bend with plain ends 75°

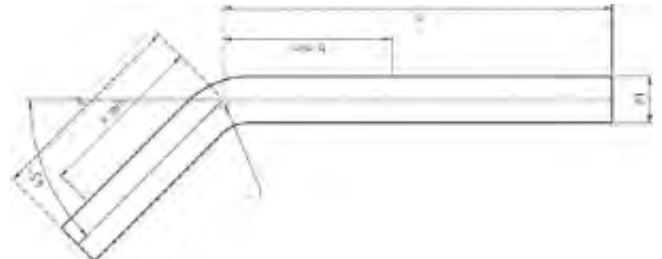
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|--------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904515 | 15 | 10 | 130 | 4021343155949 | 66 | 55 | 125 | 55 |
| 6904518 | 18 | 10 | 80 | 4021343155956 | 62 | 57 | 125 | 57 |
| 6904522 | 22 | 10 | 60 | 4021343155963 | 75 | 65 | 150 | 65 |
| 6904528 | 28 | 5 | 50 | 4021343155970 | 85 | 76 | 200 | 76 |
| 6904535 | 35 | 2 | 20 | 4021343155987 | 92 | 81 | 225 | 81 |
| 6904542 | 42 | 2 | 10 | 4021343155994 | 113 | 100 | 250 | 100 |
| 6904554 | 54 | 2 | 4 | 4021343156007 | 131 | 120 | 300 | 120 |



Catalog-no. and -description

9058 – Bend with plain ends 60°

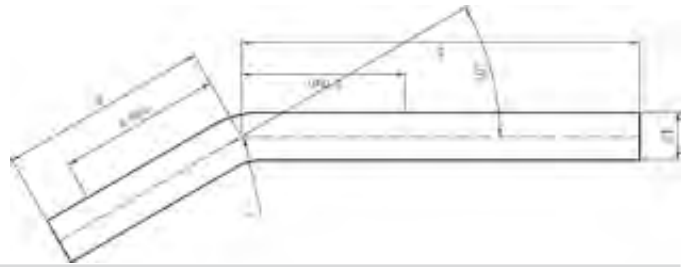
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6905815 | 15 | 10 | 100 | 4021343149047 | 66 | 55 | 125 | 55 |
| 6905818 | 18 | 10 | 80 | 4021343149054 | 62 | 57 | 125 | 57 |
| 6905822 | 22 | 10 | 60 | 4021343149061 | 75 | 65 | 150 | 65 |
| 6905828 | 28 | 5 | 40 | 4021343149078 | 85 | 62 | 200 | 62 |
| 6905835 | 35 | 2 | 20 | 4021343149085 | 92 | 71 | 225 | 71 |
| 6905842 | 42 | 2 | 10 | 4021343149092 | 113 | 85 | 250 | 85 |
| 6905854 | 54 | 2 | 4 | 4021343149108 | 131 | 105 | 300 | 105 |
| 6905876 | 76,1 | 1 | 6 | 4021343177248 | 162 | 130 | 350 | 130 |
| 6905889 | 88,9 | 1 | 3 | 4021343177255 | 185 | 150 | 350 | 150 |
| 69058108 | 108 | 1 | 1 | 4021343177262 | 231 | 160 | 350 | 160 |



Catalog-no. and -description

9042 – Bend with plain ends 45°

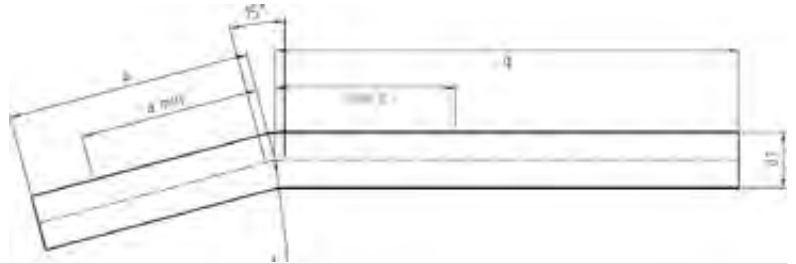
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-----------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904215 | 15 | 10 | 100 | 4021343149115 | 66 | 55 | 125 | 55 |
| 6904218 | 18 | 10 | 90 | 4021343149122 | 62 | 57 | 125 | 57 |
| 6904222 | 22 | 10 | 70 | 4021343149139 | 75 | 60 | 150 | 60 |
| 6904228 | 28 | 5 | 40 | 4021343149146 | 85 | 62 | 200 | 62 |
| 6904235 | 35 | 2 | 20 | 4021343149153 | 92 | 70 | 225 | 70 |
| 6904242 | 42 | 2 | 6 | 4021343149160 | 113 | 75 | 250 | 75 |
| 6904254 | 54 | 2 | 24 | 4021343149177 | 131 | 100 | 300 | 100 |



Catalog-no. and -description

9044 – Bend with plain ends 30°

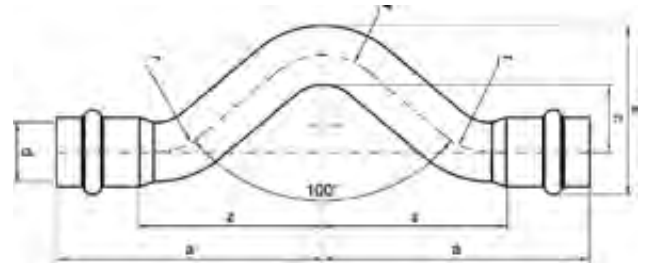
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|--------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904415 | 15 | 10 | 100 | 4021343155864 | 66 | 52 | 125 | 52 |
| 6904418 | 18 | 10 | 90 | 4021343155871 | 62 | 55 | 125 | 55 |
| 6904422 | 22 | 10 | 70 | 4021343155888 | 75 | 55 | 150 | 55 |
| 6904428 | 28 | 5 | 40 | 4021343155895 | 85 | 55 | 200 | 55 |
| 6904435 | 35 | 2 | 20 | 4021343155901 | 92 | 55 | 225 | 55 |
| 6904442 | 42 | 2 | 20 | 4021343155918 | 113 | 67 | 250 | 67 |
| 6904454 | 54 | 2 | 20 | 4021343155925 | 131 | 77 | 300 | 77 |
| 6904476 | 76,1 | 1 | 6 | 4021343177170 | 162 | 130 | 350 | 130 |
| 6904489 | 88,9 | 1 | 4 | 4021343177187 | 186 | 150 | 350 | 150 |
| 69044108 | 108 | 1 | 4 | 4021343177194 | 231 | 160 | 350 | 160 |



Catalog-no. and -description

9043 – Bend with plain ends 15°

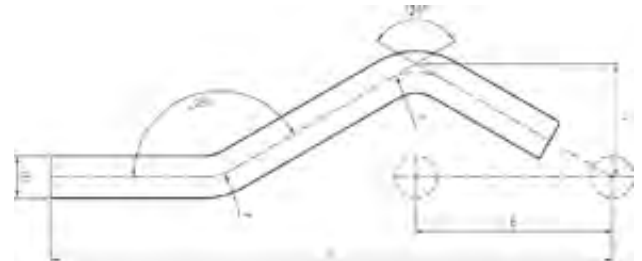
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | a min | b | b min |
|-------------|--------------|-----|-----|---------------|-----|-------|-----|-------|
| 6904315 | 15 | 10 | 100 | 4021343155789 | 66 | 49 | 125 | 49 |
| 6904318 | 18 | 10 | 90 | 4021343155796 | 62 | 52 | 125 | 52 |
| 6904322 | 22 | 10 | 70 | 4021343155802 | 75 | 52 | 150 | 52 |
| 6904328 | 28 | 5 | 40 | 4021343155819 | 85 | 51 | 200 | 51 |
| 6904335 | 35 | 2 | 20 | 4021343155826 | 92 | 50 | 225 | 50 |
| 6904342 | 42 | 2 | 12 | 4021343155833 | 113 | 55 | 250 | 55 |
| 6904354 | 54 | 1 | 2 | 4021343155840 | 131 | 65 | 300 | 65 |
| 6904376 | 76,1 | 1 | 6 | 4021343177217 | 162 | 130 | 350 | 130 |
| 6904389 | 88,9 | 1 | 4 | 4021343177224 | 186 | 150 | 350 | 150 |
| 69043108 | 108 | 1 | 1 | 4021343177231 | 231 | 160 | 350 | 160 |



Catalog-no. and -description

18085 – Full crossover

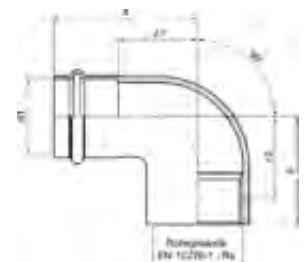
| Article-no. | Dimension d | Bag | Box | EAN code | a | c | h | z |
|-------------|----------------|-----|-----|---------------|-----|----|---|----|
| 61808515 | 15 | 10 | 120 | 4021343171666 | 79 | 21 | 8 | 53 |
| 61808518 | 18 | 10 | 80 | 4021343171673 | 81 | 21 | 8 | 55 |
| 61808522 | 22 | 10 | 60 | 4021343171680 | 93 | 26 | 7 | 64 |
| 61808528 | 28 | 5 | 30 | 4021343171697 | 105 | 28 | 9 | 84 |



Catalog-no. and -description

9087 – Crossover

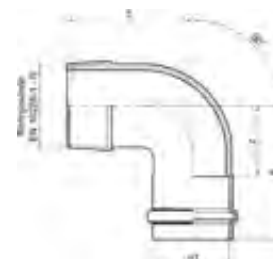
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | b | c |
|-------------|-----------------|-----|-----|---------------|-----|----|----|
| 6908715 | 15 | 10 | 120 | 4021343149184 | 200 | 70 | 41 |
| 6908718 | 18 | 10 | 80 | 4021343149191 | 216 | 70 | 50 |
| 6908722 | 22 | 10 | 50 | 4021343149207 | 216 | 78 | 45 |
| 6908728 | 28 | 5 | 40 | 4021343149214 | 244 | 87 | 50 |



Catalog-no. and -description

18090IG – Female elbow 90°

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z1 | z2 |
|---------------|----------------------|-----|-----|---------------|----|----|----|----|
| 618090IG1512 | 15 x 1/2 | 10 | 180 | 4021343189296 | 52 | 31 | 27 | 17 |
| 618090IG1834 | 18 x 3/4 | 10 | 120 | 4021343189302 | 55 | 35 | 30 | 20 |
| 618090IG2234 | 22 x 3/4 | 10 | 100 | 4021343189319 | 56 | 37 | 28 | 22 |
| 618090IG281 | 28 x 1 | 5 | 50 | 4021343189326 | 61 | 43 | 32 | 26 |
| 618090IG35114 | 35 x 1 1/4 | 2 | 30 | 4021343189333 | 67 | 51 | 37 | 31 |



Catalog-no. and -description

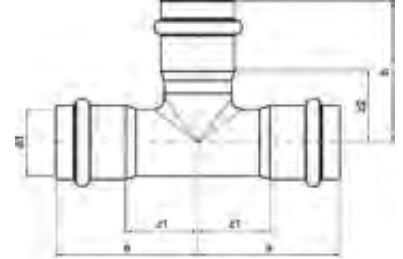
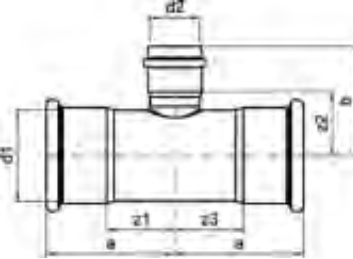
18092AG – Male elbow 90°

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | b | z |
|---------------|---------------------|-----|-----|---------------|----|----|----|
| 618092AG1512 | 15 x 1/2 | 10 | 200 | 4021343189340 | 50 | 37 | 25 |
| 618092AG1834 | 18 x 3/4 | 10 | 120 | 4021343189357 | 53 | 43 | 28 |
| 618092AG2234 | 22 x 3/4 | 10 | 100 | 4021343189364 | 54 | 43 | 26 |
| 618092AG281 | 28 x 1 | 5 | 50 | 4021343189371 | 58 | 52 | 29 |
| 618092AG35114 | 35 x 1 1/4 | 2 | 40 | 4021343189388 | 64 | 60 | 34 |
| 618092AG42112 | 42 x 1 1/2 | 2 | 30 | 4021343334771 | 80 | 52 | 41 |
| 618092AG542 | 54 x 2 | 2 | 16 | 4021343334788 | 96 | 62 | 51 |



3
(Branch)

1 **2**



Catalog-no. and -description

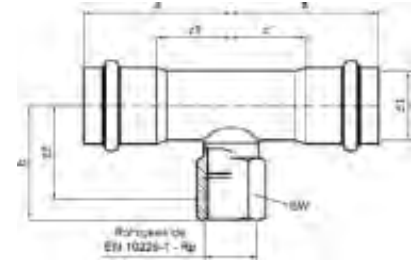
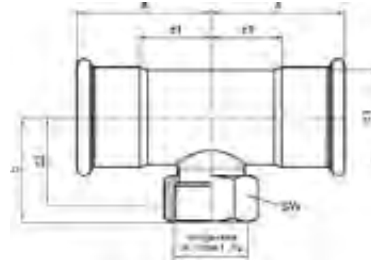
18130 – Tee

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | z1 | z2 | z3 |
|----------------|---------------------------|-----|-----|---------------|-----|-----|----|----|----|
| 61813015 | 15 | 10 | 120 | 4021343160974 | 48 | 46 | 22 | 21 | 22 |
| 61813018 | 18 | 10 | 100 | 4021343161025 | 49 | 49 | 24 | 24 | 24 |
| 61813022 | 22 | 10 | 60 | 4021343164392 | 54 | 53 | 26 | 25 | 26 |
| 61813028 | 28 | 5 | 40 | 4021343161179 | 60 | 59 | 30 | 30 | 30 |
| 61813035 | 35 | 2 | 24 | 4021343161261 | 65 | 65 | 35 | 35 | 35 |
| 61813042 | 42 | 2 | 16 | 4021343161353 | 77 | 77 | 39 | 38 | 39 |
| 61813054 | 54 | 2 | 8 | 4021343161438 | 89 | 90 | 45 | 46 | 45 |
| 61813076 | 76,1 | 1 | 3 | 4021343194016 | 108 | 106 | 57 | 55 | 57 |
| 61813089 | 88,9 | 1 | 2 | 4021343198212 | 120 | 120 | 63 | 62 | 63 |
| 618130108 | 108 | 1 | 1 | 4021343195921 | 144 | 144 | 74 | 74 | 74 |
| 618130181515 | 18 x 15 x 15 | 10 | 120 | 4021343161056 | 41 | 41 | 15 | 15 | 15 |
| 618130181518 | 18 x 18 x 15 | 10 | 100 | 4021343161070 | 49 | 53 | 24 | 16 | 24 |
| 618130221515 | 22 x 15 x 15 | 10 | 100 | 4021343161100 | 44 | 44 | 15 | 18 | 15 |
| 618130221818 | 22 x 18 x 18 | 10 | 80 | 4021343161131 | 44 | 44 | 15 | 18 | 15 |
| 618130221522 | 22 x 22 x 15 | 10 | 80 | 4021343161124 | 55 | 51 | 27 | 25 | 27 |
| 618130221822 | 22 x 22 x 18 | 10 | 80 | 4021343161155 | 55 | 49 | 27 | 24 | 27 |
| 618130282222 | 28 x 22 x 22 | 5 | 60 | 4021343161230 | 49 | 49 | 19 | 20 | 19 |
| 618130281528 | 28 x 28 x 15 | 5 | 50 | 4021343161209 | 60 | 54 | 30 | 28 | 30 |
| 618130281828 | 28 x 28 x 18 | 5 | 40 | 4021343161216 | 60 | 53 | 30 | 27 | 30 |
| 618130282228 | 28 x 28 x 22 | 5 | 40 | 4021343161254 | 60 | 56 | 30 | 27 | 30 |
| 618130351535 | 35 x 35 x 15 | 2 | 30 | 4021343161278 | 65 | 58 | 35 | 33 | 35 |
| 618130351835 | 35 x 35 x 18 | 2 | 30 | 4021343161292 | 65 | 55 | 35 | 32 | 35 |
| 618130352235 | 35 x 35 x 22 | 2 | 26 | 4021343161308 | 65 | 59 | 35 | 31 | 35 |
| 618130352835 | 35 x 35 x 28 | 2 | 26 | 4021343161315 | 65 | 62 | 35 | 33 | 35 |
| 618130421842 | 42 x 42 x 18 | 2 | 22 | 4021343161377 | 77 | 60 | 39 | 35 | 39 |
| 618130422242 | 42 x 42 x 22 | 2 | 18 | 4021343161384 | 77 | 63 | 39 | 34 | 39 |
| 618130422842 | 42 x 42 x 28 | 2 | 18 | 4021343161407 | 77 | 64 | 39 | 35 | 39 |
| 618130423542 | 42 x 42 x 35 | 2 | 16 | 4021343161414 | 77 | 67 | 39 | 37 | 39 |
| 618130542254 | 54 x 54 x 22 | 2 | 10 | 4021343161445 | 89 | 69 | 45 | 40 | 45 |
| 618130542854 | 54 x 54 x 28 | 2 | 10 | 4021343161452 | 89 | 70 | 45 | 41 | 45 |
| 618130543554 | 54 x 54 x 35 | 2 | 8 | 4021343161476 | 89 | 74 | 45 | 42 | 45 |
| 618130544254 | 54 x 54 x 42 | 2 | 8 | 4021343161483 | 89 | 81 | 45 | 42 | 45 |
| 618130762276 | 76,1 x 76,1 x 22 | 1 | 5 | 4021343203916 | 108 | 83 | 57 | 55 | 57 |
| 618130762876 | 76,1 x 76,1 x 28 | 1 | 5 | 4021343204449 | 108 | 85 | 57 | 56 | 57 |
| 618130763576 | 76,1 x 76,1 x 35 | 1 | 5 | 4021343204456 | 108 | 87 | 57 | 57 | 57 |
| 618130764276 | 76,1 x 76,1 x 42 | 1 | 5 | 4021343204463 | 108 | 95 | 57 | 57 | 57 |
| 618130765476 | 76,1 x 76,1 x 54 | 1 | 4 | 4021343204470 | 108 | 102 | 57 | 57 | 57 |
| 618130892289 | 88,9 x 88,9 x 22 | 1 | 4 | 4021343204067 | 120 | 90 | 63 | 61 | 63 |
| 618130892889 | 88,9 x 88,9 x 28 | 1 | 4 | 4021343198199 | 120 | 92 | 63 | 62 | 63 |
| 618130893589 | 88,9 x 88,9 x 35 | 1 | 4 | 4021343204487 | 120 | 94 | 63 | 63 | 63 |
| 618130894289 | 88,9 x 88,9 x 42 | 1 | 3 | 4021343204494 | 120 | 102 | 63 | 63 | 63 |
| 618130895489 | 88,9 x 88,9 x 54 | 1 | 3 | 4021343198205 | 120 | 108 | 63 | 64 | 63 |
| 618130897689 | 88,9 x 88,9 x 76,1 | 1 | 2 | 4021343204500 | 120 | 112 | 63 | 62 | 63 |
| 61813010822108 | 108 x 108 x 22 | 1 | 2 | 4021343203909 | 144 | 99 | 74 | 70 | 74 |
| 61813010828108 | 108 x 108 x 28 | 1 | 2 | 4021343203411 | 144 | 101 | 74 | 72 | 74 |
| 61813010835108 | 108 x 108 x 35 | 1 | 2 | 4021343204517 | 144 | 103 | 74 | 73 | 74 |
| 61813010842108 | 108 x 108 x 42 | 1 | 2 | 4021343204524 | 144 | 111 | 74 | 73 | 74 |
| 61813010854108 | 108 x 108 x 54 | 1 | 1 | 4021343195938 | 144 | 118 | 74 | 73 | 74 |
| 61813010876108 | 108 x 108 x 76,1 | 1 | 1 | 4021343203121 | 144 | 122 | 74 | 71 | 74 |
| 61813010889108 | 108 x 108 x 88,9 | 1 | 1 | 4021343203268 | 144 | 129 | 74 | 72 | 74 |



3
(Branch)

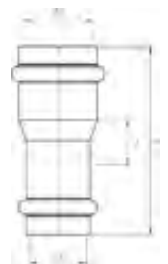
1 **2**



Catalog-no. and -description

18130G – Female branch tee

| Article-no. | Dimension d1 x d1x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-----------------|--------------------------|-----|-----|---------------|-----|-----|----|----|----|
| 618130G151215 | 15 x 15 x 1/2 | 10 | 80 | 4021343160332 | 48 | 45 | 22 | 32 | 24 |
| 618130G181218 | 18 x 18 x 1/2 | 10 | 80 | 4021343160349 | 49 | 47 | 24 | 34 | 24 |
| 618130G183418 | 18 x 18 x 3/4 | 10 | 70 | 4021343160363 | 49 | 49 | 24 | 34 | 32 |
| 618130G221222 | 22 x 22 x 1/2 | 5 | 60 | 4021343160370 | 54 | 48 | 26 | 35 | 24 |
| 618130G223422 | 22 x 22 x 3/4 | 10 | 50 | 4021343160400 | 54 | 50 | 26 | 35 | 32 |
| 618130G281228 | 28 x 28 x 1/2 | 5 | 40 | 4021343160417 | 60 | 46 | 30 | 32 | 24 |
| 618130G283428 | 28 x 28 x 3/4 | 5 | 40 | 4021343160431 | 60 | 54 | 30 | 39 | 32 |
| 618130G28128 | 28 x 28 x 1 | 5 | 40 | 4021343160448 | 60 | 57 | 30 | 40 | 38 |
| 618130G351235 | 35 x 35 x 1/2 | 2 | 30 | 4021343160462 | 65 | 49 | 35 | 36 | 24 |
| 618130G353435 | 35 x 35 x 3/4 | 2 | 30 | 4021343168802 | 65 | 51 | 35 | 36 | 32 |
| 618130G3511435 | 35 x 35 x 1 1/4 | 2 | 24 | 4021343160486 | 65 | 65 | 35 | 45 | 46 |
| 618130G421242 | 42 x 42 x 1/2 | 2 | 20 | 4021343204715 | 77 | 54 | 39 | 40 | 24 |
| 618130G423442 | 42 x 42 x 3/4 | 2 | 20 | 4021343168819 | 77 | 56 | 39 | 41 | 32 |
| 618130G4211242 | 42 x 42 x 1 1/2 | 2 | 12 | 4021343160509 | 77 | 68 | 39 | 48 | 55 |
| 618130G541254 | 54 x 54 x 1/2 | 2 | 12 | 4021343186820 | 89 | 60 | 45 | 46 | 24 |
| 618130G543454 | 54 x 54 x 3/4 | 2 | 12 | 4021343168826 | 89 | 62 | 45 | 47 | 32 |
| 618130G54254 | 54 x 54 x 2 | 2 | 8 | 4021343160523 | 89 | 80 | 45 | 56 | 65 |
| 618130G763476 | 76,1 x 76,1 x 3/4 | 1 | 4 | 4021343204388 | 108 | 75 | 57 | 60 | 32 |
| 618130G76276 | 76,1 x 76,1 x 2 | 1 | 4 | 4021343204395 | 108 | 85 | 57 | 61 | 65 |
| 618130G893489 | 88,9 x 88,9 x 3/4 | 1 | 4 | 4021343204401 | 120 | 82 | 63 | 67 | 32 |
| 618130G89289 | 88,9 x 88,9 x 2 | 1 | 4 | 4021343204418 | 120 | 91 | 63 | 67 | 65 |
| 618130G10834108 | 108 x 108 x 3/4 | 1 | 2 | 4021343204425 | 144 | 91 | 74 | 76 | 32 |
| 618130G1082108 | 108 x 108 x 2 | 1 | 2 | 4021343204432 | 144 | 101 | 74 | 77 | 65 |



Catalog-no. and -description

18240 – Reducing coupling

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 6182401815 | 18 x 15 | 10 | 200 | 4021343171581 | 61 | 10 |
| 6182402215 | 22 x 15 | 10 | 150 | 4021343171598 | 71 | 17 |
| 6182402218 | 22 x 18 | 10 | 150 | 4021343171604 | 67 | 13 |
| 6182402822 | 28 x 22 | 10 | 100 | 4021343171611 | 75 | 17 |



Catalog-no. and -description

18243 – Reducer

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|
| 6182431815 | 18a x 15 | 10 | 300 | 4021343162695 | 58 | 32 |
| 6182432215 | 22a x 15 | 10 | 200 | 4021343162701 | 73 | 47 |
| 6182432218 | 22a x 18 | 10 | 200 | 4021343162718 | 74 | 48 |
| 6182432815 | 28a x 15 | 5 | 120 | 4021343162725 | 78 | 52 |
| 6182432818 | 28a x 18 | 5 | 100 | 4021343162732 | 79 | 53 |
| 6182432822 | 28a x 22 | 5 | 120 | 4021343162749 | 77 | 48 |
| 6182433518 | 35a x 18 | 2 | 70 | 4021343162756 | 78 | 52 |
| 6182433522 | 35a x 22 | 2 | 70 | 4021343162763 | 84 | 55 |
| 6182433528 | 35a x 28 | 2 | 60 | 4021343162787 | 85 | 55 |
| 6182434222 | 42a x 22 | 2 | 40 | 4021343162794 | 95 | 66 |
| 6182434228 | 42a x 28 | 2 | 40 | 4021343162800 | 97 | 67 |
| 6182434235 | 42a x 35 | 2 | 40 | 4021343162817 | 95 | 64 |
| 6182435428 | 54a x 28 | 2 | 30 | 4021343162824 | 106 | 76 |
| 6182435435 | 54a x 35 | 2 | 30 | 4021343162831 | 106 | 75 |
| 6182435442 | 54a x 42 | 2 | 30 | 4021343162848 | 112 | 73 |
| 6182437654 | 76,1a x 54 | 2 | 16 | 4021343194023 | 141 | 96 |
| 6182438954 | 88,9a x 54 | 2 | 10 | 4021343200595 | 160 | 115 |
| 6182438976 | 88,9a x 76,1 | 2 | 8 | 4021343203466 | 151 | 100 |
| 61824310854 | 108a x 54 | 2 | 4 | 4021343204203 | 180 | 135 |
| 61824310876 | 108a x 76,1 | 2 | 4 | 4021343203251 | 181 | 130 |
| 61824310889 | 108a x 88,9 | 2 | 4 | 4021343203152 | 181 | 123 |



Catalog-no. and -description

18243G – Male adaptor

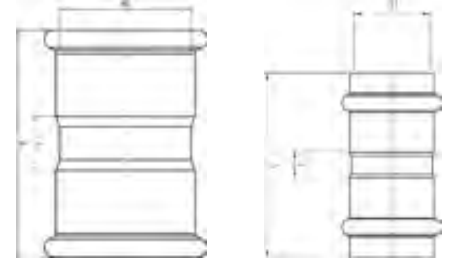
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW |
|--------------|---------------------|-----|-----|---------------|-----|----|-----|
| 618243G1538 | 15 x 3/8 | 10 | 300 | 4021343162565 | 41 | 15 | 19 |
| 618243G1512 | 15 x 1/2 | 10 | 250 | 4021343162572 | 46 | 20 | 24 |
| 618243G1534 | 15 x 3/4 | 10 | 200 | 4021343204722 | 63 | 37 | 30 |
| 618243G1812 | 18 x 1/2 | 10 | 250 | 4021343162589 | 46 | 20 | 24 |
| 618243G1834 | 18 x 3/4 | 10 | 200 | 4021343162596 | 48 | 22 | 30 |
| 618243G2212 | 22 x 1/2 | 10 | 180 | 4021343162602 | 51 | 22 | 27 |
| 618243G2234 | 22 x 3/4 | 10 | 180 | 4021343162619 | 51 | 22 | 30 |
| 618243G221 | 22 x 1 | 10 | 150 | 4021343162626 | 52 | 23 | 36 |
| 618243G2834 | 28 x 3/4 | 5 | 100 | 4021343162633 | 72 | 42 | 30 |
| 618243G281 | 28 x 1 | 5 | 90 | 4021343162640 | 74 | 44 | 36 |
| 618243G351 | 35 x 1 | 2 | 60 | 4021343162657 | 80 | 49 | 36 |
| 618243G35114 | 35 x 1 1/4 | 2 | 40 | 4021343162664 | 84 | 53 | 46 |
| 618243G42112 | 42 x 1 1/2 | 2 | 30 | 4021343162671 | 94 | 55 | 55 |
| 618243G542 | 54 x 2 | 2 | 20 | 4021343162688 | 107 | 62 | 65 |
| 618243G76212 | 76,1 x 2 1/2 | 1 | 8 | 4021343203145 | 117 | 65 | 100 |
| 618243G893 | 88,9 x 3 | 1 | 6 | 4021343198229 | 136 | 78 | 105 |
| 618243G1084 | 108 x 4 | 1 | 4 | 4021343195969 | 155 | 84 | 125 |



Catalog-no. and -description

9246G – Plug-in adaptor, female

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|----------------------|-----|-----|---------------|----|----|----|
| 69246G1512 | 15a x 1/2 | 10 | 200 | 4021343150333 | 66 | 53 | 24 |
| 69246G1812 | 18a x 1/2 | 10 | 200 | 4021343150340 | 66 | 53 | 24 |
| 69246G1834 | 18a x 3/4 | 10 | 150 | 4021343150357 | 68 | 53 | 32 |
| 69246G2212 | 22a x 1/2 | 10 | 180 | 4021343150364 | 71 | 58 | 24 |
| 69246G2234 | 22a x 3/4 | 10 | 120 | 4021343150371 | 73 | 58 | 32 |
| 69246G2834 | 28a x 3/4 | 5 | 100 | 4021343150388 | 78 | 63 | 32 |



Catalog-no. and -description

18270 – Coupling

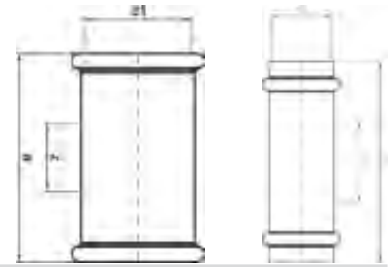
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 61827015 | 15 | 10 | 300 | 4021343159220 | 56 | 6 |
| 61827018 | 18 | 10 | 200 | 4021343159299 | 67 | 17 |
| 61827022 | 22 | 10 | 150 | 4021343159305 | 76 | 20 |
| 61827028 | 28 | 5 | 80 | 4021343159312 | 78 | 19 |
| 61827035 | 35 | 2 | 50 | 4021343159329 | 78 | 17 |
| 61827042 | 42 | 2 | 30 | 4021343159336 | 94 | 18 |
| 61827054 | 54 | 2 | 24 | 4021343159343 | 106 | 18 |
| 61827076 | 76,1 | 1 | 10 | 4021343200526 | 132 | 31 |
| 61827089 | 88,9 | 1 | 6 | 4021343200533 | 145 | 30 |
| 618270108 | 108 | 1 | 4 | 4021343195952 | 170 | 31 |



Catalog-no. and -description

18270G – Female adaptor

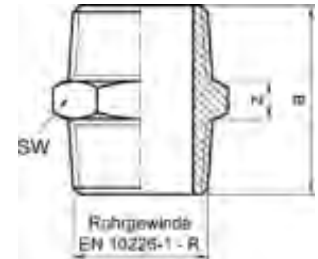
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW |
|--------------|----------------------|-----|-----|---------------|-----|----|----|
| 618270G1512 | 15 x 1/2 | 10 | 200 | 4021343159480 | 46 | 7 | 24 |
| 618270G1534 | 15 x 3/4 | 10 | 180 | 4021343159497 | 49 | 9 | 30 |
| 618270G1812 | 18 x 1/2 | 10 | 200 | 4021343159503 | 47 | 9 | 24 |
| 618270G1834 | 18 x 3/4 | 10 | 170 | 4021343159510 | 49 | 9 | 30 |
| 618270G2212 | 22 x 1/2 | 10 | 170 | 4021343159527 | 50 | 8 | 24 |
| 618270G2234 | 22 x 3/4 | 10 | 150 | 4021343159534 | 52 | 9 | 30 |
| 618270G221 | 22 x 1 | 10 | 120 | 4021343159541 | 55 | 9 | 38 |
| 618270G2834 | 28 x 3/4 | 5 | 100 | 4021343159558 | 76 | 32 | 32 |
| 618270G281 | 28 x 1 | 5 | 80 | 4021343159565 | 79 | 32 | 38 |
| 618270G35114 | 35 x 1 1/4 | 2 | 36 | 4021343159572 | 89 | 39 | 46 |
| 618270G42112 | 42 x 1 1/2 | 2 | 28 | 4021343159589 | 98 | 40 | 55 |
| 618270G542 | 54 x 2 | 2 | 20 | 4021343159596 | 107 | 39 | 65 |



Catalog-no. and -description

18270S – Slip coupling

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 618270S15 | 15 | 10 | 200 | 4021343159602 | 78 | 27 |
| 618270S18 | 18 | 10 | 150 | 4021343159619 | 78 | 27 |
| 618270S22 | 22 | 10 | 100 | 4021343159626 | 84 | 27 |
| 618270S28 | 28 | 5 | 80 | 4021343159633 | 96 | 37 |
| 618270S35 | 35 | 2 | 50 | 4021343159640 | 98 | 37 |
| 618270S42 | 42 | 2 | 40 | 4021343159657 | 114 | 37 |
| 618270S54 | 54 | 2 | 20 | 4021343159664 | 131 | 42 |
| 618270S76 | 76,1 | 1 | 10 | 4021343204531 | 148 | 47 |
| 618270S89 | 88,9 | 1 | 4 | 4021343204548 | 161 | 46 |
| 618270S108 | 108 | 1 | 3 | 4021343204555 | 210 | 71 |



Catalog-no. and -description

9280 – Double nipple, male

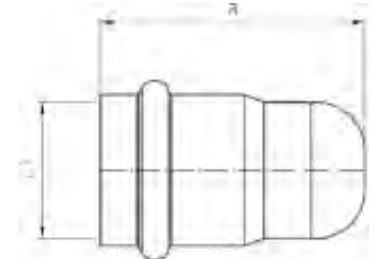
| Article-no. | Dimension R | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|-----|---------------|----|----|
| 6928012 | 1/2 | 10 | 230 | 4021343150517 | 34 | 22 |
| 6928034 | 3/4 | 10 | 140 | 4021343150524 | 39 | 30 |
| 692801 | 1 | 5 | 120 | 4021343150531 | 45 | 36 |



Catalog-no. and -description

9280G – Plug-in adaptor, male

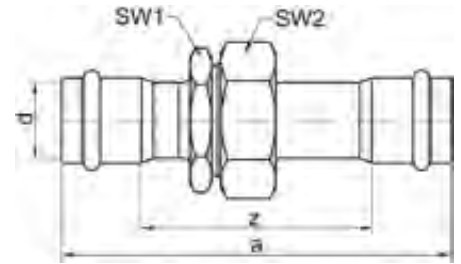
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | SW |
|-------------|---------------------|-----|-----|---------------|----|----|
| 69280G1512 | 15a x 1/2 | 10 | 200 | 4021343150272 | 59 | 22 |
| 69280G1812 | 18a x 1/2 | 10 | 150 | 4021343150289 | 59 | 22 |
| 69280G1834 | 18a x 3/4 | 10 | 180 | 4021343150296 | 63 | 30 |
| 69280G2212 | 22a x 1/2 | 10 | 120 | 4021343150302 | 64 | 24 |
| 69280G2234 | 22a x 3/4 | 10 | 100 | 4021343150319 | 68 | 30 |
| 69280G281 | 28a x 1 | 5 | 100 | 4021343150326 | 76 | 36 |



Catalog-no. and -description

18301 – Endcap

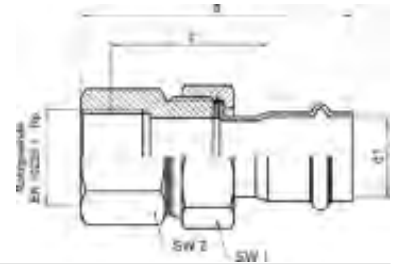
| Article-no. | Dimension d1 | Bag | Box | EAN code | a |
|-------------|-----------------|-----|-----|---------------|----|
| 61830115 | 15 | 10 | 400 | 4021343171741 | 47 |
| 61830118 | 18 | 10 | 300 | 4021343171758 | 47 |
| 61830122 | 22 | 10 | 200 | 4021343171765 | 51 |
| 61830128 | 28 | 5 | 150 | 4021343171772 | 54 |
| 61830135 | 35 | 2 | 80 | 4021343172885 | 57 |
| 61830142 | 42 | 2 | 50 | 4021343172892 | 68 |
| 61830154 | 54 | 2 | 30 | 4021343172908 | 82 |



Catalog-no. and -description

18330 – Union, flat sealing, stainless steel nut

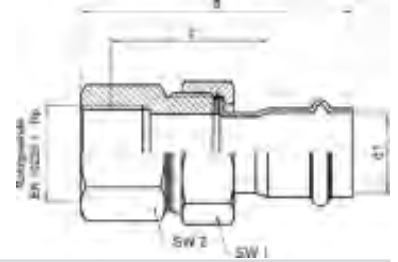
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | G | z | SW1 | SW2 |
|-------------|-----------------|-----|-----|---------------|-----|-------|----|-----|-----|
| 61833015 | 15 | 5 | 120 | 4021343217821 | 111 | 1/2 | 60 | 24 | 24 |
| 61833018 | 18 | 5 | 80 | 4021343217838 | 117 | 3/4 | 60 | 27 | 30 |
| 61833022 | 22 | 5 | 50 | 4021343217845 | 127 | 1 | 70 | 36 | 38 |
| 61833028 | 28 | 5 | 35 | 4021343217852 | 143 | 1 1/4 | 84 | 46 | 50 |
| 61833035 | 35 | 2 | 30 | 4021343217869 | 146 | 1 1/2 | 85 | 50 | 55 |
| 61833042 | 42 | 2 | 20 | 4021343217876 | 158 | 1 3/4 | 81 | 55 | 58 |
| 61833054 | 54 | 2 | 12 | 4021343217883 | 175 | 2 3/8 | 85 | 70 | 75 |



Catalog-no. and -description

18330G – Union, female, flat sealing, brass nut

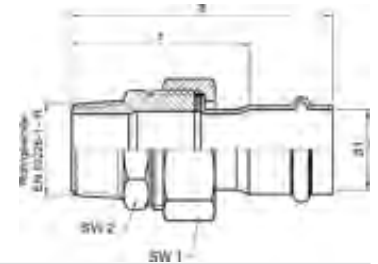
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|--------------|----------------------|-----|-----|---------------|-----|----|-----|-----|
| 618330G1512 | 15 x 1/2 | 5 | 120 | 4021343193729 | 93 | 53 | 24 | 24 |
| 618330G1534 | 15 x 3/4 | 5 | 100 | 4021343193736 | 94 | 53 | 32 | 30 |
| 618330G1834 | 18 x 3/4 | 5 | 80 | 4021343193743 | 96 | 55 | 32 | 30 |
| 618330G2234 | 22 x 3/4 | 5 | 50 | 4021343193750 | 104 | 60 | 36 | 32 |
| 618330G221 | 22 x 1 | 5 | 50 | 4021343193767 | 107 | 60 | 38 | 36 |
| 618330G2834 | 28 x 3/4 | 5 | 50 | 4021343193774 | 92 | 47 | 46 | 32 |
| 618330G281 | 28 x 1 | 5 | 40 | 4021343193781 | 96 | 49 | 46 | 41 |
| 618330G35114 | 35 x 1 1/4 | 2 | 30 | 4021343193798 | 88 | 37 | 52 | 46 |
| 618330G42112 | 42 x 1 1/2 | 2 | 20 | 4021343193804 | 100 | 41 | 59 | 55 |
| 618330G542 | 54 x 2 | 2 | 12 | 4021343193811 | 109 | 40 | 75 | 70 |



Catalog-no. and -description

18330GMVA – Union, female, flat sealing, stainless steel nut

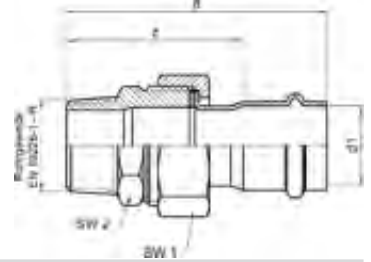
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-----------------|----------------------|-----|-----|---------------|-----|----|-----|-----|
| 618330GMVA1512 | 15 x 1/2 | 5 | 120 | 4021343193828 | 93 | 53 | 27 | 24 |
| 618330GMVA1534 | 15 x 3/4 | 5 | 100 | 4021343193835 | 94 | 53 | 32 | 30 |
| 618330GMVA1834 | 18 x 3/4 | 5 | 80 | 4021343193842 | 98 | 57 | 32 | 30 |
| 618330GMVA2234 | 22 x 3/4 | 5 | 50 | 4021343193859 | 104 | 60 | 38 | 32 |
| 618330GMVA221 | 22 x 1 | 5 | 50 | 4021343193866 | 107 | 60 | 38 | 38 |
| 618330GMVA2834 | 28 x 3/4 | 5 | 50 | 4021343193873 | 114 | 69 | 50 | 32 |
| 618330GMVA281 | 28 x 1 | 5 | 40 | 4021343193880 | 118 | 71 | 40 | 41 |
| 618330GMVA35114 | 35 x 11/4 | 2 | 30 | 4021343193897 | 113 | 62 | 55 | 46 |
| 618330GMVA42112 | 42 x 11/2 | 2 | 20 | 4021343193903 | 115 | 57 | 58 | 55 |
| 618330GMVA542 | 54 x 2 | 2 | 12 | 4021343193910 | 126 | 57 | 75 | 70 |



Catalog-no. and -description

18333G – Union, male, flat sealing, brass nut

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|--------------|---------------------|-----|-----|---------------|-----|----|-----|-----|
| 618333G1512 | 15 x 1/2 | 5 | 150 | 4021343193569 | 88 | 61 | 24 | 22 |
| 618333G1534 | 15 x 3/4 | 5 | 120 | 4021343193576 | 90 | 63 | 30 | 30 |
| 618333G1812 | 18 x 1/2 | 5 | 100 | 4021343193583 | 92 | 66 | 30 | 30 |
| 618333G2234 | 22 x 3/4 | 5 | 60 | 4021343193590 | 101 | 71 | 38 | 36 |
| 618333G281 | 28 x 1 | 5 | 50 | 4021343193606 | 91 | 61 | 41 | 32 |
| 618333G35114 | 35 x 11/4 | 2 | 40 | 4021343193613 | 98 | 67 | 52 | 46 |
| 618333G42112 | 42 x 11/2 | 2 | 20 | 4021343193620 | 111 | 72 | 59 | 55 |
| 618333G542 | 54 x 2 | 2 | 12 | 4021343193637 | 121 | 75 | 75 | 70 |



Catalog-no. and -description

18333GMVA – Union, male, flat sealing, stainless steel nut

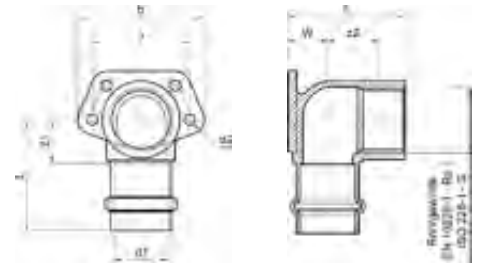
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-----------------|---------------------|-----|-----|---------------|-----|----|-----|-----|
| 618333GMVA1512 | 15 x 1/2 | 5 | 150 | 4021343193644 | 90 | 63 | 30 | 27 |
| 618333GMVA1534 | 15 x 3/4 | 5 | 120 | 4021343193651 | 91 | 64 | 30 | 30 |
| 618333GMVA1812 | 18 x 1/2 | 5 | 100 | 4021343193668 | 94 | 68 | 30 | 30 |
| 618333GMVA2234 | 22 x 3/4 | 5 | 60 | 4021343193675 | 101 | 71 | 38 | 36 |
| 618333GMVA281 | 28 x 1 | 5 | 50 | 4021343193682 | 115 | 85 | 50 | 36 |
| 618333GMVA35114 | 35 x 1 1/4 | 2 | 40 | 4021343193699 | 124 | 92 | 55 | 46 |
| 618333GMVA42112 | 42 x 1 1/2 | 2 | 20 | 4021343193705 | 126 | 87 | 58 | 55 |
| 618333GMVA542 | 54 x 2 | 2 | 12 | 4021343193712 | 138 | 93 | 75 | 70 |



Catalog-no. and -description

18359M – Union adaptor, flat sealing, stainless steel nut

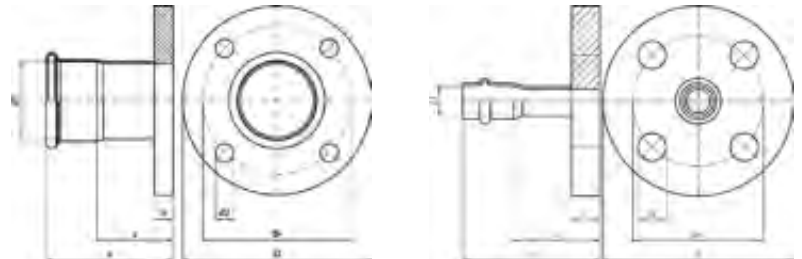
| Article-no. | Dimension d1 x G | Bag | Box | EAN code | a | c | z | SW |
|--------------|---------------------|-----|-----|---------------|----|----|----|----|
| 618359M1512 | 15 x 1/2 | 5 | 250 | 4021343169007 | 63 | 55 | 29 | 24 |
| 618359M1534 | 15 x 3/4 | 5 | 200 | 4021343159671 | 61 | 51 | 25 | 30 |
| 618359M1834 | 18 x 3/4 | 5 | 200 | 4021343159688 | 65 | 55 | 29 | 30 |
| 618359M221 | 22 x 1 | 5 | 130 | 4021343159695 | 72 | 60 | 31 | 38 |
| 618359M28114 | 28 x 1 1/4 | 5 | 50 | 4021343159701 | 85 | 70 | 40 | 50 |
| 618359M35112 | 35 x 1 1/2 | 5 | 50 | 4021343164408 | 85 | 71 | 40 | 55 |
| 618359M42134 | 42 x 1 3/4 | 2 | 34 | 4021343164415 | 93 | 75 | 36 | 58 |
| 618359M54238 | 54 x 2 3/8 | 2 | 20 | 4021343164422 | 96 | 78 | 33 | 75 |



Catalog-no. and -description

18472G – Wall plate elbow with universal flange

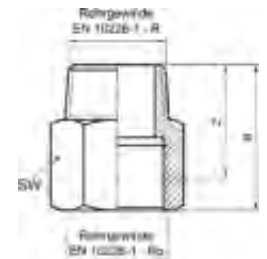
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | L | W | d2 |
|-------------|----------------------|-----|-----|---------------|----|----|----|----|----|----|----|----|
| 618472G1512 | 15 x 1/2 | 10 | 90 | 4021343159718 | 40 | 55 | 40 | 15 | 14 | 40 | 13 | 5 |
| 618472G1812 | 18 x 1/2 | 10 | 80 | 4021343159725 | 40 | 55 | 46 | 15 | 17 | 40 | 16 | 5 |
| 618472G2234 | 22 x 3/4 | 10 | 60 | 4021343159732 | 46 | 55 | 47 | 18 | 16 | 46 | 16 | 5 |
| 618472G281 | 28 x 1 | 5 | 40 | 4021343159749 | 55 | 70 | 58 | 22 | 21 | 51 | 20 | 5 |



Catalog-no. and -description

18-VA-PF – Crimping flange PN 10/16

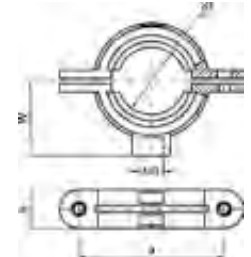
| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | a | z | h | dk | d2 | D | Az |
|-------------|----------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 618VAPF15 | DN 12 / 15 mm | 1 | 25 | 4021343196072 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 618VAPF18 | DN 15 / 18 mm | 1 | 20 | 4021343196089 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 618VAPF22 | DN 20 / 22 mm | 1 | 16 | 4021343196096 | 69 | 40 | 14 | 75 | 14 | 105 | 4 |
| 618VAPF28 | DN 25 / 28 mm | 1 | 14 | 4021343196102 | 75 | 45 | 16 | 85 | 14 | 115 | 4 |
| 618VAPF35 | DN 32 / 35 mm | 1 | 10 | 4021343196119 | 78 | 47 | 16 | 100 | 18 | 140 | 4 |
| 618VAPF42 | DN 40 / 42 mm | 1 | 8 | 4021343196126 | 87 | 48 | 16 | 110 | 18 | 150 | 4 |
| 618VAPF54 | DN 50 / 54 mm | 1 | 5 | 4021343196133 | 100 | 55 | 18 | 125 | 18 | 165 | 4 |
| 618VAPF76 | DN 65 / 76,1 mm | 1 | 2 | 4021343195877 | 124 | 73 | 18 | 145 | 18 | 185 | 4 |
| 618VAPF89 | DN 80 / 88,9 mm | 1 | 2 | 4021343196140 | 137 | 79 | 18 | 160 | 18 | 200 | 8 |
| 618VAPF108 | DN 100 / 108 mm | 1 | 1 | 4021343196058 | 162 | 92 | 20 | 180 | 18 | 220 | 8 |



Catalog-no. and -description

9370G – Hexagon nipple

| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 69370G1212 | 1/2 x 1/2 | 10 | 200 | 4021343150487 | 39 | 31 | 24 |
| 69370G3434 | 3/4 x 3/4 | 5 | 120 | 4021343150494 | 42 | 33 | 32 |
| 69370G11 | 1 x 1 | 5 | 100 | 4021343150500 | 48 | 38 | 38 |



Catalog-no. and -description

9918 – Pipe ring with sound insulation

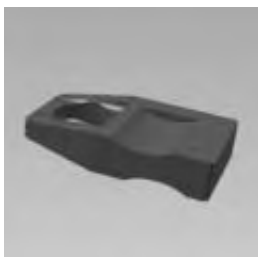
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | W |
|-------------|----------------|-----|-----|---------------|----|----|----|
| 6991812 | 12 | 10 | 400 | 4021343155291 | 44 | 18 | 23 |
| 6991815 | 15 | 10 | 300 | 4021343150968 | 47 | 18 | 25 |
| 6991818 | 18 | 10 | 200 | 4021343150975 | 50 | 18 | 26 |
| 6991822 | 22 | 10 | 180 | 4021343150982 | 54 | 18 | 28 |
| 6991828 | 28 | 5 | 150 | 4021343150999 | 60 | 18 | 31 |
| 6991835 | 35 | 2 | 100 | 4021343151002 | 67 | 18 | 35 |
| 6991842 | 42 | 2 | 100 | 4021343151019 | 74 | 18 | 38 |
| 6991854 | 54 | 2 | 80 | 4021343151026 | 86 | 18 | 44 |



Catalog-no. and -description

4981 – Plastic measure tool for NiroSan®-Press with bottle opener and water level, 15 - 54 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84981 | 15-54 mm | | 30 | 4021343142673 |



Catalog-no. and -description

4989 – Plastic measure tool for NiroSan-Press with bottle opener and water level, 64 mm and 67 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84989 | 64 + 67 mm | | | 4021343356889 |



Catalog-no. and -description

4990 – Plastic measure tool for NiroSan®-Press, with bottle opener and water level, 76,1 - 108 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84990 | 76,1-108 mm | | 20 | 4021343194511 |



Catalog-no. and -description

FL-D – Flange sealing, asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|-----------------|-----|-----|---------------|
| 1D15 | 15 | | 240 | 4021343001017 |
| 1D20 | 20 | | 200 | 4021343001048 |
| 1D25 | 25 | | 160 | 4021343001093 |
| 1D32 | 32 | | 120 | 4021343001123 |
| 1D40 | 40 | | 100 | 4021343001154 |
| 1D50 | 50 | | 120 | 4021343001161 |
| 1D65 | 65 | | 100 | 4021343001185 |
| 1D80 | 80 | | 80 | 4021343001192 |
| 1D100 | 100 | | 60 | 4021343000935 |

SANHA[®]

NiroSan[®]-Press Industry

Stainless steel (316L) pressfittings for industrial and high temperature installations
Series 18000

SYSTEM TECHNOLOGY

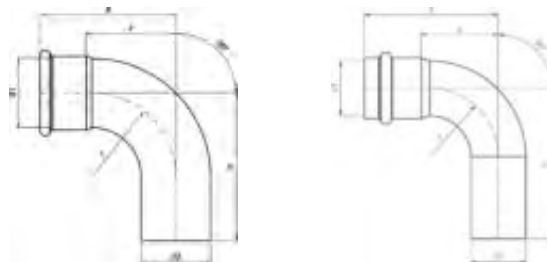
NiroSan[®]-Press SF
Stainless steel (316L)
pressfittings for silicone-free
installations

Series 19000 *

*** Advice:**

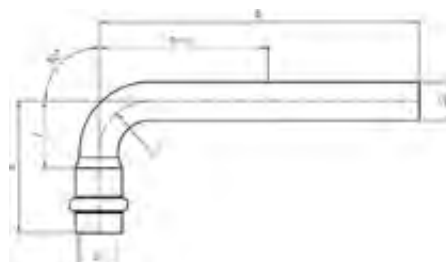
Only complete bags available.

In order to avoid unintentional pollution please
don't open the bags before the installation.



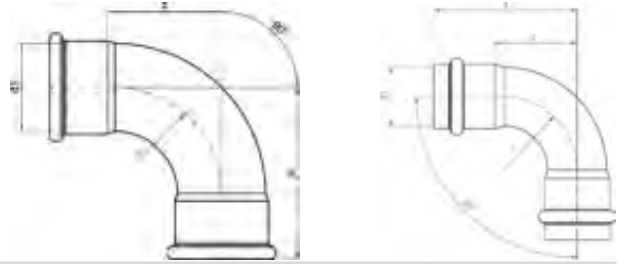
Catalog-no. and -description
19001A – Bend 90° female/male

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|-----|
| 619001A15 | 15 | 10 | 200 | 4021343189760 | 48 | 60 | 22 |
| 619001A18 | 18 | 10 | 150 | 4021343189777 | 53 | 62 | 27 |
| 619001A22 | 22 | 10 | 100 | 4021343189784 | 63 | 72 | 34 |
| 619001A28 | 28 | 5 | 60 | 4021343189791 | 68 | 77 | 39 |
| 619001A35 | 35 | 2 | 30 | 4021343189807 | 87 | 93 | 56 |
| 619001A42 | 42 | 2 | 20 | 4021343189814 | 103 | 113 | 64 |
| 619001A54 | 54 | 2 | 10 | 4021343189821 | 125 | 131 | 80 |
| 619001A76 | 76,1 | 1 | 3 | 4021343189838 | 143 | 162 | 92 |
| 619001A89 | 88,9 | 1 | 2 | 4021343189845 | 165 | 186 | 107 |
| 619001A108 | 108 | 1 | 1 | 4021343189852 | 201 | 231 | 131 |



Catalog-no. and -description
19001L – Bend 90° female/male - long

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|----|
| 619001L15 | 15 | 10 | 150 | 4021343189869 | 52 | 125 | 26 |
| 619001L18 | 18 | 10 | 100 | 4021343189876 | 60 | 125 | 34 |
| 619001L22 | 22 | 10 | 60 | 4021343189883 | 63 | 150 | 34 |
| 619001L28 | 28 | 5 | 30 | 4021343189890 | 75 | 200 | 45 |
| 619001L35 | 35 | 2 | 16 | 4021343189906 | 87 | 225 | 56 |
| 619001L42 | 42 | 2 | 10 | 4021343189913 | 103 | 250 | 64 |
| 619001L54 | 54 | 2 | 6 | 4021343189920 | 125 | 300 | 80 |



Catalog-no. and -description

19002A – Bend 90° female/female

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|-----|
| 619002A15 | 15 | 10 | 200 | 4021343189937 | 48 | 22 |
| 619002A18 | 18 | 10 | 150 | 4021343189944 | 53 | 27 |
| 619002A22 | 22 | 10 | 100 | 4021343189951 | 63 | 34 |
| 619002A28 | 28 | 5 | 60 | 4021343189968 | 68 | 39 |
| 619002A35 | 35 | 2 | 30 | 4021343189975 | 87 | 56 |
| 619002A42 | 42 | 2 | 20 | 4021343189982 | 103 | 64 |
| 619002A54 | 54 | 2 | 10 | 4021343189999 | 125 | 80 |
| 619002A76 | 76,1 | 1 | 3 | 4021343190001 | 143 | 92 |
| 619002A89 | 88,9 | 1 | 2 | 4021343190018 | 165 | 107 |
| 619002A108 | 108 | 1 | 1 | 4021343190025 | 201 | 131 |

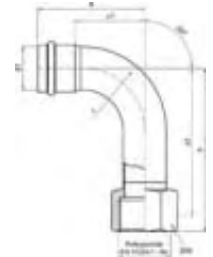
10



Catalog-no. and -description

19002AG – Bend 90° with male thread

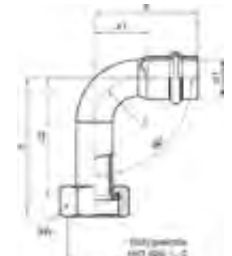
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | b | z | SW |
|---------------|---------------------|-----|-----|---------------|-----|-----|----|----|
| 619002AG1512 | 15 x 1/2 | 10 | 120 | 4021343190513 | 48 | 84 | 22 | 22 |
| 619002AG1812 | 18 x 1/2 | 10 | 100 | 4021343190520 | 53 | 86 | 27 | 22 |
| 619002AG1834 | 18 x 3/4 | 10 | 80 | 4021343190537 | 52 | 90 | 26 | 30 |
| 619002AG2234 | 22 x 3/4 | 10 | 80 | 4021343190544 | 63 | 100 | 34 | 30 |
| 619002AG281 | 28 x 1 | 5 | 40 | 4021343190551 | 68 | 108 | 39 | 36 |
| 619002AG35114 | 35 x 1 1/4 | 2 | 20 | 4021343190568 | 87 | 128 | 56 | 46 |
| 619002AG42112 | 42 x 1 1/2 | 2 | 10 | 4021343190575 | 103 | 149 | 64 | 55 |
| 619002AG542 | 54 x 2 | 2 | 6 | 4021343190582 | 125 | 173 | 80 | 65 |



Catalog-no. and -description

19002G – Bend 90° with female thread

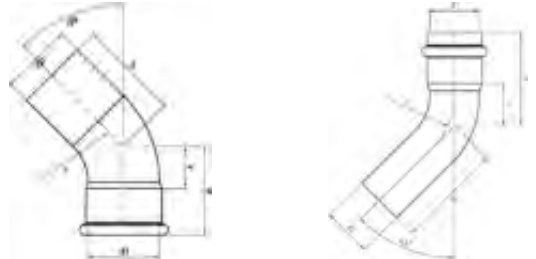
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|--------------|----------------------|-----|-----|---------------|----|-----|----|-----|----|
| 619002G1512 | 15 x 1/2 | 10 | 100 | 4021343190360 | 48 | 91 | 22 | 77 | 24 |
| 619002G1834 | 18 x 3/4 | 10 | 70 | 4021343190377 | 53 | 95 | 27 | 80 | 32 |
| 619002G2234 | 22 x 3/4 | 10 | 60 | 4021343190384 | 63 | 105 | 34 | 90 | 32 |
| 619002G281 | 28 x 1 | 5 | 30 | 4021343190391 | 69 | 113 | 39 | 96 | 38 |
| 619002G35114 | 35 x 1 1/4 | 2 | 20 | 4021343190407 | 87 | 133 | 56 | 113 | 46 |



Catalog-no. and -description

19002M – Bend 90° with union nut

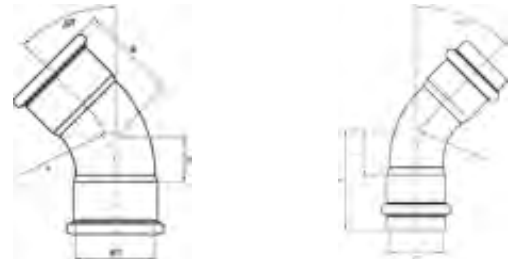
| Article-no. | Dimension d1 x G | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|--------------|---------------------|-----|-----|---------------|----|----|----|----|----|
| 619002M1534 | 15 x 3/4 | 10 | 100 | 4021343190032 | 48 | 65 | 23 | 55 | 30 |
| 619002M1834 | 18 x 3/4 | 10 | 100 | 4021343190049 | 53 | 69 | 28 | 59 | 30 |
| 619002M221 | 22 x 1 | 10 | 50 | 4021343190056 | 63 | 80 | 35 | 68 | 38 |
| 619002M28114 | 28 x 1 1/4 | 5 | 40 | 4021343190063 | 69 | 88 | 40 | 73 | 50 |



Catalog-no. and -description
19040 – Bend 45° female/male

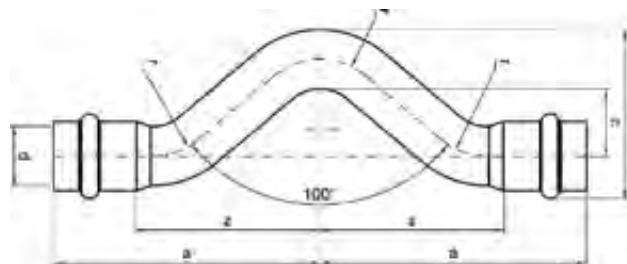
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | b | z |
|-------------|--------------|-----|-----|---------------|-----|-----|----|
| 61904015 | 15 | 10 | 250 | 4021343190070 | 37 | 47 | 12 |
| 61904018 | 18 | 10 | 200 | 4021343190087 | 39 | 48 | 14 |
| 61904022 | 22 | 10 | 120 | 4021343190094 | 48 | 56 | 19 |
| 61904028 | 28 | 5 | 80 | 4021343190100 | 53 | 60 | 24 |
| 61904035 | 35 | 2 | 50 | 4021343190117 | 58 | 64 | 27 |
| 61904042 | 42 | 2 | 26 | 4021343190124 | 68 | 79 | 30 |
| 61904054 | 54 | 2 | 14 | 4021343190131 | 83 | 89 | 38 |
| 61904076 | 76,1 | 1 | 5 | 4021343190148 | 89 | 108 | 38 |
| 61904089 | 88,9 | 1 | 3 | 4021343190155 | 101 | 122 | 43 |
| 619040108 | 108 | 1 | 2 | 4021343190162 | 124 | 150 | 54 |

10



Catalog-no. and -description
19041 – Bend 45° female/female

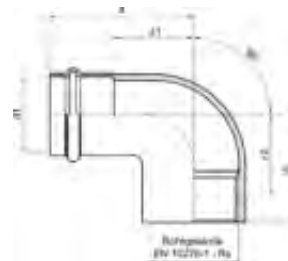
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|--------------|-----|-----|---------------|-----|----|
| 61904115 | 15 | 10 | 250 | 4021343190179 | 37 | 12 |
| 61904118 | 18 | 10 | 200 | 4021343190186 | 39 | 14 |
| 61904122 | 22 | 10 | 120 | 4021343190193 | 48 | 19 |
| 61904128 | 28 | 5 | 80 | 4021343190209 | 53 | 24 |
| 61904135 | 35 | 2 | 50 | 4021343190216 | 58 | 27 |
| 61904142 | 42 | 2 | 26 | 4021343190223 | 68 | 29 |
| 61904154 | 54 | 2 | 14 | 4021343190230 | 83 | 38 |
| 61904176 | 76,1 | 1 | 5 | 4021343190247 | 89 | 38 |
| 61904189 | 88,9 | 1 | 3 | 4021343190254 | 101 | 43 |
| 619041108 | 108 | 1 | 2 | 4021343190261 | 124 | 54 |



Catalog-no. and -description

19085 – Full crossover

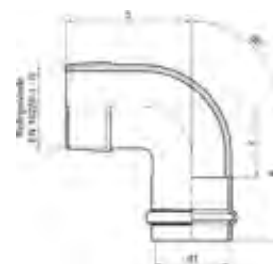
| Article-no. | Dimension d | Bag | Box | EAN code | a | c | h | z |
|-------------|----------------|-----|-----|---------------|-----|----|---|----|
| 61908515 | 15 | 10 | 120 | 4021343190278 | 79 | 21 | 8 | 53 |
| 61908518 | 18 | 10 | 80 | 4021343190285 | 81 | 21 | 8 | 55 |
| 61908522 | 22 | 10 | 60 | 4021343190292 | 93 | 26 | 7 | 64 |
| 61908528 | 28 | 5 | 30 | 4021343190308 | 105 | 28 | 9 | 84 |



Catalog-no. and -description

19090IG – Female elbow 90°

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | b | z1 | z2 |
|---------------|----------------------|-----|-----|---------------|----|----|----|----|
| 619090IG1512 | 15 x 1/2 | 10 | 180 | 4021343190414 | 52 | 31 | 27 | 17 |
| 619090IG1834 | 18 x 3/4 | 10 | 120 | 4021343190421 | 55 | 35 | 30 | 20 |
| 619090IG2234 | 22 x 3/4 | 10 | 100 | 4021343190438 | 56 | 37 | 28 | 22 |
| 619090IG281 | 28 x 1 | 5 | 50 | 4021343190445 | 61 | 43 | 32 | 26 |
| 619090IG35114 | 35 x 1 1/4 | 2 | 30 | 4021343190452 | 67 | 51 | 37 | 31 |



Catalog-no. and -description

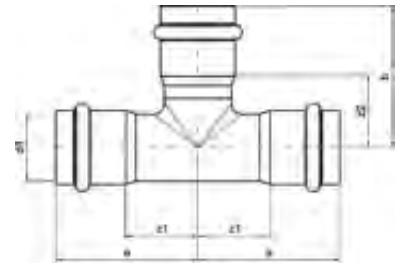
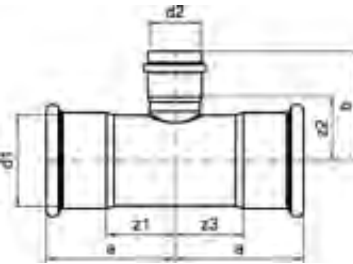
19092AG – Male elbow 90°

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | b | z |
|---------------|---------------------|-----|-----|---------------|----|----|----|
| 619092AG1512 | 15 x 1/2 | 10 | 200 | 4021343190469 | 50 | 37 | 25 |
| 619092AG1834 | 18 x 3/4 | 10 | 120 | 4021343190476 | 53 | 43 | 28 |
| 619092AG2234 | 22 x 3/4 | 10 | 100 | 4021343190483 | 54 | 43 | 26 |
| 619092AG281 | 28 x 1 | 5 | 50 | 4021343190490 | 58 | 52 | 29 |
| 619092AG35114 | 35 x 1 1/4 | 2 | 40 | 4021343190506 | 64 | 60 | 34 |



3
(Branch)

1 **L** **2**



Catalog-no. and -description

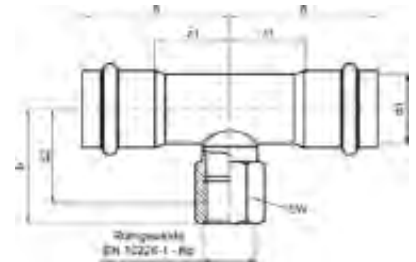
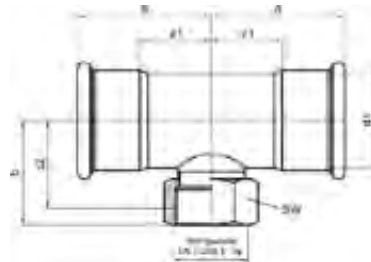
19130 – Tee

| Article-no. | Dimension d1 x d3x d2 | Bag | Box | EAN code | a | b | z1 | z2 | z3 |
|----------------|--------------------------|-----|-----|---------------|-----|-----|----|----|----|
| 61913015 | 15 | 10 | 120 | 4021343190599 | 48 | 46 | 22 | 21 | 22 |
| 61913018 | 18 | 10 | 100 | 4021343190605 | 49 | 49 | 24 | 24 | 24 |
| 61913022 | 22 | 10 | 60 | 4021343190612 | 54 | 53 | 26 | 25 | 26 |
| 61913028 | 28 | 5 | 40 | 4021343190629 | 60 | 59 | 30 | 30 | 30 |
| 61913035 | 35 | 2 | 24 | 4021343190636 | 65 | 65 | 35 | 35 | 35 |
| 61913042 | 42 | 2 | 16 | 4021343190643 | 77 | 77 | 39 | 38 | 39 |
| 61913054 | 54 | 2 | 8 | 4021343190650 | 89 | 90 | 45 | 46 | 45 |
| 61913076 | 76,1 | 1 | 3 | 4021343190667 | 108 | 106 | 57 | 55 | 57 |
| 61913089 | 88,9 | 1 | 2 | 4021343190674 | 120 | 120 | 63 | 62 | 63 |
| 619130108 | 108 | 1 | 1 | 4021343190681 | 144 | 144 | 74 | 74 | 74 |
| 619130181515 | 18 x 15 x 15 | 10 | 120 | 4021343190698 | 41 | 41 | 15 | 15 | 15 |
| 619130181518 | 18 x 18 x 15 | 10 | 100 | 4021343190704 | 49 | 53 | 24 | 16 | 24 |
| 619130221515 | 22 x 15 x 15 | 10 | 100 | 4021343190711 | 44 | 44 | 15 | 18 | 15 |
| 619130221818 | 22 x 18 x 18 | 10 | 80 | 4021343190735 | 44 | 44 | 15 | 18 | 15 |
| 619130221522 | 22 x 22 x 15 | 10 | 80 | 4021343190728 | 55 | 51 | 27 | 25 | 27 |
| 619130221822 | 22 x 22 x 18 | 10 | 80 | 4021343190742 | 55 | 49 | 27 | 24 | 27 |
| 619130282222 | 28 x 22 x 22 | 5 | 60 | 4021343190773 | 49 | 49 | 19 | 20 | 19 |
| 619130281528 | 28 x 28 x 15 | 5 | 50 | 4021343190759 | 60 | 54 | 30 | 28 | 30 |
| 619130281828 | 28 x 28 x 18 | 5 | 40 | 4021343190766 | 60 | 53 | 30 | 27 | 30 |
| 619130282228 | 28 x 28 x 22 | 5 | 40 | 4021343190780 | 60 | 56 | 30 | 27 | 30 |
| 619130351535 | 35 x 35 x 15 | 2 | 30 | 4021343190797 | 65 | 58 | 35 | 33 | 35 |
| 619130351835 | 35 x 35 x 18 | 2 | 30 | 4021343190803 | 65 | 55 | 35 | 32 | 35 |
| 619130352235 | 35 x 35 x 22 | 2 | 26 | 4021343190810 | 65 | 59 | 35 | 31 | 35 |
| 619130352835 | 35 x 35 x 28 | 2 | 26 | 4021343190827 | 65 | 62 | 35 | 33 | 35 |
| 619130421842 | 42 x 42 x 18 | 2 | 22 | 4021343190834 | 77 | 60 | 39 | 35 | 39 |
| 619130422242 | 42 x 42 x 22 | 2 | 18 | 4021343190841 | 77 | 63 | 39 | 34 | 39 |
| 619130422842 | 42 x 42 x 28 | 2 | 18 | 4021343190858 | 77 | 64 | 39 | 35 | 39 |
| 619130423542 | 42 x 42 x 35 | 2 | 16 | 4021343190865 | 77 | 67 | 39 | 37 | 39 |
| 619130542254 | 54 x 54 x 22 | 2 | 10 | 4021343190872 | 89 | 69 | 45 | 40 | 45 |
| 619130542854 | 54 x 54 x 28 | 2 | 10 | 4021343190889 | 89 | 70 | 45 | 41 | 45 |
| 619130543554 | 54 x 54 x 35 | 2 | 8 | 4021343190896 | 89 | 74 | 45 | 42 | 45 |
| 619130544254 | 54 x 54 x 42 | 2 | 8 | 4021343190902 | 89 | 81 | 45 | 42 | 45 |
| 619130762276 | 76,1 x 76,1 x 22 | 1 | 5 | 4021343190919 | 108 | 83 | 57 | 55 | 57 |
| 619130762876 | 76,1 x 76,1 x 28 | 1 | 5 | 4021343190926 | 108 | 85 | 57 | 56 | 57 |
| 619130763576 | 76,1 x 76,1 x 35 | 1 | 5 | 4021343190933 | 108 | 87 | 57 | 57 | 57 |
| 619130764276 | 76,1 x 76,1 x 42 | 1 | 5 | 4021343190940 | 108 | 95 | 57 | 57 | 57 |
| 619130765476 | 76,1 x 76,1 x 54 | 1 | 4 | 4021343190957 | 108 | 102 | 57 | 57 | 57 |
| 619130892289 | 88,9 x 88,9 x 22 | 1 | 4 | 4021343190964 | 120 | 90 | 63 | 61 | 63 |
| 619130892889 | 88,9 x 88,9 x 28 | 1 | 4 | 4021343190971 | 120 | 92 | 63 | 62 | 63 |
| 619130893589 | 88,9 x 88,9 x 35 | 1 | 4 | 4021343190988 | 120 | 94 | 63 | 63 | 63 |
| 619130894289 | 88,9 x 88,9 x 42 | 1 | 3 | 4021343190995 | 120 | 102 | 63 | 63 | 63 |
| 619130895489 | 88,9 x 88,9 x 54 | 1 | 3 | 4021343191008 | 120 | 108 | 63 | 64 | 63 |
| 619130897689 | 88,9 x 88,9 x 76,1 | 1 | 2 | 4021343191015 | 120 | 112 | 63 | 62 | 63 |
| 61913010822108 | 108 x 108 x 22 | 1 | 2 | 4021343191022 | 144 | 99 | 74 | 70 | 74 |
| 61913010828108 | 108 x 108 x 28 | 1 | 2 | 4021343191039 | 144 | 101 | 74 | 72 | 74 |
| 61913010835108 | 108 x 108 x 35 | 1 | 2 | 4021343191046 | 144 | 103 | 74 | 73 | 74 |
| 61913010842108 | 108 x 108 x 42 | 1 | 2 | 4021343191053 | 144 | 111 | 74 | 73 | 74 |
| 61913010854108 | 108 x 108 x 54 | 1 | 1 | 4021343191060 | 144 | 118 | 74 | 73 | 74 |
| 61913010876108 | 108 x 108 x 76,1 | 1 | 1 | 4021343191077 | 144 | 122 | 74 | 71 | 74 |
| 61913010889108 | 108 x 108 x 88,9 | 1 | 1 | 4021343191084 | 144 | 129 | 74 | 72 | 74 |



3
(Branch)

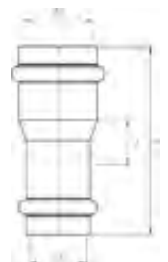
1 **2**



Catalog-no. and -description

19130G – Female branche tee

| Article-no. | Dimension d1 x d1x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-----------------|--------------------------|-----|-----|---------------|-----|-----|----|----|----|
| 619130G151215 | 15 x 15 x 1/2 | 10 | 80 | 4021343191145 | 48 | 45 | 22 | 32 | 24 |
| 619130G181218 | 18 x 18 x 1/2 | 10 | 80 | 4021343191091 | 49 | 47 | 24 | 34 | 24 |
| 619130G183418 | 18 x 18 x 3/4 | 10 | 70 | 4021343191107 | 49 | 49 | 24 | 34 | 32 |
| 619130G221222 | 22 x 22 x 1/2 | 5 | 60 | 4021343191114 | 54 | 48 | 26 | 35 | 24 |
| 619130G223422 | 22 x 22 x 3/4 | 10 | 50 | 4021343191121 | 54 | 50 | 26 | 35 | 32 |
| 619130G281228 | 28 x 28 x 1/2 | 5 | 40 | 4021343191138 | 60 | 46 | 30 | 32 | 24 |
| 619130G283428 | 28 x 28 x 3/4 | 5 | 40 | 4021343191152 | 60 | 54 | 30 | 39 | 32 |
| 619130G28128 | 28 x 28 x 1 | 5 | 40 | 4021343191169 | 60 | 57 | 30 | 40 | 38 |
| 619130G351235 | 35 x 35 x 1/2 | 2 | 30 | 4021343191176 | 65 | 49 | 35 | 36 | 24 |
| 619130G353435 | 35 x 35 x 3/4 | 2 | 30 | 4021343191183 | 65 | 51 | 35 | 36 | 32 |
| 619130G3511435 | 35 x 35 x 1 1/4 | 2 | 24 | 4021343191190 | 65 | 65 | 35 | 45 | 46 |
| 619130G421242 | 42 x 42 x 1/2 | 2 | 20 | 4021343191206 | 77 | 54 | 39 | 40 | 24 |
| 619130G423442 | 42 x 42 x 3/4 | 2 | 20 | 4021343191213 | 77 | 56 | 39 | 41 | 32 |
| 619130G4211242 | 42 x 42 x 1 1/2 | 2 | 12 | 4021343191220 | 77 | 68 | 39 | 48 | 55 |
| 619130G541254 | 54 x 54 x 1/2 | 2 | 12 | 4021343191237 | 89 | 60 | 45 | 46 | 24 |
| 619130G543454 | 54 x 54 x 3/4 | 2 | 12 | 4021343191244 | 89 | 62 | 45 | 47 | 32 |
| 619130G54254 | 54 x 54 x 2 | 2 | 8 | 4021343191251 | 89 | 80 | 45 | 56 | 65 |
| 619130G763476 | 76,1 x 76,1 x 3/4 | 1 | 4 | 4021343191268 | 108 | 75 | 57 | 60 | 32 |
| 619130G76276 | 76,1 x 76,1 x 2 | 1 | 4 | 4021343191275 | 108 | 85 | 57 | 61 | 65 |
| 619130G893489 | 88,9 x 88,9 x 3/4 | 1 | 4 | 4021343191282 | 120 | 82 | 63 | 67 | 32 |
| 619130G89289 | 88,9 x 88,9 x 2 | 1 | 4 | 4021343191299 | 120 | 91 | 63 | 67 | 65 |
| 619130G10834108 | 108 x 108 x 3/4 | 1 | 2 | 4021343191305 | 144 | 91 | 74 | 76 | 32 |
| 619130G1082108 | 108 x 108 x 2 | 1 | 2 | 4021343191312 | 144 | 101 | 74 | 77 | 65 |



Catalog-no. and -description

19240 – Reducing coupling

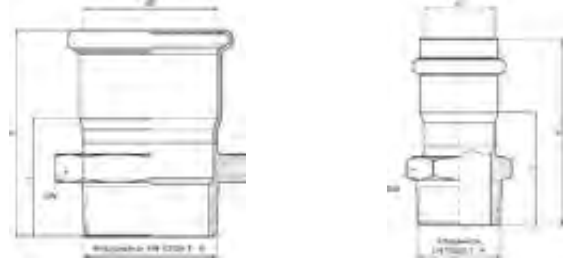
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 6192401815 | 18 x 15 | 10 | 200 | 4021343191367 | 61 | 10 |
| 6192402215 | 22 x 15 | 10 | 150 | 4021343191374 | 71 | 17 |
| 6192402218 | 22 x 18 | 10 | 150 | 4021343191381 | 67 | 13 |
| 6192402822 | 28 x 22 | 10 | 100 | 4021343191398 | 75 | 17 |



Catalog-no. and -description

19243 – Reducer

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|
| 6192431815 | 18a x 15 | 10 | 300 | 4021343191404 | 58 | 32 |
| 6192432215 | 22a x 15 | 10 | 200 | 4021343191411 | 73 | 47 |
| 6192432218 | 22a x 18 | 10 | 200 | 4021343191428 | 74 | 48 |
| 6192432815 | 28a x 15 | 5 | 120 | 4021343191435 | 78 | 52 |
| 6192432818 | 28a x 18 | 5 | 100 | 4021343191442 | 79 | 53 |
| 6192432822 | 28a x 22 | 5 | 120 | 4021343191459 | 77 | 48 |
| 6192433518 | 35a x 18 | 2 | 70 | 4021343191466 | 78 | 52 |
| 6192433522 | 35a x 22 | 2 | 70 | 4021343191473 | 84 | 55 |
| 6192433528 | 35a x 28 | 2 | 60 | 4021343191480 | 85 | 55 |
| 6192434222 | 42a x 22 | 2 | 40 | 4021343191497 | 95 | 66 |
| 6192434228 | 42a x 28 | 2 | 40 | 4021343191503 | 97 | 67 |
| 6192434235 | 42a x 35 | 2 | 40 | 4021343191510 | 95 | 64 |
| 6192435428 | 54a x 28 | 2 | 30 | 4021343191527 | 106 | 76 |
| 6192435435 | 54a x 35 | 2 | 30 | 4021343191534 | 106 | 75 |
| 6192435442 | 54a x 42 | 2 | 30 | 4021343191541 | 112 | 73 |
| 6192437654 | 76,1a x 54 | 2 | 16 | 4021343191558 | 141 | 96 |
| 6192438954 | 88,9a x 54 | 2 | 10 | 4021343191565 | 160 | 115 |
| 6192438976 | 88,9a x 76,1 | 2 | 8 | 4021343191572 | 151 | 100 |
| 61924310854 | 108a x 54 | 2 | 4 | 4021343191589 | 180 | 135 |
| 61924310876 | 108a x 76,1 | 2 | 4 | 4021343191596 | 181 | 130 |
| 61924310889 | 108a x 88,9 | 2 | 4 | 4021343191602 | 181 | 123 |



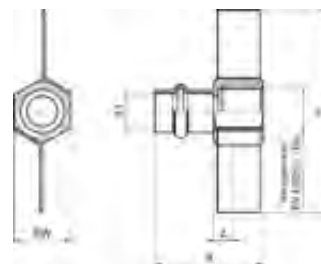
Catalog-no. and -description
19243G – Male adaptor

| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW |
|--------------|---------------------|-----|-----|---------------|-----|----|-----|
| 619243G1538 | 15 x 3/8 | 10 | 300 | 4021343191626 | 41 | 15 | 19 |
| 619243G1512 | 15 x 1/2 | 10 | 250 | 4021343191619 | 46 | 20 | 24 |
| 619243G1534 | 15 x 3/4 | 10 | 200 | 4021343191633 | 63 | 37 | 30 |
| 619243G1812 | 18 x 1/2 | 10 | 250 | 4021343191640 | 46 | 20 | 24 |
| 619243G1834 | 18 x 3/4 | 10 | 200 | 4021343191657 | 48 | 22 | 30 |
| 619243G2212 | 22 x 1/2 | 10 | 180 | 4021343191664 | 51 | 22 | 27 |
| 619243G2234 | 22 x 3/4 | 10 | 180 | 4021343191671 | 51 | 22 | 30 |
| 619243G221 | 22 x 1 | 10 | 150 | 4021343191688 | 52 | 23 | 36 |
| 619243G2834 | 28 x 3/4 | 5 | 100 | 4021343191695 | 72 | 42 | 30 |
| 619243G281 | 28 x 1 | 5 | 90 | 4021343191701 | 74 | 44 | 36 |
| 619243G351 | 35 x 1 | 2 | 60 | 4021343191718 | 80 | 49 | 36 |
| 619243G35114 | 35 x 1 1/4 | 2 | 40 | 4021343191725 | 84 | 53 | 46 |
| 619243G42112 | 42 x 1 1/2 | 2 | 30 | 4021343191732 | 94 | 55 | 55 |
| 619243G542 | 54 x 2 | 2 | 20 | 4021343191749 | 107 | 62 | 65 |
| 619243G76212 | 76,1 x 2 1/2 | 1 | 8 | 4021343191756 | 117 | 65 | 100 |
| 619243G893 | 88,9 x 3 | 1 | 6 | 4021343191763 | 136 | 78 | 105 |
| 619243G1084 | 108 x 4 | 1 | 4 | 4021343191770 | 155 | 84 | 125 |



Catalog-no. and -description
19270 – Coupling

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 61927015 | 15 | 10 | 300 | 4021343191848 | 56 | 6 |
| 61927018 | 18 | 10 | 200 | 4021343191855 | 67 | 17 |
| 61927022 | 22 | 10 | 150 | 4021343191862 | 76 | 20 |
| 61927028 | 28 | 5 | 80 | 4021343191879 | 78 | 19 |
| 61927035 | 35 | 2 | 50 | 4021343191886 | 78 | 17 |
| 61927042 | 42 | 2 | 30 | 4021343191893 | 94 | 18 |
| 61927054 | 54 | 2 | 24 | 4021343191909 | 106 | 18 |
| 61927076 | 76,1 | 1 | 10 | 4021343191916 | 132 | 31 |
| 61927089 | 88,9 | 1 | 6 | 4021343191923 | 145 | 30 |
| 619270108 | 108 | 1 | 4 | 4021343191930 | 170 | 31 |



Catalog-no. and -description

19270F – Female adaptor

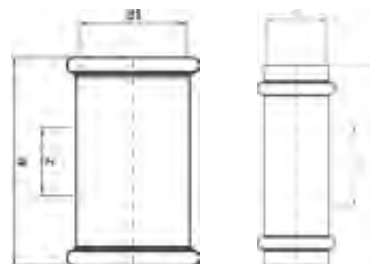
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | h | SW |
|-------------|----------------------|-----|-----|---------------|----|---|----|----|
| 619270F1512 | 15 x 1/2 | 10 | 150 | 4021343192166 | 46 | 7 | 86 | 24 |



Catalog-no. and -description

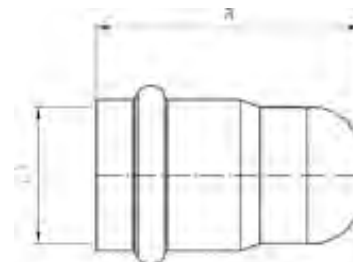
19270G – Female adaptor

| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW |
|--------------|----------------------|-----|-----|---------------|-----|----|----|
| 619270G1512 | 15 x 1/2 | 10 | 200 | 4021343192043 | 46 | 7 | 24 |
| 619270G1534 | 15 x 3/4 | 10 | 180 | 4021343192050 | 49 | 9 | 30 |
| 619270G1812 | 18 x 1/2 | 10 | 200 | 4021343192067 | 47 | 9 | 24 |
| 619270G1834 | 18 x 3/4 | 10 | 170 | 4021343192074 | 49 | 9 | 30 |
| 619270G2212 | 22 x 1/2 | 10 | 170 | 4021343192081 | 50 | 8 | 24 |
| 619270G2234 | 22 x 3/4 | 10 | 150 | 4021343192098 | 52 | 9 | 30 |
| 619270G221 | 22 x 1 | 10 | 120 | 4021343192104 | 55 | 9 | 38 |
| 619270G2834 | 28 x 3/4 | 5 | 100 | 4021343192111 | 76 | 32 | 32 |
| 619270G281 | 28 x 1 | 5 | 80 | 4021343192128 | 79 | 32 | 38 |
| 619270G35114 | 35 x 1 1/4 | 2 | 36 | 4021343192135 | 89 | 39 | 46 |
| 619270G42112 | 42 x 1 1/2 | 2 | 28 | 4021343192142 | 98 | 40 | 55 |
| 619270G542 | 54 x 2 | 2 | 20 | 4021343192159 | 107 | 39 | 65 |



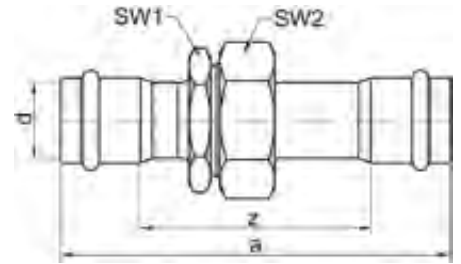
Catalog-no. and -description
19270S – Slip coupling

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| 619270S15 | 15 | 10 | 200 | 4021343191947 | 78 | 27 |
| 619270S18 | 18 | 10 | 150 | 4021343191954 | 78 | 27 |
| 619270S22 | 22 | 10 | 100 | 4021343191961 | 84 | 27 |
| 619270S28 | 28 | 5 | 80 | 4021343191978 | 96 | 37 |
| 619270S35 | 35 | 2 | 50 | 4021343191985 | 98 | 37 |
| 619270S42 | 42 | 2 | 40 | 4021343191992 | 114 | 37 |
| 619270S54 | 54 | 2 | 20 | 4021343192005 | 131 | 42 |
| 619270S76 | 76,1 | 1 | 10 | 4021343192012 | 148 | 47 |
| 619270S89 | 88,9 | 1 | 4 | 4021343192029 | 161 | 46 |
| 619270S108 | 108 | 1 | 3 | 4021343192036 | 210 | 71 |



Catalog-no. and -description
19301 – Endcap

| Article-no. | Dimension d1 | Bag | Box | EAN code | a |
|-------------|-----------------|-----|-----|---------------|----|
| 61930115 | 15 | 10 | 400 | 4021343192234 | 47 |
| 61930118 | 18 | 10 | 300 | 4021343192241 | 47 |
| 61930122 | 22 | 10 | 200 | 4021343192258 | 51 |
| 61930128 | 28 | 5 | 150 | 4021343192265 | 54 |
| 61930135 | 35 | 2 | 80 | 4021343192272 | 57 |
| 61930142 | 42 | 2 | 50 | 4021343192289 | 68 |
| 61930154 | 54 | 2 | 30 | 4021343192296 | 82 |

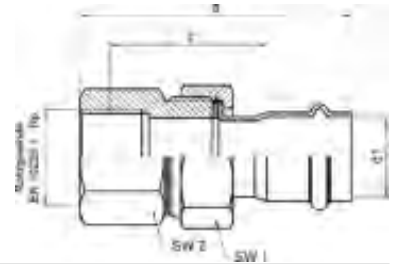


Catalog-no. and -description

19330 – Union, flat sealing, stainless steel nut

| Article-no. | Dimension d1 | Bag | Box | EAN code | a | z | G | SW1 | SW2 |
|-------------|-----------------|-----|-----|---------------|-----|----|-------|-----|-----|
| 61933015 | 15 | 5 | 120 | 4021343217890 | 111 | 60 | 1/2 | 24 | 24 |
| 61933018 | 18 | 5 | 80 | 4021343217906 | 117 | 65 | 3/4 | 27 | 30 |
| 61933022 | 22 | 5 | 50 | 4021343217913 | 127 | 70 | 1 | 36 | 38 |
| 61933028 | 28 | 5 | 35 | 4021343217920 | 143 | 84 | 1 1/4 | 46 | 50 |
| 61933035 | 35 | 2 | 30 | 4021343217937 | 146 | 85 | 1 1/2 | 50 | 55 |
| 61933042 | 42 | 2 | 20 | 4021343217944 | 158 | 81 | 1 3/4 | 55 | 58 |
| 61933054 | 54 | 2 | 12 | 4021343217951 | 175 | 85 | 2 3/8 | 70 | 75 |

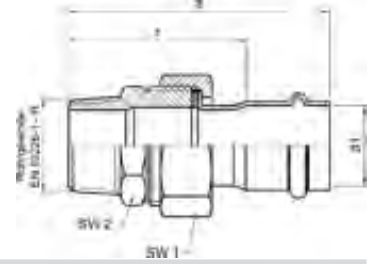
10



Catalog-no. and -description

19330GMVA – Union, female, flat sealing, stainless steel nut

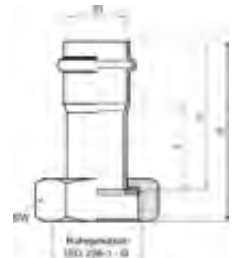
| Article-no. | Dimension d1 x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-----------------|----------------------|-----|-----|---------------|-----|----|-----|-----|
| 619330GMVA1512 | 15 x 1/2 | 5 | 120 | 4021343217128 | 93 | 53 | 27 | 24 |
| 619330GMVA1534 | 15 x 3/4 | 5 | 100 | 4021343217074 | 94 | 53 | 32 | 30 |
| 619330GMVA1834 | 18 x 3/4 | 5 | 80 | 4021343217111 | 98 | 57 | 32 | 30 |
| 619330GMVA2234 | 22 x 3/4 | 5 | 50 | 4021343217067 | 104 | 60 | 38 | 32 |
| 619330GMVA221 | 22 x 1 | 5 | 50 | 4021343217050 | 107 | 60 | 38 | 38 |
| 619330GMVA2834 | 28 x 3/4 | 5 | 40 | 4021343217135 | 114 | 69 | 50 | 32 |
| 619330GMVA281 | 28 x 1 | 5 | 50 | 4021343217173 | 118 | 71 | 40 | 41 |
| 619330GMVA35114 | 35 x 1 1/4 | 2 | 30 | 4021343217180 | 113 | 62 | 55 | 46 |
| 619330GMVA42112 | 42 x 1 1/2 | 2 | 20 | 4021343217197 | 115 | 57 | 58 | 55 |
| 619330GMVA542 | 54 x 2 | 2 | 12 | 4021343217364 | 126 | 57 | 75 | 70 |



Catalog-no. and -description

19333GMVA – Union, male, flat sealing, stainless steel nut

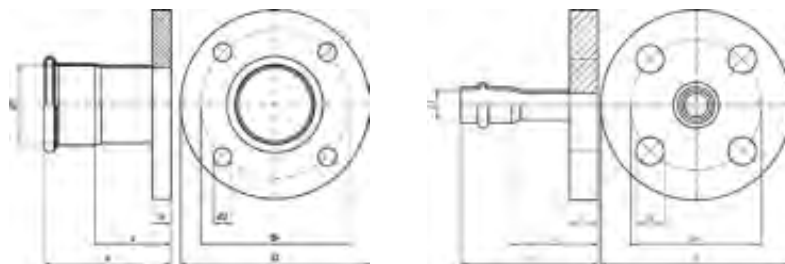
| Article-no. | Dimension d1 x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-----------------|---------------------|-----|-----|---------------|-----|----|-----|-----|
| 619333GMVA1512 | 15 x 1/2 | 5 | 150 | 4021343217388 | 90 | 63 | 30 | 27 |
| 619333GMVA1534 | 15 x 3/4 | 5 | 120 | 4021343217395 | 91 | 64 | 30 | 30 |
| 619333GMVA1812 | 18 x 1/2 | 5 | 100 | 4021343217401 | 94 | 68 | 30 | 30 |
| 619333GMVA2234 | 22 x 3/4 | 5 | 60 | 4021343217418 | 101 | 71 | 38 | 36 |
| 619333GMVA281 | 28 x 1 | 5 | 50 | 4021343217425 | 115 | 85 | 50 | 36 |
| 619333GMVA35114 | 35 x 1 1/4 | 2 | 40 | 4021343217449 | 124 | 92 | 55 | 46 |
| 619333GMVA42112 | 42 x 1 1/2 | 2 | 20 | 4021343217456 | 127 | 87 | 58 | 55 |
| 619333GMVA542 | 54 x 2 | 2 | 12 | 4021343217463 | 138 | 93 | 75 | 70 |



Catalog-no. and -description

19359M – Union adaptor, flat sealing, stainless steel nut

| Article-no. | Dimension d1 x G | Bag | Box | EAN code | a | c | z | SW |
|--------------|---------------------|-----|-----|---------------|----|----|----|----|
| 619359M1512 | 15 x 1/2 | 5 | 250 | 4021343192340 | 63 | 55 | 29 | 24 |
| 619359M1534 | 15 x 3/4 | 5 | 200 | 4021343192357 | 61 | 51 | 25 | 30 |
| 619359M1834 | 18 x 3/4 | 5 | 200 | 4021343192364 | 65 | 55 | 29 | 30 |
| 619359M221 | 22 x 1 | 5 | 130 | 4021343192371 | 72 | 60 | 31 | 38 |
| 619359M28114 | 28 x 1 1/4 | 5 | 50 | 4021343192425 | 85 | 70 | 40 | 50 |
| 619359M35112 | 35 x 1 1/2 | 5 | 50 | 4021343192432 | 85 | 71 | 40 | 55 |
| 619359M42134 | 42 x 1 3/4 | 2 | 34 | 4021343192449 | 93 | 75 | 36 | 58 |
| 619359M54238 | 54 x 2 3/8 | 2 | 20 | 4021343192456 | 96 | 78 | 33 | 75 |

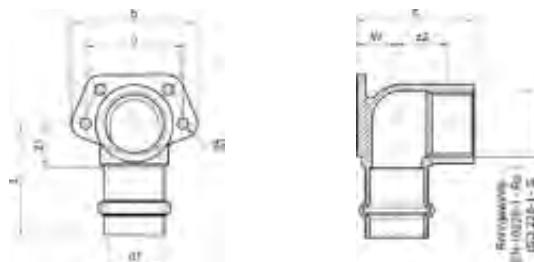


Catalog-no. and -description

19-VA-PF – Crimping flange, PN 10/16

| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | a | z | h | dk | d2 | D | Az |
|-------------|----------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 619VAPF15 | DN 12 / 15 mm | 1 | 25 | 4021343192647 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 619VAPF18 | DN 15 / 18 mm | 1 | 20 | 4021343192654 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 619VAPF22 | DN 20 / 22 mm | 1 | 16 | 4021343192661 | 69 | 40 | 14 | 75 | 14 | 105 | 4 |
| 619VAPF28 | DN 25 / 28 mm | 1 | 14 | 4021343192678 | 75 | 45 | 16 | 85 | 14 | 115 | 4 |
| 619VAPF35 | DN 32 / 35 mm | 1 | 10 | 4021343192685 | 78 | 47 | 16 | 100 | 18 | 140 | 4 |
| 619VAPF42 | DN 40 / 42 mm | 1 | 8 | 4021343192692 | 87 | 48 | 16 | 110 | 18 | 150 | 4 |
| 619VAPF54 | DN 50 / 54 mm | 1 | 5 | 4021343192708 | 100 | 55 | 18 | 125 | 18 | 165 | 4 |
| 619VAPF76 | DN 65 / 76,1 mm | 1 | 2 | 4021343192715 | 124 | 73 | 18 | 145 | 18 | 185 | 4 |
| 619VAPF89 | DN 80 / 88,9 mm | 1 | 2 | 4021343192722 | 137 | 79 | 18 | 160 | 18 | 200 | 8 |
| 619VAPF108 | DN 100 / 108 mm | 1 | 1 | 4021343192630 | 162 | 92 | 20 | 180 | 18 | 220 | 8 |

10



Catalog-no. and -description

19472G – Wall plate elbow with universal flange

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | L | W | d2 |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|----|----|----|
| 619472G1512 | 15 x 1/2 | 10 | 90 | 4021343192302 | 40 | 55 | 40 | 15 | 14 | 40 | 13 | 5 |
| 619472G1812 | 18 x 1/2 | 10 | 80 | 4021343192319 | 40 | 55 | 46 | 15 | 17 | 40 | 16 | 5 |
| 619472G2234 | 22 x 3/4 | 10 | 60 | 4021343192326 | 46 | 55 | 47 | 18 | 16 | 46 | 16 | 5 |
| 619472G281 | 28 x 1 | 5 | 40 | 4021343192333 | 55 | 70 | 58 | 22 | 21 | 51 | 20 | 5 |



Catalog-no. and -description

19-FL-D – Flange sealing, asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

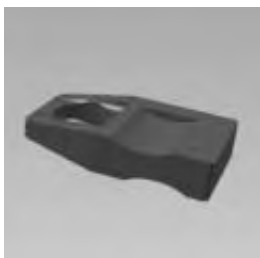
| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|-----------------|-----|-----|---------------|
| 619FLD15 | 15 | | 240 | 4021343207860 |
| 619FLD20 | 20 | 50 | 200 | 4021343207877 |
| 619FLD25 | 25 | 40 | 160 | 4021343207884 |
| 619FLD32 | 32 | 30 | 120 | 4021343207891 |
| 619FLD40 | 40 | 25 | 100 | 4021343207907 |
| 619FLD50 | 50 | | 120 | 4021343207914 |
| 619FLD65 | 65 | | 100 | 4021343207921 |
| 619FLD80 | 80 | | 80 | 4021343207938 |
| 619FLD100 | 100 | | 60 | 4021343207945 |



Catalog-no. and -description

4981 – Plastic measure tool for NiroSan®-Press, with bottle opener and water level, 15 - 54 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84981 | 15-54 mm | | 30 | 4021343142673 |



Catalog-no. and -description

4989 – Plastic measure tool for NiroSan-Press with bottle opener and water level, 64 mm and 67 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84989 | 64 + 67 mm | | | 4021343356889 |



Catalog-no. and -description

4990 – Plastic measure tool for NiroSan®-Pres, with bottle opener and water level, 76,1 - 108 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84990 | 76,1-108 mm | | 20 | 4021343194511 |

SANHA[®]

NiroSan[®]-Press SF

Stainless steel (316L) pressfittings for
silicone-free installations
Series 19000

SYSTEM TECHNOLOGY

SANHA-Therm

**Pressfittings for heating,
compressed air and cooling
(only in closed systems)**

Series 24000



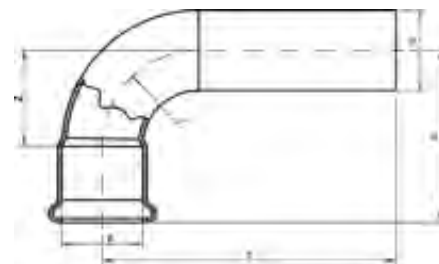
104-1255



AT / 2001-02-1068-02



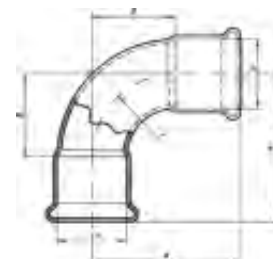
POCC DE.AЮ31.H08013



Catalog-no. and -description

24001A – Bend 90° female/male

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|-----|-----|-----|
| 124001A12 | 12 | 10 | 500 | 4021343326011 | 30 | 40 | 15 |
| 124001A15 | 15 | 10 | 350 | 4021343326028 | 36 | 44 | 18 |
| 124001A18 | 18 | 10 | 250 | 4021343326035 | 42 | 50 | 22 |
| 124001A22 | 22 | 10 | 130 | 4021343326042 | 50 | 58 | 27 |
| 124001A28 | 28 | 5 | 75 | 4021343326059 | 61 | 68 | 34 |
| 124001A35 | 35 | 2 | 40 | 4021343326066 | 75 | 82 | 43 |
| 124001A42 | 42 | 2 | 22 | 4021343326073 | 89 | 103 | 51 |
| 124001A54 | 54 | 2 | 12 | 4021343326080 | 108 | 123 | 65 |
| 124001A67 | 66,7 | 1 | 8 | 4021343342868 | 129 | 147 | 81 |
| 124001A76 | 76,1 | 1 | 5 | 4021343326097 | 142 | 160 | 92 |
| 124001A89 | 88,9 | 1 | 3 | 4021343326103 | 164 | 184 | 108 |
| 124001A108 | 108 | 1 | 1 | 4021343326110 | 200 | 227 | 131 |



Catalog-no. and -description

24002A – Bend 90° female/female

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|-----|-----|
| 124002A12 | 12 | 10 | 500 | 4021343326127 | 30 | 15 |
| 124002A15 | 15 | 10 | 300 | 4021343326134 | 36 | 18 |
| 124002A18 | 18 | 10 | 200 | 4021343326141 | 42 | 22 |
| 124002A22 | 22 | 10 | 130 | 4021343326158 | 50 | 27 |
| 124002A28 | 28 | 5 | 80 | 4021343326165 | 61 | 34 |
| 124002A35 | 35 | 2 | 40 | 4021343326172 | 75 | 43 |
| 124002A42 | 42 | 2 | 24 | 4021343326189 | 89 | 51 |
| 124002A54 | 54 | 2 | 12 | 4021343326196 | 108 | 65 |
| 124002A67 | 66,7 | 1 | 6 | 4021343342875 | 129 | 81 |
| 124002A76 | 76,1 | 1 | 4 | 4021343326202 | 142 | 92 |
| 124002A89 | 88,9 | 1 | 2 | 4021343326219 | 164 | 108 |
| 124002A108 | 108 | 1 | 1 | 4021343326226 | 200 | 131 |



Catalog-no. and -description

24040 – Bend 45° female/male

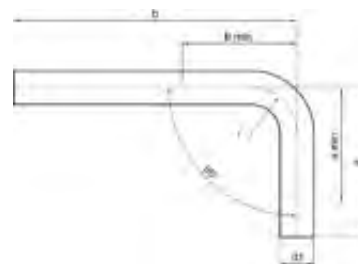
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|-----|---------------|-----|-----|----|
| 12404012 | 12 | 10 | 600 | 4021343326240 | 22 | 30 | 6 |
| 12404015 | 15 | 10 | 400 | 4021343326257 | 26 | 34 | 8 |
| 12404018 | 18 | 10 | 300 | 4021343326264 | 29 | 37 | 9 |
| 12404022 | 22 | 10 | 180 | 4021343326271 | 35 | 43 | 11 |
| 12404028 | 28 | 5 | 90 | 4021343326288 | 41 | 49 | 14 |
| 12404035 | 35 | 2 | 50 | 4021343326295 | 50 | 58 | 18 |
| 12404042 | 42 | 2 | 30 | 4021343326301 | 60 | 74 | 21 |
| 12404054 | 54 | 2 | 18 | 4021343326318 | 70 | 85 | 27 |
| 12404067 | 66,7 | 1 | 12 | 4021343342899 | 82 | 100 | 34 |
| 12404076 | 76,1 | 1 | 6 | 4021343326325 | 89 | 105 | 39 |
| 12404089 | 88,9 | 1 | 3 | 4021343326332 | 101 | 119 | 45 |
| 124040108 | 108 | 1 | 2 | 4021343326349 | 124 | 145 | 55 |



Catalog-no. and -description

24041 – Bend 45° female/female

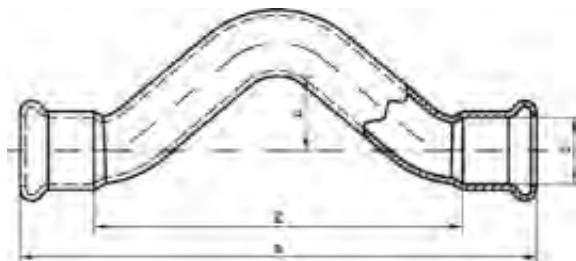
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|-----|----|
| 12404112 | 12 | 10 | 600 | 4021343326356 | 22 | 6 |
| 12404115 | 15 | 10 | 350 | 4021343326363 | 26 | 8 |
| 12404118 | 18 | 10 | 250 | 4021343326370 | 29 | 9 |
| 12404122 | 22 | 10 | 160 | 4021343326387 | 35 | 11 |
| 12404128 | 28 | 5 | 100 | 4021343326394 | 41 | 14 |
| 12404135 | 35 | 2 | 50 | 4021343326400 | 50 | 18 |
| 12404142 | 42 | 2 | 30 | 4021343326417 | 59 | 21 |
| 12404154 | 54 | 2 | 18 | 4021343326424 | 70 | 27 |
| 12404167 | 66,7 | 1 | 12 | 4021343342899 | 82 | 34 |
| 12404176 | 76,1 | 1 | 6 | 4021343326431 | 89 | 39 |
| 12404189 | 88,9 | 1 | 3 | 4021343326448 | 101 | 45 |
| 124041108 | 108 | 1 | 2 | 4021343326455 | 124 | 55 |



Catalog-no. and -description

24003 – Bend with plain ends 90°

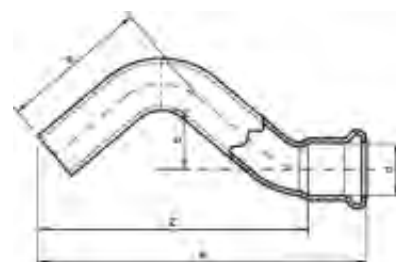
| Article-no. | Dimension d | Bag | Box | EAN code | a | a min | b | b min |
|-------------|-------------|-----|-----|---------------|-----|-------|-----|-------|
| 12400315 | 15 | 10 | 100 | 4021343337413 | 62 | 55 | 125 | 55 |
| 12400318 | 18 | 10 | 80 | 4021343337420 | 62 | 57 | 125 | 57 |
| 12400322 | 22 | 10 | 70 | 4021343337437 | 73 | 65 | 150 | 65 |
| 12400328 | 28 | 5 | 30 | 4021343337444 | 85 | 80 | 200 | 80 |
| 12400335 | 35 | 2 | 20 | 4021343337451 | 92 | 92 | 225 | 92 |
| 12400342 | 42 | 2 | 10 | 4021343337468 | 113 | | 250 | 113 |
| 12400354 | 54 | 2 | 6 | 4021343337475 | 131 | | 300 | 131 |



Catalog-no. and -description

24085 – Full crossover

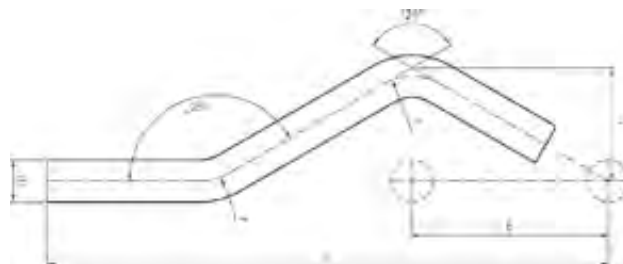
| Article-no. | Dimension d | Bag | Box | EAN code | a | c | z |
|-------------|-------------|-----|-----|---------------|-----|----|-----|
| 12408512 | 12 | 10 | 200 | 4021343326462 | 110 | 18 | 78 |
| 12408515 | 15 | 10 | 150 | 4021343326479 | 124 | 19 | 89 |
| 12408518 | 18 | 10 | 90 | 4021343326486 | 142 | 21 | 102 |
| 12408522 | 22 | 10 | 50 | 4021343326493 | 172 | 25 | 125 |
| 12408528 | 28 | 5 | 35 | 4021343326509 | 203 | 28 | 150 |



Catalog-no. and -description

24086 – Partial crossover

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | c | z |
|-------------|-------------|-----|-----|---------------|-----|----|----|-----|
| 12408612 | 12 | 10 | 300 | 4021343326516 | 87 | 40 | 18 | 71 |
| 12408615 | 15 | 10 | 200 | 4021343326523 | 98 | 44 | 19 | 80 |
| 12408618 | 18 | 10 | 150 | 4021343326530 | 111 | 49 | 21 | 92 |
| 12408622 | 22 | 10 | 80 | 4021343326547 | 136 | 61 | 25 | 112 |
| 12408628 | 28 | 5 | 40 | 4021343326554 | 161 | 72 | 28 | 134 |



Catalog-no. and -description

24087 – Crossover

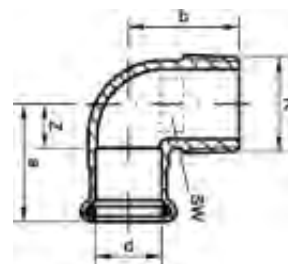
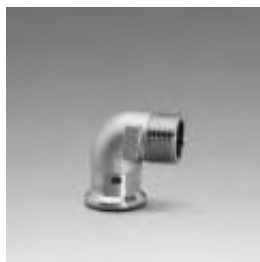
| Article-no. | Dimension d1 | Bag | Box | EAN code | a | b | c |
|-------------|-----------------|-----|-----|---------------|-----|----|----|
| 12408715 | 15 | 10 | 120 | 4021343337482 | 200 | 70 | 41 |
| 12408718 | 18 | 10 | 80 | 4021343337499 | 216 | 70 | 50 |
| 12408722 | 22 | 10 | 50 | 4021343337505 | 216 | 78 | 45 |
| 12408728 | 28 | 5 | 40 | 4021343337512 | 244 | 87 | 50 |



Catalog-no. and -description

24090g – Female elbow 90°

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|--------------|---------------------|-----|-----|---------------|----|----|----|----|----|
| 124090G1238 | 12x3/8 | 10 | 150 | 4021343327971 | 27 | 18 | 11 | 8 | 21 |
| 124090G1512 | 15x1/2 | 10 | 150 | 4021343327988 | 33 | 23 | 15 | 10 | 26 |
| 124090G1812 | 18x1/2 | 10 | 150 | 4021343327995 | 33 | 25 | 13 | 11 | 26 |
| 124090G2234 | 22x3/4 | 10 | 80 | 4021343328008 | 40 | 29 | 16 | 14 | 32 |
| 124090G281 | 28x1 | 5 | 30 | 4021343328015 | 46 | 33 | 20 | 16 | 39 |
| 124090G35114 | 35x1 1/4 | 2 | 20 | 4021343328022 | 57 | 42 | 25 | 20 | 49 |
| 124090G42112 | 42x1 1/2 | 2 | 12 | 4021343328039 | 65 | 45 | 27 | 23 | 56 |
| 124090G542 | 54x2 | 2 | 6 | 4021343328046 | 78 | 55 | 36 | 31 | 68 |



Catalog-no. and -description

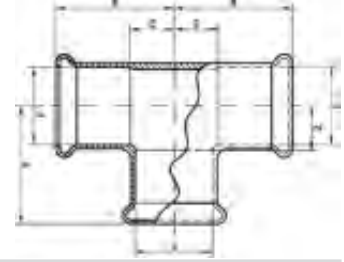
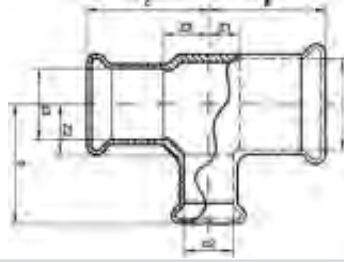
24092g – Male elbow 90°

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | b | z | SW |
|--------------|--------------------|-----|-----|---------------|----|----|----|----|
| 124092G1238 | 12x3/8 | 10 | 250 | 4021343328053 | 24 | 22 | 8 | 16 |
| 124092G1512 | 15x1/2 | 10 | 200 | 4021343328077 | 26 | 23 | 8 | 18 |
| 124092G1538 | 15x3/8 | 10 | 200 | 4021343328060 | 27 | 26 | 9 | 19 |
| 124092G1812 | 18x1/2 | 10 | 160 | 4021343328084 | 30 | 28 | 10 | 20 |
| 124092G2234 | 22x3/4 | 10 | 80 | 4021343328091 | 36 | 33 | 12 | 26 |
| 124092G281 | 28x1 | 5 | 50 | 4021343328107 | 42 | 38 | 16 | 32 |
| 124092G35114 | 35x1 1/4 | 2 | 30 | 4021343328114 | 52 | 45 | 20 | 39 |
| 124092G42112 | 42x1 1/2 | 2 | 12 | 4021343328121 | 59 | 48 | 21 | 45 |
| 124092G542 | 54x2 | 2 | 10 | 4021343328138 | 70 | 59 | 28 | 57 |



3
(Branch)

1 **2**



Catalog-no. and -description

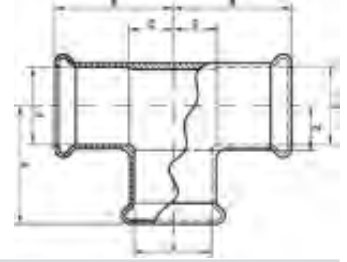
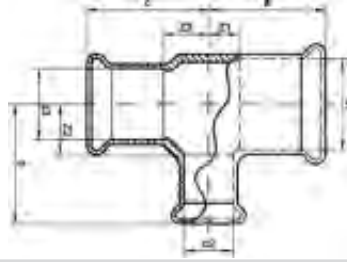
24130 – Tee

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|--------------|---------------------------|-----|-----|---------------|-----|-----|-----|----|----|----|----|
| 12413012 | 12 | 10 | 350 | 4021343326578 | 23 | 23 | 23 | 8 | | | |
| 12413015 | 15 | 10 | 200 | 4021343326585 | 34 | 27 | 34 | 9 | | | |
| 12413018 | 18 | 10 | 150 | 4021343326592 | 36 | 31 | 36 | 11 | | | |
| 12413022 | 22 | 10 | 80 | 4021343326608 | 39 | 37 | 39 | 13 | | | |
| 12413028 | 28 | 5 | 60 | 4021343326615 | 43 | 43 | 43 | 17 | | | |
| 12413035 | 35 | 2 | 30 | 4021343326622 | 53 | 53 | 53 | 21 | | | |
| 12413042 | 42 | 2 | 22 | 4021343326639 | 63 | 63 | 63 | 25 | | | |
| 12413054 | 54 | 2 | 12 | 4021343326646 | 73 | 73 | 73 | 31 | | | |
| 12413067 | 66,7 | 1 | 6 | 4021343342905 | 89 | 100 | 89 | 41 | | | |
| 12413076 | 76,1 | 1 | 3 | 4021343326653 | 97 | 106 | 97 | | 47 | 57 | 47 |
| 12413089 | 88,9 | 1 | 2 | 4021343326660 | 111 | 121 | 111 | | 55 | 65 | 55 |
| 124130108 | 108 | 1 | 1 | 4021343326677 | 135 | 145 | 135 | | 65 | 75 | 65 |
| 124130121512 | 12x12x15 | 10 | 300 | 4021343326684 | 28 | 27 | 28 | | 12 | 9 | 12 |
| 124130151215 | 15x15x12 | 10 | 280 | 4021343326691 | 26 | 25 | 26 | | 8 | 9 | 8 |
| 124130151815 | 15x15x18 | 10 | 180 | 4021343326707 | 31 | 31 | 31 | | 13 | 11 | 13 |
| 124130152215 | 15x15x22 | 10 | 120 | 4021343337529 | 35 | 37 | 35 | | 17 | 13 | 17 |
| 124130181515 | 18x15x15 | 10 | 200 | 4021343326714 | 30 | 29 | 30 | | 10 | 11 | 12 |
| 124130181815 | 18x15x18 | 10 | 180 | 4021343326738 | 31 | 31 | 31 | | 11 | 11 | 13 |
| 124130181518 | 18x18x15 | 10 | 180 | 4021343326721 | 30 | 29 | 30 | | 10 | 11 | 10 |
| 124130182218 | 18x18x22 | 10 | 90 | 4021343326745 | 36 | 37 | 36 | | 16 | 13 | 16 |
| 124130221515 | 22x15x15 | 10 | 150 | 4021343326769 | 33 | 31 | 32 | | 10 | 13 | 14 |
| 124130222215 | 22x15x22 | 10 | 100 | 4021343326813 | 37 | 37 | 35 | | 13 | 13 | 17 |
| 124130221518 | 22x18x15 | 10 | 150 | 4021343326776 | 33 | 31 | 32 | | 10 | 13 | 12 |
| 124130221818 | 22x18x18 | 10 | 130 | 4021343326790 | 35 | 33 | 34 | | 11 | 13 | 14 |
| 124130222218 | 22x18x22 | 10 | 100 | 4021343326820 | 37 | 37 | 36 | | 13 | 13 | 16 |
| 124130221222 | 22x22x12 | 10 | 130 | 4021343326752 | 32 | 29 | 32 | | 8 | 13 | 8 |
| 124130221522 | 22x22x15 | 10 | 120 | 4021343326783 | 33 | 31 | 33 | | 10 | 13 | 10 |
| 124130221822 | 22x22x18 | 10 | 120 | 4021343326806 | 35 | 33 | 35 | | 11 | 13 | 11 |
| 124130222822 | 22x22x28 | 5 | 70 | 4021343326837 | 43 | 43 | 43 | | 20 | 17 | 20 |
| 124130282815 | 28x15x28 | 5 | 60 | 4021343326912 | 43 | 43 | 42 | | 17 | 17 | 24 |
| 124130281818 | 28x18x18 | 5 | 100 | 4021343326868 | 38 | 36 | 37 | | 12 | 16 | 17 |
| 124130282818 | 28x18x28 | 5 | 60 | 4021343326929 | 43 | 43 | 42 | | 17 | 17 | 22 |
| 124130281522 | 28x22x15 | 5 | 80 | 4021343326844 | 37 | 34 | 37 | | 10 | 16 | 13 |
| 124130281822 | 28x22x18 | 5 | 90 | 4021343326875 | 38 | 36 | 38 | | 12 | 16 | 15 |
| 124130282222 | 28x22x22 | 5 | 70 | 4021343326899 | 40 | 40 | 40 | | 14 | 16 | 17 |
| 124130282822 | 28x22x28 | 5 | 70 | 4021343326936 | 43 | 43 | 43 | | 17 | 17 | 20 |
| 124130281528 | 28x28x15 | 5 | 80 | 4021343326851 | 37 | 34 | 37 | | 10 | 16 | 10 |
| 124130281828 | 28x28x18 | 5 | 70 | 4021343326882 | 38 | 36 | 38 | | 12 | 16 | 12 |
| 124130282228 | 28x28x22 | 5 | 60 | 4021343326905 | 40 | 40 | 40 | | 14 | 16 | 14 |
| 124130283528 | 28x28x35 | 2 | 40 | 4021343326943 | 53 | 53 | 53 | | 25 | 21 | 25 |
| 124130352222 | 35x22x22 | 2 | 50 | 4021343326974 | 46 | 44 | 45 | | 14 | 20 | 21 |
| 124130353522 | 35x22x35 | 2 | 40 | 4021343327025 | 53 | 53 | 51 | | 21 | 21 | 28 |
| 124130352228 | 35x28x22 | 2 | 40 | 4021343326981 | 46 | 44 | 45 | | 14 | 20 | 19 |
| 124130352828 | 35x28x28 | 2 | 44 | 4021343327001 | 49 | 47 | 48 | | 17 | 21 | 22 |
| 124130353528 | 35x28x35 | 2 | 30 | 4021343327032 | 53 | 53 | 52 | | 21 | 21 | 25 |
| 124130351535 | 35x35x15 | 2 | 50 | 4021343326950 | 43 | 38 | 43 | | 11 | 20 | 11 |
| 124130351835 | 35x35x18 | 2 | 50 | 4021343326967 | 44 | 40 | 44 | | 12 | 20 | 12 |
| 124130352235 | 35x35x22 | 2 | 50 | 4021343326998 | 46 | 44 | 46 | | 14 | 20 | 14 |
| 124130352835 | 35x35x28 | 2 | 36 | 4021343327018 | 49 | 47 | 49 | | 17 | 21 | 17 |
| 124130423535 | 42x35x35 | 2 | 24 | 4021343327070 | 59 | 57 | 57 | | 21 | 25 | 25 |



3
(Branch)

1 **2**



Catalog-no. and -description

24130 – Tee (continued)

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|----------------|---------------------------|-----|-----|---------------|-----|-----|-----|----|----|----|----|
| 124130421542 | 42x42x15 | 2 | 30 | 4021343327049 | 49 | 51 | 49 | 11 | 34 | 11 | |
| 124130422242 | 42x42x22 | 2 | 30 | 4021343327056 | 53 | 48 | 53 | 15 | 24 | 15 | |
| 124130422842 | 42x42x28 | 2 | 26 | 4021343327063 | 56 | 51 | 56 | 18 | 25 | 18 | |
| 124130423542 | 42x42x35 | 2 | 24 | 4021343327087 | 59 | 57 | 59 | 21 | 25 | 21 | |
| 124130542254 | 54x54x22 | 2 | 18 | 4021343327094 | 57 | 54 | 57 | 15 | 30 | 15 | |
| 124130542854 | 54x54x28 | 2 | 14 | 4021343327100 | 60 | 68 | 60 | 18 | 41 | 18 | |
| 124130543554 | 54x54x35 | 2 | 14 | 4021343327117 | 64 | 63 | 64 | 21 | 31 | 21 | |
| 124130544254 | 54x54x42 | 2 | 14 | 4021343327124 | 67 | 69 | 67 | 25 | 31 | 25 | |
| 124130672867 | 66,7x66,7x28 | 1 | 10 | 4021343342912 | 70 | 76 | 70 | 22 | 49 | 22 | |
| 124130673567 | 66,7x66,7x35 | 1 | 10 | 4021343342929 | 75 | 81 | 75 | 27 | 49 | 27 | |
| 124130674267 | 66,7x66,7x42 | 1 | 8 | 4021343342936 | 78 | 87 | 78 | 30 | 49 | 30 | |
| 124130675467 | 66,7x66,7x54 | 1 | 8 | 4021343342943 | 83 | 92 | 83 | 35 | 49 | 35 | |
| 124130762276 | 76,1x76,1x22 | 1 | 8 | 4021343327131 | 76 | 87 | 76 | 27 | 63 | 27 | |
| 124130762876 | 76,1x76,1x28 | 1 | 8 | 4021343327148 | 76 | 87 | 76 | 27 | 60 | 27 | |
| 124130763576 | 76,1x76,1x35 | 1 | 6 | 4021343327155 | 76 | 86 | 76 | 27 | 54 | 27 | |
| 124130764276 | 76,1x76,1x42 | 1 | 6 | 4021343327162 | 80 | 92 | 80 | 30 | 54 | 30 | |
| 124130765476 | 76,1x76,1x54 | 1 | 6 | 4021343327179 | 86 | 97 | 86 | 36 | 54 | 36 | |
| 124130766776 | 76,1x76,1x66,7 | 1 | 6 | 4021343342950 | 91 | 105 | 91 | 41 | 57 | 41 | |
| 124130895489 | 88,9x88,9x54 | 1 | 3 | 4021343327186 | 94 | 105 | 94 | 38 | 62 | 38 | |
| 124130897689 | 88,9x88,9x76,1 | 1 | 2 | 4021343327193 | 105 | 115 | 105 | 49 | 65 | 49 | |
| 12413010854108 | 108x108x54 | 1 | 2 | 4021343327209 | 108 | 115 | 108 | 38 | 72 | 38 | |
| 12413010867108 | 108,0x108,0x66,7 | 1 | 2 | 4021343342967 | 113 | 123 | 113 | 43 | 75 | 43 | |
| 12413010876108 | 108x108x76,1 | 1 | 2 | 4021343327216 | 119 | 125 | 119 | 49 | 75 | 49 | |
| 12413010889108 | 108x108x88,9 | 1 | 1 | 4021343327223 | 125 | 131 | 125 | 56 | 75 | 56 | |



3
(Branch)

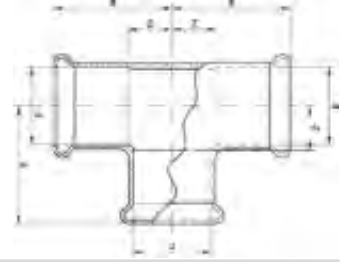
1 **2**



Catalog-no. and -description

24130g – Female branch tee

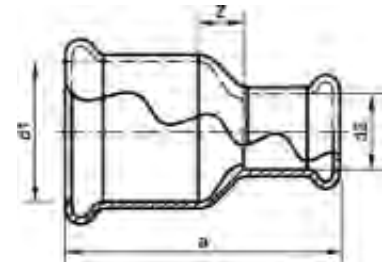
| Article-no. | Dimension d x d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | z3 | SW |
|-------------|-------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 124130G1212 | 12x12x1/2 | 10 | 150 | 4021343328145 | 29 | 22 | 29 | 13 | 9 | 13 | 26 |
| 124130G1512 | 15x15x1/2 | 10 | 100 | 4021343328152 | 31 | 23 | 31 | 13 | 10 | 13 | 26 |
| 124130G1812 | 18x18x1/2 | 10 | 90 | 4021343328169 | 33 | 25 | 33 | 13 | 12 | 13 | 26 |
| 124130G2212 | 22x22x1/2 | 10 | 60 | 4021343328176 | 37 | 27 | 37 | 13 | 14 | 13 | 26 |
| 124130G2812 | 28x28x1/2 | 5 | 40 | 4021343328183 | 40 | 29 | 40 | 14 | 16 | 14 | 32 |
| 124130G2834 | 28x28x3/4 | 5 | 40 | 4021343328190 | 42 | 31 | 42 | 16 | 16 | 16 | 32 |
| 124130G3512 | 35x35x1/2 | 2 | 30 | 4021343328206 | 45 | 32 | 45 | 13 | 19 | 13 | 39 |
| 124130G351 | 35x35x1 | 2 | 20 | 4021343328213 | 52 | 37 | 52 | 20 | 20 | 20 | 39 |
| 124130G4212 | 42x42x1/2 | 2 | 18 | 4021343328220 | 51 | 36 | 51 | 13 | 23 | 13 | 47 |
| 124130G5412 | 54x54x1/2 | 2 | 10 | 4021343328237 | 56 | 42 | 56 | 14 | 29 | 14 | 59 |



Catalog-no. and -description

24130L – Tee, long

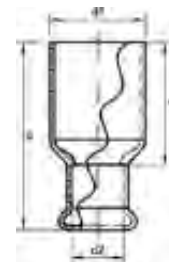
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|----|----|
| 124130L15 | 15 | 10 | 200 | 4021343327230 | 35 | 17 |



Catalog-no. and -description

24240 – Reducing coupling

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|----|----|
| 1242401512 | 15x12 | 10 | 600 | 4021343327247 | 34 | 4 |
| 1242401812 | 18x12 | 10 | 400 | 4021343327254 | 41 | 6 |
| 1242401815 | 18x15 | 10 | 350 | 4021343327261 | 42 | 4 |
| 1242402215 | 22x15 | 10 | 250 | 4021343327278 | 48 | 6 |
| 1242402218 | 22x18 | 10 | 250 | 4021343327285 | 48 | 5 |
| 1242402815 | 28x15 | 5 | 160 | 4021343327292 | 54 | 10 |
| 1242402818 | 28x18 | 5 | 150 | 4021343327308 | 55 | 8 |
| 1242402822 | 28x22 | 5 | 125 | 4021343327315 | 56 | 6 |
| 1242403522 | 35x22 | 2 | 100 | 4021343327322 | 65 | 10 |
| 1242403528 | 35x28 | 2 | 80 | 4021343327339 | 65 | 7 |
| 1242404222 | 42x22 | 2 | 70 | 4021343327346 | 75 | 13 |
| 1242404228 | 42x28 | 2 | 60 | 4021343327353 | 75 | 10 |
| 1242404235 | 42x35 | 2 | 44 | 4021343327360 | 77 | 7 |
| 1242405428 | 54x28 | 2 | 40 | 4021343327377 | 86 | 16 |
| 1242405435 | 54x35 | 2 | 40 | 4021343327384 | 88 | 13 |
| 1242405442 | 54x42 | 2 | 30 | 4021343327391 | 90 | 9 |



Catalog-no. and -description

24243 – Reducer

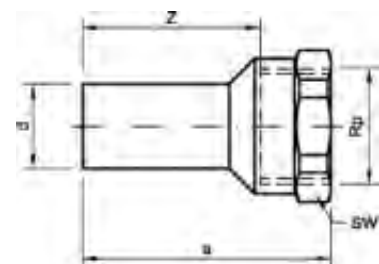
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|-----|-----|
| 1242431512 | 15ax12 | 10 | 600 | 4021343327407 | 40 | 24 |
| 1242431812 | 18ax12 | 10 | 500 | 4021343327414 | 44 | 28 |
| 1242431815 | 18ax15 | 10 | 360 | 4021343327421 | 44 | 26 |
| 1242432215 | 22ax15 | 10 | 350 | 4021343327438 | 51 | 33 |
| 1242432218 | 22ax18 | 10 | 300 | 4021343327445 | 50 | 30 |
| 1242432815 | 28ax15 | 5 | 200 | 4021343327452 | 57 | 39 |
| 1242432818 | 28ax18 | 5 | 200 | 4021343327469 | 57 | 37 |
| 1242432822 | 28ax22 | 5 | 150 | 4021343327476 | 58 | 34 |
| 1242433522 | 35ax22 | 2 | 100 | 4021343327483 | 68 | 44 |
| 1242433528 | 35ax28 | 2 | 100 | 4021343327490 | 67 | 40 |
| 1242434222 | 42ax22 | 2 | 70 | 4021343327506 | 77 | 54 |
| 1242434228 | 42ax28 | 2 | 70 | 4021343327513 | 77 | 51 |
| 1242434235 | 42ax35 | 2 | 60 | 4021343327520 | 78 | 46 |
| 1242435435 | 54ax35 | 2 | 40 | 4021343327537 | 90 | 58 |
| 1242435442 | 54ax42 | 2 | 36 | 4021343327544 | 91 | 53 |
| 1242436728 | 66,7ax28 | 1 | 20 | 4021343342974 | 124 | 98 |
| 1242436735 | 66,7ax35 | 1 | 20 | 4021343342981 | 126 | 94 |
| 1242436742 | 66,7ax42 | 1 | 18 | 4021343342998 | 129 | 91 |
| 1242436754 | 66,7ax54 | 1 | 20 | 4021343343001 | 128 | 85 |
| 1242437635 | 76,1ax35 | 1 | 15 | 4021343327551 | 131 | 99 |
| 1242437642 | 76,1ax42 | 1 | 15 | 4021343327568 | 133 | 95 |
| 1242437654 | 76,1ax54 | 1 | 15 | 4021343327575 | 133 | 90 |
| 1242437667 | 76,1ax66,7 | 1 | 15 | 4021343343018 | 129 | 81 |
| 1242438954 | 88,9ax54 | 1 | 10 | 4021343327582 | 149 | 106 |
| 1242438976 | 88,9ax76,1 | 1 | 10 | 4021343327599 | 145 | 95 |
| 12424310842 | 108ax42 | 1 | 4 | 4021343327605 | 179 | 141 |
| 12424310854 | 108ax54 | 1 | 4 | 4021343327612 | 179 | 136 |
| 12424310867 | 108ax66,7 | 1 | 4 | 4021343343025 | 178 | 129 |
| 12424310876 | 108ax76,1 | 1 | 4 | 4021343327629 | 174 | 124 |
| 12424310889 | 108ax88,9 | 1 | 4 | 4021343327636 | 174 | 118 |



Catalog-no. and -description

24243g – Male adaptor

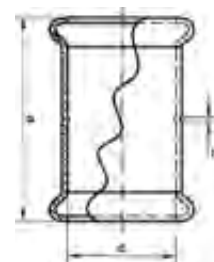
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW |
|--------------|--------------------|-----|-----|---------------|-----|----|-----|
| 124243G1238 | 12x3/8 | 10 | 400 | 4021343328244 | 30 | 14 | 16 |
| 124243G1538 | 15x3/8 | 10 | 400 | 4021343328251 | 33 | 14 | 19 |
| 124243G1512 | 15x1/2 | 10 | 300 | 4021343328268 | 31 | 12 | 18 |
| 124243G1812 | 18x1/2 | 10 | 200 | 4021343328275 | 37 | 17 | 21 |
| 124243G1834 | 18x3/4 | 10 | 200 | 4021343328282 | 38 | 17 | 22 |
| 124243G2212 | 22x1/2 | 10 | 150 | 4021343338601 | 40 | 16 | 26 |
| 124243G2234 | 22x3/4 | 10 | 120 | 4021343328299 | 41 | 17 | 28 |
| 124243G221 | 22x1 | 10 | 100 | 4021343338618 | 44 | 20 | 28 |
| 124243G2834 | 28x3/4 | 5 | 100 | 4021343328305 | 46 | 19 | 32 |
| 124243G281 | 28x1 | 5 | 100 | 4021343328312 | 45 | 18 | 36 |
| 124243G28114 | 28x1 1/4 | 5 | 70 | 4021343342363 | 47 | 20 | 34 |
| 124243G351 | 35x1 | 2 | 70 | 4021343338625 | 52 | 20 | 39 |
| 124243G35114 | 35x1 1/4 | 2 | 50 | 4021343328329 | 53 | 21 | 40 |
| 124243G42112 | 42x1 1/2 | 2 | 40 | 4021343328336 | 60 | 23 | 50 |
| 124243G542 | 54x2 | 2 | 16 | 4021343328343 | 71 | 29 | 60 |
| 124243G67212 | 66,7x2 1/2 | 1 | 10 | 4021343343063 | 85 | 37 | 77 |
| 124243G76212 | 76,1x2 1/2 | 1 | 5 | 4021343328350 | 88 | 38 | 82 |
| 124243G763 | 76,1x3 | 1 | 5 | 4021343328367 | 92 | 42 | 90 |
| 124243G893 | 88,9x3 | 1 | 4 | 4021343328374 | 97 | 41 | 95 |
| 124243G1084 | 108x4 | 1 | 2 | 4021343328381 | 120 | 50 | 117 |



Catalog-no. and -description

24246g – Plug-in adaptor, female

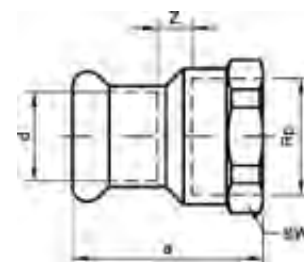
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 124246G1212 | 12x1/2 | 10 | 250 | 4021343328398 | 42 | 29 | 25 |
| 124246G1512 | 15x1/2 | 10 | 200 | 4021343328404 | 44 | 31 | 25 |
| 124246G1812 | 18x1/2 | 10 | 200 | 4021343328411 | 45 | 32 | 25 |
| 124246G1834 | 18x3/4 | 10 | 150 | 4021343328428 | 50 | 35 | 30 |
| 124246G2212 | 22x1/2 | 10 | 200 | 4021343328435 | 46 | 33 | 25 |
| 124246G2234 | 22x3/4 | 10 | 150 | 4021343328442 | 51 | 38 | 30 |



Catalog-no. and -description

24270 – Coupling

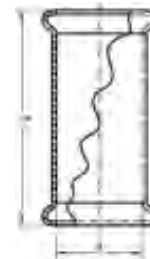
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|-----|----|
| 12427012 | 12 | 10 | 600 | 4021343327643 | 33 | 2 |
| 12427015 | 15 | 10 | 500 | 4021343327650 | 38 | 2 |
| 12427018 | 18 | 10 | 300 | 4021343327667 | 42 | 2 |
| 12427022 | 22 | 10 | 200 | 4021343327674 | 49 | 2 |
| 12427028 | 28 | 5 | 125 | 4021343327681 | 55 | 2 |
| 12427035 | 35 | 2 | 80 | 4021343327698 | 66 | 2 |
| 12427042 | 42 | 2 | 40 | 4021343327704 | 79 | 3 |
| 12427054 | 54 | 2 | 32 | 4021343327711 | 88 | 3 |
| 12427067 | 66,7 | 1 | 14 | 4021343343032 | 113 | 17 |
| 12427076 | 76,1 | 1 | 10 | 4021343327728 | 117 | 17 |
| 12427089 | 88,9 | 1 | 6 | 4021343327735 | 129 | 17 |
| 124270108 | 108 | 1 | 4 | 4021343327742 | 156 | 17 |



Catalog-no. and -description

24270g – Female adaptor

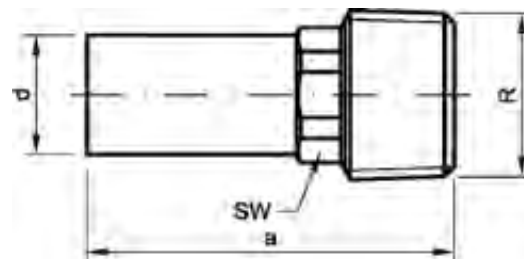
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|--------------|---------------------|-----|-----|---------------|----|---|----|
| 124270G1212 | 12x1/2 | 10 | 300 | 4021343328466 | 34 | 5 | 25 |
| 124270G1512 | 15x1/2 | 10 | 250 | 4021343328473 | 33 | 2 | 25 |
| 124270G1812 | 18x1/2 | 10 | 200 | 4021343328480 | 35 | 2 | 25 |
| 124270G1834 | 18x3/4 | 10 | 150 | 4021343328497 | 40 | 5 | 30 |
| 124270G2234 | 22x3/4 | 10 | 120 | 4021343328503 | 42 | 3 | 30 |
| 124270G221 | 22x1 | 10 | 80 | 4021343338663 | 48 | 7 | 37 |
| 124270G2834 | 28x3/4 | 5 | 100 | 4021343328527 | 55 | 6 | 32 |
| 124270G281 | 28x1 | 5 | 80 | 4021343328510 | 44 | 7 | 37 |
| 124270G28114 | 28x11/4 | 5 | 40 | 4021343328534 | 48 | 4 | 39 |
| 124270G351 | 35x1 | 2 | 60 | 4021343328541 | 49 | | 39 |
| 124270G35112 | 35x11/2 | 2 | 30 | 4021343328565 | 58 | 5 | 55 |
| 124270G35114 | 35x11/4 | 2 | 40 | 4021343328558 | 59 | 4 | 46 |
| 124270G42112 | 42x11/2 | 2 | 30 | 4021343328589 | 62 | 4 | 55 |
| 124270G42114 | 42x11/4 | 2 | 30 | 4021343328572 | 63 | 3 | 46 |
| 124270G54112 | 54x11/2 | 2 | 24 | 4021343328596 | 67 | 3 | 55 |
| 124270G542 | 54x2 | 2 | 20 | 4021343328602 | 74 | 8 | 60 |
| 124270G67212 | 66,7x21/2 | 1 | 10 | 4021343343087 | 85 | 7 | 85 |
| 124270G76212 | 76x21/2 | 1 | 5 | 4021343328619 | 86 | 6 | 85 |
| 124270G893 | 88,9x3 | 1 | 3 | 4021343328626 | 96 | 5 | 95 |



Catalog-no. and -description

24270S – Slip coupling

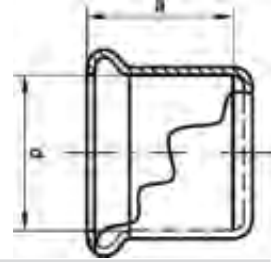
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 124270S12 | 12 | 10 | 700 | 4021343327759 | 41 |
| 124270S15 | 15 | 10 | 300 | 4021343327766 | 47 |
| 124270S18 | 18 | 10 | 250 | 4021343327773 | 53 |
| 124270S22 | 22 | 10 | 150 | 4021343327780 | 64 |
| 124270S28 | 28 | 5 | 100 | 4021343327797 | 72 |
| 124270S35 | 35 | 2 | 50 | 4021343327803 | 88 |
| 124270S42 | 42 | 2 | 40 | 4021343327810 | 104 |
| 124270S54 | 54 | 2 | 24 | 4021343327827 | 119 |
| 124270S67 | 66,7 | 1 | 15 | 4021343343049 | 112 |
| 124270S76 | 76,1 | 1 | 10 | 4021343327834 | 116 |
| 124270S89 | 88,9 | 1 | 6 | 4021343327841 | 128 |
| 124270S108 | 108 | 1 | 4 | 4021343327858 | 155 |



Catalog-no. and -description

24280g – Plug-in adaptor, male

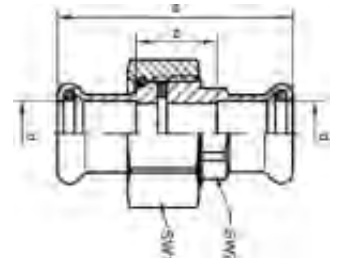
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 124280G1212 | 12x1/2 | 10 | 350 | 4021343328633 | 44 | 16 |
| 124280G1512 | 15x1/2 | 10 | 350 | 4021343328640 | 46 | 16 |
| 124280G1812 | 18x1/2 | 10 | 250 | 4021343328657 | 47 | 19 |
| 124280G1834 | 18x3/4 | 10 | 150 | 4021343328664 | 51 | 19 |
| 124280G2212 | 22x1/2 | 10 | 150 | 4021343328671 | 52 | 22 |
| 124280G2234 | 22x3/4 | 10 | 150 | 4021343328688 | 52 | 22 |



Catalog-no. and -description

24301 – Endcap

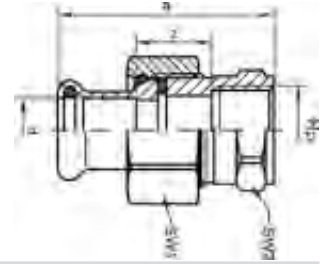
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|------|---------------|----|
| 12430112 | 12 | 10 | 1000 | 4021343327865 | 16 |
| 12430115 | 15 | 10 | 800 | 4021343327872 | 18 |
| 12430118 | 18 | 10 | 700 | 4021343327889 | 20 |
| 12430122 | 22 | 10 | 300 | 4021343327896 | 24 |
| 12430128 | 28 | 5 | 250 | 4021343327902 | 27 |
| 12430135 | 35 | 2 | 120 | 4021343327919 | 32 |
| 12430142 | 42 | 2 | 90 | 4021343327926 | 38 |
| 12430154 | 54 | 2 | 50 | 4021343327933 | 43 |
| 12430167 | 66,7 | 1 | 6 | 4021343342905 | 48 |
| 12430176 | 76,1 | 1 | 20 | 4021343327940 | 50 |
| 12430189 | 88,9 | 1 | 14 | 4021343327957 | 56 |
| 124301108 | 108 | 1 | 10 | 4021343327964 | 70 |



Catalog-no. and -description

24330 – Union, flat sealing

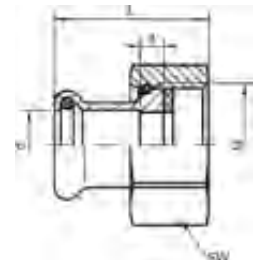
| Article-no. | Dimension d | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|-----|----|-----|-----|
| 12433015 | 15 | 5 | 100 | 4021343328695 | 54 | 18 | 30 | 19 |
| 12433018 | 18 | 5 | 100 | 4021343328701 | 70 | 30 | 30 | 22 |
| 12433022 | 22 | 5 | 60 | 4021343328718 | 66 | 18 | 37 | 26 |
| 12433028 | 28 | 5 | 40 | 4021343328725 | 71 | 17 | 46 | 34 |
| 12433035 | 35 | 2 | 30 | 4021343328732 | 82 | 18 | 52 | 40 |
| 12433042 | 42 | 2 | 18 | 4021343328749 | 94 | 19 | 59 | 46 |
| 12433054 | 54 | 2 | 10 | 4021343328756 | 102 | 17 | 75 | 60 |



Catalog-no. and -description

24333g – Union, male, flat sealing

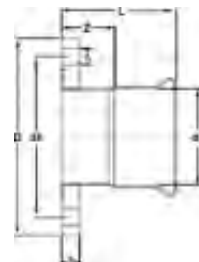
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|--------------|--------------------|-----|-----|---------------|-----|----|-----|-----|
| 124333G1512 | 15x1/2 | 5 | 120 | 4021343328763 | 55 | 37 | 30 | 22 |
| 124333G1812 | 18x1/2 | 5 | 100 | 4021343337536 | 69 | 49 | 30 | 22 |
| 124333G221 | 22x1 | 5 | 60 | 4021343328770 | 70 | 46 | 37 | 34 |
| 124333G2234 | 22x3/4 | 5 | 60 | 4021343337543 | 66 | 42 | 37 | 27 |
| 124333G281 | 28x1 | 5 | 40 | 4021343328787 | 74 | 47 | 46 | 34 |
| 124333G35114 | 35x11/4 | 2 | 20 | 4021343328794 | 95 | 63 | 52 | 46 |
| 124333G42112 | 42x11/2 | 2 | 12 | 4021343328800 | 102 | 64 | 59 | 50 |
| 124333G542 | 54x2 | 2 | 10 | 4021343328817 | 116 | 73 | 75 | 60 |



Catalog-no. and -description

24359g – Union adaptor, flat sealing

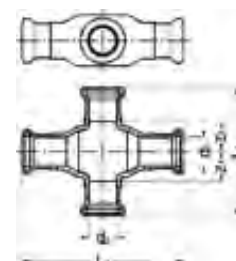
| Article-no. | Dimension d x G | Bag | Box | EAN code | L | SW |
|--------------|--------------------|-----|-----|---------------|----|-----|
| 124359G1534 | 15x3/4 | 5 | 200 | 4021343328824 | 32 | 30 |
| 124359G181 | 18x1 | 5 | 120 | 4021343328831 | 46 | 30 |
| 124359G1834 | 18x3/4 | 5 | 200 | 4021343328848 | 36 | 37 |
| 124359G221 | 22x1 | 5 | 100 | 4021343328862 | 51 | 30 |
| 124359G22114 | 22x11/4 | 5 | 80 | 4021343328879 | 42 | 37 |
| 124359G2234 | 22x3/4 | 5 | 120 | 4021343328855 | 38 | 46 |
| 124359G28112 | 28x11/2 | 5 | 50 | 4021343328893 | 46 | 46 |
| 124359G28114 | 28x11/4 | 5 | 80 | 4021343328886 | 45 | 52 |
| 124359G35112 | 35x11/2 | 2 | 40 | 4021343328909 | 52 | 52 |
| 124359G352 | 35x2 | 2 | 30 | 4021343328916 | 54 | 64 |
| 124359G42134 | 42x13/4 | 2 | 30 | 4021343328923 | 60 | 59 |
| 124359G422 | 42x2 | 2 | 30 | 4021343328930 | 62 | 64 |
| 124359G54238 | 54x23/8 | 2 | 16 | 4021343328947 | 68 | 75 |
| 124359G763 | 76,1x3 | 1 | 10 | 4021343328954 | 84 | 94 |
| 124359G89312 | 88,9x31/2 | 1 | 6 | 4021343328961 | 94 | 110 |



Catalog-no. and -description

24-ST-PF – Crimping flange, PN 10/16

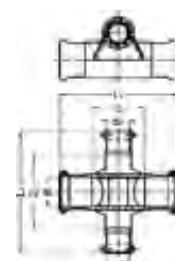
| Article-no. | Dimension d x G | Bag | Box | EAN code | L | z | d2 | dk | b | D | Az |
|----------------|--------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 124STPF67 | DN -- / 66,7 mm | 1 | 2 | 4021343344923 | 103 | 53 | 18 | 145 | 18 | 185 | 4 |
| 124STPF76 | DN 65/ 76,1 mm | | 1 | 4021343333941 | 92 | 41 | 18 | 145 | 18 | 185 | 4 |
| 124STPF76_DN80 | DN 80/ 76,1 mm | | 1 | 4021343337338 | 92 | 41 | 18 | 160 | 18 | 200 | 8 |
| 124STPF89 | DN 80/ 88,9 mm | | 1 | 4021343333958 | 104 | 46 | 18 | 160 | 18 | 200 | 8 |
| 124STPF108 | DN 100/ 108 mm | | 1 | 4021343333965 | 128 | 58 | 18 | 180 | 20 | 225 | 8 |



Catalog-no. and -description

24180 – Junction piece, single level

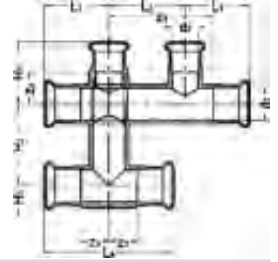
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | L1 | L2 | z1 | z2 |
|-------------|----------------------|-----|-----|---------------|----|----|----|----|
| 12418015 | 15 | 1 | 25 | 4021343334795 | 85 | 71 | 18 | 18 |
| 1241801512 | 15 x 12 | 1 | 30 | 4021343334801 | 85 | 70 | 19 | 19 |
| 1241801812 | 18 x 12 | 1 | 25 | 4021343334818 | 85 | 74 | 21 | 21 |
| 1241801815 | 18 x 15 | 1 | 20 | 4021343334825 | 85 | 71 | 18 | 18 |
| 1241802212 | 22 x 12 | 1 | 20 | 4021343334832 | 85 | 70 | 19 | 19 |
| 1241802215 | 22 x 15 | 1 | 20 | 4021343334849 | 85 | 79 | 22 | 22 |



Catalog-no. and -description

24181 – Junction piece, two levels

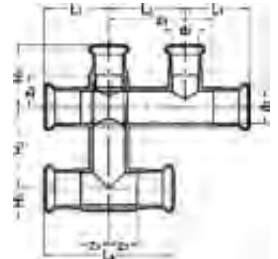
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | L1 | L2 | z1 | z2 |
|-------------|----------------------|-----|-----|---------------|----|----|----|----|
| 124181115 | 15 | 1 | 20 | 4021343334856 | 84 | 84 | 49 | 49 |
| 1241811815 | 18 x 15 | 1 | 20 | 4021343334863 | 84 | 84 | 49 | 45 |
| 1241812215 | 22 x 15 | 1 | 15 | 4021343334870 | 87 | 90 | 55 | 40 |
| 1241812815 | 28 x 15 | 1 | 15 | 4021343334887 | 88 | 91 | 56 | 35 |



Catalog-no. and -description

24580 – Junction T-piece, with insulating box

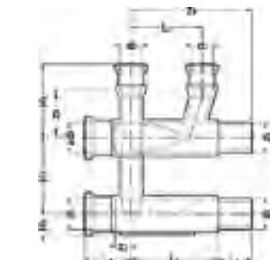
| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code | L1 | L2 | L3 | L4 | H1 | H2 | H3 | z1 | z2 | z3 | z4 |
|--------------|---------------------------|-----|-----|---------------|----|----|----|-----|----|----|----|----|----|-----|----|
| 12458015 | 15 | | 5 | 4021343334955 | 43 | 50 | 43 | 100 | 43 | 55 | 15 | 80 | 25 | 100 | 65 |
| 124580151215 | 15 x 15 x 12 | | 5 | 4021343334962 | 43 | 50 | 43 | 100 | 45 | 55 | 15 | 84 | 29 | 100 | 65 |
| 124580181218 | 18 x 18 x 12 | | 5 | 4021343334979 | 43 | 50 | 43 | 100 | 45 | 55 | 15 | 84 | 29 | 100 | 61 |
| 124580181518 | 18 x 18 x 15 | | 5 | 4021343334986 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 77 | 22 | 96 | 61 |
| 124580221522 | 22 x 22 x 15 | | 5 | 4021343334993 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 77 | 22 | 88 | 53 |
| 124580221822 | 22 x 22 x 18 | | 5 | 4021343335006 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 75 | 20 | 88 | 53 |



Catalog-no. and -description

24580.1 – Junction T-piece like catalogue no. 24580, without insulating box

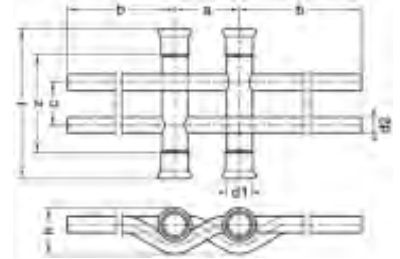
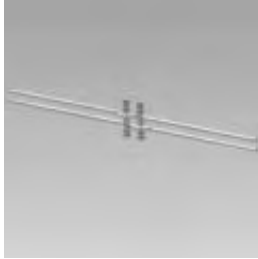
| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code | L1 | L2 | L3 | L4 | H1 | H2 | H3 | z1 | z2 | z3 | z4 |
|---------------|---------------------------|-----|-----|---------------|----|----|----|-----|----|----|----|----|----|-----|----|
| 124580115 | 15 | | 10 | 4021343334894 | 43 | 50 | 43 | 100 | 43 | 55 | 15 | 80 | 25 | 100 | 65 |
| 1245801151215 | 15 x 15 x 12 | | 10 | 4021343334900 | 43 | 50 | 43 | 100 | 45 | 55 | 15 | 84 | 29 | 100 | 65 |
| 1245801181218 | 18 x 18 x 12 | | 10 | 4021343334917 | 43 | 50 | 43 | 100 | 45 | 55 | 15 | 84 | 29 | 100 | 61 |
| 1245801181518 | 18 x 18 x 15 | | 10 | 4021343334924 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 77 | 22 | 96 | 61 |
| 1245801221522 | 22 x 22 x 15 | | 10 | 4021343334931 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 77 | 22 | 88 | 53 |
| 1245801221822 | 22 x 22 x 18 | | 10 | 4021343334948 | 43 | 50 | 43 | 100 | 40 | 55 | 15 | 75 | 20 | 88 | 53 |



Catalog-no. and -description

24581 – Plaster distributor, with insulating box

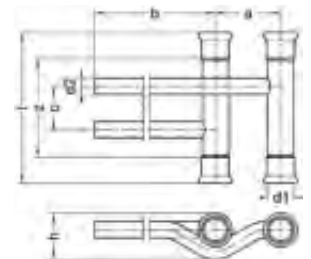
| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code | L1 | L2 | L3 | L4 | H1 | H2 | H3 | z1 | z2 | z3 |
|--------------|---------------------------|-----|-----|---------------|----|----|----|----|----|----|----|----|----|----|
| 124581221222 | 22 x 22 x 12 | | 5 | 4021343335013 | 50 | 33 | 62 | 32 | 45 | 55 | 15 | 93 | 9 | 30 |
| 124581221522 | 22 x 22 x 15 | | 5 | 4021343335020 | 50 | 33 | 62 | 32 | 51 | 55 | 15 | 93 | 9 | 33 |



Catalog-no. and -description

24582 – Twin pipe crossover

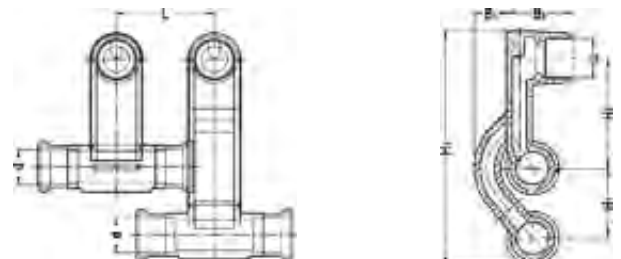
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | c | h | l | z |
|----------------|----------------------|-----|-----|---------------|----|-----|----|----|-----|-----|
| 12458215121060 | 15 x 12 | | | 4021343337642 | 60 | 500 | 40 | 33 | 140 | 104 |
| 12458222121060 | 22 x 12 | | | 4021343337659 | 60 | 500 | 40 | 41 | 140 | 93 |
| 12458222151060 | 22 x 15 | | | 4021343337666 | 60 | 500 | 40 | 43 | 140 | 93 |
| 12458228151060 | 28 x 15 | | | 4021343337673 | 60 | 500 | 40 | 50 | 140 | 87 |



Catalog-no. and -description

24583 – Junction tee, long branch

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | c | h | l | z |
|---------------|----------------------|-----|-----|---------------|----|-----|----|----|-----|-----|
| 1245831212540 | 12 x 12 | | | 4021343337680 | 40 | 500 | 40 | 29 | 140 | 109 |
| 1245831512540 | 15 x 12 | | | 4021343337635 | 40 | 500 | 40 | 33 | 140 | 104 |
| 1245831512560 | 15 x 12 | | | 4021343337697 | 60 | 500 | 40 | 33 | 140 | 104 |
| 1245832212560 | 22 x 12 | | | 4021343337604 | 60 | 500 | 40 | 41 | 140 | 93 |
| 1245832215560 | 22 x 15 | | | 4021343337611 | 60 | 500 | 40 | 43 | 140 | 93 |
| 1245832815560 | 28 x 15 | | | 4021343337628 | 60 | 500 | 40 | 50 | 140 | 87 |



Catalog-no. and -description

24590 – Skirting rail radiator connector, nickel-plated, with compression union 1/2 x 15 mm

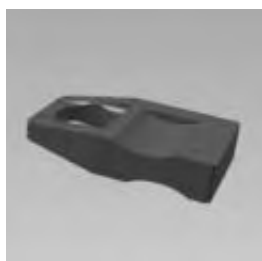
| Article-no. | Dimension d1 x G x d1 | Bag | Box | EAN code | B1 | B2 | L | H1 | H2 | H3 |
|-------------|--------------------------|-----|-----|---------------|----|----|----|----|----|-----|
| 1245901512 | 15 x 15 x 1/2 | 1 | 10 | 4021343335037 | 16 | 42 | 50 | 55 | 35 | 117 |
| 1245901812 | 18 x 18 x 1/2 | 1 | 10 | 4021343335044 | 16 | 42 | 50 | 55 | 35 | 117 |



Catalog-no. and -description

4980 – Plastic measure tool for SANHA®-Therm, with bottle opener and water level, 12 - 54 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84980 | 12-54 mm | | 30 | 4021343140297 |



Catalog-no. and -description

4989 – Plastic measure tool for SANHA®-Therm, with bottle opener and water level, 64 mm and 67 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84989 | 64 + 67 mm | | | 4021343356889 |



Catalog-no. and -description

4990 – Plastic measure tool for SANHA®-Therm, with bottle opener and water level, 76,1 - 108 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84990 | 76,1-108 mm | | 20 | 4021343194511 |

SANHA[®]

SANHA[®]-Therm

Pressfittings for heating, compressed air and cooling (only in closed systems)

Series 24000

SYSTEM TECHNOLOGY

3fit®-Press

Pressfittings for the drinking
water and heating installation
in connection with the
MultiFit®-Flex system pipes

Series 25000



РОСС DE.АЮ31.Н08772

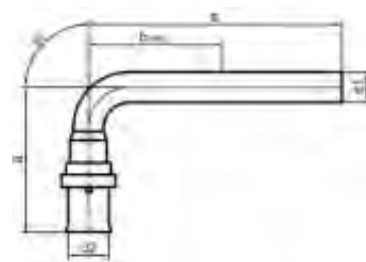


DW-8501BN0454



PN-EN 1254-3:2004

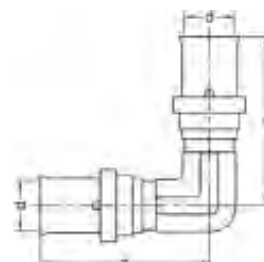




Catalog-no. and -description

25003 – Bend with plain end 90°, nickel-plated

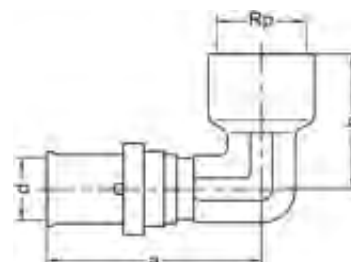
| Article-no. | Dimension d1/d2 x b | Bag | Box | EAN code | a | b | b min |
|-------------|------------------------|-----|-----|---------------|----|-----|-------|
| 12500316300 | 15/16 x 300 | 10 | 50 | 4021343345371 | 90 | 300 | 60 |



Catalog-no. and -description

25090 – Elbow 90°, male/male

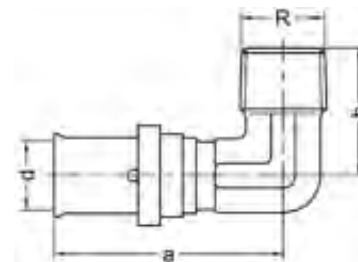
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 12509014 | 14 | 10 | 120 | 4021343333118 | 42 |
| 12509016 | 16 | 10 | 120 | 4021343331565 | 40 |
| 12509020 | 20 | 10 | 70 | 4021343331572 | 42 |
| 12509026 | 26 | 5 | 40 | 4021343331589 | 49 |
| 12509032 | 32 | 5 | 30 | 4021343331596 | 53 |
| 12509040 | 40 | 5 | 20 | 4021343338243 | 55 |
| 12509050 | 50 | 2 | 8 | 4021343338250 | 76 |
| 12509063 | 63 | 2 | 6 | 4021343338267 | 83 |



Catalog-no. and -description

25090g – Female elbow 90°

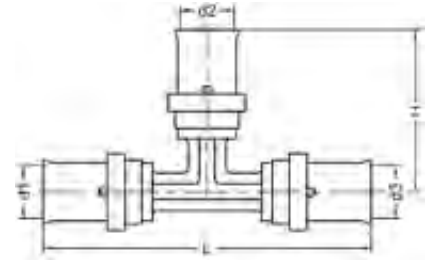
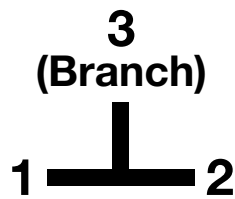
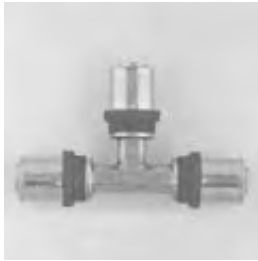
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b |
|--------------|---------------------|-----|-----|---------------|----|----|
| 125090g1412 | 14x1/2 | 10 | 100 | 4021343333125 | 53 | 34 |
| 125090g1612 | 16x1/2 | 10 | 120 | 4021343331930 | 44 | 34 |
| 125090g2012 | 20x1/2 | 10 | 80 | 4021343331947 | 50 | 34 |
| 125090g2034 | 20x3/4 | 10 | 40 | 4021343331954 | 52 | 45 |
| 125090g2634 | 26x3/4 | 5 | 40 | 4021343331961 | 56 | 45 |
| 125090g261 | 26x1 | 5 | 30 | 4021343338717 | 56 | 72 |
| 125090g321 | 32x1 | 5 | 30 | 4021343331978 | 55 | 49 |
| 125090g40112 | 40x11/2 | 5 | 20 | 4021343338274 | 55 | 84 |
| 125090g50112 | 50x11/2 | 2 | 8 | 4021343338281 | 76 | 63 |



Catalog-no. and -description

25092g – Male elbow 90°

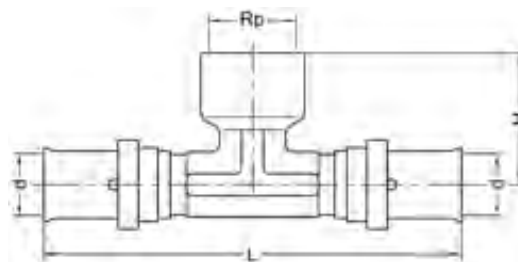
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | b |
|-------------|--------------------|-----|-----|---------------|----|----|
| 125092g1412 | 14x1/2 | 10 | 120 | 4021343331985 | 53 | 4 |
| 125092g1638 | 16x3/8 | 10 | 120 | 4021343338731 | 44 | 50 |
| 125092g1612 | 16x1/2 | 10 | 120 | 4021343331992 | 44 | 34 |
| 125092g2012 | 20x1/2 | 10 | 100 | 4021343332005 | 50 | 34 |
| 125092g2034 | 20x3/4 | 10 | 80 | 4021343332012 | 53 | 34 |
| 125092g2634 | 26x3/4 | 5 | 40 | 4021343332029 | 56 | 45 |
| 125092g261 | 26x1 | 5 | 30 | 4021343338724 | 56 | 66 |
| 125092g321 | 32x1 | 5 | 30 | 4021343332036 | 55 | 49 |



Catalog-no. and -description

25130 – Tee

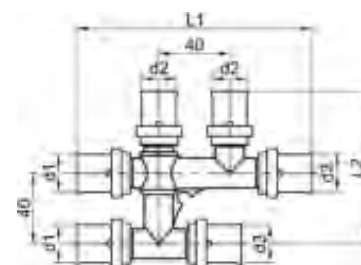
| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | L | H |
|--------------|---------------------------|-----|-----|----------------|-----|----|
| 12513014 | 14 | 10 | 80 | 4021343333132 | 83 | 42 |
| 12513016 | 16 | 10 | 60 | 40213433331602 | 77 | 39 |
| 12513020 | 20 | 10 | 40 | 40213433331619 | 83 | 42 |
| 12513026 | 26 | 5 | 20 | 40213433331626 | 102 | 51 |
| 12513032 | 32 | 5 | 20 | 40213433331633 | 106 | 53 |
| 12513040 | 40 | 5 | 10 | 4021343338298 | 110 | 55 |
| 12513050 | 50 | 2 | 6 | 4021343338304 | 152 | 76 |
| 12513063 | 63 | 2 | 4 | 4021343338311 | 166 | 83 |
| 125130161414 | 16x14x14 | 10 | 50 | 4021343333149 | 83 | 42 |
| 125130161416 | 16x16x14 | 10 | 50 | 4021343333156 | 83 | 42 |
| 125130162016 | 16x16x20 | 10 | 50 | 4021343338328 | 88 | 44 |
| 125130202014 | 20x14x20 | 10 | 40 | 4021343333170 | 88 | 44 |
| 125130201616 | 20x16x16 | 10 | 50 | 40213433331640 | 83 | 42 |
| 125130202016 | 20x16x20 | 10 | 40 | 4021343337574 | 83 | 42 |
| 125130201420 | 20x20x14 | 10 | 40 | 4021343333163 | 88 | 44 |
| 125130201620 | 20x20x16 | 10 | 40 | 40213433331657 | 83 | 42 |
| 125130262020 | 26x20x20 | 5 | 30 | 40213433331671 | 102 | 51 |
| 125130262620 | 26x20x26 | 5 | 30 | 40213433331688 | 97 | 49 |
| 125130261626 | 26x26x16 | 5 | 30 | 40213433331664 | 97 | 49 |
| 125130262026 | 26x26x20 | 5 | 30 | 40213433331695 | 112 | 56 |
| 125130323220 | 32x20x32 | 5 | 20 | 40213433331756 | 106 | 53 |
| 125130322026 | 32x26x20 | 5 | 20 | 40213433331732 | 106 | 53 |
| 125130322626 | 32x26x26 | 5 | 20 | 40213433331749 | 106 | 53 |
| 125130323226 | 32x26x32 | 5 | 20 | 40213433331756 | 106 | 53 |
| 125130321632 | 32x32x16 | 5 | 20 | 40213433331701 | 106 | 53 |
| 125130322032 | 32x32x20 | 5 | 20 | 40213433331718 | 106 | 53 |
| 125130322632 | 32x32x26 | 5 | 20 | 40213433331725 | 106 | 53 |
| 125130403232 | 40x32x32 | 5 | 15 | 4021343338342 | 110 | 55 |
| 125130402640 | 40x40x26 | 5 | 15 | 4021343338335 | 110 | 55 |
| 125130403240 | 40x40x32 | 5 | 15 | 4021343338359 | 110 | 55 |
| 125130502650 | 50x50x26 | 2 | 8 | 4021343338366 | 152 | 62 |
| 125130504050 | 50x50x40 | 2 | 8 | 4021343338373 | 152 | 61 |
| 125130634063 | 63x63x40 | 2 | 4 | 4021343338380 | 153 | 70 |



Catalog-no. and -description

25130g – Female branch tee

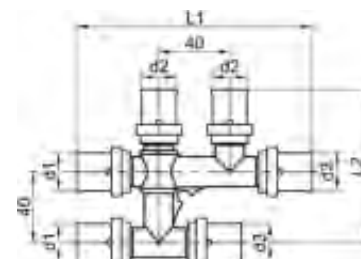
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | L | H |
|--------------|---------------------|-----|-----|---------------|-----|----|
| 125130g1612 | 16x1/2 | 10 | 50 | 4021343332043 | 90 | 4 |
| 125130g2012 | 20x1/2 | 10 | 40 | 4021343332050 | 91 | 34 |
| 125130g2612 | 26x1/2 | 5 | 30 | 4021343332067 | 112 | 37 |
| 125130g2634 | 26x3/4 | 5 | 25 | 4021343332074 | 112 | 43 |
| 125130g3234 | 32x3/4 | 5 | 20 | 4021343332081 | 110 | 47 |
| 125130g321 | 32x1 | 5 | 20 | 4021343332098 | 110 | 47 |
| 125130g401 | 40x1 | 5 | 10 | 4021343338397 | 110 | 55 |
| 125130g50114 | 50x11/4 | 2 | 6 | 4021343338403 | 152 | 63 |



Catalog-no. and -description

25580 – Junction T-piece, with insulating box

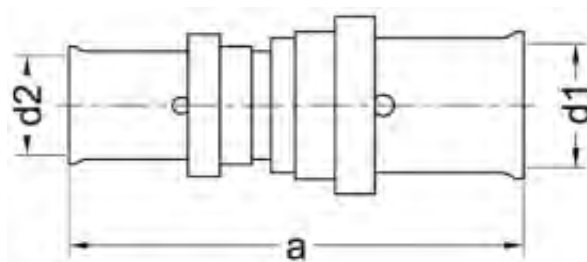
| Article-no. | Dimension d1 x d2 x d3 | Bag | Box | EAN code | L1 | L2 |
|--------------|---------------------------|-----|-----|---------------|-----|----|
| 12558016 | 16 | | | 4021343357060 | 133 | 87 |
| 125580201616 | 20x16x16 | | | 4021343357084 | 133 | 87 |
| 125580201620 | 20x20x16 | | | 4021343357077 | 133 | 87 |



Catalog-no. and -description

25580.1 – Junction T-piece like catalogue no. 25580, without insulating box

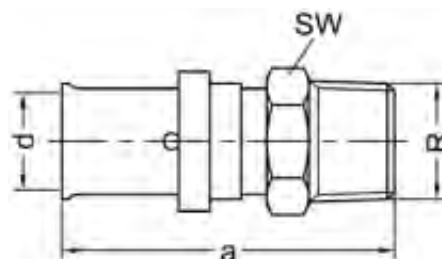
| Article-no. | Dimension d1 x d2 x d3 | Bag | Box | EAN code | L1 | L2 |
|---------------|---------------------------|-----|-----|---------------|-----|----|
| 125580116 | 16 | | | 4021343357107 | 133 | 87 |
| 1255801201616 | 20x16x16 | | | 4021343357114 | 133 | 87 |
| 1255801201620 | 20x20x16 | | | 4021343357121 | 133 | 87 |



Catalog-no. and -description

25240 – Reducing coupling

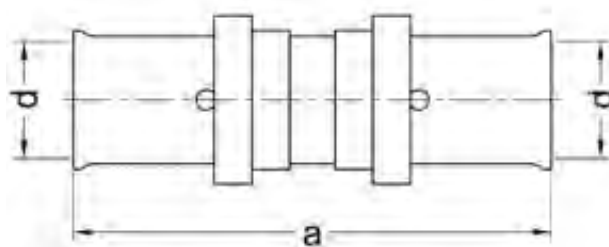
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a |
|-------------|----------------------|-----|-----|---------------|----|
| 1252401614 | 16x14 | 10 | 150 | 4021343331770 | 65 |
| 1252402014 | 20x14 | 10 | 120 | 4021343333187 | 62 |
| 1252402016 | 20x16 | 10 | 140 | 4021343331787 | 62 |
| 1252402616 | 26x16 | 5 | 90 | 4021343331794 | 65 |
| 1252402620 | 26x20 | 5 | 70 | 4021343331800 | 65 |
| 1252403220 | 32x20 | 5 | 60 | 4021343331824 | 65 |
| 1252403226 | 32x26 | 5 | 40 | 4021343331831 | 65 |
| 1252404032 | 40x32 | 5 | 30 | 4021343338441 | 65 |
| 1252405032 | 50x32 | 2 | 16 | 4021343338458 | 81 |
| 1252405040 | 50x40 | 2 | 16 | 4021343338465 | 81 |
| 1252406340 | 63x40 | 2 | 10 | 4021343338472 | 82 |
| 1252406350 | 63x50 | 2 | 10 | 4021343338489 | 98 |



Catalog-no. and -description

25243g – Male adaptor

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | SW |
|--------------|--------------------|-----|-----|---------------|----|----|
| 125243g1412 | 14x1/2 | 10 | 150 | 4021343332104 | 55 | 22 |
| 125243g1612 | 16x1/2 | 10 | 140 | 4021343332111 | 55 | 22 |
| 125243g2012 | 20x1/2 | 10 | 140 | 4021343332128 | 55 | 22 |
| 125243g2034 | 20x3/4 | 10 | 120 | 4021343332135 | 56 | 27 |
| 125243g2634 | 26x3/4 | 5 | 80 | 4021343332142 | 56 | 27 |
| 125243g261 | 26x1 | 5 | 60 | 4021343332159 | 58 | 34 |
| 125243g321 | 32x1 | 5 | 50 | 4021343332166 | 58 | 34 |
| 125243g1638 | 16x3/8 | 10 | 140 | 4021343338748 | 72 | 24 |
| 125243g1634 | 16x3/4 | 10 | 120 | 4021343338755 | 75 | 24 |
| 125243g32114 | 32x11/4 | 5 | 40 | 4021343338496 | 61 | 44 |
| 125243g40114 | 40x11/4 | 5 | 30 | 4021343338502 | 61 | 44 |
| 125243g50112 | 50x11/2 | 2 | 16 | 4021343338519 | 81 | 52 |
| 125243g632 | 63x2 | 2 | 10 | 4021343338526 | 90 | 65 |

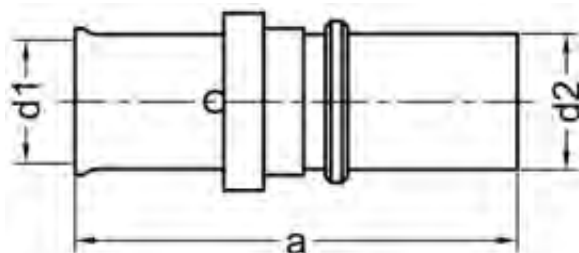


Catalog-no. and -description

25270 – Coupling

| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 12527014 | 14 | 10 | 150 | 4021343331848 | 65 |
| 12527016 | 16 | 10 | 150 | 4021343331855 | 58 |
| 12527020 | 20 | 10 | 100 | 4021343331862 | 58 |
| 12527026 | 26 | 5 | 70 | 4021343331879 | 65 |
| 12527032 | 32 | 5 | 50 | 4021343331886 | 65 |
| 12527040 | 40 | 5 | 30 | 4021343338410 | 65 |
| 12527050 | 50 | 2 | 16 | 4021343338427 | 97 |
| 12527063 | 63 | 2 | 10 | 4021343338434 | 98 |

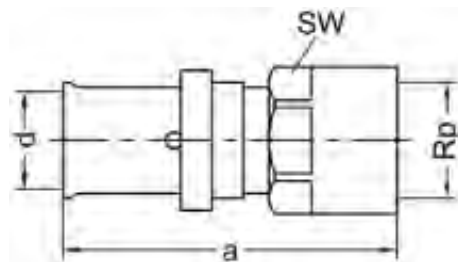
12



Catalog-no. and -description

25271 – Female adaptor made out of copper

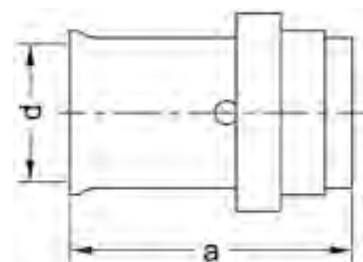
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a |
|-------------|----------------------|-----|-----|---------------|----|
| 1252711412 | 14x12 | | | 4021343356902 | 60 |
| 1252711414 | 14x14 | | | 4021343356919 | 60 |
| 1252711415 | 14x15 | | | 4021343356926 | 60 |
| 1252711612 | 16x12 | | | 4021343356933 | 58 |
| 1252711614 | 16x14 | | | 4021343356940 | 60 |
| 1252711615 | 16x15 | | | 4021343356957 | 60 |
| 1252711616 | 16x16 | | | 4021343356964 | 60 |
| 1252711618 | 16x18 | | | 4021343356971 | 58 |
| 1252712015 | 20x15 | | | 4021343356988 | 58 |
| 1252712016 | 20x16 | | | 4021343356995 | 58 |
| 1252712018 | 20x18 | | | 4021343357008 | 60 |
| 1252712022 | 20x22 | | | 4021343357015 | 58 |
| 1252712622 | 26x22 | | | 4021343357022 | 60 |
| 1252712628 | 26x28 | | | 4021343357039 | 68 |



Catalog-no. and -description

25270g – Female adaptor

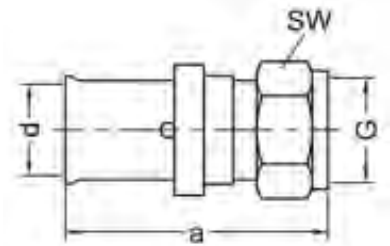
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | SW |
|--------------|---------------------|-----|-----|---------------|----|----|
| 125270g1412 | 14x1/2 | 10 | 140 | 4021343332173 | 57 | 24 |
| 125270g1638 | 16x3/8 | 10 | 140 | 4021343338762 | 63 | 24 |
| 125270g1612 | 16x1/2 | 10 | 120 | 4021343332180 | 57 | 24 |
| 125270g2012 | 20x1/2 | 10 | 120 | 4021343332197 | 57 | 24 |
| 125270g2034 | 20x3/4 | 10 | 90 | 4021343332203 | 59 | 30 |
| 125270g2634 | 26x3/4 | 10 | 70 | 4021343332210 | 59 | 30 |
| 125270g261 | 26x1 | 5 | 60 | 4021343332227 | 59 | 36 |
| 125270g321 | 32x1 | 5 | 50 | 4021343332234 | 59 | 36 |
| 125270g32114 | 32x1 1/4 | 5 | 30 | 4021343338533 | 65 | 42 |
| 125270g40114 | 40x1 1/4 | 5 | 30 | 4021343338540 | 65 | 42 |
| 125270g50112 | 50x1 1/2 | 2 | 16 | 4021343338557 | 74 | 52 |
| 125270g632 | 63x2 | 2 | 10 | 4021343338564 | 90 | 65 |



Catalog-no. and -description

25290 – Plug

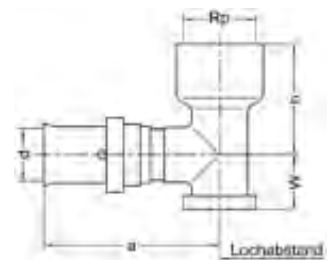
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 12529014 | 14 | 10 | 150 | 4021343333194 | 33 |
| 12529016 | 16 | 10 | 250 | 4021343331893 | 31 |
| 12529020 | 20 | 10 | 200 | 4021343331909 | 31 |
| 12529026 | 26 | 5 | 120 | 4021343331916 | 33 |
| 12529032 | 32 | 5 | 60 | 4021343331923 | 33 |



Catalog-no. and -description

25359g – Union adaptor, flat sealing

| Article-no. | Dimension d x G | Bag | Box | EAN code | a | SW |
|--------------|--------------------|-----|-----|---------------|----|----|
| 125359g1434 | 14x3/4 | 10 | 120 | 4021343332258 | 55 | 30 |
| 125359g1634 | 16x3/4 | 10 | 120 | 4021343332265 | 55 | 30 |
| 125359g2034 | 20x3/4 | 10 | 120 | 4021343332272 | 55 | 30 |
| 125359g261 | 26x1 | 5 | 60 | 4021343332289 | 60 | 37 |
| 125359g26114 | 26x11/4 | 5 | 40 | 4021343332296 | 47 | 46 |
| 125359G32114 | 32x11/4 | 5 | 40 | 4021343355417 | 47 | 46 |
| 125359G40112 | 40x11/2 | 5 | 25 | 4021343355424 | 64 | 52 |
| 125359G502 | 50x2 | 2 | 14 | 4021343355431 | 90 | 65 |
| 125359G63212 | 63x21/2 | 2 | 10 | 4021343355448 | 94 | 80 |



Catalog-no. and -description

25473g – Wall plate elbow

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | W | dK |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|
| 125473g1412 | 14x1/2 | 10 | 40 | 4021343332302 | 45 | 35 | 17 | 20 |
| 125473g1612 | 16x1/2 | 10 | 50 | 4021343332319 | 45 | 35 | 17 | 20 |
| 125473g2012 | 20x1/2 | 10 | 50 | 4021343332326 | 45 | 35 | 17 | 20 |
| 125473g2034 | 20x3/4 | 5 | 40 | 4021343332333 | 52 | 32 | 22 | 20 |
| 125473g2634 | 26x3/4 | 5 | 35 | 4021343332340 | 52 | 32 | 22 | 20 |



Catalog-no. and -description

25980g – Mounting unit

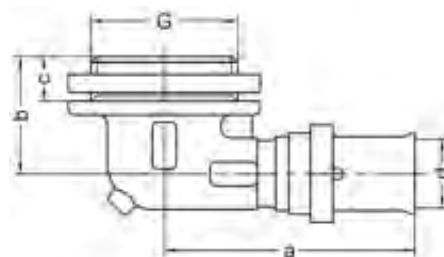
| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 125980G1612 | 16x1/2 | | 10 | 4021343343360 |
| 125980G2012 | 20x1/2 | | 10 | 4021343343377 |
| 125980G2034 | 20x3/4 | | 10 | 4021343343384 |



Catalog-no. and -description

25981 – Sound insulation element for wall plate elbow no. 25473g

| Article-no. | Dimension d x Rp | Bag | Box | EAN code |
|-------------|---------------------|-----|-----|---------------|
| 12598112 | 1/2 | 10 | 30 | 4021343338014 |
| 12598134 | 3/4 | 10 | 30 | 4021343338021 |



Catalog-no. and -description

25091UP – Elbow 90°, for concealed cistern

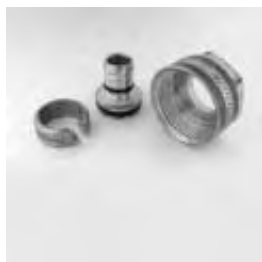
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | c |
|--------------|---------------------|-----|-----|---------------|----|----|----|
| 125091UP1612 | 16x1/2 | 10 | 40 | 4021343332357 | 55 | 28 | 10 |
| 125091UP2012 | 20x1/2 | 10 | 40 | 4021343332364 | 60 | 28 | 10 |



Catalog-no. and -description

25481 – Wall bushing, female/male, for diameter 27 mm, with conternut 30 mm

| Article-no. | Dimension d x Rp | Bag | Box | EAN code |
|-------------|---------------------|-----|-----|---------------|
| 1254811612 | 16x1/2 30 mm | 10 | 20 | 4021343338038 |
| 1254812012 | 20x1/2 30 mm | 10 | 20 | 4021343338045 |



Catalog-no. and -description

DKHV VPE R – Compression fittings set, for MultiFit®-Flex pipes, with euroconus, nickle-plated

| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code |
|--------------|---------------------------|-----|-----|---------------|
| 3DKHWPE3416R | 3/4 x 16 | 2 | 150 | 4021343337956 |
| 3DKHWPE3420R | 3/4 x 20 | 2 | 150 | 4021343337963 |



Catalog-no. and -description

DKHV VPE – Compression fittings set

| Article-no. | Dimension d1 x d2 x d1 | Bag | Box | EAN code |
|-------------|---------------------------|-----|-----|---------------|
| 3DKHWPE1216 | 1/2 x 16 | 2 | 150 | 4021343337901 |
| 3DKHWPE3416 | 3/4 x 16 | 2 | 150 | 4021343174377 |
| 3DKHWPE3420 | 3/4 x 20 | 2 | 150 | 4021343337918 |
| 3DKHWPE116 | 1 x 16 | 2 | 150 | 4021343337925 |
| 3DKHWPE120 | 1 x 20 | 2 | 150 | 4021343337932 |
| 3DKHWPE126 | 1 x 26 | 2 | 150 | 4021343337949 |

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in connection with
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Series 23000

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DW-8501BS0295



POCC DE.AK031.H08772



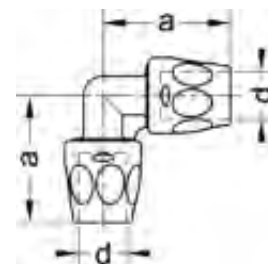
AT-15-7671/2008



HK/W/0418/02/2007



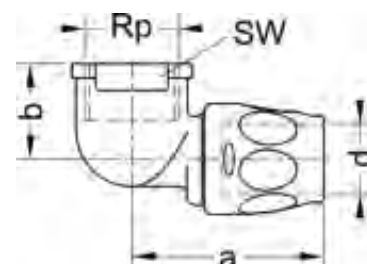
1007R2F1P2



Catalog-no. and -description

23090 – Elbow 90°, female/female

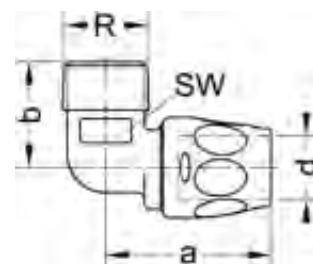
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 12309016 | 16 | 5 | 20 | 4021343329357 | 48 |
| 12309020 | 20 | 5 | 20 | 4021343329364 | 53 |



Catalog-no. and -description

23090g – Elbow 90°, female/female thread

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 123090g1612 | 16x1/2 | 5 | 20 | 4021343329494 | 50 | 22 | 28 |
| 123090g2012 | 20x1/2 | 5 | 20 | 4021343329500 | 52 | 22 | 27 |
| 123090g2034 | 20x3/4 | 5 | 20 | 4021343329517 | 55 | 25 | 32 |



Catalog-no. and -description

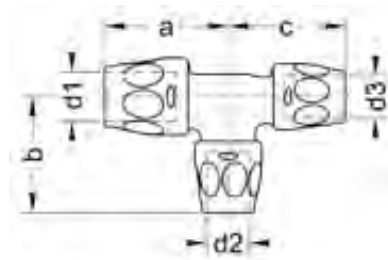
23092g – Elbow 90°, female/male thread

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | b | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 123092g1412 | 14x1/2 | 5 | 20 | 4021343329524 | 41 | 28 | 19 |
| 123092g1612 | 16x1/2 | 5 | 20 | 4021343329531 | 47 | 29 | 20 |
| 123092g2012 | 20x1/2 | 5 | 20 | 4021343329548 | 48 | 32 | 19 |
| 123092g2034 | 20x3/4 | 5 | 20 | 4021343329555 | 52 | 33 | 24 |



3
(Branch)

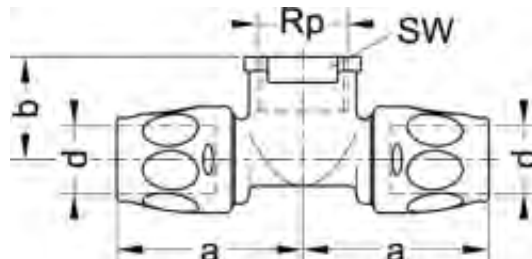
1 **2**



Catalog-no. and -description

23130 – Tee

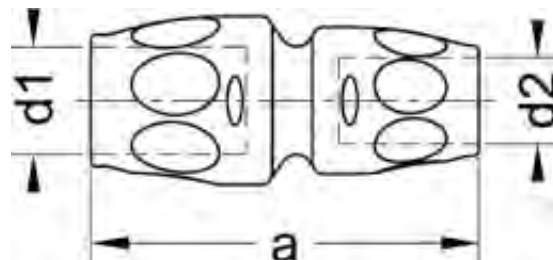
| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c |
|--------------|---------------------------|-----|-----|---------------|----|----|----|
| 12313016 | 16 | 5 | 20 | 4021343329371 | 41 | 28 | 19 |
| 12313020 | 20 | 5 | 20 | 4021343329388 | 47 | 29 | 20 |
| 123130201616 | 20x16x16 | 5 | 20 | 4021343329395 | 48 | 32 | 19 |
| 123130201620 | 20x20x16 | 5 | 20 | 4021343329401 | 52 | 33 | 24 |



Catalog-no. and -description

23130g – Female branch tee

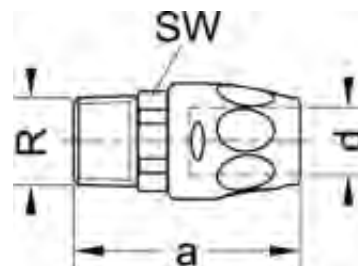
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 123130g1612 | 16x1/2 | 5 | 20 | 4021343329562 | 50 | 22 | 28 |
| 123130g2012 | 20x1/2 | 5 | 20 | 4021343329579 | 52 | 28 | 27 |
| 123130g2034 | 20x3/4 | 5 | 20 | 4021343329586 | 55 | 30 | 32 |



Catalog-no. and -description

23240 – Reducing coupling

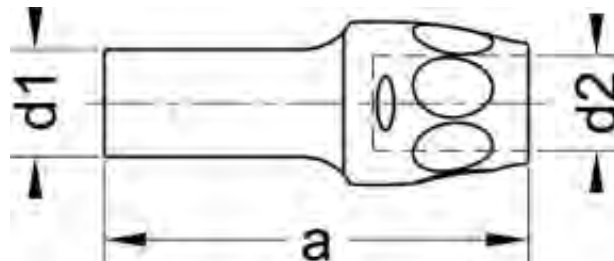
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a |
|-------------|----------------------|-----|-----|---------------|----|
| 1232401614 | 16x14 | 5 | 20 | 4021343329425 | 63 |
| 1232402016 | 20x16 | 5 | 20 | 4021343329432 | 72 |



Catalog-no. and -description

23243g – Male adaptor

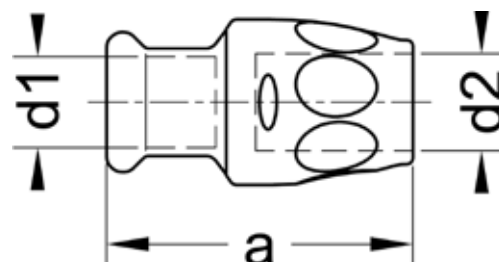
| Article-no. | Dimension d x R | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 123243g1412 | 14x1/2 | 5 | 20 | 4021343329593 | 50 | 22 |
| 123243g1612 | 16x1/2 | 5 | 20 | 4021343329609 | 53 | 22 |
| 123243g2012 | 20x1/2 | 5 | 20 | 4021343329616 | 56 | 22 |
| 123243g2034 | 20x3/4 | 5 | 20 | 4021343329623 | 60 | 28 |



Catalog-no. and -description

23245 – Universal adaptor 3fit®-Push, for the transition onto metal pipes

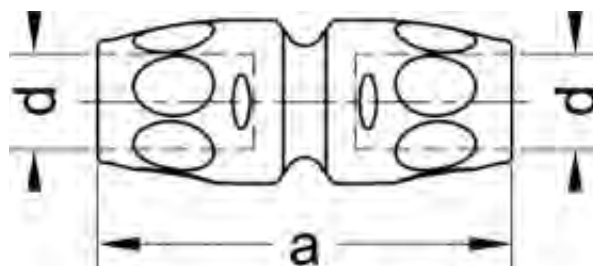
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a |
|-------------|----------------------|-----|-----|---------------|----|
| 1232451516 | 15x16 | 5 | 20 | 4021343329982 | 66 |
| 1232451816 | 18x16 | 5 | 20 | 4021343330001 | 71 |
| 1232452216 | 22x16 | 5 | 20 | 4021343330018 | 70 |
| 1232452220 | 22x20 | 5 | 20 | 4021343330025 | 70 |



Catalog-no. and -description

23270P – Female adaptor with press end

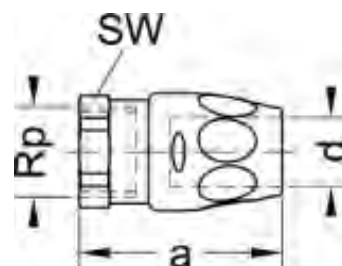
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a |
|-------------|----------------------|-----|-----|---------------|----|
| 123270P1516 | 15x16 | | | 4021343351051 | 51 |
| 123270P1520 | 15x20 | | | 4021343351068 | 55 |



Catalog-no. and -description

23270 – Coupling

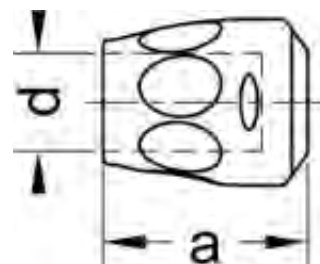
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 12327014 | 14 | 5 | 20 | 4021343329449 | 59 |
| 12327016 | 16 | 5 | 20 | 4021343329456 | 69 |
| 12327020 | 20 | 5 | 20 | 4021343329463 | 74 |



Catalog-no. and -description

23270g – Female adaptor

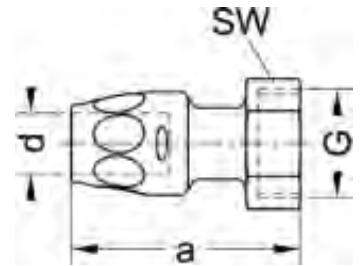
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | SW |
|-------------|---------------------|-----|-----|---------------|----|----|
| 123270g1412 | 14x1/2 | 5 | 20 | 4021343329630 | 59 | 24 |
| 123270g1612 | 16x1/2 | 5 | 20 | 4021343329647 | 47 | 24 |
| 123270g2012 | 20x1/2 | 5 | 20 | 4021343329654 | 50 | 24 |
| 123270g2034 | 20x3/4 | 5 | 20 | 4021343329661 | 51 | 30 |



Catalog-no. and -description

23301 – Endcap

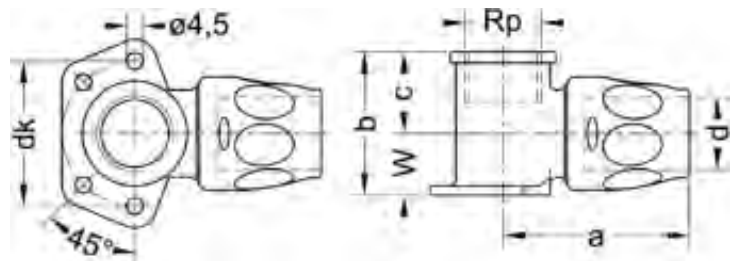
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 12330116 | 16 | 5 | 20 | 4021343329470 | 34 |
| 12330120 | 20 | 5 | 20 | 4021343329487 | 36 |



Catalog-no. and -description

23359g – Union adaptor, flat sealing

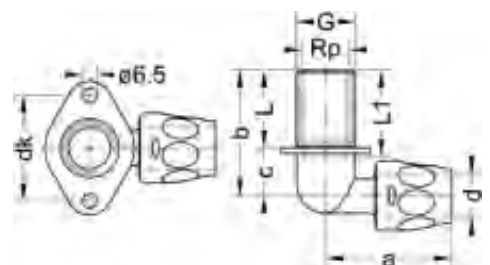
| Article-no. | Dimension d x G | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 123359g1434 | 14x3/4 | 5 | 20 | 4021343329678 | 52 | 30 |
| 123359g1612 | 16x1/2 | 5 | 20 | 4021343329685 | 62 | 24 |
| 123359g1634 | 16x3/4 | 5 | 20 | 4021343329692 | 63 | 30 |
| 123359g2012 | 20x1/2 | 5 | 20 | 4021343329708 | 67 | 24 |
| 123359g2034 | 20x3/4 | 5 | 20 | 4021343329715 | 66 | 30 |
| 123359g201 | 20x1 | 5 | 20 | 4021343329722 | 63 | 37 |



Catalog-no. and -description

23473g – Wall plate elbow

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | c | dk | W |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|
| 123473g1412 | 14x1/2 | 5 | 20 | 4021343329739 | 45 | 34 | 20 | 40 | 14 |
| 123473g1612 | 16x1/2 | 5 | 20 | 4021343329746 | 49 | 36 | 21 | 40 | 15 |
| 123473g2012 | 20x1/2 | 5 | 20 | 4021343329753 | 52 | 40 | 23 | 40 | 17 |
| 123473g2034 | 20x3/4 | 5 | 20 | 4021343329760 | 54 | 41 | 24 | 40 | 17 |



Catalog-no. and -description

23091UP – Elbow 90°, for concealed cistern

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | G | a | b | c | dk | L1 |
|----------------|---------------------|-----|-----|---------------|-----|----|----|----|----|----|
| 123091UP161218 | 16x1/2x3/4x18 | 5 | 20 | 4021343330056 | 3/4 | 54 | 36 | 18 | 48 | 23 |
| 123091UP161225 | 16x1/2x3/4x25 | 5 | 20 | 4021343335075 | 3/4 | 54 | 43 | 18 | 48 | 30 |
| 123091UP161235 | 16x1/2x3/4x35 | 5 | 20 | 4021343335082 | 3/4 | 54 | 53 | 18 | 48 | 40 |
| 123091UP161255 | 16x1/2x3/4x55 | 5 | 20 | 4021343335099 | 3/4 | 54 | 73 | 18 | 48 | 60 |
| 123091UP161265 | 16x1/2x3/4x65 | 4 | 16 | 4021343335105 | 3/4 | 54 | 83 | 18 | 48 | 70 |
| 123091UP2012 | 20x1/2 | 5 | 20 | 4021343330063 | 3/4 | 54 | 57 | 22 | 48 | 42 |



Catalog-no. and -description

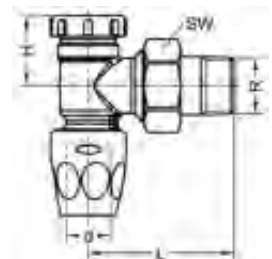
912 – Installation set for elbow 90° for concealed cistern no. 23091UP and lightweight walls, consisting of one hexagon nut (brass) and 2 sealing

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|-------------|-----|-----|---------------|
| 291234 | 3/4 | 1 | 20 | 4021343336706 |



Catalog-no. and -description

234APV – Radiator union, corner form, nickel-plated, max. 100° C

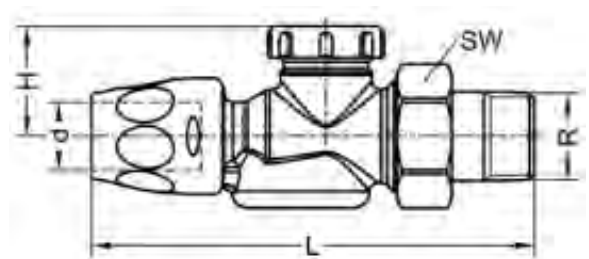


| Article-no. | Dimension d | Bag | Box | EAN code | H | L | SW |
|-------------|-------------|-----|-----|---------------|----|----|----|
| 1234APV1612 | 16x1/2 | 5 | 20 | 4021343330032 | 26 | 53 | 30 |



Catalog-no. and -description

235APV – Radiator union, passage form, nickel-plated, max. 100° C



| Article-no. | Dimension d | Bag | Box | EAN code | H | L | SW |
|-------------|-------------|-----|-----|---------------|----|-----|----|
| 1235APV1612 | 16x1/2 | 5 | 20 | 4021343330049 | 26 | 105 | 30 |

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MM-3616



TAC - 004/2004



HK / W 0301 / 01 - 2003



DW-7301BL6102
DW-7301BT0267
DW-8501BN0454



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POCC DE.AIO31.H08581
POCC DE.AIO31.H08770
POCC DE.AIO31.H08771



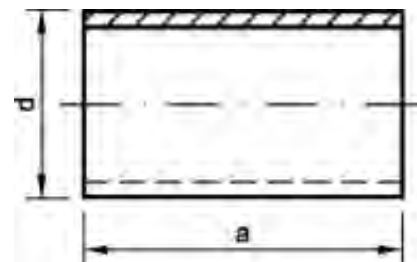
D00/1403/0004/4



PN - EN 10305
PN - EN 10312



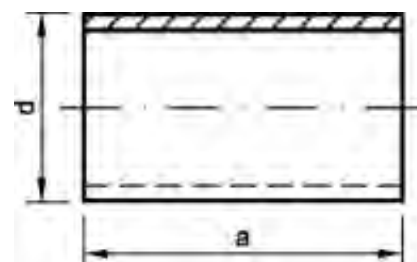
WZ 473 HH 5



Catalog-no. and -description

9000 – NiroSan system pipes in 6 m rods, AISI 316 L

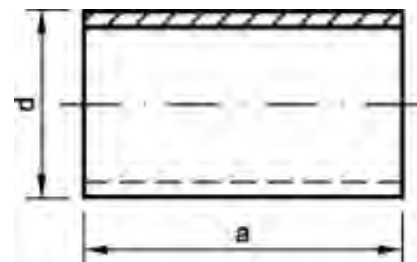
| Article-no. | Dimension d x s | Bag | Bundle | EAN code | á | Weight empty pipe [kg/m] | Weight of pipe filled with water [kg/m] | Water content [l/m] |
|-------------|--------------------|-----|---------------|----------|-------|--------------------------------|---|------------------------|
| 6900015 | 15 x 1,0 | 600 | 4021343151101 | 6 m | 0,351 | 0,484 | 0,133 | |
| 6900018 | 18 x 1,0 | 240 | 4021343151118 | 6 m | 0,426 | 0,627 | 0,201 | |
| 6900022 | 22 x 1,2 | 420 | 4021343151125 | 6 m | 0,626 | 0,928 | 0,302 | |
| 6900028 | 28 x 1,2 | 240 | 4021343151132 | 6 m | 0,806 | 1,321 | 0,515 | |
| 6900035 | 35 x 1,5 | 180 | 4021343151149 | 6 m | 1,260 | 2,064 | 0,804 | |
| 6900042 | 42 x 1,5 | 120 | 4021343151156 | 6 m | 1,523 | 2,718 | 1,195 | |
| 6900054 | 54 x 1,5 | 60 | 4021343151163 | 6 m | 1,974 | 4,017 | 2,043 | |
| 6900064 | 64 x 2,0 | 30 | 4021343164743 | 6 m | 3,109 | 5,936 | 2,827 | |
| 6900076 | 76,1 x 2,0 | 30 | 4021343165009 | 6 m | 3,715 | 7,798 | 4,083 | |
| 6900089 | 88,9 x 2,0 | 30 | 4021343165016 | 6 m | 4,357 | 10,018 | 5,661 | |
| 69000108 | 108 x 2,0 | 30 | 4021343172564 | 6 m | 5,315 | 13,810 | 8,495 | |



Catalog-no. and -description

19000 – NiroSan-SF system pipes in 6 m rods, AISI 316 L, silicone-free

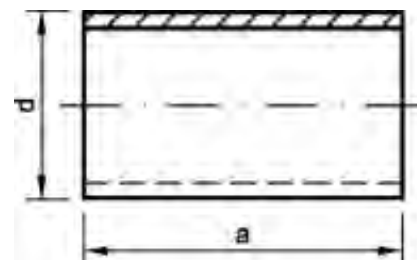
| Article-no. | Dimension d x s | Bag | Bundle | EAN code | á | Weight empty pipe [kg/m] | Weight of pipe filled with water [kg/m] | Water content [l/m] |
|-------------|--------------------|-----|---------------|----------|-------|--------------------------------|---|------------------------|
| 61900015 | 15 x 1,0 | 600 | 4021343198632 | 6 m | 0,351 | 0,484 | 0,133 | |
| 61900018 | 18 x 1,0 | 240 | 4021343198649 | 6 m | 0,426 | 0,627 | 0,201 | |
| 61900022 | 22 x 1,2 | 420 | 4021343198656 | 6 m | 0,626 | 0,928 | 0,302 | |
| 61900028 | 28 x 1,2 | 240 | 4021343198663 | 6 m | 0,806 | 1,321 | 0,515 | |
| 61900035 | 35 x 1,5 | 180 | 4021343198670 | 6 m | 1,260 | 2,064 | 0,804 | |
| 61900042 | 42 x 1,5 | 120 | 4021343198687 | 6 m | 1,523 | 2,718 | 1,195 | |
| 61900054 | 54 x 1,5 | 60 | 4021343198694 | 6 m | 1,974 | 4,017 | 2,043 | |
| 61900076 | 76,1 x 2,0 | 30 | 4021343198700 | 6 m | 3,715 | 7,798 | 4,083 | |
| 61900089 | 88,9 x 2,0 | 30 | 4021343198717 | 6 m | 4,357 | 10,018 | 5,661 | |
| 619000108 | 108 x 2,0 | 30 | 4021343198724 | 6 m | 5,315 | 13,810 | 8,495 | |



Catalog-no. and -description

9600 – NiroSan-ECO pipes, reduced wall-thickness, for heating and drinking water installations, AISI 316 L

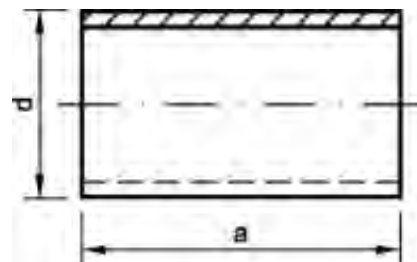
| Article-no. | Dimension d x s | Bag | Bundle | EAN code | á | Weight empty pipe [kg/m] | Weight of pipe filled with water [kg/m] | Water content [l/m] |
|-------------|--------------------|-----|--------|---------------|-----|--------------------------------|---|------------------------|
| 6960015 | 15x0,6 | | 600 | 4021343321061 | 6 m | 0,217 | 0,367 | 0,150 |
| 6960018 | 18x0,7 | | 240 | 4021343321078 | 6 m | 0,304 | 0,520 | 0,216 |
| 6960022 | 22x0,7 | | 420 | 4021343321085 | 6 m | 0,374 | 0,707 | 0,333 |
| 6960028 | 28x0,8 | | 240 | 4021343321092 | 6 m | 0,546 | 1,093 | 0,547 |
| 6960035 | 35x1,0 | | 180 | 4021343321108 | 6 m | 0,852 | 1,707 | 0,855 |
| 6960042 | 42x1,1 | | 120 | 4021343321115 | 6 m | 1,128 | 2,372 | 1,244 |
| 6960054 | 54x1,2 | | 60 | 4021343321122 | 6 m | 1,588 | 3,679 | 2,091 |
| 6960076 | 76,1x1,5 | | 30 | 4021343321139 | 6 m | 2,805 | 7,002 | 4,197 |
| 6960089 | 88,9x1,5 | | 30 | 4021343321146 | 6 m | 3,287 | 9,082 | 5,795 |
| 69600108 | 108 x 1,5 | | 30 | 4021343321153 | 6 m | 4,005 | 12,664 | 8,659 |



Catalog-no. and -description

9700 – NiroSan-F system pipes in 6 m rods; AISI 443/444

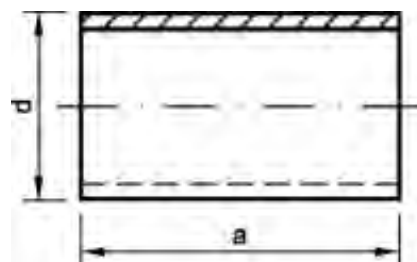
| Article-no. | Dimension d x s | Bag | Bundle | EAN code | á | Weight empty pipe [kg/m] | Weight of pipe filled with water [kg/m] | Water content [l/m] |
|-------------|--------------------|-----|--------|---------------|-----|--------------------------------|---|------------------------|
| 6970015 | 15x1,0 | | 600 | 4021343345210 | 6 m | 0,351 | 0,484 | 0,133 |
| 6970018 | 18x1,0 | | 240 | 4021343345227 | 6 m | 0,426 | 0,627 | 0,201 |
| 6970022 | 22x1,2 | | 420 | 4021343345234 | 6 m | 0,626 | 0,928 | 0,302 |
| 6970028 | 28x1,2 | | 240 | 4021343345241 | 6 m | 0,806 | 1,321 | 0,515 |
| 6970035 | 35x1,5 | | 180 | 4021343345258 | 6 m | 1,260 | 2,064 | 0,804 |
| 6970042 | 42x1,5 | | 120 | 4021343345265 | 6 m | 1,523 | 2,718 | 1,195 |
| 6970054 | 54x1,5 | | 60 | 4021343345272 | 6 m | 1,974 | 4,017 | 2,043 |
| 6970076 | 76,1x2,0 | | 30 | 4021343345296 | 6 m | 3,715 | 7,798 | 4,083 |
| 6970089 | 88,9x2,0 | | 30 | 4021343345302 | 6 m | 4,357 | 10,018 | 5,661 |
| 69700108 | 108,0x2,0 | | 30 | 4021343345319 | 6 m | 5,315 | 13,810 | 8,495 |



Catalog-no. and -description

9100 – Niro-Therm system pipes, reduced wallthickness, for cooling, compressed air, heating and industrial applications, in combination with SANHA-Therm and NiroSan-Press fittings ; AISI 304

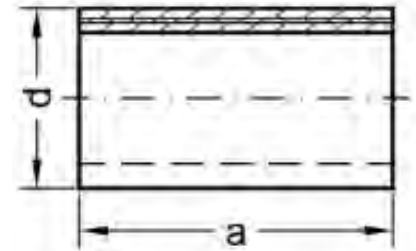
| Article-no. | Dimension d x s | Bag | Bundle | EAN code | á | Weight empty pipe [kg/m] | Weight of pipe filled with water [kg/m] | Water content [l/m] |
|-------------|--------------------|-----|---------------|----------|-------|--------------------------------|---|------------------------|
| 6910015 | 15x0,6 | 600 | 4021343320965 | 6 m | 0,217 | 0,367 | 0,150 | |
| 6910018 | 18x0,7 | 240 | 4021343320972 | 6 m | 0,304 | 0,520 | 0,216 | |
| 6910022 | 22x0,7 | 420 | 4021343320989 | 6 m | 0,374 | 0,707 | 0,333 | |
| 6910028 | 28x0,8 | 240 | 4021343320996 | 6 m | 0,546 | 1,093 | 0,547 | |
| 6910035 | 35x1,0 | 180 | 4021343321009 | 6 m | 0,852 | 1,707 | 0,855 | |
| 6910042 | 42x1,1 | 120 | 4021343321016 | 6 m | 1,128 | 2,372 | 1,244 | |
| 6910054 | 54x1,2 | 60 | 4021343321023 | 6 m | 1,588 | 3,679 | 2,091 | |
| 6910076 | 76,1x1,5 | 30 | 4021343321030 | 6 m | 2,805 | 7,002 | 4,197 | |
| 6910089 | 88,9x1,5 | 30 | 4021343321047 | 6 m | 3,287 | 9,082 | 5,795 | |
| 69100108 | 108x1,5 | 30 | 4021343321054 | 6 m | 4,005 | 12,664 | 8,659 | |



Catalog-no. and -description

24000 – SANHA-Therm system pipes of carbon steel, for heating, compressed air and cooling (in closed installations), in combination with SANHA-Therm pressfittings

| Article-no. | Dimension d x s | Bag | Bundle | EAN code | á | Weight empty pipe [kg/m] | Weight of pipe filled with water [kg/m] | Water content [l/m] |
|-------------|--------------------|-----|---------------|----------|-------|--------------------------------|---|------------------------|
| 12400012 | 12x1,2 | 600 | 4021343325892 | 6 m | 0,320 | 0,392 | 0,072 | |
| 12400015 | 15x1,2 | 600 | 4021343325908 | 6 m | 0,408 | 0,533 | 0,125 | |
| 12400018 | 18x1,2 | 240 | 4021343325915 | 6 m | 0,497 | 0,688 | 0,191 | |
| 12400022 | 22x1,5 | 420 | 4021343325922 | 6 m | 0,758 | 1,042 | 0,284 | |
| 12400028 | 28x1,5 | 240 | 4021343325939 | 6 m | 0,980 | 1,471 | 0,491 | |
| 12400035 | 35x1,5 | 180 | 4021343325946 | 6 m | 1,128 | 1,789 | 0,661 | |
| 12400042 | 42x1,5 | 120 | 4021343325953 | 6 m | 1,424 | 2,499 | 1,075 | |
| 12400054 | 54x1,5 | 60 | 4021343325960 | 6 m | 1,942 | 3,985 | 2,043 | |
| 12400067 | 66,7x1,5 | 30 | 4021343342851 | 6 m | 2,303 | 5,490 | 3,187 | |
| 12400076 | 76,1x2,0 | 30 | 4021343325984 | 6 m | 3,655 | 7,738 | 4,083 | |
| 12400089 | 88,9x2,0 | 30 | 4021343325991 | 6 m | 4,286 | 9,947 | 5,661 | |
| 124000108 | 108x2,0 | 30 | 4021343326004 | 6 m | 5,228 | 13,723 | 8,495 | |

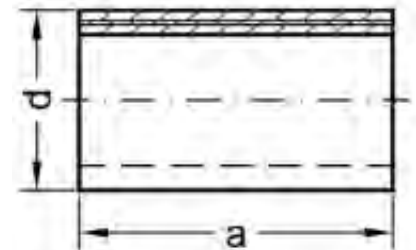


Catalog-no. and -description

23000 – Multifit®-Flex multilayer pipes for the drinking water and heating installation, in coils

| Article-no. | Dimension d x s | Bag | coil á m | EAN code | á | Weight empty pipe [kg/m] | Weight of pipe filled with water [kg/m] | Water content [l/m] |
|-------------|--------------------|-----|-------------|---------------|-------|--------------------------------|---|------------------------|
| 12300016 | 16 x 2,0 | | 200 | 4021343328992 | 200 m | 0,102 | 0,215 | 0,113 |
| 12300020 | 20 x 2,0 | | 100 | 4021343329005 | 100 m | 0,137 | 0,338 | 0,201 |
| 12300026 | 26 x 3,0 | | 50* | 4021343331503 | 50 m | 0,225 | 0,569 | 0,314 |
| 12300032 | 32 x 3,0 | | 50* | 4021343337550 | 50 m | 0,365 | 0,896 | 0,531 |

* ring bund



Catalog-no. and -description

23100 – Multifit®-Flex multilayer pipes for the drinking water and heating installation, in 5 metre bars

| Article-no. | Dimension d x s | Bag | Bundle m | EAN code | á | Weight empty pipe [kg/m] | Weight of pipe filled with water [kg/m] | Water content [l/m] |
|-------------|--------------------|-----|-------------|---------------|-----|--------------------------------|---|------------------------|
| 12310016 | 16 x 2,0 | | 50 | 4021343358128 | 5 m | 0,102 | 0,215 | 0,113 |
| 12310020 | 20 x 2,0 | | 45 | 4021343358135 | 5 m | 0,137 | 0,338 | 0,201 |
| 12310026 | 26 x 3,0 | | 120 | 4021343333934 | 5 m | 0,137 | 0,338 | 0,201 |
| 12310032 | 32 x 3,0 | | 100 | 4021343331510 | 5 m | 0,365 | 0,869 | 0,531 |
| 12310040 | 40 x 3,5 | | 50 | 4021343338571 | 5 m | 0,510 | 1,365 | 0,855 |
| 12310050 | 50 x 4,0 | | 15 | 4021343338588 | 5 m | 0,715 | 2,100 | 1,385 |
| 12310063 | 63 x 4,5 | | 5 | 4021343338595 | 5 m | 1,060 | 3,350 | 2,290 |



Catalog-no. and -description

23200B – Multifit®-Flex protect, system pipes in coils, blue

| Article-no. | Dimension d x s | Bag | coil á m | EAN code |
|-------------|--------------------|-----|-------------|---------------|
| 12320016B | 16 X 2,0 | | 75 | 4021343358173 |
| 12320020B | 20 x 2,0 | | 75 | 4021343358180 |



Catalog-no. and -description

23200R – MultiFit[®]-Flex protect, system pipes in coils, red

| Article-no. | Dimension d x s | Bag | coils á m | EAN code |
|-------------|--------------------|-----|--------------|---------------|
| 12320016R | 16 X 2,0 | | 75 | 4021343358159 |
| 12320020R | 20 x 2,0 | | 75 | 4021343358166 |



Catalog-no. and -description

23300 – MultiFit[®]-Flex ISO, system pipes in coils

| Article-no. | Dimension d x s | Bag | coils á m | EAN code |
|-------------|--------------------|-----|--------------|---------------|
| 12330016 | 16 X 2,0 | | 50 | 4021343358197 |
| 12330020 | 20 x 2,0 | | 50 | 4021343358203 |

SYSTEM TECHNOLOGY

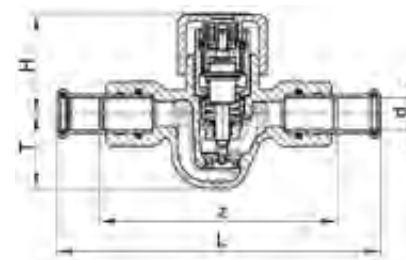
**Kemper valves with
SANHA® connector***

* Supply only via:

Gebr. Kemper GmbH + Co. KG
Harkortstraße 5
D - 57462 Olpe
www.kemper-olpe.de



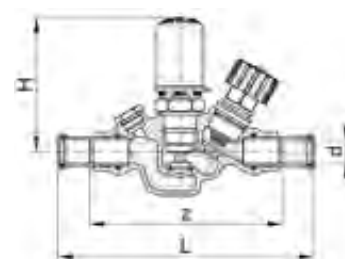
DW-8511BS0082



Catalog-no. and -description

131 35 – Kemper-Weser ,UP-plus‘ wall recessing valve with **SANHA® system connection, with lock-, control- and presetting-function, completely made of gunmetal, consistent against abrasive water and free of brass in medium contacted ranges, with maintenance-free s**

| Kemper-EDV-No. | Dimension DN x d | z | L | H | T |
|----------------|------------------|-----|-----|----|----|
| 015 | DN 15 / 15 mm | 112 | 152 | 47 | 35 |
| 020 | DN 15 / 18 mm | 114 | 154 | 47 | 35 |



Catalog-no. and -description

143 35 – Kemper-Weser ,Multi-Therm‘ automatic circulation-control valve with **SANHA® system connection blockable, for thermic selfcontrolled hydraulic leg-calibration, with automatic changeover of control range for thermic fumigation, female/female**

| Kemper-EDV-No. | Dimension DN x d | z | L | H |
|----------------|------------------|-----|-----|----|
| 015 | DN 15 / 15 mm | 122 | 162 | 85 |
| 018 | DN 18 / 18 mm | 124 | 164 | 85 |
| 020 | DN 20 / 22 mm | 142 | 184 | 83 |

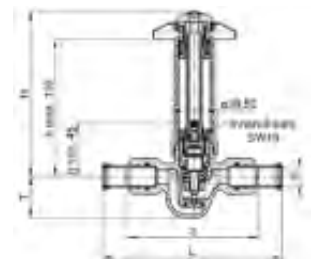


Catalog-no. and -description

190 36 – Kemper-Weser system-lock valve with SANHA® system connection consistent against abrasive water, made of gunmetal in medium contacted ranges, wear-resistant valve-lip, free of clearance volume, with selffoiling and under pressure convertible EPDM-gasket

| Kemper-EDV-No. | Dimension DN x d | z | L | H | D |
|----------------|------------------|-----|-----|-----|----|
| 015 | DN 15 / 15 mm | 90 | 130 | 90 | 60 |
| 018 | DN 18 / 18 mm | 92 | 132 | 90 | 60 |
| 020 | DN 20 / 22 mm | 104 | 146 | 105 | 60 |
| 025 | DN 25 / 28 mm | 121 | 167 | 132 | 70 |
| 032 | DN 32 / 35 mm | 124 | 188 | 154 | 70 |
| 040 | DN 40 / 42 mm | 132 | 207 | 162 | 70 |
| 050 | DN 50 / 54 mm | 181 | 263 | 193 | 90 |

15



Catalog-no. and -description

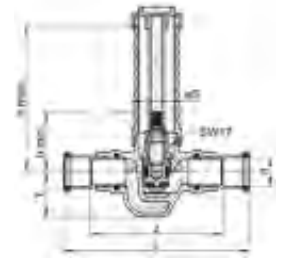
546 02 – Kemper-Weser 'Eta-Therm' floor wall recessing control valve with SANHA® system connection, automatic fine-control valve for hydraulic calibration of floor-distribution pipelines, kv-min = 0.05, for calibration of circulation-systems in floor-areas

| Kemper-EDV-No. | Dimension DN x d | z | L | H | T |
|----------------|------------------|-----|-----|-----|----|
| 015 | DN 15 / 15 mm | 112 | 152 | 140 | 35 |
| 018 | DN 15 / 18 mm | 114 | 154 | 140 | 35 |



Catalog-no. and -description

560 19



| Kemper-EDV-No. | Dimension DN x d | z | L | h min. | h max. | T | ø S |
|----------------|------------------|-----|-----|--------|--------|----|-----|
| 015 | DN 15 / 15 mm | 100 | 140 | 45 | 110 | 37 | 39 |
| 018 | DN 18 / 18 mm | 100 | 140 | 45 | 110 | 37 | 39 |
| 020 | DN 20 / 22 mm | 103 | 145 | 45 | 110 | 35 | 39 |
| 025 | DN 25 / 28 mm | 134 | 180 | 45 | 115 | 54 | 46 |

SANHA[®]

**SANHA[®] system valves (of Kemper)
for the drinking water and heating installation**

SYSTEM TECHNOLOGY

Tools



РОСС DE.АЮ31.В09634



Catalog-no. and -description

6900 – SANHA® electrical crimping tool ECO 301, with case, without press jaws

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16900 | | | 1 | 4021343134258 |



Catalog-no. and -description

6901 – SANHA® electrical crimping tool ECO 301, with case, with 6 press jaws 12/15/18/22/28/35 mm

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16901 | | | 1 | 4021343138850 |



Catalog-no. and -description

6907 – Battery charger for 6906 and 6906 14,4 V

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16907 | | | 1 | 4021343138843 |



Catalog-no. and -description
6952 – SANHA® tool set with intermediate jaws for electrical crimping tool ECO 301 and ACO 3

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-------------------|-----|-----|---------------|
| 169524254 | 42 + 54 mm * | | 1 | 4021343138713 |
| 169527689 | 76,1 + 88,9 mm ** | | 1 | 4021343179860 |
| 16952108 | 108 mm *** | | 1 | 4021343179877 |

* with intermediate jaw 169311

** with intermediate jaw 169312

*** with intermediate jaw 169312 and 169313



Catalog-no. and -description
6920 – SANHA® - Press jaw with 8-edge profile for electrical crimping tool ECO 301 and ACO 3

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 1692012 | 12 | | 2 | 4021343203657 |
| 1692014 | 14 | | 2 | 4021343203664 |
| 1692015 | 15 | | 2 | 4021343203671 |
| 1692016 | 16 | | 2 | 4021343203688 |
| 1692018 | 18 | | 2 | 4021343203695 |
| 1692022 | 22 | | 2 | 4021343203701 |
| 1692028 | 28 | | 2 | 4021343203718 |
| 1692035 | 35 | | 2 | 4021343203725 |



Catalog-no. and -description
6931.1/6931.2/6931.3 – SANHA intermediate jaw for electrical crimping tools no. 6900/01

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|---|-----|-----|---------------|
| 169311 | for 42, 54, 64 and 66,7 mm | | 2 | 4021343134364 |
| 169312 | for 76,1, 88,9 and 108 mm (first crimping for 108 mm) | | 1 | 4021343175183 |
| 169313 | for 108 mm (second crimping) | | 1 | 4021343175190 |



Catalog-no. and -description
6932 – SANHA® - Press collar with SANHA 9-edge profile

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 1693242 | 42 | | 2 | 4021343134371 |
| 1693254 | 54 | | 2 | 4021343134388 |



Catalog-no. and -description
6933 – SANHA® - Press sling for electrical crimping tools ECO 301 no. 6900/6901

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 1693364 | 64 | | 2 | 4021343197604 |
| 1693367 | 66,7 | | 1 | 4021343198380 |
| 1693376 | 76,1 | | 1 | 4021343175152 |
| 1693389 | 88,9 | | 1 | 4021343175169 |
| 16933108 | 108 | | 1 | 4021343175176 |



Catalog-no. and -description
6934 – SANHA® sling „copper only“ for electronic crimping tools ECO 301 no. 6900/01

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16934108 | 108 | | 1 | 4021343205903 |



Catalog-no. and -description

6911 – Empty SANHA® case for slings 42 mm and 54 mm, catalog no. 6932 and intermediate jaws 6930 or 6931.1, 6931.2
 -case for press slings 76,1 and 88,9 and intermediate jaw 6931.2, 6931.3
 -case for press sling 108 mm and intermediate jaw 6931.2, 6931.3

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16911 | | | 1 | 4021343134272 |
| 169112 | | | 1 | 4021343175206 |
| 169113 | | | 1 | 4021343175213 |



Catalog-no. and -description

6902 – SANHA® crimping tool ECO 201, with case, without press jaws

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16902 | | | 1 | 4021343156526 |



Catalog-no. and -description

6903 – SANHA® crimping tool ECO 201, with case, with 6 service plus press jaws 12/15/18/22/28/35 mm

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16903 | | | 1 | 4021343156533 |



Catalog-no. and -description

6908 – SANHA® crimping tool ACO 201, with case, battery and battery charger, without press jaws

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16908 | | | 1 | 4021343156540 |



Catalog-no. and -description

**6909 – SANHA® crimping tool ACO 201, with case, battery and battery charger, with 6 service plus press jaws
12/15/18/22/28/35 mm**

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16909 | | | 1 | 4021343156557 |



Catalog-no. and -description

6906 – Battery 14,4 V, for SANHA® crimping tool no. 6908/ 6909

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16906144V | | | 2 | 4021343208676 |



Catalog-no. and -description
6915 – SANHA® crimping tool EFP 201, with case, without jaws

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16915 | | | 1 | 4021343208485 |



Catalog-no. and -description
6916 – SANHA® crimping tool EFP 201, with case, with 6 service plus jaws

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16916 | | | 1 | 4021343209307 |



Catalog-no. and -description
6917 – SANHA® crimping tool ROMAX Compact, with case, without jaws

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|----------|
| 16917 | | | | |



Catalog-no. and -description

6954 – SANHA® service plus tool set with SANHA® 9-edge profile, with press slings 42 mm and 54 mm and intermediate jaw 6930

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|------------|-----|-----|---------------|
| 16954 | 42 + 54 mm | | 1 | 4021343138737 |



Catalog-no. and -description

6935 – SANHA®-Press slings with TH profile for the 3fit®-Press system

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 1693540 | 40 | | 2 | 4021343356681 |
| 1693550 | 50 | | 2 | 4021343356698 |
| 1693563 | 63 | | 2 | 4021343356704 |



Catalog-no. and -description

6940 – SANHA®-Press jaws with SANHA® 8-edge profile service plus, with maintenance tag for SANHA® crimping tools 6902/03/08/09/15/16

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 1694012 | 12 | | 2 | 4021343134395 |
| 1694014 | 14 | | 2 | 4021343169113 |
| 1694015 | 15 | | 2 | 4021343134401 |
| 1694016 | 16 | | 2 | 4021343169106 |
| 1694018 | 18 | | 2 | 4021343134418 |
| 1694022 | 22 | | 2 | 4021343134425 |
| 1694028 | 28 | | 2 | 4021343134432 |
| 1694035 | 35 | | 2 | 4021343134449 |



Catalog-no. and -description

6945 – SANHA®-Press jaws with TH profile for the 3fit®-Press system, with maintenance tag, for SANHA® crimping tools 6902/03/08/09/15/16

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 1694514 | 14 | | 4 | 4021343333859 |
| 1694516 | 16 | | 4 | 4021343333811 |
| 1694520 | 20 | | 4 | 4021343333828 |
| 1694526 | 26 | | 4 | 4021343333835 |
| 1694532 | 32 | | 4 | 4021343333842 |



Catalog-no. and -description

6953 – SANHA®-Press jaw set service plus 12, 15, 18, 22, 35 mm with SANHA® 8-edge profile, with case for 6 SANHA® crimping tools no. 6902/03/08/09/15/16

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|---------------------------|-----|-----|---------------|
| 16953 | 12, 15, 18, 22, 28, 35 mm | | 1 | 4021343138720 |



Catalog-no. and -description

6932 – SANHA®-Press sling for electrical crimping tools ECO 301 no. 6900/6901

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 1693242 | 42 | | 2 | 4021343134371 |
| 1693254 | 54 | | 2 | 4021343134388 |



Catalog-no. and -description

6930 – SANHA® intermediate jaw Service Plus with maintenance tag for SANHA® crimping tools no. 6902/03/08/09/15/16

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16930 | | | 2 | 4021343134357 |



Catalog-no. and -description

6912 – Empty case for 6 SANHA® service plus press jaws, d=12 - 35 mm

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16912 | | | 1 | 4021343134289 |



Catalog-no. and -description

6958 – SANHA® standard press jaw with SANHA® 8-edge profile, loose

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 1695812 | 12 | | 4 | 4021343139253 |
| 1695814 | 14 | | 4 | 4021343163982 |
| 1695815 | 15 | | 4 | 4021343139260 |
| 1695816 | 16 | | 4 | 4021343163999 |
| 1695818 | 18 | | 4 | 4021343139277 |
| 1695822 | 22 | | 4 | 4021343139284 |
| 1695828 | 28 | | 4 | 4021343139291 |
| 1695835 | 35 | | 4 | 4021343139307 |



Catalog-no. and -description
6959 – SANHA®-Press jaw with TH profile for crimping tool 6917

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|----------|
| 1695914 | 14 | | | |
| 1695916 | 16 | | | |
| 1695920 | 20 | | | |
| 1695926 | 26 | | | |



Catalog-no. and -description
6957 – SANHA®-Press jaw set Standard 12, 15, 18, 22, 35 mm with SANHA® 8-edge profile, with case for 6 SANHA® crimping tools

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|---------------------------|-----|-----|---------------|
| 16957 | 12, 15, 18, 22, 28, 35 mm | | 1 | 4021343139246 |



Catalog-no. and -description
6961 – Empty case for 6 SANHA®-Press jaws Standard, d = 12 - 35 mm

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 16961 | | | 1 | 4021343139574 |



Catalog-no. and -description

4980 – Plastic measure tool for SANHA[®]-Press, SANHA[®]-Therm and NiroSan[®]-Press, 12 - 54 mm

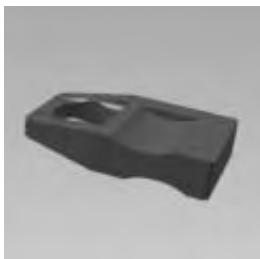
| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84980 | 12-54 mm | | 30 | 4021343140297 |



Catalog-no. and -description

4981 – Plastic measure tool for NiroSan[®]-Press with bottle opener and water level, 15 - 54 mm

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84981 | 15-54 mm | | 30 | 4021343142673 |



Catalog-no. and -description

4989 – Plastic measure tool for NiroSan[®]-Press with bottle opener and water level, 64 mm and 67 mm

| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 84989 | 64 + 67 mm | | | 4021343356889 |



Catalog-no. and -description

4990 – Plastic measure tool for NiroSan[®]-Pres SANHA[®]-Press with bottle opener and water level, 76,1 - 108 mm

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-------------|-----|-----|---------------|
| 84990 | 76,1-108 mm | | 20 | 4021343194511 |



Catalog-no. and -description

4991 – Bending clamp

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84991 | | | 1 | 4021343200397 |



Catalog-no. and -description

4995 – Calibration tool for MultiFit[®]-Flex system pipes

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 8499516 | 16 | | 1 | 4021343332432 |
| 8499520 | 20 | | 1 | 4021343332449 |
| 8499526 | 26 | | 1 | 4021343332456 |
| 8499532 | 32 | | 1 | 4021343332463 |



Catalog-no. and -description

4996.1 – Cutting tool for MultiFit[®]-Flex system pipes

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84996.1 | 16-20 mm | | 1 | 4021343332470 |



Catalog-no. and -description

4996.2 – Cutting tool for MultiFit[®]-Flex system pipes

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84996.2 | 26-32 mm | | 1 | 4021343334696 |

TRADITIONAL PIPING

Gunmetal end feed fittings

Series 4000



1005R01F4P5-bst



DW-7401B00047



POCC DE.AIO31.H08582
POCC DE.AIO31.H08800



W / 483 / 92



9711-3852



PN - EN 1254-1:2004
PN - EN 1254-4:2004

Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.

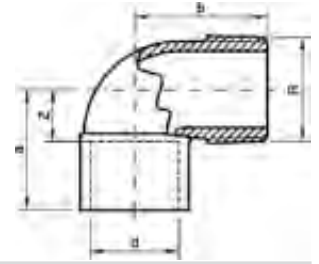


Catalog-no. and -description

4090g – Female elbow 90°

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | z1 | z2 |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|
| 140901014 | 10 x 1/4 | 10 | 500 | 4021343013171 | 17 | 15 | 8 | 5 |
| 140901012 | 10 x 1/2 | 10 | 200 | 4021343013164 | 22 | 18 | 13 | 7 |
| 140901238 | 12 x 3/8 | 10 | 250 | 4021343013201 | 20 | 17 | 10 | 8 |
| 140901212 | 12 x 1/2 | 10 | 250 | 4021343013195 | 20 | 19 | 11 | 8 |
| 140901412 | 14 x 1/2 | 10 | 200 | 4021343013218 | 22 | 21 | 10 | 10 |
| 140901538 | 15 x 3/8 | 10 | 250 | 4021343013270 | 22 | 19 | 10 | 10 |
| 140901512 | 15 x 1/2 | 10 | 200 | 4021343013256 | 22 | 21 | 11 | 10 |
| 140901534 | 15 x 3/4 | 10 | 150 | 4021343013263 | 29 | 23 | 16 | 10 |
| 140901612 | 16 x 1/2 | 10 | 150 | 4021343013287 | 22 | 21 | 10 | 10 |
| 140901634 | 16 x 3/4 | 10 | 150 | 4021343013294 | 29 | 23 | 16 | 10 |
| 140901812 | 18 x 1/2 | 10 | 150 | 4021343013324 | 24 | 22 | 11 | 11 |
| 140901834 | 18 x 3/4 | 10 | 130 | 4021343013331 | 28 | 24 | 15 | 11 |
| 140902212 | 22 x 1/2 | 10 | 130 | 4021343013362 | 27 | 24 | 11 | 13 |
| 140902234 | 22 x 3/4 | 10 | 100 | 4021343013379 | 31 | 26 | 14 | 13 |
| 14090221 | 22 x 1 | 10 | 80 | 4021343013355 | 36 | 28 | 19 | 13 |
| 140902834 | 28 x 3/4 | 10 | 50 | 4021343013423 | 36 | 30 | 16 | 17 |
| 14090281 | 28 x 1 | 10 | 50 | 4021343013393 | 39 | 32 | 19 | 17 |
| 14090351 | 35 x 1 | | 30 | 4021343013430 | 47 | 39 | 22 | 24 |
| 1409035114 | 35 x 1 1/4 | | 30 | 4021343013447 | 50 | 38 | 25 | 20 |
| 1409042112 | 42 x 1 1/2 | | 20 | 4021343013454 | 55 | 45 | 27 | 24 |
| 14090542 | 54 x 2 | | 10 | 4021343013478 | 70 | 52 | 36 | 31 |

Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4092g – Male elbow 90°

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | b | z |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 140921238 | 12 x 3/8 | 10 | 400 | 4021343013539 | 18 | 23 | 8 |
| 140921212 | 12 x 1/2 | 10 | 300 | 4021343013515 | 20 | 25 | 10 |
| 140921412 | 14 x 1/2 | 10 | 200 | 4021343013546 | 22 | 27 | 10 |
| 140921538 | 15 x 3/8 | 10 | 400 | 4021343013591 | 20 | 25 | 8 |
| 140921512 | 15 x 1/2 | 10 | 200 | 4021343013560 | 22 | 27 | 10 |
| 140921534 | 15 x 3/4 | 10 | 150 | 4021343013584 | 25 | 29 | 13 |
| 140921612 | 16 x 1/2 | 10 | 200 | 4021343013607 | 22 | 27 | 10 |
| 140921812 | 18 x 1/2 | 10 | 200 | 4021343013621 | 24 | 28 | 10 |
| 140921834 | 18 x 3/4 | 10 | 150 | 4021343013638 | 28 | 30 | 14 |
| 140922212 | 22 x 1/2 | 10 | 150 | 4021343013652 | 27 | 31 | 10 |
| 140922234 | 22 x 3/4 | 10 | 120 | 4021343013669 | 30 | 33 | 13 |
| 14092221 | 22 x 1 | 10 | 60 | 4021343013645 | 38 | 43 | 21 |
| 140922834 | 28 x 3/4 | | 70 | 4021343013713 | 31 | 39 | 11 |
| 14092281 | 28 x 1 | | 60 | 4021343013683 | 33 | 39 | 14 |
| 1409235114 | 35 x 1 1/4 | | 35 | 4021343013737 | 42 | 51 | 19 |
| 1409242112 | 42 x 1 1/2 | | 25 | 4021343013744 | 53 | 56 | 25 |
| 14092542 | 54 x 2 | | 12 | 4021343013768 | 64 | 65 | 30 |



Catalog-no. and -description

4096 – Elbow union, conical sealing

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-------------|----------------|-----|-----|---------------|----|----|----|----|----|
| 1409615 | 15 | 5 | 125 | 4021343013867 | 45 | 23 | 33 | 11 | 30 |
| 1409618 | 18 | 5 | 100 | 4021343013928 | 44 | 26 | 31 | 12 | 30 |
| 1409622 | 22 | 5 | 50 | 4021343013959 | 51 | 31 | 34 | 14 | 37 |
| 1409628 | 28 | 5 | 40 | 4021343013980 | 66 | 35 | 47 | 15 | 46 |
| 1409635 | 35 | 2 | 20 | 4021343014000 | 70 | 46 | 47 | 21 | 52 |
| 1409642 | 42 | 2 | 12 | 4021343014024 | 80 | 53 | 53 | 24 | 59 |
| 1409654 | 54 | 2 | 8 | 4021343014048 | 90 | 62 | 56 | 28 | 75 |

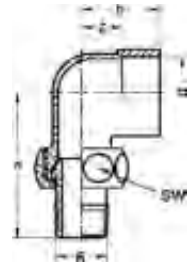
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4096g – Elbow union, female, conical sealing

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|-----|-----|
| 140961012 | 10 x 1/2 | 5 | 120 | 4021343013782 | 43 | 20 | 34 | 9 | 24 | 26 |
| 140961212 | 12 x 1/2 | 5 | 120 | 4021343013829 | 43 | 20 | 33 | 9 | 24 | 26 |
| 140961512 | 15 x 1/2 | 5 | 100 | 4021343013874 | 49 | 22 | 37 | 11 | 30 | 26 |
| 140961534 | 15 x 3/4 | 5 | 80 | 4021343013881 | 54 | 24 | 42 | 11 | 30 | 32 |
| 140961812 | 18 x 1/2 | 5 | 100 | 4021343013935 | 45 | 22 | 32 | 11 | 30 | 26 |
| 140961834 | 18 x 3/4 | 5 | 80 | 4021343013942 | 50 | 24 | 37 | 11 | 30 | 32 |
| 140962234 | 22 x 3/4 | 5 | 50 | 4021343013973 | 54 | 26 | 37 | 13 | 37 | 32 |
| 14096221 | 22 x 1 | 5 | 40 | 4021343013966 | 57 | 37 | 40 | 22 | 37 | 40 |
| 14096281 | 28 x 1 | 5 | 30 | 4021343013997 | 70 | 40 | 51 | 23 | 46 | 40 |
| 1409635114 | 35 x 1 1/4 | 2 | 20 | 4021343014017 | 72 | 38 | 49 | 21 | 52 | 48 |
| 1409642112 | 42 x 1 1/2 | 2 | 12 | 4021343014031 | 85 | 41 | 58 | 24 | 59 | 54 |
| 14096542 | 54 x 2 | 2 | 6 | 4021343014055 | 96 | 51 | 62 | 30 | 75 | 66 |

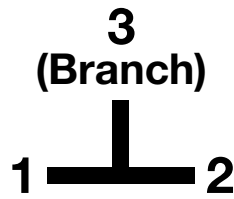


Catalog-no. and -description

4098g – Elbow union, male, conical sealing

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | b | z | SW |
|-------------|--------------------|-----|-----|---------------|-----|----|----|----|
| 140981238 | 12 x 3/8 | 5 | 125 | 4021343014116 | 43 | 18 | 8 | 24 |
| 140981212 | 12 x 1/2 | 5 | 120 | 4021343014109 | 50 | 19 | 9 | 30 |
| 140981412 | 14 x 1/2 | 5 | 100 | 4021343014123 | 51 | 20 | 8 | 30 |
| 140981512 | 15 x 1/2 | 5 | 100 | 4021343014147 | 51 | 23 | 11 | 30 |
| 140981612 | 16 x 1/2 | 5 | 100 | 4021343014178 | 52 | 23 | 11 | 30 |
| 140981812 | 18 x 1/2 | 5 | 100 | 4021343014192 | 54 | 26 | 12 | 30 |
| 140981834 | 18 x 3/4 | 5 | 50 | 4021343014208 | 61 | 26 | 12 | 37 |
| 140982234 | 22 x 3/4 | 5 | 50 | 4021343014222 | 62 | 31 | 14 | 37 |
| 14098221 | 22 x 1 | 5 | 40 | 4021343014215 | 68 | 34 | 18 | 46 |
| 14098281 | 28 x 1 | 5 | 30 | 4021343014239 | 74 | 35 | 15 | 46 |
| 1409835114 | 35 x 1 1/4 | 2 | 20 | 4021343014246 | 81 | 46 | 21 | 52 |
| 1409842112 | 42 x 1 1/2 | 2 | 12 | 4021343014253 | 86 | 53 | 24 | 59 |
| 14098542 | 54 x 2 | 2 | 6 | 4021343014260 | 100 | 62 | 28 | 75 |

Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4130g – Female tee

| Article-no. | Dimension d x d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | z3 |
|-------------|-------------------------|-----|-----|---------------|----|----|----|----|----|----|
| 141301238 | 12 x 12 x 3/8 | 10 | 200 | 4021343014338 | 19 | 17 | 19 | 9 | 8 | 9 |
| 141301212 | 12 x 12 x 1/2 | 10 | 150 | 4021343014321 | 23 | 19 | 23 | 13 | 8 | 13 |
| 141301412 | 14 x 14 x 1/2 | 10 | 120 | 4021343014345 | 25 | 21 | 25 | 13 | 10 | 13 |
| 141301538 | 15 x 15 x 3/8 | 10 | 200 | 4021343014383 | 22 | 19 | 22 | 10 | 10 | 10 |
| 141301512 | 15 x 15 x 1/2 | 10 | 120 | 4021343014369 | 25 | 21 | 25 | 13 | 10 | 13 |
| 141301534 | 15 x 15 x 3/4 | 10 | 100 | 4021343014376 | 29 | 23 | 29 | 17 | 10 | 17 |
| 141301612 | 16 x 16 x 1/2 | 10 | 120 | 4021343014390 | 25 | 21 | 25 | 13 | 10 | 13 |
| 141301838 | 18 x 18 x 3/8 | 10 | 120 | 4021343014444 | 27 | 22 | 27 | 13 | 13 | 13 |
| 141301812 | 18 x 18 x 1/2 | 10 | 120 | 4021343014420 | 27 | 22 | 27 | 13 | 11 | 13 |
| 141301834 | 18 x 18 x 3/4 | 10 | 90 | 4021343014437 | 31 | 24 | 31 | 17 | 11 | 17 |
| 141302212 | 22 x 22 x 1/2 | 10 | 70 | 4021343014468 | 31 | 24 | 31 | 14 | 11 | 14 |
| 141302234 | 22 x 22 x 3/4 | 10 | 60 | 4021343014475 | 33 | 27 | 33 | 16 | 14 | 16 |
| 141302812 | 28 x 28 x 1/2 | 10 | 50 | 4021343014505 | 33 | 28 | 33 | 13 | 17 | 13 |
| 141302834 | 28 x 28 x 3/4 | 10 | 40 | 4021343014512 | 36 | 30 | 36 | 16 | 17 | 16 |
| 14130281 | 28 x 28 x 1 | 10 | 40 | 4021343014499 | 39 | 32 | 39 | 19 | 17 | 19 |
| 141303512 | 35 x 35 x 1/2 | | 40 | 4021343014550 | 38 | 31 | 38 | 13 | 20 | 13 |
| 141303534 | 35 x 35 x 3/4 | | 32 | 4021343014567 | 43 | 36 | 43 | 18 | 21 | 18 |
| 14130351 | 35 x 35 x 1 | | 28 | 4021343014536 | 46 | 39 | 46 | 21 | 22 | 21 |
| 141304212 | 42 x 42 x 1/2 | | 25 | 4021343014604 | 40 | 38 | 40 | 12 | 25 | 12 |
| 141305412 | 54 x 54 x 1/2 | | 12 | 4021343158490 | 50 | 41 | 50 | 16 | 30 | 16 |
| 14130542 | 54 x 54 x 2 | | 9 | 4021343014642 | 66 | 53 | 66 | 32 | 29 | 32 |

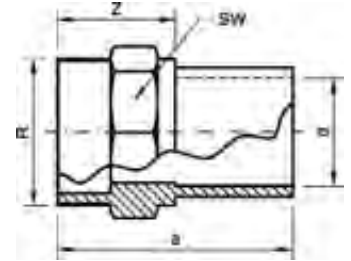


Catalog-no. and -description

4180 – Cross, female

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|----|----|
| 1418015 | 15 | 10 | 100 | 4021343014673 | 23 | 11 |
| 1418018 | 18 | 10 | 80 | 4021343014680 | 27 | 13 |
| 1418022 | 22 | 10 | 50 | 4021343014697 | 31 | 14 |
| 1418028 | 28 | 10 | 30 | 4021343014710 | 37 | 17 |

Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.

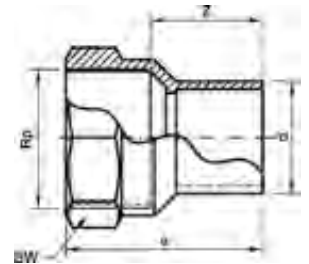


Catalog-no. and -description

4243g – Male adaptor

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW |
|-------------|--------------------|-----|-----|---------------|----|----|-----|
| 142431014 | 10 x 1/4 | 10 | 600 | 4021343014857 | 21 | 13 | 14 |
| 142431038 | 10 x 3/8 | 10 | 600 | 4021343014864 | 22 | 13 | 13 |
| 142431012 | 10 x 1/2 | 10 | 500 | 4021343014840 | 23 | 14 | 14 |
| 142431238 | 12 x 3/8 | 10 | 500 | 4021343014901 | 21 | 12 | 16 |
| 142431212 | 12 x 1/2 | 10 | 400 | 4021343014888 | 23 | 14 | 16 |
| 142431438 | 14 x 3/8 | 10 | 400 | 4021343014932 | 25 | 14 | 18 |
| 142431412 | 14 x 1/2 | 10 | 400 | 4021343014918 | 24 | 13 | 19 |
| 142431538 | 15 x 3/8 | 10 | 400 | 4021343014963 | 25 | 14 | 18 |
| 142431512 | 15 x 1/2 | 10 | 400 | 4021343014949 | 21 | 10 | 19 |
| 142431534 | 15 x 3/4 | 10 | 250 | 4021343014956 | 25 | 14 | 19 |
| 142431612 | 16 x 1/2 | 10 | 350 | 4021343014970 | 22 | 11 | 19 |
| 142431634 | 16 x 3/4 | 10 | 250 | 4021343014987 | 25 | 14 | 20 |
| 142431812 | 18 x 1/2 | 10 | 300 | 4021343015007 | 26 | 13 | 21 |
| 142431834 | 18 x 3/4 | 10 | 250 | 4021343015014 | 27 | 14 | 22 |
| 142432212 | 22 x 1/2 | 10 | 250 | 4021343015038 | 32 | 16 | 26 |
| 142432234 | 22 x 3/4 | 10 | 200 | 4021343015045 | 31 | 15 | 27 |
| 14243221 | 22 x 1 | 10 | 120 | 4021343015021 | 29 | 13 | 26 |
| 142432812 | 28 x 1/2 | 10 | 140 | 4021343015083 | 46 | 27 | 23 |
| 142432834 | 28 x 3/4 | 10 | 120 | 4021343015090 | 41 | 22 | 27 |
| 14243281 | 28 x 1 | 10 | 120 | 4021343015069 | 36 | 17 | 32 |
| 1424328114 | 28 x 11/4 | 10 | 90 | 4021343015076 | 37 | 18 | 34 |
| 142433534 | 35 x 3/4 | 10 | 80 | 4021343015137 | 49 | 26 | 28 |
| 14243351 | 35 x 1 | 10 | 70 | 4021343015106 | 45 | 20 | 39 |
| 1424335114 | 35 x 11/4 | | 70 | 4021343015120 | 43 | 18 | 40 |
| 1424335112 | 35 x 11/2 | | 60 | 4021343015113 | 41 | 18 | 40 |
| 1424342114 | 42 x 11/4 | | 40 | 4021343015168 | 51 | 22 | 46 |
| 1424342112 | 42 x 11/2 | | 40 | 4021343015151 | 51 | 22 | 50 |
| 14243422 | 42 x 2 | | 36 | 4021343015175 | 58 | 29 | 60 |
| 1424354112 | 54 x 11/2 | | 36 | 4021343015199 | 60 | 28 | 60 |
| 14243542 | 54 x 2 | | 24 | 4021343015205 | 62 | 29 | 60 |
| 1424364212 | 64 x 21/2 | | 14 | 4021343015212 | 67 | 34 | 71 |
| 1424367212 | 66,7 x 21/2 | | 14 | 4021343015229 | 72 | 38 | 75 |
| 1424376212 | 76,1 x 21/2 | | 12 | 4021343015243 | 71 | 35 | 83 |
| 14243763 | 76,1 x 3 | | 10 | 4021343015250 | 68 | 34 | 83 |
| 14243803 | 80 x 3 | | 6 | 4021343015267 | 78 | 40 | 87 |
| 14243893 | 88,9 x 3 | | 8 | 4021343015304 | 78 | 40 | 97 |
| 142431084 | 108 x 4 | | 2 | 4021343014871 | 97 | 47 | 117 |

Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.

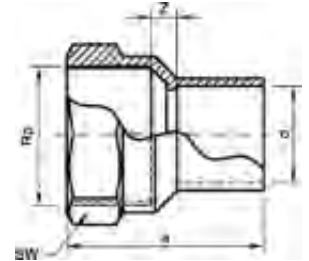


Catalog-no. and -description

4246g – Plug-in adaptor, female

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 142461238 | 12a x 3/8 | 10 | 400 | 4021343015335 | 27 | 18 | 20 |
| 142461212 | 12a x 1/2 | 10 | 300 | 4021343015328 | 30 | 19 | 25 |
| 142461538 | 15a x 3/8 | 10 | 400 | 4021343015359 | 26 | 17 | 20 |
| 142461512 | 15a x 1/2 | 10 | 300 | 4021343015342 | 32 | 20 | 25 |
| 142461812 | 18a x 1/2 | 10 | 250 | 4021343015366 | 33 | 21 | 25 |
| 142461834 | 18a x 3/4 | 10 | 200 | 4021343015373 | 38 | 24 | 30 |
| 142462212 | 22a x 1/2 | 10 | 200 | 4021343015380 | 34 | 22 | 25 |
| 142462234 | 22a x 3/4 | 10 | 200 | 4021343015397 | 39 | 25 | 30 |
| 142462834 | 28a x 3/4 | 10 | 150 | 4021343015410 | 38 | 24 | 30 |
| 14246281 | 28a x 1 | 10 | 100 | 4021343015403 | 41 | 26 | 38 |
| 1424635114 | 35a x 1 1/4 | | 70 | 4021343015434 | 54 | 40 | 35 |
| 1424642112 | 42a x 1 1/2 | | 40 | 4021343015441 | 58 | 38 | 55 |
| 14246542 | 54a x 2 | | 24 | 4021343015458 | 70 | 49 | 66 |

Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.

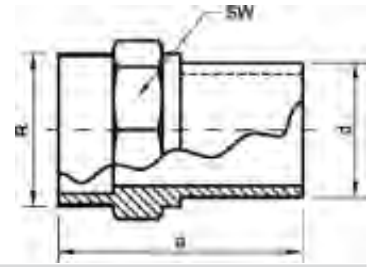


Catalog-no. and -description

4270g – Female adaptor

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW |
|-------------|---------------------|-----|-----|---------------|----|---|----|
| 142701038 | 10 x 3/8 | 10 | 400 | 4021343015533 | 21 | 2 | 13 |
| 142701012 | 10 x 1/2 | 10 | 300 | 4021343015519 | 25 | 2 | 15 |
| 142701238 | 12 x 3/8 | 10 | 400 | 4021343015557 | 22 | 2 | 15 |
| 142701212 | 12 x 1/2 | 10 | 300 | 4021343015540 | 26 | 2 | 16 |
| 142701438 | 14 x 3/8 | 10 | 400 | 4021343015588 | 24 | 2 | 17 |
| 142701412 | 14 x 1/2 | 10 | 250 | 4021343015564 | 28 | 2 | 19 |
| 142701538 | 15 x 3/8 | 10 | 350 | 4021343015618 | 24 | 2 | 18 |
| 142701512 | 15 x 1/2 | 10 | 250 | 4021343015595 | 28 | 2 | 19 |
| 142701534 | 15 x 3/4 | 10 | 200 | 4021343015601 | 29 | 2 | 19 |
| 142701638 | 16 x 3/8 | 10 | 400 | 4021343015649 | 24 | 2 | 20 |
| 142701612 | 16 x 1/2 | 10 | 250 | 4021343015625 | 28 | 2 | 20 |
| 142701634 | 16 x 3/4 | 10 | 200 | 4021343015632 | 29 | 2 | 20 |
| 142701812 | 18 x 1/2 | 10 | 250 | 4021343015656 | 30 | 2 | 22 |
| 142701834 | 18 x 3/4 | 10 | 200 | 4021343015663 | 31 | 2 | 22 |
| 142702212 | 22 x 1/2 | 10 | 200 | 4021343015687 | 31 | 2 | 25 |
| 142702234 | 22 x 3/4 | 10 | 150 | 4021343015694 | 34 | 2 | 26 |
| 142702221 | 22 x 1 | 10 | 100 | 4021343015670 | 37 | 2 | 26 |
| 142702812 | 28 x 1/2 | 10 | 150 | 4021343015724 | 30 | | 24 |
| 142702834 | 28 x 3/4 | 10 | 120 | 4021343015731 | 35 | 1 | 30 |
| 14270281 | 28 x 1 | 10 | 100 | 4021343015700 | 40 | 2 | 33 |
| 1427028114 | 28 x 1 1/4 | 10 | 60 | 4021343015717 | 42 | 2 | 33 |
| 142703534 | 35 x 3/4 | 10 | 80 | 4021343015779 | 35 | | 30 |
| 14270351 | 35 x 1 | 10 | 70 | 4021343015748 | 42 | 2 | 37 |
| 1427035114 | 35 x 1 1/4 | | 50 | 4021343015762 | 46 | 2 | 39 |
| 1427035112 | 35 x 1 1/2 | | 45 | 4021343015755 | 47 | 2 | 40 |
| 14270421 | 42 x 1 | | 50 | 4021343015786 | 40 | | 38 |
| 1427042114 | 42 x 1 1/4 | | 50 | 4021343015809 | 49 | 2 | 46 |
| 1427042112 | 42 x 1 1/2 | | 40 | 4021343015793 | 51 | 2 | 48 |
| 1427054112 | 54 x 1 1/2 | | 24 | 4021343015823 | 48 | 2 | 54 |
| 14270542 | 54 x 2 | | 24 | 4021343015830 | 60 | 2 | 60 |
| 14270642 | 64 x 2 | | 18 | 4021343015847 | 59 | | 65 |
| 1427064212 | 64 x 2 1/2 | | 12 | 4021343015854 | 66 | 3 | 72 |
| 1427067212 | 66,7 x 2 1/2 | | 12 | 4021343015861 | 67 | 3 | 75 |
| 1427076212 | 76,1 x 2 1/2 | | 12 | 4021343015885 | 64 | | 82 |
| 14270893 | 88,9 x 3 | | 6 | 4021343015922 | 72 | 4 | 95 |

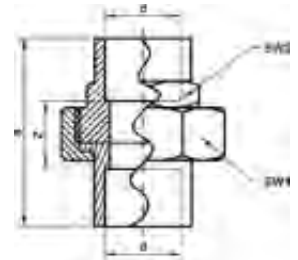
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4280g – Plug-in adaptor, male

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 142801238 | 12a x 3/8 | 10 | 500 | 4021343015960 | 29 | 14 |
| 142801212 | 12a x 1/2 | 10 | 500 | 4021343015953 | 32 | 16 |
| 142801538 | 15a x 3/8 | 10 | 500 | 4021343016004 | 35 | |
| 142801512 | 15a x 1/2 | 10 | 350 | 4021343015991 | 34 | 16 |
| 142801812 | 18a x 1/2 | 10 | 300 | 4021343016028 | 32 | 19 |
| 142801834 | 18a x 3/4 | 10 | 250 | 4021343016035 | 38 | 19 |
| 142802212 | 22a x 1/2 | 10 | 250 | 4021343016042 | 38 | 22 |
| 142802234 | 22a x 3/4 | 10 | 200 | 4021343016059 | 40 | 22 |
| 14280281 | 28a x 1 | 10 | 80 | 4021343016066 | 52 | 34 |
| 1428035114 | 35a x 1 1/4 | | 40 | 4021343016073 | 58 | 40 |
| 1428042112 | 42a x 1 1/2 | | 40 | 4021343016080 | 62 | 46 |
| 14280542 | 54a x 2 | | 24 | 4021343016097 | 73 | |

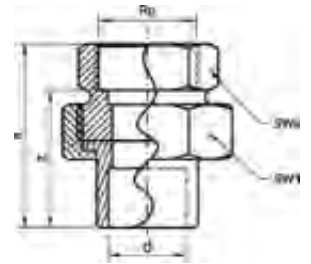


Catalog-no. and -description

4330 – Union, flat sealing

| Article-no. | Dimension d | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|----|----|-----|-----|
| 1433010 | 10 | 5 | 250 | 4021343016189 | 33 | 15 | 24 | 14 |
| 1433012 | 12 | 5 | 200 | 4021343016219 | 40 | 20 | 30 | 16 |
| 1433015 | 15 | 5 | 120 | 4021343016264 | 44 | 21 | 30 | 22 |
| 1433018 | 18 | 5 | 120 | 4021343016325 | 44 | 18 | 30 | 22 |
| 1433022 | 22 | 5 | 100 | 4021343016356 | 44 | 11 | 37 | 26 |
| 1433028 | 28 | 5 | 50 | 4021343016394 | 54 | 16 | 46 | 34 |
| 1433035 | 35 | 2 | 30 | 4021343016424 | 60 | 14 | 52 | 40 |
| 1433042 | 42 | 2 | 20 | 4021343016448 | 72 | 18 | 59 | 46 |
| 1433054 | 54 | 2 | 12 | 4021343016462 | 82 | 18 | 75 | 60 |

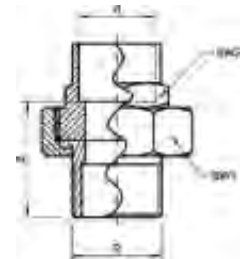
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4330g – Union, female, flat sealing

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 143301238 | 12 x 3/8 | 5 | 250 | 4021343016233 | 46 | 32 | 24 | 25 |
| 143301512 | 15 x 1/2 | 5 | 120 | 4021343016271 | 45 | 31 | 30 | 25 |
| 143301534 | 15 x 3/4 | 5 | 120 | 4021343016288 | 51 | 35 | 30 | 30 |
| 143301812 | 18 x 1/2 | 5 | 120 | 4021343016332 | 43 | 29 | 30 | 25 |
| 143301834 | 18 x 3/4 | 5 | 120 | 4021343016349 | 49 | 33 | 30 | 30 |
| 143302234 | 22 x 3/4 | 5 | 80 | 4021343016387 | 51 | 34 | 37 | 30 |
| 14330221 | 22 x 1 | 5 | 70 | 4021343016363 | 52 | 33 | 37 | 39 |
| 14330281 | 28 x 1 | 5 | 50 | 4021343016400 | 59 | 40 | 46 | 39 |
| 1433035114 | 35 x 1 1/4 | 2 | 30 | 4021343016431 | 63 | 42 | 52 | 46 |
| 1433042112 | 42 x 1 1/2 | 2 | 20 | 4021343016455 | 75 | 56 | 59 | 46 |
| 14330542 | 54 x 2 | 2 | 12 | 4021343016479 | 84 | 29 | 75 | 70 |



Catalog-no. and -description

4331g – Union, male, flat sealing

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|-----|----|-----|-----|
| 143311014 | 10 x 1/4 | 5 | 300 | 4021343016530 | 42 | 33 | 24 | 14 |
| 143311038 | 10 x 3/8 | 5 | 200 | 4021343016547 | 45 | 36 | 24 | 14 |
| 143311238 | 12 x 3/8 | 5 | 200 | 4021343016561 | 48 | 38 | 24 | 16 |
| 143311212 | 12 x 1/2 | 5 | 150 | 4021343016554 | 54 | 44 | 30 | 17 |
| 143311412 | 14 x 1/2 | 5 | 150 | 4021343016578 | 55 | 44 | 30 | 18 |
| 143311512 | 15 x 1/2 | 5 | 120 | 4021343016585 | 55 | 44 | 30 | 18 |
| 143311534 | 15 x 3/4 | 5 | 80 | 4021343016592 | 59 | 48 | 37 | 19 |
| 143311612 | 16 x 1/2 | 5 | 150 | 4021343016615 | 55 | 44 | 30 | 18 |
| 143311812 | 18 x 1/2 | 5 | 120 | 4021343016622 | 55 | 42 | 30 | 22 |
| 143311834 | 18 x 3/4 | 5 | 80 | 4021343016639 | 58 | 45 | 37 | 22 |
| 143312212 | 22 x 1/2 | 5 | 120 | 4021343016653 | 62 | 46 | 30 | 25 |
| 143312234 | 22 x 3/4 | 5 | 80 | 4021343016660 | 58 | 41 | 37 | 26 |
| 14331221 | 22 x 1 | 5 | 50 | 4021343016646 | 64 | 48 | 46 | 27 |
| 14331281 | 28 x 1 | 5 | 50 | 4021343016677 | 65 | 46 | 46 | 34 |
| 1433135114 | 35 x 1 1/4 | 2 | 30 | 4021343016691 | 74 | 51 | 52 | 40 |
| 1433142112 | 42 x 1 1/2 | 2 | 20 | 4021343016707 | 80 | 53 | 59 | 46 |
| 14331542 | 54 x 2 | 2 | 10 | 4021343016714 | 93 | 61 | 75 | 60 |
| 1433164212 | 64 x 2 1/2 | 2 | 6 | 4021343016721 | 104 | 69 | 94 | 72 |
| 1433176212 | 76,1 x 2 1/2 | 2 | 6 | 4021343016745 | 104 | 68 | 94 | 85 |
| 14331893 | 88,9 x 3 | 2 | 4 | 4021343016769 | 111 | 72 | 110 | 97 |

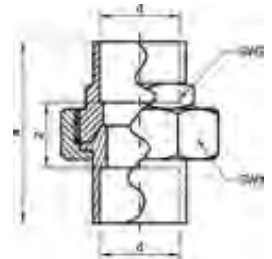
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4333g – Union, male, flat sealing

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|-----|----|-----|-----|
| 143331212 | 12 x 1/2 | 5 | 150 | 4021343016813 | 48 | 38 | 24 | 22 |
| 143331512 | 15 x 1/2 | 5 | 150 | 4021343016844 | 51 | 37 | 30 | 22 |
| 143331812 | 18 x 1/2 | 5 | 150 | 4021343016851 | 49 | 36 | 30 | 22 |
| 143332212 | 22 x 1/2 | 5 | 90 | 4021343124792 | 60 | 44 | 37 | 23 |
| 143332234 | 22 x 3/4 | 5 | 80 | 4021343016868 | 55 | 39 | 37 | 27 |
| 14333221 | 22 x 1 | 5 | 70 | 4021343124785 | 59 | 43 | 37 | 34 |
| 14333281 | 28 x 1 | 5 | 40 | 4021343016875 | 67 | 48 | 46 | 34 |
| 1433335114 | 35 x 11/4 | 2 | 24 | 4021343016882 | 84 | 61 | 52 | 46 |
| 1433342112 | 42 x 11/2 | 2 | 20 | 4021343016899 | 90 | 63 | 59 | 50 |
| 14333542 | 54 x 2 | 2 | 10 | 4021343016905 | 104 | 72 | 75 | 60 |

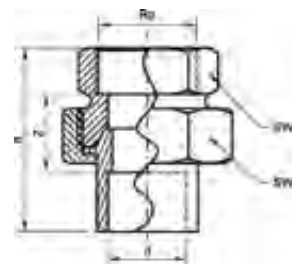


Catalog-no. and -description

4340 – Union, conical sealing

| Article-no. | Dimension d | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|----|----|-----|-----|
| 1434010 | 10 | 5 | 250 | 4021343016974 | 36 | 18 | 24 | 14 |
| 1434012 | 12 | 5 | 200 | 4021343017025 | 42 | 22 | 24 | 16 |
| 1434015 | 15 | 5 | 120 | 4021343017094 | 46 | 33 | 30 | 25 |
| 1434018 | 18 | 5 | 120 | 4021343017162 | 43 | 17 | 30 | 22 |
| 1434022 | 22 | 5 | 100 | 4021343017193 | 45 | 11 | 37 | 26 |
| 1434028 | 28 | 5 | 50 | 4021343017230 | 54 | 16 | 46 | 34 |
| 1434035 | 35 | 2 | 30 | 4021343017254 | 61 | 15 | 52 | 40 |
| 1434042 | 42 | 2 | 20 | 4021343017278 | 72 | 18 | 59 | 46 |
| 1434054 | 54 | 2 | 12 | 4021343017292 | 81 | 15 | 75 | 60 |

Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4340g – Union, female, conical sealing

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 143401014 | 10 x 1/4 | 5 | 250 | 4021343016998 | 39 | 20 | 24 | 19 |
| 143401012 | 10 x 1/2 | 5 | 150 | 4021343016981 | 43 | 22 | 24 | 25 |
| 143401212 | 12 x 1/2 | 5 | 150 | 4021343017032 | 43 | 19 | 24 | 25 |
| 143401538 | 15 x 3/8 | 5 | 120 | 4021343017124 | 51 | 23 | 30 | 30 |
| 143401512 | 15 x 1/2 | 5 | 120 | 4021343017100 | 45 | 18 | 30 | 25 |
| 143401534 | 15 x 3/4 | 5 | 120 | 4021343017117 | 51 | 23 | 30 | 30 |
| 143401612 | 16 x 1/2 | 5 | 120 | 4021343017148 | 45 | 18 | 30 | 25 |
| 143401634 | 16 x 3/4 | 5 | 120 | 4021343017155 | 51 | 39 | 30 | 30 |
| 143401812 | 18 x 1/2 | 5 | 120 | 4021343017179 | 42 | 14 | 30 | 25 |
| 143401834 | 18 x 3/4 | 5 | 120 | 4021343017186 | 48 | 20 | 30 | 30 |
| 143402212 | 22 x 1/2 | 5 | 80 | 4021343017216 | 45 | 32 | 37 | 26 |
| 143402234 | 22 x 3/4 | 5 | 80 | 4021343017223 | 50 | 16 | 37 | 30 |
| 14340221 | 22 x 1 | 5 | 70 | 4021343017209 | 51 | 12 | 37 | 39 |
| 14340281 | 28 x 1 | 5 | 50 | 4021343017247 | 57 | 19 | 46 | 39 |
| 1434035114 | 35 x 1 1/4 | 2 | 30 | 4021343017261 | 62 | 18 | 52 | 46 |
| 1434042112 | 42 x 1 1/2 | 2 | 20 | 4021343017285 | 73 | 25 | 59 | 54 |
| 14340542 | 54 x 2 | 2 | 12 | 4021343017308 | 79 | 18 | 75 | 66 |

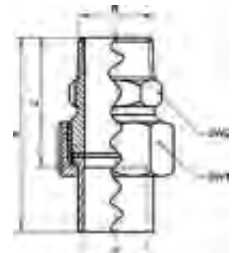
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4341g – Union, male, conical sealing

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|-----|-----|-----|-----|
| 143411014 | 10 x 1/4 | 5 | 300 | 4021343017407 | 41 | 32 | 24 | 14 |
| 143411038 | 10 x 3/8 | 5 | 200 | 4021343017414 | 42 | 33 | 24 | 14 |
| 143411214 | 12 x 1/4 | 5 | 300 | 4021343017445 | 47 | 37 | 24 | 16 |
| 143411238 | 12 x 3/8 | 5 | 200 | 4021343017469 | 47 | 37 | 24 | 16 |
| 143411212 | 12 x 1/2 | 5 | 150 | 4021343017438 | 53 | 43 | 30 | 16 |
| 143411412 | 14 x 1/2 | 5 | 150 | 4021343017476 | 54 | 43 | 30 | 19 |
| 143411538 | 15 x 3/8 | 5 | 150 | 4021343017513 | 47 | 36 | 24 | 19 |
| 143411512 | 15 x 1/2 | 5 | 150 | 4021343017490 | 54 | 43 | 30 | 19 |
| 143411534 | 15 x 3/4 | 5 | 80 | 4021343017506 | 59 | 48 | 37 | 19 |
| 143411612 | 16 x 1/2 | 5 | 150 | 4021343017520 | 54 | 43 | 30 | 19 |
| 143411812 | 18 x 1/2 | 5 | 120 | 4021343017544 | 54 | 41 | 30 | 22 |
| 143411834 | 18 x 3/4 | 5 | 80 | 4021343017551 | 58 | 44 | 37 | 22 |
| 143412212 | 22 x 1/2 | 5 | 120 | 4021343017575 | 57 | 41 | 30 | 26 |
| 143412234 | 22 x 3/4 | 5 | 80 | 4021343017582 | 58 | 41 | 37 | 26 |
| 14341221 | 22 x 1 | 5 | 50 | 4021343017568 | 63 | 42 | 46 | 27 |
| 14341281 | 28 x 1 | 5 | 50 | 4021343017599 | 64 | 45 | 46 | 34 |
| 1434135114 | 35 x 1 1/4 | 2 | 30 | 4021343017605 | 73 | 50 | 52 | 40 |
| 1434142112 | 42 x 1 1/2 | 2 | 20 | 4021343017612 | 79 | 52 | 59 | 46 |
| 14341542 | 54 x 2 | 2 | 10 | 4021343017629 | 92 | 60 | 75 | 60 |
| 1434164212 | 64 x 2 1/2 | 2 | 6 | 4021343017636 | 105 | 70 | 94 | 72 |
| 1434176212 | 76,1 x 2 1/2 | 5 | 5 | 4021343017650 | 105 | 69 | 94 | 83 |
| 14341893 | 88,9 x 3 | 2 | 4 | 4021343017681 | 163 | 123 | 110 | 97 |

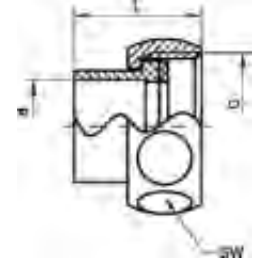


Catalog-no. and -description

4343g – Union, male, conical sealing

| Article-no. | Dimension d x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|-----|----|-----|-----|
| 143431212 | 12 x 1/2 | 5 | 150 | 4021343017742 | 52 | 42 | 24 | 22 |
| 143431512 | 15 x 1/2 | 5 | 150 | 4021343017766 | 57 | 45 | 30 | 22 |
| 143431812 | 18 x 1/2 | 5 | 150 | 4021343017780 | 54 | 41 | 30 | 22 |
| 143431834 | 18 x 3/4 | 5 | 140 | 4021343124846 | 59 | 46 | 30 | 27 |
| 143432234 | 22 x 3/4 | 5 | 80 | 4021343017797 | 61 | 44 | 37 | 27 |
| 14343221 | 22 x 1 | 5 | 70 | 4021343124853 | 65 | 48 | 37 | 34 |
| 14343281 | 28 x 1 | 5 | 40 | 4021343017803 | 72 | 53 | 46 | 34 |
| 1434335114 | 35 x 1 1/4 | 2 | 24 | 4021343017810 | 91 | 68 | 52 | 46 |
| 1434342112 | 42 x 1 1/2 | 2 | 20 | 4021343017827 | 98 | 71 | 59 | 50 |
| 14343542 | 54 x 2 | 2 | 10 | 4021343017834 | 110 | 76 | 75 | 60 |

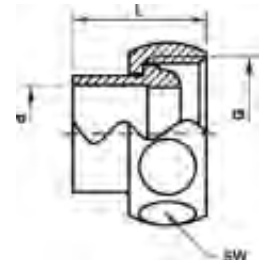
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4359g – Union adaptor, flat sealing

| Article-no. | Dimension d x G | Bag | Box | EAN code | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 143591212 | 12 x 1/2 | 5 | 300 | 4021343127199 | 25 | 24 |
| 143591534 | 15 x 3/4 | 5 | 200 | 4021343126925 | 27 | 30 |
| 143591634 | 16 x 3/4 | 5 | 200 | 4021343127212 | 27 | 30 |
| 143591834 | 18 x 3/4 | 5 | 200 | 4021343127236 | 25 | 30 |
| 14359181 | 18 x 1 | 5 | 150 | 4021343127229 | 32 | 37 |
| 14359221 | 22 x 1 | 5 | 150 | 4021343127243 | 31 | 37 |
| 1435922114 | 22 x 11/4 | 5 | 100 | 4021343127250 | 31 | 46 |
| 1435928114 | 28 x 11/4 | 5 | 70 | 4021343127274 | 37 | 46 |
| 1435928112 | 28 x 11/2 | 5 | 60 | 4021343127267 | 38 | 52 |
| 1435935112 | 35 x 11/2 | 2 | 60 | 4021343127281 | 39 | 52 |
| 1435942134 | 42 x 13/4 | 2 | 40 | 4021343127298 | 48 | 59 |
| 1435954238 | 54 x 23/8 | 2 | 24 | 4021343127304 | 54 | 75 |

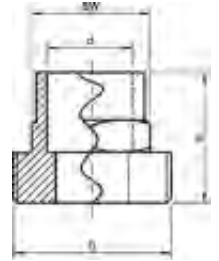


Catalog-no. and -description

4360g – Union adaptor, conical sealing

| Article-no. | Dimension d x G | Bag | Box | EAN code | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 143601212 | 12 x 1/2 | 5 | 300 | 4021343127335 | 26 | 24 |
| 143601534 | 15 x 3/4 | 5 | 200 | 4021343127342 | 28 | 30 |
| 143601834 | 18 x 3/4 | 5 | 200 | 4021343127359 | 25 | 30 |
| 14360221 | 22 x 1 | 5 | 150 | 4021343127366 | 32 | 37 |

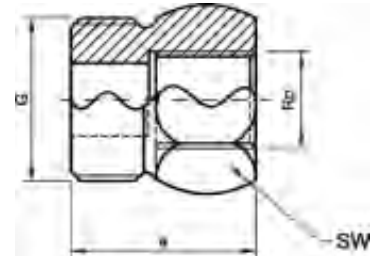
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4370 – Screwed piece flat sealing

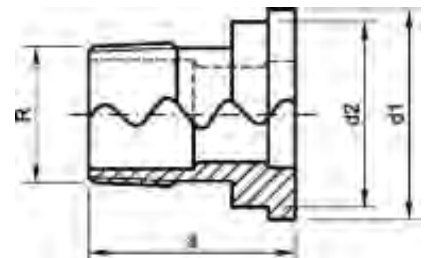
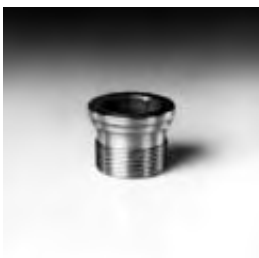
| Article-no. | Dimension d x G | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 143701512 | 15x1/2 | | 600 | 4021343018084 | 22 | 18 |
| 143701834 | 18x3/4 | | 350 | 4021343018121 | 25 | 22 |
| 143702234 | 22x3/4 | | 280 | 4021343018176 | 32 | 25 |
| 14370221 | 22x1 | | 200 | 4021343018152 | 25 | 26 |
| 1437028114 | 28x1 1/4 | | 150 | 4021343018190 | 28 | 34 |
| 1437035112 | 35x1 1/2 | | 80 | 4021343018244 | 33 | 40 |



Catalog-no. and -description

4370g – Screwed piece flat sealing

| Article-no. | Dimension Rp x G | Bag | Box | EAN code | a | SW |
|-------------|---------------------|-----|-----|---------------|----|----|
| 143701234B | 1/2x3/4 | | 350 | 4021343018039 | 24 | 25 |
| 14370341 | 3/4x1 | | 200 | 4021343018220 | 30 | 30 |

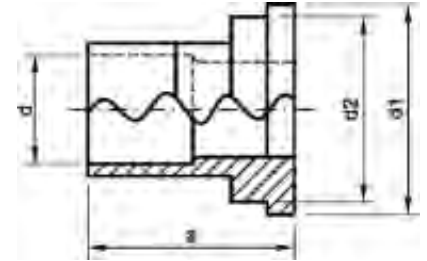


Catalog-no. and -description

4371g – Union piece flat sealing

| Article-no. | Dimension R x G nut | Bag | Box | EAN code | a | d1 | d2 |
|-------------|------------------------|-----|-----|---------------|----|----|----|
| 143713812 | 3/8x1/2 | | 800 | 4021343018473 | 22 | 19 | 16 |
| 143711234 | 1/2x3/4 | | 400 | 4021343018411 | 28 | 24 | 20 |
| 14371341 | 3/4x1 | | 250 | 4021343018466 | 31 | 30 | 26 |
| 143711114 | 1x1 1/4 | | 130 | 4021343018367 | 35 | 39 | 36 |

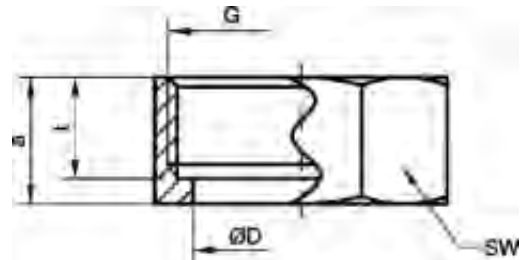
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4372 – Union piece flat sealing

| Article-no. | Dimension d x G nut | Bag | Box | EAN code | a | d1 | d2 |
|-------------|------------------------|-----|-----|---------------|----|----|----|
| 143721534 | 15x3/4 | | 600 | 4021343018633 | 19 | 24 | 22 |
| 143721634 | 16x3/4 | | 600 | 4021343018640 | 19 | 24 | 22 |
| 143721834 | 18x3/4 | | 600 | 4021343018671 | 17 | 24 | 21 |
| 14372181 | 18x1 | | 400 | 4021343018657 | 20 | 30 | 22 |
| 14372221 | 22x1 | | 350 | 4021343018688 | 19 | 30 | 25 |
| 1437222114 | 22x11/4 | | 250 | 4021343018701 | 20 | 39 | 36 |
| 1437228114 | 28x11/4 | | 150 | 4021343018725 | 26 | 39 | 31 |
| 1437228112 | 28x11/2 | | 150 | 4021343018718 | 26 | 45 | 42 |
| 1437235112 | 35x11/2 | | 120 | 4021343018732 | 27 | 45 | 42 |

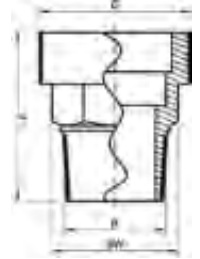


Catalog-no. and -description

4374 – Nut (brass)

| Article-no. | Dimension G | Bag | Box | EAN code | a | t | D | SW |
|-------------|----------------|-----|------|---------------|----|----|-----|-----|
| 1437438 | 3/8 | | 1400 | 4021343019203 | 12 | 10 | 13 | 19 |
| 1437412 | 1/2 | | 800 | 4021343019104 | 14 | 12 | 17 | 24 |
| 1437434 | 3/4 | | 450 | 4021343019197 | 14 | 12 | 23 | 30 |
| 143741 | 1 | | 250 | 4021343019029 | 17 | 14 | 28 | 37 |
| 14374114 | 11/4 | | 150 | 4021343019067 | 18 | 15 | 36 | 46 |
| 14374112 | 11/2 | | 120 | 4021343019050 | 19 | 16 | 43 | 52 |
| 14374134 | 13/4 | | 70 | 4021343019111 | 22 | 18 | 48 | 59 |
| 143742 | 2 | | 50 | 4021343019128 | 24 | 19 | 53 | 64 |
| 14374214 | 21/4 | | 40 | 4021343019142 | 25 | 20 | 59 | 72 |
| 14374238 | 23/8 | | 40 | 4021343019166 | 25 | 20 | 61 | 75 |
| 14374234 | 23/4 | | 30 | 4021343019159 | 26 | 22 | 74 | 89 |
| 143743 | 3 | | 20 | 4021343019173 | 31 | 25 | 80 | 94 |
| 14374312 | 31/2 | | 12 | 4021343019180 | 33 | 26 | 93 | 110 |
| 143744 | 4 | | 8 | 4021343019210 | 38 | 31 | 105 | 120 |

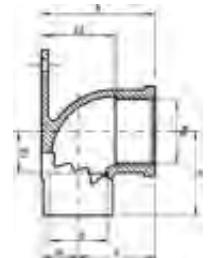
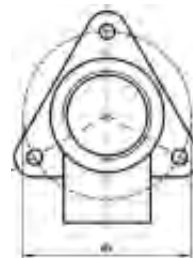
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4376g – Screwed piece flat sealing

| Article-no. | Dimension R x G | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 14376G1234 | 1/2x3/4 | | 300 | 4021343019333 | 30 | 22 |
| 14376G121 | 1/2x1 | | 200 | 4021343019319 | 39 | 23 |
| 14376G341 | 3/4x1 | | 150 | 4021343019388 | 34 | 27 |
| 14376G34114 | 3/4x1 1/4 | | 100 | 4021343019395 | 43 | 28 |
| 14376G1112 | 1x1 1/2 | | 70 | 4021343019258 | 50 | 38 |

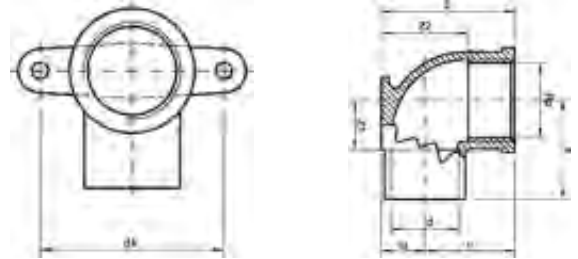


Catalog-no. and -description

4471g – Wall plate elbow

| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | dk | W |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 144711238 | 12 x 3/8 | 10 | 200 | 4021343020797 | 20 | 26 | 17 | 10 | 17 | 40 | 9 |
| 144711212 | 12 x 1/2 | 10 | 150 | 4021343020780 | 20 | 28 | 19 | 11 | 15 | 40 | 9 |
| 144711412 | 14 x 1/2 | 10 | 150 | 4021343020803 | 25 | 31 | 21 | 13 | 20 | 40 | 10 |
| 144711512 | 15 x 1/2 | 10 | 120 | 4021343020827 | 22 | 31 | 21 | 11 | 18 | 40 | 10 |
| 144711812 | 18 x 1/2 | 10 | 120 | 4021343020865 | 24 | 34 | 22 | 11 | 23 | 40 | 12 |

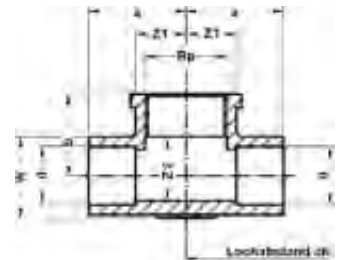
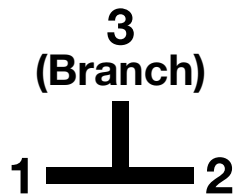
Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

4472g – Wall plate elbow

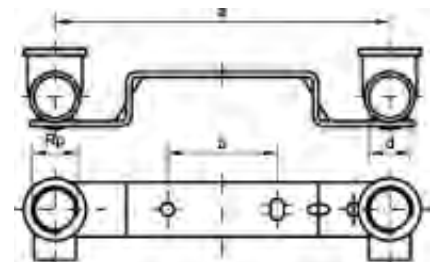
| Article-no. | Dimension d x Rp | Bag | Box | EAN code | a | b | c | z1 | z2 | dk | W |
|-------------|---------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 144721212 | 12 x 1/2 | 10 | 150 | 4021343020957 | 20 | 28 | 19 | 11 | 17 | 35 | 10 |
| 144721412 | 14 x 1/2 | 10 | 120 | 4021343020971 | 25 | 31 | 21 | 13 | 20 | 35 | 10 |
| 144721512 | 15 x 1/2 | 10 | 150 | 4021343021008 | 22 | 31 | 21 | 11 | 20 | 35 | 10 |
| 144721534 | 15 x 3/4 | 10 | 100 | 4021343021015 | 29 | 33 | 23 | 16 | 20 | 50 | 10 |
| 144721612 | 16 x 1/2 | 10 | 120 | 4021343021039 | 25 | 31 | 21 | 13 | 20 | 35 | 10 |
| 144721812 | 18 x 1/2 | 10 | 120 | 4021343021053 | 24 | 34 | 22 | 11 | 23 | 40 | 12 |
| 144721834 | 18 x 3/4 | 10 | 90 | 4021343021060 | 27 | 36 | 24 | 11 | 23 | 40 | 12 |
| 144722212 | 22 x 1/2 | 10 | 80 | 4021343021077 | 30 | 38 | 24 | 13 | 27 | 40 | 14 |
| 144722234 | 22 x 3/4 | 10 | 60 | 4021343021084 | 33 | 40 | 26 | 16 | 27 | 50 | 14 |



Catalog-no. and -description

4490g – Ceiling tee

| Article-no. | Dimension d x d x Rp | Bag | Box | EAN code | a | b | z1 | z2 | dk | W |
|-------------|-------------------------|-----|-----|---------------|----|----|----|----|----|----|
| 144901512 | 15 x 15 x 1/2 | 10 | 80 | 4021343021145 | 25 | 21 | 13 | 20 | 40 | 20 |



Catalog-no. and -description

4976 – Mounting unit

| Article-no. | Dimension d x Rp x a | Bag | Box | EAN code | a | b |
|---------------|-------------------------|-----|-----|---------------|-----|----|
| edged | | | | | | |
| 149761238 | 12 x 3/8 150 mm | | 35 | 4021343216725 | 153 | 50 |
| 149761512 | 15 x 1/2 150 mm | | 28 | 4021343021480 | 153 | 50 |
| flat | | | | | | |
| 14976F1512100 | 15 x 1/2 100 mm | | 30 | 4021343195754 | 100 | 30 |
| 14976F1512 | 15 x 1/2 150 mm | | 28 | 4021343195747 | 153 | 50 |

Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.



Catalog-no. and -description

DCU – Centellen sealing element for copper, gunmetal and stainless steel union, approval according to DIN 3535 part 6, DIN DVGW,

- produced without asbestos
- temperature-resistant up to 200°C max.
- application areas: water, steam, alcohols, glycols, oils on a hydrocarbon basis, inflammable gases

| Article-no. | Dimension * D x d x s | suitable for | Box | EAN code |
|-------------|--------------------------|--------------|-----|---------------|
| 1DCU38 | 14 x 8 x 2* | nut 3/8 | 800 | 4021343000867 |
| 1DCU12 | 18 x 11 x 2* | nut 1/2 | 800 | 4021343000737 |
| 1DCU58 | 20 x 10 x 2* | nut 5/8 | 600 | 4021343000904 |
| 1DCU34 | 24 x 17 x 2* | nut 3/4 | 600 | 4021343000850 |
| 1DCU1 | 30 x 21 x 2* | nut 1 | 400 | 4021343000706 |
| 1DCU114 | 38 x 27 x 2* | nut 1 1/4 | 400 | 4021343000720 |
| 1DCU112 | 44 x 32 x 2* | nut 1 1/2 | 400 | 4021343000713 |
| 1DCU134 | 50 x 37 x 2* | nut 1 3/4 | 320 | 4021343000744 |
| 1DCU2 | 55 x 42 x 2* | nut 2 | 240 | 4021343000775 |
| 1DCU214 | 62 x 46 x 2* | nut 2 1/4 | 200 | 4021343000799 |
| 1DCU238 | 65 x 55 x 2* | nut 2 3/8 | 200 | 4021343000812 |
| 1DCU212 | 72 x 55 x 2* | nut 2 1/2 | 160 | 4021343000782 |
| 1DCU234 | 78 x 60 x 2* | nut 2 3/4 | 120 | 4021343000805 |
| 1DCU3 | 85 x 70 x 2* | nut 3 | 120 | 4021343000836 |
| 1DCU312 | 97 x 75 x 2* | nut 3 1/2 | 80 | 4021343000843 |

* Outer diameter x inner diameter x thickness

SANHA[®] Gunmetal end feed fittings Series 4000

Unions will be supplied with brass nuts, flat unions with sealing made of AFM 34 for PN 16. Asbestos-free, BSI, WRAS, Advantica proofed and allowed for gas.

TRADITIONAL PIPING

Copper end feed fittings

Series 5000



W / 483 / 92



DV-7411A02009



14/6



9711-3852

kiwa
k11152/01



POCC DE.AIO31.H08582
POCC DE.AIO31.H08800



1005R01F4P5-rsa



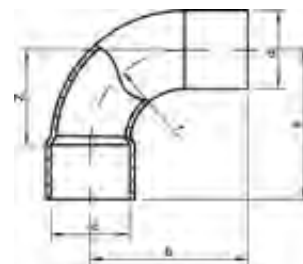
KM 60861



PN - EN 1254-1:2004



Q 97 / 019



Catalog-no. and -description

5001A – Bend 90° female/male

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|------|---------------|-----|-----|-----|
| 15001A6 | 6 | 10 | 3000 | 4021343022272 | 14 | 16 | 7 |
| 15001A8 | 8 | 10 | 2000 | 4021343022326 | 18 | 20 | 10 |
| 15001A10 | 10 | 10 | 1500 | 4021343022067 | 21 | 23 | 12 |
| 15001A12 | 12 | 10 | 900 | 4021343022098 | 24 | 26 | 15 |
| 15001A14 | 14 | 10 | 700 | 4021343022111 | 30 | 32 | 18 |
| 15001A15 | 15 | 10 | 550 | 4021343022128 | 30 | 32 | 18 |
| 15001A16 | 16 | 10 | 550 | 4021343022142 | 30 | 31 | 18 |
| 15001A18 | 18 | 10 | 350 | 4021343022159 | 36 | 38 | 22 |
| 15001A22 | 22 | 10 | 200 | 4021343022173 | 43 | 45 | 27 |
| 15001A28 | 28 | 10 | 100 | 4021343022197 | 53 | 55 | 34 |
| 15001A32 | 32 | | 80 | 4021343022203 | 60 | 62 | 38 |
| 15001A35 | 35 | | 65 | 4021343022210 | 67 | 69 | 43 |
| 15001A36 | 36 | | 55 | 4021343022227 | 77 | 79 | 53 |
| 15001A40 | 40 | | 40 | 4021343022234 | 77 | 79 | 49 |
| 15001A42 | 42 | | 35 | 4021343022241 | 79 | 81 | 51 |
| 15001A52 | 52 | | 15 | 4021343022258 | 121 | 123 | 88 |
| 15001A54 | 54 | | 15 | 4021343022265 | 99 | 101 | 65 |
| 15001A64 | 64 | | 22 | 4021343022289 | 112 | 115 | 78 |
| 15001A67 | 66,7 | | 20 | 4021343022296 | 116 | 119 | 81 |
| 15001A76 | 76,1 | | 14 | 4021343022319 | 127 | 130 | 92 |
| 15001A80 | 80 | | 12 | 4021343022333 | 134 | 137 | 121 |
| 15001A89 | 88,9 | | 9 | 4021343022340 | 147 | 150 | 108 |
| 15001A108 | 108 | | 4 | 4021343022081 | 179 | 182 | 131 |
| 15001A133 | 133 | | 2 | 4021343022104 | 212 | 217 | 162 |

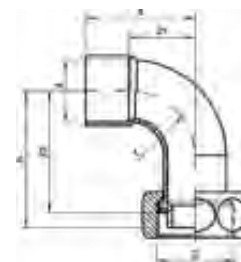


Catalog-no. and -description

5002A – Bend 90° female/female

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|------|---------------|-----|-----|
| 15002A6 | 6 | 10 | 3000 | 4021343022678 | 14 | 7 |
| 15002A8 | 8 | 10 | 2000 | 4021343022722 | 18 | 10 |
| 15002A10 | 10 | 10 | 1400 | 4021343022456 | 21 | 12 |
| 15002A12 | 12 | 10 | 1000 | 4021343022470 | 24 | 15 |
| 15002A14 | 14 | 10 | 550 | 4021343022494 | 30 | 18 |
| 15002A15 | 15 | 10 | 550 | 4021343022500 | 30 | 18 |
| 15002A16 | 16 | 10 | 500 | 4021343022524 | 30 | 18 |
| 15002A18 | 18 | 10 | 350 | 4021343022548 | 36 | 22 |
| 15002A22 | 22 | 10 | 200 | 4021343022562 | 43 | 27 |
| 15002A28 | 28 | 10 | 100 | 4021343022586 | 53 | 34 |
| 15002A32 | 32 | | 95 | 4021343022593 | 60 | 38 |
| 15002A35 | 35 | | 65 | 4021343022609 | 67 | 43 |
| 15002A36 | 36 | | 55 | 4021343022616 | 69 | 44 |
| 15002A40 | 40 | | 40 | 4021343022623 | 77 | 49 |
| 15002A42 | 42 | | 35 | 4021343022630 | 79 | 51 |
| 15002A52 | 52 | | 15 | 4021343022654 | 121 | 88 |
| 15002A54 | 54 | | 15 | 4021343022661 | 99 | 65 |
| 15002A64 | 64 | | 22 | 4021343022685 | 112 | 78 |
| 15002A67 | 66,7 | | 20 | 4021343022692 | 116 | 81 |
| 15002A70 | 70 | | 20 | 4021343022708 | 120 | 85 |
| 15002A76 | 76,1 | | 14 | 4021343022715 | 127 | 92 |
| 15002A80 | 80 | | 12 | 4021343022739 | 134 | 97 |
| 15002A89 | 88,9 | | 9 | 4021343022746 | 147 | 108 |
| 15002A108 | 108 | | 4 | 4021343022463 | 179 | 131 |
| 15002A133 | 133 | | 2 | 4021343022487 | 212 | 161 |
| 15002A159 | 159 | | 1 | 4021343022517 | 262 | 212 |

18



Catalog-no. and -description

5002G – Bend 90° female with nut

| Article-no. | Dimension d x G | Bag | Box | EAN code | a | b | z1 | z2 | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|----|----|
| 15002G1212 | 12 x 1/2 | 5 | 200 | 4021343117473 | 39 | 29 | 29 | 25 | 24 |
| 15002G1412 | 14 x 1/2 | 5 | 170 | 4021343022753 | 28 | 32 | 16 | 28 | 24 |
| 15002G1512 | 15 x 1/2 | 5 | 170 | 4021343022760 | 28 | 32 | 16 | 28 | 24 |
| 15002G1812 | 18 x 1/2 | 5 | 150 | 4021343127519 | 30 | 32 | 16 | 28 | 24 |
| 15002G1834 | 18 x 3/4 | 5 | 90 | 4021343117497 | 42 | 40 | 28 | 36 | 30 |
| 15002G2234 | 22 x 3/4 | 5 | 90 | 4021343022807 | 40 | 40 | 23 | 36 | 30 |



Catalog-no. and -description

5040 – Bend 45° female/male

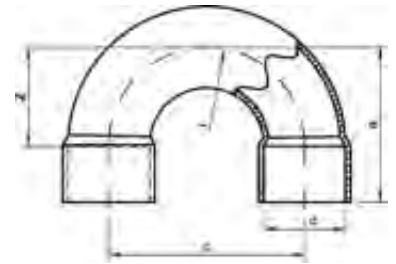
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|------|---------------|-----|-----|----|
| 150406 | 6 | 10 | 2500 | 4021343023132 | 10 | 12 | 3 |
| 150408 | 8 | 10 | 1700 | 4021343023187 | 12 | 14 | 4 |
| 1504010 | 10 | 10 | 1800 | 4021343022920 | 13 | 15 | 4 |
| 1504012 | 12 | 10 | 1300 | 4021343022951 | 15 | 17 | 5 |
| 1504014 | 14 | 10 | 850 | 4021343022975 | 18 | 18 | 6 |
| 1504015 | 15 | 10 | 700 | 4021343022982 | 18 | 20 | 6 |
| 1504016 | 16 | 10 | 750 | 4021343023002 | 19 | 21 | 7 |
| 1504018 | 18 | 10 | 400 | 4021343023019 | 21 | 23 | 7 |
| 1504022 | 22 | 10 | 280 | 4021343023033 | 26 | 28 | 9 |
| 1504028 | 28 | 10 | 160 | 4021343023057 | 30 | 32 | 11 |
| 1504032 | 32 | | 130 | 4021343023064 | 35 | 37 | 13 |
| 1504035 | 35 | | 110 | 4021343023071 | 39 | 41 | 15 |
| 1504036 | 36 | | 100 | 4021343023088 | 38 | 40 | 13 |
| 1504040 | 40 | | 70 | 4021343023095 | 40 | 42 | 12 |
| 1504042 | 42 | | 60 | 4021343023101 | 44 | 46 | 16 |
| 1504052 | 52 | | 25 | 4021343023118 | 53 | 55 | 20 |
| 1504054 | 54 | | 30 | 4021343023125 | 54 | 56 | 21 |
| 1504064 | 64 | | 36 | 4021343023149 | 67 | 69 | 33 |
| 1504067 | 66,7 | | 28 | 4021343023156 | 69 | 72 | 34 |
| 1504076 | 76,1 | | 25 | 4021343023170 | 74 | 77 | 39 |
| 1504080 | 80 | | 20 | 4021343023194 | 77 | 80 | 41 |
| 1504089 | 88,9 | | 15 | 4021343023200 | 84 | 87 | 45 |
| 15040108 | 108 | | 8 | 4021343022944 | 112 | 115 | 61 |



Catalog-no. and -description

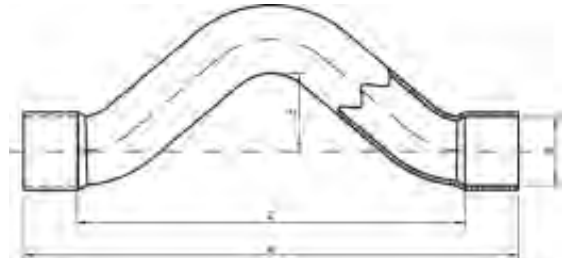
5041 – Bend 45° female/female

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|------|---------------|-----|----|
| 150416 | 6 | 10 | 2500 | 4021343023446 | 10 | 3 |
| 150418 | 8 | 10 | 1700 | 4021343023491 | 12 | 4 |
| 1504110 | 10 | 10 | 1500 | 4021343023231 | 13 | 4 |
| 1504112 | 12 | 10 | 1200 | 4021343023262 | 15 | 5 |
| 1504114 | 14 | 10 | 700 | 4021343023286 | 18 | 6 |
| 1504115 | 15 | 10 | 800 | 4021343023293 | 18 | 6 |
| 1504116 | 16 | 10 | 600 | 4021343023316 | 19 | 7 |
| 1504118 | 18 | 10 | 450 | 4021343023323 | 21 | 7 |
| 1504120 | 20 | 10 | 350 | 4021343023330 | 23 | 7 |
| 1504122 | 22 | 10 | 280 | 4021343023347 | 26 | 9 |
| 1504125 | 25 | 10 | 200 | 4021343023354 | 28 | 9 |
| 1504128 | 28 | 10 | 150 | 4021343023361 | 30 | 11 |
| 1504132 | 32 | | 120 | 4021343023378 | 35 | 13 |
| 1504135 | 35 | | 100 | 4021343023385 | 39 | 15 |
| 1504136 | 36 | | 90 | 4021343023392 | 39 | 12 |
| 1504140 | 40 | | 70 | 4021343023408 | 40 | 12 |
| 1504142 | 42 | | 60 | 4021343023415 | 44 | 16 |
| 1504152 | 52 | | 25 | 4021343023422 | 62 | 21 |
| 1504154 | 54 | | 25 | 4021343023439 | 54 | 21 |
| 1504164 | 64 | | 36 | 4021343023453 | 67 | 33 |
| 1504167 | 66,7 | | 35 | 4021343023460 | 69 | 34 |
| 1504176 | 76,1 | | 24 | 4021343023484 | 74 | 39 |
| 1504180 | 80 | | 20 | 4021343023507 | 77 | 41 |
| 1504189 | 88,9 | | 15 | 4021343023514 | 84 | 45 |
| 15041108 | 108 | | 8 | 4021343023255 | 112 | 61 |
| 15041133 | 133 | | 5 | 4021343023279 | 118 | 68 |
| 15041159 | 159 | | 2 | 4021343023309 | 140 | 90 |



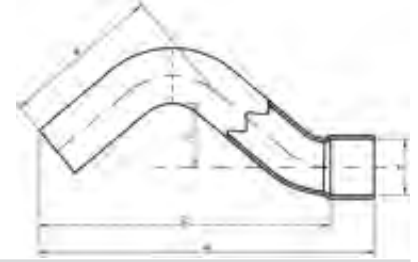
Catalog-no. and -description
5060 – Return bend

| Article-no. | Dimension d | Bag | Box | EAN code | a | c | z |
|-------------|----------------|-----|------|---------------|-----|-----|-----|
| 150608 | 8 | 10 | 1000 | 4021343023699 | 21 | 24 | 12 |
| 1506010 | 10 | 10 | 800 | 4021343023521 | 25 | 30 | 15 |
| 1506012 | 12 | 10 | 500 | 4021343023545 | 29 | 36 | 17 |
| 1506014 | 14 | 10 | 300 | 4021343023552 | 35 | 45 | 23 |
| 1506015 | 15 | 10 | 300 | 4021343023569 | 36 | 45 | 23 |
| 1506016 | 16 | 10 | 200 | 4021343023576 | 38 | 48 | 24 |
| 1506018 | 18 | 10 | 180 | 4021343023583 | 42 | 54 | 27 |
| 1506022 | 22 | 10 | 90 | 4021343023590 | 49 | 66 | 31 |
| 1506028 | 28 | | 55 | 4021343023606 | 61 | 85 | 41 |
| 1506035 | 35 | | 20 | 4021343023613 | 97 | 141 | 71 |
| 1506042 | 42 | | 12 | 4021343023620 | 114 | 169 | 84 |
| 1506054 | 54 | | 5 | 4021343023637 | 142 | 217 | 107 |



Catalog-no. and -description
5085 – Full crossover

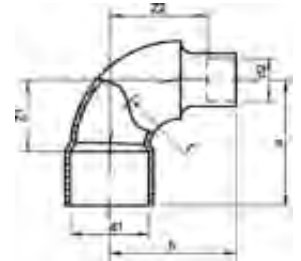
| Article-no. | Dimension d | Bag | Box | EAN code | a | c | z |
|-------------|----------------|-----|-----|---------------|-----|----|-----|
| 1508512 | 12 | 10 | 300 | 4021343023729 | 102 | 20 | 82 |
| 1508514 | 14 | 10 | 200 | 4021343023736 | 114 | 20 | 90 |
| 1508515 | 15 | 10 | 200 | 4021343023743 | 115 | 20 | 91 |
| 1508516 | 16 | 10 | 180 | 4021343023750 | 115 | 20 | 91 |
| 1508518 | 18 | 10 | 120 | 4021343023767 | 124 | 20 | 96 |
| 1508522 | 22 | 10 | 70 | 4021343023774 | 147 | 23 | 113 |



Catalog-no. and -description

5086 – Partial crossover

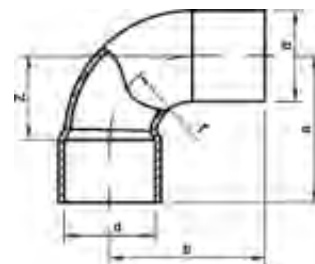
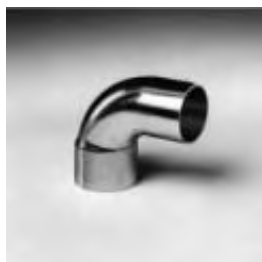
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | c | z |
|-------------|----------------|-----|-----|---------------|-----|----|----|-----|
| 1508612 | 12 | 10 | 400 | 4021343023781 | 87 | 44 | 20 | 42 |
| 1508614 | 14 | 10 | 250 | 4021343023798 | 95 | 47 | 20 | 83 |
| 1508615 | 15 | 10 | 250 | 4021343023804 | 94 | 44 | 20 | 81 |
| 1508616 | 16 | 10 | 250 | 4021343023811 | 95 | 47 | 20 | 83 |
| 1508618 | 18 | 10 | 180 | 4021343023828 | 102 | 48 | 20 | 88 |
| 1508622 | 22 | 10 | 100 | 4021343023835 | 123 | 55 | 23 | 106 |



Catalog-no. and -description

5090 – Elbow 90° female/female

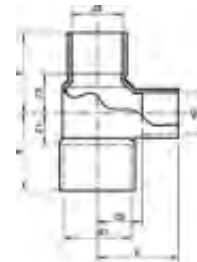
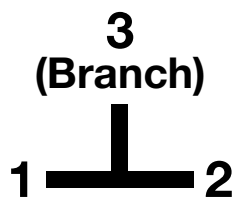
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | b | z | z1 | z2 |
|-------------|----------------------|-----|------|---------------|-----|----|----|----|----|
| 150906 | 6 | 10 | 3000 | 4021343024245 | 14 | | 7 | | |
| 150908 | 8 | 10 | 2000 | 4021343024290 | 14 | | 6 | | |
| 1509010 | 10 | 10 | 1800 | 4021343023842 | 16 | | 7 | | |
| 1509012 | 12 | 10 | 1000 | 4021343023873 | 18 | | 8 | | |
| 1509014 | 14 | 10 | 800 | 4021343023903 | 21 | | 9 | | |
| 1509015 | 15 | 10 | 700 | 4021343023910 | 23 | | 11 | | |
| 1509016 | 16 | 10 | 600 | 4021343023941 | 25 | | 12 | | |
| 1509018 | 18 | 10 | 450 | 4021343023958 | 27 | | 13 | | |
| 1509020 | 20 | 10 | 300 | 4021343023989 | 32 | | 15 | | |
| 1509022 | 22 | 10 | 280 | 4021343023996 | 31 | | 14 | | |
| 1509025 | 25 | 10 | 200 | 4021343024030 | 34 | | 16 | | |
| 1509028 | 28 | 10 | 150 | 4021343024047 | 38 | | 18 | | |
| 1509032 | 32 | | 120 | 4021343024092 | 45 | | 23 | | |
| 1509035 | 35 | | 90 | 4021343024108 | 48 | | 24 | | |
| 1509036 | 36 | | 65 | 4021343024467 | 55 | | 29 | | |
| 1509040 | 40 | | 55 | 4021343024160 | 61 | | 33 | | |
| 1509042 | 42 | | 55 | 4021343024177 | 57 | | 29 | | |
| 1509052 | 52 | | 20 | 4021343024207 | 86 | | 49 | | |
| 1509054 | 54 | | 20 | 4021343024214 | 72 | | 39 | | |
| 1509064 | 64 | | 30 | 4021343024269 | 86 | | 52 | | |
| 1509067 | 66,7 | | 25 | 4021343024276 | 88 | | 53 | | |
| 1509070 | 70 | | 25 | 4021343122941 | 88 | | 54 | | |
| 1509076 | 76,1 | | 20 | 4021343024283 | 93 | | 58 | | |
| 1509089 | 88,9 | | 12 | 4021343024313 | 107 | | 69 | | |
| 15090108 | 108 | | 6 | 4021343023866 | 129 | | 71 | | |
| 150902218 | 22 x 18 | 10 | 250 | 4021343024023 | 33 | 35 | | 15 | 20 |



Catalog-no. and -description

5092 – Elbow 90° female/male

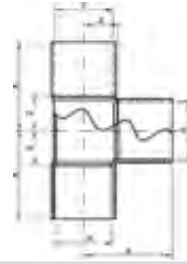
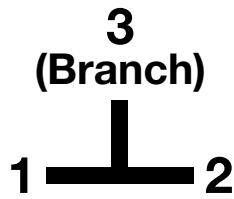
| Article-no. | Dimension d | Bag | Box | EAN code | a | b | z |
|-------------|----------------|-----|------|---------------|----|----|----|
| 150926 | 6 | 10 | 2000 | 4021343024511 | 15 | 17 | 7 |
| 150928 | 8 | 10 | 2000 | 4021343024559 | 14 | 17 | 6 |
| 1509210 | 10 | 10 | 1500 | 4021343024320 | 20 | 23 | 10 |
| 1509212 | 12 | 10 | 1200 | 4021343024344 | 18 | 21 | 8 |
| 1509214 | 14 | 10 | 800 | 4021343024368 | 22 | 24 | 10 |
| 1509215 | 15 | 10 | 700 | 4021343024375 | 24 | 26 | 11 |
| 1509216 | 16 | 10 | 600 | 4021343024382 | 26 | 30 | 13 |
| 1509218 | 18 | 10 | 400 | 4021343024399 | 28 | 28 | 13 |
| 1509222 | 22 | 10 | 250 | 4021343024412 | 32 | 34 | 14 |
| 1509228 | 28 | 10 | 130 | 4021343024436 | 39 | 41 | 18 |
| 1509232 | 32 | | 120 | 4021343024443 | 46 | 51 | 24 |
| 1509235 | 35 | | 80 | 4021343024450 | 49 | 56 | 25 |
| 1509236 | 36 | | 80 | 4021343024467 | 54 | 56 | 29 |
| 1509240 | 40 | | 55 | 4021343024474 | 61 | 65 | 33 |
| 1509242 | 42 | | 50 | 4021343024481 | 58 | 68 | 30 |
| 1509252 | 52 | | 20 | 4021343024498 | 80 | 87 | 46 |
| 1509254 | 54 | | 20 | 4021343024504 | 73 | 84 | 40 |
| 1509267 | 66,7 | | 12 | 4021343024535 | 89 | 94 | 55 |



Catalog-no. and -description

5130 – Tee

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|-------------|---------------------------|-----|------|---------------|-----|----|----|-----|----|----|----|
| 151306 | 6 | 10 | 3000 | 4021343027307 | 11 | | | 4 | | | |
| 151308 | 8 | 10 | 1500 | 4021343027581 | 13 | | | 5 | | | |
| 1513010 | 10 | 10 | 1000 | 4021343025020 | 15 | | | 6 | | | |
| 1513012 | 12 | 10 | 800 | 4021343025198 | 17 | | | 7 | | | |
| 1513014 | 14 | 10 | 500 | 4021343025358 | 20 | | | 8 | | | |
| 1513015 | 15 | 10 | 500 | 4021343025488 | 20 | | | 8 | | | |
| 1513016 | 16 | 10 | 400 | 4021343025693 | 21 | | | 9 | | | |
| 1513018 | 18 | 10 | 300 | 4021343025839 | 24 | | | 10 | | | |
| 1513020 | 20 | 10 | 200 | 4021343026119 | 28 | | | 12 | | | |
| 1513022 | 22 | 10 | 160 | 4021343026126 | 29 | | | 12 | | | |
| 1513025 | 25 | 10 | 120 | 4021343026430 | 32 | | | 14 | | | |
| 1513028 | 28 | 10 | 90 | 4021343026454 | 35 | | | 15 | | | |
| 1513032 | 32 | | 70 | 4021343026751 | 40 | | | 18 | | | |
| 1513035 | 35 | | 60 | 4021343026768 | 44 | | | 20 | | | |
| 1513036 | 36 | | 50 | 4021343026980 | 45 | | | 20 | | | |
| 1513040 | 40 | | 35 | 4021343026997 | 50 | | | 23 | | | |
| 1513042 | 42 | | 30 | 4021343027000 | 52 | | | 24 | | | |
| 1513052 | 52 | | 15 | 4021343027178 | 61 | | | 28 | | | |
| 1513054 | 54 | | 15 | 4021343027185 | 63 | | | 30 | | | |
| 1513064 | 64 | | 20 | 4021343027321 | 75 | | | 41 | | | |
| 1513067 | 66,7 | | 20 | 4021343027390 | 74 | | | 39 | | | |
| 1513070 | 70 | | 20 | 4021343027468 | 74 | | | 39 | | | |
| 1513076 | 76,1 | | 15 | 4021343027482 | 82 | | | 47 | | | |
| 1513080 | 80 | | 15 | 4021343027598 | 84 | | | 47 | | | |
| 1513089 | 88,9 | | 10 | 4021343027673 | 94 | | | 55 | | | |
| 15130108 | 108 | | 5 | 4021343025075 | 114 | | | 65 | | | |
| 15130133 | 133 | | 2 | 4021343025334 | 133 | | | 85 | | | |
| 15130159 | 159 | | 1 | 4021343025686 | 159 | | | 100 | | | |
| 15130686 | 6 x 6 x 8 | 10 | 1600 | 4021343027451 | 14 | 13 | 14 | 7 | 5 | 7 | |
| 151306106 | 6 x 6 x 10 | 10 | 1400 | 4021343027314 | 15 | 15 | 15 | 8 | 6 | 8 | |
| 15130866 | 8 x 6 x 6 | 10 | 2000 | 4021343027642 | 13 | 12 | 13 | 5 | 5 | 6 | |
| 15130868 | 8 x 8 x 6 | 10 | 2000 | 4021343027659 | 13 | 12 | 13 | 5 | 5 | 5 | |
| 151308108 | 8 x 8 x 10 | 10 | 1200 | 4021343027635 | 16 | 15 | 16 | 8 | 6 | 8 | |
| 151301088 | 10 x 8 x 8 | 10 | 1200 | 4021343025167 | 15 | 14 | 15 | 6 | 6 | 7 | |
| 1513010108 | 10 x 8 x 10 | 10 | 1000 | 4021343025037 | 15 | 15 | 16 | 6 | 6 | 8 | |
| 1513010610 | 10 x 10 x 6 | 10 | 1300 | 4021343025068 | 15 | 13 | 15 | 6 | 6 | 6 | |
| 1513010810 | 10 x 10 x 8 | 10 | 1200 | 4021343025082 | 15 | 14 | 15 | 6 | 6 | 6 | |
| 15130101210 | 10 x 10 x 12 | 10 | 800 | 4021343025044 | 18 | 17 | 18 | 9 | 7 | 9 | |
| 15130101510 | 10 x 10 x 15 | 10 | 500 | 4021343025051 | 20 | 20 | 20 | 11 | 8 | 11 | |
| 15130121010 | 12 x 10 x 10 | 10 | 1000 | 4021343025204 | 15 | 15 | 17 | 6 | 7 | 9 | |
| 15130121210 | 12 x 10 x 12 | 10 | 800 | 4021343025228 | 17 | 17 | 19 | 7 | 7 | 9 | |
| 1513012612 | 12 x 12 x 6 | 10 | 1000 | 4021343025303 | 16 | 16 | 16 | 6 | 9 | 6 | |
| 1513012812 | 12 x 12 x 8 | 10 | 1000 | 4021343025327 | 16 | 15 | 16 | 6 | 7 | 6 | |
| 15130121012 | 12 x 12 x 10 | 10 | 1000 | 4021343025211 | 16 | 16 | 16 | 6 | 7 | 6 | |
| 15130121412 | 12 x 12 x 14 | 10 | 600 | 4021343025235 | 20 | 20 | 20 | 10 | 8 | 10 | |
| 15130121512 | 12 x 12 x 15 | 10 | 500 | 4021343025259 | 21 | 20 | 21 | 11 | 8 | 11 | |
| 15130121612 | 12 x 12 x 16 | 10 | 450 | 4021343025266 | 21 | 21 | 21 | 11 | 9 | 11 | |
| 15130121812 | 12 x 12 x 18 | 10 | 350 | 4021343025273 | 24 | 24 | 24 | 14 | 10 | 14 | |



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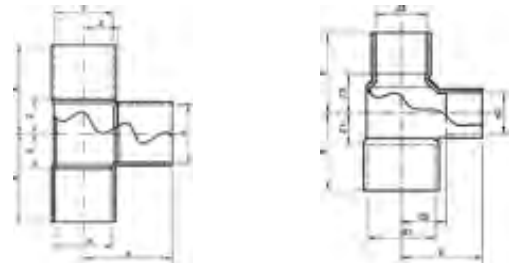
5130 – Tee (continued)

| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|-------------|---------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 15130122212 | 12 x 12 x 22 | 10 | 200 | 4021343025280 | 28 | 29 | 28 | 18 | 12 | 18 | |
| 15130141212 | 14 x 12 x 12 | 10 | 550 | 4021343025396 | 19 | 18 | 19 | 7 | 8 | 9 | |
| 15130141412 | 14 x 12 x 14 | 10 | 600 | 4021343025426 | 20 | 20 | 21 | 8 | 8 | 10 | |
| 15130141612 | 14 x 12 x 16 | 10 | 500 | 4021343025433 | 22 | 21 | 21 | 10 | 9 | 11 | |
| 15130141014 | 14 x 14 x 10 | 10 | 700 | 4021343025372 | 18 | 17 | 18 | 6 | 8 | 6 | |
| 15130141214 | 14 x 14 x 12 | 10 | 550 | 4021343025402 | 19 | 18 | 19 | 7 | 8 | 7 | |
| 15130141614 | 14 x 14 x 16 | 10 | 500 | 4021343025440 | 23 | 21 | 23 | 11 | 9 | 11 | |
| 15130141814 | 14 x 14 x 18 | 10 | 300 | 4021343025464 | 25 | 24 | 25 | 13 | 10 | 13 | |
| 15130151010 | 15 x 10 x 10 | 10 | 700 | 4021343025495 | 18 | 18 | 18 | 6 | 9 | 9 | |
| 15130151210 | 15 x 10 x 12 | 10 | 600 | 4021343025525 | 19 | 19 | 20 | 7 | 9 | 11 | |
| 15130151510 | 15 x 10 x 15 | 10 | 500 | 4021343025556 | 20 | 20 | 20 | 8 | 8 | 11 | |
| 15130151012 | 15 x 12 x 10 | 10 | 600 | 4021343025501 | 18 | 18 | 19 | 6 | 9 | 9 | |
| 15130151212 | 15 x 12 x 12 | 10 | 600 | 4021343025532 | 19 | 19 | 19 | 7 | 9 | 9 | |
| 15130151512 | 15 x 12 x 15 | 10 | 500 | 4021343025563 | 20 | 20 | 20 | 8 | 8 | 10 | |
| 1513015615 | 15 x 15 x 6 | 10 | 700 | 4021343025648 | 17 | 18 | 17 | 5 | 11 | 5 | |
| 1513015815 | 15 x 15 x 8 | 10 | 650 | 4021343025679 | 17 | 17 | 17 | 5 | 9 | 5 | |
| 15130151015 | 15 x 15 x 10 | 10 | 600 | 4021343025518 | 18 | 18 | 18 | 6 | 9 | 6 | |
| 15130151215 | 15 x 15 x 12 | 10 | 500 | 4021343025549 | 19 | 19 | 19 | 7 | 9 | 7 | |
| 15130151415 | 15 x 15 x 14 | 10 | 500 | 4021343331213 | 20 | 20 | 20 | 8 | 8 | 8 | |
| 15130151815 | 15 x 15 x 18 | 10 | 300 | 4021343025594 | 24 | 24 | 24 | 12 | 10 | 12 | |
| 15130152215 | 15 x 15 x 22 | 10 | 200 | 4021343025617 | 28 | 29 | 28 | 16 | 12 | 16 | |
| 15130152815 | 15 x 15 x 28 | 10 | 110 | 4021343025631 | 34 | 35 | 34 | 22 | 15 | 22 | |
| 15130161212 | 16 x 12 x 12 | 10 | 600 | 4021343025716 | 19 | 19 | 19 | 7 | 9 | 9 | |
| 15130161412 | 16 x 12 x 14 | 10 | 500 | 4021343025747 | 20 | 21 | 20 | 8 | 9 | 10 | |
| 15130161612 | 16 x 12 x 16 | 10 | 450 | 4021343025778 | 21 | 21 | 21 | 9 | 9 | 11 | |
| 15130161214 | 16 x 14 x 12 | 10 | 500 | 4021343025723 | 19 | 19 | 22 | 7 | 9 | 10 | |
| 15130161414 | 16 x 14 x 14 | 10 | 500 | 4021343025754 | 20 | 21 | 21 | 8 | 9 | 9 | |
| 15130161614 | 16 x 14 x 16 | 10 | 400 | 4021343025785 | 21 | 21 | 22 | 9 | 9 | 10 | |
| 15130161814 | 16 x 14 x 18 | 10 | 300 | 4021343025792 | 24 | 24 | 24 | 12 | 10 | 12 | |
| 1513016616 | 16 x 16 x 6 | 10 | 700 | 4021343025822 | 18 | 17 | 18 | 6 | 10 | 6 | |
| 15130161016 | 16 x 16 x 10 | 10 | 550 | 4021343025709 | 18 | 18 | 18 | 6 | 9 | 6 | |
| 15130161216 | 16 x 16 x 12 | 10 | 500 | 4021343025730 | 19 | 19 | 19 | 7 | 9 | 7 | |
| 15130161416 | 16 x 16 x 14 | 10 | 500 | 4021343025761 | 20 | 21 | 20 | 8 | 9 | 8 | |
| 15130161816 | 16 x 16 x 18 | 10 | 300 | 4021343025808 | 24 | 24 | 24 | 12 | 10 | 12 | |
| 15130162216 | 16 x 16 x 22 | 10 | 200 | 4021343025815 | 28 | 29 | 28 | 16 | 12 | 16 | |
| 15130181212 | 18 x 12 x 12 | 10 | 400 | 4021343025860 | 21 | 20 | 21 | 7 | 10 | 11 | |
| 15130181412 | 18 x 12 x 14 | 10 | 350 | 4021343025914 | 22 | 22 | 21 | 8 | 10 | 11 | |
| 15130181512 | 18 x 12 x 15 | 10 | 350 | 4021343025952 | 23 | 22 | 21 | 9 | 10 | 11 | |
| 15130181812 | 18 x 12 x 18 | 10 | 300 | 4021343026034 | 24 | 24 | 22 | 10 | 10 | 13 | |
| 15130181214 | 18 x 14 x 12 | 10 | 400 | 4021343025877 | 21 | 20 | 21 | 7 | 10 | 9 | |
| 15130181414 | 18 x 14 x 14 | 10 | 350 | 4021343025921 | 22 | 22 | 22 | 8 | 10 | 10 | |
| 15130181614 | 18 x 14 x 16 | 10 | 350 | 4021343025990 | 23 | 22 | 23 | 9 | 10 | 11 | |
| 15130181814 | 18 x 14 x 18 | 10 | 300 | 4021343026041 | 24 | 24 | 24 | 10 | 10 | 12 | |
| 15130181215 | 18 x 15 x 12 | 10 | 400 | 4021343025884 | 21 | 20 | 21 | 7 | 10 | 9 | |
| 15130181515 | 18 x 15 x 15 | 10 | 360 | 4021343025969 | 23 | 22 | 23 | 9 | 10 | 11 | |
| 15130181815 | 18 x 15 x 18 | 10 | 300 | 4021343026058 | 24 | 24 | 24 | 10 | 10 | 12 | |
| 15130182215 | 18 x 15 x 22 | 10 | 200 | 4021343026072 | 29 | 29 | 28 | 15 | 12 | 16 | |
| 15130181216 | 18 x 16 x 12 | 10 | 400 | 4021343025891 | 21 | 20 | 21 | 7 | 10 | 9 | |



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(Branch)

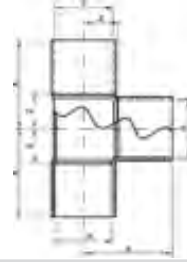
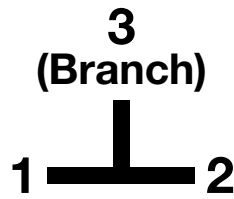
1 **2**



Catalog-no. and -description

5130 – Tee (continued)

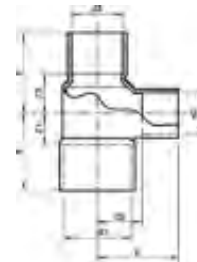
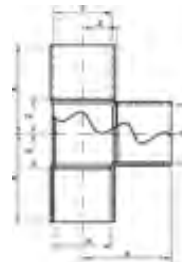
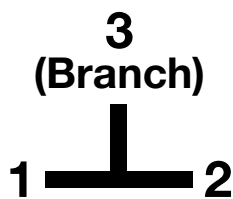
| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|-------------|---------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 15130181416 | 18 x 16 x 14 | 10 | 350 | 4021343025938 | 22 | 22 | 22 | 8 | 10 | 10 | |
| 15130181616 | 18 x 16 x 16 | 10 | 350 | 4021343026003 | 23 | 22 | 23 | 9 | 10 | 11 | |
| 15130181816 | 18 x 16 x 18 | 10 | 300 | 4021343026065 | 24 | 24 | 24 | 10 | 10 | 12 | |
| 1513018618 | 18 x 18 x 6 | 10 | 450 | 4021343026102 | 21 | 18 | 21 | 7 | 11 | 7 | |
| 15130181018 | 18 x 18 x 10 | 10 | 400 | 4021343025853 | 22 | 19 | 22 | 8 | 10 | 8 | |
| 15130181218 | 18 x 18 x 12 | 10 | 380 | 4021343025907 | 22 | 20 | 22 | 8 | 10 | 8 | |
| 15130181418 | 18 x 18 x 14 | 10 | 350 | 4021343025945 | 22 | 22 | 22 | 8 | 10 | 8 | |
| 15130181518 | 18 x 18 x 15 | 10 | 300 | 4021343025976 | 22 | 22 | 22 | 8 | 10 | 8 | |
| 15130181618 | 18 x 18 x 16 | 10 | 300 | 4021343026010 | 23 | 22 | 23 | 9 | 10 | 9 | |
| 15130182218 | 18 x 18 x 22 | 10 | 200 | 4021343026089 | 29 | 29 | 29 | 15 | 12 | 15 | |
| 15130182818 | 18 x 18 x 28 | 10 | 120 | 4021343026096 | 35 | 35 | 35 | 21 | 16 | 21 | |
| 15130221212 | 22 x 12 x 12 | 10 | 250 | 4021343026140 | 24 | 22 | 22 | 7 | 12 | 12 | |
| 15130221512 | 22 x 12 x 15 | 10 | 250 | 4021343026232 | 26 | 24 | 24 | 9 | 12 | 14 | |
| 15130221812 | 22 x 12 x 18 | 10 | 250 | 4021343026294 | 27 | 26 | 25 | 10 | 12 | 15 | |
| 15130222212 | 22 x 12 x 22 | 10 | 250 | 4021343026348 | 29 | 29 | 27 | 12 | 12 | 17 | |
| 15130221214 | 22 x 14 x 12 | 10 | 300 | 4021343026157 | 24 | 22 | 23 | 7 | 12 | 11 | |
| 15130221414 | 22 x 14 x 14 | 10 | 280 | 4021343026195 | 25 | 24 | 24 | 8 | 12 | 12 | |
| 15130221814 | 22 x 14 x 18 | 10 | 250 | 4021343026300 | 27 | 26 | 26 | 10 | 12 | 14 | |
| 15130222214 | 22 x 14 x 22 | 10 | 200 | 4021343026355 | 29 | 29 | 28 | 12 | 12 | 16 | |
| 15130221215 | 22 x 15 x 12 | 10 | 300 | 4021343026164 | 24 | 22 | 23 | 7 | 12 | 11 | |
| 15130221515 | 22 x 15 x 15 | 10 | 250 | 4021343026249 | 26 | 24 | 25 | 9 | 12 | 13 | |
| 15130221815 | 22 x 15 x 18 | 10 | 250 | 4021343026317 | 27 | 26 | 26 | 10 | 12 | 14 | |
| 15130222215 | 22 x 15 x 22 | 10 | 200 | 4021343026362 | 29 | 29 | 28 | 12 | 12 | 16 | |
| 15130222815 | 22 x 15 x 28 | 10 | 100 | 4021343026393 | 36 | 35 | 34 | 19 | 16 | 22 | |
| 15130221416 | 22 x 16 x 14 | 10 | 250 | 4021343026201 | 25 | 24 | 24 | 8 | 12 | 12 | |
| 15130221616 | 22 x 16 x 16 | 10 | 250 | 4021343026270 | 26 | 24 | 25 | 9 | 12 | 13 | |
| 15130221816 | 22 x 16 x 18 | 10 | 250 | 4021343117657 | 27 | 26 | 26 | 10 | 12 | 14 | |
| 15130222216 | 22 x 16 x 22 | 10 | 200 | 4021343026379 | 29 | 29 | 28 | 12 | 12 | 16 | |
| 15130221218 | 22 x 18 x 12 | 10 | 250 | 4021343026171 | 24 | 22 | 24 | 7 | 12 | 10 | |
| 15130221418 | 22 x 18 x 14 | 10 | 250 | 4021343026218 | 25 | 24 | 25 | 8 | 12 | 11 | |
| 15130221518 | 22 x 18 x 15 | 10 | 250 | 4021343026256 | 26 | 25 | 26 | 9 | 12 | 12 | |
| 15130221618 | 22 x 18 x 16 | 10 | 250 | 4021343117640 | 26 | 24 | 25 | 9 | 12 | 11 | |
| 15130221818 | 22 x 18 x 18 | 10 | 250 | 4021343026324 | 28 | 26 | 27 | 11 | 12 | 13 | |
| 15130222218 | 22 x 18 x 22 | 10 | 180 | 4021343026386 | 29 | 29 | 28 | 12 | 12 | 14 | |
| 1513022622 | 22 x 22 x 6 | 10 | 250 | 4021343026423 | 24 | 22 | 24 | 7 | 16 | 7 | |
| 15130221022 | 22 x 22 x 10 | 10 | 270 | 4021343026133 | 24 | 22 | 24 | 7 | 13 | 7 | |
| 15130221222 | 22 x 22 x 12 | 10 | 250 | 4021343026188 | 24 | 22 | 24 | 7 | 12 | 7 | |
| 15130221422 | 22 x 22 x 14 | 10 | 250 | 4021343026225 | 25 | 24 | 25 | 8 | 12 | 8 | |
| 15130221522 | 22 x 22 x 15 | 10 | 200 | 4021343026263 | 26 | 24 | 26 | 9 | 12 | 9 | |
| 15130221622 | 22 x 22 x 16 | 10 | 200 | 4021343026287 | 26 | 24 | 26 | 9 | 12 | 9 | |
| 15130221822 | 22 x 22 x 18 | 10 | 200 | 4021343026331 | 28 | 26 | 28 | 11 | 12 | 11 | |
| 15130222822 | 22 x 22 x 28 | 10 | 100 | 4021343026409 | 36 | 36 | 36 | 19 | 16 | 19 | |
| 15130223522 | 22 x 22 x 35 | | 60 | 4021343026416 | 44 | 44 | 44 | 27 | 20 | 27 | |
| 15130281515 | 28 x 15 x 15 | 10 | 140 | 4021343026539 | 30 | 27 | 28 | 10 | 15 | 16 | |
| 15130281815 | 28 x 15 x 18 | 10 | 140 | 4021343026584 | 31 | 29 | 29 | 11 | 15 | 17 | |
| 15130282215 | 28 x 15 x 22 | 10 | 130 | 4021343026638 | 33 | 32 | 31 | 13 | 15 | 19 | |
| 15130282815 | 28 x 15 x 28 | 10 | 100 | 4021343026690 | 36 | 36 | 34 | 16 | 16 | 22 | |
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Catalog-no. and -description

5130 – Tee (continued)

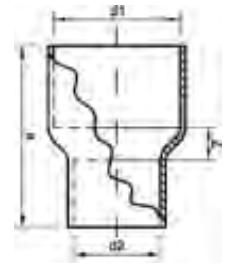
| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|-------------|---------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 15130282816 | 28 x 16 x 28 | 10 | 100 | 4021343026706 | 36 | 36 | 35 | 16 | 16 | 23 | |
| 15130281518 | 28 x 18 x 15 | 10 | 140 | 4021343026546 | 30 | 27 | 28 | 10 | 15 | 14 | |
| 15130281818 | 28 x 18 x 18 | 10 | 140 | 4021343026591 | 31 | 29 | 30 | 11 | 15 | 16 | |
| 15130282218 | 28 x 18 x 22 | 10 | 100 | 4021343026645 | 33 | 32 | 32 | 13 | 15 | 18 | |
| 15130282818 | 28 x 18 x 28 | 10 | 100 | 4021343026713 | 36 | 36 | 35 | 16 | 16 | 21 | |
| 15130281522 | 28 x 22 x 15 | 10 | 150 | 4021343026553 | 30 | 27 | 30 | 10 | 15 | 13 | |
| 15130281822 | 28 x 22 x 18 | 10 | 120 | 4021343026607 | 31 | 29 | 31 | 11 | 15 | 15 | |
| 15130282222 | 28 x 22 x 22 | 10 | 100 | 4021343026652 | 33 | 32 | 33 | 13 | 15 | 16 | |
| 15130282822 | 28 x 22 x 28 | 10 | 80 | 4021343026720 | 36 | 36 | 36 | 16 | 16 | 19 | |
| 15130281028 | 28 x 28 x 10 | 10 | 140 | 4021343026461 | 29 | 27 | 29 | 9 | 18 | 9 | |
| 15130281228 | 28 x 28 x 12 | 10 | 140 | 4021343026508 | 28 | 25 | 27 | 8 | 15 | 8 | |
| 15130281428 | 28 x 28 x 14 | 10 | 140 | 4021343026515 | 29 | 27 | 29 | 9 | 15 | 9 | |
| 15130281528 | 28 x 28 x 15 | 10 | 140 | 4021343026560 | 30 | 27 | 30 | 10 | 15 | 10 | |
| 15130281628 | 28 x 28 x 16 | 10 | 130 | 4021343026577 | 30 | 27 | 30 | 10 | 15 | 10 | |
| 15130281828 | 28 x 28 x 18 | 10 | 120 | 4021343026614 | 31 | 29 | 31 | 11 | 15 | 11 | |
| 15130282228 | 28 x 28 x 22 | 10 | 100 | 4021343026669 | 33 | 32 | 33 | 13 | 15 | 13 | |
| 15130283528 | 28 x 28 x 35 | | 65 | 4021343026744 | 45 | 44 | 45 | 25 | 20 | 25 | |
| 15130322232 | 32 x 32 x 22 | | 90 | 4021343174421 | 35 | 35 | 35 | 13 | 18 | 13 | |
| 15130322832 | 32 x 32 x 28 | | 80 | 4021343171499 | 38 | 33 | 38 | 16 | 18 | 16 | |
| 15130353515 | 35 x 15 x 35 | | 70 | 4021343026935 | 44 | 43 | 43 | 20 | 19 | 31 | |
| 15130353518 | 35 x 18 x 35 | | 70 | 4021343026942 | 44 | 43 | 43 | 20 | 19 | 29 | |
| 15130352222 | 35 x 22 x 22 | | 90 | 4021343026867 | 38 | 36 | 39 | 14 | 19 | 22 | |
| 15130352822 | 35 x 22 x 28 | | 80 | 4021343026904 | 40 | 39 | 41 | 16 | 20 | 24 | |
| 15130353522 | 35 x 22 x 35 | | 60 | 4021343026959 | 44 | 44 | 44 | 20 | 20 | 27 | |
| 15130351528 | 35 x 28 x 15 | | 100 | 4021343026805 | 34 | 31 | 35 | 10 | 19 | 16 | |
| 15130351828 | 35 x 28 x 18 | | 110 | 4021343026829 | 36 | 33 | 36 | 12 | 19 | 17 | |
| 15130352228 | 35 x 28 x 22 | | 90 | 4021343026874 | 38 | 36 | 38 | 14 | 19 | 19 | |
| 15130352828 | 35 x 28 x 28 | | 80 | 4021343026911 | 40 | 39 | 41 | 16 | 20 | 22 | |
| 15130353528 | 35 x 28 x 35 | | 55 | 4021343026966 | 44 | 44 | 44 | 20 | 20 | 24 | |
| 15130351535 | 35 x 35 x 15 | | 100 | 4021343026812 | 34 | 31 | 34 | 10 | 19 | 10 | |
| 15130351835 | 35 x 35 x 18 | | 100 | 4021343026836 | 36 | 33 | 36 | 12 | 19 | 12 | |
| 15130352235 | 35 x 35 x 22 | | 85 | 4021343026881 | 38 | 36 | 38 | 14 | 19 | 14 | |
| 15130352835 | 35 x 35 x 28 | | 75 | 4021343026928 | 40 | 39 | 40 | 16 | 20 | 16 | |
| 15130354235 | 35 x 35 x 42 | | 40 | 4021343026973 | 51 | 52 | 51 | 27 | 24 | 27 | |
| 15130424222 | 42 x 22 x 42 | | 40 | 4021343027130 | 52 | 52 | 50 | 24 | 24 | 33 | |
| 15130422828 | 42 x 28 x 28 | | 55 | 4021343027079 | 44 | 43 | 44 | 16 | 24 | 25 | |
| 15130423528 | 42 x 28 x 35 | | 45 | 4021343027109 | 48 | 48 | 47 | 20 | 24 | 28 | |
| 15130424228 | 42 x 28 x 42 | | 40 | 4021343027147 | 52 | 52 | 51 | 24 | 24 | 32 | |
| 15130422235 | 42 x 35 x 22 | | 55 | 4021343027048 | 42 | 40 | 42 | 14 | 23 | 18 | |
| 15130422835 | 42 x 35 x 28 | | 50 | 4021343027086 | 44 | 43 | 46 | 16 | 24 | 20 | |
| 15130423535 | 42 x 35 x 35 | | 45 | 4021343027116 | 48 | 48 | 48 | 20 | 24 | 24 | |
| 15130424235 | 42 x 35 x 42 | | 35 | 4021343027154 | 52 | 52 | 52 | 24 | 24 | 28 | |
| 15130421542 | 42 x 42 x 15 | | 60 | 4021343027017 | 39 | 35 | 39 | 11 | 23 | 11 | |
| 15130421842 | 42 x 42 x 18 | | 60 | 4021343027024 | 40 | 37 | 40 | 12 | 23 | 12 | |
| 15130422242 | 42 x 42 x 22 | | 50 | 4021343027055 | 42 | 40 | 42 | 14 | 23 | 14 | |
| 15130422842 | 42 x 42 x 28 | | 50 | 4021343027093 | 45 | 43 | 45 | 17 | 24 | 17 | |
| 15130423542 | 42 x 42 x 35 | | 40 | 4021343027123 | 48 | 48 | 48 | 20 | 24 | 20 | |
| 15130425442 | 42 x 42 x 54 | | 20 | 4021343027161 | 64 | 63 | 64 | 36 | 30 | 36 | |



Catalog-no. and -description

5130 – Tee (continued)

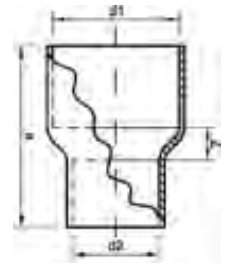
| Article-no. | Dimension d1 x d3 x d2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|----------------|---------------------------|-----|-----|---------------|-----|-----|-----|----|----|----|----|
| 15130543535 | 54 x 35 x 35 | | 25 | 4021343027253 | 54 | 54 | 53 | 21 | 30 | 29 | |
| 15130542242 | 54 x 42 x 22 | | 30 | 4021343027215 | 48 | 47 | 49 | 15 | 30 | 21 | |
| 15130542842 | 54 x 42 x 28 | | 30 | 4021343027239 | 51 | 49 | 51 | 18 | 30 | 23 | |
| 15130543542 | 54 x 42 x 35 | | 25 | 4021343117763 | 53 | 54 | 55 | 20 | 30 | 27 | |
| 15130544242 | 54 x 42 x 42 | | 20 | 4021343027277 | 57 | 58 | 58 | 24 | 30 | 30 | |
| 15130545442 | 54 x 42 x 54 | | 15 | 4021343027291 | 63 | 63 | 64 | 30 | 30 | 36 | |
| 15130541554 | 54 x 54 x 15 | | 30 | 4021343027192 | 44 | 41 | 44 | 11 | 29 | 11 | |
| 15130541854 | 54 x 54 x 18 | | 30 | 4021343027208 | 45 | 43 | 45 | 12 | 29 | 12 | |
| 15130542254 | 54 x 54 x 22 | | 30 | 4021343027222 | 47 | 47 | 47 | 14 | 30 | 14 | |
| 15130542854 | 54 x 54 x 28 | | 25 | 4021343027246 | 50 | 49 | 50 | 17 | 30 | 17 | |
| 15130543554 | 54 x 54 x 35 | | 25 | 4021343027260 | 53 | 54 | 53 | 20 | 30 | 20 | |
| 15130544254 | 54 x 54 x 42 | | 20 | 4021343027284 | 57 | 58 | 57 | 24 | 30 | 24 | |
| 15130643564 | 64 x 64 x 35 | | 30 | 4021343027338 | 61 | 66 | 61 | 27 | 41 | 27 | |
| 15130644264 | 64 x 64 x 42 | | 30 | 4021343027345 | 64 | 70 | 64 | 30 | 41 | 30 | |
| 15130645464 | 64 x 64 x 54 | | 12 | 4021343027352 | 69 | 72 | 69 | 35 | 38 | 35 | |
| 15130763576 | 76,1 x 76,1 x 35 | | 24 | 4021343027499 | 62 | 72 | 62 | 27 | 47 | 27 | |
| 15130764276 | 76,1 x 76,1 x 42 | | 24 | 4021343027505 | 65 | 76 | 65 | 30 | 47 | 30 | |
| 15130765476 | 76,1 x 76,1 x 54 | | 18 | 4021343027512 | 71 | 81 | 71 | 36 | 47 | 36 | |
| 15130766476 | 76,1 x 76,1 x 64 | | 16 | 4021343027529 | 76 | 81 | 76 | 41 | 47 | 41 | |
| 15130893589 | 88,9 x 88,9 x 35 | | 24 | 4021343027680 | 64 | 56 | 64 | 25 | 51 | 25 | |
| 15130894289 | 88,9 x 88,9 x 42 | | 24 | 4021343027697 | 71 | 84 | 71 | 32 | 55 | 32 | |
| 15130895489 | 88,9 x 88,9 x 54 | | 12 | 4021343027703 | 77 | 89 | 77 | 38 | 55 | 38 | |
| 15130896489 | 88,9 x 88,9 x 64 | | 12 | 4021343027710 | 82 | 89 | 82 | 43 | 55 | 43 | |
| 15130897689 | 88,9 x 88,9 x 76,1 | | 12 | 4021343027727 | 88 | 90 | 88 | 49 | 55 | 49 | |
| 1513010854108 | 108 x 108 x 54 | | 8 | 4021343025112 | 87 | 99 | 87 | 38 | 65 | 38 | |
| 1513010864108 | 108 x 108 x 64 | | 8 | 4021343025129 | 92 | 99 | 92 | 43 | 65 | 43 | |
| 1513010876108 | 108 x 108 x 76,1 | | 5 | 4021343025143 | 98 | 100 | 98 | 49 | 65 | 49 | |
| 1513010889108 | 108 x 108 x 88,9 | | 5 | 4021343025181 | 105 | 104 | 105 | 56 | 65 | 56 | |
| 15130133108133 | 133 x 133 x 108 | | 2 | 4021343025341 | 139 | 142 | 139 | 89 | 95 | 89 | |



Catalog-no. and -description

5240 – Reducing coupling

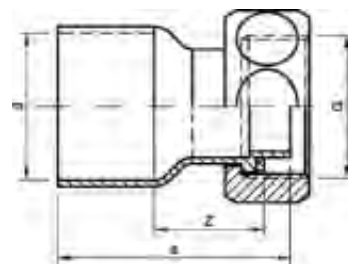
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|------|---------------|----|----|
| 1524086 | 8 x 6 | 10 | 3000 | 4021343028618 | 17 | 2 |
| 15240106 | 10 x 6 | 10 | 2000 | 4021343027864 | 19 | 3 |
| 15240108 | 10 x 8 | 10 | 2000 | 4021343027871 | 19 | 3 |
| 15240126 | 12 x 6 | 10 | 2000 | 4021343027901 | 21 | 4 |
| 15240128 | 12 x 8 | 10 | 2000 | 4021343027918 | 21 | 3 |
| 152401210 | 12 x 10 | 10 | 1500 | 4021343027895 | 22 | 3 |
| 152401410 | 14 x 10 | 10 | 1400 | 4021343027956 | 25 | 4 |
| 152401412 | 14 x 12 | 10 | 1000 | 4021343027963 | 24 | 3 |
| 15240158 | 15 x 8 | 10 | 1200 | 4021343028007 | 25 | 5 |
| 152401510 | 15 x 10 | 10 | 1200 | 4021343027970 | 25 | 4 |
| 152401512 | 15 x 12 | 10 | 1100 | 4021343027987 | 25 | 3 |
| 152401514 | 15 x 14 | 10 | 1000 | 4021343027994 | 26 | 3 |
| 152401610 | 16 x 10 | 10 | 1200 | 4021343028045 | 26 | 5 |
| 152401612 | 16 x 12 | 10 | 1200 | 4021343028052 | 27 | 5 |
| 152401614 | 16 x 14 | 10 | 1000 | 4021343028069 | 27 | 3 |
| 152401615 | 16 x 15 | 10 | 1100 | 4021343028076 | 25 | 1 |
| 152401810 | 18 x 10 | 10 | 900 | 4021343028083 | 28 | 7 |
| 152401812 | 18 x 12 | 10 | 900 | 4021343028090 | 29 | 5 |
| 152401814 | 18 x 14 | 10 | 800 | 4021343028106 | 29 | 5 |
| 152401815 | 18 x 15 | 10 | 800 | 4021343028113 | 29 | 5 |
| 152401816 | 18 x 16 | 10 | 700 | 4021343028120 | 29 | 3 |
| 152402014 | 20 x 14 | 10 | 500 | 4021343117794 | 35 | 4 |
| 152402016 | 20 x 16 | 10 | 500 | 4021343117800 | 32 | 5 |
| 152402018 | 20 x 18 | 10 | 500 | 4021343117817 | 33 | 4 |
| 152402210 | 22 x 10 | 10 | 500 | 4021343117824 | 34 | 8 |
| 152402212 | 22 x 12 | 10 | 500 | 4021343028137 | 34 | 7 |
| 152402214 | 22 x 14 | 10 | 500 | 4021343028144 | 35 | 6 |
| 152402215 | 22 x 15 | 10 | 500 | 4021343028151 | 34 | 5 |
| 152402216 | 22 x 16 | 10 | 500 | 4021343028168 | 34 | 5 |
| 152402218 | 22 x 18 | 10 | 500 | 4021343028175 | 33 | 4 |
| 152402220 | 22 x 20 | 10 | 400 | 4021343117831 | 35 | 4 |
| 152402812 | 28 x 12 | 10 | 300 | 4021343028236 | 41 | 12 |
| 152402814 | 28 x 14 | 10 | 280 | 4021343028243 | 41 | 10 |
| 152402815 | 28 x 15 | 10 | 300 | 4021343028250 | 41 | 10 |
| 152402816 | 28 x 16 | 10 | 280 | 4021343028267 | 40 | 9 |
| 152402818 | 28 x 18 | 10 | 280 | 4021343028274 | 40 | 8 |
| 152402820 | 28 x 20 | 10 | 280 | 4021343117848 | 42 | 7 |
| 152402822 | 28 x 22 | 10 | 280 | 4021343028281 | 41 | 6 |
| 152403218 | 32 x 18 | 10 | 220 | 4021343028298 | 46 | 10 |
| 152403222 | 32 x 22 | 10 | 200 | 4021343028311 | 49 | 10 |
| 152403228 | 32 x 28 | 10 | 180 | 4021343028328 | 47 | 6 |
| 152403515 | 35 x 15 | 10 | 160 | 4021343028335 | 48 | 13 |
| 152403518 | 35 x 18 | 10 | 160 | 4021343028342 | 52 | 14 |
| 152403522 | 35 x 22 | 10 | 150 | 4021343028359 | 49 | 9 |
| 152403528 | 35 x 28 | 10 | 140 | 4021343028366 | 49 | 6 |
| 152403628 | 36 x 28 | 10 | 140 | 4021343220067 | 52 | 8 |
| 152404028 | 40 x 28 | | 125 | 4021343028373 | 57 | 10 |
| 152404032 | 40 x 32 | | 125 | 4021343174469 | 56 | 7 |



Catalog-no. and -description

5240 – Reducing coupling (continued)

| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|-----|----|
| 152404218 | 42 x 18 | | 135 | 4021343028397 | 56 | 15 |
| 152404222 | 42 x 22 | | 120 | 4021343028403 | 58 | 14 |
| 152404228 | 42 x 28 | | 110 | 4021343028410 | 58 | 11 |
| 152404232 | 42 x 32 | | 100 | 4021343220081 | 59 | 9 |
| 152404235 | 42 x 35 | | 100 | 4021343028427 | 59 | 7 |
| 152405422 | 54 x 22 | | 60 | 4021343028434 | 71 | 22 |
| 152404036 | 40 x 36 | | 125 | 4021343220074 | 58 | 5 |
| 152405232 | 52 x 32 | | 60 | 4021343220104 | 68 | 14 |
| 152405240 | 52 x 40 | | 60 | 4021343174490 | 70 | 11 |
| 152405242 | 52 x 42 | | 50 | 4021343220128 | 70 | 10 |
| 152405428 | 54 x 28 | | 55 | 4021343028441 | 71 | 19 |
| 152405435 | 54 x 35 | | 50 | 4021343028458 | 71 | 14 |
| 152405442 | 54 x 42 | | 50 | 4021343028465 | 73 | 12 |
| 152406435 | 64 x 35 | | 50 | 4021343028472 | 77 | 20 |
| 152406442 | 64 x 42 | | 56 | 4021343028489 | 78 | 16 |
| 152406454 | 64 x 54 | | 56 | 4021343028496 | 77 | 10 |
| 152406754 | 66,7 x 54 | | 50 | 4021343028502 | 79 | 12 |
| 152407054 | 70 x 54 | | 48 | 4021343028519 | 81 | 13 |
| 152407064 | 70 x 64 | | 48 | 4021343028533 | 77 | 8 |
| 152407654 | 76,1 x 54 | | 40 | 4021343028540 | 84 | 16 |
| 152407664 | 76,1 x 64 | | 40 | 4021343028557 | 80 | 11 |
| 152407667 | 76,1 x 66,7 | | 40 | 4021343134661 | 79 | 10 |
| 152407670 | 76,1 x 70 | | 40 | 4021343028564 | 79 | 10 |
| 152408054 | 80 x 54 | | 35 | 4021343028571 | 88 | 18 |
| 152408064 | 80 x 64 | | 35 | 4021343028588 | 84 | 13 |
| 152408076 | 80 x 76,1 | | 24 | 4021343028601 | 80 | 8 |
| 152408976 | 88,9 x 76,1 | | 24 | 4021343028625 | 85 | 12 |
| 1524010889 | 108 x 88,9 | | 30 | 4021343027888 | 104 | 16 |
| 1524013376 | 133 x 76,1 | | 16 | 4021343027949 | 110 | 41 |
| 15240133108 | 133 x 108 | | 16 | 4021343027925 | 106 | 23 |
| 15240159108 | 159 x 108 | | 9 | 4021343028014 | 130 | 32 |
| 15240159133 | 159 x 133 | | 6 | 4021343028021 | 120 | 20 |



Catalog-no. and -description

5240g – Straight tap connector

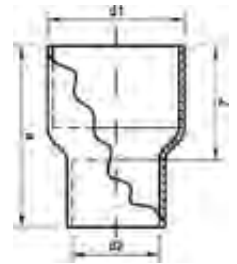
| Article-no. | Dimension d x G | Bag | Box | EAN code | a | z | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 15240G1512 | 15 x 1/2 | 5 | 200 | 4021343027833 | 32 | 16 | 24 |
| 15240G1534 | 15 x 3/4 | 5 | 120 | 4021343027840 | 46 | 26 | 30 |
| 15240G1812 | 18 x 1/2 | 5 | 170 | 4021343127458 | 34 | 15 | 24 |
| 15240G1834 | 18 x 3/4 | 5 | 120 | 4021343118081 | 40 | 22 | 30 |
| 15240G2212 | 22 x 1/2 | 5 | 130 | 4021343181054 | 47 | 23 | 24 |
| 15240G2234 | 22 x 3/4 | 5 | 120 | 4021343027857 | 39 | 17 | 30 |
| 15240G221 | 22 x 1 | 5 | 100 | 4021343118104 | 40 | 22 | 38 |



Catalog-no. and -description

5243 – Reducer

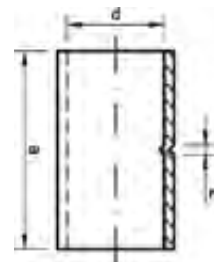
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|------|---------------|----|----|
| 1524386 | 8a x 6 | 10 | 3000 | 4021343029745 | 18 | 11 |
| 15243106 | 10a x 6 | 10 | 3000 | 4021343028830 | 20 | 13 |
| 15243108 | 10a x 8 | 10 | 3000 | 4021343028847 | 18 | 10 |
| 15243126 | 12a x 6 | 10 | 2000 | 4021343028915 | 23 | 16 |
| 15243128 | 12a x 8 | 10 | 2000 | 4021343028922 | 22 | 14 |
| 152431210 | 12a x 10 | 10 | 2000 | 4021343028908 | 21 | 12 |
| 152431410 | 14a x 10 | 10 | 1300 | 4021343028977 | 24 | 15 |
| 152431412 | 14a x 12 | 10 | 1200 | 4021343028984 | 24 | 14 |
| 15243158 | 15a x 8 | 10 | 1500 | 4021343029028 | 26 | 18 |
| 152431510 | 15a x 10 | 10 | 1300 | 4021343028991 | 25 | 16 |
| 152431512 | 15a x 12 | 10 | 1200 | 4021343029004 | 26 | 16 |
| 152431514 | 15a x 14 | 10 | 1000 | 4021343029011 | 27 | 16 |
| 152431610 | 16a x 10 | 10 | 1200 | 4021343029059 | 27 | 18 |
| 152431612 | 16a x 12 | 10 | 1100 | 4021343029066 | 27 | 17 |
| 152431614 | 16a x 14 | 10 | 1000 | 4021343029073 | 28 | 16 |
| 152431615 | 16a x 15 | 10 | 1000 | 4021343029080 | 27 | 15 |
| 152431810 | 18a x 10 | 10 | 1000 | 4021343029097 | 29 | 20 |
| 152431812 | 18a x 12 | 10 | 800 | 4021343029103 | 29 | 19 |
| 152431814 | 18a x 14 | 10 | 800 | 4021343029110 | 31 | 19 |
| 152431815 | 18a x 15 | 10 | 800 | 4021343029127 | 31 | 19 |
| 152431816 | 18a x 16 | 10 | 800 | 4021343029134 | 30 | 18 |
| 152432014 | 20a x 14 | 10 | 600 | 4021343117893 | 33 | 23 |
| 152432018 | 20a x 18 | 10 | 500 | 4021343117916 | 34 | 21 |
| 152432210 | 22a x 10 | 10 | 600 | 4021343029158 | 35 | 26 |
| 152432212 | 22a x 12 | 10 | 600 | 4021343029165 | 35 | 25 |
| 152432214 | 22a x 14 | 10 | 550 | 4021343029172 | 36 | 24 |
| 152432215 | 22a x 15 | 10 | 550 | 4021343029189 | 36 | 24 |
| 152432216 | 22a x 16 | 10 | 550 | 4021343029196 | 35 | 24 |
| 152432218 | 22a x 18 | 10 | 500 | 4021343029202 | 37 | 23 |
| 152432220 | 22a x 20 | 10 | 450 | 4021343117923 | | |
| 152432812 | 28a x 12 | 10 | 300 | 4021343029264 | 43 | 33 |
| 152432814 | 28a x 14 | 10 | 300 | 4021343029271 | 44 | 32 |
| 152432815 | 28a x 15 | 10 | 300 | 4021343029288 | 41 | 29 |
| 152432816 | 28a x 16 | 10 | 300 | 4021343029295 | 42 | 30 |
| 152432818 | 28a x 18 | 10 | 300 | 4021343029301 | 43 | 30 |
| 152432820 | 28a x 20 | 10 | 280 | 4021343194399 | 43 | 27 |
| 152432822 | 28a x 22 | 10 | 280 | 4021343029318 | 44 | 27 |
| 152433218 | 32a x 18 | 10 | 200 | 4021343029325 | 47 | 33 |
| 152433222 | 32a x 22 | 10 | 200 | 4021343029349 | 48 | 31 |
| 152433228 | 32a x 28 | 10 | 160 | 4021343029356 | 48 | 29 |
| 152433515 | 35a x 15 | 10 | 180 | 4021343029370 | 52 | 40 |
| 152433518 | 35a x 18 | 10 | 180 | 4021343029387 | 51 | 38 |
| 152433522 | 35a x 22 | 10 | 180 | 4021343029394 | 52 | 36 |
| 152433528 | 35a x 28 | 10 | 140 | 4021343029400 | 53 | 34 |
| 152433628 | 36a x 28 | 10 | 170 | 4021343117961 | 53 | 34 |
| 152434028 | 40a x 28 | | 140 | 4021343029417 | 58 | 27 |
| 152434032 | 40a x 32 | | 120 | 4021343117978 | 57 | 35 |
| 152434036 | 40a x 36 | | 120 | 4021343177385 | 59 | 34 |



Catalog-no. and -description

5243 – Reducer (continued)

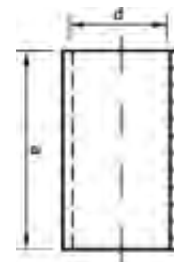
| Article-no. | Dimension d1 x d2 | Bag | Box | EAN code | a | z |
|-------------|----------------------|-----|-----|---------------|-----|----|
| 152434215 | 42a x 15 | | 145 | 4021343029424 | 62 | 49 |
| 152434218 | 42a x 18 | | 145 | 4021343029431 | 59 | 46 |
| 152434222 | 42a x 22 | | 140 | 4021343029448 | 61 | 44 |
| 152434228 | 42a x 28 | | 120 | 4021343029455 | 62 | 43 |
| 152434232 | 42a x 32 | | 100 | 4021343181191 | 60 | 38 |
| 152434235 | 42a x 35 | | 100 | 4021343029462 | 62 | 38 |
| 152435232 | 52a x 32 | | 60 | 4021343220159 | 69 | 47 |
| 152435422 | 54a x 22 | | 70 | 4021343029493 | 74 | 57 |
| 152435428 | 54a x 28 | | 60 | 4021343029509 | 75 | 55 |
| 152435435 | 54a x 35 | | 55 | 4021343029516 | 78 | 54 |
| 152435442 | 54a x 42 | | 50 | 4021343029523 | 79 | 51 |
| 152436435 | 64a x 35 | | 60 | 4021343029530 | 79 | 55 |
| 152436442 | 64a x 42 | | 60 | 4021343029547 | 79 | 51 |
| 152436454 | 64a x 54 | | 60 | 4021343029554 | 77 | 44 |
| 152436735 | 66,7a x 35 | | 48 | 4021343029578 | 81 | 57 |
| 152436742 | 66,7a x 42 | | 48 | 4021343029585 | 81 | 53 |
| 152436754 | 66,7a x 54 | | 48 | 4021343029592 | 80 | 47 |
| 152437054 | 70a x 54 | | 48 | 4021343029615 | 81 | 48 |
| 152437064 | 70a x 64 | | 30 | 4021343029639 | 77 | 43 |
| 152437635 | 76,1a x 35 | | 48 | 4021343029646 | 86 | 61 |
| 152437642 | 76,1a x 42 | | 50 | 4021343029653 | 86 | 58 |
| 152437654 | 76,1a x 54 | | 50 | 4021343029660 | 85 | 52 |
| 152437664 | 76,1a x 64 | | 50 | 4021343029677 | 81 | 48 |
| 152437667 | 76,1a x 66,7 | | 40 | 4021343029684 | 81 | 46 |
| 152437670 | 76,1a x 70 | | 24 | 4021343029691 | 80 | 44 |
| 152438054 | 80a x 54 | | 36 | 4021343029707 | 89 | 56 |
| 152438064 | 80a x 64 | | 36 | 4021343029714 | 85 | 51 |
| 152438067 | 80a x 66,7 | | 36 | 4021343124662 | 85 | 50 |
| 152438076 | 80a x 76,1 | | 28 | 4021343029738 | 78 | 43 |
| 152438954 | 88,9a x 54 | | 22 | 4021343029752 | 95 | 62 |
| 152438964 | 88,9a x 64 | | 22 | 4021343029769 | 91 | 57 |
| 152438976 | 88,9a x 76,1 | | 21 | 4021343029776 | 86 | 51 |
| 1524310854 | 108a x 54 | | 12 | 4021343028854 | 116 | 83 |
| 1524310864 | 108a x 64 | | 10 | 4021343028861 | 113 | 78 |
| 1524310876 | 108a x 76,1 | | 10 | 4021343028885 | 108 | 72 |
| 1524310889 | 108a x 88,9 | | 10 | 4021343028892 | 105 | 66 |
| 1524313376 | 133a x 76,1 | | 12 | 4021343028953 | 122 | 89 |
| 1524313389 | 133a x 88,9 | | 12 | 4021343028960 | 108 | 71 |
| 15243133108 | 133a x 108 | | 10 | 4021343028939 | 105 | 58 |
| 15243159108 | 159a x 108 | | 3 | 4021343029035 | 125 | 77 |
| 15243159133 | 159a x 133 | | 3 | 4021343029042 | 120 | 70 |



Catalog-no. and -description

5270 – Coupling

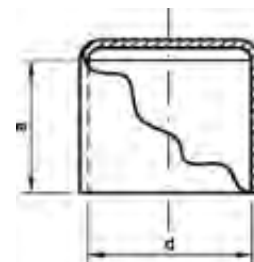
| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|------|---------------|-----|----|
| 152706 | 6 | 10 | 3500 | 4021343030253 | 16 | 1 |
| 152708 | 8 | 10 | 3000 | 4021343030307 | 18 | 1 |
| 1527010 | 10 | 10 | 1700 | 4021343030062 | 20 | 1 |
| 1527012 | 12 | 10 | 1500 | 4021343030093 | 22 | 2 |
| 1527014 | 14 | 10 | 1200 | 4021343030116 | 26 | 2 |
| 1527015 | 15 | 10 | 1000 | 4021343030123 | 26 | 2 |
| 1527016 | 16 | 10 | 1000 | 4021343030147 | 26 | 2 |
| 1527018 | 18 | 10 | 700 | 4021343030154 | 30 | 2 |
| 1527020 | 20 | 10 | 400 | 4021343117992 | 33 | 2 |
| 1527022 | 22 | 10 | 400 | 4021343030161 | 35 | 2 |
| 1527025 | 25 | 10 | 300 | 4021343030178 | 33 | 2 |
| 1527028 | 28 | 10 | 200 | 4021343030185 | 41 | 2 |
| 1527032 | 32 | | 200 | 4021343030192 | 44 | 2 |
| 1527035 | 35 | | 170 | 4021343030208 | 51 | 2 |
| 1527036 | 36 | | 150 | 4021343163111 | 52 | 2 |
| 1527040 | 40 | | 100 | 4021343030215 | 56 | 3 |
| 1527042 | 42 | | 90 | 4021343030222 | 61 | 3 |
| 1527052 | 52 | | 50 | 4021343030239 | 70 | 3 |
| 1527054 | 54 | | 45 | 4021343030246 | 71 | 3 |
| 1527064 | 64 | | 30 | 4021343030260 | 71 | 3 |
| 1527067 | 66,7 | | 36 | 4021343030277 | 73 | 3 |
| 1527070 | 70 | | 30 | 4021343030284 | 73 | 3 |
| 1527076 | 76,1 | | 28 | 4021343030291 | 73 | 3 |
| 1527080 | 80 | | 24 | 4021343030314 | 77 | 3 |
| 1527089 | 88,9 | | 12 | 4021343030321 | 81 | 3 |
| 15270108 | 108 | | 6 | 4021343030086 | 101 | 3 |
| 15270133 | 133 | | 12 | 4021343030109 | 82 | 12 |
| 15270159 | 159 | | 6 | 4021343030130 | 112 | 12 |



Catalog-no. and -description

5270S – Slip coupling

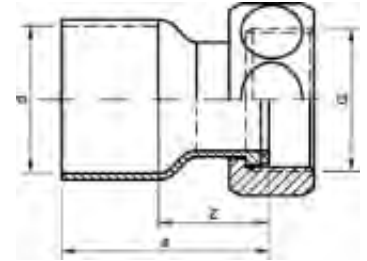
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|------|---------------|----|
| 15270S12 | 12 | 10 | 1500 | 4021343029974 | 22 |
| 15270S14 | 14 | 10 | 1200 | 4021343124648 | 24 |
| 15270S15 | 15 | 10 | 1000 | 4021343029981 | 26 |
| 15270S18 | 18 | 10 | 800 | 4021343030000 | 30 |
| 15270S22 | 22 | 10 | 400 | 4021343030017 | 35 |
| 15270S28 | 28 | 10 | 250 | 4021343030024 | 40 |
| 15270S35 | 35 | | 170 | 4021343030031 | 51 |
| 15270S42 | 42 | | 85 | 4021343030048 | 60 |
| 15270S54 | 54 | | 45 | 4021343030055 | 70 |



Catalog-no. and -description

5301 – Endcap

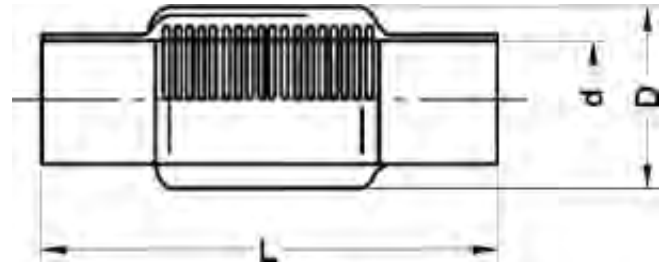
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|------|---------------|----|
| 153018 | 8 | 10 | 3000 | 4021343192623 | 7 |
| 1530110 | 10 | 10 | 3000 | 4021343030444 | 9 |
| 1530112 | 12 | 10 | 2500 | 4021343030468 | 9 |
| 1530114 | 14 | 10 | 2000 | 4021343030475 | 11 |
| 1530115 | 15 | 10 | 1500 | 4021343030482 | 11 |
| 1530116 | 16 | 10 | 1200 | 4021343030499 | 11 |
| 1530118 | 18 | 10 | 1000 | 4021343030505 | 13 |
| 1530122 | 22 | 10 | 800 | 4021343030512 | 16 |
| 1530128 | 28 | 10 | 400 | 4021343030529 | 19 |
| 1530135 | 35 | 10 | 250 | 4021343030536 | 24 |
| 1530142 | 42 | | 150 | 4021343030543 | 28 |
| 1530154 | 54 | | 90 | 4021343030550 | 33 |
| 1530164 | 64 | | 60 | 4021343126888 | 34 |
| 1530167 | 66,7 | | 60 | 4021343030574 | 35 |
| 1530176 | 76 | | 40 | 4021343030598 | 35 |
| 1530189 | 88,9 | | 35 | 4021343126895 | 39 |
| 15301108 | 108 | | 12 | 4021343030451 | 49 |



Catalog-no. and -description

5359g – Straight connector

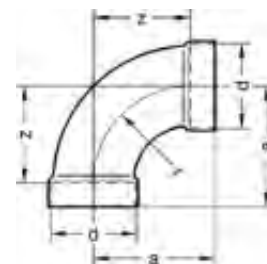
| Article-no. | Dimension d x G | Bag | Box | EAN code | a | z | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 153591212 | 12 x 1/2 | 5 | 200 | 4021343123948 | 29 | 15 | 24 |
| 153591412 | 14 x 1/2 | 5 | 200 | 4021343123962 | 28 | 11 | 24 |
| 153591434 | 14 x 3/4 | 5 | 130 | 4021343123979 | 38 | 25 | 30 |
| 153591512 | 15 x 1/2 | 5 | 200 | 4021343123986 | 28 | 11 | 24 |
| 153591534 | 15 x 3/4 | 5 | 130 | 4021343123993 | 37 | 20 | 30 |
| 153591612 | 16 x 1/2 | 5 | 200 | 4021343124006 | 27 | 10 | 24 |
| 153591634 | 16 x 3/4 | 5 | 100 | 4021343124013 | 37 | 20 | 30 |
| 153591834 | 18 x 3/4 | 5 | 110 | 4021343124020 | 36 | 17 | 30 |
| 153592234 | 22 x 3/4 | 5 | 110 | 4021343124051 | 35 | 13 | 30 |
| 15359221 | 22 x 1 | 5 | 80 | 4021343124044 | 36 | 19 | 38 |



Catalog-no. and -description

5872 – Expansion coupling

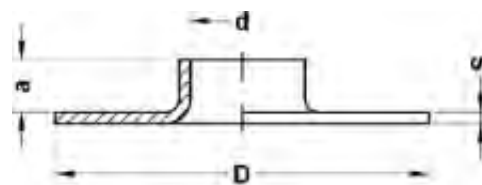
| Article-no. | Dimension d | Bag | Box | EAN code | L | D |
|-------------|----------------|-----|-----|---------------|----|----|
| 1587215 | 15 | 5 | 80 | 4021343031533 | 68 | 24 |
| 1587218 | 18 | 5 | 60 | 4021343031557 | 73 | 27 |
| 1587222 | 22 | 5 | 50 | 4021343031564 | 75 | 33 |
| 1587228 | 28 | 5 | 40 | 4021343031571 | 85 | 38 |
| 1587235 | 35 | 5 | 30 | 4021343031588 | 97 | 48 |



Catalog-no. and -description

3KM – Short bend for brazing 90°

| Article-no. | Dimension d | Bag | Box | EAN code | a | z |
|-------------|----------------|-----|-----|---------------|-----|-----|
| 13KM54 | 54 | | 30 | 4021343009167 | 65 | 55 |
| 13KM64 | 64 | | 35 | 4021343009174 | 77 | 67 |
| 13KM76 | 76,1 | | 20 | 4021343009198 | 91 | 81 |
| 13KM89 | 88,9 | | 12 | 4021343009211 | 107 | 97 |
| 13KM108 | 108 | | 6 | 4021343009112 | 130 | 120 |

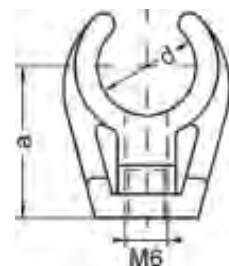


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à braser
for brazing

Catalog-no. and -description

WBS H – Slip-on collar for brazing

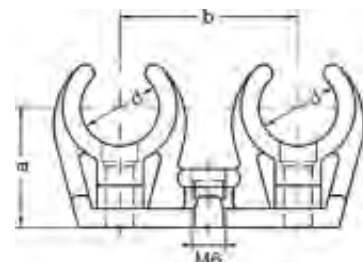
| Article-no. | Dimension d x s | Bag | Box | EAN code | a | D |
|-------------|--------------------|-----|-----|---------------|----|-----|
| 1WBS2215H | 22 x 1,5 | | 300 | 4021343002878 | 12 | 58 |
| 1WBS2815H | 28 x 1,5 | | 300 | 4021343002915 | 15 | 68 |
| 1WBS3515H | 35 x 1,5 | | 200 | 4021343002939 | 17 | 78 |
| 1WBS4215H | 42 x 1,5 | | 100 | 4021343002953 | 17 | 88 |
| 1WBS422H | 42 x 2 | | 100 | 4021343002977 | 17 | 88 |
| 1WBS542H | 54 x 2 | | 80 | 4021343002991 | 17 | 102 |
| 1WBS642H | 64 x 2 | | 50 | 4021343003011 | 20 | 122 |
| 1WBS672H | 66,7 x 2 | | 50 | 4021343003035 | 20 | 122 |
| 1WBS702H | 70 x 2 | | 50 | 4021343003042 | 20 | 122 |
| 1WBS762H | 76,1 x 2 | | 45 | 4021343003066 | 20 | 122 |
| 1WBS802H | 80 x 2 | | 40 | 4021343003080 | 20 | 138 |
| 1WBS892H | 88,9 x 2 | | 40 | 4021343003103 | 20 | 138 |
| 1WBS1042H | 104 x 2 | | 20 | 4021343002687 | 20 | 158 |
| 1WBS10825H | 108 x 2,5 | | 20 | 4021343002717 | 23 | 158 |
| 1WBS1333H | 133 x 3 | | 12 | 4021343002748 | 23 | 188 |
| 1WBS1593H | 159 x 3 | | 10 | 4021343002809 | 26 | 212 |
| 1WBS2193H | 219 x 3 | | 10 | 4021343002854 | 26 | 272 |



Catalog-no. and -description

9826c – Clips, single with brass thread

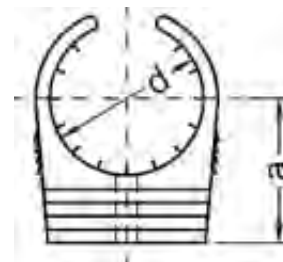
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|------|---------------|----|
| 798266 | 6 | 25 | 5000 | 4021343124303 | 13 |
| 798268 | 8 | 25 | 4500 | 4021343124310 | 14 |
| 7982610 | 10 | 25 | 4000 | 4021343124228 | 17 |
| 7982612 | 12 | 25 | 2500 | 4021343124235 | 18 |
| 798261415 | 14/ 15 | 25 | 2000 | 4021343124242 | 19 |
| 798261618 | 16/ 18 | 25 | 1750 | 4021343124259 | 23 |
| 7982622 | 22 | 25 | 1250 | 4021343124266 | 28 |
| 7982628 | 28 | 25 | 700 | 4021343124273 | 34 |
| 7982635 | 35 | 25 | 600 | 4021343124280 | 38 |
| 7982642 | 42 | 25 | 500 | 4021343124297 | 42 |



Catalog-no. and -description

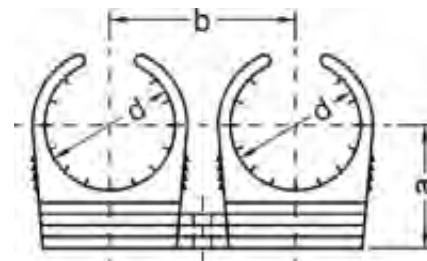
9827c – Clips, double with brass thread

| Article-no. | Dimension d | Bag | Box | EAN code | a | b |
|-------------|----------------|-----|------|---------------|----|----|
| 798278 | 8 | 25 | 2400 | 4021343093388 | 14 | 26 |
| 7982710 | 10 | 25 | 1250 | 4021343124327 | 17 | 28 |
| 7982712 | 12 | 25 | 1000 | 4021343093371 | 18 | 33 |
| 798271415 | 14/ 15 | 25 | 700 | 4021343124334 | 19 | 36 |
| 798271618 | 16/ 18 | 25 | 500 | 4021343124341 | 23 | 38 |
| 7982722 | 22 | 25 | 350 | 4021343124358 | 28 | 42 |
| 7982728 | 28 | 25 | 250 | 4021343124365 | 34 | 50 |



Catalog-no. and -description
9828c – Clips, single

| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|------|---------------|----|
| 798286 | 6 | 25 | 5000 | 4021343093487 | 11 |
| 79828810 | 8-10 | 25 | 4000 | 4021343093494 | 16 |
| 798281216 | 12-16 | 25 | 2000 | 4021343093395 | 19 |
| 798281822 | 18-22 | 25 | 1200 | 4021343093418 | 23 |
| 7982828 | 28 | 25 | 700 | 4021343093449 | 27 |
| 7982835 | 35 | 25 | 600 | 4021343093456 | 37 |
| 7982842 | 42 | 25 | 500 | 4021343093463 | 42 |



Catalog-no. and -description
9829c – Clips, double

| Article-no. | Dimension d | Bag | Box | EAN code | a | b |
|-------------|----------------|-----|------|---------------|----|----|
| 79829810 | 8-10 | 25 | 1250 | 4021343093562 | 16 | 28 |
| 798291216 | 12-16 | 25 | 1000 | 4021343093500 | 19 | 34 |
| 798291822 | 18-22 | 25 | 750 | 4021343093517 | 23 | 39 |
| 7982928 | 28 | 25 | 500 | 4021343093524 | 27 | 48 |



Catalog-no. and -description

DCU – Centellen sealing element for copper, gunmetal and stainless steel union, approval according to DIN 3535 part 6, DIN DVGW,

- produced without asbestos
- temperature-resistant up to 200°C max.
- application areas: water, steam, alcohols, glycols, oils on a hydrocarbon basis, inflammable gases

| Article-no. | Dimension D x d x s* | suitable for | Box | EAN code |
|-------------|-------------------------|--------------|-----|---------------|
| 1DCU38 | 14 x 8 x 2 | nut 3/8 | 800 | 4021343000867 |
| 1DCU12 | 18 x 11 x 2 | nut 1/2 | 800 | 4021343000737 |
| 1DCU58 | 20 x 10 x 2 | nut 5/8 | 600 | 4021343000904 |
| 1DCU34 | 24 x 17 x 2 | nut 3/4 | 600 | 4021343000850 |
| 1DCU1 | 30 x 21 x 2 | nut 1 | 400 | 4021343000706 |
| 1DCU114 | 38 x 27 x 2 | nut 1 1/4 | 400 | 4021343000720 |
| 1DCU112 | 44 x 32 x 2 | nut 1 1/2 | 400 | 4021343000713 |
| 1DCU134 | 50 x 37 x 2 | nut 1 3/4 | 320 | 4021343000744 |
| 1DCU2 | 55 x 42 x 2 | nut 2 | 240 | 4021343000775 |
| 1DCU214 | 62 x 46 x 2 | nut 2 1/4 | 200 | 4021343000799 |
| 1DCU238 | 65 x 55 x 2 | nut 2 3/8 | 200 | 4021343000812 |
| 1DCU212 | 72 x 55 x 2 | nut 2 1/2 | 160 | 4021343000782 |
| 1DCU234 | 78 x 60 x 2 | nut 2 3/4 | 120 | 4021343000805 |
| 1DCU3 | 85 x 70 x 2 | nut 3 | 120 | 4021343000836 |
| 1DCU312 | 97 x 75 x 2 | nut 3 1/2 | 80 | 4021343000843 |

* Outer diameter x inner diameter x thickness

TRADITIONAL PIPING

Soldering accessories



HK / B / 0592 / 02 / 99



DV-0101A02046
DV-0101AT2243
DV-0101AT2245



POCC DE.AO.H06712
POCC DE.AO.H06713
POCC DE.AO.H06714
POCC DE.AO.H06715



AT / 2001-02-1068-02



Catalog-no. and -description

4933 – Soft solder no. 3 S-Sn97Cu3 EN 29453, diameter 2/3 mm, melting area 230°-250° C, spool of 250 g

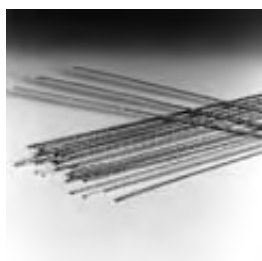
| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84933 | 3 mm | | 60 | 4021343093661 |
| 84933.2 | 2,0 mm | | 60 | 4021343135750 |



Catalog-no. and -description

4934 – Soft solder no. 4 S-Sn97Ag3 EN29453, diameter 3 mm, melting area 221°-240°, spool of 250 g

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84934 | 3 mm | | 60 | 4021343093678 |



Catalog-no. and -description

4936 – Hard solder CP 105 (L-AG2P) - EN 1044, diameter 2 mm, melting area 650° bis 810° C, bundle of 1 kg

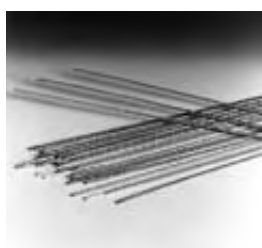
| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84936 | 2 mm | | 1 | 4021343093692 |



Catalog-no. and -description

4937 – Hard solder AG 104 (L-Ag45Sn) - EN 1044, diameter 2 mm, melting area 640°-680° C, suitable in connection with no. 4948, bundle of 70 g

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84937 | 2 mm | | 1 | 4021343093708 |



Catalog-no. and -description

4939 – Solder CP 203 (L-CuP6) - EN 1044, diameter 2 mm, melting area 710°-890° C, bundle of 1 kg

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84939 | 2 mm | | 1 | 4021343093722 |



Catalog-no. and -description

4943 – Paste for soft-soldering, water-soluble, EN 29454-3.1.1.C with soldering alloy S-Sn97Cu3, only suitable with solder no. 3, bottle of 250g

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84943 | | | 19 | 4021343093753 |



Catalog-no. and -description

4948 – Flux for hard soldering, EN 1045, type FH 10, bottle of 100 g

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84948 | | | 19 | 4021343093760 |



Catalog-no. and -description

4941 – Flux for soft-soldering, water-soluble, EN 29454 – 3.1.1.C, tube of 70 g

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84941 | | | 50 | 4021343093746 |



Catalog-no. and -description

4974 – Cleaning brush with handle

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 8497412 | 12 | | 180 | 4021343125447 |
| 8497415 | 15 | | 180 | 4021343125454 |
| 8497418 | 18 | | 150 | 4021343125461 |
| 8497422 | 22 | | 100 | 4021343125478 |
| 8497428 | 28 | | 80 | 4021343129940 |
| 8497435 | 35 | | 60 | 4021343129957 |



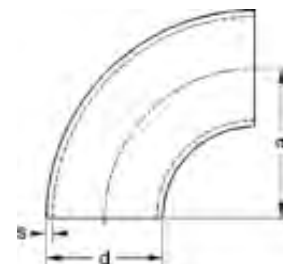
Catalog-no. and -description

0961 – Cleaning pads

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 80961 | 60 x 130 | | 360 | 4021343093630 |

TRADITIONAL PIPING

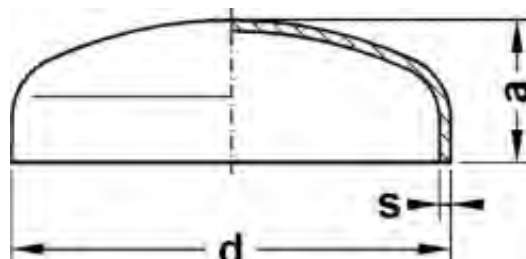
Copper fittings for brazing



Catalog-no. and -description

3K – Welding bend 90°

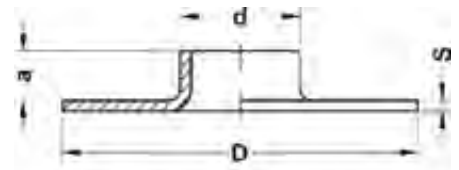
| Article-no. | Dimension d x s | Bag | Box | EAN code | a |
|-------------|--------------------|-----|-----|---------------|-----|
| 13K4215 | 42 x 1,5 | | 60 | 4021343009358 | 48 |
| 13K542 | 54 x 2 | | 30 | 4021343009396 | 72 |
| 13K642 | 64 x 2 | | 40 | 4021343009402 | 83 |
| 13K762 | 76,1 x 2 | | 20 | 4021343009426 | 95 |
| 13K892 | 88,9 x 2 | | 12 | 4021343009440 | 115 |
| 13K10825 | 108 x 2,5 | | 6 | 4021343009235 | 143 |



Catalog-no. and -description

KB – Welding cap

| Article-no. | Dimension d x s | Bag | Box | EAN code | a |
|-------------|--------------------|-----|-----|---------------|----|
| 1KB3515 | 35 x 1,5 | | 300 | 4021343001901 | 14 |
| 1KB4215 | 42 x 1,5 | | 250 | 4021343001918 | 17 |
| 1KB422 | 42 x 2 | | 250 | 4021343001925 | 17 |
| 1KB542 | 54 x 2 | | 200 | 4021343001932 | 21 |
| 1KB642 | 64 x 2 | | 150 | 4021343001949 | 20 |
| 1KB762 | 76,1 x 2 | | 100 | 4021343001963 | 26 |
| 1KB802 | 80 x 2 | | 90 | 4021343001970 | 26 |
| 1KB892 | 88,9 x 2 | | 80 | 4021343001987 | 28 |
| 1KB1042 | 104 x 2 | | 50 | 4021343001802 | 30 |
| 1KB10825 | 108 x 2,5 | | 40 | 4021343001819 | 32 |
| 1KB1333 | 133 x 3 | | 30 | 4021343001833 | 36 |
| 1KB2193 | 219 x 3 | | 5 | 4021343001871 | 52 |



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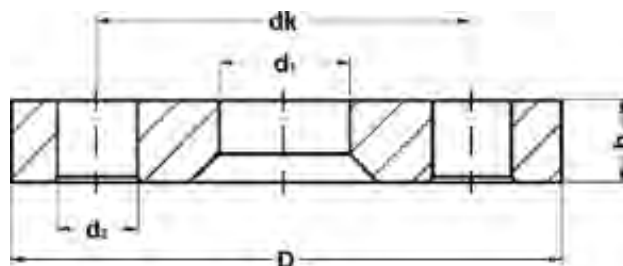
Catalog-no. and -description

WBS V – Slip-on collar for welding according to EN 1092-1, material: copper

| Article-no. | Dimension d x s | Bag | Box | EAN code | a | D |
|-------------|--------------------|-----|---------------|----------|-----|---|
| 1WBS2215V | 22 x 1,5 | 300 | 4021343002885 | 12 | 58 | |
| 1WBS2815V | 28 x 1,5 | 300 | 4021343002922 | 15 | 68 | |
| 1WBS3515V | 35 x 1,5 | 200 | 4021343002946 | 17 | 78 | |
| 1WBS4215V | 42 x 1,5 | 100 | 4021343002960 | 17 | 88 | |
| 1WBS542V | 54 x 2 | 80 | 4021343003004 | 17 | 102 | |
| 1WBS762V | 76,1 x 2 | 45 | 4021343003073 | 20 | 122 | |
| 1WBS892V | 88,9 x 2 | 40 | 4021343003110 | 20 | 138 | |
| 1WBS10825V | 108 x 2,5 | 20 | 4021343002724 | 23 | 158 | |
| 1WBS1333V | 133 x 3 | 12 | 4021343002755 | 23 | 188 | |
| 1WBS1593V | 159 x 3 | 10 | 4021343002816 | 26 | 212 | |
| 1WBS2193V | 219 x 3 | 10 | 4021343002861 | 26 | 272 | |

TRADITIONAL PIPING

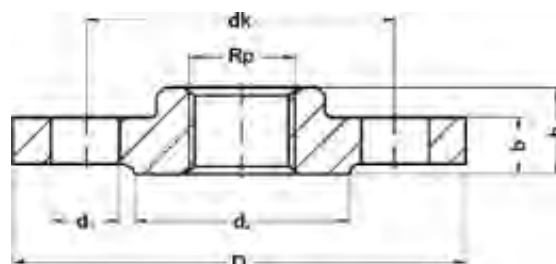
Flanges



Catalog-no. and -description

RG-FL – Loose flange PN 10 for slip-on collars, gunmetal, dimensions according to EN 1092

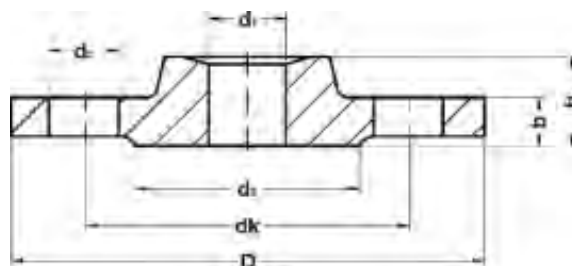
| Article-no. | Dimension DN | Bag | Box | EAN code | b | d1 | d2 | dk | D | Az |
|-------------|-----------------|-----|-----|---------------|----|-----|----|-----|-----|----|
| 1RGFL25 | 25 | | 24 | 4021343002175 | 16 | 33 | 14 | 85 | 115 | 4 |
| 1RGFL32 | 32 | | 16 | 4021343002199 | 16 | 42 | 18 | 100 | 140 | 4 |
| 1RGFL40 | 40 | | 15 | 4021343002205 | 16 | 50 | 18 | 110 | 150 | 4 |
| 1RGFL50 | 50 | | 9 | 4021343002212 | 16 | 62 | 18 | 125 | 165 | 4 |
| 1RGFL65 | 65 | | 9 | 4021343002229 | 16 | 81 | 18 | 145 | 185 | 4 |
| 1RGFL80 | 80 | | 8 | 4021343002236 | 18 | 96 | 18 | 160 | 200 | 4 |
| 1RGFL100 | 100 | | 8 | 4021343002113 | 18 | 119 | 18 | 180 | 220 | 8 |
| 1RGFL125 | 125 | | 5 | 4021343002120 | 18 | 145 | 18 | 210 | 250 | 8 |
| 1RGFL150 | 150 | | 3 | 4021343002144 | 18 | 170 | 23 | 240 | 285 | 8 |



Catalog-no. and -description

RG-GF – Threaded flange PN 16, gunmetal, dimensions according to EN 1092

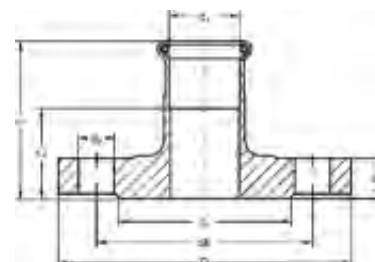
| Article-no. | Dimension DN x Rp | Bag | Box | EAN code | b | d1 | d2 | h | dk | D | Az |
|-------------|----------------------|-----|-----|---------------|----|----|-----|----|-----|-----|----|
| 1RGGF15 | DN 15 / 1/2 | | 28 | 4021343002267 | 14 | 14 | 45 | 20 | 65 | 95 | 4 |
| 1RGGF20 | DN 20 / 3/4 | | 18 | 4021343002281 | 16 | 14 | 58 | 24 | 75 | 105 | 4 |
| 1RGGF25 | DN 25 / 1 | | 16 | 4021343002298 | 16 | 14 | 68 | 24 | 85 | 115 | 4 |
| 1RGGF32 | DN 32 / 1 1/4 | | 9 | 4021343002304 | 16 | 18 | 78 | 26 | 100 | 140 | 4 |
| 1RGGF40 | DN 40 / 1 1/2 | | 8 | 4021343002311 | 16 | 18 | 88 | 26 | 110 | 150 | 4 |
| 1RGGF50 | DN 50 / 2 | | 6 | 4021343002328 | 18 | 18 | 102 | 28 | 125 | 165 | 4 |
| 1RGGF65 | DN 65 / 2 1/2 | | 4 | 4021343002335 | 18 | 18 | 122 | 32 | 145 | 185 | 4 |
| 1RGGF80 | DN 80 / 3 | | 7 | 4021343002342 | 20 | 18 | 138 | 34 | 160 | 200 | 8 |
| 1RGGF100 | DN 100 / 4 | | 5 | 4021343002243 | 20 | 18 | 158 | 38 | 180 | 220 | 8 |



Catalog-no. and -description

RG-LF – Soldering flange PN 16, gunmetal, dimensions according to EN 1092

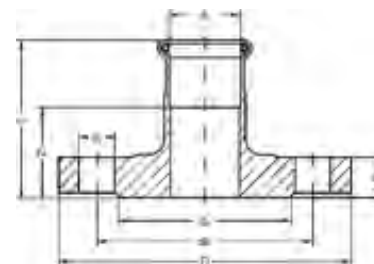
| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | b | d1 | d2 | d3 | h | dk | D | Az |
|-------------|----------------------|-----|-----|---------------|----|-----|----|-----|----|-----|-----|----|
| 1RGLF18 | DN 15 / 18 mm | | 40 | 4021343002397 | 12 | 18 | 14 | 45 | 18 | 65 | 95 | 4 |
| 1RGLF22 | DN 20 / 22 mm | | 24 | 4021343002410 | 12 | 22 | 14 | 58 | 18 | 75 | 105 | 4 |
| 1RGLF28 | DN 25 / 28 mm | | 20 | 4021343002427 | 12 | 28 | 14 | 68 | 18 | 85 | 115 | 4 |
| 1RGLF35 | DN 32 / 35 mm | | 14 | 4021343002434 | 14 | 35 | 18 | 78 | 20 | 100 | 140 | 4 |
| 1RGLF42 | DN 40 / 42 mm | | 12 | 4021343002441 | 14 | 42 | 18 | 88 | 20 | 110 | 150 | 4 |
| 1RGLF54 | DN 50 / 54 mm | | 7 | 4021343002458 | 16 | 54 | 18 | 102 | 22 | 125 | 165 | 4 |
| 1RGLF64 | DN / 64 mm | | 6 | 4021343002465 | 16 | 64 | 18 | 122 | 22 | 145 | 185 | 4 |
| 1RGLF76 | DN 65 / 76,1 mm | | 6 | 4021343002472 | 16 | 76 | 18 | 122 | 22 | 145 | 185 | 4 |
| 1RGLF89 | DN 80 / 88,9 mm | | 10 | 4021343002489 | 18 | 89 | 18 | 138 | 24 | 160 | 200 | 8 |
| 1RGLF108 | DN 100 / 108 mm | | 6 | 4021343002359 | 18 | 108 | 18 | 158 | 26 | 180 | 220 | 8 |
| 1RGLF133 | DN 125 / 133 mm | | 14 | 4021343002366 | 20 | 133 | 18 | 188 | 26 | 210 | 250 | 8 |



Catalog-no. and -description

RG-PF – SANHA®-Press crimping flange for drinking water and heating installation, PN 10/16, female

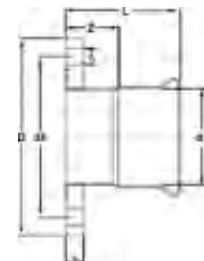
| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | b | d2 | d3 | z | L | dk | D | Az |
|--------------|----------------------|-----|-----|---------------|----|----|-----|----|----|-----|-----|----|
| 1RGPF28 | DN 25 / 28 mm | | 6 | 4021343179754 | 16 | 14 | 68 | 36 | 62 | 85 | 115 | 4 |
| 1RGPF35 | DN 32 / 35 mm | | 4 | 4021343179761 | 16 | 18 | 78 | 30 | 62 | 100 | 140 | 4 |
| 1RGPF42 | DN 40 / 42 mm | | 3 | 4021343179778 | 16 | 18 | 88 | 25 | 63 | 110 | 150 | 4 |
| 1RGPF54 | DN 50 / 54 mm | | 2 | 4021343179785 | 18 | 18 | 102 | 23 | 65 | 125 | 165 | 4 |
| 1RGPF64 | DN / 64 mm | | 2 | 4021343203879 | 18 | 18 | 122 | 24 | 67 | 145 | 185 | 4 |
| 1RGPF67 | DN / 66,7 mm | | 2 | 4021343198878 | 18 | 18 | 122 | 19 | 67 | 145 | 185 | 4 |
| 1RGPF76 | DN 65 / 76,1 mm | | 3 | 4021343176630 | 18 | 18 | 122 | 28 | 78 | 145 | 185 | 4 |
| 1RGPF76_DN80 | DN 80 / 76,1 mm | | 2 | 4021343198885 | 20 | 18 | 122 | 30 | 80 | 160 | 200 | 8 |
| 1RGPF89 | DN 80 / 88,9 mm | | 2 | 4021343176647 | 20 | 18 | 138 | 24 | 80 | 160 | 200 | 8 |
| 1RGPF108 | DN 100 / 108 mm | | 2 | 4021343176654 | 20 | 18 | 158 | 11 | 80 | 180 | 220 | 8 |



Catalog-no. and -description

10-RG-PF – SANHA[®]-Press Gas crimping flange, PN 5, female, for gas installation

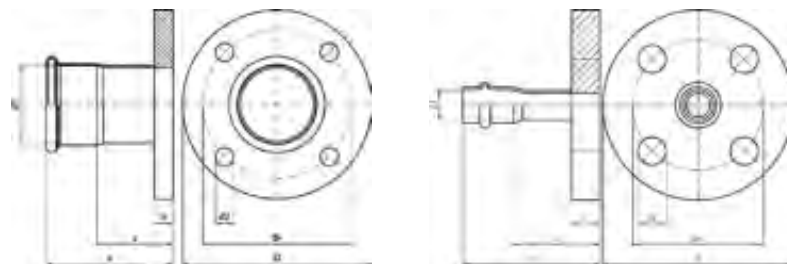
| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | b | d2 | d3 | z | L | dk | D | Az |
|-------------|----------------------|-----|-----|---------------|----|----|-----|----|----|-----|-----|----|
| 110RGPF28 | DN 25 / 28 mm | | 6 | 4021343200311 | 16 | 14 | 68 | 36 | 62 | 85 | 115 | 4 |
| 110RGPF35 | DN 32 / 35 mm | | 4 | 4021343200328 | 16 | 18 | 78 | 30 | 62 | 100 | 140 | 4 |
| 110RGPF42 | DN 40 / 42 mm | | 4 | 4021343204340 | 16 | 18 | 88 | 25 | 63 | 110 | 150 | 4 |
| 110RGPF54 | DN 50 / 54 mm | | 2 | 4021343204357 | 18 | 18 | 102 | 23 | 65 | 125 | 165 | 4 |



Catalog-no. and -description

24-ST-PF – SANHA[®]-Therm crimping flange, female, PN 10/16

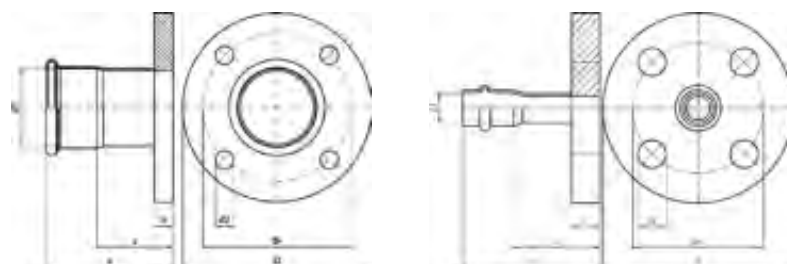
| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | L | z | d2 | dk | b | D | Az |
|----------------|----------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 124STPF67 | DN -- / 66,7 mm | 1 | 2 | 4021343344923 | 103 | 53 | 18 | 145 | 18 | 185 | 4 |
| 124STPF76 | DN 65/ 76,1 mm | | 1 | 4021343333941 | 92 | 41 | 18 | 145 | 18 | 185 | 4 |
| 124STPF89 | DN 80/ 88,9 mm | | 1 | 4021343333958 | 104 | 46 | 18 | 160 | 18 | 200 | 8 |
| 124STPF108 | DN 100/ 108 mm | | 1 | 4021343333965 | 128 | 58 | 18 | 180 | 20 | 225 | 8 |
| 124STPF76_DN80 | DN 80/ 76,1 mm | | 1 | 4021343337338 | 92 | 41 | 18 | 160 | 18 | 200 | 8 |



Catalog-no. and -description

VA-PF – NiroSan®-Press crimping flange for drinking water and heating installation, PN 10/16

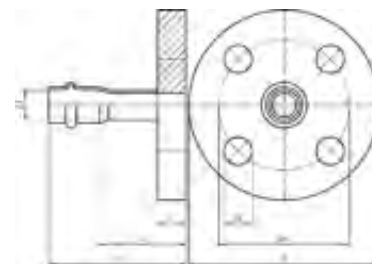
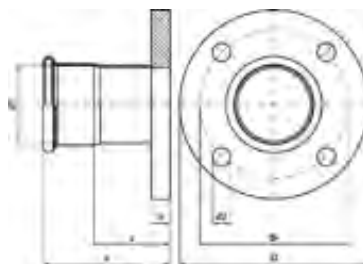
| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | a | z | h | dk | d2 | D | Az |
|-------------|----------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 6VAPF15 | DN 12 / 15 mm | 1 | 25 | 4021343177675 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 6VAPF18 | DN 15 / 18 mm | 1 | 20 | 4021343177699 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 6VAPF22 | DN 20 / 22 mm | 1 | 16 | 4021343177705 | 69 | 40 | 14 | 75 | 14 | 105 | 4 |
| 6VAPF28 | DN 25 / 28 mm | 1 | 14 | 4021343177712 | 75 | 45 | 16 | 85 | 14 | 115 | 4 |
| 6VAPF35 | DN 32 / 35 mm | 1 | 10 | 4021343177729 | 78 | 47 | 16 | 100 | 18 | 140 | 4 |
| 6VAPF42 | DN 40 / 42 mm | 1 | 8 | 4021343177736 | 87 | 48 | 16 | 110 | 18 | 150 | 4 |
| 6VAPF54 | DN 50 / 54 mm | 1 | 5 | 4021343177743 | 100 | 55 | 18 | 125 | 18 | 165 | 4 |
| 6VAPF64 | DN - - / 64 mm | 1 | 4 | 4021343329272 | 93 | 45 | 18 | 125 | 18 | 165 | 4 |
| 6VAPF76 | DN 65 / 76,1 mm | 1 | 2 | 4021343177750 | 124 | 73 | 18 | 145 | 18 | 185 | 4 |
| 6VAPF89 | DN 80 / 88,9 mm | 1 | 2 | 4021343180125 | 137 | 79 | 18 | 160 | 18 | 200 | 8 |
| 6VAPF108 | DN 100 / 108 mm | 1 | 1 | 4021343177767 | 162 | 92 | 20 | 180 | 18 | 220 | 8 |



Catalog-no. and -description

17-VA-PF – NiroSan®-Press Gas crimping flange for gas installation, PN 5, female

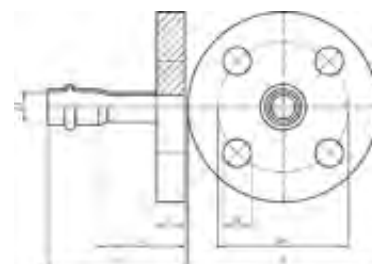
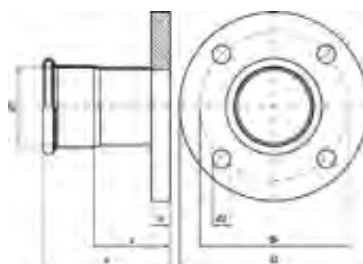
| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | a | z | h | dk | d2 | D | Az |
|-------------|----------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 617VAPF15 | DN 12 / 15 mm | 1 | 25 | 4021343202421 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 617VAPF18 | DN 15 / 18 mm | 1 | 20 | 4021343202438 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 617VAPF22 | DN 20 / 22 mm | 1 | 16 | 4021343202445 | 69 | 40 | 14 | 75 | 14 | 105 | 4 |
| 617VAPF28 | DN 25 / 28 mm | 1 | 14 | 4021343202452 | 75 | 45 | 16 | 85 | 14 | 115 | 4 |
| 617VAPF35 | DN 32 / 35 mm | 1 | 10 | 4021343202469 | 78 | 47 | 16 | 100 | 18 | 140 | 4 |
| 617VAPF42 | DN 40 / 42 mm | 1 | 8 | 4021343202476 | 87 | 48 | 16 | 110 | 18 | 150 | 4 |
| 617VAPF54 | DN 50 / 54 mm | 1 | 5 | 4021343335563 | 100 | 55 | 18 | 125 | 18 | 165 | 4 |
| 617VAPF76 | DN 65 / 76,1 mm | 1 | 2 | 4021343335570 | 124 | 73 | 18 | 145 | 18 | 185 | 4 |
| 617VAPF789 | DN 80 / 88,9 mm | 1 | 2 | 4021343335587 | 137 | 79 | 18 | 160 | 18 | 200 | 8 |
| 617VAPF108 | DN 100 / 108 mm | 1 | 1 | 4021343202483 | 162 | 92 | 20 | 180 | 18 | 220 | 8 |



Catalog-no. and -description

18-VA-PF – NiroSan®-Press Industry crimping flange for industrial and high temperature installation, PN 10/16, female

| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | a | z | h | dk | d2 | D | Az |
|-------------|----------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 618VAPF15 | DN 12 / 15 mm | 1 | 25 | 4021343196072 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 618VAPF18 | DN 15 / 18 mm | 1 | 20 | 4021343196089 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 618VAPF22 | DN 20 / 22 mm | 1 | 16 | 4021343196096 | 69 | 40 | 14 | 75 | 14 | 105 | 4 |
| 618VAPF28 | DN 25 / 28 mm | 1 | 14 | 4021343196102 | 75 | 45 | 16 | 85 | 14 | 115 | 4 |
| 618VAPF35 | DN 32 / 35 mm | 1 | 10 | 4021343196119 | 78 | 47 | 16 | 100 | 18 | 140 | 4 |
| 618VAPF42 | DN 40 / 42 mm | 1 | 8 | 4021343196126 | 87 | 48 | 16 | 110 | 18 | 150 | 4 |
| 618VAPF54 | DN 50 / 54 mm | 1 | 5 | 4021343196133 | 100 | 55 | 18 | 125 | 18 | 165 | 4 |
| 618VAPF76 | DN 65 / 76,1 mm | 1 | 2 | 4021343195877 | 124 | 73 | 18 | 145 | 18 | 185 | 4 |
| 618VAPF89 | DN 80 / 88,9 mm | 1 | 2 | 4021343196140 | 137 | 79 | 18 | 160 | 18 | 200 | 8 |
| 618VAPF108 | DN 100 / 108 mm | 1 | 1 | 4021343196058 | 162 | 92 | 20 | 180 | 18 | 220 | 8 |



Catalog-no. and -description

19-VA-PF – NiroSan®-Press SF crimping flange for silicone-free installations, PN 10/16, female

| Article-no. | Dimension DN x d1 | Bag | Box | EAN code | a | z | h | dk | d2 | D | Az |
|-------------|----------------------|-----|-----|---------------|-----|----|----|-----|----|-----|----|
| 619VAPF15 | DN 12 / 15 mm | 1 | 25 | 4021343192647 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 619VAPF18 | DN 15 / 18 mm | 1 | 20 | 4021343192654 | 65 | 39 | 14 | 65 | 14 | 95 | 4 |
| 619VAPF22 | DN 20 / 22 mm | 1 | 16 | 4021343192661 | 69 | 40 | 14 | 75 | 14 | 105 | 4 |
| 619VAPF28 | DN 25 / 28 mm | 1 | 14 | 4021343192678 | 75 | 45 | 16 | 85 | 14 | 115 | 4 |
| 619VAPF35 | DN 32 / 35 mm | 1 | 10 | 4021343192685 | 78 | 47 | 16 | 100 | 18 | 140 | 4 |
| 619VAPF42 | DN 40 / 42 mm | 1 | 8 | 4021343192692 | 87 | 48 | 16 | 110 | 18 | 150 | 4 |
| 619VAPF54 | DN 50 / 54 mm | 1 | 5 | 4021343192708 | 100 | 55 | 18 | 125 | 18 | 165 | 4 |
| 619VAPF76 | DN 65 / 76,1 mm | 1 | 2 | 4021343192715 | 124 | 73 | 18 | 145 | 18 | 185 | 4 |
| 619VAPF89 | DN 80 / 88,9 mm | 1 | 2 | 4021343192722 | 137 | 79 | 18 | 160 | 18 | 200 | 8 |
| 619VAPF108 | DN 100 / 108 mm | 1 | 1 | 4021343192630 | 162 | 92 | 20 | 180 | 18 | 220 | 8 |



Catalog-no. and -description

FL-D – Flange sealing, asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|-----------------|-----|-----|---------------|
| 1D15 | 15 | 60 | 240 | 4021343001017 |
| 1D20 | 20 | 50 | 200 | 4021343001048 |
| 1D25 | 25 | 40 | 160 | 4021343001093 |
| 1D32 | 32 | 30 | 120 | 4021343001123 |
| 1D40 | 40 | 25 | 100 | 4021343001154 |
| 1D50 | 50 | | 120 | 4021343001161 |
| 1D65 | 65 | | 100 | 4021343001185 |
| 1D80 | 80 | | 80 | 4021343001192 |
| 1D100 | 100 | | 60 | 4021343000935 |
| 1D125 | 125 | | 80 | 4021343000980 |
| 1D150 | 150 | | 60 | 4021343001024 |



Catalog-no. and -description

19-FL-D – Flange sealing, silicone and asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|-----------------|-----|-----|---------------|
| 619FLD15 | 15 | | 240 | 4021343207860 |
| 619FLD20 | 20 | 50 | 200 | 4021343207877 |
| 619FLD25 | 25 | 40 | 160 | 4021343207884 |
| 619FLD32 | 32 | 30 | 120 | 4021343207891 |
| 619FLD40 | 40 | 25 | 100 | 4021343207907 |
| 619FLD50 | 50 | | 120 | 4021343207914 |
| 619FLD65 | 65 | | 100 | 4021343207921 |
| 619FLD80 | 80 | | 80 | 4021343207938 |
| 619FLD100 | 100 | | 60 | 4021343207945 |

TRADITIONAL PIPING

Gunmetal threaded fittings

Series 3000

for drinking water installations
according to DIN 1988 and
gas installations according to
TRGI 86 with threads
according to EN 10226 and
measures following EN 10242



1005R01F4P5-bst



DW-7401B00046



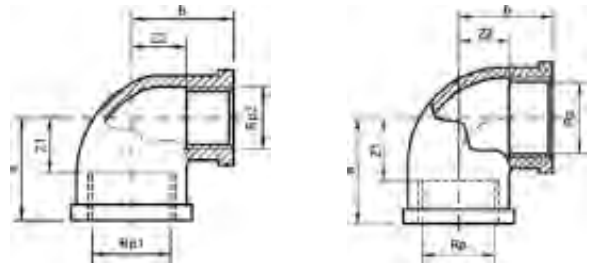
POCC DE.AIO.H08800



W / 483 /92



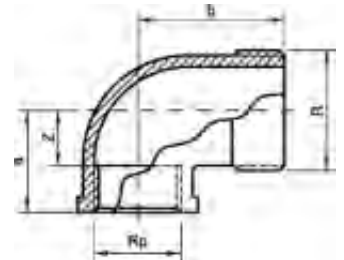
PN - EN 1254-4:2004



Catalog-no. and -description

3090 – Female elbow 90°

| Article-no. | Dimension Rp1 x Rp2 | Bag | Box | EAN code | a | b | z | z1 | z2 |
|-------------|------------------------|-----|-----|---------------|----|----|----|----|----|
| 1309014 | 1/4 | 10 | 300 | 4021343009549 | 21 | 11 | | | |
| 1309038 | 3/8 | 10 | 150 | 4021343009600 | 25 | 15 | | | |
| 1309012 | 1/2 | 10 | 100 | 4021343009518 | 28 | 15 | | | |
| 1309034 | 3/4 | 10 | 70 | 4021343009587 | 33 | 18 | | | |
| 130901 | 1 | 10 | 40 | 4021343009457 | 38 | 21 | | | |
| 13090114 | 1 1/4 | 10 | 20 | 4021343009495 | 44 | 25 | | | |
| 13090112A | 1 1/2 | 15 | 15 | 4021343009471 | 50 | 31 | | | |
| 130902 | 2 | 10 | 10 | 4021343009556 | 57 | 34 | | | |
| 13090212 | 2 1/2 | 5 | 5 | 4021343009563 | 70 | 43 | | | |
| 130903 | 3 | 2 | 2 | 4021343009570 | 78 | 53 | | | |
| 130903412 | 3/4 x 1/2 | 10 | 100 | 4021343009594 | 29 | 30 | 14 | 17 | |
| 13090134 | 1 x 3/4 | 10 | 50 | 4021343009532 | 34 | 35 | 17 | 20 | |
| 130901141 | 1 1/4 x 1 | 10 | 20 | 4021343009501 | 40 | 42 | 21 | 25 | |



Catalog-no. and -description

3092 – Male elbow 90°

| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | b | z |
|-------------|---------------------|-----|-----|---------------|----|-----|----|
| 1309214 | 1/4 | 10 | 400 | 4021343009655 | 21 | 28 | 11 |
| 1309238 | 3/8 | 10 | 250 | 4021343009709 | 25 | 32 | 15 |
| 1309212 | 1/2 | 10 | 120 | 4021343009648 | 28 | 37 | 15 |
| 1309234 | 3/4 | 10 | 80 | 4021343009693 | 33 | 43 | 18 |
| 130921 | 1 | 10 | 30 | 4021343009617 | 38 | 52 | 21 |
| 13092114 | 1 1/4 | 10 | 20 | 4021343009631 | 45 | 60 | 26 |
| 13092112 | 1 1/2 | 16 | 16 | 4021343009624 | 50 | 65 | 31 |
| 130922 | 2 | 10 | 10 | 4021343009662 | 58 | 74 | 34 |
| 13092212 | 2 1/2 | 4 | 4 | 4021343009679 | 69 | 98 | 42 |
| 130923 | 3 | 3 | 3 | 4021343009686 | 78 | 115 | 48 |



Catalog-no. and -description

3098 – Elbow union, male/female, conical sealing

| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | b | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|----|----|-----|-----|
| 1309838 | 3/8 | 5 | 150 | 4021343009785 | 45 | 23 | 14 | 24 | 22 |
| 1309812 | 1/2 | 5 | 100 | 4021343009747 | 55 | 22 | 11 | 30 | 26 |
| 1309834 | 3/4 | 5 | 50 | 4021343009778 | 66 | 26 | 13 | 37 | 32 |
| 130981 | 1 | 5 | 20 | 4021343009716 | 79 | 39 | 23 | 46 | 40 |
| 13098114 | 1 1/4 | | 18 | 4021343009730 | 83 | 38 | 21 | 52 | 48 |
| 13098112 | 1 1/2 | | 12 | 4021343009723 | 91 | 41 | 24 | 59 | 54 |
| 130982 | 2 | | 6 | 4021343009761 | 106 | 51 | 30 | 75 | 66 |



Catalog-no. and -description

3120 – Elbow 45°, female/female

| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|----|----|
| 1312038 | 3/8 | 10 | 180 | 4021343009846 | 16 | 6 |
| 1312012 | 1/2 | 10 | 150 | 4021343009822 | 19 | 6 |
| 1312034 | 3/4 | 10 | 80 | 4021343009839 | 22 | 7 |
| 131201 | 1 | 10 | 40 | 4021343009792 | 26 | 9 |
| 13120114 | 1 1/4 | 10 | 20 | 4021343009815 | 31 | 12 |



Catalog-no. and -description

3121 – Elbow 45°, male/female

| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | b | z |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 1312138 | 3/8 | 10 | 300 | 4021343009907 | 16 | 22 | 6 |
| 1312112 | 1/2 | 10 | 150 | 4021343009884 | 19 | 28 | 6 |
| 1312134 | 3/4 | 10 | 80 | 4021343009891 | 22 | 31 | 7 |
| 131211 | 1 | 10 | 60 | 4021343009853 | 26 | 36 | 9 |
| 13121114 | 1 1/4 | 10 | 30 | 4021343009877 | 31 | 40 | 12 |
| 13121112 | 1 1/2 | 10 | 20 | 4021343165146 | 36 | 47 | 16 |



3
(Branch)

1 **2**



Catalog-no. and -description

3130 – Tee, female

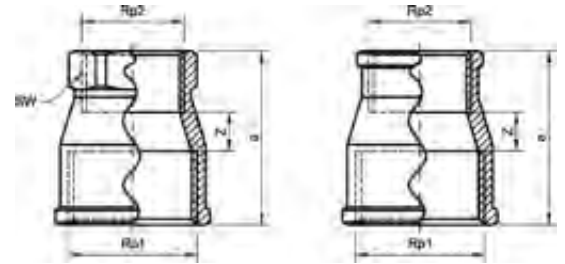
| Article-no. | Dimension Rp1 x Rp3 x Rp2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|----------------|------------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 1313014 | 1/4 | 10 | 200 | 4021343010118 | 21 | | | 11 | | | |
| 1313038 | 3/8 | 10 | 150 | 4021343010255 | 25 | | | 15 | | | |
| 1313012 | 1/2 | 10 | 70 | 4021343010071 | 28 | | | 15 | | | |
| 1313034 | 3/4 | 10 | 50 | 4021343010194 | 33 | | | 18 | | | |
| 131301 | 1 | 10 | 30 | 4021343009914 | 38 | | | 21 | | | |
| 13130114 | 1 1/4 | | 20 | 4021343010019 | 44 | | | 25 | | | |
| 13130112 | 1 1/2 | | 10 | 4021343009952 | 50 | | | 31 | | | |
| 131302 | 2 | | 8 | 4021343010125 | 57 | | | 35 | | | |
| 13130212A | 2 1/2 | | 4 | 4021343010163 | 69 | | | 46 | | | |
| 131303 | 3 | | 2 | 4021343010187 | 78 | | | 53 | | | |
| 13130123812 | 1/2 x 1/2 x 3/8 | 10 | 100 | 4021343010095 | 25 | 25 | 25 | | 12 | 15 | 12 |
| 13130123412 | 1/2 x 1/2 x 3/4 | 10 | 60 | 4021343010088 | 28 | 27 | 28 | | 15 | 12 | 15 |
| 13130341212 | 3/4 x 1/2 x 1/2 | 10 | 70 | 4021343010200 | 29 | 30 | 27 | | 14 | 17 | 14 |
| 13130341234 | 3/4 x 3/4 x 1/2 | 10 | 50 | 4021343010217 | 30 | 31 | 30 | | 15 | 18 | 15 |
| 13130343412 | 3/4 x 1/2 x 3/4 | 10 | 50 | 4021343010231 | 33 | 33 | 31 | | 18 | 18 | 18 |
| 131301112 | 1 x 1/2 x 1 | 10 | 30 | 4021343009921 | 38 | 38 | 33 | | 20 | 20 | 20 |
| 131301121 | 1 x 1 x 1/2 | 10 | 30 | 4021343009969 | 31 | 34 | 31 | | 14 | 21 | 14 |
| 131301341 | 1 x 1 x 3/4 | 10 | 30 | 4021343010101 | 34 | 35 | 34 | | 17 | 20 | 17 |
| 1313011412114 | 1 1/4 x 1 1/4 x 1/2 | | 30 | 4021343010033 | 33 | 38 | 33 | | 14 | 25 | 14 |
| 1313011434114 | 1 1/4 x 1 1/4 x 3/4 | | 24 | 4021343010057 | 36 | 40 | 36 | | 17 | 25 | 17 |
| 131301141114 | 1 1/4 x 1 1/4 x 1 | | 24 | 4021343010026 | 40 | 42 | 40 | | 21 | 25 | 21 |
| 131301121112 | 1 1/2 x 1 1/2 x 1 | | 20 | 4021343009976 | 41 | 45 | 41 | | 22 | 28 | 22 |
| 13130112114112 | 1 1/2 x 1 1/2 x 1 1/4 | | 16 | 4021343009983 | 46 | 48 | 46 | | 27 | 29 | 27 |
| 13130212B | 2 x 2 x 1 | | 12 | 4021343010170 | 43 | 52 | 43 | | 21 | 35 | 21 |



Catalog-no. and -description

3180 – Cross, female

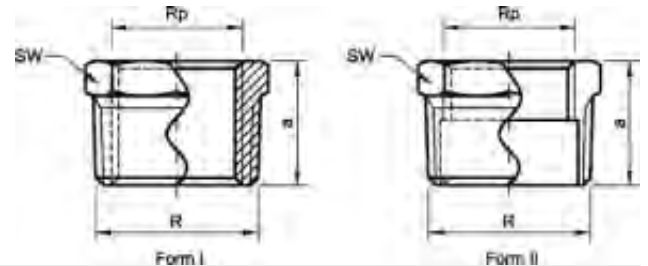
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|----|----|
| 1318012 | 1/2 | 10 | 50 | 4021343010293 | 26 | 13 |
| 1318034 | 3/4 | 10 | 40 | 4021343010323 | 30 | 17 |
| 131801 | 1 | 10 | 20 | 4021343010262 | 38 | 21 |
| 13180114 | 1 1/4 | | 15 | 4021343010286 | 43 | 25 |
| 13180112 | 1 1/2 | | 8 | 4021343010279 | 49 | 30 |
| 131802 | 2 | | 6 | 4021343010316 | 54 | 34 |



Catalog-no. and -description

3240 – Coupling, reduced, female

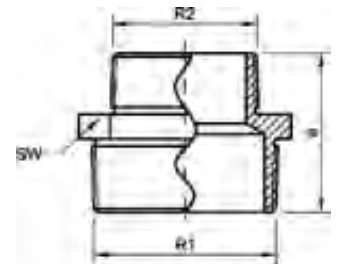
| Article-no. | Dimension Rp1 x Rp2 | Bag | Box | EAN code | a | z | SW |
|-------------|------------------------|-----|-----|---------------|----|----|----|
| 132403814 | 3/8 x 1/4 | 10 | 300 | 4021343010477 | 30 | 13 | 18 |
| 132401214 | 1/2 x 1/4 | 10 | 200 | 4021343010408 | 33 | 13 | 18 |
| 132401238 | 1/2 x 3/8 | 10 | 150 | 4021343010415 | 30 | 7 | 21 |
| 132403412 | 3/4 x 1/2 | 10 | 150 | 4021343010453 | 32 | 8 | 25 |
| 13240138 | 1 x 3/8 | 10 | 100 | 4021343010439 | 40 | 13 | 21 |
| 13240112 | 1 x 1/2 | 10 | 80 | 4021343010347 | 38 | 10 | 25 |
| 13240134 | 1 x 3/4 | 10 | 80 | 4021343010422 | 45 | 12 | 30 |
| 1324011412 | 1 1/4 x 1/2 | 10 | 50 | 4021343010385 | 37 | 9 | 25 |
| 1324011434 | 1 1/4 x 3/4 | 10 | 40 | 4021343010392 | 48 | 22 | 30 |
| 132401141 | 1 1/4 x 1 | 10 | 40 | 4021343010378 | 45 | 5 | 39 |
| 132401121 | 1 1/2 x 1 | | 40 | 4021343010354 | 53 | 16 | 38 |
| 13240112114 | 1 1/2 x 1 1/4 | | 30 | 4021343010361 | 53 | 13 | 48 |
| 132402112 | 2 x 1 1/2 | | 16 | 4021343010446 | 63 | 20 | 55 |



Catalog-no. and -description

3241 – Reducer, male/female

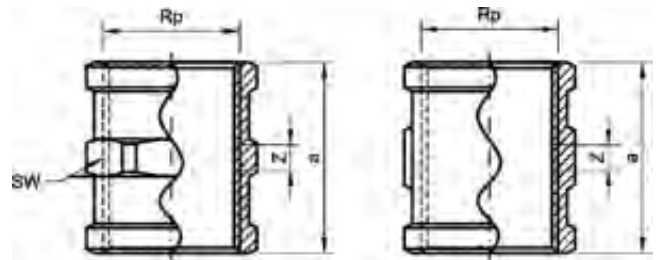
| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | SW |
|-------------|---------------------|-----|-----|---------------|----|----|
| 132413814 | 3/8 x 1/4 | 10 | 500 | 4021343010712 | 17 | 20 |
| 132411214 | 1/2 x 1/4 | 10 | 350 | 4021343010569 | 20 | 22 |
| 132411238 | 1/2 x 3/8 | 10 | 350 | 4021343010576 | 21 | 22 |
| 132413438 | 3/4 x 3/8 | 10 | 250 | 4021343010705 | 22 | 27 |
| 132413412 | 3/4 x 1/2 | 10 | 250 | 4021343010682 | 22 | 27 |
| 13241112 | 1 x 1/2 | 10 | 150 | 4021343010484 | 28 | 8 |
| 13241134 | 1 x 3/4 | 10 | 130 | 4021343010583 | 25 | 34 |
| 1324111412 | 1 1/4 x 1/2 | 10 | 70 | 4021343010545 | 29 | 46 |
| 1324111434 | 1 1/4 x 3/4 | 10 | 70 | 4021343010552 | 29 | 46 |
| 132411141 | 1 1/4 x 1 | 10 | 70 | 4021343010538 | 27 | 46 |
| 1324111212 | 1 1/2 x 1/2 | 10 | 50 | 4021343010514 | 31 | 40 |
| 1324111234 | 1 1/2 x 3/4 | 10 | 50 | 4021343010521 | 31 | 40 |
| 132411121 | 1 1/2 x 1 | 10 | 50 | 4021343010491 | 31 | 50 |
| 13241112114 | 1 1/2 x 1 1/4 | 10 | 50 | 4021343010507 | 31 | 50 |
| 1324121 | 2 x 1 | | 48 | 4021343010606 | 36 | 62 |
| 132412114 | 2 x 1 1/4 | | 48 | 4021343010620 | 36 | 62 |
| 132412112 | 2 x 1 1/2 | | 48 | 4021343010613 | 35 | 62 |
| 13241212112 | 2 1/2 x 1 1/2 | | 20 | 4021343010644 | 39 | 78 |
| 132412122 | 2 1/2 x 2 | | 24 | 4021343203763 | 39 | 78 |
| 132413212 | 3 x 2 1/2 | | 15 | 4021343010675 | 44 | 90 |



Catalog-no. and -description

3245 – Reducing nipple, male

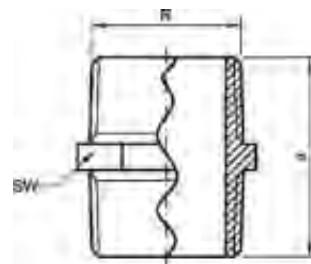
| Article-no. | Dimension R1 x R2 | Bag | Box | EAN code | a | SW |
|-------------|----------------------|-----|-----|---------------|----|----|
| 132451214 | 1/2 x 1/4 | 10 | 400 | 4021343010743 | 32 | 22 |
| 132451238 | 1/2 x 3/8 | 10 | 400 | 4021343010750 | 31 | 22 |
| 132453412 | 3/4 x 1/2 | 10 | 180 | 4021343010781 | 36 | 27 |
| 13245134 | 1 x 3/4 | 10 | 100 | 4021343010767 | 41 | 34 |
| 132451141 | 1 1/4 x 1 | 10 | 60 | 4021343010736 | 49 | 44 |
| 13245112114 | 1 1/2 x 1 1/4 | | 45 | 4021343010729 | 52 | 50 |
| 132452112 | 2 x 1 1/2 | | 18 | 4021343010774 | 59 | 62 |
| 132452122 | 2 1/2 x 2 | | 15 | 4021343124136 | 65 | 80 |



Catalog-no. and -description

3270 – Coupling, female

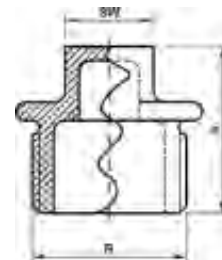
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z | SW |
|-------------|-----------------|-----|-----|---------------|----|----|----|
| 1327014 | 1/4 | 10 | 500 | 4021343010835 | 26 | 6 | 17 |
| 1327038 | 3/8 | 10 | 400 | 4021343010880 | 28 | 8 | 20 |
| 1327012 | 1/2 | 10 | 160 | 4021343010828 | 34 | 8 | 25 |
| 1327034 | 3/4 | 10 | 120 | 4021343010873 | 37 | 7 | 30 |
| 132701 | 1 | 10 | 80 | 4021343010798 | 43 | 9 | 38 |
| 13270114 | 1 1/4 | 10 | 40 | 4021343010811 | 48 | 10 | 48 |
| 13270112 | 1 1/2 | | 36 | 4021343010804 | 50 | 12 | 54 |
| 132702 | 2 | | 20 | 4021343010842 | 52 | 4 | 67 |
| 13270212 | 2 1/2 | | 10 | 4021343010859 | 68 | 14 | 82 |
| 132703 | 3 | | 5 | 4021343010866 | 80 | 20 | 97 |



Catalog-no. and -description

3280 – Double nipple, male

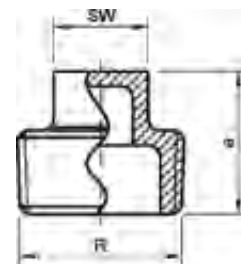
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | SW |
|-------------|-----------------|-----|-----|---------------|----|----|
| 1328014 | 1/4 | 10 | 350 | 4021343010934 | 28 | 17 |
| 1328038 | 3/8 | 10 | 350 | 4021343010989 | 28 | 20 |
| 1328012 | 1/2 | 10 | 250 | 4021343010927 | 37 | 22 |
| 1328034 | 3/4 | 10 | 150 | 4021343010972 | 38 | 27 |
| 132801 | 1 | 10 | 90 | 4021343010897 | 44 | 34 |
| 13280114 | 1 1/4 | 10 | 50 | 4021343010910 | 48 | 46 |
| 13280112 | 1 1/2 | | 45 | 4021343010903 | 52 | 50 |
| 132802 | 2 | | 24 | 4021343010941 | 63 | 64 |
| 13280212 | 2 1/2 | | 6 | 4021343010958 | 72 | 85 |
| 132803 | 3 | | 5 | 4021343010965 | 78 | 95 |



Catalog-no. and -description

3290 – Plug, male

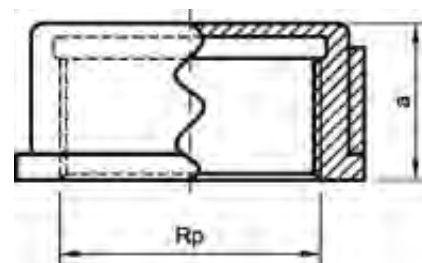
| Article-no. | Dimension R | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|-----|---------------|----|----|
| 1329038 | 3/8 | 10 | 700 | 4021343011078 | 24 | 10 |
| 1329012 | 1/2 | 10 | 400 | 4021343011023 | 26 | 11 |
| 1329034 | 3/4 | 10 | 200 | 4021343011061 | 32 | 17 |
| 132901 | 1 | 10 | 100 | 4021343010996 | 36 | 19 |
| 13290114 | 1 1/4 | 10 | 70 | 4021343011016 | 39 | 22 |
| 13290112 | 1 1/2 | 10 | 50 | 4021343011009 | 41 | 22 |
| 132902 | 2 | | 30 | 4021343011047 | 48 | 27 |
| 13290212 | 2 1/2 | | 18 | 4021343011054 | 55 | 32 |



Catalog-no. and -description

3291 – Plug, male, without edge

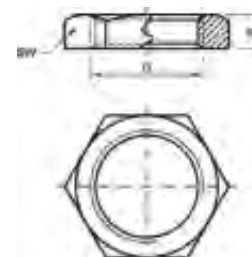
| Article-no. | Dimension R | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|-----|---------------|----|----|
| 1329138 | 3/8 | 10 | 700 | 4021343140303 | 20 | 12 |
| 1329112 | 1/2 | 10 | 400 | 4021343140310 | 25 | 15 |
| 13291114 | 1 1/4 | 10 | 80 | 4021343140327 | 33 | 22 |
| 13291112 | 1 1/2 | | 70 | 4021343140334 | 38 | 29 |
| 13291212 | 2 1/2 | | 30 | 4021343140341 | 46 | 37 |



Catalog-no. and -description

3301 – Cap, female

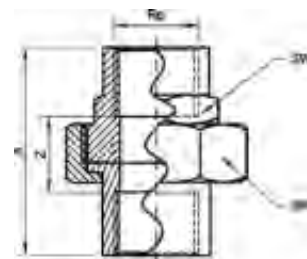
| Article-no. | Dimension Rp | Bag | Box | EAN code | a |
|-------------|-----------------|-----|-----|---------------|----|
| 1330112 | 1/2 | 10 | 300 | 4021343011115 | 19 |
| 1330134 | 3/4 | 10 | 200 | 4021343011139 | 22 |
| 133011 | 1 | 10 | 100 | 4021343011085 | 24 |
| 13301114 | 1 1/4 | 10 | 50 | 4021343011108 | 27 |
| 13301112 | 1 1/2 | 10 | 40 | 4021343011092 | 28 |
| 133012 | 2 | | 35 | 4021343011122 | 32 |



Catalog-no. and -description

3310 – Nut

| Article-no. | Dimension G | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|------|---------------|----|----|
| 1331014 | 1/4 | 10 | 1000 | 4021343011184 | 6 | 22 |
| 1331038 | 3/8 | 10 | 800 | 4021343011238 | 7 | 27 |
| 1331012 | 1/2 | 10 | 350 | 4021343011177 | 8 | 34 |
| 1331034 | 3/4 | 10 | 300 | 4021343011214 | 9 | 37 |
| 133101 | 1 | 10 | 200 | 4021343011146 | 10 | 42 |
| 13310114 | 1 1/4 | 10 | 100 | 4021343011160 | 11 | 55 |
| 13310112 | 1 1/2 | 10 | 100 | 4021343011153 | 13 | 64 |
| 133102 | 2 | 10 | 40 | 4021343011191 | 14 | 78 |



Catalog-no. and -description

3330 – Union, female/female, flat sealing

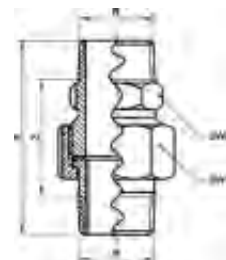
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|-----------------|-----|-----|---------------|----|----|-----|-----|
| 1333038 | 3/8 | 5 | 100 | 4021343011337 | 46 | 26 | 30 | 22 |
| 1333012 | 1/2 | 5 | 80 | 4021343011276 | 48 | 21 | 37 | 26 |
| 1333034 | 3/4 | 5 | 50 | 4021343011320 | 52 | 22 | 46 | 30 |
| 133301 | 1 | 5 | 40 | 4021343011245 | 57 | 23 | 52 | 40 |
| 13330114 | 1 1/4 | 5 | 20 | 4021343011269 | 64 | 26 | 64 | 50 |
| 13330112 | 1 1/2 | 5 | 15 | 4021343011252 | 70 | 34 | 72 | 54 |
| 133302 | 2 | 2 | 10 | 4021343011290 | 78 | 30 | 89 | |



Catalog-no. and -description

3331 – Union, male/female, flat sealing

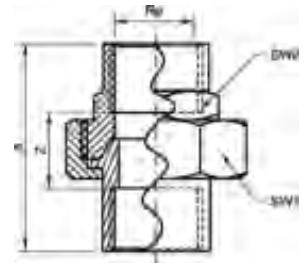
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|----|-----|-----|
| 1333138 | 3/8 | 5 | 150 | 4021343011436 | 47 | 37 | 24 | 22 |
| 1333112 | 1/2 | 5 | 120 | 4021343011375 | 53 | 40 | 30 | 25 |
| 1333134 | 3/4 | 5 | 60 | 4021343011429 | 63 | 49 | 37 | 34 |
| 1333111 | 1 | 5 | 40 | 4021343011344 | 68 | 52 | 46 | 37 |
| 13331114 | 1 1/4 | 5 | 30 | 4021343011368 | 76 | 56 | 52 | 46 |
| 13331112 | 1 1/2 | 5 | 20 | 4021343011351 | 81 | 62 | 59 | 54 |
| 133312 | 2 | 2 | 10 | 4021343011399 | 93 | 70 | 75 | 70 |
| 13331212 | 2 1/2 | 5 | 5 | 4021343011405 | 107 | 80 | 84 | 85 |
| 133313 | 3 | 3 | 3 | 4021343011412 | 116 | 83 | 94 | 98 |



Catalog-no. and -description

3334 – Union, male/male, flat sealing

| Article-no. | Dimension R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|----|----|-----|-----|
| 1333412 | 1/2 | 5 | 100 | 4021343011474 | 62 | 36 | 30 | 27 |
| 1333434 | 3/4 | 5 | 50 | 4021343011498 | 71 | 41 | 37 | 34 |
| 133341 | 1 | 5 | 30 | 4021343011443 | 80 | 46 | 46 | 43 |
| 13334114 | 1 1/4 | 5 | 20 | 4021343011467 | 96 | 58 | 52 | 46 |
| 13334112 | 1 1/2 | 5 | 20 | 4021343011450 | 98 | 58 | 59 | 50 |



Catalog-no. and -description

3340 – Union, female/female, conical sealing

| Article-no. | Dimension R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|----|----|-----|-----|
| 1334014 | 1/4 | 5 | 100 | 4021343011542 | 43 | 23 | 26 | |
| 1334038 | 3/8 | 5 | 100 | 4021343011573 | 46 | 26 | 30 | 22 |
| 1334012 | 1/2 | 5 | 80 | 4021343011535 | 48 | 21 | 37 | 26 |
| 1334034 | 3/4 | 5 | 50 | 4021343011566 | 52 | 22 | 46 | 30 |
| 133401 | 1 | 5 | 40 | 4021343011504 | 57 | 23 | 52 | 40 |
| 13340114 | 1 1/4 | 5 | 20 | 4021343011528 | 64 | 26 | 64 | 50 |
| 13340112 | 1 1/2 | 5 | 15 | 4021343011511 | 70 | 32 | 72 | 54 |
| 133402 | 2 | 2 | 10 | 4021343011559 | 79 | 31 | 89 | |



Catalog-no. and -description

3341 – Union, male/female, conical sealing

| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|----|-----|-----|
| 1334114 | 1/4 | 5 | 200 | 4021343011627 | 44 | 34 | 24 | 19 |
| 1334138 | 3/8 | 5 | 150 | 4021343011672 | 47 | 37 | 24 | 22 |
| 1334112 | 1/2 | 5 | 120 | 4021343011610 | 53 | 40 | 30 | 25 |
| 1334134 | 3/4 | 5 | 60 | 4021343011665 | 63 | 49 | 37 | 34 |
| 133411 | 1 | 5 | 40 | 4021343011580 | 67 | 51 | 46 | 37 |
| 13341114 | 1 1/4 | 5 | 30 | 4021343011603 | 75 | 56 | 52 | 46 |
| 13341112 | 1 1/2 | 5 | 20 | 4021343011597 | 81 | 62 | 59 | 54 |
| 133412 | 2 | 2 | 10 | 4021343011634 | 91 | 67 | 75 | 66 |
| 13341212 | 2 1/2 | | 5 | 4021343011641 | 110 | 83 | 94 | 85 |
| 133413 | 3 | | 3 | 4021343011658 | 121 | 91 | 109 | 98 |



Catalog-no. and -description

3344 – Union, male/male, conical sealing

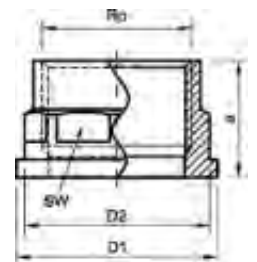
| Article-no. | Dimension R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|-----|----|-----|-----|
| 1334412 | 1/2 | 5 | 100 | 4021343011719 | 62 | 36 | 30 | 27 |
| 1334434 | 3/4 | 5 | 50 | 4021343011733 | 72 | 42 | 37 | 34 |
| 133441 | 1 | 5 | 30 | 4021343011689 | 80 | 46 | 46 | 43 |
| 13344114 | 1 1/4 | 5 | 20 | 4021343011702 | 96 | 58 | 52 | 46 |
| 13344112 | 1 1/2 | 5 | 20 | 4021343011696 | 98 | 58 | 59 | 50 |
| 133442 | 2 | 2 | 10 | 4021343011726 | 113 | 65 | 75 | 60 |



Catalog-no. and -description

3370 – Screwed piece flat sealing

| Article-no. | Dimension Rp x G | Bag | Box | EAN code | a | SW |
|-------------|---------------------|-----|-----|---------------|----|----|
| 13370121 | 1/2x1 | | 200 | 4021343011771 | 25 | 26 |
| 1337034114 | 3/4x1 1/4 | | 150 | 4021343011818 | 27 | 30 |
| 133701112 | 1x1 1/2 | | 100 | 4021343011740 | 30 | 40 |
| 133701142 | 1 1/4x2 | | 45 | 4021343011764 | 33 | 50 |
| 13370112214 | 1 1/2x2 1/4 | | 36 | 4021343011757 | 36 | 54 |
| 133702234 | 2x2 3/4 | | 18 | 4021343011801 | 42 | 67 |



Catalog-no. and -description

3372 – Union piece flat sealing

| Article-no. | Dimension Rp x G nut | Bag | Box | EAN code | a | z | D1 | D2 | SW |
|-------------|-------------------------|-----|-----|---------------|----|----|----|----|----|
| 1337234114 | 3/4x1 1/4 | | 160 | 4021343011900 | 24 | 10 | 39 | 36 | 34 |
| 133721112 | 1x1 1/2 | | 130 | 4021343011849 | 26 | 7 | 45 | 41 | 39 |
| 133721142 | 1 1/4x2 | | 70 | 4021343011863 | 29 | 8 | 56 | 52 | 50 |



Catalog-no. and -description

3530 – Long nipple, male/male

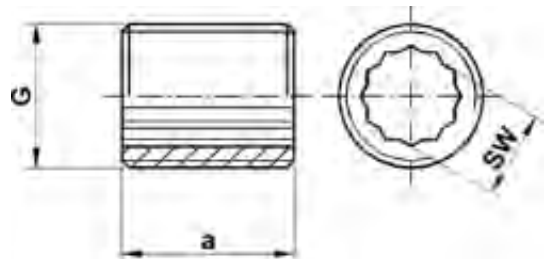
| Article-no. | Dimension Rp x L | Bag | Box | EAN code | L | SW |
|-------------|---------------------|-----|-----|---------------|-----|----|
| 135301230 | 1/2 x 30 | 10 | 350 | 4021343012471 | 30 | 12 |
| 135301240 | 1/2 x 40 | 10 | 200 | 4021343012488 | 40 | 12 |
| 135301250 | 1/2 x 50 | 10 | 150 | 4021343208959 | 50 | 12 |
| 135301260 | 1/2 x 60 | 10 | 150 | 4021343012495 | 60 | 12 |
| 135301270 | 1/2 x 70 | 10 | 150 | 4021343208966 | 70 | 12 |
| 135301280 | 1/2 x 80 | 10 | 120 | 4021343012501 | 80 | 12 |
| 135301290 | 1/2 x 90 | 10 | 120 | 4021343208973 | 90 | 12 |
| 1353012100 | 1/2 x 100 | 10 | 90 | 4021343012426 | 100 | 12 |
| 1353012110 | 1/2 x 110 | | 90 | 4021343208980 | 110 | 12 |
| 1353012120 | 1/2 x 120 | | 90 | 4021343012433 | 120 | 12 |
| 1353012130 | 1/2 x 130 | | 80 | 4021343208997 | 130 | 12 |
| 1353012150 | 1/2 x 150 | | 70 | 4021343012440 | 150 | 12 |
| 135303430 | 3/4 x 30 | 10 | 200 | 4021343012679 | 30 | 12 |
| 135303440 | 3/4 x 40 | 10 | 150 | 4021343012686 | 40 | 17 |
| 135303450 | 3/4 x 50 | 10 | 120 | 4021343209000 | 50 | 17 |
| 135303460 | 3/4 x 60 | 10 | 100 | 4021343012693 | 60 | 17 |
| 135303470 | 3/4 x 70 | 10 | 100 | 4021343209017 | 70 | 17 |
| 135303480 | 3/4 x 80 | 10 | 80 | 4021343012709 | 80 | 17 |
| 135303490 | 3/4 x 90 | 10 | 70 | 4021343209024 | 90 | 17 |
| 1353034100 | 3/4 x 100 | 10 | 50 | 4021343012624 | 100 | 17 |
| 1353034110 | 3/4 x 110 | | 50 | 4021343209031 | 110 | 17 |
| 1353034120 | 3/4 x 120 | | 70 | 4021343012631 | 120 | 17 |
| 1353034130 | 3/4 x 130 | | 50 | 4021343209048 | 130 | 17 |
| 1353034150 | 3/4 x 150 | | 50 | 4021343012648 | 150 | 17 |
| 13530130 | 1 x 30 | 10 | 150 | 4021343209055 | 30 | 22 |
| 13530140 | 1 x 40 | 10 | 100 | 4021343012518 | 40 | 22 |
| 13530150 | 1 x 50 | 10 | 90 | 4021343209062 | 50 | 22 |
| 13530160 | 1 x 60 | 10 | 80 | 4021343012525 | 60 | 22 |
| 13530170 | 1 x 70 | 10 | 70 | 4021343209079 | 70 | 22 |
| 13530180 | 1 x 80 | 10 | 60 | 4021343012532 | 80 | 22 |
| 13530190 | 1 x 90 | 10 | 60 | 4021343209086 | 90 | 22 |
| 135301100 | 1 x 100 | 10 | 50 | 4021343012228 | 100 | 22 |
| 135301110 | 1 x 110 | | 50 | 4021343209093 | 110 | 22 |
| 135301120 | 1 x 120 | | 50 | 4021343012235 | 120 | 22 |
| 135301130 | 1 x 130 | | 40 | 4021343209109 | 130 | 22 |
| 135301150 | 1 x 150 | | 40 | 4021343012396 | 150 | 22 |
| 1353011430 | 11/4 x 30 | | 120 | 4021343209116 | 30 | |
| 1353011440 | 11/4 x 40 | | 80 | 4021343012365 | 40 | |
| 1353011450 | 11/4 x 50 | | 60 | 4021343209123 | 50 | |
| 1353011460 | 11/4 x 60 | | 50 | 4021343012372 | 60 | |
| 1353011470 | 11/4 x 70 | | 50 | 4021343209130 | 70 | |
| 1353011480 | 11/4 x 80 | | 40 | 4021343012389 | 80 | |
| 1353011490 | 11/4 x 90 | | 30 | 4021343209147 | 90 | |
| 13530114100 | 11/4 x 100 | | 30 | 4021343012310 | 100 | |
| 13530114120 | 11/4 x 120 | | 30 | 4021343012327 | 120 | |
| 13530114150 | 11/4 x 150 | | 20 | 4021343189586 | 150 | |
| 1353011230 | 11/2 x 30 | | 80 | 4021343209154 | 30 | |
| 1353011240 | 11/2 x 40 | | 60 | 4021343189593 | 40 | |



Catalog-no. and -description

3530 – Long nipple, male/male (continued)

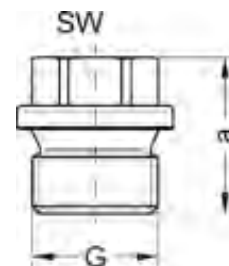
| Article-no. | Dimension Rp x L | Bag | Box | EAN code | L | SW |
|-------------|---------------------|-----|-----|---------------|-----|----|
| 1353011250 | 1 1/2 x 50 | | 50 | 4021343209161 | 50 | |
| 1353011260 | 1 1/2 x 60 | | 45 | 4021343189609 | 60 | |
| 1353011270 | 1 1/2 x 70 | | 40 | 4021343209178 | 70 | |
| 1353011280 | 1 1/2 x 80 | | 30 | 4021343189616 | 80 | |
| 1353011290 | 1 1/2 x 90 | | 30 | 4021343209185 | 90 | |
| 13530112100 | 1 1/2 x 100 | | 25 | 4021343189623 | 100 | |
| 13530112120 | 1 1/2 x 120 | | 20 | 4021343189630 | 120 | |
| 13530112150 | 1 1/2 x 150 | | 15 | 4021343189647 | 150 | |
| 13530230 | 2 x 30 | | 30 | 4021343209192 | 30 | |
| 13530250 | 2 x 50 | | 24 | 4021343209208 | 50 | |
| 13530260 | 2 x 60 | | 24 | 4021343012600 | 60 | |
| 13530270 | 2 x 70 | | 20 | 4021343209215 | 70 | |
| 13530280 | 2 x 80 | | 20 | 4021343012617 | 80 | |
| 13530290 | 2 x 90 | | 18 | 4021343209222 | 90 | |
| 135302100 | 2 x 100 | | 15 | 4021343012549 | 100 | |
| 135302120 | 2 x 120 | | 12 | 4021343012556 | 120 | |
| 135302150 | 2 x 150 | | 12 | 4021343189661 | 150 | |



Catalog-no. and -description

3531 – Nipple

| Article-no. | Dimension R | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|-----|---------------|----|----|
| 1353112 | 1/2 | 10 | 400 | 4021343012808 | 25 | 12 |
| 1353134 | 3/4 | 10 | 200 | 4021343012822 | 26 | 17 |
| 1353111 | 1 | 10 | 100 | 4021343012785 | 33 | 22 |



Catalog-no. and -description

3910 – Plug, male according to DIN 910, with hexagon bolt

| Article-no. | Dimension G | Bag | Box | EAN code | a | SW |
|-------------|----------------|------|---------------|----------|----|----|
| 1391014 | 1/4 | 1000 | 4021343127700 | 21 | 13 | |
| 1391038 | 3/8 | 500 | 4021343127731 | 21 | 17 | |
| 1391012 | 1/2 | 300 | 4021343127694 | 26 | 19 | |
| 1391034 | 3/4 | 200 | 4021343127724 | 30 | 24 | |
| 139101 | 1 | 100 | 4021343127670 | 32 | 27 | |

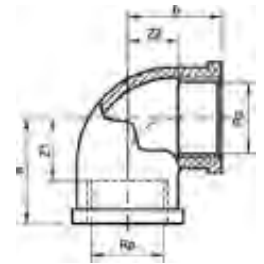
SANHA[®]

Gunmetal threaded fittings
Series 3000

TRADITIONAL PIPING

Lead free gunmetal threaded
fittings series 30000
„Pb-free“

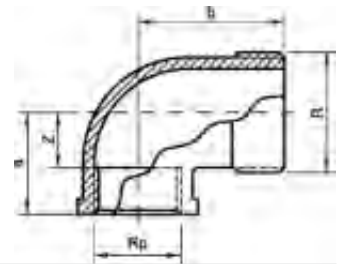




Catalog-no. and -description

30090 – Female elbow 90°

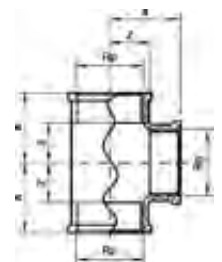
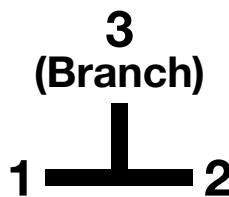
| Article-no. | Dimension Rp1 x Rp2 | Bag | Box | EAN code | a | z |
|-------------|------------------------|-----|-----|---------------|----|----|
| 13009012 | 1/2 | 10 | 100 | 4021343351099 | 28 | 15 |
| 13009034 | 3/4 | 10 | 70 | 4021343351105 | 33 | 18 |
| 1300901 | 1 | 10 | 40 | 4021343351112 | 38 | 21 |
| 130090114 | 1 1/4 | 10 | 20 | 4021343351129 | 44 | 25 |



Catalog-no. and -description

30092 – Male elbow 90°

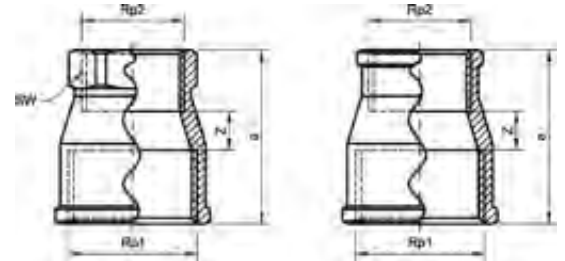
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | b | z |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| 13009212 | 1/2 | 10 | 120 | 4021343351136 | 28 | 37 | 15 |
| 13009234 | 3/4 | 10 | 80 | 4021343351143 | 33 | 43 | 18 |
| 1300921 | 1 | 10 | 30 | 4021343351150 | 38 | 52 | 21 |
| 130092114 | 1 1/4 | 10 | 20 | 4021343351167 | 45 | 60 | 26 |



Catalog-no. and -description

30130 – Tee, female

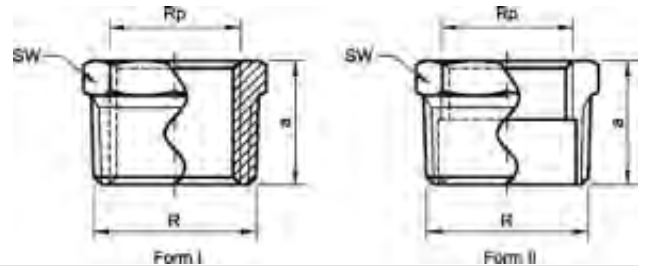
| Article-no. | Dimension Rp 1 x Rp3 x Rp2 | Bag | Box | EAN code | a | b | c | z | z1 | z2 | z3 |
|--------------|-------------------------------|-----|-----|---------------|----|----|----|----|----|----|----|
| 13013012 | 1/2 | 10 | 70 | 4021343351174 | 28 | | | 15 | | | |
| 13013034 | 3/4 | 10 | 50 | 4021343351181 | 33 | | | 18 | | | |
| 1301301 | 1 | 10 | 30 | 4021343351204 | 38 | | | 21 | | | |
| 130130114 | 1 1/4 | 10 | 20 | 4021343351235 | 44 | | | 25 | | | |
| 130130341234 | 3/4 x 3/4 x 1/2 | 10 | 50 | 4021343351198 | 30 | 31 | 30 | | 15 | 18 | 15 |
| 1301301121 | 1 x 1 x 1/2 | 10 | 30 | 4021343351211 | 31 | 34 | 31 | | 14 | 21 | 14 |
| 1301301341 | 1 x 1 x 3/4 | 10 | 30 | 4021343351228 | 34 | 35 | 34 | | 17 | 20 | 17 |



Catalog-no. and -description

30240 – Coupling, reduced, female

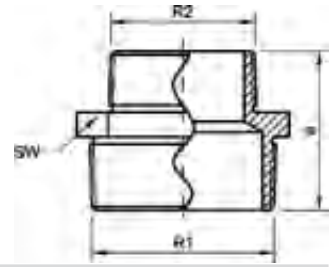
| Article-no. | Dimension Rp1 x Rp2 | Bag | Box | EAN code | a | z | SW |
|--------------|------------------------|-----|-----|---------------|----|----|----|
| 1302403814 | 3/8 x 1/4 | 10 | 300 | 4021343351242 | 30 | 13 | 18 |
| 1302401238 | 1/2 x 3/8 | 10 | 150 | 4021343351259 | 30 | 7 | 21 |
| 1302403412 | 3/4 x 1/2 | 10 | 150 | 4021343351266 | 32 | 8 | 25 |
| 130240134 | 1 x 3/4 | 10 | 80 | 4021343351273 | 45 | 12 | 30 |
| 1302401141 | 1 1/4 x 1 | 10 | 40 | 4021343351280 | 45 | 5 | 39 |
| 130240112114 | 1 1/2 x 1 1/4 | 30 | 30 | 4021343351297 | 53 | 13 | 48 |
| 1302402112 | 2 x 1 1/2 | 16 | 16 | 4021343351303 | 63 | 20 | 55 |



Catalog-no. and -description

30241 – Reducer, male/female

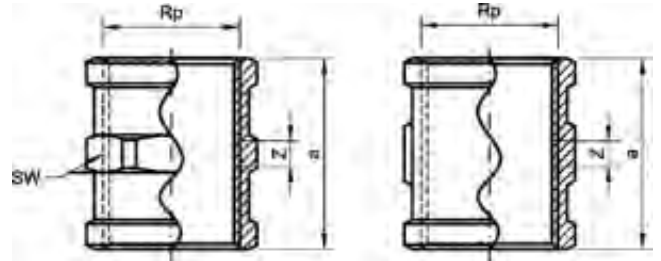
| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | SW |
|--------------|---------------------|-----|-----|---------------|----|----|
| 1302413814 | 3/8 x 1/4 | 10 | 500 | 4021343356797 | 17 | 20 |
| 1302411214 | 1/2 x 1/4 | 10 | 350 | 4021343356780 | 20 | 22 |
| 1302411238 | 1/2 x 3/8 | 10 | 350 | 4021343351310 | 21 | 22 |
| 1302413438 | 3/4 x 3/8 | 10 | 250 | 4021343351327 | 22 | 27 |
| 1302413412 | 3/4 x 1/2 | 10 | 250 | 4021343351334 | 22 | 27 |
| 130241112 | 1 x 1/2 | 10 | 150 | 4021343351341 | 28 | 8 |
| 130241134 | 1 x 3/4 | 10 | 130 | 4021343351358 | 25 | 34 |
| 13024111434 | 1 1/4 x 3/4 | 10 | 70 | 4021343351365 | 29 | 46 |
| 1302411141 | 1 1/4 x 1 | 10 | 70 | 4021343351372 | 27 | 46 |
| 1302411121 | 1 1/2 x 1 | 10 | 50 | 4021343351389 | 31 | 50 |
| 130241112114 | 1 1/2 x 1 1/4 | 10 | 50 | 4021343351396 | 31 | 50 |
| 1302412112 | 2 x 1 1/2 | 48 | 48 | 4021343351402 | 35 | 62 |



Catalog-no. and -description

30245 – Reducing nipple, male

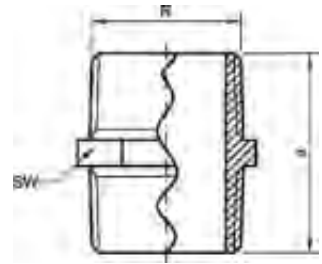
| Article-no. | Dimension R1 x R2 | Bag | Box | EAN code | a | SW |
|--------------|----------------------|-----|-----|---------------|----|----|
| 1302451238 | 1/2 x 3/8 | 10 | 400 | 4021343351419 | 31 | 22 |
| 1302453412 | 3/4 x 1/2 | 10 | 180 | 4021343351426 | 36 | 27 |
| 130245134 | 1 x 3/4 | 10 | 100 | 4021343351433 | 41 | 34 |
| 1302451141 | 1 1/4 x 1 | 10 | 60 | 4021343351440 | 49 | 44 |
| 130245112114 | 1 1/2 x 1 1/4 | | 45 | 4021343351457 | 52 | 50 |
| 1302452112 | 2 x 1 1/2 | | 18 | 4021343351464 | 59 | 62 |



Catalog-no. and -description

30270 – Coupling, female

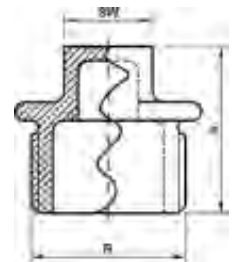
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z | SW |
|-------------|-----------------|-----|-----|---------------|----|----|----|
| 13027014 | 1/4 | 10 | 500 | 4021343356803 | 26 | 6 | 17 |
| 13027038 | 3/8 | 10 | 400 | 4021343351471 | 28 | 8 | 20 |
| 13027012 | 1/2 | 10 | 160 | 4021343351488 | 34 | 8 | 25 |
| 13027034 | 3/4 | 10 | 120 | 4021343351495 | 37 | 7 | 30 |
| 1302701 | 1 | 10 | 80 | 4021343351501 | 43 | 9 | 38 |
| 130270114 | 1 1/4 | 10 | 40 | 4021343351518 | 48 | 10 | 48 |
| 130270112 | 1 1/2 | | 36 | 4021343351525 | 50 | 12 | 54 |
| 1302702 | 2 | | 20 | 4021343351532 | 52 | 4 | 67 |



Catalog-no. and -description

30280 – Double nipple, male

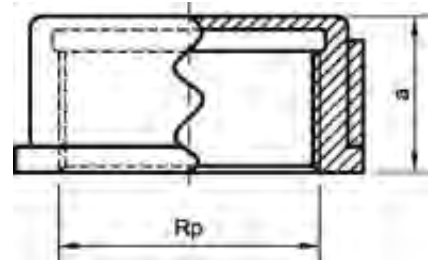
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | SW |
|-------------|-----------------|-----|-----|---------------|----|----|
| 13028014 | 1/4 | 10 | 350 | 4021343356810 | 28 | 17 |
| 13028038 | 3/8 | 10 | 350 | 4021343351549 | 28 | 20 |
| 13028012 | 1/2 | 10 | 250 | 4021343351556 | 37 | 22 |
| 13028034 | 3/4 | 10 | 150 | 4021343351563 | 38 | 27 |
| 1302801 | 1 | 10 | 90 | 4021343351570 | 44 | 34 |
| 130280114 | 1 1/4 | 10 | 50 | 4021343351587 | 48 | 46 |
| 130280112 | 1 1/2 | | 45 | 4021343351594 | 52 | 50 |
| 1302802 | 2 | | 24 | 4021343351600 | 63 | 64 |



Catalog-no. and -description

30290 – Plug, male

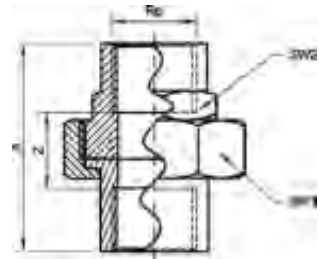
| Article-no. | Dimension R | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|-----|---------------|----|----|
| 13029038 | 3/8 | 10 | 700 | 4021343351617 | 24 | 10 |
| 13029012 | 1/2 | 10 | 400 | 4021343351624 | 26 | 11 |
| 13029034 | 3/4 | 10 | 200 | 4021343351631 | 32 | 17 |
| 1302901 | 1 | 10 | 100 | 4021343351648 | 36 | 19 |
| 130290114 | 1 1/4 | 10 | 70 | 4021343351655 | 39 | 22 |
| 130290112 | 1 1/2 | 10 | 50 | 4021343351662 | 41 | 22 |
| 1302902 | 2 | | 30 | 4021343351679 | 48 | 27 |



Catalog-no. and -description

30301 – Cap, female

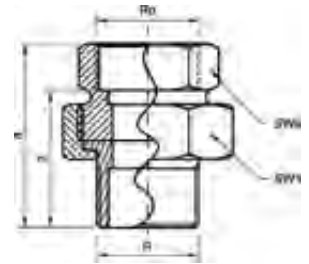
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | SW |
|-------------|-----------------|-----|-----|---------------|----|----|
| 13030112 | 1/2 | 10 | 400 | 4021343351686 | 25 | 15 |
| 13030134 | 3/4 | 10 | 200 | 4021343351693 | 22 | |
| 1303011 | 1 | 10 | 100 | 4021343351709 | 24 | |
| 130301114 | 1 1/4 | 10 | 50 | 4021343351716 | 27 | |
| 130301112 | 1 1/2 | 10 | 40 | 4021343351723 | 28 | |
| 1303012 | 2 | | 35 | 4021343351730 | 32 | |



Catalog-no. and -description

30330 – Union, female/female, flat sealing

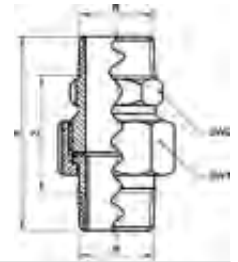
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|----|----|
| 13033038 | 3/8 | 10 | 800 | 4021343351747 | 7 | 27 |
| 13033012 | 1/2 | 10 | 350 | 4021343351754 | 8 | 34 |
| 13033034 | 3/4 | 10 | 300 | 4021343351761 | 9 | 37 |
| 1303301 | 1 | 10 | 200 | 4021343351778 | 10 | 42 |
| 130330114 | 1 1/4 | 10 | 100 | 4021343351785 | 11 | 55 |
| 130330112 | 1 1/2 | 10 | 100 | 4021343351792 | 13 | 64 |
| 1303302 | 2 | 10 | 40 | 4021343351808 | 14 | 78 |



Catalog-no. and -description

30331 – Union, male/female, flat sealing

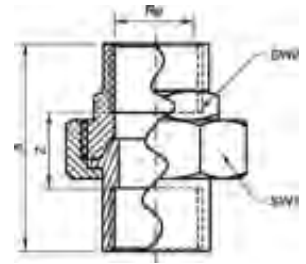
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 13033138 | 3/8 | 5 | 150 | 4021343351815 | 47 | 37 | 24 | 22 |
| 13033112 | 1/2 | 5 | 120 | 4021343351822 | 53 | 40 | 30 | 25 |
| 13033134 | 3/4 | 5 | 60 | 4021343351839 | 63 | 49 | 37 | 34 |
| 13033111 | 1 | 5 | 40 | 4021343351846 | 68 | 52 | 46 | 37 |
| 130331114 | 1 1/4 | 5 | 30 | 4021343351853 | 76 | 56 | 52 | 46 |
| 130331112 | 1 1/2 | 5 | 20 | 4021343351860 | 81 | 62 | 59 | 54 |
| 1303312 | 2 | 2 | 10 | 4021343351877 | 93 | 70 | 75 | 70 |



Catalog-no. and -description

30334 – Union, male/male, flat sealing

| Article-no. | Dimension R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|----|----|-----|-----|
| 13033412 | 1/2 | 5 | 100 | 4021343351884 | 62 | 36 | 30 | 27 |
| 13033434 | 3/4 | 5 | 50 | 4021343351891 | 71 | 41 | 37 | 34 |
| 1303341 | 1 | 5 | 30 | 4021343351907 | 80 | 46 | 46 | 43 |
| 130334114 | 1 1/4 | 5 | 20 | 4021343351914 | 96 | 58 | 52 | 46 |
| 130334112 | 1 1/2 | 5 | 20 | 4021343351921 | 98 | 58 | 59 | 50 |



Catalog-no. and -description

30340 – Union, female/female, conical sealing

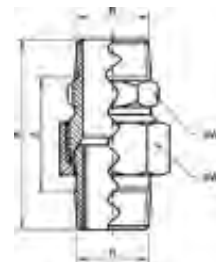
| Article-no. | Dimension R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|----|----|-----|-----|
| 13034014 | 1/4 | 5 | 100 | 4021343356827 | 43 | 23 | 26 | |
| 13034038 | 3/8 | 5 | 100 | 4021343351938 | 46 | 26 | 30 | 22 |
| 13034012 | 1/2 | 5 | 80 | 4021343351945 | 48 | 21 | 37 | 26 |
| 13034034 | 3/4 | 5 | 50 | 4021343351952 | 52 | 22 | 46 | 30 |
| 1303401 | 1 | 5 | 40 | 4021343351969 | 57 | 23 | 52 | 40 |
| 130340114 | 1 1/4 | 5 | 20 | 4021343351976 | 64 | 26 | 64 | 50 |
| 130340112 | 1 1/2 | 5 | 15 | 4021343351983 | 70 | 32 | 72 | 54 |
| 1303402 | 2 | 2 | 10 | 4021343351990 | 79 | 31 | 89 | |



Catalog-no. and -description

30341 – Union female/male, conical sealing

| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 13034114 | 1/4 | 5 | 200 | 4021343356834 | 44 | 34 | 24 | 19 |
| 13034138 | 3/8 | 5 | 150 | 4021343352003 | 47 | 37 | 24 | 22 |
| 13034112 | 1/2 | 5 | 120 | 4021343352010 | 53 | 40 | 30 | 25 |
| 13034134 | 3/4 | 5 | 60 | 4021343352027 | 63 | 49 | 37 | 34 |
| 1303411 | 1 | 5 | 40 | 4021343352034 | 67 | 51 | 46 | 37 |
| 130341114 | 1 1/4 | 5 | 30 | 4021343352041 | 75 | 56 | 52 | 46 |
| 130341112 | 1 1/2 | 5 | 20 | 4021343352058 | 81 | 62 | 59 | 54 |
| 1303412 | 2 | 2 | 10 | 4021343352065 | 91 | 67 | 75 | 66 |



Catalog-no. and -description

30344 – Union, male/male, conical sealing

| Article-no. | Dimension R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|-----|----|-----|-----|
| 13034412 | 1/2 | 5 | 100 | 4021343352072 | 62 | 36 | 30 | 27 |
| 13034434 | 3/4 | 5 | 50 | 4021343352089 | 72 | 42 | 37 | 34 |
| 1303441 | 1 | 5 | 30 | 4021343352096 | 80 | 46 | 46 | 43 |
| 130344114 | 1 1/4 | 5 | 20 | 4021343352102 | 96 | 58 | 52 | 46 |
| 130344112 | 1 1/2 | 5 | 20 | 4021343352119 | 98 | 58 | 59 | 50 |
| 1303442 | 2 | 2 | 10 | 4021343352126 | 113 | 65 | 75 | 60 |



Catalog-no. and -description

30530 – Long nipple, male/male

| Article-no. | Dimension Rp x L | Bag | Box | EAN code | L | SW |
|--------------|---------------------|-----|-----|---------------|-----|----|
| 1305301240 | 1/2 x 40 | 10 | 200 | 4021343352133 | 40 | 12 |
| 1305301260 | 1/2 x 60 | 10 | 150 | 4021343352140 | 60 | 12 |
| 1305301280 | 1/2 x 80 | 10 | 120 | 4021343352157 | 80 | 12 |
| 13053012100 | 1/2 x 100 | 10 | 90 | 4021343352164 | 100 | 12 |
| 13053012120 | 1/2 x 120 | | 90 | 4021343352171 | 120 | 12 |
| 13053012150 | 1/2 x 150 | | 70 | 4021343352188 | 150 | 12 |
| 1305303440 | 3/4 x 40 | 10 | 150 | 4021343352195 | 40 | 17 |
| 1305303460 | 3/4 x 60 | 10 | 100 | 4021343352201 | 60 | 17 |
| 1305303480 | 3/4 x 80 | 10 | 80 | 4021343352218 | 80 | 17 |
| 13053034100 | 3/4 x 100 | 10 | 50 | 4021343352225 | 100 | 17 |
| 13053034120 | 3/4 x 120 | | 70 | 4021343352232 | 120 | 17 |
| 13053034150 | 3/4 x 150 | | 50 | 4021343352249 | 150 | 17 |
| 130530140 | 1 x 40 | 10 | 100 | 4021343352256 | 40 | 22 |
| 130530160 | 1 x 60 | 10 | 80 | 4021343352263 | 60 | 22 |
| 130530180 | 1 x 80 | 10 | 60 | 4021343352270 | 80 | 22 |
| 1305301100 | 1 x 100 | 10 | 50 | 4021343352287 | 100 | 22 |
| 1305301120 | 1 x 120 | | 50 | 4021343352294 | 120 | 22 |
| 1305301150 | 1 x 150 | | 40 | 4021343352300 | 150 | 22 |
| 13053011440 | 1 1/4 x 40 | | 80 | 4021343352317 | 40 | |
| 13053011460 | 1 1/4 x 60 | | 50 | 4021343352324 | 60 | |
| 13053011480 | 1 1/4 x 80 | | 40 | 4021343352331 | 80 | |
| 130530114100 | 1 1/4 x 100 | | 30 | 4021343352348 | 100 | |
| 130530114120 | 1 1/4 x 120 | | 30 | 4021343352355 | 120 | |
| 130530114150 | 1 1/4 x 150 | | 20 | 4021343352362 | 150 | |
| 13053011240 | 1 1/2 x 40 | | 60 | 4021343352379 | 40 | |
| 13053011260 | 1 1/2 x 60 | | 45 | 4021343352386 | 60 | |
| 13053011280 | 1 1/2 x 80 | | 30 | 4021343352393 | 80 | |
| 130530112100 | 1 1/2 x 100 | | 25 | 4021343352409 | 100 | |
| 130530112120 | 1 1/2 x 120 | | 20 | 4021343352416 | 120 | |
| 130530112150 | 1 1/2 x 150 | | 15 | 4021343352423 | 150 | |

SANHA[®]

Lead free gunmetal threaded fittings „Pb-free“
Series 30000



TRADITIONAL PIPING

**Gunmetal lengthening pieces
(according to DIN 50 930-6)**

**according to DVGW working
sheet GW 393 with threads
according to EN 10226**



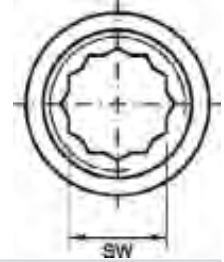
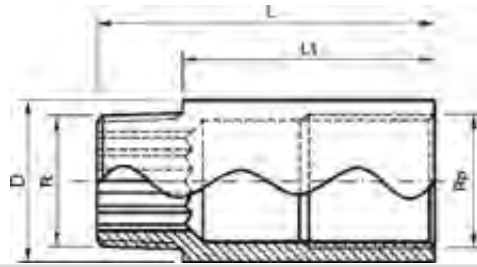
W / 483 / 92



DW-7401B00046



PN - EN 1254-4:2004



Catalog-no. and -description

3513 – Lengthening piece

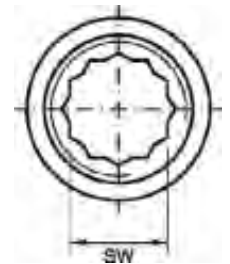
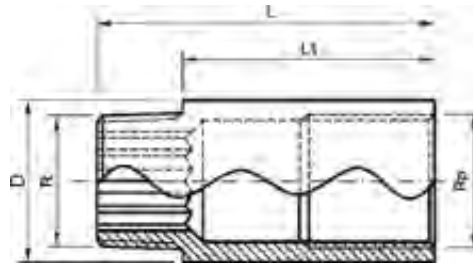
| Article-no. | Dimension R/Rp x L1 | Bag | Box | EAN code | L | L1 | D | SW |
|-------------|------------------------|-----|-----|---------------|-----|-----|----|----|
| 135133810* | 3/8 x 10 | 10 | 500 | 4021343174544 | 22 | 10 | 22 | 10 |
| 135133815 | 3/8 x 15 | 10 | 400 | 4021343174551 | 27 | 15 | 22 | 10 |
| 135133820 | 3/8 x 20 | 10 | 350 | 4021343174568 | 32 | 20 | 22 | 10 |
| 135133825 | 3/8 x 25 | 10 | 300 | 4021343174575 | 37 | 25 | 22 | 10 |
| 135133830 | 3/8 x 30 | 10 | 250 | 4021343174582 | 42 | 30 | 22 | 10 |
| 135133840 | 3/8 x 40 | 10 | 200 | 4021343174599 | 52 | 40 | 22 | 10 |
| 135133850 | 3/8 x 50 | 10 | 180 | 4021343174605 | 62 | 50 | 22 | 10 |
| 135133865 | 3/8 x 65 | 10 | 140 | 4021343174612 | 77 | 65 | 22 | 10 |
| 135133880 | 3/8 x 80 | 10 | 120 | 4021343174629 | 92 | 80 | 22 | 10 |
| 1351338100 | 3/8 x 100 | 10 | 100 | 4021343174636 | 112 | 100 | 22 | 10 |
| 135131212* | 1/2 x 12,5 | 10 | 200 | 4021343174643 | 28 | 13 | 27 | 12 |
| 135131217 | 1/2 x 17,5 | 10 | 200 | 4021343174650 | 33 | 18 | 27 | 12 |
| 135131220 | 1/2 x 20 | 10 | 200 | 4021343174667 | 36 | 20 | 27 | 12 |
| 135131225 | 1/2 x 25 | 10 | 200 | 4021343174674 | 41 | 25 | 27 | 12 |
| 135131230 | 1/2 x 30 | 10 | 180 | 4021343174681 | 46 | 30 | 27 | 12 |
| 135131240 | 1/2 x 40 | 10 | 150 | 4021343174698 | 56 | 40 | 27 | 12 |
| 135131250 | 1/2 x 50 | 10 | 120 | 4021343174704 | 66 | 50 | 27 | 12 |
| 135131265 | 1/2 x 65 | 10 | 90 | 4021343174711 | 81 | 65 | 27 | 12 |
| 135131280 | 1/2 x 80 | 10 | 90 | 4021343174728 | 96 | 80 | 27 | 12 |
| 1351312100 | 1/2 x 100 | 10 | 60 | 4021343174735 | 116 | 100 | 27 | 12 |
| 1351312120 | 1/2 x 120 | 5 | 50 | 4021343174742 | 136 | 120 | 27 | 12 |
| 1351312150 | 1/2 x 150 | 5 | 40 | 4021343174759 | 166 | 150 | 27 | 12 |
| 135133412* | 3/4 x 12,5 | 10 | 150 | 4021343174766 | 30 | 13 | 32 | 17 |
| 135133415* | 3/4 x 15 | 10 | 150 | 4021343174773 | 32 | 15 | 32 | 17 |
| 135133420 | 3/4 x 20 | 10 | 140 | 4021343174780 | 37 | 20 | 32 | 17 |
| 135133425 | 3/4 x 25 | 10 | 120 | 4021343174797 | 42 | 25 | 32 | 17 |
| 135133430 | 3/4 x 30 | 10 | 100 | 4021343174803 | 47 | 30 | 32 | 17 |
| 135133440 | 3/4 x 40 | 10 | 90 | 4021343174810 | 57 | 40 | 32 | 17 |
| 135133450 | 3/4 x 50 | 10 | 80 | 4021343174827 | 67 | 50 | 32 | 17 |
| 135133465 | 3/4 x 65 | 10 | 60 | 4021343174834 | 82 | 65 | 32 | 17 |
| 135133480 | 3/4 x 80 | 10 | 50 | 4021343174841 | 97 | 80 | 32 | 17 |
| 1351334100 | 3/4 x 100 | 10 | 40 | 4021343174858 | 117 | 100 | 32 | 17 |
| 13513115* | 1 x 15 | 10 | 120 | 4021343174872 | 35 | 15 | 39 | 22 |
| 13513120* | 1 x 20 | 10 | 100 | 4021343174889 | 40 | 20 | 39 | 22 |
| 13513125 | 1 x 25 | 10 | 70 | 4021343174896 | 45 | 25 | 39 | 22 |
| 13513130 | 1 x 30 | 10 | 70 | 4021343174902 | 60 | 30 | 39 | 22 |
| 13513140 | 1 x 40 | 10 | 70 | 4021343174919 | 54 | 40 | 39 | 22 |
| 13513150 | 1 x 50 | 10 | 50 | 4021343174926 | 70 | 50 | 39 | 22 |
| 13513165 | 1 x 65 | 5 | 40 | 4021343174933 | 85 | 65 | 39 | 22 |
| 13513180 | 1 x 80 | 5 | 40 | 4021343174940 | 100 | 80 | 39 | 22 |
| 135131100 | 1 x 100 | 5 | 30 | 4021343174957 | 120 | 100 | 39 | 22 |
| 1351311420* | 1 1/4 x 20 | 5 | 70 | 4021343174971 | 40 | 20 | 48 | 27 |
| 1351311425 | 1 1/4 x 25 | 5 | 70 | 4021343174988 | 45 | 25 | 48 | 27 |
| 1351311430 | 1 1/4 x 30 | 5 | 60 | 4021343174995 | 50 | 30 | 48 | 27 |
| 1351311440 | 1 1/4 x 40 | 5 | 40 | 4021343175008 | 60 | 40 | 48 | 27 |
| 1351311450 | 1 1/4 x 50 | 5 | 40 | 4021343175015 | 70 | 50 | 48 | 27 |

* not DVGW registered

TRADITIONAL PIPING

Lengthening pieces according
to DIN 3523 in lead free gunmetal
„Pb-free“
(according to DIN 50 930-6)





Catalog-no. and -description

30513 – Lengthening piece, „Pb-free“

| Article-no. | Dimension R/ Rp x L1 | Bag | Box | EAN code | L | L1 | D | SW |
|-------------|-------------------------|-----|-----|---------------|-----|-----|----|----|
| 1305133810 | 3/8 x 10 | 10 | 500 | 4021343352430 | 22 | 10 | 22 | 10 |
| 1305133815 | 3/8 x 15 | 10 | 400 | 4021343352447 | 27 | 15 | 22 | 10 |
| 1305133820 | 3/8 x 20 | 10 | 350 | 4021343352454 | 32 | 20 | 22 | 10 |
| 1305133825 | 3/8 x 25 | 10 | 300 | 4021343352461 | 37 | 25 | 22 | 10 |
| 1305133830 | 3/8 x 30 | 10 | 250 | 4021343352478 | 42 | 30 | 22 | 10 |
| 1305133840 | 3/8 x 40 | 10 | 200 | 4021343352485 | 52 | 40 | 22 | 10 |
| 1305133850 | 3/8 x 50 | 10 | 180 | 4021343352492 | 62 | 50 | 22 | 10 |
| 1305133865 | 3/8 x 65 | 10 | 140 | 4021343352508 | 77 | 65 | 22 | 10 |
| 1305133880 | 3/8 x 80 | 10 | 120 | 4021343352515 | 92 | 80 | 22 | 10 |
| 13051338100 | 3/8 x 100 | 10 | 100 | 4021343352522 | 112 | 100 | 22 | 10 |
| 1305131212 | 1/2 x 12,5 | 10 | 200 | 4021343352621 | 28 | 13 | 27 | 12 |
| 1305131217 | 1/2 x 17,5 | 10 | 200 | 4021343352546 | 33 | 18 | 27 | 12 |
| 1305131220 | 1/2 x 20 | 10 | 200 | 4021343352539 | 36 | 20 | 27 | 12 |
| 1305131225 | 1/2 x 25 | 10 | 200 | 4021343352553 | 41 | 25 | 27 | 12 |
| 1305131230 | 1/2 x 30 | 10 | 180 | 4021343352560 | 46 | 30 | 27 | 12 |
| 1305131240 | 1/2 x 40 | 10 | 150 | 4021343352577 | 56 | 40 | 27 | 12 |
| 1305131250 | 1/2 x 50 | 10 | 120 | 4021343352584 | 66 | 50 | 27 | 12 |
| 1305131265 | 1/2 x 65 | 10 | 90 | 4021343352591 | 81 | 65 | 27 | 12 |
| 1305131280 | 1/2 x 80 | 10 | 90 | 4021343352607 | 96 | 80 | 27 | 12 |
| 13051312100 | 1/2 x 100 | 10 | 60 | 4021343352614 | 116 | 100 | 27 | 12 |
| 13051312120 | 1/2 x 120 | 5 | 50 | 4021343352638 | 136 | 120 | 27 | 12 |
| 13051312150 | 1/2 x 150 | 5 | 40 | 4021343352645 | 166 | 150 | 27 | 12 |
| 1305133412 | 3/4 x 12,5 | 10 | 150 | 4021343352652 | 30 | 13 | 32 | 17 |
| 1305133415 | 3/4 x 15 | 10 | 150 | 4021343352669 | 32 | 15 | 32 | 17 |
| 1305133420 | 3/4 x 20 | 10 | 140 | 4021343352676 | 37 | 20 | 32 | 17 |
| 1305133425 | 3/4 x 25 | 10 | 120 | 4021343352683 | 42 | 25 | 32 | 17 |
| 1305133430 | 3/4 x 30 | 10 | 100 | 4021343352690 | 47 | 30 | 32 | 17 |
| 1305133440 | 3/4 x 40 | 10 | 90 | 4021343352706 | 57 | 40 | 32 | 17 |
| 1305133450 | 3/4 x 50 | 10 | 80 | 4021343352713 | 67 | 50 | 32 | 17 |
| 1305133465 | 3/4 x 65 | 10 | 60 | 4021343352720 | 82 | 65 | 32 | 17 |
| 1305133480 | 3/4 x 80 | 10 | 50 | 4021343352737 | 97 | 80 | 32 | 17 |
| 13051334100 | 3/4 x 100 | 10 | 40 | 4021343352744 | 117 | 100 | 32 | 17 |
| 130513115 | 1 x 15 | 10 | 120 | 4021343352751 | 35 | 15 | 39 | 22 |
| 130513120 | 1 x 20 | 10 | 100 | 4021343352768 | 40 | 20 | 39 | 22 |
| 130513125 | 1 x 25 | 10 | 70 | 4021343352775 | 45 | 25 | 39 | 22 |
| 130513130 | 1 x 30 | 10 | 70 | 4021343352782 | 60 | 30 | 39 | 22 |
| 130513140 | 1 x 40 | 10 | 70 | 4021343352799 | 54 | 40 | 39 | 22 |
| 130513150 | 1 x 50 | 10 | 50 | 4021343352805 | 70 | 50 | 39 | 22 |
| 130513165 | 1 x 65 | 5 | 40 | 4021343352812 | 85 | 65 | 39 | 22 |
| 130513180 | 1 x 80 | 5 | 40 | 4021343352829 | 100 | 80 | 39 | 22 |
| 1305131100 | 1 x 100 | 5 | 30 | 4021343352836 | 120 | 100 | 39 | 22 |

SANHA[®]

Lead free gunmetal
lengthening pieces „Pb-free“



TRADITIONAL PIPING

**Brass threaded fittings
(according to DIN 50930-6)**



PN - EN 1254-4:2004



ГОСТ DE.AIO31.H08800



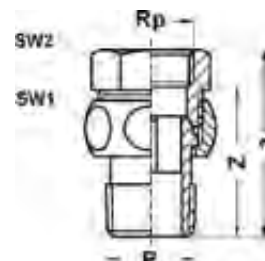
W / 483 / 92



Catalog-no. and -description

221 – Union, male/male, conical sealing, raw, threads according to EN 10226

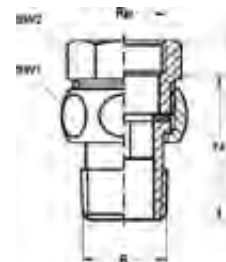
| Article-no. | Dimension R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|----|----|-----|-----|
| 222138R | 3/8 | 5 | 150 | 4021343039089 | 52 | 32 | 24 | 22 |
| 222112R | 1/2 | 5 | 100 | 4021343039058 | 62 | 36 | 30 | 27 |
| 222134R | 3/4 | 5 | 50 | 4021343039072 | 72 | 42 | 37 | 34 |
| 22211R | 1 | 5 | 30 | 4021343039027 | 73 | 42 | 46 | 34 |
| 2221114R | 1 1/4 | 5 | 30 | 4021343039041 | 91 | 58 | 52 | 46 |
| 2221112R | 1 1/2 | 5 | 20 | 4021343039034 | 98 | 58 | 59 | 50 |



Catalog-no. and -description

222 – Union, male/female, conical sealing, raw, threads according to EN 10226

| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 222238R | 3/8 | 5 | 150 | 4021343039157 | 47 | 37 | 24 | 22 |
| 222212R | 1/2 | 5 | 120 | 4021343039126 | 47 | 38 | 30 | 26 |
| 222234R | 3/4 | 5 | 60 | 4021343039140 | 63 | 49 | 37 | 34 |
| 22221R | 1 | 5 | 40 | 4021343039096 | 68 | 51 | 46 | 37 |
| 2222114R | 1 1/4 | 5 | 20 | 4021343039119 | 75 | 56 | 52 | 46 |
| 2222112R | 1 1/2 | 5 | 15 | 4021343039102 | 81 | 62 | 59 | 54 |
| 22222R | 2 | 2 | 10 | 4021343039133 | 91 | 67 | 75 | 66 |



Catalog-no. and -description

223 – Union, male/female, flat sealing, raw, threads according to EN 10226

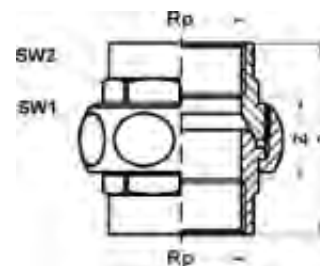
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 222338R | 3/8 | 5 | 150 | 4021343039225 | 47 | 37 | 24 | 22 |
| 222312R | 1/2 | 5 | 120 | 4021343039195 | 49 | 40 | 30 | 26 |
| 222334R | 3/4 | 5 | 60 | 4021343039218 | 59 | 44 | 37 | 32 |
| 22231R | 1 | 5 | 40 | 4021343039164 | 66 | 49 | 46 | 41 |
| 2223114R | 1 1/4 | 5 | 30 | 4021343039188 | 72 | 57 | 52 | 48 |
| 2223112R | 1 1/2 | 5 | 20 | 4021343039171 | 81 | 62 | 59 | 54 |
| 22232R | 2 | 2 | 10 | 4021343039201 | 91 | 66 | 75 | 66 |



Catalog-no. and -description

224 – Union, male/male, flat sealing, raw, threads according to EN 10226

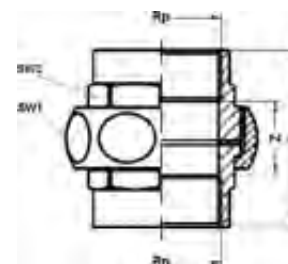
| Article-no. | Dimension R | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|----------------|-----|-----|---------------|-----|----|-----|-----|
| 222412R | 1/2 | 5 | 100 | 4021343039263 | 60 | 34 | 30 | 22 |
| 222434R | 3/4 | 5 | 50 | 4021343039409 | 67 | 37 | 37 | 27 |
| 22241R | 1 | 5 | 30 | 4021343039232 | 76 | 42 | 46 | 34 |
| 2224114R | 1 1/4 | 5 | 30 | 4021343039256 | 96 | 58 | 52 | 46 |
| 2224112R | 1 1/2 | 5 | 20 | 4021343039249 | 98 | 58 | 59 | 50 |
| 22242R | 2 | 2 | 10 | 4021343039270 | 113 | 65 | 75 | 60 |



Catalog-no. and -description

271 – Union, female/female, conical sealing, raw, threads according to EN 10226

| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------|-----|-----|---------------|----|----|-----|-----|
| 227114R | 1/4 | 5 | 100 | 4021343041303 | 43 | 23 | 26 | |
| 227112R | 1/2 | 5 | 80 | 4021343041297 | 48 | 21 | 37 | 26 |
| 227134R | 3/4 | 5 | 50 | 4021343041334 | 52 | 22 | 46 | 30 |
| 22711R | 1 | 5 | 40 | 4021343041266 | 57 | 23 | 52 | 40 |
| 2271114R | 1 1/4 | 5 | 20 | 4021343041280 | 64 | 26 | 64 | 50 |
| 2271112R | 1 1/2 | 5 | 15 | 4021343041273 | 70 | 32 | 72 | 54 |
| 22712R | 2 | 2 | 10 | 4021343041327 | 79 | 31 | 89 | |



Catalog-no. and -description

272 – Union, female/female, flat sealing, raw, threads according to EN 10226

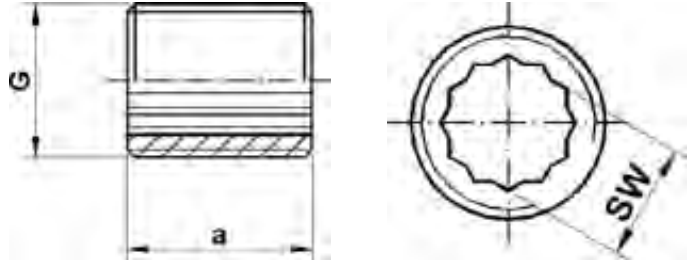
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|--------------|-----|-----|---------------|----|----|-----|-----|
| 227212R | 1/2 | 5 | 80 | 4021343041389 | 48 | 21 | 37 | 26 |
| 227234R | 3/4 | 5 | 50 | 4021343041426 | 52 | 22 | 46 | 30 |
| 22721R | 1 | 5 | 40 | 4021343041358 | 57 | 23 | 52 | 40 |
| 2272114R | 1 1/4 | 5 | 20 | 4021343041372 | 64 | 26 | 64 | 50 |
| 2272112R | 1 1/2 | 5 | 15 | 4021343041365 | 70 | 34 | 72 | 54 |
| 22722R | 2 | 2 | 10 | 4021343041419 | 78 | 30 | 89 | |



Catalog-no. and -description

421 – Wall plate elbow, chrome-plated and raw, threads according to EN ISO 228

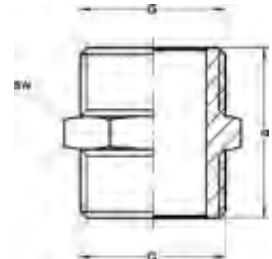
| Article-no. | Dimension G | Bag | Box | EAN code | a | b | c | e |
|---------------|-------------|-----|-----|---------------|----|----|----|----|
| raw | | | | | | | | |
| 242112R | 1/2 | 10 | 90 | 4021343042676 | 23 | 38 | 23 | 40 |
| 242134R | 3/4 | 10 | 60 | 4021343042690 | 26 | 44 | 26 | 45 |
| chrome-plated | | | | | | | | |
| 242112C | 1/2 | 10 | 90 | 4021343042669 | 23 | 38 | 23 | 40 |



Catalog-no. and -description

521 – Nipple, raw, thread according to EN ISO 228

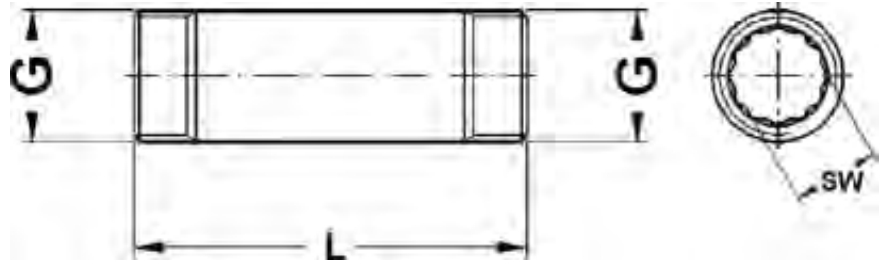
| Article-no. | Dimension G | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|------|---------------|----|----|
| raw | | | | | | |
| 252118R | 1/8 | 10 | 2000 | 4021343044281 | 20 | |
| 252114R | 1/4 | 10 | 1000 | 4021343044267 | 20 | |
| 252138R | 3/8 | 10 | 600 | 4021343044342 | 20 | 10 |
| 252112R | 1/2 | 10 | 400 | 4021343044243 | 25 | 12 |
| 252134R | 3/4 | 10 | 200 | 4021343044328 | 26 | 17 |
| 25211R | 1 | 10 | 100 | 4021343044182 | 33 | 22 |
| 2521114R | 1 1/4 | | 90 | 4021343044229 | 38 | |
| 2521112R | 1 1/2 | | 65 | 4021343044205 | 38 | |
| 25212R | 2 | | 36 | 4021343044304 | 44 | |



Catalog-no. and -description

522 – Double nipple, male/male, chrome-plated and raw, threads according to EN 1254-4

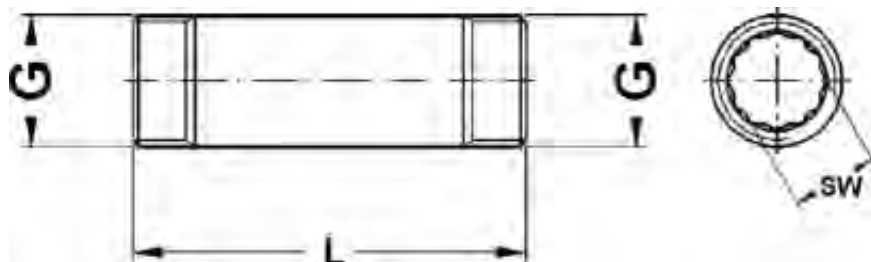
| Article-no. | Dimension Rk | Bag | Box | EAN code | a | SW |
|---------------|-----------------|-----|------|---------------|----|----|
| raw | | | | | | |
| 252218R | 1/8 | 10 | 1500 | 4021343044465 | 20 | 10 |
| 252214R | 1/4 | 10 | 700 | 4021343044441 | 20 | 14 |
| 252238R | 3/8 | 10 | 600 | 4021343044571 | 22 | 17 |
| 252212R | 1/2 | 10 | 350 | 4021343044427 | 24 | 22 |
| 252234R | 3/4 | 10 | 250 | 4021343044557 | 26 | 27 |
| 25221R | 1 | 10 | 150 | 4021343044366 | 28 | 34 |
| 2522114R | 1 1/4 | | 90 | 4021343044403 | 34 | 42 |
| 2522112R | 1 1/2 | | 60 | 4021343044380 | 40 | 50 |
| 25222R | 2 | | 30 | 4021343044489 | 44 | 60 |
| chrome-plated | | | | | | |
| 252218C | 1/8 | 10 | 1500 | 4021343044458 | 20 | 10 |
| 252214C | 1/4 | 10 | 700 | 4021343044434 | 20 | 14 |
| 252238C | 3/8 | 10 | 600 | 4021343044564 | 22 | 17 |
| 252212C | 1/2 | 10 | 350 | 4021343044410 | 24 | 22 |
| 252234C | 3/4 | 10 | 250 | 4021343044540 | 26 | 27 |
| 25221C | 1 | 10 | 150 | 4021343044359 | 28 | 34 |
| 2522114C | 1 1/4 | | 90 | 4021343044397 | 34 | 42 |
| 2522112C | 1 1/2 | | 60 | 4021343044373 | 40 | 50 |
| 25222C | 2 | | 30 | 4021343044472 | 44 | 60 |



Catalog-no. and -description

523 – Long nipple, male/male, chrome-plated and raw, threads according to EN ISO 228

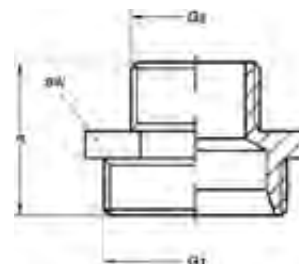
| Article-no. | Dimension G x L | Bag | Box | EAN code | L | SW |
|-------------|--------------------|-----|-----|---------------|-----|----|
| raw | | | | | | |
| 25233840R | 3/8 x 40 | 10 | 500 | 4021343045929 | 40 | 10 |
| 25233860R | 3/8 x 60 | 10 | 300 | 4021343045967 | 60 | 10 |
| 25233880R | 3/8 x 80 | 10 | 200 | 4021343045981 | 80 | 10 |
| 252338100R | 3/8 x 100 | 10 | 150 | 4021343045769 | 100 | 10 |
| 25231230R | 1/2 x 30 | 10 | 350 | 4021343045202 | 30 | 12 |
| 25231240R | 1/2 x 40 | 10 | 300 | 4021343045226 | 40 | 12 |
| 25231250R | 1/2 x 50 | 10 | 250 | 4021343045240 | 50 | 12 |
| 25231260R | 1/2 x 60 | 10 | 200 | 4021343045264 | 60 | 12 |
| 25231280R | 1/2 x 80 | 10 | 120 | 4021343045288 | 80 | 12 |
| 252312100R | 1/2 x 100 | 10 | 90 | 4021343045066 | 100 | 12 |
| 252312120R | 1/2 x 120 | | 90 | 4021343045080 | 120 | 12 |
| 252312150R | 1/2 x 150 | | 80 | 4021343045127 | 150 | 12 |
| 252312200R | 1/2 x 200 | | 70 | 4021343045189 | 200 | 12 |
| 25233430R | 3/4 x 30 | 10 | 220 | 4021343045653 | 30 | 17 |
| 25233440R | 3/4 x 40 | 10 | 150 | 4021343045677 | 40 | 17 |
| 25233450R | 3/4 x 50 | 10 | 150 | 4021343045691 | 50 | 17 |
| 25233460R | 3/4 x 60 | 10 | 120 | 4021343045714 | 60 | 17 |
| 25233480R | 3/4 x 80 | 10 | 90 | 4021343045738 | 80 | 17 |
| 252334100R | 3/4 x 100 | 10 | 60 | 4021343045516 | 100 | 17 |
| 252334120R | 3/4 x 120 | | 60 | 4021343045530 | 120 | 17 |
| 252334150R | 3/4 x 150 | | 60 | 4021343045578 | 150 | 17 |
| 252334200R | 3/4 x 200 | | 40 | 4021343045639 | 200 | 17 |
| 2523130R | 1 x 30 | 10 | 120 | 4021343045301 | 30 | 22 |
| 2523140R | 1 x 40 | 10 | 100 | 4021343045325 | 40 | 22 |
| 2523150R | 1 x 50 | 10 | 90 | 4021343045349 | 50 | 22 |
| 2523160R | 1 x 60 | 10 | 70 | 4021343045363 | 60 | 22 |
| 2523180R | 1 x 80 | 10 | 60 | 4021343045387 | 80 | 22 |
| 25231100R | 1 x 100 | 10 | 40 | 4021343044595 | 100 | 22 |
| 25231120R | 1 x 120 | | 50 | 4021343044618 | 120 | 22 |
| 25231150R | 1 x 150 | | 36 | 4021343044984 | 150 | 22 |
| 25231200R | 1 x 200 | | 20 | 4021343045042 | 200 | 22 |
| 252311440R | 1 1/4 x 40 | | 80 | 4021343044908 | 40 | |
| 252311460R | 1 1/4 x 60 | | 50 | 4021343044946 | 60 | |
| 252311480R | 1 1/4 x 80 | | 40 | 4021343044960 | 80 | |
| 2523114100R | 1 1/4 x 100 | | 38 | 4021343044762 | 100 | |
| 2523114120R | 1 1/4 x 120 | | 32 | 4021343044786 | 120 | |
| 2523114150R | 1 1/4 x 150 | | 28 | 4021343044823 | 150 | |
| 2523114200R | 1 1/4 x 200 | | 16 | 4021343044885 | 200 | |
| 252311240R | 1 1/2 x 40 | | 60 | 4021343044694 | 40 | |
| 252311260R | 1 1/2 x 60 | | 48 | 4021343044717 | 60 | |
| 252311280R | 1 1/2 x 80 | | 36 | 4021343044724 | 80 | |
| 2523112100R | 1 1/2 x 100 | | 30 | 4021343044625 | 100 | |
| 2523112120R | 1 1/2 x 120 | | 24 | 4021343044632 | 120 | |
| 2523112150R | 1 1/2 x 150 | | 20 | 4021343044656 | 150 | |
| 2523112200R | 1 1/2 x 200 | | 10 | 4021343044687 | 200 | |
| 2523280R | 2 x 80 | | 20 | 4021343045493 | 80 | |
| 25232100R | 2 x 100 | | 15 | 4021343045394 | 100 | |



Catalog-no. and -description

523 – Long nipple, male/male, chrome-plated and raw, threads according to EN ISO 228 (continued)

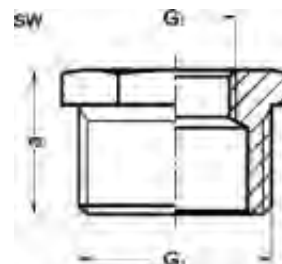
| Article-no. | Dimension G x L | Bag | Box | EAN code | L | SW |
|---------------|--------------------|-----|-----|---------------|-----|----|
| 25232120R | 2 x 120 | | 12 | 4021343045400 | 120 | |
| 25232150R | 2 x 150 | | 12 | 4021343045424 | 150 | |
| chrome-plated | | | | | | |
| 25233840C | 3/8 x 40 | 10 | 500 | 4021343045912 | 40 | 10 |
| 25233860C | 3/8 x 60 | 10 | 300 | 4021343045950 | 60 | 10 |
| 25233880C | 3/8 x 80 | 10 | 200 | 4021343045974 | 80 | 10 |
| 25231230C | 1/2 x 30 | 10 | 350 | 4021343045196 | 30 | 12 |
| 25231240C | 1/2 x 40 | 10 | 300 | 4021343045219 | 40 | 12 |
| 25231250C | 1/2 x 50 | 10 | 250 | 4021343045233 | 50 | 12 |
| 25231260C | 1/2 x 60 | 10 | 200 | 4021343045257 | 60 | 12 |
| 25231280C | 1/2 x 80 | 10 | 120 | 4021343045271 | 80 | 12 |
| 252312100C | 1/2 x 100 | 10 | 90 | 4021343045059 | 100 | 12 |
| 252312120C | 1/2 x 120 | 10 | 90 | 4021343045073 | 120 | 12 |
| 252312150C | 1/2 x 150 | 10 | 80 | 4021343045110 | 150 | 12 |
| 252312200C | 1/2 x 200 | 10 | 70 | 4021343045172 | 200 | 12 |
| 25233440C | 3/4 x 40 | 10 | 150 | 4021343045660 | 40 | 17 |
| 25233460C | 3/4 x 60 | 10 | 120 | 4021343045707 | 60 | 17 |
| 25233480C | 3/4 x 80 | 10 | 90 | 4021343045721 | 80 | 17 |
| 252334100C | 3/4 x 100 | 10 | 60 | 4021343045509 | 100 | 17 |
| 252334120C | 3/4 x 120 | | 60 | 4021343045523 | 120 | 17 |



Catalog-no. and -description

531 – Reducing nipple, male/male, threads according to EN 1254-4, chrome-plated and raw

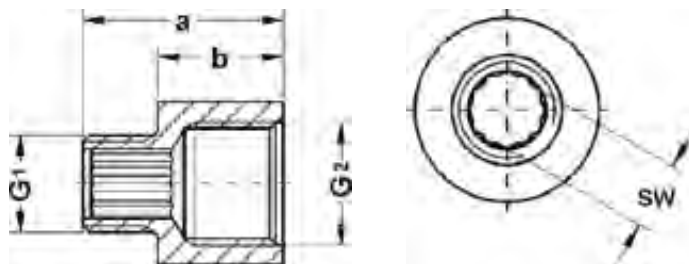
| Article-no. | Dimension G2 x G1 | Bag | Box | EAN code | a | SW |
|---------------|----------------------|-----|------|---------------|----|----|
| raw | | | | | | |
| 25311418R | 1/4 x 1/8 | 10 | 1000 | 4021343046209 | 20 | 14 |
| 25313814R | 3/8 x 1/4 | 10 | 600 | 4021343046407 | 25 | 17 |
| 25311214R | 1/2 x 1/4 | 10 | 350 | 4021343046117 | 27 | 22 |
| 25311238R | 1/2 x 3/8 | 10 | 400 | 4021343046148 | 25 | 22 |
| 25313438R | 3/4 x 3/8 | 10 | 300 | 4021343046377 | 28 | 27 |
| 25313412R | 3/4 x 1/2 | 10 | 250 | 4021343046346 | 27 | 27 |
| 2531112R | 1 x 1/2 | 10 | 150 | 4021343046025 | 30 | 34 |
| 2531134R | 1 x 3/4 | 10 | 150 | 4021343046162 | 31 | 34 |
| 25311141R | 1 1/4 x 1 | | 70 | 4021343046070 | 32 | 42 |
| 2531112114R | 1 1/2 x 1 1/4 | | 50 | 4021343046049 | 40 | 50 |
| 25312112R | 2 x 1 1/2 | | 30 | 4021343046223 | 43 | 61 |
| 25312122R | 2 1/2 x 2 | | 18 | 4021343046247 | 48 | 62 |
| chrome-plated | | | | | | |
| 25311418C | 1/4 x 1/8 | 10 | 1000 | 4021343046193 | 20 | 14 |
| 25313814C | 3/8 x 1/4 | 10 | 600 | 4021343046391 | 25 | 17 |
| 25311214C | 1/2 x 1/4 | 10 | 350 | 4021343046100 | 27 | 22 |
| 25311238C | 1/2 x 3/8 | 10 | 400 | 4021343046131 | 25 | 22 |
| 25313412C | 3/4 x 1/2 | 10 | 250 | 4021343046339 | 27 | 27 |
| 2531112C | 1 x 1/2 | 10 | 150 | 4021343046018 | 30 | 34 |
| 2531134C | 1 x 3/4 | 10 | 150 | 4021343046155 | 31 | 34 |
| 25311141C | 1 1/4 x 1 | | 70 | 4021343046063 | 32 | 42 |
| 2531112114C | 1 1/2 x 1 1/4 | | 50 | 4021343046032 | 40 | 50 |



Catalog-no. and -description

541 – Reducer, male/female, threads according to EN 1254-4, chrome-plated and raw

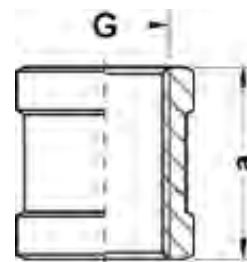
| Article-no. | Dimension G2 x G1 | Bag | Box | EAN code | a | SW |
|---------------|----------------------|-----|------|---------------|----|----|
| raw | | | | | | |
| 25411418R | 1/4 x 1/8 | 10 | 1000 | 4021343046933 | 13 | 14 |
| 25413818R | 3/8 x 1/8 | 10 | 800 | 4021343047251 | 14 | 17 |
| 25413814R | 3/8 x 1/4 | 10 | 700 | 4021343047237 | 14 | 17 |
| 25411218R | 1/2 x 1/8 | 10 | 500 | 4021343046858 | 16 | 22 |
| 25411214R | 1/2 x 1/4 | 10 | 500 | 4021343046834 | 16 | 22 |
| 25411238R | 1/2 x 3/8 | 10 | 500 | 4021343046872 | 16 | 22 |
| 25413414R | 3/4 x 1/4 | 10 | 300 | 4021343047190 | 18 | 27 |
| 25413438R | 3/4 x 3/8 | 10 | 300 | 4021343047213 | 18 | 27 |
| 25413412R | 3/4 x 1/2 | 10 | 300 | 4021343047176 | 18 | 27 |
| 2541138R | 1 x 3/8 | 10 | 200 | 4021343046919 | 21 | 34 |
| 2541112R | 1 x 1/2 | 10 | 180 | 4021343046674 | 21 | 34 |
| 2541134R | 1 x 3/4 | 10 | 200 | 4021343046896 | 21 | 34 |
| 254111412R | 1 1/4 x 1/2 | | 140 | 4021343046797 | 22 | 42 |
| 254111434R | 1 1/4 x 3/4 | | 140 | 4021343046810 | 22 | 42 |
| 25411141R | 1 1/4 x 1 | | 140 | 4021343046773 | 22 | 42 |
| 254111212R | 1 1/2 x 1/2 | | 100 | 4021343046735 | 22 | 50 |
| 254111234R | 1 1/2 x 3/4 | | 100 | 4021343046759 | 22 | 50 |
| 25411121R | 1 1/2 x 1 | | 100 | 4021343046698 | 22 | 50 |
| 2541112114R | 1 1/2 x 1 1/4 | | 100 | 4021343046711 | 22 | 50 |
| 2541212R | 2 x 1/2 | | 55 | 4021343047015 | 25 | 60 |
| 2541234R | 2 x 3/4 | | 55 | 4021343047077 | 25 | 60 |
| 254121R | 2 x 1 | | 55 | 4021343046957 | 25 | 60 |
| 25412114R | 2 x 1 1/4 | | 55 | 4021343046995 | 25 | 60 |
| 25412112R | 2 x 1 1/2 | | 55 | 4021343046971 | 25 | 60 |
| chrome-plated | | | | | | |
| 25411418C | 1/4 x 1/8 | 10 | 1000 | 4021343046926 | 13 | 14 |
| 25413818C | 3/8 x 1/8 | 10 | 800 | 4021343047244 | 14 | 17 |
| 25413814C | 3/8 x 1/4 | 10 | 700 | 4021343047220 | 14 | 17 |
| 25411218C | 1/2 x 1/8 | 10 | 500 | 4021343046841 | 16 | 22 |
| 25411214C | 1/2 x 1/4 | 10 | 600 | 4021343046827 | 16 | 22 |
| 25411238C | 1/2 x 3/8 | 10 | 500 | 4021343046865 | 16 | 22 |
| 25413412C | 3/4 x 1/2 | 10 | 300 | 4021343047169 | 18 | 27 |
| 2541112C | 1 x 1/2 | 10 | 180 | 4021343046667 | 21 | 34 |
| 2541134C | 1 x 3/4 | 10 | 200 | 4021343046889 | 21 | 34 |
| 254111412C | 1 1/4 x 1/2 | | 165 | 4021343046780 | 22 | 42 |
| 254111434C | 1 1/4 x 3/4 | | 165 | 4021343046803 | 22 | 42 |
| 25411141C | 1 1/4 x 1 | | 165 | 4021343046766 | 22 | 42 |
| 254111212C | 1 1/2 x 1/2 | | 100 | 4021343046728 | 22 | 50 |
| 254111234C | 1 1/2 x 3/4 | | 100 | 4021343046742 | | |
| 25411121C | 1 1/2 x 1 | | 100 | 4021343046681 | 22 | 50 |



Catalog-no. and -description

542 – Reducer, male/female, threads according to EN 1254-4, chrome-plated and raw

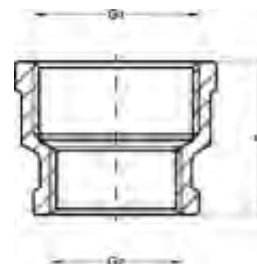
| Article-no. | Dimension G1 x G2 | Bag | Box | EAN code | a | b | SW |
|----------------------|----------------------|-----|-----|---------------|----|----|----|
| raw | | | | | | | |
| 25421814R | 1/8a x 1/4i | 10 | 700 | 4021343047350 | 22 | 14 | 6 |
| 25421438R | 1/4a x 3/8i | 10 | 400 | 4021343047336 | 27 | 17 | 8 |
| 25423812R | 3/8a x 1/2i | 10 | 350 | 4021343047411 | 27 | 10 | 10 |
| 25421238R | 1/2a x 3/8i | 10 | 300 | 4021343047312 | 29 | 19 | |
| 25421234R | 1/2a x 3/4i | 10 | 200 | 4021343047299 | 29 | 10 | 12 |
| 2542121R | 1/2a x 1i | 10 | 120 | 4021343137181 | 32 | 22 | 12 |
| 25423412R | 3/4a x 1/2i | 10 | 200 | 4021343047398 | 28 | 18 | 27 |
| 2542341R | 3/4a x 1i | 10 | 120 | 4021343047374 | 34 | 12 | |
| 25421114R | 1a x 1 1/4i | | 45 | 4021343047275 | 22 | 14 | 6 |
| chrome-plated | | | | | | | |
| 25421438C | 1/4a x 3/8i | 10 | 400 | 4021343047329 | 27 | 17 | 8 |
| 25423812C | 3/8a x 1/2i | 10 | 350 | 4021343047404 | 27 | 10 | 10 |
| 25421238C | 1/2a x 3/8i | 10 | 300 | 4021343047305 | 29 | 19 | |
| 25421234C | 1/2a x 3/4i | 10 | 200 | 4021343047282 | 29 | 10 | 12 |
| 2542121C | 1/2a x 1i | 10 | 120 | 4021343172915 | 32 | 22 | 12 |
| 25423412C | 3/4a x 1/2i | 10 | 200 | 4021343047381 | 28 | 18 | 27 |
| 2542341C | 3/4a x 1i | 10 | 120 | 4021343047367 | 34 | 12 | |



Catalog-no. and -description

551 – Coupling, female, threads according to EN ISO 228, chrome-plated and raw

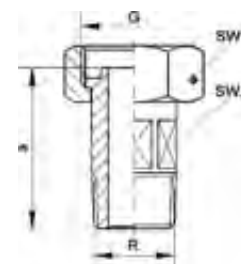
| Article-no. | Dimension G | Bag | Box | EAN code | a |
|----------------------|----------------|-----|-----|---------------|----|
| raw | | | | | |
| 255118R | 1/8 | 10 | 700 | 4021343047534 | 18 |
| 255114R | 1/4 | 10 | 600 | 4021343047510 | 20 |
| 255138R | 3/8 | 10 | 400 | 4021343047633 | 20 |
| 255112R | 1/2 | 10 | 250 | 4021343047497 | 27 |
| 255134R | 3/4 | 10 | 150 | 4021343047619 | 30 |
| 25511R | 1 | 10 | 80 | 4021343047435 | 35 |
| 2551114R | 1 1/4 | | 50 | 4021343047473 | 39 |
| 2551112R | 1 1/2 | | 45 | 4021343047459 | 40 |
| 25512R | 2 | | 25 | 4021343047558 | 45 |
| chrome-plated | | | | | |
| 255114C | 1/4 | 10 | 600 | 4021343047503 | 20 |
| 255138C | 3/8 | 10 | 400 | 4021343047626 | 20 |
| 255112C | 1/2 | 10 | 250 | 4021343047480 | 27 |
| 255134C | 3/4 | 10 | 150 | 4021343047602 | 30 |
| 25511C | 1 | 10 | 80 | 4021343047428 | 35 |
| 2551114C | 1 1/4 | | 50 | 4021343047466 | 39 |
| 2551112C | 1 1/2 | | 45 | 4021343047442 | 40 |



Catalog-no. and -description

552 – Reducing coupling, female/female, threads according to EN ISO 228, chrome-plated and raw

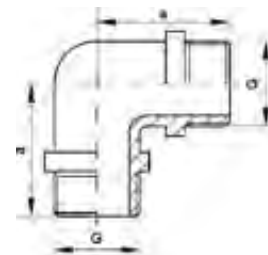
| Article-no. | Dimension G1 x G2 | Bag | Box | EAN code | a |
|----------------------|----------------------|-----|-----|---------------|----|
| raw | | | | | |
| 25523814R | 3/8 x 1/4 | 10 | 350 | 4021343047855 | 27 |
| 25521238R | 1/2 x 3/8 | 10 | 250 | 4021343047770 | 31 |
| 25523412R | 3/4 x 1/2 | 10 | 200 | 4021343047831 | 32 |
| 2552112R | 1 x 1/2 | 10 | 120 | 4021343047657 | 35 |
| 2552134R | 1 x 3/4 | 10 | 100 | 4021343047794 | 36 |
| 255211412R | 1 1/4 x 1/2 | | 45 | 4021343047732 | 40 |
| 255211434R | 1 1/4 x 3/4 | | 60 | 4021343047756 | 41 |
| 25521141R | 1 1/4 x 1 | | 60 | 4021343047718 | 45 |
| 25521121R | 1 1/2 x 1 | | 40 | 4021343047671 | 44 |
| 2552112114R | 1 1/2 x 1 1/4 | | 40 | 4021343047695 | 47 |
| 25522112R | 2 x 1 1/2 | | 18 | 4021343047817 | 50 |
| chrome-plated | | | | | |
| 25523814C | 3/8 x 1/4 | 10 | 350 | 4021343047848 | 27 |
| 25523412C | 3/4 x 1/2 | 10 | 200 | 4021343047824 | 32 |
| 2552112C | 1 x 1/2 | 10 | 120 | 4021343047640 | 35 |
| 2552134C | 1 x 3/4 | 10 | 100 | 4021343047787 | 36 |
| 255211434C | 1 1/4 x 3/4 | | 60 | 4021343047749 | 41 |
| 25521141C | 1 1/4 x 1 | | 60 | 4021343047701 | 45 |
| 2552112114C | 1 1/2 x 1 1/4 | | 40 | 4021343047688 | 47 |
| 25522112C | 2 x 1 1/2 | | 18 | 4021343047800 | 50 |



Catalog-no. and -description

604 – Water meter union, threads according to EN 10226, chrome-plated and raw

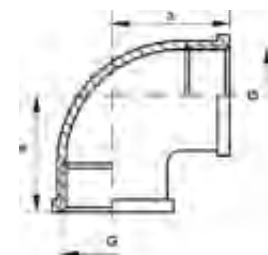
| Article-no. | Dimension R x G | Bag | Box | EAN code | a | z | SW1 | SW2 |
|----------------------|--------------------|-----|-----|---------------|----|----|-----|-----|
| raw | | | | | | | | |
| 26041234R | 1/2 x 3/4 | 10 | 140 | 4021343047978 | 46 | 38 | 30 | 19 |
| 2604341R | 3/4 x 1 | 10 | 80 | 4021343047992 | 59 | 47 | 37 | 25 |
| 26041114R | 1 x 1 1/4 | 10 | 50 | 4021343047954 | 70 | 57 | 46 | 32 |
| chrome-plated | | | | | | | | |
| 26041234C | 1/2 x 3/4 | 10 | 140 | 4021343047961 | 46 | 48 | 30 | 19 |
| 2604341C | 3/4 x 1 | 10 | 80 | 4021343047985 | 59 | 47 | 37 | 25 |



Catalog-no. and -description

611 – Elbow 90°, male/male, threads according to EN ISO 228, chrome-plated and raw

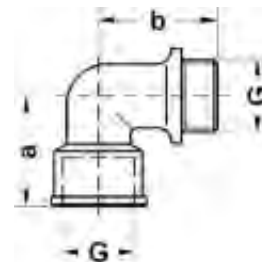
| Article-no. | Dimension G | Bag | Box | EAN code | a |
|---------------|----------------|-----|-----|---------------|----|
| raw | | | | | |
| 261138R | 3/8 | 10 | 250 | 4021343048357 | 30 |
| 261112R | 1/2 | 10 | 120 | 4021343048319 | 34 |
| 261134R | 3/4 | 10 | 80 | 4021343048333 | 40 |
| 26111R | 1 | 10 | 40 | 4021343048296 | 45 |
| chrome-plated | | | | | |
| 261112C | 1/2 | 10 | 120 | 4021343048302 | 34 |
| 261134C | 3/4 | 10 | 80 | 4021343048326 | 40 |
| 26111C | 1 | 10 | 40 | 4021343048289 | 45 |



Catalog-no. and -description

612 – Elbow 90°, female/female, threads according to EN ISO 228, chrome-plated and raw

| Article-no. | Dimension G | Bag | Box | EAN code | a |
|---------------|----------------|-----|-----|---------------|----|
| raw | | | | | |
| 261218R | 1/8 | 10 | 600 | 4021343048470 | 14 |
| 261214R | 1/4 | 10 | 400 | 4021343048456 | 18 |
| 261238R | 3/8 | 10 | 200 | 4021343048555 | 22 |
| 261212R | 1/2 | 10 | 140 | 4021343048432 | 25 |
| 261234R | 3/4 | 10 | 80 | 4021343048531 | 30 |
| 26121R | 1 | 10 | 40 | 4021343048371 | 35 |
| 2612114R | 1 1/4 | | 25 | 4021343048418 | 47 |
| 2612112R | 1 1/2 | | 15 | 4021343048395 | 50 |
| 26122R | 2 | | 14 | 4021343048494 | 58 |
| chrome-plated | | | | | |
| 261238C | 3/8 | 10 | 200 | 4021343048548 | 22 |
| 261212C | 1/2 | 10 | 140 | 4021343048425 | 25 |
| 261234C | 3/4 | 10 | 80 | 4021343048524 | 30 |
| 26121C | 1 | 10 | 40 | 4021343048364 | 35 |



Catalog-no. and -description

613 – Elbow 90°, male/female, threads according to EN ISO 228, chrome-plated and raw

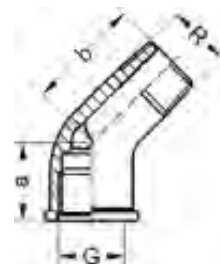
| Article-no. | Dimension G | Bag | Box | EAN code | a | b |
|---------------|----------------|-----|-----|---------------|----|----|
| raw | | | | | | |
| 261314R | 1/4 | 10 | 300 | 4021343048692 | 26 | 26 |
| 261338R | 3/8 | 10 | 150 | 4021343048777 | 29 | 32 |
| 261312R | 1/2 | 10 | 140 | 4021343048678 | 32 | 35 |
| 261334R | 3/4 | 10 | 60 | 4021343048753 | 39 | 42 |
| 26131R | 1 | 10 | 40 | 4021343048616 | 46 | 46 |
| 2613114R | 1 1/4 | | 25 | 4021343048654 | 55 | 55 |
| 2613112R | 1 1/2 | | 16 | 4021343048630 | 60 | 64 |
| 26132R | 2 | | 10 | 4021343048715 | 70 | 77 |
| chrome-plated | | | | | | |
| 261338C | 3/8 | 10 | 150 | 4021343048760 | 29 | 32 |
| 261312C | 1/2 | 10 | 140 | 4021343048661 | 32 | 35 |
| 261334C | 3/4 | 10 | 60 | 4021343048746 | 39 | 42 |
| 26131C | 1 | 10 | 40 | 4021343048609 | 46 | 46 |
| 2613114C | 1 1/4 | | 25 | 4021343048647 | 55 | 55 |



Catalog-no. and -description

614 – Elbow 45°, female/female, threads according to EN ISO 228, chrome-plated and raw

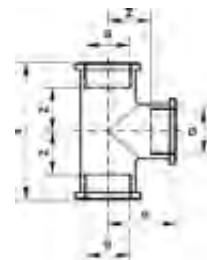
| Article-no. | Dimension G | Bag | Box | EAN code | a |
|---------------|----------------|-----|-----|---------------|----|
| raw | | | | | |
| 261438R | 3/8 | 10 | 300 | 4021343048852 | 20 |
| 261412R | 1/2 | 10 | 180 | 4021343048814 | 25 |
| 261434R | 3/4 | 10 | 100 | 4021343048838 | 30 |
| 26141R | 1 | 10 | 50 | 4021343048791 | 29 |
| chrome-plated | | | | | |
| 261438C | 3/8 | 10 | 300 | 4021343048845 | 20 |
| 261412C | 1/2 | 10 | 180 | 4021343048807 | 25 |
| 261434C | 3/4 | 10 | 100 | 4021343048821 | 30 |



Catalog-no. and -description

615 – Elbow 45°, male/female, threads according to EN ISO 228 and EN 10226, chrome-plated and raw

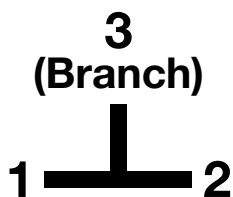
| Article-no. | Dimension R x G | Bag | Box | EAN code | a | b |
|---------------|--------------------|-----|-----|---------------|----|----|
| raw | | | | | | |
| 261538R | 3/8 | 10 | 250 | 4021343048937 | 20 | |
| 261512R | 1/2 | 10 | 170 | 4021343048890 | 23 | 34 |
| 261534R | 3/4 | 10 | 100 | 4021343048913 | 25 | 36 |
| 26151R | 1 | 10 | 50 | 4021343048876 | 28 | 41 |
| chrome-plated | | | | | | |
| 261538C | 3/8 | 10 | 250 | 4021343048920 | 20 | |
| 261512C | 1/2 | 10 | 170 | 4021343048883 | 23 | 34 |
| 261534C | 3/4 | 10 | 100 | 4021343048906 | 25 | 36 |



Catalog-no. and -description

622 – Tee, female, threads according to EN ISO 228, chrome-plated and raw

| Article-no. | Dimension G | Bag | Box | EAN code | a | b | z |
|---------------|----------------|-----|-----|---------------|-----|----|----|
| raw | | | | | | | |
| 262218R | 1/8 | 10 | 400 | 4021343049057 | 28 | 14 | 6 |
| 262214R | 1/4 | 10 | 300 | 4021343049033 | 35 | 18 | 8 |
| 262238R | 3/8 | 10 | 150 | 4021343049132 | 43 | 22 | 11 |
| 262212R | 1/2 | 10 | 100 | 4021343049019 | 50 | 25 | 12 |
| 262234R | 3/4 | 10 | 60 | 4021343049118 | 60 | 30 | 15 |
| 26221R | 1 | 10 | 30 | 4021343048951 | 67 | 34 | 18 |
| 2622114R | 1 1/4 | | 20 | 4021343048999 | 90 | 45 | 26 |
| 2622112R | 1 1/2 | | 12 | 4021343048975 | 93 | 47 | 28 |
| 26222R | 2 | | 10 | 4021343049071 | 102 | 51 | 32 |
| chrome-plated | | | | | | | |
| 262238C | 3/8 | 10 | 150 | 4021343049125 | 43 | 22 | 11 |
| 262212C | 1/2 | 10 | 100 | 4021343049002 | 50 | 25 | 12 |
| 262234C | 3/4 | 10 | 60 | 4021343049101 | 60 | 30 | 15 |
| 26221C | 1 | 10 | 30 | 4021343048944 | 67 | 34 | 18 |
| 2622112C | 1 1/2 | | 12 | 4021343048968 | 93 | 47 | 28 |



Catalog-no. and -description

626 – Reducing tee, female, threads according to EN ISO 228, chrome-plated and raw

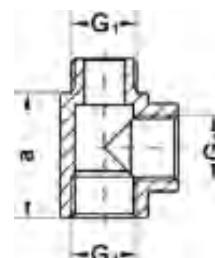
| Article-no. | Dimension G1 x G1 x G2 | Bag | Box | EAN code | a | b | z1 | z2 |
|---------------|---------------------------|-----|-----|---------------|----|----|----|----|
| raw | | | | | | | | |
| 26261238R | 1/2 x 1/2 x 3/8 | 10 | 100 | 4021343049200 | 51 | 26 | 13 | 16 |
| 26263412R | 3/4 x 3/4 x 1/2 | 10 | 60 | 4021343049262 | 52 | 29 | 11 | 16 |
| 2626112R | 1 x 1 x 1/2 | 10 | 40 | 4021343049163 | 67 | 32 | 17 | 17 |
| 2626134R | 1 x 1 x 3/4 | 10 | 30 | 4021343049224 | 67 | 34 | 18 | 19 |
| 262611412R | 1 1/4 x 1 1/4 x 1/2 | | 20 | 4021343049187 | 90 | 40 | 26 | 23 |
| chrome-plated | | | | | | | | |
| 26263412C | 3/4 X 1/2 | 10 | 60 | 4021343049255 | 52 | 29 | 11 | 16 |



Catalog-no. and -description

641 – Fork piece, threads according to EN ISO 228, chrome-plated

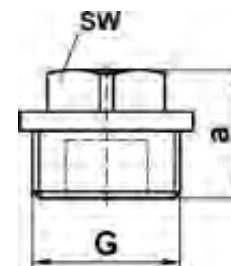
| Article-no. | Dimension G | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|----|
| 264112C | 1/2 | | 50 | 4021343049279 | 34 |



Catalog-no. and -description

642 – Fork piece, threads according to EN ISO 228, chrome-plated

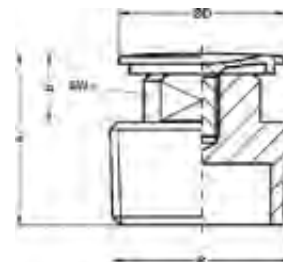
| Article-no. | Dimension G1 x G2 x G1 | Bag | Box | EAN code | a |
|-------------|---------------------------|-----|-----|---------------|----|
| 26421212C | 1/2 x 1/2 | | 100 | 4021343049286 | 40 |
| 26423412C | 3/4 x 1/2 | | 80 | 4021343049293 | 40 |



Catalog-no. and -description

751 – Plug, male, thread according to EN ISO 228, chrome-plated and raw

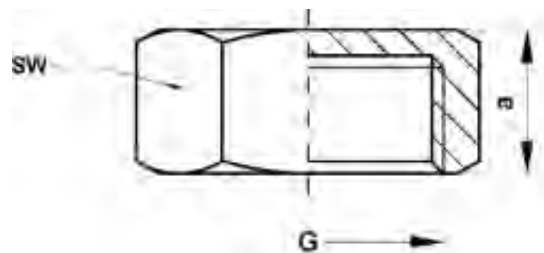
| Article-no. | Dimension G | Bag | Box | EAN code | a | SW |
|----------------------|----------------|-----|------|---------------|----|----|
| raw | | | | | | |
| 275118R | 1/8 | 10 | 2000 | 4021343050107 | 14 | 8 |
| 275114R | 1/4 | 10 | 800 | 4021343050084 | 14 | 10 |
| 275138R | 3/8 | 10 | 800 | 4021343050206 | 15 | 11 |
| 275112R | 1/2 | 10 | 500 | 4021343050060 | 17 | 12 |
| 275134R | 3/4 | 10 | 300 | 4021343050176 | 18 | 14 |
| 27511R | 1 | 10 | 220 | 4021343050008 | 18 | 20 |
| 2751114R | 1 1/4 | | 140 | 4021343050046 | 20 | 19 |
| 2751112R | 1 1/2 | | 70 | 4021343050022 | 24 | 22 |
| 27512R | 2 | | 55 | 4021343050121 | 27 | 25 |
| chrome-plated | | | | | | |
| 275114C | 1/4 | 10 | 800 | 4021343050077 | 14 | 10 |
| 275138C | 3/8 | 10 | 800 | 4021343050190 | 15 | 11 |
| 275112C | 1/2 | 10 | 500 | 4021343050053 | 17 | 12 |
| 275134C | 3/4 | 10 | 300 | 4021343050169 | 18 | 14 |
| 27511C | 1 | 10 | 220 | 4021343049996 | 18 | 17 |
| 2751114C | 1 1/4 | | 140 | 4021343050039 | 20 | 19 |
| 2751112C | 1 1/2 | | 70 | 4021343050015 | 24 | 22 |
| 27512C | 2 | | 55 | 4021343050114 | 27 | 25 |



Catalog-no. and -description

752 – Plug, male, thread according to EN ISO 228, chrome-plated and raw

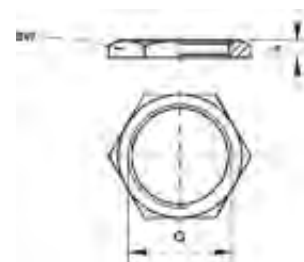
| Article-no. | Dimension R | Bag | Box | EAN code | a | b | D | SW |
|-------------|----------------|-----|-----|---------------|----|----|----|----|
| 275212C | 1/2 | 10 | 400 | 4021343050213 | 18 | 12 | 24 | 10 |



Catalog-no. and -description

761 – Cap, female, thread according to EN ISO 228, chrome-plated and raw

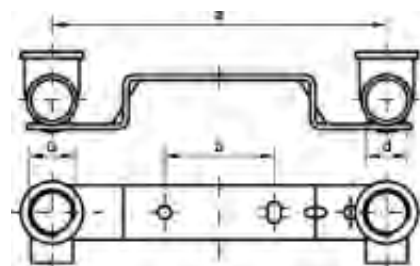
| Article-no. | Dimension G | Bag | Box | EAN code | a | SW |
|---------------|----------------|-----|------|---------------|----|----|
| raw | | | | | | |
| 276114R | 1/4 | 10 | 1000 | 4021343050336 | 10 | 16 |
| 276138R | 3/8 | 10 | 700 | 4021343050435 | 12 | 19 |
| 276112R | 1/2 | 10 | 500 | 4021343050312 | 13 | 24 |
| 276134R | 3/4 | 10 | 300 | 4021343050411 | 14 | 29 |
| 27611R | 1 | 10 | 240 | 4021343050251 | 14 | 36 |
| 2761114R | 1 1/4 | | 150 | 4021343050299 | 14 | 45 |
| 2761112R | 1 1/2 | | 120 | 4021343050275 | 15 | 52 |
| 27612R | 2 | | 80 | 4021343050374 | 18 | 64 |
| chrome-plated | | | | | | |
| 276138C | 3/8 | 10 | 700 | 4021343050428 | 12 | 19 |
| 276112C | 1/2 | 10 | 500 | 4021343050305 | 13 | 24 |
| 276134C | 3/4 | 10 | 300 | 4021343050404 | 14 | 29 |
| 27611C | 1 | 10 | 240 | 4021343050244 | 14 | 36 |



Catalog-no. and -description

911 – Hexagon nut, thread according to EN ISO 228, chrome-plated and raw

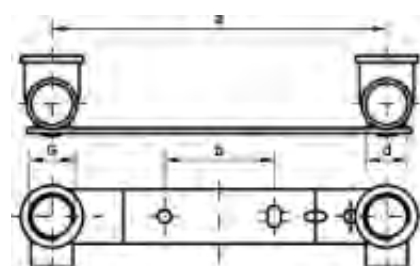
| Article-no. | Dimension G | Bag | Box | EAN code | a | SW |
|---------------|----------------|-----|------|---------------|---|----|
| raw | | | | | | |
| 291114R | 1/4 | 10 | 1000 | 4021343051302 | 5 | 22 |
| 291138R | 3/8 | 10 | 1000 | 4021343051401 | 5 | 22 |
| 291112R | 1/2 | 10 | 800 | 4021343051289 | 5 | 27 |
| 291134R | 3/4 | 10 | 600 | 4021343051371 | 6 | 34 |
| 29111R | 1 | 10 | 400 | 4021343051227 | 7 | 37 |
| 2911114R | 1 1/4 | 10 | 250 | 4021343051265 | 7 | 50 |
| 2911112R | 1 1/2 | 10 | 150 | 4021343051241 | 8 | 60 |
| 29112R | 2 | 10 | 100 | 4021343051333 | 9 | 70 |
| chrome-plated | | | | | | |
| 291114C | 1/4 | 10 | 1000 | 4021343051296 | 5 | 22 |
| 291138C | 3/8 | 10 | 1000 | 4021343051395 | 5 | 22 |
| 291112C | 1/2 | 10 | 800 | 4021343051272 | 5 | 27 |
| 291134C | 3/4 | 10 | 600 | 4021343051364 | 6 | 34 |
| 29111C | 1 | 10 | 400 | 4021343051210 | 7 | 37 |
| 2911114C | 1 1/4 | 10 | 300 | 4021343051258 | 7 | 50 |
| 2911112C | 1 1/2 | 10 | 150 | 4021343051234 | 8 | 60 |



Catalog-no. and -description

976 – Mounting unit with female thread according to EN ISO 228 and soldering end, edged version

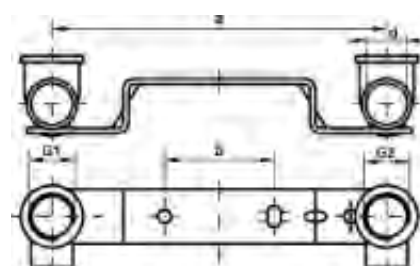
| Article-no. | Dimension d x G x a | Bag | Box | EAN code | a | b |
|--------------|------------------------|-----|-----|---------------|-----|----|
| 29761512100R | 15 x 1/2 x 100 | 40 | 40 | 4021343198281 | 100 | 30 |
| 29761512150R | 15 x 1/2 x 150 | 30 | 30 | 4021343198298 | 153 | 50 |



Catalog-no. and -description

976F – Mounting unit with female thread according to EN ISO 228 and soldering end, flat version

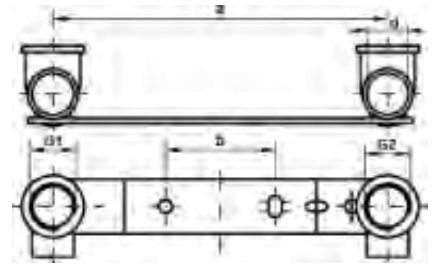
| Article-no. | Dimension d x G x a | Bag | Box | EAN code | a | b |
|---------------|------------------------|-----|-----|---------------|-----|----|
| 2976F151280R | 15 x 1/2 x 80 | 60 | 60 | 4021343198304 | 80 | 23 |
| 2976F1512100R | 15 x 1/2 x 100 | 50 | 50 | 4021343198311 | 100 | 30 |
| 2976F1512150R | 15 x 1/2 x 150 | 30 | 30 | 4021343198328 | 153 | 50 |



Catalog-no. and -description

977 – Mounting unit with female thread according to EN ISO 228 and soldering end, edged version

| Article-no. | Dimension G1 x G2 x a | Bag | Box | EAN code | a | b |
|--------------|--------------------------|-----|-----|---------------|-----|----|
| 29771212100R | 1/2 x 1/2 x 100 | 30 | 30 | 4021343198335 | 100 | 30 |
| 29771212150R | 1/2 x 1/2 x 150 | 25 | 25 | 4021343198342 | 153 | 50 |



Catalog-no. and -description

977F – Mounting unit with female thread according to EN ISO 228 and soldering end, flat version

| Article-no. | Dimension G1 x G2 x a | Bag | Box | EAN code | a | b |
|---------------|--------------------------|-----|-----|---------------|-----|----|
| 2977F1212100R | 1/2 x 1/2 x 100 | | 30 | 4021343198366 | 100 | 30 |
| 2977F1212150R | 1/2 x 1/2 x 150 | | 25 | 4021343198373 | 153 | 50 |

TRADITIONAL PIPING

**Lengthening pieces
according to DIN 3523 in brass
(according DIN 50 930-6)**



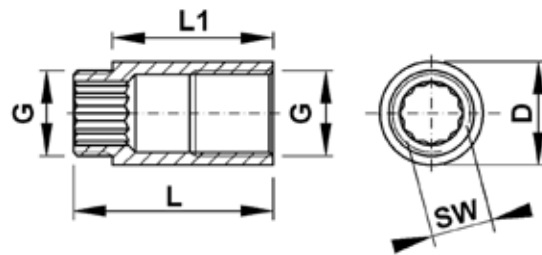
PN - EN 1254-4:2004



RAL-GZ 643/2



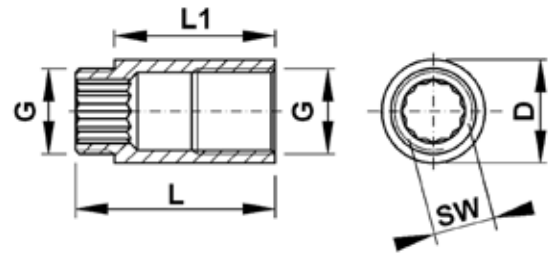
W / 483 / 92



Catalog-no. and -description

513 – Lengthening piece, raw

| Article-no. | Dimension G x L1 | Bag | Box | EAN code | L1 | L | D | SW |
|-------------|---------------------|-----|-----|---------------|-----|-----|----|----|
| 25133810R | 3/8 x 10 | 10 | 500 | 4021343043949 | 10 | 20 | 22 | 10 |
| 25133815R | 3/8 x 15 | 10 | 400 | 4021343043987 | 15 | 25 | 22 | 10 |
| 25133820R | 3/8 x 20 | 10 | 350 | 4021343044007 | 20 | 30 | 22 | 10 |
| 25133825R | 3/8 x 25 | 10 | 300 | 4021343044021 | 25 | 35 | 22 | 10 |
| 25133830R | 3/8 x 30 | 10 | 250 | 4021343044045 | 30 | 40 | 22 | 10 |
| 25133840R | 3/8 x 40 | 10 | 200 | 4021343044069 | 40 | 50 | 22 | 10 |
| 25133850R | 3/8 x 50 | 10 | 180 | 4021343044083 | 50 | 60 | 22 | 10 |
| 25133880R | 3/8 x 80 | 10 | 120 | 4021343044120 | 80 | 90 | 22 | 10 |
| 251338100R | 3/8 x 100 | 10 | 120 | 4021343043963 | 100 | 110 | 22 | 10 |
| 25131210R | 1/2 x 10 | 10 | 300 | 4021343043345 | 10 | 21 | 27 | 12 |
| 25131215R | 1/2 x 15 | 10 | 300 | 4021343043390 | 15 | 26 | 27 | 12 |
| 25131220R | 1/2 x 20 | 10 | 200 | 4021343043413 | 20 | 31 | 27 | 12 |
| 25131225R | 1/2 x 25 | 10 | 200 | 4021343043444 | 25 | 36 | 27 | 12 |
| 25131230R | 1/2 x 30 | 10 | 180 | 4021343043468 | 30 | 41 | 27 | 12 |
| 25131240R | 1/2 x 40 | 10 | 150 | 4021343043482 | 40 | 51 | 27 | 12 |
| 25131250R | 1/2 x 50 | 10 | 120 | 4021343043536 | 50 | 61 | 27 | 12 |
| 25131265R | 1/2 x 65 | 10 | 100 | 4021343043574 | 65 | 76 | 27 | 12 |
| 25131280R | 1/2 x 80 | 10 | 90 | 4021343043598 | 80 | 91 | 27 | 12 |
| 251312100R | 1/2 x 100 | 10 | 60 | 4021343043369 | 100 | 111 | 27 | 12 |
| 25133410R | 3/4 x 10 | 10 | 240 | 4021343043734 | 10 | 22 | 32 | 17 |
| 25133415R | 3/4 x 15 | 10 | 150 | 4021343043772 | 15 | 27 | 32 | 17 |
| 25133420R | 3/4 x 20 | 10 | 140 | 4021343043802 | 20 | 32 | 32 | 17 |
| 25133425R | 3/4 x 25 | 10 | 120 | 4021343043826 | 25 | 37 | 32 | 17 |
| 25133430R | 3/4 x 30 | 10 | 100 | 4021343043840 | 30 | 42 | 32 | 17 |
| 25133440R | 3/4 x 40 | 10 | 90 | 4021343043864 | 40 | 52 | 32 | 17 |
| 25133450R | 3/4 x 50 | 10 | 80 | 4021343043888 | 50 | 62 | 32 | 17 |
| 25133465R | 3/4 x 65 | 10 | 60 | 4021343043901 | 65 | 77 | 32 | 17 |
| 25133480R | 3/4 x 80 | 10 | 50 | 4021343043925 | 80 | 92 | 32 | 17 |
| 251334100R | 3/4 x 100 | 10 | 40 | 4021343043758 | 100 | 112 | 32 | 17 |
| 2513115R | 1 x 15 | 10 | 120 | 4021343043291 | 15 | 27 | 39 | 22 |
| 2513120R | 1 x 20 | 10 | 100 | 4021343043321 | 20 | 34 | 39 | 22 |
| 2513125R | 1 x 25 | 10 | 70 | 4021343043512 | 25 | 39 | 39 | 22 |
| 2513130R | 1 x 30 | 10 | 70 | 4021343043611 | 30 | 44 | 39 | 22 |
| 2513140R | 1 x 40 | 10 | 70 | 4021343043642 | 40 | 54 | 39 | 22 |
| 2513150R | 1 x 50 | 10 | 50 | 4021343043666 | 50 | 64 | 39 | 22 |
| 2513165R | 1 x 65 | 5 | 45 | 4021343043697 | 65 | 79 | 39 | 22 |
| 2513180R | 1 x 80 | 5 | 40 | 4021343043710 | 80 | 94 | 39 | 22 |
| 25131100R | 1 x 100 | 5 | 30 | 4021343043260 | 100 | 114 | 39 | 22 |



Catalog-no. and -description

513 – Lengthening piece, chrome-plated

| Article-no. | Dimension G x L1 | Bag | Box | EAN code | L1 | L | D | SW |
|-------------|---------------------|-----|-----|---------------|-----|-----|----|----|
| 25133810C | 3/8 x 10 | 10 | 500 | 4021343043932 | 10 | 20 | 22 | 10 |
| 25133815C | 3/8 x 15 | 10 | 400 | 4021343043970 | 15 | 25 | 22 | 10 |
| 25133820C | 3/8 x 20 | 10 | 350 | 4021343043994 | 20 | 30 | 22 | 10 |
| 25133825C | 3/8 x 25 | 10 | 300 | 4021343044014 | 25 | 35 | 22 | 10 |
| 25133830C | 3/8 x 30 | 10 | 250 | 4021343044038 | 30 | 40 | 22 | 10 |
| 25133840C | 3/8 x 40 | 10 | 200 | 4021343044052 | 40 | 50 | 22 | 10 |
| 25133850C | 3/8 x 50 | 10 | 180 | 4021343044076 | 50 | 60 | 22 | 10 |
| 25131210C | 1/2 x 10 | 10 | 300 | 4021343043338 | 10 | 21 | 27 | 12 |
| 25131215C | 1/2 x 15 | 10 | 300 | 4021343043376 | 15 | 26 | 27 | 12 |
| 25131220C | 1/2 x 20 | 10 | 200 | 4021343043406 | 20 | 31 | 27 | 12 |
| 25131225C | 1/2 x 25 | 10 | 200 | 4021343043420 | 25 | 36 | 27 | 12 |
| 25131230C | 1/2 x 30 | 10 | 180 | 4021343043451 | 30 | 41 | 27 | 12 |
| 25131240C | 1/2 x 40 | 10 | 150 | 4021343043475 | 40 | 51 | 27 | 12 |
| 25131250C | 1/2 x 50 | 10 | 120 | 4021343043529 | 50 | 61 | 27 | 12 |
| 25131265C | 1/2 x 65 | 10 | 100 | 4021343043567 | 65 | 76 | 27 | 12 |
| 25131280C | 1/2 x 80 | 10 | 90 | 4021343043581 | 80 | 91 | 27 | 12 |
| 251312100C | 1/2 x 100 | 10 | 60 | 4021343043352 | 100 | 111 | 27 | 12 |
| 25133410C | 3/4 x 10 | 10 | 240 | 4021343043727 | 10 | 22 | 32 | 17 |
| 25133415C | 3/4 x 15 | 10 | 150 | 4021343043765 | 15 | 27 | 32 | 17 |
| 25133420C | 3/4 x 20 | 10 | 140 | 4021343043789 | 20 | 32 | 32 | 17 |
| 25133425C | 3/4 x 25 | 10 | 120 | 4021343043819 | 25 | 37 | 32 | 17 |
| 25133430C | 3/4 x 30 | 10 | 100 | 4021343043833 | 30 | 42 | 32 | 17 |
| 25133440C | 3/4 x 40 | 10 | 90 | 4021343043857 | 40 | 52 | 32 | 17 |
| 25133450C | 3/4 x 50 | 10 | 80 | 4021343043871 | 50 | 62 | 32 | 17 |
| 25133460C | 3/4 x 60 | 10 | 70 | 4021343194207 | 60 | 72 | 32 | 17 |
| 25133465C | 3/4 x 65 | 10 | 60 | 4021343043895 | 65 | 77 | 32 | 17 |
| 25133480C | 3/4 x 80 | 10 | 50 | 4021343043918 | 80 | 92 | 32 | 17 |
| 251334100C | 3/4 x 100 | 10 | 40 | 4021343043741 | 100 | 112 | 32 | 17 |
| 2513115C | 1 x 15 | 10 | 120 | 4021343043284 | 15 | 27 | 39 | 22 |
| 2513120C | 1 x 20 | 10 | 100 | 4021343043307 | 20 | 34 | 39 | 22 |
| 2513125C | 1 x 25 | 10 | 70 | 4021343043499 | 25 | 39 | 39 | 22 |
| 2513130C | 1 x 30 | 10 | 70 | 4021343043604 | 30 | 44 | 39 | 22 |
| 2513150C | 1 x 50 | 10 | 50 | 4021343043659 | 50 | 64 | 39 | 22 |
| 2513165C | 1 x 65 | 5 | 45 | 4021343043673 | 65 | 79 | 39 | 22 |
| 2513180C | 1 x 80 | 5 | 40 | 4021343043703 | 80 | 94 | 39 | 22 |
| 25131100C | 1 x 100 | 5 | 30 | 4021343043253 | 100 | 114 | 39 | 22 |

TRADITIONAL PIPING

**Malleable cast iron threaded fittings according to EN 10242
design symbol „A“
Threads according to
EN 10226**



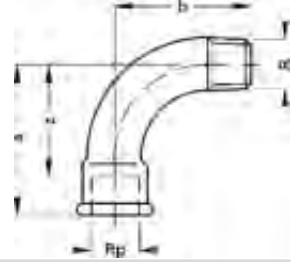
1005R01F4P5-gst



POCC DE.AIO31.H08391



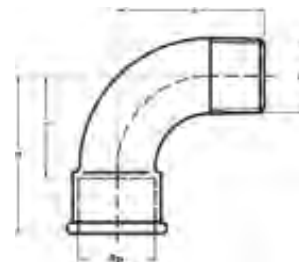
HK/W/0200/01/99



Catalog-no. and -description

1# – Bend 90°, long, female/male, black or galvanized

| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | b | z |
|-------------|---------------------|-----|-----|---------------|-----|-----|-----|
| black | | | | | | | |
| 9114S# | 1/4 | 10 | 400 | 4021343185687 | 40 | 36 | 30 |
| 9138S# | 3/8 | 10 | 250 | 4021343099793 | 48 | 42 | 38 |
| 9112S# | 1/2 | 10 | 160 | 4021343095870 | 55 | 48 | 42 |
| 9134S# | 3/4 | 10 | 90 | 4021343099755 | 69 | 60 | 54 |
| 911S# | 1 | 10 | 40 | 4021343095740 | 85 | 75 | 68 |
| 91114S# | 1 1/4 | | 20 | 4021343095832 | 105 | 95 | 86 |
| 91112S# | 1 1/2 | | 18 | 4021343095795 | 116 | 105 | 97 |
| 912S# | 2 | | 8 | 4021343095955 | 140 | 130 | 116 |
| galvanized | | | | | | | |
| 9114V# | 1/4 | 10 | 400 | 4021343185694 | 40 | 36 | 30 |
| 9138V# | 3/8 | 10 | 250 | 4021343099816 | 48 | 42 | 38 |
| 9112V# | 1/2 | 10 | 160 | 4021343095894 | 55 | 48 | 42 |
| 9134V# | 3/4 | 10 | 90 | 4021343099779 | 69 | 60 | 54 |
| 911V# | 1 | 10 | 40 | 4021343095764 | 85 | 75 | 68 |
| 91114V# | 1 1/4 | | 20 | 4021343095856 | 105 | 95 | 86 |
| 91112V# | 1 1/2 | | 18 | 4021343095818 | 116 | 105 | 97 |
| 912V# | 2 | | 8 | 4021343095979 | 140 | 130 | 116 |
| 91212VA# | 2 1/2 | | 4 | 4021343096464 | 176 | 165 | 149 |
| 913V# | 3 | | 2 | 4021343096563 | 206 | 190 | 176 |
| 914V# | 4 | | 2 | 4021343099854 | 264 | 245 | 228 |



Catalog-no. and -description

1A# – Bend 90°, short, female/male, black or galvanized

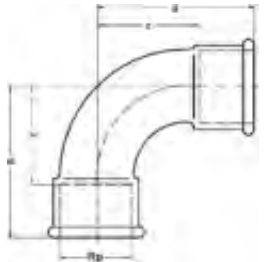
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z |
|-------------|---------------------|-----|-----|---------------|-----|----|
| black | | | | | | |
| 91A12S# | 1/2 | 10 | 160 | 4021343156236 | 45 | 32 |
| 91A34S# | 3/4 | 10 | 70 | 4021343168123 | 50 | 35 |
| 91A1S# | 1 | 10 | 60 | 4021343156229 | 63 | 46 |
| 91A114S# | 1 1/4 | | 30 | 4021343156250 | 76 | 57 |
| 91A112S# | 1 1/2 | | 25 | 4021343156243 | 85 | 66 |
| 91A2S# | 2 | | 10 | 4021343156267 | 102 | 78 |
| galvanized | | | | | | |
| 91A12V# | 1/2 | 10 | 160 | 4021343156274 | 45 | 32 |
| 91A34V# | 3/4 | 10 | 70 | 4021343156281 | 50 | 35 |
| 91A1V# | 1 | 10 | 60 | 4021343156298 | 63 | 46 |
| 91A114V# | 1 1/4 | | 30 | 4021343156304 | 76 | 57 |
| 91A112V# | 1 1/2 | | 25 | 4021343156311 | 85 | 66 |
| 91A2V# | 2 | | 10 | 4021343156328 | 102 | 78 |



Catalog-no. and -description

2# – Bend 90°, long, female/female, black or galvanized

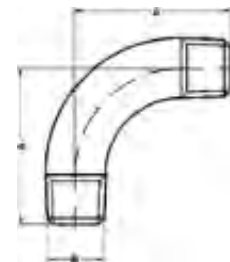
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|-----|
| black | | | | | | |
| 9238S# | 3/8 | 10 | 200 | 4021343101021 | 48 | 38 |
| 9212S# | 1/2 | 10 | 120 | 4021343100536 | 55 | 42 |
| 9234S# | 3/4 | 10 | 60 | 4021343100987 | 69 | 54 |
| 921S# | 1 | 10 | 40 | 4021343100406 | 85 | 68 |
| 92114S# | 1 1/4 | | 20 | 4021343100499 | 105 | 86 |
| 92112S# | 1 1/2 | | 15 | 4021343100451 | 116 | 97 |
| 922S# | 2 | | 7 | 4021343100611 | 140 | 116 |
| 92212SA# | 2 1/2 | | 4 | 4021343100772 | 176 | 149 |
| 923S# | 3 | | 2 | 4021343100949 | 205 | 175 |
| galvanized | | | | | | |
| 9238V# | 3/8 | 10 | 200 | 4021343101045 | 48 | 38 |
| 9212V# | 1/2 | 10 | 120 | 4021343100550 | 55 | 42 |
| 9234V# | 3/4 | 10 | 60 | 4021343101007 | 69 | 54 |
| 921V# | 1 | 10 | 40 | 4021343100420 | 85 | 68 |
| 92114V# | 1 1/4 | | 20 | 4021343100512 | 105 | 86 |
| 92112V# | 1 1/2 | | 15 | 4021343100475 | 116 | 97 |
| 922V# | 2 | | 7 | 4021343100635 | 140 | 116 |
| 92212VA# | 2 1/2 | | 4 | 4021343100802 | 176 | 149 |
| 923V# | 3 | | 2 | 4021343100963 | 205 | 175 |
| 924V# | 4 | | 2 | 4021343101083 | 260 | 224 |



Catalog-no. and -description

2A# – Bend 90°, short, female/female, black or galvanized

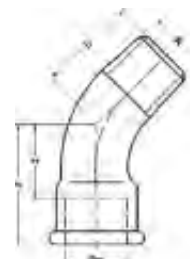
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|-----|----|
| black | | | | | | |
| 92A12S# | 1/2 | 10 | 120 | 4021343156335 | 45 | 32 |
| 92A34S# | 3/4 | 10 | 80 | 4021343156359 | 50 | 35 |
| 92A1S# | 1 | 10 | 40 | 4021343156366 | 63 | 46 |
| galvanized | | | | | | |
| 92A12V# | 1/2 | 10 | 120 | 4021343156397 | 45 | 32 |
| 92A34V# | 3/4 | 10 | 80 | 4021343156403 | 50 | 35 |
| 92A1V# | 1 | 10 | 40 | 4021343156410 | 63 | 46 |
| 92A114V# | 1 1/4 | | 25 | 4021343156434 | 76 | 57 |
| 92A112V# | 1 1/2 | | 20 | 4021343156427 | 85 | 66 |
| 92A2V# | 2 | | 10 | 4021343156441 | 102 | 78 |



Catalog-no. and -description

3# – Bend 90°, male/male, galvanized

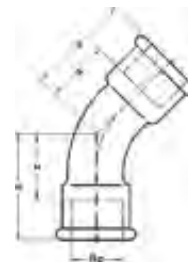
| Article-no. | Dimension R | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 9312V# | 1/2 | 10 | 200 | 4021343186080 | 48 |
| 9334V# | 3/4 | 10 | 100 | 4021343186097 | 60 |
| 931V# | 1 | 10 | 50 | 4021343186103 | 63 |
| 93114V# | 1 1/4 | | 20 | 4021343188121 | 76 |
| 93112V# | 1 1/2 | | 25 | 4021343188114 | 89 |
| 932V# | 2 | | 14 | 4021343188138 | 105 |



Catalog-no. and -description

40# – Bend 45°, male/female, black or galvanized

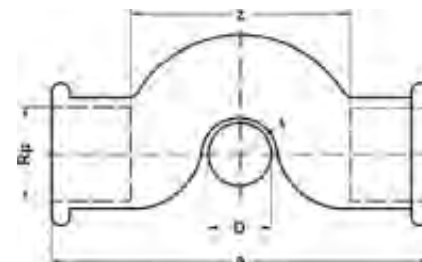
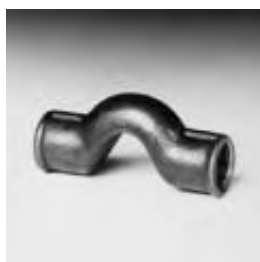
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | b | z |
|-------------------|---------------------|-----|-----|---------------|-----|-----|-----|
| black | | | | | | | |
| 94038S# | 3/8 | 10 | 330 | 4021343113109 | 30 | 24 | 20 |
| 94012S# | 1/2 | 10 | 220 | 4021343112881 | 36 | 30 | 23 |
| 94034S# | 3/4 | 10 | 100 | 4021343113055 | 43 | 36 | 28 |
| 9401S# | 1 | 10 | 70 | 4021343112751 | 51 | 42 | 34 |
| 940114S# | 1 1/4 | | 35 | 4021343112843 | 64 | 54 | 45 |
| 940112S# | 1 1/2 | | 25 | 4021343112805 | 68 | 58 | 49 |
| 9402S# | 2 | | 14 | 4021343112973 | 81 | 70 | 57 |
| galvanized | | | | | | | |
| 94012V# | 1/2 | 10 | 220 | 4021343112904 | 36 | 30 | 23 |
| 94034V# | 3/4 | 10 | 100 | 4021343113079 | 43 | 36 | 28 |
| 9401V# | 1 | 10 | 70 | 4021343112775 | 51 | 42 | 34 |
| 940114V# | 1 1/4 | | 35 | 4021343112867 | 64 | 54 | 45 |
| 940112V# | 1 1/2 | | 25 | 4021343112829 | 68 | 58 | 49 |
| 9402V# | 2 | | 14 | 4021343112997 | 81 | 70 | 57 |
| 940212V# | 2 1/2 | | 6 | 4021343188879 | 99 | 100 | 75 |
| 9403V# | 3 | | 4 | 4021343188893 | 113 | 118 | 84 |
| 9404V# | 4 | | 1 | 4021343188916 | 143 | 148 | 115 |



Catalog-no. and -description

41# – Bend 45°, female/female, galvanized

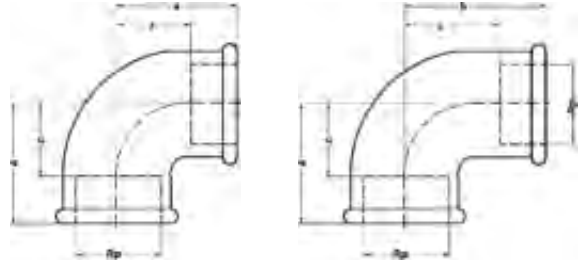
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|--------------|-----|-----|---------------|-----|-----|
| galvanized | | | | | | |
| 94112V# | 1/2 | 10 | 140 | 4021343113321 | 36 | 23 |
| 94134V# | 3/4 | 10 | 80 | 4021343113468 | 43 | 28 |
| 94111V# | 1 | 10 | 60 | 4021343113185 | 51 | 34 |
| 941114V# | 1 1/4 | | 30 | 4021343113284 | 64 | 45 |
| 941112V# | 1 1/2 | | 22 | 4021343113239 | 68 | 49 |
| 9412V# | 2 | | 12 | 4021343113376 | 81 | 57 |
| 941212V# | 2 1/2 | | 5 | 4021343188930 | 103 | 80 |
| 9413V# | 3 | | 3 | 4021343188954 | 113 | 83 |
| 9414V# | 4 | | 1 | 4021343186158 | 146 | 118 |



Catalog-no. and -description

85# – Full crossover female/female, black or galvanized

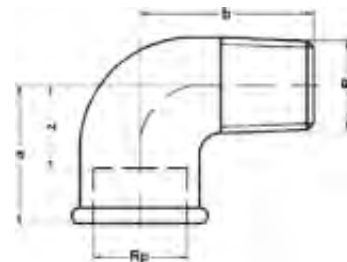
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z | D |
|-------------|--------------|-----|-----|---------------|-----|----|-----|
| black | | | | | | | |
| 98512S# | 1/2 | 10 | 80 | 4021343114038 | 90 | 64 | 1/2 |
| 98534S# | 3/4 | 10 | 50 | 4021343114076 | 106 | 76 | 3/4 |
| galvanized | | | | | | | |
| 98512V# | 1/2 | 10 | 80 | 4021343114052 | 90 | 64 | 1/2 |
| 98534V# | 3/4 | 10 | 50 | 4021343114090 | 106 | 76 | 3/4 |
| 9851V# | 1 | 10 | 30 | 4021343114014 | 125 | 91 | 1 |



Catalog-no. and -description

90# – Elbow 90°, female/female, black or galvanized

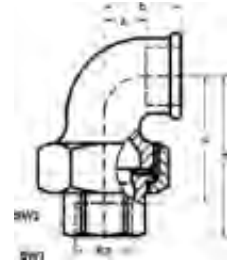
| Article-no. | Dimension Rp1 x Rp2 | Bag | Box | EAN code | a | b | z1 | z2 |
|-------------------|------------------------|-----|-----|---------------|----|----|----|----|
| black | | | | | | | | |
| 99014S# | 1/4 | 10 | 450 | 4021343114687 | 21 | | 11 | |
| 99038S# | 3/8 | 10 | 300 | 4021343115134 | 25 | | 15 | |
| 99012S# | 1/2 | 10 | 200 | 4021343114557 | 28 | | 15 | |
| 99034S# | 3/4 | 10 | 120 | 4021343115011 | 33 | | 18 | |
| 9901S# | 1 | 10 | 70 | 4021343114212 | 38 | | 21 | |
| 990114S# | 1 1/4 | | 45 | 4021343114434 | 45 | | 26 | |
| 990112SA# | 1 1/2 | | 30 | 4021343114250 | 50 | | 31 | |
| 9902S# | 2 | | 18 | 4021343114755 | 58 | | 34 | |
| 990212S# | 2 1/2 | | 10 | 4021343114915 | 69 | | 42 | |
| 9903S# | 3 | | 5 | 4021343114977 | 78 | | 48 | |
| 9901238S# | 1/2 x 3/8 | 10 | 250 | 4021343114595 | 26 | 26 | 13 | 16 |
| 9903412S# | 3/4 x 1/2 | 10 | 150 | 4021343115059 | 30 | 31 | 15 | 18 |
| 990112SB# | 1 x 1/2 | 10 | 100 | 4021343114274 | 32 | 34 | 15 | 21 |
| 990134S# | 1 x 3/4 | 10 | 90 | 4021343114649 | 35 | 36 | 18 | 21 |
| 9901141S# | 1 1/4 x 1 | | 55 | 4021343114472 | 40 | 42 | 21 | 25 |
| galvanized | | | | | | | | |
| 99018V# | 1/8 | 10 | 600 | 4021343114731 | 20 | | 13 | |
| 99014V# | 1/4 | 10 | 450 | 4021343114700 | 21 | | 11 | |
| 99038V# | 3/8 | 10 | 300 | 4021343115158 | 25 | | 15 | |
| 99012V# | 1/2 | 10 | 200 | 4021343114571 | 28 | | 15 | |
| 99034V# | 3/4 | 10 | 120 | 4021343115035 | 33 | | 18 | |
| 9901V# | 1 | 10 | 70 | 4021343114236 | 38 | | 21 | |
| 990114V# | 1 1/4 | | 45 | 4021343114458 | 45 | | 26 | |
| 990112VA# | 1 1/2 | | 30 | 4021343114298 | 50 | | 31 | |
| 9902V# | 2 | | 18 | 4021343114779 | 58 | | 34 | |
| 990212V# | 2 1/2 | | 10 | 4021343114939 | 69 | | 42 | |
| 9903V# | 3 | | 5 | 4021343114991 | 78 | | 48 | |
| 9904V# | 4 | | 2 | 4021343115226 | 98 | | 65 | |
| 9901238V# | 1/2 x 3/8 | 10 | 250 | 4021343114618 | 26 | 26 | 13 | 16 |
| 9903412V# | 3/4 x 1/2 | 10 | 150 | 4021343115073 | 30 | 31 | 15 | 18 |
| 990112VB# | 1 x 1/2 | 10 | 100 | 4021343114311 | 32 | 34 | 15 | 21 |
| 990134V# | 1 x 3/4 | 10 | 90 | 4021343114663 | 35 | 36 | 18 | 21 |
| 99011434V# | 1 1/4 x 3/4 | | 55 | 4021343114533 | 36 | 41 | 17 | 26 |
| 9901141V# | 1 1/4 x 1 | | 55 | 4021343114496 | 40 | 42 | 21 | 25 |
| 99011234V# | 1 1/2 x 3/4 | | 45 | 4021343124112 | 23 | 30 | 9 | 12 |
| 9901121V# | 1 1/2 x 1 | | 45 | 4021343114359 | 42 | 46 | 23 | 29 |
| 990112114V# | 1 1/2 x 1 1/4 | | 40 | 4021343114397 | 46 | 48 | 27 | 29 |
| 99021V# | 2 x 1 | | 25 | 4021343114816 | 24 | 30 | 8 | 6 |
| 9902114V# | 2 x 1 1/4 | | 20 | 4021343114892 | 48 | 53 | 24 | 34 |
| 9902112V# | 2 x 1 1/2 | | 20 | 4021343114854 | 52 | 55 | 28 | 36 |
| 9902122V# | 2 1/2 x 2 | | 12 | 4021343194528 | 30 | 33 | 10 | 10 |



Catalog-no. and -description

92# – Elbow 90°, female/male, black or galvanized

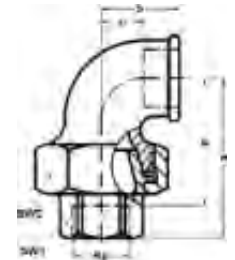
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | b | z |
|-------------|---------------------|-----|-----|---------------|----|-----|----|
| black | | | | | | | |
| 99214S# | 1/4 | 10 | 600 | 4021343115530 | 21 | 28 | 11 |
| 99238S# | 3/8 | 10 | 350 | 4021343115752 | 25 | 32 | 15 |
| 99212S# | 1/2 | 10 | 220 | 4021343115493 | 28 | 38 | 15 |
| 99234S# | 3/4 | 10 | 100 | 4021343115714 | 33 | 46 | 18 |
| 9921S# | 1 | 10 | 70 | 4021343115363 | 38 | 56 | 21 |
| 992114S# | 1 1/4 | | 40 | 4021343115448 | 45 | 63 | 26 |
| 992112S# | 1 1/2 | | 30 | 4021343115400 | 50 | 68 | 31 |
| 9922S# | 2 | | 15 | 4021343115592 | 58 | 78 | 34 |
| 992212S# | 2 1/2 | | 9 | 4021343115639 | 69 | 98 | 42 |
| 9923S# | 3 | | 5 | 4021343115677 | 78 | 99 | 48 |
| galvanized | | | | | | | |
| 99214V# | 1/4 | 10 | 600 | 4021343115554 | 21 | 28 | 11 |
| 99238V# | 3/8 | 10 | 350 | 4021343115776 | 25 | 32 | 15 |
| 99212V# | 1/2 | 10 | 220 | 4021343115516 | 28 | 38 | 15 |
| 99234V# | 3/4 | 10 | 100 | 4021343115738 | 33 | 46 | 18 |
| 9921V# | 1 | 10 | 70 | 4021343115387 | 38 | 56 | 21 |
| 992114V# | 1 1/4 | | 40 | 4021343115462 | 45 | 63 | 26 |
| 992112V# | 1 1/2 | | 30 | 4021343115424 | 50 | 68 | 31 |
| 9922V# | 2 | | 15 | 4021343115615 | 58 | 78 | 34 |
| 992212V# | 2 1/2 | | 9 | 4021343115653 | 69 | 98 | 42 |
| 9923V# | 3 | | 5 | 4021343115691 | 78 | 99 | 48 |
| 9924V# | 4 | | 2 | 4021343115813 | 96 | 119 | 60 |



Catalog-no. and -description

95# – Elbow union 90° , female/female, flat sealing, black or galvanized

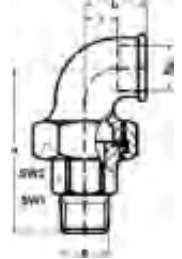
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW1 | SW2 |
|-------------|--------------|-----|-----|---------------|-----|----|----|----|-----|-----|
| black | | | | | | | | | | |
| 99534S# | 3/4 | 10 | 50 | 4021343116131 | 62 | 33 | 47 | 18 | 32 | 49 |
| 9951S# | 1 | 10 | 40 | 4021343115868 | 72 | 38 | 55 | 21 | 38 | 55 |
| 995114S# | 1 1/4 | | 20 | 4021343115950 | 82 | 45 | 63 | 26 | 48 | 70 |
| 995112S# | 1 1/2 | | 16 | 4021343115912 | 90 | 50 | 71 | 31 | 53 | 75 |
| galvanized | | | | | | | | | | |
| 99512V# | 1/2 | 10 | 80 | 4021343116018 | 58 | 28 | 45 | 15 | 25 | 41 |
| 99534V# | 3/4 | 10 | 50 | 4021343116155 | 62 | 33 | 47 | 18 | 32 | 49 |
| 9951V# | 1 | 10 | 40 | 4021343115882 | 72 | 38 | 55 | 21 | 38 | 55 |
| 995114V# | 1 1/4 | | 20 | 4021343115974 | 82 | 45 | 63 | 26 | 48 | 70 |
| 995112V# | 1 1/2 | | 16 | 4021343115936 | 90 | 50 | 71 | 31 | 53 | 75 |
| 9952V# | 2 | | 10 | 4021343116070 | 100 | 58 | 76 | 34 | 67 | 91 |
| 995212V# | 2 1/2 | | 6 | 4021343189005 | 122 | 70 | 95 | 43 | 85 | 110 |



Catalog-no. and -description

96# – Elbow union 90° , female/female, conical sealing, black or galvanized

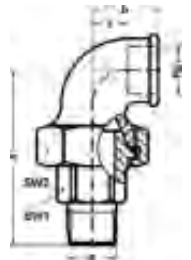
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | b | z1 | z2 | SW1 | SW2 |
|-------------|--------------|-----|-----|---------------|-----|----|----|----|-----|-----|
| black | | | | | | | | | | |
| 99612S# | 1/2 | 10 | 80 | 4021343116384 | 58 | 28 | 45 | 15 | 25 | 41 |
| 99634S# | 3/4 | 10 | 50 | 4021343116520 | 62 | 33 | 47 | 18 | 32 | 49 |
| 9961S# | 1 | 10 | 40 | 4021343116261 | 72 | 38 | 55 | 21 | 38 | 55 |
| 996114S# | 1 1/4 | | 20 | 4021343116346 | 82 | 45 | 63 | 26 | 48 | 70 |
| 996112S# | 1 1/2 | | 16 | 4021343116308 | 90 | 50 | 71 | 31 | 53 | 75 |
| 9962S# | 2 | | 10 | 4021343116445 | 100 | 58 | 76 | 34 | 67 | 91 |
| galvanized | | | | | | | | | | |
| 99638V# | 3/8 | 10 | 100 | 4021343116599 | 52 | 25 | 42 | 15 | 22 | 36 |
| 99612V# | 1/2 | 10 | 80 | 4021343116407 | 58 | 28 | 45 | 15 | 25 | 41 |
| 99634V# | 3/4 | 10 | 50 | 4021343116544 | 62 | 33 | 47 | 18 | 32 | 49 |
| 9961V# | 1 | 10 | 40 | 4021343116285 | 72 | 38 | 55 | 21 | 38 | 55 |
| 996114V# | 1 1/4 | | 20 | 4021343116360 | 82 | 45 | 63 | 26 | 48 | 70 |
| 996112V# | 1 1/2 | | 16 | 4021343116322 | 90 | 50 | 71 | 31 | 53 | 75 |
| 9962V# | 2 | | 10 | 4021343116469 | 100 | 58 | 76 | 34 | 67 | 91 |
| 996212V# | 2 1/2 | | 6 | 4021343164668 | 114 | 75 | 86 | 50 | 86 | 111 |
| 9963V# | 3 | | 4 | 4021343164675 | 128 | 82 | 96 | 56 | 99 | 132 |



Catalog-no. and -description

97# – Elbow union 90°, female/male, flat sealing, black or galvanized

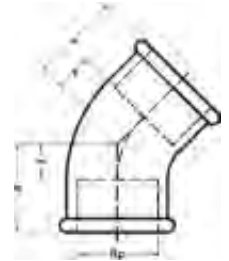
| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | b | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|----|----|-----|-----|
| black | | | | | | | | | |
| 99712S# | 1/2 | 10 | 80 | 4021343116759 | 76 | 28 | 15 | 25 | 41 |
| 99734S# | 3/4 | 10 | 40 | 4021343116896 | 82 | 33 | 18 | 32 | 49 |
| 9971S# | 1 | 10 | 30 | 4021343116636 | 94 | 38 | 21 | 38 | 55 |
| 997114S# | 1 1/4 | | 18 | 4021343116711 | 107 | 45 | 26 | 48 | 70 |
| 997112S# | 1 1/2 | | 12 | 4021343116674 | 115 | 50 | 31 | 53 | 75 |
| 9972S# | 2 | | 7 | 4021343116810 | 128 | 58 | 34 | 67 | 91 |
| galvanized | | | | | | | | | |
| 99712V# | 1/2 | 10 | 80 | 4021343116773 | 76 | 28 | 15 | 25 | 41 |
| 99734V# | 3/4 | 10 | 40 | 4021343116919 | 82 | 33 | 18 | 32 | 49 |
| 9971V# | 1 | 10 | 30 | 4021343116650 | 94 | 38 | 21 | 38 | 55 |
| 997114V# | 1 1/4 | | 18 | 4021343116735 | 107 | 45 | 26 | 48 | 70 |
| 997112V# | 1 1/2 | | 12 | 4021343116698 | 115 | 50 | 31 | 53 | 75 |
| 9972V# | 2 | | 7 | 4021343116834 | 128 | 58 | 34 | 67 | 91 |



Catalog-no. and -description

98# – Elbow union 90°, female/male, conical sealing, black or galvanized

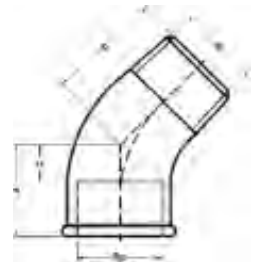
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | b | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|----|----|-----|-----|
| black | | | | | | | | | |
| 99814S# | 1/4 | 10 | 120 | 4021343189197 | 61 | 21 | 11 | 18 | 32 |
| 99812S# | 1/2 | 10 | 80 | 4021343117145 | 76 | 28 | 15 | 25 | 41 |
| 99834S# | 3/4 | 10 | 40 | 4021343117299 | 82 | 33 | 18 | 32 | 49 |
| 9981S# | 1 | 10 | 30 | 4021343117022 | 94 | 38 | 21 | 38 | 55 |
| 998114S# | 1 1/4 | | 18 | 4021343117107 | 107 | 45 | 26 | 48 | 70 |
| 998112S# | 1 1/2 | | 12 | 4021343117060 | 115 | 50 | 31 | 53 | 75 |
| 9982S# | 2 | | 7 | 4021343117213 | 128 | 58 | 34 | 67 | 91 |
| 998212S# | 2 1/2 | | 4 | 4021343166334 | 152 | 70 | 43 | 85 | 110 |
| galvanized | | | | | | | | | |
| 99838V# | 3/8 | 10 | 100 | 4021343117350 | 65 | 25 | 15 | 22 | 36 |
| 99812V# | 1/2 | 10 | 80 | 4021343117169 | 76 | 28 | 15 | 25 | 41 |
| 99834V# | 3/4 | 10 | 40 | 4021343117312 | 82 | 33 | 18 | 32 | 49 |
| 9981V# | 1 | 10 | 30 | 4021343117046 | 94 | 38 | 21 | 38 | 55 |
| 998114V# | 1 1/4 | | 18 | 4021343117121 | 107 | 45 | 26 | 48 | 70 |
| 998112V# | 1 1/2 | | 12 | 4021343117084 | 115 | 50 | 31 | 53 | 75 |
| 9982V# | 2 | | 7 | 4021343117237 | 128 | 58 | 34 | 67 | 91 |
| 998212V# | 2 1/2 | | 4 | 4021343166426 | 152 | 70 | 43 | 85 | 110 |
| 9983V# | 3 | | 2 | 4021343166419 | 165 | 78 | 48 | 99 | 131 |



Catalog-no. and -description

120# – Elbow 45°, female/female, black or galvanized

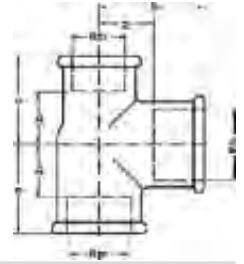
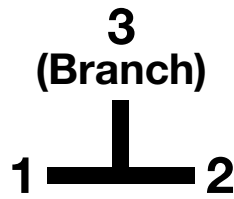
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|----|----|
| black | | | | | | |
| 912012S# | 1/2 | 10 | 200 | 4021343096112 | 22 | 9 |
| 912034S# | 3/4 | 10 | 120 | 4021343096198 | 25 | 10 |
| 91201S# | 1 | 10 | 80 | 4021343095993 | 28 | 11 |
| 9120114S# | 1 1/4 | | 45 | 4021343096075 | 33 | 14 |
| 9120112S# | 1 1/2 | | 30 | 4021343096037 | 36 | 17 |
| 91202S# | 2 | | 18 | 4021343096150 | 43 | 19 |
| galvanized | | | | | | |
| 912012V# | 1/2 | 10 | 200 | 4021343096136 | 22 | 9 |
| 912034V# | 3/4 | 10 | 120 | 4021343096211 | 25 | 10 |
| 91201V# | 1 | 10 | 80 | 4021343096013 | 28 | 11 |
| 9120114V# | 1 1/4 | | 45 | 4021343096099 | 33 | 14 |
| 9120112V# | 1 1/2 | | 30 | 4021343096051 | 36 | 17 |
| 91202V# | 2 | | 18 | 4021343096174 | 43 | 19 |



Catalog-no. and -description

121# – Elbow 45°, male/female, black or galvanized

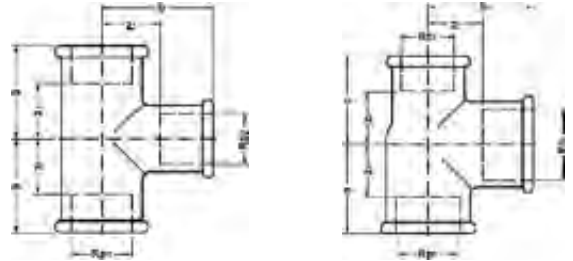
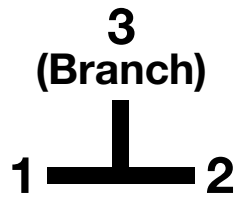
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | b | z |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| black | | | | | | | |
| 912112S# | 1/2 | 10 | 200 | 4021343096372 | 22 | 28 | 9 |
| 912134S# | 3/4 | 10 | 150 | 4021343096501 | 25 | 32 | 10 |
| 91211S# | 1 | 10 | 90 | 4021343096259 | 28 | 37 | 11 |
| 9121114S# | 1 1/4 | | 50 | 4021343096334 | 33 | 43 | 14 |
| 9121112S# | 1 1/2 | | 35 | 4021343096297 | 36 | 46 | 17 |
| 91212SB# | 2 | | 20 | 4021343096440 | 43 | 55 | 19 |
| galvanized | | | | | | | |
| 912112V# | 1/2 | 10 | 200 | 4021343096396 | 22 | 28 | 9 |
| 912134V# | 3/4 | 10 | 150 | 4021343096525 | 25 | 32 | 10 |
| 91211V# | 1 | 10 | 90 | 4021343096273 | 28 | 37 | 11 |
| 9121114V# | 1 1/4 | | 50 | 4021343096358 | 33 | 43 | 14 |
| 9121112V# | 1 1/2 | | 35 | 4021343096310 | 36 | 46 | 17 |
| 91212VB# | 2 | | 20 | 4021343096488 | 43 | 55 | 19 |



Catalog-no. and -description

130# – Tee, female, black or galvanized

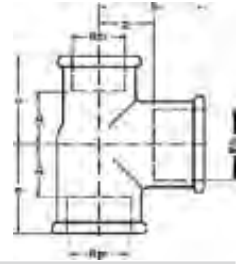
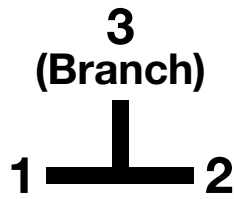
| Article-no. | Dimension Rp1 x Rp3 x Rp2 | Bag | Box | EAN code | a | b | c | z1 | z2 | z3 |
|----------------|------------------------------|-----|-----|---------------|----|----|----|----|----|----|
| black | | | | | | | | | | |
| 913014S# | 1/4 | 10 | 300 | 4021343098239 | 21 | | | 11 | | |
| 913038S# | 3/8 | 10 | 180 | 4021343099373 | 25 | | | 15 | | |
| 913012S# | 1/2 | 10 | 120 | 4021343097843 | 28 | | | 15 | | |
| 913034S# | 3/4 | 10 | 60 | 4021343099052 | 33 | | | 18 | | |
| 91301S# | 1 | 10 | 40 | 4021343096686 | 38 | | | 21 | | |
| 9130114S# | 1 1/4 | 25 | 25 | 4021343097362 | 45 | | | 26 | | |
| 9130112S# | 1 1/2 | 22 | 22 | 4021343096815 | 50 | | | 31 | | |
| 91302S# | 2 | 13 | 13 | 4021343098291 | 58 | | | 34 | | |
| 9130212SA# | 2 1/2 | 6 | 6 | 4021343098475 | 69 | | | 42 | | |
| 91303S# | 3 | 4 | 4 | 4021343098895 | 78 | | | 48 | | |
| 91304S# | 4 | 2 | 2 | 4021343099458 | 96 | | | 60 | | |
| 9130123838S# | 1/2 x 3/8 x 3/8 | 10 | 150 | 4021343098048 | 26 | 26 | 25 | 13 | 16 | 15 |
| 9130121238S# | 1/2 x 3/8 x 1/2 | 10 | 150 | 4021343097904 | 28 | 28 | 26 | 15 | 15 | 16 |
| 9130123812S# | 1/2 x 1/2 x 3/8 | 10 | 140 | 4021343098000 | 26 | 26 | | 13 | 16 | |
| 9130123412S# | 1/2 x 1/2 x 3/4 | 10 | 90 | 4021343097966 | 31 | 30 | | 18 | 15 | |
| 9130343438S# | 3/4 x 3/8 x 3/4 | 10 | 80 | 4021343185793 | 33 | 33 | 28 | 18 | 18 | 18 |
| 9130341212S# | 3/4 x 1/2 x 1/2 | 10 | 100 | 4021343099113 | 30 | 31 | 28 | 15 | 18 | 15 |
| 9130343412S# | 3/4 x 1/2 x 3/4 | 10 | 80 | 4021343099250 | 33 | 33 | 31 | 18 | 18 | 18 |
| 9130343834S# | 3/4 x 3/4 x 3/8 | 10 | 100 | 4021343099335 | 28 | 28 | | 13 | 18 | |
| 9130341234S# | 3/4 x 3/4 x 1/2 | 10 | 90 | 4021343099151 | 30 | 31 | | 15 | 18 | |
| 91301138S# | 1 x 3/8 x 1 | 10 | 60 | 4021343187087 | 38 | 38 | 32 | 21 | 21 | 22 |
| 913013412S# | 1 x 1/2 x 3/4 | 10 | 50 | 4021343098130 | 35 | 36 | 31 | 18 | 21 | 18 |
| 91301112S# | 1 x 1/2 x 1 | 10 | 50 | 4021343096730 | 38 | 38 | 34 | 21 | 21 | 21 |
| 913011234S# | 1 x 3/4 x 1/2 | 10 | 70 | 4021343185700 | 32 | 34 | 30 | 15 | 21 | 15 |
| 913013434S# | 1 x 3/4 x 3/4 | 10 | 50 | 4021343098178 | 35 | 36 | 33 | 18 | 21 | 18 |
| 91301134S# | 1 x 3/4 x 1 | 10 | 50 | 4021343097300 | 38 | 38 | 36 | 21 | 21 | 21 |
| 91301381S# | 1 x 1 x 3/8 | 10 | 60 | 4021343185762 | 30 | 32 | | 13 | 22 | |
| 91301121S# | 1 x 1 x 1/2 | 10 | 60 | 4021343096860 | 32 | 34 | | 15 | 21 | |
| 91301341S# | 1 x 1 x 3/4 | 10 | 50 | 4021343098093 | 35 | 36 | | 18 | 21 | |
| 913011121S# | 1 x 1 x 1 1/2 | | 30 | 4021343186875 | 46 | 42 | | 29 | 23 | |
| 913011411412S# | 1 1/4 x 1/2 x 1 1/4 | | 35 | 4021343097577 | 45 | 45 | 38 | 26 | 26 | 25 |
| 9130114121S# | 1 1/4 x 1 x 1/2 | | 45 | 4021343187148 | 34 | 38 | 32 | 15 | 25 | 15 |
| 913011411S# | 1 1/4 x 1 x 1 | | 35 | 4021343097409 | 40 | 42 | 38 | 21 | 25 | 21 |
| 91301141141S# | 1 1/4 x 1 x 1 1/4 | | 30 | 4021343097539 | 45 | 45 | 42 | 26 | 26 | 25 |
| 913011412114S# | 1 1/4 x 1 1/4 x 1/2 | | 40 | 4021343097676 | 34 | 38 | | 15 | 25 | |
| 913011434114S# | 1 1/4 x 1 1/4 x 3/4 | | 40 | 4021343097751 | 36 | 41 | | 17 | 26 | |
| 91301141114S# | 1 1/4 x 1 1/4 x 1 | | 35 | 4021343097454 | 40 | 42 | | 21 | 25 | |
| 913011212112S# | 1 1/2 x 1 1/2 x 1/2 | | 30 | 4021343097164 | 36 | 42 | | 17 | 29 | |
| 913011234112S# | 1 1/2 x 1 1/2 x 3/4 | | 30 | 4021343097249 | 38 | 44 | | 19 | 29 | |
| 91301121112S# | 1 1/2 x 1 1/2 x 1 | | 25 | 4021343096921 | 42 | 46 | | 23 | 29 | |
| 91302122S# | 2 x 2 x 1/2 | | 20 | 4021343098611 | 61 | 66 | | 14 | 35 | |
| 91302342S# | 2 x 2 x 3/4 | | 20 | 4021343098857 | 40 | 50 | | 16 | 35 | |
| 9130212SB# | 2 x 2 x 1 | | 18 | 4021343098499 | 44 | 52 | | 20 | 34 | |
| 913021142S# | 2 x 2 x 1 1/4 | | 15 | 4021343098437 | 48 | 54 | | 24 | 34 | |
| 913021122S# | 2 x 2 x 1 1/2 | | 15 | 4021343098376 | 52 | 55 | | 28 | 36 | |
| galvanized | | | | | | | | | | |
| 913014V# | 1/4 | 10 | 300 | 4021343098253 | 21 | | | 11 | | |



Catalog-no. and -description

130# – Tee, female, black or galvanized (continued)

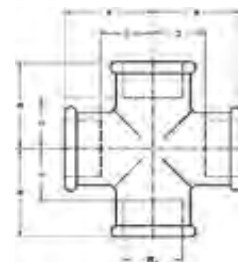
| Article-no. | Dimension Rp1 x Rp3 x Rp2 | Bag | Box | EAN code | a | b | c | z1 | z2 | z3 |
|-----------------|------------------------------|-----|-----|---------------|----|----|----|----|----|----|
| 913038V# | 3/8 | 10 | 180 | 4021343099397 | 25 | | | 15 | | |
| 913012V# | 1/2 | 10 | 120 | 4021343097867 | 28 | | | 18 | | |
| 913034V# | 3/4 | 10 | 60 | 4021343099076 | 33 | | | 18 | | |
| 91301V# | 1 | 10 | 40 | 4021343096709 | 38 | | | 21 | | |
| 9130114V# | 1 1/4 | | 25 | 4021343097386 | 45 | | | 26 | | |
| 9130112V# | 1 1/2 | | 22 | 4021343096839 | 50 | | | 31 | | |
| 91302V# | 2 | | 13 | 4021343098314 | 58 | | | 34 | | |
| 9130212VA# | 2 1/2 | | 6 | 4021343098512 | 69 | | | 42 | | |
| 91303V# | 3 | | 4 | 4021343098918 | 78 | | | 48 | | |
| 91304V# | 4 | | 2 | 4021343099472 | 96 | | | 60 | | |
| 9130381238V# | 3/8 x 3/8 x 1/2 | 10 | 130 | 4021343187605 | 26 | 26 | 26 | 15 | 13 | 16 |
| 9130121238V# | 1/2 x 3/8 x 1/2 | 10 | 150 | 4021343097928 | 28 | 28 | 26 | 15 | 15 | 16 |
| 9130121412V# | 1/2 x 1/2 x 1/4 | 10 | 150 | 4021343185755 | 25 | 25 | | 15 | 18 | |
| 9130123812V# | 1/2 x 1/2 x 3/8 | 10 | 140 | 4021343098024 | 26 | 26 | | 13 | 16 | |
| 9130123412V# | 1/2 x 1/2 x 3/4 | 10 | 90 | 4021343097980 | 31 | 30 | | 18 | 15 | |
| 913012112V# | 1/2 x 1/2 x 1 | 10 | 80 | 4021343187223 | 34 | 33 | | 24 | 19 | |
| 9130341212V# | 3/4 x 1/2 x 1/2 | 10 | 100 | 4021343099137 | 30 | 31 | 28 | 15 | 18 | 15 |
| 9130343412V# | 3/4 x 1/2 x 3/4 | 10 | 80 | 4021343099274 | 33 | 33 | 31 | 18 | 18 | 18 |
| 9130343834V# | 3/4 x 3/4 x 3/8 | 10 | 100 | 4021343099359 | 28 | 28 | | 13 | 18 | |
| 9130341234V# | 3/4 x 3/4 x 1/2 | 10 | 90 | 4021343099175 | 30 | 31 | | 15 | 18 | |
| 913034134V# | 3/4 x 3/4 x 1 | 10 | 60 | 4021343099236 | 37 | 48 | | 22 | 32 | |
| 913011212V# | 1 x 1/2 x 1/2 | 10 | 60 | 4021343097140 | 32 | 34 | 28 | 15 | 21 | 15 |
| 913013412V# | 1 x 1/2 x 3/4 | 10 | 50 | 4021343098154 | 35 | 36 | 31 | 18 | 21 | 18 |
| 91301112V# | 1 x 1/2 x 1 | 10 | 50 | 4021343096754 | 38 | 38 | 34 | 21 | 21 | 21 |
| 913011234V# | 1 x 3/4 x 1/2 | 10 | 70 | 4021343185717 | 32 | 34 | 30 | 15 | 21 | 15 |
| 913013434V# | 1 x 3/4 x 3/4 | 10 | 50 | 4021343098192 | 35 | 36 | 33 | 18 | 21 | 18 |
| 91301134V# | 1 x 3/4 x 1 | 10 | 50 | 4021343097324 | 38 | 38 | 36 | 21 | 21 | 21 |
| 91301381V# | 1 x 1 x 3/8 | 10 | 60 | 4021343185779 | 30 | 32 | | 13 | 22 | |
| 91301121V# | 1 x 1 x 1/2 | 10 | 60 | 4021343096884 | 32 | 34 | | 15 | 21 | |
| 91301341V# | 1 x 1 x 3/4 | 10 | 50 | 4021343098116 | 35 | 36 | | 18 | 21 | |
| 913011141V# | 1 x 1 x 1 1/4 | | 35 | 4021343181702 | 42 | 40 | | 25 | 21 | |
| 913011121V# | 1 x 1 x 1 1/2 | | 30 | 4021343186882 | 46 | 42 | | 29 | 23 | |
| 9130114112V# | 1 1/4 x 1/2 x 1 | | 40 | 4021343187131 | 48 | 46 | 48 | 29 | 27 | 29 |
| 913011411412V# | 1 1/4 x 1/2 x 1 1/4 | | 35 | 4021343097591 | 45 | 45 | 38 | 26 | 26 | 25 |
| 9130114134V# | 1 1/4 x 3/4 x 1 | | 40 | 4021343187162 | 40 | 42 | 36 | 21 | 25 | 21 |
| 913011411434V# | 1 1/4 x 3/4 x 1 1/4 | | 35 | 4021343097638 | 45 | 45 | 41 | 26 | 26 | 26 |
| 9130114341V# | 1 1/4 x 1 x 3/4 | | 40 | 4021343187186 | 36 | 41 | 35 | 17 | 26 | 18 |
| 9130114111V# | 1 1/4 x 1 x 1 | | 35 | 4021343097423 | 40 | 42 | 38 | 21 | 25 | 21 |
| 91301141141V# | 1 1/4 x 1 x 1 1/4 | | 30 | 4021343097553 | 45 | 45 | 42 | 26 | 26 | 25 |
| 913011412114V# | 1 1/4 x 1 1/4 x 1/2 | | 40 | 4021343097690 | 34 | 38 | | 15 | 25 | |
| 913011434114V# | 1 1/4 x 1 1/4 x 3/4 | | 40 | 4021343097775 | 36 | 41 | | 17 | 26 | |
| 91301141114V# | 1 1/4 x 1 1/4 x 1 | | 35 | 4021343097478 | 40 | 42 | | 21 | 25 | |
| 9130114112114V# | 1 1/4 x 1 1/4 x 1 1/2 | | 20 | 4021343187117 | 48 | 46 | | 29 | 27 | |
| 913011211212V# | 1 1/2 x 1/2 x 1 1/2 | | 24 | 4021343186936 | 49 | 50 | 44 | 31 | 32 | 32 |
| 913011211234V# | 1 1/2 x 3/4 x 1 1/2 | | 25 | 4021343186974 | 50 | 50 | 44 | 31 | 31 | 29 |
| 913011211V# | 1 1/2 x 1 x 1 | | 25 | 4021343187032 | 42 | 46 | 38 | 23 | 29 | 21 |
| 91301121141V# | 1 1/2 x 1 x 1 1/4 | | 30 | 4021343187018 | 46 | 48 | 42 | 27 | 29 | 25 |
| 91301121121V# | 1 1/2 x 1 x 1 1/2 | | 20 | 4021343186950 | 50 | 50 | 46 | 31 | 31 | 29 |



Catalog-no. and -description

130# – Tee, female, black or galvanized (continued)

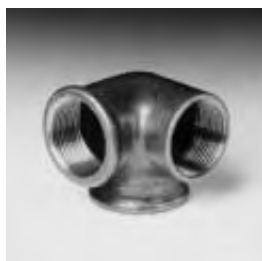
| Article-no. | Dimension Rp1 x Rp3 x Rp2 | Bag | Box | EAN code | a | b | c | z1 | z2 | z3 |
|-----------------|------------------------------|-----|-----|---------------|----|----|----|----|----|----|
| 913011212114V# | 1 1/2 x 1 1/4 x 1/2 | | 30 | 4021343181733 | 35 | 42 | 36 | 17 | 30 | 20 |
| 913011211114V# | 1 1/2 x 1 1/4 x 1 | | 25 | 4021343181740 | 43 | 47 | 40 | 24 | 32 | 24 |
| 9130112114114V# | 1 1/2 x 1 1/4 x 1 1/4 | | 20 | 4021343186981 | 46 | 48 | 45 | 27 | 29 | 26 |
| 9130112112114V# | 1 1/2 x 1 1/4 x 1 1/2 | | 25 | 4021343186929 | 50 | 50 | 48 | 32 | 32 | 32 |
| 913011212112V# | 1 1/2 x 1 1/2 x 1/2 | | 30 | 4021343097188 | 36 | 42 | | 17 | 29 | |
| 913011234112V# | 1 1/2 x 1 1/2 x 3/4 | | 30 | 4021343097263 | 38 | 44 | | 19 | 29 | |
| 91301121112V# | 1 1/2 x 1 1/2 x 1 | | 25 | 4021343096945 | 42 | 46 | | 23 | 29 | |
| 9130112114112V# | 1 1/2 x 1 1/2 x 1 1/4 | | 20 | 4021343097089 | 46 | 48 | | 27 | 29 | |
| 91301122112V# | 1 1/2 x 1 1/2 x 2 | | 18 | 4021343187056 | 57 | 56 | | 38 | 34 | |
| 91302212V# | 2 x 1/2 x 2 | | 15 | 4021343187469 | 58 | 58 | 52 | 38 | 38 | 40 |
| 91302234V# | 2 x 3/4 x 2 | | 15 | 4021343187490 | 58 | 58 | 50 | 38 | 38 | 37 |
| 9130221V# | 2 x 1 x 2 | | 18 | 4021343181757 | 58 | 58 | 51 | 38 | 38 | 37 |
| 91302114114V# | 2 x 1 1/4 x 1 1/4 | | 15 | 4021343187285 | 50 | 55 | 46 | 30 | 39 | 30 |
| 91302112114V# | 2 x 1 1/4 x 1 1/2 | | 16 | 4021343187261 | 52 | 55 | 49 | 29 | 37 | 31 |
| 913022114V# | 2 x 1 1/4 x 2 | | 15 | 4021343181764 | 58 | 58 | 54 | 34 | 34 | 35 |
| 91302112112V# | 2 x 1 1/2 x 1 1/2 | | 15 | 4021343185786 | 52 | 56 | 50 | 32 | 38 | 31 |
| 913022112V# | 2 x 1 1/2 x 2 | | 14 | 4021343187414 | 58 | 58 | 55 | 34 | 34 | 36 |
| 91302122V# | 2 x 2 x 1/2 | | 20 | 4021343098635 | 61 | 66 | | 14 | 35 | |
| 91302342V# | 2 x 2 x 3/4 | | 20 | 4021343098871 | 40 | 50 | | 16 | 35 | |
| 9130212VB# | 2 x 2 x 1 | | 18 | 4021343098536 | 44 | 52 | | 20 | 34 | |
| 913021142V# | 2 x 2 x 1 1/4 | | 15 | 4021343098451 | 48 | 54 | | 24 | 34 | |
| 913021122V# | 2 x 2 x 1 1/2 | | 15 | 4021343098390 | 52 | 55 | | 28 | 36 | |
| 91302122122V# | 2 1/2 x 2 x 2 1/2 | | 6 | 4021343187346 | 70 | 70 | 68 | 43 | 43 | 48 |
| 913021234212V# | 2 1/2 x 2 1/2 x 3/4 | | 6 | 4021343187391 | 44 | 59 | | 17 | 44 | |
| 91302121212V# | 2 1/2 x 2 1/2 x 1 | | 8 | 4021343164637 | 48 | 59 | | 22 | 43 | |
| 9130212114212V# | 2 1/2 x 2 1/2 x 1 1/4 | | 12 | 4021343164644 | 53 | 63 | | 27 | 46 | |
| 9130212112212V# | 2 1/2 x 2 1/2 x 1 1/2 | | 12 | 4021343166341 | 56 | 64 | | 32 | 46 | |
| 91302122212V# | 2 1/2 x 2 1/2 x 2 | | 8 | 4021343166433 | 62 | 67 | | 38 | 44 | |
| 9130313V# | 3 x 3 x 1 | | 6 | 4021343164651 | 51 | 67 | | 21 | 50 | |
| 913031143V# | 3 x 3 x 1 1/4 | | 6 | 4021343187520 | 51 | 70 | | 29 | 52 | |
| 913031123V# | 3 x 3 x 1 1/2 | | 6 | 4021343166440 | 58 | 71 | | 28 | 52 | |
| 9130323V# | 3 x 3 x 2 | | 5 | 4021343166457 | 66 | 75 | | 34 | 52 | |
| 913032123V# | 3 x 3 x 2 1/2 | | 5 | 4021343166464 | 72 | 76 | | 42 | 49 | |
| 9130424V# | 4 x 4 x 2 | | 3 | 4021343099557 | 71 | 86 | | 33 | 60 | |
| 913042124V# | 4 x 4 x 2 1/2 | | 2 | 4021343187667 | 79 | 93 | | 34 | 60 | |
| 9130434V# | 4 x 4 x 3 | | 2 | 4021343166471 | 84 | 94 | | 37 | 60 | |



Catalog-no. and -description

180# – Cross, female, black or galvanized

| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|--------------|-----|-----|---------------|----|----|
| black | | | | | | |
| 918012S# | 1/2 | 10 | 110 | 4021343100017 | 28 | 15 |
| 918034S# | 3/4 | 10 | 50 | 4021343100178 | 33 | 18 |
| 91801S# | 1 | 10 | 40 | 4021343099892 | 38 | 21 |
| 9180114S# | 1 1/4 | | 25 | 4021343099977 | 45 | 26 |
| 9180112S# | 1 1/2 | | 18 | 4021343099939 | 50 | 31 |
| 91802S# | 2 | | 7 | 4021343100079 | 58 | 34 |
| galvanized | | | | | | |
| 918014V# | 1/4 | 10 | 250 | 4021343187810 | 21 | 13 |
| 918038V# | 3/8 | 10 | 140 | 4021343100239 | 26 | 16 |
| 918012V# | 1/2 | 10 | 110 | 4021343100031 | 28 | 15 |
| 918034V# | 3/4 | 10 | 50 | 4021343100192 | 33 | 18 |
| 91801V# | 1 | 10 | 40 | 4021343099915 | 38 | 21 |
| 9180114V# | 1 1/4 | | 25 | 4021343099991 | 45 | 26 |
| 9180112V# | 1 1/2 | | 18 | 4021343099953 | 50 | 31 |
| 91802V# | 2 | | 7 | 4021343100093 | 58 | 34 |
| 9180212V# | 2 1/2 | | 5 | 4021343185847 | 71 | 45 |
| 91803V# | 3 | | 3 | 4021343100154 | 79 | 53 |



Catalog-no. and -description

221# – Distributor, female, black or galvanized

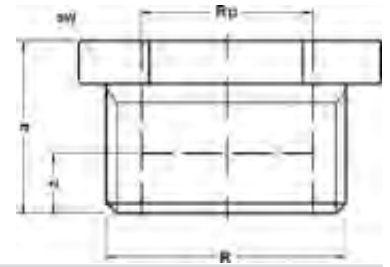
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|--------------|-----|-----|---------------|----|----|
| black | | | | | | |
| 922112S# | 1/2 | 10 | 120 | 4021343100734 | 28 | 15 |
| 922134S# | 3/4 | 10 | 80 | 4021343100833 | 33 | 18 |
| 92211S# | 1 | 10 | 50 | 4021343100659 | 38 | 21 |
| galvanized | | | | | | |
| 922112V# | 1/2 | 10 | 120 | 4021343100758 | 28 | 15 |
| 922134V# | 3/4 | 10 | 80 | 4021343100857 | 33 | 18 |
| 92211V# | 1 | 10 | 50 | 4021343100673 | 38 | 21 |
| 9221114V# | 1 1/4 | | 25 | 4021343187865 | 45 | 28 |
| 9221112V# | 1 1/2 | | 20 | 4021343185861 | 50 | 31 |
| 92212VB# | 2 | | 12 | 4021343187889 | 58 | 34 |



Catalog-no. and -description

240# – Coupling, reduced, female, black or galvanized

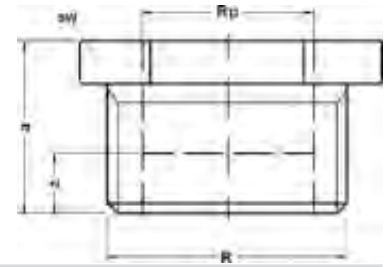
| Article-no. | Dimension Rp1 x Rp2 | Bag | Box | EAN code | a | z |
|-------------------|------------------------|-----|-----|---------------|----|----|
| black | | | | | | |
| 92403814S# | 3/8 x 1/4 | 10 | 500 | 4021343102073 | 30 | 10 |
| 92401214S# | 1/2 x 1/4 | 10 | 300 | 4021343185878 | 36 | 13 |
| 92401238S# | 1/2 x 3/8 | 10 | 300 | 4021343101489 | 36 | 13 |
| 92403438S# | 3/4 x 3/8 | 10 | 160 | 4021343185939 | 39 | 14 |
| 92403412S# | 3/4 x 1/2 | 10 | 150 | 4021343101991 | 39 | 11 |
| 9240138S# | 1 x 3/8 | 10 | 140 | 4021343187896 | 45 | 18 |
| 9240112S# | 1 x 1/2 | 10 | 120 | 4021343101144 | 45 | 15 |
| 9240134S# | 1 x 3/4 | 10 | 100 | 4021343101533 | 45 | 13 |
| 924011412S# | 1 1/4 x 1/2 | 10 | 90 | 4021343101380 | 50 | 18 |
| 924011434S# | 1 1/4 x 3/4 | | 90 | 4021343101427 | 48 | 16 |
| 92401141S# | 1 1/4 x 1 | | 80 | 4021343101342 | 50 | 14 |
| 924011212S# | 1 1/2 x 1/2 | | 60 | 4021343101267 | 55 | 23 |
| 924011234S# | 1 1/2 x 3/4 | | 60 | 4021343101304 | 55 | 21 |
| 92401121S# | 1 1/2 x 1 | | 50 | 4021343101182 | 55 | 19 |
| 9240112114S# | 1 1/2 x 1 1/4 | | 50 | 4021343101229 | 55 | 17 |
| 9240234S# | 2 x 3/4 | | 42 | 4021343101854 | 65 | 26 |
| 924021S# | 2 x 1 | | 42 | 4021343101618 | 65 | 24 |
| 92402114S# | 2 x 1 1/4 | | 30 | 4021343101694 | 65 | 22 |
| 92402112S# | 2 x 1 1/2 | | 30 | 4021343101656 | 65 | 22 |
| galvanized | | | | | | |
| 92403818V# | 3/8 x 1/8 | 10 | 500 | 4021343189531 | 33 | 17 |
| 92403814V# | 3/8 x 1/4 | 10 | 500 | 4021343102097 | 30 | 10 |
| 92401214V# | 1/2 x 1/4 | 10 | 300 | 4021343185885 | 36 | 13 |
| 92401238V# | 1/2 x 3/8 | 10 | 300 | 4021343101502 | 36 | 13 |
| 92403414V# | 3/4 x 1/4 | 10 | 180 | 4021343187957 | 39 | 21 |
| 92403438V# | 3/4 x 3/8 | 10 | 160 | 4021343185946 | 39 | 14 |
| 92403412V# | 3/4 x 1/2 | 10 | 150 | 4021343102011 | 39 | 11 |
| 9240138V# | 1 x 3/8 | 10 | 140 | 4021343187902 | 45 | 18 |
| 9240112V# | 1 x 1/2 | 10 | 120 | 4021343101168 | 45 | 15 |
| 9240134V# | 1 x 3/4 | 10 | 100 | 4021343101557 | 45 | 13 |
| 924011412V# | 1 1/4 x 1/2 | 10 | 90 | 4021343101403 | 50 | 18 |
| 924011434V# | 1 1/4 x 3/4 | | 90 | 4021343101441 | 48 | 16 |
| 92401141V# | 1 1/4 x 1 | | 80 | 4021343101366 | 50 | 14 |
| 924011212V# | 1 1/2 x 1/2 | | 60 | 4021343101281 | 55 | 23 |
| 924011234V# | 1 1/2 x 3/4 | | 60 | 4021343101328 | 55 | 21 |
| 92401121V# | 1 1/2 x 1 | | 50 | 4021343101205 | 55 | 19 |
| 9240112114V# | 1 1/2 x 1 1/4 | | 50 | 4021343101243 | 55 | 17 |
| 9240212V# | 2 x 1/2 | | 42 | 4021343185908 | 65 | 28 |
| 9240234V# | 2 x 3/4 | | 42 | 4021343101878 | 65 | 26 |
| 924021V# | 2 x 1 | | 42 | 4021343101632 | 65 | 24 |
| 92402114V# | 2 x 1 1/4 | | 30 | 4021343101717 | 65 | 22 |
| 92402112V# | 2 x 1 1/2 | | 30 | 4021343101670 | 65 | 22 |
| 9240212112V# | 2 1/2 x 1 1/2 | | 27 | 4021343185922 | 67 | 31 |
| 92402122V# | 2 1/2 x 2 | | 18 | 4021343101830 | 74 | 23 |
| 92403112V# | 3 x 1 1/2 | | 18 | 4021343187940 | 75 | 32 |
| 924032V# | 3 x 2 | | 18 | 4021343101939 | 80 | 26 |
| 92403212V# | 3 x 2 1/2 | | 12 | 4021343101977 | 80 | 23 |
| 924042V# | 4 x 2 | | 6 | 4021343185953 | 88 | 42 |
| 924043V# | 4 x 3 | | 6 | 4021343102196 | 94 | 28 |



Catalog-no. and -description

241# – Reducer, male/female, black or galvanized

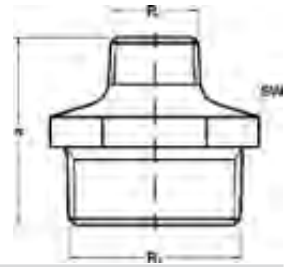
| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | z | SW |
|--------------|---------------------|-----|------|---------------|----|----|-----|
| black | | | | | | | |
| 92411418S# | 1/4 x 1/8 | 10 | 1000 | 4021343102936 | 20 | 13 | 18 |
| 92413818S# | 3/8 x 1/8 | 10 | 1000 | 4021343103728 | 20 | 13 | 20 |
| 92413814S# | 3/8 x 1/4 | 10 | 1000 | 4021343103681 | 20 | 10 | 20 |
| 92411218S# | 1/2 x 1/8 | 10 | 500 | 4021343102769 | 24 | 17 | 24 |
| 92411214S# | 1/2 x 1/4 | 10 | 500 | 4021343102721 | 24 | 14 | 28 |
| 92411238S# | 1/2 x 3/8 | 10 | 500 | 4021343102813 | 24 | 14 | 28 |
| 92413414S# | 3/4 x 1/4 | 10 | 320 | 4021343103605 | 26 | 16 | 33 |
| 92413438S# | 3/4 x 3/8 | 10 | 320 | 4021343103643 | 26 | 16 | 33 |
| 92413412S# | 3/4 x 1/2 | 10 | 320 | 4021343103568 | 26 | 13 | 33 |
| 9241138S# | 1 x 3/8 | 10 | 200 | 4021343102899 | 29 | 19 | 36 |
| 9241112S# | 1 x 1/2 | 10 | 200 | 4021343102271 | 29 | 16 | 42 |
| 9241134S# | 1 x 3/4 | 10 | 200 | 4021343102851 | 29 | 14 | 42 |
| 924111412S# | 1 1/4 x 1/2 | | 140 | 4021343102608 | 31 | 18 | 47 |
| 924111434S# | 1 1/4 x 3/4 | | 140 | 4021343102646 | 31 | 16 | 47 |
| 92411141S# | 1 1/4 x 1 | | 140 | 4021343102561 | 31 | 14 | 47 |
| 924111212S# | 1 1/2 x 1/2 | | 110 | 4021343102394 | 31 | 18 | 52 |
| 924111234S# | 1 1/2 x 3/4 | | 110 | 4021343102431 | 31 | 16 | 52 |
| 92411121S# | 1 1/2 x 1 | | 110 | 4021343102318 | 31 | 14 | 52 |
| 9241112114S# | 1 1/2 x 1 1/4 | | 110 | 4021343102356 | 31 | 12 | 52 |
| 9241212S# | 2 x 1/2 | | 50 | 4021343103094 | 35 | 35 | 65 |
| 9241234S# | 2 x 3/4 | | 50 | 4021343103315 | 35 | 33 | 65 |
| 924121S# | 2 x 1 | | 60 | 4021343102974 | 35 | 18 | 67 |
| 92412114S# | 2 x 1 1/4 | | 60 | 4021343103056 | 35 | 16 | 67 |
| 92412112S# | 2 x 1 1/2 | | 60 | 4021343103018 | 35 | 16 | 67 |
| 92412121S# | 2 1/2 x 1 | | 30 | 4021343103131 | 40 | 37 | 82 |
| 9241212114S# | 2 1/2 x 1 1/4 | | 30 | 4021343103216 | 40 | 35 | 82 |
| 9241212112S# | 2 1/2 x 1 1/2 | | 30 | 4021343103179 | 40 | 21 | 82 |
| 92412122S# | 2 1/2 x 2 | | 30 | 4021343103254 | 40 | 16 | 82 |
| 924132S# | 3 x 2 | | 24 | 4021343103476 | 44 | 20 | 97 |
| 92413212S# | 3 x 2 1/2 | | 24 | 4021343103513 | 44 | 17 | 97 |
| 924142S# | 4 x 2 | | 9 | 4021343158056 | 51 | 45 | 122 |
| galvanized | | | | | | | |
| 92411418V# | 1/4 x 1/8 | 10 | 1000 | 4021343102950 | 20 | 13 | 18 |
| 92413818V# | 3/8 x 1/8 | 10 | 1000 | 4021343103742 | 20 | 13 | 20 |
| 92413814V# | 3/8 x 1/4 | 10 | 1000 | 4021343103704 | 20 | 10 | 20 |
| 92411218V# | 1/2 x 1/8 | 10 | 500 | 4021343102783 | 24 | 17 | 24 |
| 92411214V# | 1/2 x 1/4 | 10 | 500 | 4021343102745 | 24 | 14 | 28 |
| 92411238V# | 1/2 x 3/8 | 10 | 500 | 4021343102837 | 24 | 14 | 28 |
| 92413414V# | 3/4 x 1/4 | 10 | 320 | 4021343103629 | 26 | 16 | 33 |
| 92413438V# | 3/4 x 3/8 | 10 | 320 | 4021343103667 | 26 | 16 | 33 |
| 92413412V# | 3/4 x 1/2 | 10 | 320 | 4021343103582 | 26 | 13 | 33 |
| 9241114V# | 1 x 1/4 | 10 | 200 | 4021343102530 | 29 | 19 | 37 |
| 9241138V# | 1 x 3/8 | 10 | 200 | 4021343102912 | 29 | 19 | 36 |
| 9241112V# | 1 x 1/2 | 10 | 200 | 4021343102295 | 29 | 16 | 42 |
| 9241134V# | 1 x 3/4 | 10 | 200 | 4021343102875 | 29 | 14 | 42 |
| 924111438V# | 1 1/4 x 3/8 | | 200 | 4021343102707 | 31 | 21 | 47 |
| 924111412V# | 1 1/4 x 1/2 | | 140 | 4021343102622 | 31 | 18 | 47 |



Catalog-no. and -description

241# – Reducer, male/female, black or galvanized (continued)

| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | z | SW |
|--------------|---------------------|-----|-----|---------------|----|----|-----|
| 924111434V# | 1 1/4 x 3/4 | | 140 | 4021343102660 | 31 | 16 | 47 |
| 92411141V# | 1 1/4 x 1 | | 140 | 4021343102585 | 31 | 14 | 47 |
| 924111238V# | 1 1/2 x 3/8 | | 120 | 4021343102493 | 31 | 23 | 50 |
| 924111212V# | 1 1/2 x 1/2 | | 110 | 4021343102417 | 31 | 18 | 52 |
| 924111234V# | 1 1/2 x 3/4 | | 110 | 4021343102455 | 31 | 16 | 52 |
| 92411121V# | 1 1/2 x 1 | | 110 | 4021343102332 | 31 | 14 | 52 |
| 9241112114V# | 1 1/2 x 1 1/4 | | 110 | 4021343102370 | 31 | 12 | 52 |
| 9241212V# | 2 x 1/2 | | 50 | 4021343103117 | 35 | 35 | 65 |
| 9241234V# | 2 x 3/4 | | 50 | 4021343103339 | 35 | 33 | 65 |
| 924121V# | 2 x 1 | | 60 | 4021343102998 | 35 | 18 | 67 |
| 92412114V# | 2 x 1 1/4 | | 60 | 4021343103070 | 35 | 16 | 67 |
| 92412112V# | 2 x 1 1/2 | | 60 | 4021343103032 | 35 | 16 | 67 |
| 924121234V# | 2 1/2 x 3/4 | | 30 | 4021343185977 | 40 | 40 | 82 |
| 92412121V# | 2 1/2 x 1 | | 30 | 4021343103155 | 40 | 37 | 82 |
| 9241212114V# | 2 1/2 x 1 1/4 | | 30 | 4021343103230 | 40 | 35 | 82 |
| 9241212112V# | 2 1/2 x 1 1/2 | | 30 | 4021343103193 | 40 | 21 | 82 |
| 92412122V# | 2 1/2 x 2 | | 30 | 4021343103278 | 40 | 16 | 82 |
| 924131V# | 3 x 1 | | 24 | 4021343185984 | 48 | 46 | 97 |
| 92413114V# | 3 x 1 1/4 | | 20 | 4021343103452 | 44 | 40 | 97 |
| 92413112V# | 3 x 1 1/2 | | 20 | 4021343103414 | 44 | 40 | 97 |
| 924132V# | 3 x 2 | | 24 | 4021343103490 | 44 | 20 | 97 |
| 92413212V# | 3 x 2 1/2 | | 24 | 4021343103537 | 44 | 17 | 97 |
| 92414112V# | 4 x 1 1/2 | | 9 | 4021343164682 | 54 | 49 | 122 |
| 924142V# | 4 x 2 | | 9 | 4021343158063 | 51 | 45 | 122 |
| 92414212V# | 4 x 2 1/2 | | 9 | 4021343103803 | 52 | 44 | 122 |
| 924143V# | 4 x 3 | | 12 | 4021343103841 | 53 | 24 | 122 |
| 924154V# | 5 x 4 | | 6 | 4021343166303 | 58 | 31 | 148 |



Catalog-no. and -description

245# – Reducing nipple, male, black or galvanized

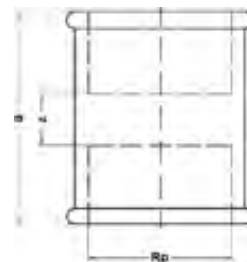
| Article-no. | Dimension R1 x R2 | Bag | Box | EAN code | a | SW |
|--------------|----------------------|-----|-----|---------------|----|-----|
| black | | | | | | |
| 92453814S# | 3/8 x 1/4 | 10 | 700 | 4021343104688 | 38 | 20 |
| 92451214S# | 1/2 x 1/4 | 10 | 400 | 4021343104169 | 44 | 24 |
| 92451238S# | 1/2 x 3/8 | 10 | 400 | 4021343104206 | 44 | 24 |
| 92453412S# | 3/4 x 1/2 | 10 | 220 | 4021343104602 | 47 | 31 |
| 9245112S# | 1 x 1/2 | 10 | 150 | 4021343103889 | 53 | 37 |
| 9245134S# | 1 x 3/4 | 10 | 140 | 4021343104244 | 53 | 37 |
| 924511434S# | 1 1/4 x 3/4 | | 100 | 4021343104121 | 57 | 47 |
| 92451141S# | 1 1/4 x 1 | | 85 | 4021343104046 | 57 | 47 |
| 924511234S# | 1 1/2 x 3/4 | | 60 | 4021343104008 | 59 | 51 |
| 92451121S# | 1 1/2 x 1 | | 60 | 4021343103926 | 59 | 51 |
| 9245112114S# | 1 1/2 x 1 1/4 | | 60 | 4021343103964 | 59 | 51 |
| 924521S# | 2 x 1 | | 45 | 4021343104329 | 68 | 65 |
| 92452114S# | 2 x 1 1/4 | | 48 | 4021343104404 | 68 | 66 |
| 92452112S# | 2 x 1 1/2 | | 48 | 4021343104367 | 68 | 66 |
| 92452122S# | 2 1/2 x 2 | | 25 | 4021343104480 | 75 | 81 |
| 924532S# | 3 x 2 | | 20 | 4021343104527 | | |
| galvanized | | | | | | |
| 92451418V# | 1/4 x 1/8 | 10 | 800 | 4021343185991 | 40 | 18 |
| 92453814V# | 3/8 x 1/4 | 10 | 700 | 4021343104701 | 38 | 20 |
| 92451214V# | 1/2 x 1/4 | 10 | 400 | 4021343104183 | 44 | 24 |
| 92451238V# | 1/2 x 3/8 | 10 | 400 | 4021343104220 | 44 | 24 |
| 92453438V# | 3/4 x 3/8 | 10 | 250 | 4021343104664 | 47 | 31 |
| 92453412V# | 3/4 x 1/2 | 10 | 220 | 4021343104626 | 47 | 31 |
| 9245112V# | 1 x 1/2 | 10 | 150 | 4021343103902 | 53 | 37 |
| 9245134V# | 1 x 3/4 | 10 | 140 | 4021343104268 | 53 | 37 |
| 924511412V# | 1 1/4 x 1/2 | | 100 | 4021343104107 | 57 | 47 |
| 924511434V# | 1 1/4 x 3/4 | | 100 | 4021343104145 | 57 | 47 |
| 92451141V# | 1 1/4 x 1 | | 85 | 4021343104060 | 57 | 47 |
| 924511234V# | 1 1/2 x 3/4 | | 60 | 4021343104022 | 59 | 51 |
| 92451121V# | 1 1/2 x 1 | | 60 | 4021343103940 | 59 | 51 |
| 9245112114V# | 1 1/2 x 1 1/4 | | 60 | 4021343103988 | 59 | 51 |
| 924521V# | 2 x 1 | | 45 | 4021343104343 | 68 | 65 |
| 92452114V# | 2 x 1 1/4 | | 48 | 4021343104428 | 68 | 66 |
| 92452112V# | 2 x 1 1/2 | | 48 | 4021343104381 | 68 | 66 |
| 9245212112V# | 2 1/2 x 1 1/2 | | 25 | 4021343104466 | 77 | 81 |
| 92452122V# | 2 1/2 x 2 | | 25 | 4021343104503 | 75 | 81 |
| 924532V# | 3 x 2 | | 20 | 4021343104541 | 86 | 95 |
| 92453212V# | 3 x 2 1/2 | | 16 | 4021343104589 | 86 | 95 |
| 92454212V# | 4 x 2 1/2 | | 7 | 4021343164705 | 97 | 121 |
| 924543V# | 4 x 3 | | 8 | 4021343164699 | 98 | 121 |



Catalog-no. and -description

246# – Plug-in adaptor, female/male, black or galvanized

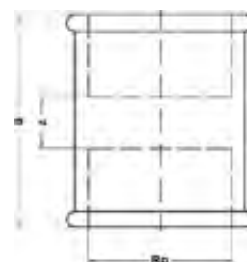
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | a | z |
|--------------|---------------------|-----|-----|---------------|----|----|
| black | | | | | | |
| 92463814S# | 3/8 x 1/4 | 10 | 400 | 4021343188084 | 35 | 25 |
| 92461238S# | 1/2 x 3/8 | 10 | 320 | 4021343104992 | 43 | 30 |
| 92463412S# | 3/4 x 1/2 | 10 | 200 | 4021343105296 | 48 | 33 |
| 9246112S# | 1 x 1/2 | 10 | 130 | 4021343104725 | 55 | 38 |
| 9246134S# | 1 x 3/4 | 10 | 110 | 4021343105036 | 55 | 38 |
| 924611434S# | 1 1/4 x 3/4 | | 80 | 4021343104930 | 60 | 41 |
| 92461141S# | 1 1/4 x 1 | | 70 | 4021343104879 | 60 | 41 |
| 92461121S# | 1 1/2 x 1 | | 60 | 4021343104763 | 63 | 44 |
| 9246112114S# | 1 1/2 x 1 1/4 | | 50 | 4021343104800 | 63 | 44 |
| 92462114S# | 2 x 1 1/4 | | 42 | 4021343105173 | 70 | 46 |
| 92462112S# | 2 x 1 1/2 | | 42 | 4021343105135 | 70 | 46 |
| 92462122S# | 2 1/2 x 2 | | 24 | 4021343158070 | 80 | 43 |
| 924632S# | 3 x 2 | | 15 | 4021343158094 | 89 | 59 |
| 92463212S# | 3 x 2 1/2 | | 15 | 4021343168147 | 89 | 59 |
| galvanized | | | | | | |
| 92461418V# | 1/4 x 1/8 | 10 | 800 | 4021343189579 | 28 | 18 |
| 92463814V# | 3/8 x 1/4 | 10 | 400 | 4021343186059 | 35 | 25 |
| 92461214V# | 1/2 x 1/4 | 10 | 350 | 4021343188039 | 43 | 30 |
| 92461238V# | 1/2 x 3/8 | 10 | 320 | 4021343105012 | 43 | 30 |
| 92463438V# | 3/4 x 3/8 | 10 | 100 | 4021343105340 | 48 | 33 |
| 92463412V# | 3/4 x 1/2 | 10 | 200 | 4021343105319 | 48 | 33 |
| 9246112V# | 1 x 1/2 | 10 | 130 | 4021343104749 | 55 | 38 |
| 9246134V# | 1 x 3/4 | 10 | 110 | 4021343105050 | 55 | 38 |
| 924611412V# | 1 1/4 x 1/2 | | 85 | 4021343186028 | 60 | 41 |
| 924611434V# | 1 1/4 x 3/4 | | 80 | 4021343104954 | 60 | 41 |
| 92461141V# | 1 1/4 x 1 | | 70 | 4021343104893 | 60 | 41 |
| 924611234V# | 1 1/2 x 3/4 | | 60 | 4021343186004 | 63 | 44 |
| 92461121V# | 1 1/2 x 1 | | 60 | 4021343104787 | 63 | 44 |
| 9246112114V# | 1 1/2 x 1 1/4 | | 50 | 4021343104824 | 63 | 44 |
| 9246234V# | 2 x 3/4 | | 42 | 4021343188077 | 70 | 46 |
| 924621V# | 2 x 1 | | 42 | 4021343186042 | 70 | 46 |
| 92462114V# | 2 x 1 1/4 | | 42 | 4021343105197 | 70 | 46 |
| 92462112V# | 2 x 1 1/2 | | 42 | 4021343105159 | 70 | 46 |
| 92462122V# | 2 1/2 x 2 | | 24 | 4021343158087 | 80 | 43 |
| 924632V# | 3 x 2 | | 15 | 4021343158100 | 89 | 59 |
| 92463212V# | 3 x 2 1/2 | | 15 | 4021343158117 | 89 | 59 |



Catalog-no. and -description

270# – Coupling, black or galvanized

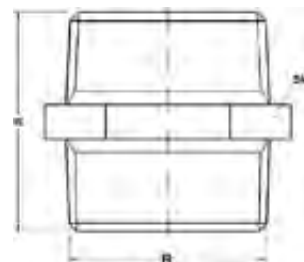
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|----|----|
| black | | | | | | |
| 927018S# | 1/8 | 10 | 700 | 4021343105678 | 25 | 11 |
| 927014S# | 1/4 | 10 | 500 | 4021343105630 | 27 | 7 |
| 927038S# | 3/8 | 10 | 300 | 4021343105876 | 30 | 10 |
| 927012S# | 1/2 | 10 | 250 | 4021343105593 | 36 | 10 |
| 927034S# | 3/4 | 10 | 150 | 4021343105838 | 39 | 9 |
| 92701S# | 1 | 10 | 90 | 4021343105449 | 45 | 11 |
| 9270114S# | 1 1/4 | | 70 | 4021343105548 | 50 | 12 |
| 9270112S# | 1 1/2 | | 50 | 4021343105494 | 55 | 17 |
| 92702S# | 2 | | 24 | 4021343105715 | 65 | 17 |
| 9270212S# | 2 1/2 | | 18 | 4021343105753 | 74 | 20 |
| 92703S# | 3 | | 12 | 4021343105791 | 80 | 20 |
| galvanized | | | | | | |
| 927018V# | 1/8 | 10 | 700 | 4021343105692 | 25 | 11 |
| 927014V# | 1/4 | 10 | 500 | 4021343105654 | 27 | 7 |
| 927038V# | 3/8 | 10 | 300 | 4021343105890 | 30 | 10 |
| 927012V# | 1/2 | 10 | 250 | 4021343105616 | 36 | 10 |
| 927034V# | 3/4 | 10 | 150 | 4021343105852 | 39 | 9 |
| 92701V# | 1 | 10 | 90 | 4021343105463 | 45 | 11 |
| 9270114V# | 1 1/4 | | 70 | 4021343105562 | 50 | 12 |
| 9270112V# | 1 1/2 | | 50 | 4021343105517 | 55 | 17 |
| 92702V# | 2 | | 24 | 4021343105739 | 65 | 17 |
| 9270212V# | 2 1/2 | | 18 | 4021343105777 | 74 | 20 |
| 92703V# | 3 | | 12 | 4021343105814 | 80 | 20 |
| 92704V# | 4 | | 5 | 4021343105937 | 94 | 22 |



Catalog-no. and -description

271# – Coupling, left/ right thread, black or galvanized

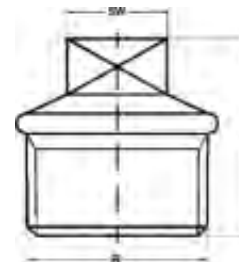
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z |
|-------------|-----------------|-----|-----|---------------|----|----|
| galvanized | | | | | | |
| 927112V# | 1/2 | 10 | 250 | 4021343168192 | 36 | 10 |
| 927134V# | 3/4 | 10 | 150 | 4021343168208 | 39 | 9 |
| 92711V# | 1 | 10 | 90 | 4021343168154 | 45 | 11 |
| 9271114V# | 1 1/4 | | 70 | 4021343168178 | 50 | 12 |
| 9271112V# | 1 1/2 | | 50 | 4021343158162 | 55 | 17 |
| 92712V# | 2 | | 24 | 4021343158186 | 65 | 17 |



Catalog-no. and -description

280# – Double nipple, male, galvanized

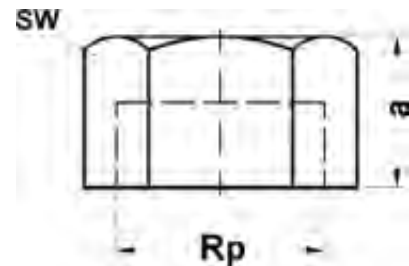
| Article-no. | Dimension R | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|------|---------------|-----|-----|
| black | | | | | | |
| 928018S# | 1/8 | 10 | 1200 | 4021343106392 | 29 | 17 |
| 928014S# | 1/4 | 10 | 800 | 4021343106354 | 36 | 19 |
| 928038S# | 3/8 | 10 | 450 | 4021343106590 | 38 | 22 |
| 928012S# | 1/2 | 10 | 350 | 4021343106316 | 44 | 27 |
| 928034S# | 3/4 | 10 | 200 | 4021343106552 | 47 | 32 |
| 92801S# | 1 | 10 | 100 | 4021343106187 | 53 | 41 |
| 9280114S# | 1 1/4 | | 70 | 4021343106262 | 57 | 50 |
| 9280112S# | 1 1/2 | | 45 | 4021343106224 | 59 | 55 |
| 92802S# | 2 | | 30 | 4021343106439 | 68 | 70 |
| 9280212S# | 2 1/2 | | 20 | 4021343106477 | 75 | 85 |
| 92803S# | 3 | | 12 | 4021343106514 | 83 | 100 |
| 92804S# | 4 | | 5 | 4021343106637 | 95 | 130 |
| galvanized | | | | | | |
| 928018V# | 1/8 | 10 | 1200 | 4021343106415 | 29 | 17 |
| 928014V# | 1/4 | 10 | 800 | 4021343106378 | 36 | 19 |
| 928038V# | 3/8 | 10 | 450 | 4021343106613 | 38 | 22 |
| 928012V# | 1/2 | 10 | 350 | 4021343106330 | 44 | 27 |
| 928034V# | 3/4 | 10 | 200 | 4021343106576 | 47 | 32 |
| 92801V# | 1 | 10 | 100 | 4021343106200 | 53 | 41 |
| 9280114V# | 1 1/4 | | 70 | 4021343106286 | 57 | 50 |
| 9280112V# | 1 1/2 | | 45 | 4021343106248 | 59 | 55 |
| 92802V# | 2 | | 30 | 4021343106453 | 68 | 70 |
| 9280212V# | 2 1/2 | | 20 | 4021343106491 | 75 | 85 |
| 92803V# | 3 | | 12 | 4021343106538 | 83 | 100 |
| 92804V# | 4 | | 5 | 4021343106651 | 95 | 130 |
| 92805V# | 5 | | 4 | 4021343158223 | 106 | 146 |



Catalog-no. and -description

290# – Plug, male, black or galvanized

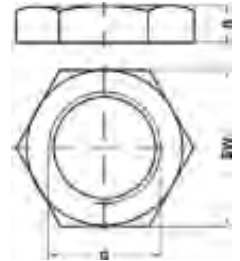
| Article-no. | Dimension R | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|------|---------------|----|----|
| black | | | | | | |
| 929018S# | 1/8 | 10 | 1000 | 4021343106965 | 20 | 8 |
| 929014S# | 1/4 | 10 | 1000 | 4021343106927 | 22 | 10 |
| 929038S# | 3/8 | 10 | 800 | 4021343107160 | 24 | 10 |
| 929012S# | 1/2 | 10 | 450 | 4021343106880 | 30 | 12 |
| 929034S# | 3/4 | 10 | 300 | 4021343107122 | 32 | 17 |
| 92901S# | 1 | 10 | 180 | 4021343106767 | 36 | 19 |
| 9290114S# | 1 1/4 | | 140 | 4021343106842 | 39 | 22 |
| 9290112S# | 1 1/2 | | 100 | 4021343106804 | 41 | 22 |
| 92902S# | 2 | | 60 | 4021343107009 | 48 | 27 |
| 9290212S# | 2 1/2 | | 35 | 4021343107047 | 54 | 32 |
| 92903S# | 3 | | 20 | 4021343107085 | 60 | 36 |
| 92904S# | 4 | | 14 | 4021343107207 | 70 | 41 |
| galvanized | | | | | | |
| 929018V# | 1/8 | 10 | 1000 | 4021343106989 | 20 | 8 |
| 929014V# | 1/4 | 10 | 1000 | 4021343106941 | 22 | 10 |
| 929038V# | 3/8 | 10 | 800 | 4021343107184 | 24 | 10 |
| 929012V# | 1/2 | 10 | 450 | 4021343106903 | 30 | 12 |
| 929034V# | 3/4 | 10 | 300 | 4021343107146 | 32 | 17 |
| 92901V# | 1 | 10 | 180 | 4021343106781 | 36 | 19 |
| 9290114V# | 1 1/4 | | 140 | 4021343106866 | 39 | 22 |
| 9290112V# | 1 1/2 | | 100 | 4021343106828 | 41 | 22 |
| 92902V# | 2 | | 60 | 4021343107023 | 48 | 27 |
| 9290212V# | 2 1/2 | | 35 | 4021343107061 | 54 | 32 |
| 92903V# | 3 | | 20 | 4021343107108 | 60 | 36 |
| 92904V# | 4 | | 14 | 4021343107221 | 70 | 41 |



Catalog-no. and -description

300# – Cap, female, black or galvanized

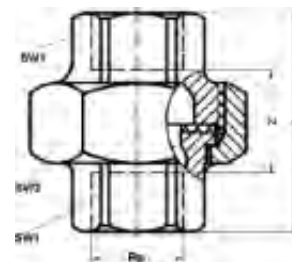
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | SW |
|-------------|-----------------|-----|-----|---------------|----|-----|
| black | | | | | | |
| 930014S# | 1/4 | 10 | 800 | 4021343186066 | 15 | 19 |
| 930038S# | 3/8 | 10 | 700 | 4021343107627 | 18 | 22 |
| 930012S# | 1/2 | 10 | 400 | 4021343107405 | 22 | 27 |
| 930034S# | 3/4 | 10 | 250 | 4021343107580 | 26 | 32 |
| 93001S# | 1 | 10 | 150 | 4021343107283 | 31 | 40 |
| 9300114S# | 1 1/4 | | 120 | 4021343107368 | 33 | 51 |
| 9300112S# | 1 1/2 | | 90 | 4021343107320 | 33 | 56 |
| 93002S# | 2 | | 50 | 4021343107467 | 38 | 71 |
| 9300212S# | 2 1/2 | | 30 | 4021343107504 | 43 | 86 |
| 93003S# | 3 | | 21 | 4021343107542 | 46 | 101 |
| 93004S# | 4 | | 11 | 4021343107665 | 52 | 131 |
| galvanized | | | | | | |
| 930014V# | 1/4 | 10 | 800 | 4021343186073 | 15 | 19 |
| 930038V# | 3/8 | 10 | 700 | 4021343107641 | 18 | 22 |
| 930012V# | 1/2 | 10 | 400 | 4021343107429 | 22 | 27 |
| 930034V# | 3/4 | 10 | 250 | 4021343107603 | 26 | 32 |
| 93001V# | 1 | 10 | 150 | 4021343107306 | 31 | 40 |
| 9300114V# | 1 1/4 | | 120 | 4021343107382 | 33 | 51 |
| 9300112V# | 1 1/2 | | 90 | 4021343107344 | 33 | 56 |
| 93002V# | 2 | | 50 | 4021343107481 | 38 | 71 |
| 9300212V# | 2 1/2 | | 30 | 4021343107528 | 43 | 86 |
| 93003V# | 3 | | 21 | 4021343107566 | 46 | 101 |
| 93004V# | 4 | | 11 | 4021343107689 | 52 | 131 |



Catalog-no. and -description

310# – Nut, black or galvanized

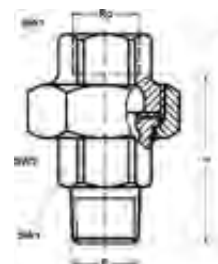
| Article-no. | Dimension G | Bag | Box | EAN code | a | SW |
|-------------|----------------|-----|------|---------------|----|-----|
| black | | | | | | |
| 931012S# | 1/2 | 10 | 680 | 4021343158261 | 8 | 32 |
| 931034S# | 3/4 | 10 | 400 | 4021343158285 | 9 | 36 |
| 93101S# | 1 | 10 | 250 | 4021343163005 | 10 | 46 |
| 9310114S# | 1 1/4 | | 200 | 4021343158308 | 11 | 55 |
| 9310112S# | 1 1/2 | | 150 | 4021343132117 | 12 | 60 |
| 93102S# | 2 | | 100 | 4021343132179 | 13 | 75 |
| 9310212S# | 2 1/2 | | 40 | 4021343158322 | 16 | 95 |
| 93103S# | 3 | | 35 | 4021343188091 | 19 | 105 |
| galvanized | | | | | | |
| 931038V# | 3/8 | 10 | 1000 | 4021343158254 | 7 | 27 |
| 931012V# | 1/2 | 10 | 680 | 4021343158278 | 8 | 32 |
| 931034V# | 3/4 | 10 | 400 | 4021343158292 | 9 | 36 |
| 93101V# | 1 | 10 | 250 | 4021343132100 | 10 | 46 |
| 9310114V# | 1 1/4 | | 200 | 4021343158315 | 11 | 55 |
| 9310112V# | 1 1/2 | | 150 | 4021343132124 | 12 | 60 |
| 93102V# | 2 | | 100 | 4021343132186 | 13 | 75 |
| 9310212V# | 2 1/2 | | 50 | 4021343158339 | 16 | 95 |
| 93103V# | 3 | | 35 | 4021343188107 | 19 | 105 |



Catalog-no. and -description

330# – Pipe union, female/female, flat sealing, black or galvanized

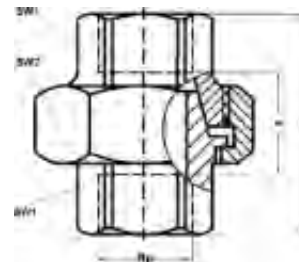
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|-----------------|-----|-----|---------------|----|----|-----|-----|
| black | | | | | | | | |
| 933012S# | 1/2 | 10 | 100 | 4021343108419 | 48 | 35 | 26 | 45 |
| 933034S# | 3/4 | 10 | 80 | 4021343108594 | 52 | 37 | 32 | 50 |
| 93301S# | 1 | 10 | 50 | 4021343108297 | 58 | 41 | 38 | 55 |
| 9330114S# | 1 1/4 | | 30 | 4021343108372 | 65 | 46 | 47 | 70 |
| 9330112S# | 1 1/2 | | 25 | 4021343108334 | 70 | 51 | 53 | 75 |
| 93302S# | 2 | | 14 | 4021343108471 | 78 | 54 | 65 | 90 |
| galvanized | | | | | | | | |
| 933038V# | 3/8 | 10 | 200 | 4021343108655 | 45 | 35 | 22 | 36 |
| 933012V# | 1/2 | 10 | 120 | 4021343108433 | 48 | 35 | 26 | 45 |
| 933034V# | 3/4 | 10 | 80 | 4021343108617 | 52 | 37 | 32 | 50 |
| 93301V# | 1 | 10 | 50 | 4021343108310 | 58 | 41 | 38 | 55 |
| 9330114V# | 1 1/4 | | 30 | 4021343108396 | 65 | 46 | 47 | 70 |
| 9330112V# | 1 1/2 | | 25 | 4021343108358 | 70 | 51 | 53 | 75 |
| 93302V# | 2 | | 14 | 4021343108495 | 78 | 54 | 65 | 90 |
| 9330212V# | 2 1/2 | | 10 | 4021343108532 | 85 | 58 | 83 | 110 |
| 93303V# | 3 | | 5 | 4021343108570 | 95 | 65 | 95 | 125 |



Catalog-no. and -description

331# – Pipe union, male/female, flat sealing, black or galvanized

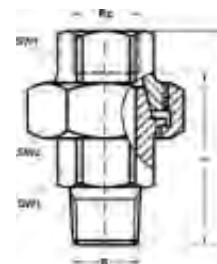
| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|-----|-----|-----|
| black | | | | | | | | |
| 933138S# | 3/8 | 10 | 180 | 4021343109072 | 58 | 48 | 22 | 36 |
| 933112S# | 1/2 | 10 | 120 | 4021343108839 | 66 | 53 | 26 | 45 |
| 933134S# | 3/4 | 10 | 60 | 4021343109034 | 72 | 57 | 32 | 50 |
| 93311S# | 1 | | 40 | 4021343108716 | 80 | 63 | 38 | 55 |
| 9331114S# | 1 1/4 | | 25 | 4021343108792 | 90 | 71 | 47 | 70 |
| 9331112S# | 1 1/2 | | 20 | 4021343108754 | 95 | 76 | 53 | 75 |
| 93312S# | 2 | | 12 | 4021343108914 | 106 | 82 | 65 | 90 |
| 9331212S# | 2 1/2 | | 7 | 4021343108952 | 118 | 91 | 83 | 110 |
| 93313S# | 3 | | 4 | 4021343108990 | 130 | 100 | 95 | 125 |
| galvanized | | | | | | | | |
| 933112V# | 1/2 | 10 | 120 | 4021343108853 | 66 | 53 | 26 | 45 |
| 933134V# | 3/4 | 10 | 60 | 4021343109058 | 72 | 57 | 32 | 50 |
| 93311V# | 1 | 10 | 40 | 4021343108730 | 80 | 63 | 38 | 55 |
| 9331114V# | 1 1/4 | | 25 | 4021343108815 | 90 | 71 | 47 | 70 |
| 9331112V# | 1 1/2 | | 20 | 4021343108778 | 95 | 76 | 53 | 75 |
| 93312V# | 2 | | 12 | 4021343108938 | 106 | 82 | 65 | 90 |
| 9331212V# | 2 1/2 | | 7 | 4021343108976 | 118 | 91 | 83 | 110 |
| 93313V# | 3 | | 4 | 4021343109010 | 130 | 100 | 95 | 125 |



Catalog-no. and -description

340# – Pipe union, female/female, conical sealing, black or galvanized

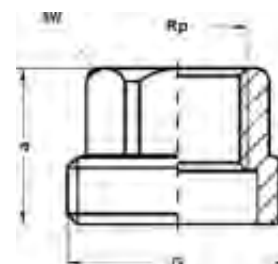
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|-----------------|-----|-----|---------------|-----|----|-----|-----|
| black | | | | | | | | |
| 934038S# | 3/8 | 10 | 200 | 4021343109591 | 45 | 35 | 22 | 36 |
| 934012S# | 1/2 | 10 | 120 | 4021343109355 | 48 | 35 | 26 | 45 |
| 934034S# | 3/4 | 10 | 60 | 4021343109553 | 52 | 37 | 32 | 50 |
| 93401S# | 1 | 10 | 50 | 4021343109232 | 58 | 41 | 38 | 55 |
| 9340114S# | 1 1/4 | | 30 | 4021343109317 | 65 | 46 | 47 | 70 |
| 9340112S# | 1 1/2 | | 25 | 4021343109270 | 70 | 51 | 53 | 75 |
| 93402S# | 2 | 14 | | 4021343109430 | 78 | 54 | 65 | 90 |
| 9340212S# | 2 1/2 | 12 | | 4021343109478 | 85 | 58 | 83 | 110 |
| 93403S# | 3 | | 5 | 4021343109515 | 95 | 65 | 95 | 125 |
| galvanized | | | | | | | | |
| 934014V# | 1/4 | 10 | 250 | 4021343188206 | 42 | 32 | 18 | 32 |
| 934038V# | 3/8 | 10 | 200 | 4021343109614 | 45 | 35 | 22 | 36 |
| 934012V# | 1/2 | 10 | 120 | 4021343109379 | 48 | 35 | 26 | 45 |
| 934034V# | 3/4 | 10 | 60 | 4021343109577 | 52 | 37 | 32 | 50 |
| 93401V# | 1 | 10 | 50 | 4021343109256 | 58 | 41 | 38 | 55 |
| 9340114V# | 1 1/4 | | 30 | 4021343109331 | 65 | 46 | 47 | 70 |
| 9340112V# | 1 1/2 | | 25 | 4021343109294 | 70 | 51 | 53 | 75 |
| 93402V# | 2 | | 14 | 4021343109454 | 78 | 54 | 65 | 90 |
| 9340212V# | 2 1/2 | | 12 | 4021343109492 | 85 | 58 | 83 | 110 |
| 93403V# | 3 | | 5 | 4021343109539 | 95 | 65 | 95 | 125 |
| 93404V# | 4 | | 4 | 4021343109652 | 110 | 74 | 123 | 165 |



Catalog-no. and -description

341# – Pipe union, male/female, conical sealing, black or galvanized

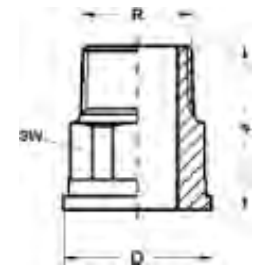
| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | z | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|-----|-----|-----|-----|
| black | | | | | | | | |
| 934138S# | 3/8 | 10 | 180 | 4021343110054 | 58 | 48 | 22 | 36 |
| 934112S# | 1/2 | 10 | 120 | 4021343109836 | 66 | 53 | 26 | 45 |
| 934134S# | 3/4 | 10 | 60 | 4021343110016 | 72 | 57 | 32 | 50 |
| 93411S# | 1 | 10 | 40 | 4021343109713 | 80 | 63 | 38 | 55 |
| 9341114S# | 1 1/4 | | 25 | 4021343109799 | 90 | 71 | 47 | 70 |
| 9341112S# | 1 1/2 | | 20 | 4021343109751 | 95 | 76 | 53 | 75 |
| 93412S# | 2 | | 12 | 4021343109898 | 106 | 82 | 65 | 90 |
| 9341212S# | 2 1/2 | | 7 | 4021343109935 | 118 | 91 | 83 | 110 |
| 93413S# | 3 | | 4 | 4021343109973 | 130 | 100 | 95 | 125 |
| galvanized | | | | | | | | |
| 934114V# | 1/4 | 10 | 200 | 4021343188220 | 55 | 45 | 18 | 32 |
| 934138V# | 3/8 | 10 | 180 | 4021343110078 | 58 | 48 | 22 | 36 |
| 934112V# | 1/2 | 10 | 120 | 4021343109850 | 66 | 53 | 26 | 45 |
| 934134V# | 3/4 | 10 | 60 | 4021343110030 | 72 | 57 | 32 | 50 |
| 93411V# | 1 | 10 | 40 | 4021343109737 | 80 | 63 | 38 | 55 |
| 9341114V# | 1 1/4 | | 25 | 4021343109812 | 90 | 71 | 47 | 70 |
| 9341112V# | 1 1/2 | | 20 | 4021343109775 | 95 | 76 | 53 | 75 |
| 93412V# | 2 | | 12 | 4021343109911 | 106 | 82 | 65 | 90 |
| 9341212V# | 2 1/2 | | 7 | 4021343109959 | 118 | 91 | 83 | 110 |
| 93413V# | 3 | | 4 | 4021343109997 | 130 | 100 | 95 | 125 |
| 93414V# | 4 | | 2 | 4021343110115 | 145 | 109 | 123 | 165 |



Catalog-no. and -description

370# – Screwed piece flat sealing, black

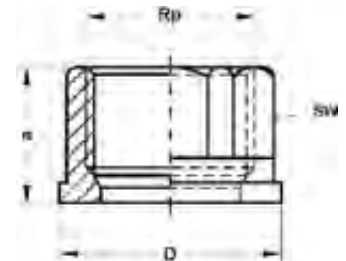
| Article-no. | Dimension Rp x G | Bag | Box | EAN code | a | SW |
|-------------|---------------------|-----|-----|---------------|----|----|
| black | | | | | | |
| 93701112S# | 1 x 1 1/2 | | 150 | 4021343158346 | 29 | 38 |



Catalog-no. and -description

371# – Union piece flat sealing, black

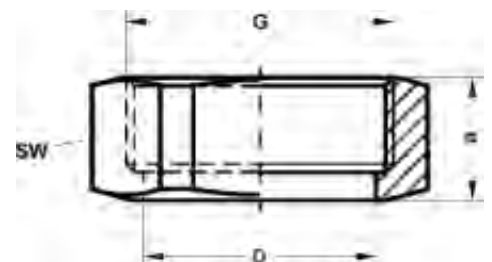
| Article-no. | Dimension R x D | Bag | Box | EAN code | a | D | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| black | | | | | | | |
| 93711112S# | 1 x 11/2 | | 130 | 4021343158360 | 50 | 45 | 38 |
| 93711142S# | 1 1/4 x 2 | | 70 | 4021343179570 | 56 | 56 | 48 |



Catalog-no. and -description

372# – Union piece flat sealing, black or galvanized

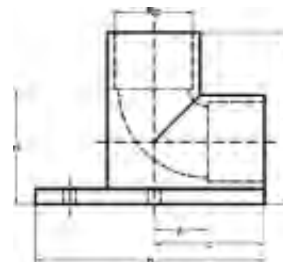
| Article-no. | Dimension Rp x D | Bag | Box | EAN code | a | D | SW |
|-------------|---------------------|-----|-----|---------------|----|----|----|
| black | | | | | | | |
| 93721112S# | 1 x 11/2 | | 220 | 4021343126857 | 28 | 44 | 38 |
| 93721142S# | 1 1/4 x 2 | | 100 | 4021343172519 | 33 | 56 | 48 |
| galvanized | | | | | | | |
| 93721112V# | 1 x 11/2 | | 220 | 4021343158384 | 28 | 44 | 38 |
| 93721142V# | 1 1/4 x 2 | | 100 | 4021343188589 | 33 | 56 | 48 |



Catalog-no. and -description

374# – Nut, black or galvanized

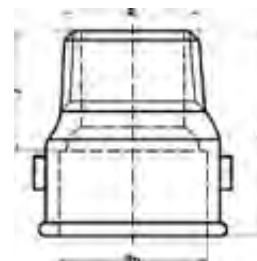
| Article-no. | Dimension Rp | Bag | Box | EAN code | a | D | SW |
|-------------|-----------------|-----|-----|---------------|----|----|----|
| black | | | | | | | |
| 93741112S# | 1 x 11/2 | | 150 | 4021343126864 | 22 | 42 | 55 |
| 93741142S# | 1 1/4 x 2 | | 70 | 4021343172526 | 25 | 53 | 70 |
| galvanized | | | | | | | |
| 93741112V# | 1 x 11/2 | | 150 | 4021343156212 | 22 | 42 | 55 |
| 93741142V# | 1 1/4 x 2 | | 70 | 4021343188718 | 25 | 53 | 70 |



Catalog-no. and -description

471# – Wall plate elbow, galvanized

| Article-no. | Dimension Rp | Bag | Box | EAN code | a | b | c | z1 | z2 |
|-------------|-----------------|-----|-----|---------------|----|----|----|----|----|
| galvanized | | | | | | | | | |
| 947112V# | 1/2 | 10 | 80 | 4021343113598 | 44 | 64 | 28 | 31 | 16 |
| 947134V# | 3/4 | 10 | 40 | 4021343113635 | 53 | 78 | 39 | 37 | 21 |



Catalog-no. and -description

529a# – Extension socket

| Article-no. | Dimension R x Rp | Bag | Box | EAN code | a | z |
|-------------|---------------------|-----|-----|---------------|----|----|
| black | | | | | | |
| 952938S# | 3/8 | 10 | 450 | 4021343113932 | 35 | 25 |
| 952912S# | 1/2 | 10 | 300 | 4021343113796 | 43 | 30 |
| 952934S# | 3/4 | 10 | 160 | 4021343113895 | 48 | 33 |
| 95291S# | 1 | 10 | 90 | 4021343113673 | 55 | 38 |
| 9529114S# | 1 1/4 | | 60 | 4021343113758 | 60 | 41 |
| 95292S# | 2 | | 28 | 4021343113857 | 70 | 46 |
| galvanized | | | | | | |
| 952938V# | 3/8 | 10 | 450 | 4021343113956 | 35 | 25 |
| 952912V# | 1/2 | 10 | 300 | 4021343113819 | 43 | 30 |
| 952934V# | 3/4 | 10 | 160 | 4021343113918 | 48 | 33 |
| 95291V# | 1 | 10 | 90 | 4021343113697 | 55 | 38 |
| 9529114V# | 1 1/4 | | 60 | 4021343113772 | 60 | 41 |
| 9529112V# | 1 1/2 | | 50 | 4021343113734 | 63 | 44 |
| 95292V# | 2 | | 28 | 4021343113871 | 70 | 46 |



Catalog-no. and -description

DTG – Centellen sealing element for malleable cast iron union, approval according to DIN 3535 part 6, DIN DVGW,
- produced without asbestos
- temperature-resistant up to 200°C max.
- application areas: water, steam, alcohols, glycols, oils on a hydrocarbon basis, flammable gases

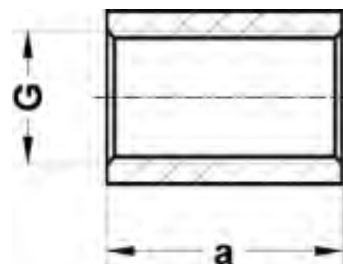
| Article-no. | Dimension D x d x s | suitable for | Box | EAN code |
|-------------|------------------------|-----------------|-----|---------------|
| 9DTG14 | 24 x 17 x 2 | nut 1/4 | 600 | 4021343093920 |
| 9DTG38 | 27 x 19 x 2 | nut 3/8 | 400 | 4021343093975 |
| 9DTG12 | 30 x 21 x 2 | nut 1/2 | 400 | 4021343093913 |
| 9DTG34 | 38 x 27 x 2 | nut 3/4 | 400 | 4021343093968 |
| 9DTG1 | 44 x 32 x 2 | nut 1 | 400 | 4021343093883 |
| 9DTG114 | 55 x 42 x 2 | nut 1 1/4 | 240 | 4021343093906 |
| 9DTG112 | 62 x 45 x 2 | nut 1 1/2 | 200 | 4021343093890 |
| 9DTG2 | 78 x 60 x 2 | nut 2 | 120 | 4021343093937 |
| 9DTG212 | 97 x 75 x 2 | nut 2 1/2 | 80 | 4021343093944 |
| 9DTG4 | 148 x 120 x 2 | nut 4 | 20 | 4021343093982 |

SANHA[®]

**Malleable cast iron threaded fittings,
black and galvanized**

TRADITIONAL PIPING

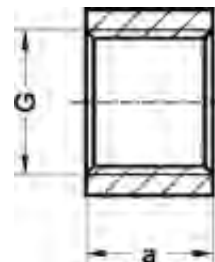
Steel couplings and nipples



Catalog-no. and -description

16 – Coupling, black or galvanized

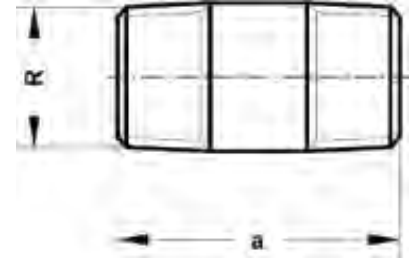
| Article-no. | Dimension G | Bag | Box | EAN code | a |
|-------------------|----------------|-----|-----|---------------|-----|
| black | | | | | |
| 11618S | 1/8 | 10 | 600 | 4021343003523 | 18 |
| 11614S | 1/4 | 10 | 500 | 4021343003509 | 25 |
| 11638S | 3/8 | 10 | 300 | 4021343003622 | 26 |
| 11612S | 1/2 | 10 | 150 | 4021343003486 | 34 |
| 1161260S | 1/2 x 60 | 10 | 100 | 4021343140402 | 60 |
| 1161280S | 1/2 x 80 | 10 | 80 | 4021343140419 | 80 |
| 11612100S | 1/2 x 100 | 10 | 50 | 4021343140426 | 100 |
| 11634S | 3/4 | 10 | 120 | 4021343003608 | 36 |
| 1161S | 1 | 10 | 60 | 4021343003417 | 43 |
| 116114S | 1 1/4 | | 45 | 4021343003462 | 47 |
| 116112S | 1 1/2 | | 35 | 4021343003431 | 49 |
| 1162S | 2 | | 20 | 4021343003547 | 52 |
| 116212S | 2 1/2 | | 12 | 4021343003561 | 65 |
| 1163S | 3 | | 8 | 4021343003585 | 72 |
| 1164S | 4 | | 4 | 4021343003646 | 84 |
| galvanized | | | | | |
| 11614V | 1/4 | 10 | 500 | 4021343003516 | 25 |
| 11638V | 3/8 | 10 | 300 | 4021343003639 | 26 |
| 11612V | 1/2 | 10 | 150 | 4021343003493 | 34 |
| 11634V | 3/4 | 10 | 120 | 4021343003615 | 36 |
| 1161V | 1 | 10 | 60 | 4021343003424 | 43 |
| 116114V | 1 1/4 | | 45 | 4021343003479 | 47 |
| 116112V | 1 1/2 | | 35 | 4021343003448 | 49 |
| 1162V | 2 | | 20 | 4021343003554 | 52 |



Catalog-no. and -description

16D – Half coupling, black

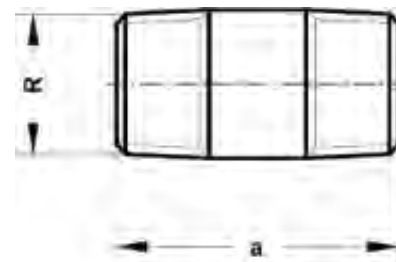
| Article-no. | Dimension G | Bag | Box | EAN code | a |
|-------------|----------------|------|---------------|----------|---|
| 116D14S | 1/4 | 2000 | 4021343003240 | 13 | |
| 116D38S | 3/8 | 1000 | 4021343003363 | 13 | |
| 116D12S | 1/2 | 350 | 4021343003226 | 17 | |
| 116D34S | 3/4 | 300 | 4021343003349 | 18 | |
| 116D1S | 1 | 150 | 4021343003165 | 22 | |
| 116D114S | 1 1/4 | 100 | 4021343003202 | 24 | |
| 116D112S | 1 1/2 | 80 | 4021343003189 | 25 | |
| 116D2S | 2 | 40 | 4021343003288 | 26 | |
| 116D212S | 2 1/2 | 25 | 4021343003301 | 33 | |



Catalog-no. and -description

23 – Double nipple, black or galvanized

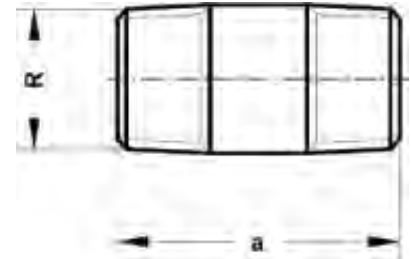
| Article-no. | Dimension R | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| black | | | | | |
| 1231440S | 1/4 x 40 | 10 | 500 | 4021343005954 | 40 |
| 1231460S | 1/4 x 60 | 10 | 400 | 4021343005992 | 60 |
| 1231480S | 1/4 x 80 | 10 | 200 | 4021343006036 | 80 |
| 12314100S | 1/4 x 100 | 10 | 150 | 4021343005671 | 100 |
| 12314120S | 1/4 x 120 | 10 | 120 | 4021343005718 | 120 |
| 12314150S | 1/4 x 150 | 10 | 120 | 4021343005770 | 150 |
| 12314200S | 1/4 x 200 | 10 | 120 | 4021343005879 | 200 |
| 1233840S | 3/8 x 40 | 10 | 300 | 4021343008573 | 40 |
| 1233860S | 3/8 x 60 | 10 | 250 | 4021343008610 | 60 |
| 1233880S | 3/8 x 80 | 10 | 150 | 4021343008658 | 80 |
| 12338100S | 3/8 x 100 | 10 | 100 | 4021343008290 | 100 |
| 12338120S | 3/8 x 120 | 10 | 100 | 4021343008337 | 120 |
| 12338150S | 3/8 x 150 | 10 | 80 | 4021343008399 | 150 |
| 12338180S | 3/8 x 180 | 10 | 80 | 4021343008450 | 180 |
| 12338200S | 3/8 x 200 | 10 | 80 | 4021343008498 | 200 |
| 12338250S | 3/8 x 250 | 10 | 80 | 4021343008511 | 250 |
| 12338300S | 3/8 x 300 | 10 | 100 | 4021343008559 | 300 |
| 1231240S | 1/2 x 40 | 10 | 200 | 4021343005404 | 40 |
| 1231260S | 1/2 x 60 | 10 | 160 | 4021343005503 | 60 |
| 1231280S | 1/2 x 80 | 10 | 150 | 4021343005558 | 80 |
| 12312100S | 1/2 x 100 | 10 | 100 | 4021343005077 | 100 |
| 12312120S | 1/2 x 120 | 10 | 90 | 4021343005121 | 120 |
| 12312150S | 1/2 x 150 | 10 | 60 | 4021343005190 | 150 |
| 12312180S | 1/2 x 180 | 10 | 60 | 4021343005268 | 180 |
| 12312200S | 1/2 x 200 | 10 | 60 | 4021343005305 | 200 |
| 12312250S | 1/2 x 250 | 10 | 60 | 4021343005336 | 250 |
| 12312300S | 1/2 x 300 | 10 | 70 | 4021343005381 | 300 |
| 1233440S | 3/4 x 40 | 10 | 120 | 4021343008054 | 40 |
| 1233460S | 3/4 x 60 | 10 | 90 | 4021343008115 | 60 |
| 1233480S | 3/4 x 80 | 10 | 70 | 4021343008160 | 80 |
| 12334100S | 3/4 x 100 | 10 | 50 | 4021343007736 | 100 |
| 12334120S | 3/4 x 120 | 5 | 50 | 4021343007781 | 120 |
| 12334150S | 3/4 x 150 | 5 | 50 | 4021343007842 | 150 |
| 12334180S | 3/4 x 180 | 5 | 50 | 4021343007910 | 180 |
| 12334200S | 3/4 x 200 | 5 | 30 | 4021343007958 | 200 |
| 12334250S | 3/4 x 250 | 5 | 30 | 4021343007989 | 250 |
| 12334300S | 3/4 x 300 | 5 | 50 | 4021343008030 | 300 |
| 123140S | 1 x 40 | 10 | 80 | 4021343005640 | 40 |
| 123160S | 1 x 60 | 10 | 80 | 4021343006128 | 60 |
| 123180S | 1 x 80 | 10 | 50 | 4021343006180 | 80 |
| 1231100S | 1 x 100 | 10 | 40 | 4021343003929 | 100 |
| 1231120S | 1 x 120 | 5 | 40 | 4021343003974 | 120 |
| 1231150S | 1 x 150 | 5 | 30 | 4021343004926 | 150 |
| 1231180S | 1 x 180 | 5 | 20 | 4021343004995 | 180 |
| 1231200S | 1 x 200 | 5 | 20 | 4021343005039 | 200 |
| 1231250SA | 1 x 250 | 5 | 20 | 4021343005435 | 250 |
| 1231300S | 1 x 300 | 5 | 30 | 4021343005626 | 300 |



Catalog-no. and -description

23 – Double nipple, black or galvanized (continued)

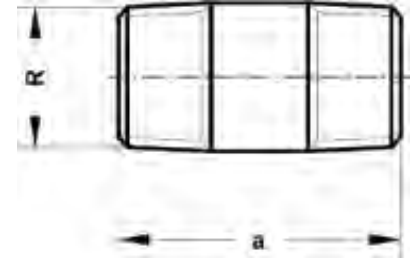
| Article-no. | Dimension R | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 12311440S | 1 1/4 x 40 | 5 | 60 | 4021343004759 | 40 |
| 12311460S | 1 1/4 x 60 | 5 | 40 | 4021343004810 | 60 |
| 12311480S | 1 1/4 x 80 | 5 | 35 | 4021343004872 | 80 |
| 123114100S | 1 1/4 x 100 | | 20 | 4021343004438 | 100 |
| 123114120S | 1 1/4 x 120 | | 20 | 4021343004483 | 120 |
| 123114150S | 1 1/4 x 150 | | 20 | 4021343004544 | 150 |
| 123114180S | 1 1/4 x 180 | | 15 | 4021343004612 | 180 |
| 123114200S | 1 1/4 x 200 | | 15 | 4021343004650 | 200 |
| 123114250S | 1 1/4 x 250 | | 12 | 4021343004681 | 250 |
| 123114300S | 1 1/4 x 300 | | 18 | 4021343004735 | 300 |
| 12311240S | 1 1/2 x 40 | | 50 | 4021343004278 | 40 |
| 12311260S | 1 1/2 x 60 | | 30 | 4021343004315 | 60 |
| 12311280S | 1 1/2 x 80 | | 20 | 4021343004353 | 80 |
| 123112100S | 1 1/2 x 100 | | 20 | 4021343003998 | 100 |
| 123112120S | 1 1/2 x 120 | | 20 | 4021343004032 | 120 |
| 123112150S | 1 1/2 x 150 | | 15 | 4021343004094 | 150 |
| 123112180S | 1 1/2 x 180 | | 15 | 4021343004155 | 180 |
| 123112200S | 1 1/2 x 200 | | 12 | 4021343004193 | 200 |
| 123112250S | 1 1/2 x 250 | | 12 | 4021343004216 | 250 |
| 123112300S | 1 1/2 x 300 | | 15 | 4021343004254 | 300 |
| 123240S | 2 x 40 | | 36 | 4021343007316 | 40 |
| 123260S | 2 x 60 | | 24 | 4021343007354 | 60 |
| 123280S | 2 x 80 | | 16 | 4021343007392 | 80 |
| 1232100S | 2 x 100 | | 12 | 4021343006630 | 100 |
| 1232120S | 2 x 120 | | 12 | 4021343006678 | 120 |
| 1232150S | 2 x 150 | | 12 | 4021343007132 | 150 |
| 1232180S | 2 x 180 | | 8 | 4021343007194 | 180 |
| 1232200S | 2 x 200 | | 6 | 4021343007231 | 200 |
| 1232250S | 2 x 250 | | 6 | 4021343007255 | 250 |
| 1232300S | 2 x 300 | | 8 | 4021343007293 | 300 |
| 12321260S | 2 1/2 x 60 | | 12 | 4021343007019 | 60 |
| 12321280S | 2 1/2 x 80 | | 12 | 4021343007057 | 80 |
| 123212100S | 2 1/2 x 100 | | 6 | 4021343006692 | 100 |
| 123212120S | 2 1/2 x 120 | | 6 | 4021343006739 | 120 |
| 123212150S | 2 1/2 x 150 | | 5 | 4021343006791 | 150 |
| 123212180S | 2 1/2 x 180 | | 3 | 4021343006852 | 180 |
| 123212200S | 2 1/2 x 200 | | 4 | 4021343006890 | 200 |
| 123212250S | 2 1/2 x 250 | | 3 | 4021343006913 | 250 |
| 123212300S | 2 1/2 x 300 | | 6 | 4021343006951 | 300 |
| 123360S | 3 x 60 | | 10 | 4021343008238 | 60 |
| 123380S | 3 x 80 | | 5 | 4021343008276 | 80 |
| 1233100S | 3 x 100 | | 5 | 4021343007439 | 100 |
| 1233120S | 3 x 120 | | 5 | 4021343007477 | 120 |
| 1233150S | 3 x 150 | | 3 | 4021343007538 | 150 |
| 1233180S | 3 x 180 | | 3 | 4021343007590 | 180 |
| 1233200S | 3 x 200 | | 2 | 4021343007637 | 200 |
| 1233250S | 3 x 250 | | 2 | 4021343007651 | 250 |
| 1233300S | 3 x 300 | | 3 | 4021343007699 | 300 |



Catalog-no. and -description

23 – Double nipple, black or galvanized (continued)

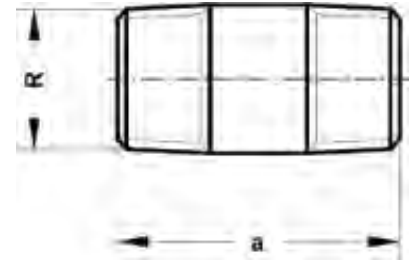
| Article-no. | Dimension R | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 123460S | 4 x 60 | | 6 | 4021343009037 | 60 |
| 123480S | 4 x 80 | | 3 | 4021343009075 | 80 |
| 1234100S | 4 x 100 | | 2 | 4021343008719 | 100 |
| 1234120S | 4 x 120 | | 2 | 4021343008757 | 120 |
| 1234150S | 4 x 150 | | 2 | 4021343008818 | 150 |
| 1234180S | 4 x 180 | | 2 | 4021343008870 | 180 |
| 1234200S | 4 x 200 | | 1 | 4021343008917 | 200 |
| 1234250S | 4 x 250 | | 1 | 4021343008931 | 250 |
| 1234300S | 4 x 300 | | 2 | 4021343008979 | 300 |
| galvanized | | | | | |
| 1231440V | 1/4 x 40 | 10 | 500 | 4021343005961 | 40 |
| 1231460V | 1/4 x 60 | 10 | 400 | 4021343006005 | 60 |
| 1231480V | 1/4 x 80 | 10 | 200 | 4021343006043 | 80 |
| 12314100V | 1/4 x 100 | 10 | 150 | 4021343005688 | 100 |
| 12314120V | 1/4 x 120 | 10 | 120 | 4021343005725 | 120 |
| 12314150V | 1/4 x 150 | 10 | 120 | 4021343005787 | 150 |
| 1233840V | 3/8 x 40 | 10 | 200 | 4021343008580 | 40 |
| 1233860V | 3/8 x 60 | 10 | 250 | 4021343008627 | 60 |
| 1233880V | 3/8 x 80 | 10 | 150 | 4021343008665 | 80 |
| 12338100V | 3/8 x 100 | 10 | 100 | 4021343008306 | 100 |
| 12338120V | 3/8 x 120 | 10 | 100 | 4021343008344 | 120 |
| 12338150V | 3/8 x 150 | 10 | 80 | 4021343008405 | 150 |
| 12338180V | 3/8 x 180 | 10 | 80 | 4021343008467 | 180 |
| 12338200V | 3/8 x 200 | 10 | 80 | 4021343008504 | 200 |
| 12338250V | 3/8 x 250 | 10 | 80 | 4021343008528 | 250 |
| 12338300V | 3/8 x 300 | 10 | 100 | 4021343008566 | 300 |
| 1231240V | 1/2 x 40 | 10 | 200 | 4021343005411 | 40 |
| 1231260V | 1/2 x 60 | 10 | 160 | 4021343005510 | 60 |
| 1231280V | 1/2 x 80 | 10 | 150 | 4021343005565 | 80 |
| 12312100V | 1/2 x 100 | 10 | 100 | 4021343005084 | 100 |
| 12312120V | 1/2 x 120 | 10 | 90 | 4021343005138 | 120 |
| 12312150V | 1/2 x 150 | 10 | 60 | 4021343005206 | 150 |
| 12312180V | 1/2 x 180 | 10 | 60 | 4021343005275 | 180 |
| 12312200V | 1/2 x 200 | 10 | 60 | 4021343005312 | 200 |
| 12312250V | 1/2 x 250 | 10 | 60 | 4021343005343 | 250 |
| 12312300V | 1/2 x 300 | 10 | 70 | 4021343005398 | 300 |
| 1233440V | 3/4 x 40 | 10 | 120 | 4021343008061 | 40 |
| 1233460V | 3/4 x 60 | 10 | 90 | 4021343008122 | 60 |
| 1233480V | 3/4 x 80 | 10 | 70 | 4021343008177 | 80 |
| 12334100V | 3/4 x 100 | 10 | 50 | 4021343007743 | 100 |
| 12334120V | 3/4 x 120 | 5 | 50 | 4021343007798 | 120 |
| 12334150V | 3/4 x 150 | 5 | 50 | 4021343007859 | 150 |
| 12334180V | 3/4 x 180 | 5 | 50 | 4021343007927 | 180 |
| 12334200V | 3/4 x 200 | 5 | 30 | 4021343007965 | 200 |
| 12334250V | 3/4 x 250 | 5 | 30 | 4021343007996 | 250 |
| 12334300V | 3/4 x 300 | 5 | 50 | 4021343008047 | 300 |
| 123140V | 1 x 40 | 10 | 80 | 4021343005657 | 40 |
| 123160V | 1 x 60 | 10 | 80 | 4021343006135 | 60 |



Catalog-no. and -description

23 – Double nipple, black or galvanized (continued)

| Article-no. | Dimension R | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 123180V | 1 x 80 | 10 | 50 | 4021343006197 | 80 |
| 1231100V | 1 x 100 | 10 | 40 | 4021343003936 | 100 |
| 1231120V | 1 x 120 | 5 | 40 | 4021343003981 | 120 |
| 1231150V | 1 x 150 | 5 | 30 | 4021343004933 | 150 |
| 1231180V | 1 x 180 | 5 | 20 | 4021343005008 | 180 |
| 1231200V | 1 x 200 | 5 | 20 | 4021343005046 | 200 |
| 1231250VA | 1 x 250 | 5 | 20 | 4021343005459 | 250 |
| 1231300V | 1 x 300 | 5 | 30 | 4021343005633 | 300 |
| 12311440V | 1 1/4 x 40 | 5 | 60 | 4021343004766 | 40 |
| 12311460V | 1 1/4 x 60 | 5 | 40 | 4021343004827 | 60 |
| 12311480V | 1 1/4 x 80 | 5 | 35 | 4021343004889 | 80 |
| 123114100V | 1 1/4 x 100 | | 20 | 4021343004445 | 100 |
| 123114120V | 1 1/4 x 120 | | 20 | 4021343004490 | 120 |
| 123114150V | 1 1/4 x 150 | | 20 | 4021343004551 | 150 |
| 123114180V | 1 1/4 x 180 | | 15 | 4021343004629 | 180 |
| 123114200V | 1 1/4 x 200 | | 15 | 4021343004667 | 200 |
| 123114250V | 1 1/4 x 250 | | 12 | 4021343004698 | 250 |
| 123114300V | 1 1/4 x 300 | | 18 | 4021343004742 | 300 |
| 12311240V | 1 1/2 x 40 | | 50 | 4021343004285 | 40 |
| 12311260V | 1 1/2 x 60 | | 30 | 4021343004322 | 60 |
| 12311280V | 1 1/2 x 80 | | 20 | 4021343004360 | 80 |
| 123112100V | 1 1/2 x 100 | | 20 | 4021343004001 | 100 |
| 123112120V | 1 1/2 x 120 | | 20 | 4021343004049 | 120 |
| 123112150V | 1 1/2 x 150 | | 15 | 4021343004100 | 150 |
| 123112180V | 1 1/2 x 180 | | 15 | 4021343004162 | 180 |
| 123112200V | 1 1/2 x 200 | | 12 | 4021343004209 | 200 |
| 123112250V | 1 1/2 x 250 | | 12 | 4021343004223 | 250 |
| 123112300V | 1 1/2 x 300 | | 15 | 4021343004261 | 300 |
| 123240V | 2 x 40 | | 36 | 4021343007323 | 40 |
| 123260V | 2 x 60 | | 24 | 4021343007361 | 60 |
| 123280V | 2 x 80 | | 16 | 4021343007408 | 80 |
| 1232100V | 2 x 100 | | 12 | 4021343006647 | 100 |
| 1232120V | 2 x 120 | | 12 | 4021343006685 | 120 |
| 1232150V | 2 x 150 | | 12 | 4021343007149 | 150 |
| 1232180V | 2 x 180 | | 8 | 4021343007200 | 180 |
| 1232200V | 2 x 200 | | 6 | 4021343007248 | 200 |
| 1232250V | 2 x 250 | | 6 | 4021343007262 | 250 |
| 1232300V | 2 x 300 | | 8 | 4021343007309 | 300 |
| 12321260V | 2 1/2 x 60 | | 12 | 4021343007026 | 60 |
| 12321280V | 2 1/2 x 80 | | 12 | 4021343007064 | 80 |
| 123212100V | 2 1/2 x 100 | | 6 | 4021343006708 | 100 |
| 123212120V | 2 1/2 x 120 | | 6 | 4021343006746 | 120 |
| 123212150V | 2 1/2 x 150 | | 5 | 4021343006807 | 150 |
| 123212180V | 2 1/2 x 180 | | 3 | 4021343006869 | 180 |
| 123212200V | 2 1/2 x 200 | | 4 | 4021343006906 | 200 |
| 123212250V | 2 1/2 x 250 | | 3 | 4021343006920 | 250 |
| 123212300V | 2 1/2 x 300 | | 6 | 4021343006968 | 300 |
| 123360V | 3 x 60 | | 10 | 4021343008245 | 60 |



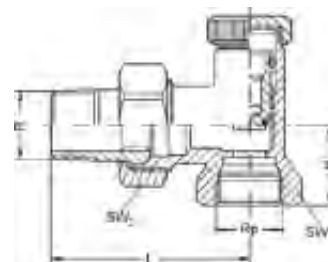
Catalog-no. and -description

23 – Double nipple, black or galvanized (continued)

| Article-no. | Dimension R | Bag | Box | EAN code | a |
|-------------|----------------|-----|-----|---------------|-----|
| 123380V | 3 x 80 | | 5 | 4021343008283 | 80 |
| 1233100V | 3 x 100 | | 5 | 4021343007446 | 100 |
| 1233120V | 3 x 120 | | 5 | 4021343007484 | 120 |
| 1233150V | 3 x 150 | | 3 | 4021343007545 | 150 |
| 1233200V | 3 x 200 | | 2 | 4021343007644 | 200 |

TRADITIONAL PIPING

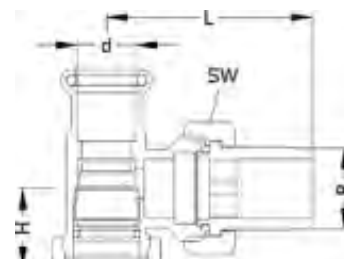
Radiator unions



Catalog-no. and -description

14AV – Radiator union made of forged brass PN 10, female/male, lockable and adjustable, corner form, max. 100°C, nickel-plated

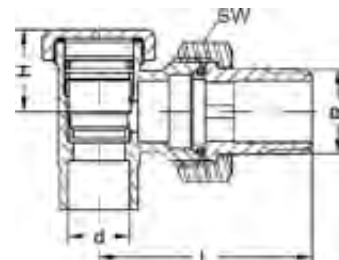
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | H | L | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|----|-----|-----|
| 314AV12 | 1/2 | | 70 | 4021343054778 | 26 | 58 | 27 | 30 |



Catalog-no. and -description

14APV – Radiator union made of forged brass PN 10, female/male, lockable and adjustable, corner form, max. 100°C, nickel-plated

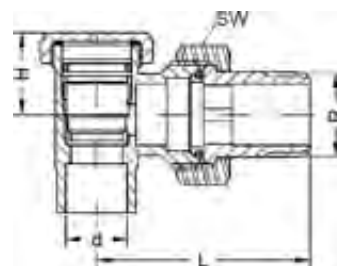
| Article-no. | Dimension d x R | Bag | Box | EAN code | H | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 314APV1512 | 15 x 1/2 | | 70 | 4021343207990 | 20 | 52 | 30 |



Catalog-no. and -description

14ALV – Radiator union made of forged brass PN 10, soldering end and male thread, lockable and adjustable, corner form, max. 100°C, nickel-plated

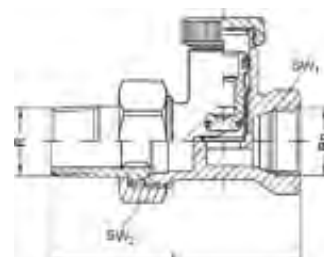
| Article-no. | Dimension d x R | Bag | Box | EAN code | H | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 314ALV1512 | 15 x 1/2 | | 70 | 4021343134678 | 20 | 52 | 30 |



Catalog-no. and -description

4014KA – Radiator union made of bronze PN 10, soldering end and male thread, lockable and adjustable, corner form, max. 100°C, raw

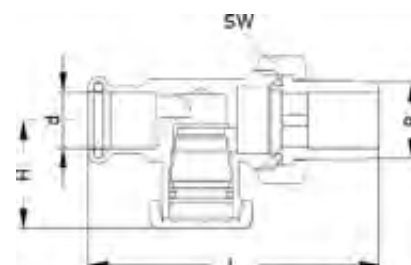
| Article-no. | Dimension d x R | Bag | Box | EAN code | H | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 34014KA1512 | 15 x 1/2 | | 70 | 4021343058417 | 27 | 47 | 30 |



Catalog-no. and -description

15AV – Radiator union made of forged brass PN 10, passage form, lockable and adjustable, max. 100°C, nickel-plated

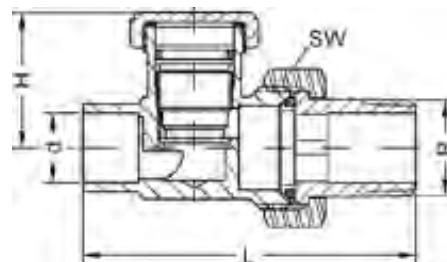
| Article-no. | Dimension Rp x R | Bag | Box | EAN code | L | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|-----|-----|
| 315AV12 | 1/2 | | 70 | 4021343055065 | 80 | 27 | 30 |



Catalog-no. and -description

15APV – Radiator union made of forged brass PN 10, female/male, lockable and adjustable, passage form, max. 100°C, nickel-plated

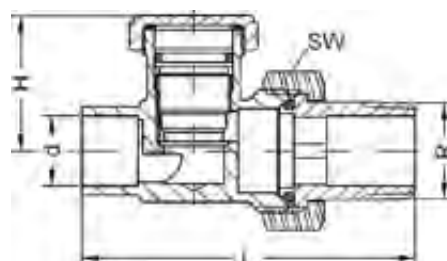
| Article-no. | Dimension d x R | Bag | Box | EAN code | H | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 315APV1512 | 15 x 1/2 | | 70 | 4021343208003 | 29 | 78 | 30 |



Catalog-no. and -description

4015KA – Radiator union made of gunmetal PN 10, soldering end and male thread, lockable and adjustable, passage form, max. 100°C, raw

| Article-no. | Dimension d x R | Bag | Box | EAN code | H | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 34015KA1512 | 15 x 1/2 | | 60 | 4021343058448 | 33 | 71 | 30 |



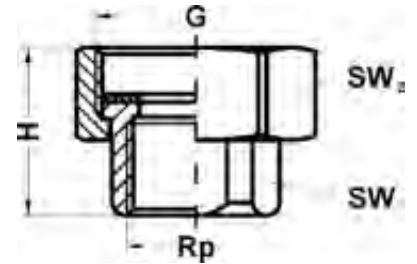
Catalog-no. and -description

15ALV – Radiator union made of forged brass PN 10, soldering end and male thread, lockable and adjustable, passage form, max. 100°C, nickel-plated

| Article-no. | Dimension d x R | Bag | Box | EAN code | H | L | SW |
|-------------|--------------------|-----|-----|---------------|----|----|----|
| 315ALV1512 | 15 x 1/2 | | 70 | 4021343134692 | 29 | 72 | 30 |

TRADITIONAL PIPING

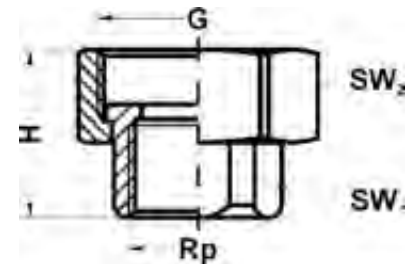
Pump connections



Catalog-no. and -description

910SW – Pump connection in malleable cast iron for heat pumps; set consisting of:
 - 2 female union pieces, threads according to EN 10226, black
 - 2 nuts
 - 2 centellen gaskets up to 200°C, DVGW approved (asbestos-free)

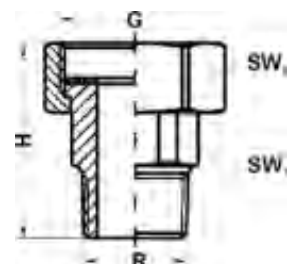
| Article-no. | Dimension Rp x G | Bag | Box | EAN code | H | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|-----|-----|
| 391034114S | 3/4 x 11/4 | 1 | 60 | 4021343060342 | 36 | 32 | 49 |
| 39101112S | 1 x 11/2 | 1 | 50 | 4021343060311 | 41 | 38 | 55 |
| 39101142S | 11/4 x 2 | 1 | 30 | 4021343060335 | 46 | 48 | 70 |
| 3910112214S | 11/2 x 21/4 | 1 | 20 | 4021343060328 | 46 | 53 | 75 |



Catalog-no. and -description

920SW – see catalog no. 910 SW, but without gaskets

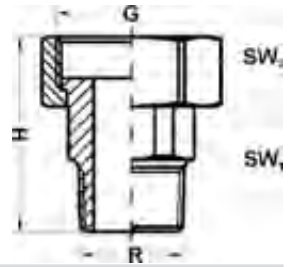
| Article-no. | Dimension Rp x G | Bag | Box | EAN code | H | SW1 | SW2 |
|-------------|---------------------|-----|-----|---------------|----|-----|-----|
| 392034114S | 3/4 x 11/4 | 1 | 60 | 4021343060489 | 36 | 32 | 49 |
| 39201112S | 1 x 11/2 | 1 | 50 | 4021343060458 | 41 | 38 | 55 |
| 39201142S | 11/4 x 2 | 1 | 30 | 4021343060472 | 46 | 48 | 70 |
| 3920112214S | 11/2 x 21/4 | 1 | 20 | 4021343060465 | 46 | 53 | 75 |



Catalog-no. and -description

926SW – Pump connection in malleable cast iron for heat pumps; set consisting of:
 - 2 male union pieces, threads according to EN 10226, black
 - 2 nuts
 - 2 centellen gaskets up to 200°C, DVGW approved (asbestos-free)

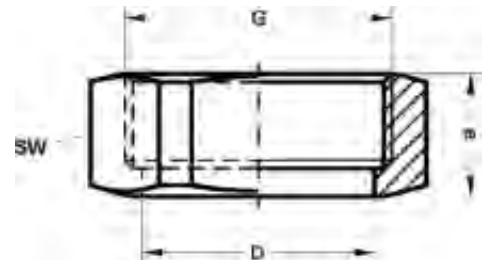
| Article-no. | Dimension R x G | Bag | Box | EAN code | H | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|----|-----|-----|
| 392634114S | 3/4 x 11/4 | 1 | 40 | 4021343060663 | 57 | 32 | 49 |
| 39261112S | 1 x 11/2 | 1 | 30 | 4021343060625 | 63 | 38 | 55 |
| 39261142S | 11/4 x 2 | 1 | 20 | 4021343060656 | 69 | 48 | 70 |



Catalog-no. and -description

925SW – see catalog no. 926SW, but without gaskets

| Article-no. | Dimension R x G | Bag | Box | EAN code | H | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|----|-----|-----|
| 39251112S | 1 x 1 1/2 | 1 | 30 | 4021343060571 | 63 | 38 | 55 |
| 39251142S | 1 1/4 x 2 | 1 | 20 | 4021343060601 | 69 | 48 | 70 |

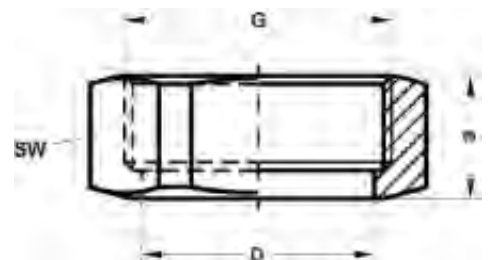


Catalog-no. and -description

928SW – Nuts in malleable cast iron; set consisting of:

- 2 nuts
- 2 centellen gaskets up to 200°C, DVGW approved (asbestos-free)

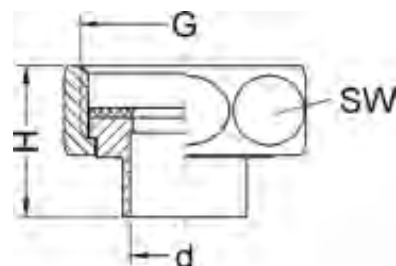
| Article-no. | Dimension R/Rp x G | Bag | Box | EAN code | a | D | SW |
|-------------|-----------------------|-----|-----|---------------|----|----|----|
| 39281112S | 1 x 1 1/2 | 1 | 50 | 4021343060717 | 22 | 42 | 55 |
| 39281142S | 1 1/4 x 2 | 1 | 40 | 4021343060731 | 25 | 53 | 70 |



Catalog-no. and -description

927SW – see catalog no. 928SW, but without gaskets

| Article-no. | Dimension R/Rp x G | Bag | Box | EAN code | a | D | SW |
|-------------|-----------------------|-----|-----|---------------|----|----|----|
| 39271112S | 1 x 1 1/2 | 1 | 50 | 4021343060670 | 22 | 42 | 55 |
| 39271142S | 1 1/4 x 2 | 1 | 40 | 4021343060694 | 25 | 53 | 70 |

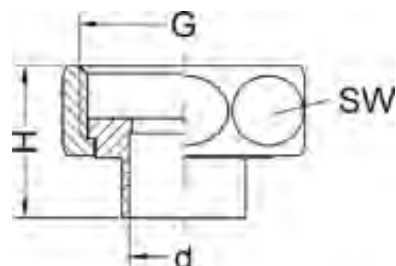


Catalog-no. and -description

930 – Pump connection in gunmetal for process water pumps; set consisting of:

- 2 union pieces in gunmetal with soldering end
- 2 nuts
- 2 centellen gaskets up to 200°C, DVGW approved (asbestos-free)

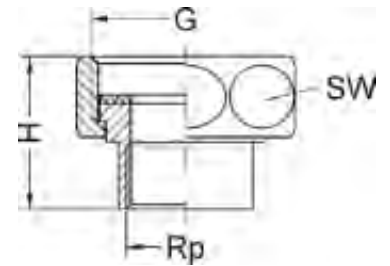
| Article-no. | Dimension d x G | Bag | Box | EAN code | H | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 39301534 | 15 x 3/4 | 1 | 100 | 4021343060755 | 27 | 30 |
| 39301834 | 18 x 3/4 | 1 | 100 | 4021343060779 | 25 | 30 |
| 3930181 | 18 x 1 | 1 | 75 | 4021343060762 | 30 | 37 |
| 3930221 | 22 x 1 | 1 | 75 | 4021343060786 | 29 | 37 |
| 393022114 | 22 x 11/4 | 1 | 50 | 4021343060809 | 31 | 46 |
| 393022112 | 22 x 11/2 | 1 | 40 | 4021343060793 | 37 | 52 |
| 393028114 | 28 x 11/4 | 1 | 50 | 4021343060823 | 37 | 46 |
| 393028112 | 28 x 11/2 | 1 | 40 | 4021343060816 | 39 | 52 |



Catalog-no. and -description

940 – see catalog no. 930, but without gaskets

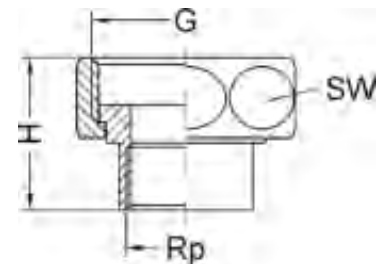
| Article-no. | Dimension d x G | Bag | Box | EAN code | H | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 39401534 | 15 x 3/4 | 1 | 100 | 4021343060854 | 27 | 30 |
| 39401834 | 18 x 3/4 | 1 | 100 | 4021343060878 | 25 | 30 |
| 3940181 | 18 x 1 | 1 | 75 | 4021343060861 | 30 | 37 |
| 3940221 | 22 x 1 | 1 | 75 | 4021343060885 | 29 | 37 |
| 394022114 | 22 x 11/4 | 1 | 50 | 4021343060908 | 31 | 46 |
| 394022112 | 22 x 11/2 | 1 | 40 | 4021343060892 | 37 | 52 |
| 394028114 | 28 x 11/4 | 1 | 50 | 4021343060922 | 37 | 46 |
| 394028112 | 28 x 11/2 | 1 | 40 | 4021343060915 | 39 | 52 |



Catalog-no. and -description

942 – Pump connection in gunmetal for process water pumps; set consisting of:
 - 2 female union pieces in gunmetal, threads according to EN 10226
 - 2 brass nuts
 - 2 centellen gaskets up to 200°C, DVGW approved (asbestos-free)

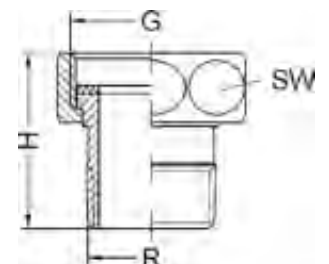
| Article-no. | Dimension Rp x G | Bag | Box | EAN code | H | SW |
|-------------|---------------------|-----|-----|---------------|----|----|
| 3942121 | 1/2 x 1 | 1 | 75 | 4021343060991 | 31 | 37 |
| 394234114 | 3/4 x 11/4 | 1 | 50 | 4021343061004 | 34 | 46 |
| 39421112 | 1 x 11/2 | 1 | 40 | 4021343060977 | 38 | 52 |
| 39421142 | 1 1/4 x 2 | 1 | 20 | 4021343060984 | 43 | 64 |



Catalog-no. and -description

941 – – see catalog no. 942, but without gaskets

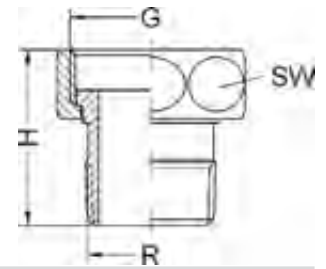
| Article-no. | Dimension Rp x G | Bag | Box | EAN code | H | SW |
|-------------|---------------------|-----|-----|---------------|----|----|
| 3941121 | 1/2 x 1 | 1 | 75 | 4021343060953 | 31 | 37 |
| 394134114 | 3/4 x 11/4 | 1 | 50 | 4021343060960 | 34 | 46 |
| 39411112 | 1 x 11/2 | 1 | 40 | 4021343060939 | 38 | 52 |
| 39411142 | 1 1/4 x 2 | 1 | 20 | 4021343060946 | 43 | 64 |



Catalog-no. and -description

946 – Pump connection in gunmetal for process water pumps; set consisting of:
 - 2 male union pieces, threads according to EN 10226
 - 2 brass nuts
 - 2 centellen gaskets up to 200°C, DVGW approved (asbestos-free)

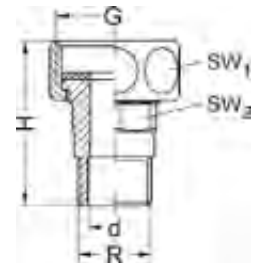
| Article-no. | Dimension R x G | Bag | Box | EAN code | H | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 3946341 | 3/4 x 1 | 1 | 50 | 4021343061066 | 41 | 37 |
| 39461114 | 1 x 11/4 | 1 | 40 | 4021343061042 | 46 | 52 |
| 3946114112 | 1 1/4 x 11/2 | 1 | 30 | 4021343061059 | 51 | 64 |



Catalog-no. and -description

945 – see catalog no. 946, but without gaskets

| Article-no. | Dimension R x G | Bag | Box | EAN code | H | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 3945341 | 3/4 x 1 | 1 | 50 | 4021343061035 | 14 | 37 |
| 39451114 | 1 x 1 1/4 | 1 | 40 | 4021343061011 | 46 | 52 |
| 3945114112 | 1 1/4 x 1 1/2 | 1 | 30 | 4021343061028 | 51 | 64 |

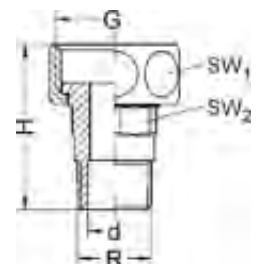


Catalog-no. and -description

950 – Pump connection in brass for process water pumps; set consisting of:

- 2 union pieces with soldering end and male thread according to EN 10226-1
- 2 brass nuts
- 2 centellen gaskets up to 200°C, DVGW approved (asbestos-free)

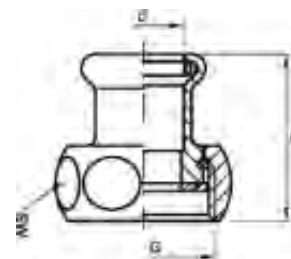
| Article-no. | Dimension R x G | Bag | Box | EAN code | H | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|----|-----|-----|
| 395012151 | 1/2 x 15 x 1 | 1 | 50 | 4021343061127 | 47 | 37 | 24 |
| 39501215114 | 1/2 x 15 x 1 1/4 | 1 | 40 | 4021343061134 | 47 | 46 | 21 |
| 3950128112 | 1 x 28 x 1 1/2 | 1 | 25 | 4021343061141 | 57 | 52 | 34 |
| 3950114352 | 1 1/4 x 35 x 2 | | 15 | 4021343061110 | 62 | 64 | 46 |



Catalog-no. and -description

960 – see catalog no. 950, but without gaskets

| Article-no. | Dimension R x G | Bag | Box | EAN code | H | SW1 | SW2 |
|-------------|--------------------|-----|-----|---------------|----|-----|-----|
| 396012151 | 1/2 x 15 x 1 | 1 | 50 | 4021343061165 | 47 | 37 | 24 |
| 39601215114 | 1/2 x 15 x 1 1/4 | 1 | 40 | 4021343061172 | 47 | 46 | 21 |
| 3960128112 | 1 x 28 x 1 1/2 | 1 | 25 | 4021343061189 | 57 | 52 | 34 |
| 3960114352 | 1 1/4 x 35 x 2 | 1 | 15 | 4021343061158 | 62 | 64 | 46 |

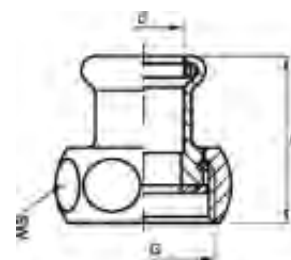


Catalog-no. and -description

970 – Pump connection for press connections in gunmetal, DVGW approved, for heating and process water pumps; set consisting of:

- 2 union pieces in gunmetal with SANHA press profile
- 2 brass nuts
- 2 centellen gaskets up to 200°C, DVGW approved (asbestos-free)

| Article-no. | Dimension d x G | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 39701534 | 15 x 3/4 | 1 | 100 | 4021343135767 | 32 | 30 |
| 3970221 | 22 x 1 | 1 | 50 | 4021343135798 | 42 | 37 |
| 397022112 | 22 x 1 1/2 | 1 | 30 | 4021343135804 | 43 | 52 |
| 397028114 | 28 x 1 1/4 | 1 | 40 | 4021343135811 | 46 | 46 |
| 397028112 | 28 x 1 1/2 | 1 | 25 | 4021343135835 | 45 | 52 |



Catalog-no. and -description

971 – see catalog no. 970, but without gaskets

| Article-no. | Dimension d x G | Bag | Box | EAN code | a | SW |
|-------------|--------------------|-----|-----|---------------|----|----|
| 39711534 | 15 x 3/4 | 1 | 100 | 4021343135842 | 32 | 30 |
| 3971151 | 15 x 1 | 1 | 60 | 4021343135859 | 34 | 37 |
| 39711834 | 18 x 3/4 | 1 | 100 | 4021343135866 | 46 | 30 |
| 3971181 | 18 x 1 | 1 | 60 | 4021343135873 | 36 | 37 |
| 3971221 | 22 x 1 | 1 | 50 | 4021343135880 | 42 | 37 |
| 397122112 | 22 x 1 1/2 | 1 | 30 | 4021343135897 | 43 | 52 |
| 397128114 | 28 x 1 1/4 | 1 | 40 | 4021343135903 | 46 | 46 |
| 397128112 | 28 x 1 1/2 | 1 | 25 | 4021343135910 | 45 | 52 |

OTHERS

Cutting tools



Catalog-no. and -description

4971 – Cutting wheel for tube cutter 4975, 4977, 4978

| Article-no. | Dimension | Bag | Box | EAN code | |
|-------------|------------|-----|------|---------------|---------------------------------------|
| 84971543 | 4 - 35 mm | | 1000 | 4021343093821 | suitable for Catalogue-no. 4975, 4977 |
| 84971541 | 13 - 65 mm | | 120 | 4021343093814 | suitable for Catalogue-no. 4978 |



Catalog-no. and -description

4975 – Tube cutter for stainless and copper tubes

| Article-no. | Dimension | Bag | Box | EAN code | |
|-------------|-----------|-----|-----|---------------|--|
| 84975 | 3 - 28 mm | | 40 | 4021343142659 | |



Catalog-no. and -description

4977 – Tube cutter for copper tubes

| Article-no. | Dimension | Bag | Box | EAN code | |
|-------------|-----------|-----|-----|---------------|--|
| 84977 | 3 - 35 mm | | 12 | 4021343142666 | |



Catalog-no. and -description

4978 – Tube cutter for stainless and copper tubes

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|------------|-----|-----|---------------|
| 84978 | 13 - 65 mm | | 5 | 4021343093784 |



Catalog-no. and -description

4979 – Multi functional tool with 7 functions

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84979 | | | 35 | 4021343164330 |



Catalog-no. and -description

4985 – Tube cutter for stainless steel and copper tubes

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84985 | 6 - 64 mm | | 5 | 4021343164347 |



Catalog-no. and -description

4986 – Cutting wheel for tube cutter 4985

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|--------------|
| 84986 | | | 120 | 402134164361 |



Catalog-no. and -description

4996.1 – Cutting shear for MultiFit[®]-Flex system tubes

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84996.1 | 16-20 mm | | 1 | 4021343332470 |



Catalog-no. and -description

4996.2 – Cutting shear for MultiFit[®]-Flex system tubes

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84996.2 | 26-32 mm | | 1 | 4021343334696 |

OTHERS

**Deburring and calibration
tools**



Catalog-no. and -description

4982 – Deburring tool, small

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84982 | 0 -38 mm | | 45 | 4021343148354 |



Catalog-no. and -description

4983 – Deburring tool, large

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 84983 | 0 - 60 mm | | 12 | 4021343148361 |



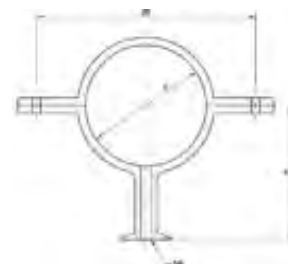
Catalog-no. and -description

4995 – Calibration tool for **MultiFit®-Flex** system tubes

| Article-no. | Dimension | Bag | Box | EAN code |
|-------------|-----------|-----|-----|---------------|
| 8499516 | 16 | | 1 | 4021343332432 |
| 8499520 | 20 | | 1 | 4021343332449 |
| 8499526 | 26 | | 1 | 4021343332456 |
| 8499532 | 32 | | 1 | 4021343332463 |

OTHERS

Fixing elements



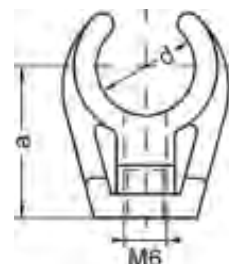
Catalog-no. and -description
4826c – Brass bracket

| Article-no. | Dimension d | Bag | Box | EAN code | a | dk |
|-------------|----------------|-----|-----|---------------|----|----|
| 148268 | 8 | 10 | 600 | 4021343021350 | 12 | 25 |
| 1482610 | 10 | 10 | 500 | 4021343021268 | 17 | 25 |
| 1482612 | 12 | 10 | 400 | 4021343021275 | 19 | 29 |
| 1482615 | 15 | 10 | 400 | 4021343021282 | 19 | 29 |
| 1482618 | 18 | 10 | 300 | 4021343021299 | 26 | 39 |
| 1482622 | 22 | 10 | 240 | 4021343021305 | 26 | 39 |
| 1482628 | 28 | 10 | 200 | 4021343021312 | 30 | 48 |
| 1482635 | 35 | 10 | 140 | 4021343021329 | 33 | 55 |
| 1482642 | 42 | 10 | 120 | 4021343021336 | 39 | 62 |
| 1482654 | 54 | 10 | 60 | 4021343021343 | 47 | 74 |



Catalog-no. and -description
8981 – Insulation plate for 8980g and 9880g

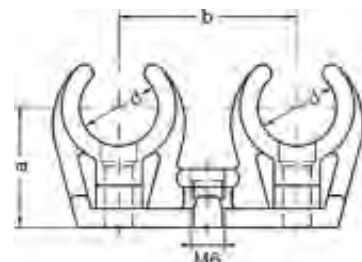
| Article-no. | Dimension d | Bag | Box | EAN code |
|-------------|----------------|-----|-----|---------------|
| 88981 | | | 30 | 4021343200403 |



Catalog-no. and -description

9826c – Clips, single with brass thread

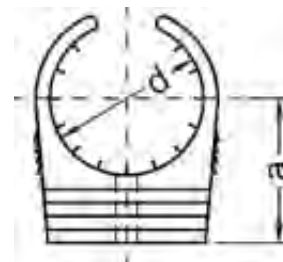
| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|------|---------------|----|
| 798266 | 6 | 25 | 5000 | 4021343124303 | 13 |
| 798268 | 8 | 25 | 4500 | 4021343124310 | 14 |
| 7982610 | 10 | 25 | 4000 | 4021343124228 | 17 |
| 7982612 | 12 | 25 | 2500 | 4021343124235 | 18 |
| 798261415 | 14/ 15 | 25 | 2000 | 4021343124242 | 19 |
| 798261618 | 16/ 18 | 25 | 1750 | 4021343124259 | 23 |
| 7982622 | 22 | 25 | 1250 | 4021343124266 | 28 |
| 7982628 | 28 | 25 | 700 | 4021343124273 | 34 |
| 7982635 | 35 | 25 | 600 | 4021343124280 | 38 |
| 7982642 | 42 | 25 | 500 | 4021343124297 | 42 |



Catalog-no. and -description

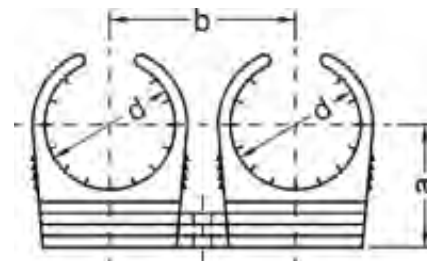
9827c – Clips, double with brass thread

| Article-no. | Dimension d | Bag | Box | EAN code | a | b |
|-------------|----------------|-----|------|---------------|----|----|
| 798278 | 8 | 25 | 2400 | 4021343093388 | 14 | 26 |
| 7982710 | 10 | 25 | 1250 | 4021343124327 | 17 | 28 |
| 7982712 | 12 | 25 | 1000 | 4021343093371 | 18 | 33 |
| 798271415 | 14 / 15 | 25 | 700 | 4021343124334 | 19 | 36 |
| 798271618 | 16 / 18 | 25 | 500 | 4021343124341 | 23 | 38 |
| 7982722 | 22 | 25 | 350 | 4021343124358 | 28 | 42 |
| 7982728 | 28 | 25 | 250 | 4021343124365 | 34 | 50 |



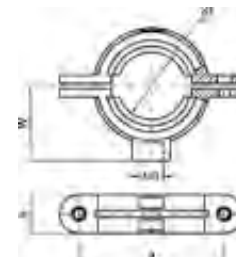
Catalog-no. and -description
9828c – Clips, single

| Article-no. | Dimension d | Bag | Box | EAN code | a |
|-------------|----------------|-----|------|---------------|----|
| 798286 | 6 | 25 | 5000 | 4021343093487 | 11 |
| 79828810 | 8 - 10 | 25 | 4000 | 4021343093494 | 16 |
| 798281216 | 12 - 16 | 25 | 2000 | 4021343093395 | 19 |
| 798281822 | 18 - 22 | 25 | 1200 | 4021343093418 | 23 |
| 7982828 | 28 | 25 | 700 | 4021343093449 | 27 |
| 7982835 | 35 | 25 | 600 | 4021343093456 | 37 |
| 7982842 | 42 | 25 | 500 | 4021343093463 | 42 |



Catalog-no. and -description
9829c – Clips, double

| Article-no. | Dimension d | Bag | Box | EAN code | a | b |
|-------------|----------------|-----|------|---------------|----|----|
| 798296 | 6 | 25 | 3000 | 4021343093555 | | |
| 79829810 | 8 - 10 | 25 | 1250 | 4021343093562 | 16 | 28 |
| 798291216 | 12 - 16 | 25 | 1000 | 4021343093500 | 19 | 34 |
| 798291822 | 18 - 22 | 25 | 750 | 4021343093517 | 23 | 39 |
| 7982928 | 28 | 25 | 500 | 4021343093524 | 27 | 48 |



Catalog-no. and -description

9918 – Pipe ring with sound insulation

| Article-no. | Dimension d | Bag | Box | EAN code | a | b | W |
|-------------|----------------|-----|-----|---------------|----|----|----|
| 6991812 | 12 | 10 | 400 | 4021343155291 | 44 | 18 | 23 |
| 6991815 | 15 | 10 | 300 | 4021343150968 | 47 | 18 | 25 |
| 6991818 | 18 | 10 | 200 | 4021343150975 | 50 | 18 | 26 |
| 6991822 | 22 | 10 | 180 | 4021343150982 | 54 | 18 | 28 |
| 6991828 | 28 | 5 | 150 | 4021343150999 | 60 | 18 | 31 |
| 6991835 | 35 | 2 | 100 | 4021343151002 | 67 | 18 | 35 |
| 6991842 | 42 | 2 | 100 | 4021343151019 | 74 | 18 | 38 |
| 6991854 | 54 | 2 | 80 | 4021343151026 | 86 | 18 | 44 |

OTHERS

Seals



Catalog-no. and -description

DCU – Centellen sealing element for copper, gunmetal and stainless steel union, approval according to DIN 3535 part 6, DIN DVGW,
 - produced without asbestos
 - temperature-resistant up to 200°C max.
 - application areas: water, steam, alcohols, glycols, oils on a hydrocarbon basis, inflammable gases

| Article-no. | Dimension D x d x s* | suitable for | Box | EAN code |
|-------------|-------------------------|--------------|-----|---------------|
| 1DCU38 | 14 x 8 x 2 | nut 3/8 | 800 | 4021343000867 |
| 1DCU12 | 18 x 11 x 2 | nut 1/2 | 800 | 4021343000737 |
| 1DCU58 | 20 x 10 x 2 | nut 5/8 | 600 | 4021343000904 |
| 1DCU34 | 24 x 17 x 2 | nut 3/4 | 600 | 4021343000850 |
| 1DCU1 | 30 x 21 x 2 | nut 1 | 400 | 4021343000706 |
| 1DCU114 | 38 x 27 x 2 | nut 11/4 | 400 | 4021343000720 |
| 1DCU112 | 44 x 32 x 2 | nut 11/2 | 400 | 4021343000713 |
| 1DCU134 | 50 x 37 x 2 | nut 13/4 | 320 | 4021343000744 |
| 1DCU2 | 55 x 42 x 2 | nut 2 | 240 | 4021343000775 |
| 1DCU214 | 62 x 46 x 2 | nut 21/4 | 200 | 4021343000799 |
| 1DCU238 | 65 x 55 x 2 | nut 23/8 | 200 | 4021343000812 |
| 1DCU212 | 72 x 55 x 2 | nut 21/2 | 160 | 4021343000782 |
| 1DCU234 | 78 x 60 x 2 | nut 23/4 | 120 | 4021343000805 |
| 1DCU3 | 85 x 70 x 2 | nut 3 | 120 | 4021343000836 |
| 1DCU312 | 97 x 75 x 2 | nut 3 1/2 | 80 | 4021343000843 |

* Outer diameter x inner diameter x thickness



Catalog-no. and -description

FL-D – Flange sealing, asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|-----------------|-----|-----|---------------|
| 1D15 | 15 | | 240 | 4021343001017 |
| 1D20 | 20 | | 200 | 4021343001048 |
| 1D25 | 25 | | 160 | 4021343001093 |
| 1D32 | 32 | | 120 | 4021343001123 |
| 1D40 | 40 | | 100 | 4021343001154 |
| 1D50 | 50 | | 120 | 4021343001161 |
| 1D65 | 65 | | 100 | 4021343001185 |
| 1D80 | 80 | | 80 | 4021343001192 |
| 1D100 | 100 | | 60 | 4021343000935 |
| 1D125 | 125 | | 80 | 4021343000980 |
| 1D150 | 150 | | 60 | 4021343001024 |



Catalog-no. and -description

19-FL-D – Flange sealing, silicone and asbestos free, suitable up to max. 400°C, resistant against water, steam, fuel, depleted liquor, oils, gases (DVGW tested according to DIN 3535 part 6). Dimensions according to EN 1514-1, 2 mm thickness for flanges, PN 10/16 = EN 1092-1 and EN 1092-2

| Article-no. | Dimension DN | Bag | Box | EAN code |
|-------------|-----------------|-----|-----|---------------|
| 619FLD15 | 15 | | 240 | 4021343207860 |
| 619FLD20 | 20 | 50 | 200 | 4021343207877 |
| 619FLD25 | 25 | 40 | 160 | 4021343207884 |
| 619FLD32 | 32 | 30 | 120 | 4021343207891 |
| 619FLD40 | 40 | 25 | 100 | 4021343207907 |
| 619FLD50 | 50 | | 120 | 4021343207914 |
| 619FLD65 | 65 | | 100 | 4021343207921 |
| 619FLD80 | 80 | | 80 | 4021343207938 |
| 619FLD100 | 100 | | 60 | 4021343207945 |



Catalog-no. and -description

604D – Sealing for catalog no. 604, tmax = 70°C

| Article-no. | Dimension * R x G | Bag | Box | EAN code |
|-------------|----------------------|-----|------|---------------|
| 2604D1234 | 1/2 x 3/4 | | 2400 | 4021343047916 |
| 2604D341 | 3/4 x 1 | | 1200 | 4021343047923 |
| 2604D1114 | 1 x 1 1/4 | | 400 | 4021343047909 |

* Nominal size of the water meter union catalog no.604



Catalog-no. and -description

DTG – Centellen sealing element for malleable cast iron union, approval according to DIN 3535 part 6, DIN DVGW,
 - produced without asbestos
 - temperature-resistant up to 200°C max.
 - application areas: water, steam, alcohols, glycols, oils on a hydrocarbon basis, flammable gases

| Article-no. | Dimension D x d x s* | suitable for | Box | EAN code |
|-------------|-------------------------|-----------------|-----|---------------|
| 9DTG14 | 24 x 17 x 2 | nut 1/4 | 600 | 4021343093920 |
| 9DTG38 | 27 x 19 x 2 | nut 3/8 | 400 | 4021343093975 |
| 9DTG12 | 30 x 21 x 2 | nut 1/2 | 400 | 4021343093913 |
| 9DTG34 | 38 x 27 x 2 | nut 3/4 | 400 | 4021343093968 |
| 9DTG1 | 44 x 32 x 2 | nut 1 | 400 | 4021343093883 |
| 9DTG114 | 55 x 42 x 2 | nut 1 1/4 | 240 | 4021343093906 |
| 9DTG112 | 62 x 45 x 2 | nut 1 1/2 | 200 | 4021343093890 |
| 9DTG2 | 78 x 60 x 2 | nut 2 | 120 | 4021343093937 |
| 9DTG212 | 97 x 75 x 2 | nut 2 1/2 | 80 | 4021343093944 |
| 9DTG4 | 148 x 120 x 2 | nut 4 | 20 | 4021343093982 |

* Outer diameter x inner diameter x thickness



Catalog-no. and -description

ORT – O-ring for drinking water and heating pressfittings, material: EPDM

| Article-no. | Dimension D | Bag | Box | EAN code |
|--------------|------------------|-----|-----|----------|
| 1ORT1210250 | 12,10x2,50 | | | |
| 1ORT1420250 | 14,20x2,50 | | | |
| 1ORT1510260 | 15,10x2,60 | | | |
| 1ORT1620250 | 16,20x2,50 | | | |
| 1ORT1820265 | 18,20x2,65 | | | |
| 1ORT2220310 | 22,20x3,10 | | | |
| 1ORT2830310 | 28,30x3,10 | | | |
| 1ORT3540325 | 35,40x3,25 | | | |
| 1ORT4240413 | 42,40x4,13 | | | |
| 1ORT5440413 | 54,40x4,13 | | | |
| 1ORT6500600 | 65,00x6,00 | | | |
| 1ORT6800600 | 68,00x6,00 | | | |
| 1ORT7700700 | 77,00x7,00 | | | |
| 1ORT9000760 | 90,00x7,60 (CU) | | | |
| 1ORT9000800 | 90,00x8,00 (VA) | | | |
| 1ORT11000900 | 110,00x9,00 (CU) | | | |



Protocols

Pressure test protocol for the drinking water unit

Building project

Client

Contractor

Pressure test with compressed air or inert gas

Test start (date/time of day) End of test (date/time of day)

Unit pressure bar

Ambient temperature.....°C temp. of test medium°C

Test medium: oil-free compressed air nitrogen carbon dioxide (CO₂)

The drink water unit was checked as complete system or in sections.

All pipes are to be closed with metallic threaded plugs, caps, blank plate or blank flanges. Devices, pressure tanks or drinking water heaters are to be separated from the pipes. A visual check of all fittings for professional execution was accomplished.

Leak test – preliminary test

Test pressure 110 mbar

Test time at least 30 minutes with up to 100 litres of pipe volume

For each further 100 litres, the testing time is to be increased by 10 minutes

Pipe volume litre; testing time..... minutes

The temperature and steady-state condition are waited for; afterwards the testing time starts

during the testing time there was no pressure drop

Strength test with increased pressure – main examination

Test pressure of the drinking water pipe system with max. 3.0 bar

Testing time at least 10 minutes

during the testing there was no pressure drop detected

the pipe system is leak proof

_____ Place

_____ Date

_____ Signature client / Representative's signature

_____ contractor / Representative

Pressure test for the drinking water unit

Building project

Client

Contractor

Pressure test with drinking water

Test start (date/time of day) End of test (date/time of day)

Pipes filled with filtered water and fully de-aerated yes no

Ambient temperature.....°C water temperature°C

Installed drinking water pipes copper high-grade steel compound pipes plastic

Pipe length of the drinking water system in total approx. m

Sight check of the push, press and screw fittings carried out yes no

Push, press and screw fittings were leak proof during the sight check yes no

Preliminary test

(testing period approx. 60 minutes)

Permissible operation pressure 10 bar, test pressure 15 bar, min. 1 bar yes no

Initial pressure (test start) P1 bar time of day.....

Test to be repeated within 30 minutes, at an interval of 10 minutes respectively, 2 times

Test pressure (30 min. after test start) P2 bar time of day.....

Test pressure (60 min. after test start) P3 bar time of day.....

Pressure drop P4
(max. 0.1 bar/5 minutes and P2-P3 max. 0.6 bar) bar P2-P3 bar

During the testing there was no leakage yes no

During the testing the max. pressure drop was not exceeded yes no

Main test (directly after the preliminary test, testing period approx. 2 hours)

Test pressure P5 bar time of day.....

Test pressure P6 (max. pressure drop P5 – P6 = 0.2 bar) bar time of day.....

During the testing there was no leakage detected yes no

Place

Date

Signature client / Representative's signature

contractor / Representative

Pressure test protocol¹⁾ for heating, solar and cooling water circuit **SANHA**[®]

Building project

 Client represented by:
 Contractor/represented by:
 Expert represented by:
 Pipe material:
 Fitting technology:

Pressure test with water

Pipes filled with filtered water and fully de-aerated. The permissible operation pressure is p_{zul} = bar.

Water temperature = °C
 Ambient temperature = °C
 Difference in temperature = K

1. Rise test pressure
 $p_{test} = p_{zul} \times 1,3 =$ bar
- 1.1 With press fittings that have a leak path if not pressed:
 All joints are after the application of pressure test of $p_{test\ pressf.} = 1$ bar leak proof. There is no pressure drop after 10 min detected.
- 1.2 With all joining techniques pressure test is to be applied. $p_{test} = p_{zul} \times 1,3$
2. Difference in temperature < 10 K
- 2.1 Testing period = 10 min.
 During this time there was no pressure drop, there was no leakage.
3. Difference in temperature ≥ 10 K
- 3.1 30 min. waiting time for temperature escape after application of p_{test}
- 3.2 Testing period = 10 min.
 During this time there was no pressure drop detected, there was no leakage.

_____ Place

_____ Signature client / Representative's signature

Pressure test with inert gas

System pressure: _____

Ambient temperature _____ °C Test medium _____ °C

Test medium: Oil free compressed air nitrogen
 carbon dioxide _____

The heating system was tested as
 a whole system in _____ sections

All pipes are closed with metallic threaded plugs, caps or blank flanges.
 A sight check of all fittings for a professional execution was carried out.

- Leak test**
 With press fittings that leak in un-pressed state:
 All joints are after the application of pressure test of $p_{test\ pressf.} = 1$ bar leak proof. There is no pressure drop after 10 min detected.

Strength test with increased pressure
 Test pressure ≤ 50 DN max. 3 bar and/or > 50 DN max. 1 bar
 Testing period at last 30 min for up to 100 l pipe volume. (For each 100 l the testing period is to be increased by 10 min.)
 Testing period = _____ minutes

- During the test period there was no pressure drop detected.
 The pipes are leak proof.

_____ Date

_____ contractor / Representative

¹⁾ according to ZVSHK-data sheet

Test report

Building project

Client represented by:

Contractor/responsible

expert person represented by:

Sanitary system gas system air conditioning system heating system _____

Acceptance negotiation on

Following deliveries and services are accepted:

.....

.....

.....

The following defects were determined:

.....

.....

.....

The following remaining works of completion is not substantial and are to be delivered by the contractor immediately, at the latest by _____:

.....

.....

.....

The following defects are not substantial and are eliminated by the contractor immediately, at the latest by _____:

.....

.....

.....

Deliveries and services _____ of the contractors) are hereby accepted.

Place

Date

Signature client / Representative's signature

contractor / Representative

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| DCU | 1DCU312 | 18.25 | FL-D | 1D80 | 1.21 | ORS | 1ORS1210250 | 5.13 |
| DCU | 1DCU3 | 17.19 | FL-D | 1D100 | 7.25 | ORS | 1ORS1510260 | 5.13 |
| DCU | 1DCU1 | 18.25 | FL-D | 1D100 | 35.2 | ORS | 1ORS1820265 | 5.13 |
| DCU | 1DCU212 | 17.19 | FL-D | 1D125 | 35.2 | ORS | 1ORS2220310 | 5.13 |
| DCU | 1DCU238 | 17.19 | FL-D | 1D150 | 35.2 | ORS | 1ORS2830310 | 5.13 |
| DCU | 1DCU214 | 17.19 | FL-D | 1D65 | 35.2 | ORS | 1ORS3540325 | 5.13 |
| DCU | 1DCU2 | 17.19 | FL-D | 1D100 | 1.21 | ORS | 1ORS4240413 | 5.13 |
| DCU | 1DCU134 | 17.19 | FL-D | 1D15 | 9.23 | ORS | 1ORS5440413 | 5.13 |
| DCU | 1DCU112 | 17.19 | FL-D | 1D80 | 7.25 | ORS | 1ORS7700700 | 5.13 |
| DCU | 1DCU114 | 17.19 | FL-D | 1D40 | 4.18 | ORT | 1ORT1820265 | 1.22 |
| DCU | 1DCU1 | 17.19 | FL-D | 1D50 | 21.7 | ORT | 1ORT7700700 | 7.26 |
| DCU | 1DCU34 | 17.19 | FL-D | 1D20 | 7.25 | ORT | 1ORT2220310 | 7.26 |
| DCU | 1DCU58 | 17.19 | FL-D | 1D80 | 21.7 | ORT | 1ORT6800600 | 7.26 |
| DCU | 1DCU12 | 17.19 | FL-D | 1D32 | 7.25 | ORT | 1ORT1420250 | 35.4 |
| DCU | 1DCU38 | 17.19 | FL-D | 1D125 | 21.7 | ORT | 1ORT6500600 | 7.26 |
| DCU | 1DCU312 | 17.19 | FL-D | 1D150 | 21.7 | ORT | 1ORT5440413 | 7.26 |
| DCU | 1DCU58 | 18.25 | FL-D | 1D40 | 8.19 | ORT | 1ORT4240413 | 7.26 |
| DKHV CU | 3DKHVCU3418 | 3.5 | FL-D | 1D40 | 21.7 | ORT | 1ORT3540325 | 7.26 |
| DKHV CU | 3DKHVCU3415 | 3.5 | FL-D | 1D50 | 4.18 | ORT | 1ORT1210250 | 1.22 |
| DKHV CU | 3DKHVCU3412 | 3.5 | FL-D | 1D65 | 21.7 | ORT | 1ORT11000900 | 35.4 |
| DKHV CU R | 3DKHVCU3418R | 3.4 | FL-D | 1D32 | 4.18 | ORT | 1ORT1420250 | 1.22 |
| DKHV CU R | 3DKHVCU3415R | 3.4 | FL-D | 1D25 | 4.18 | ORT | 1ORT110001000 | 1.22 |
| DKHV CU R | 3DKHVCU3412R | 3.4 | FL-D | 1D65 | 9.23 | ORT | 1ORT1620250 | 1.22 |
| DKHV VPE | 3DKHVVPE116 | 12.11 | FL-D | 1D50 | 9.23 | ORT | 1ORT6500600 | 1.22 |
| DKHV VPE | 3DKHVVPE120 | 12.11 | FL-D | 1D40 | 9.23 | ORT | 1ORT2220310 | 1.22 |
| DKHV VPE | 3DKHVVPE3420 | 12.11 | FL-D | 1D32 | 9.23 | ORT | 1ORT2830310 | 1.22 |
| DKHV VPE | 3DKHVVPE3416 | 12.11 | FL-D | 1D25 | 9.23 | ORT | 1ORT3540325 | 1.22 |
| DKHV VPE | 3DKHVVPE1216 | 12.11 | FL-D | 1D20 | 9.23 | ORT | 1ORT4240413 | 1.22 |
| DKHV VPE | 3DKHVVPE126 | 12.11 | FL-D | 1D50 | 8.19 | ORT | 1ORT6800600 | 35.4 |
| DKHV VPE R | 3DKHVVPE3420R | 12.11 | FL-D | 1D32 | 8.19 | ORT | 1ORT5440413 | 1.22 |
| DKHV VPE R | 3DKHVVPE3416R | 12.11 | FL-D | 1D15 | 7.25 | ORT | 1ORT1820265 | 7.26 |
| DTG | 9DTG112 | 28.32 | FL-D | 1D15 | 8.19 | ORT | 1ORT11000900 | 1.22 |
| DTG | 9DTG114 | 28.32 | FL-D | 1D100 | 21.7 | ORT | 1ORT9000800 | 1.22 |
| DTG | 9DTG1 | 28.32 | FL-D | 1D25 | 8.19 | ORT | 1ORT9000760 | 1.22 |
| DTG | 9DTG34 | 28.32 | FL-D | 1D32 | 21.7 | ORT | 1ORT7700700 | 1.22 |
| DTG | 9DTG12 | 35.4 | FL-D | 1D100 | 9.23 | ORT | 1ORT6800600 | 1.22 |
| DTG | 9DTG212 | 28.32 | FL-D | 1D80 | 9.23 | ORT | 1ORT1510260 | 1.22 |
| DTG | 9DTG1 | 35.4 | FL-D | 1D15 | 35.2 | ORT | 1ORT2220310 | 35.4 |
| DTG | 9DTG38 | 28.32 | FL-D | 1D25 | 35.2 | ORT | 1ORT1210250 | 7.26 |
| DTG | 9DTG14 | 28.32 | FL-D | 1D32 | 35.2 | ORT | 1ORT1420250 | 7.26 |
| DTG | 9DTG14 | 35.4 | FL-D | 1D40 | 35.2 | ORT | 1ORT7700700 | 35.4 |

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| ORT | 1ORT2830310 | 7.26 | RG-PF | 1RGPF64 | 1.20 | | | |
| ORT | 1ORT9000800 | 35.4 | RG-PF | 1RGPF42 | 1.20 | | | |
| ORT | 1ORT6500600 | 35.4 | RG-PF | 1RGPF35 | 1.20 | | | |
| ORT | 1ORT5440413 | 35.4 | RG-PF | 1RGPF28 | 1.20 | | | |
| ORT | 1ORT4240413 | 35.4 | RG-PF | 1RGPF54 | 1.20 | | | |
| ORT | 1ORT2830310 | 35.4 | RG-PF | 1RGPF35 | 21.3 | | | |
| ORT | 1ORT1210250 | 35.4 | VA-PF | 6VAPF64 | 21.5 | | | |
| ORT | 1ORT1820265 | 35.4 | VA-PF | 6VAPF18 | 21.5 | | | |
| ORT | 1ORT1620250 | 35.4 | VA-PF | 6VAPF22 | 21.5 | | | |
| ORT | 1ORT1510260 | 35.4 | VA-PF | 6VAPF28 | 21.5 | | | |
| ORT | 1ORT11000900 | 7.26 | VA-PF | 6VAPF35 | 21.5 | | | |
| ORT | 1ORT9000800 | 7.26 | VA-PF | 6VAPF54 | 21.5 | | | |
| ORT | 1ORT9000760 | 7.26 | VA-PF | 6VAPF28 | 7.27 | | | |
| ORT | 1ORT1510260 | 7.26 | VA-PF | 6VAPF76 | 21.5 | | | |
| ORT | 1ORT1620250 | 7.26 | VA-PF | 6VAPF89 | 21.5 | | | |
| ORT | 1ORT110001000 | 7.26 | VA-PF | 6VAPF108 | 21.5 | | | |
| ORT | 1ORT9000760 | 35.4 | VA-PF | 6VAPF42 | 21.5 | | | |
| ORT | 1ORT3540325 | 35.4 | VA-PF | 6VAPF15 | 21.5 | | | |
| RG-FL | 1RGFL40 | 21.2 | VA-PF | 6VAPF22 | 7.27 | | | |
| RG-FL | 1RGFL25 | 21.2 | VA-PF | 6VAPF35 | 7.27 | | | |
| RG-FL | 1RGFL32 | 21.2 | VA-PF | 6VAPF42 | 7.27 | | | |
| RG-FL | 1RGFL65 | 21.2 | VA-PF | 6VAPF54 | 7.27 | | | |
| RG-FL | 1RGFL100 | 21.2 | VA-PF | 6VAPF64 | 7.27 | | | |
| RG-FL | 1RGFL125 | 21.2 | VA-PF | 6VAPF76 | 7.27 | | | |
| RG-FL | 1RGFL150 | 21.2 | VA-PF | 6VAPF89 | 7.27 | | | |
| RG-FL | 1RGFL50 | 21.2 | VA-PF | 6VAPF108 | 7.27 | | | |
| RG-FL | 1RGFL80 | 21.2 | VA-PF | 6VAPF15 | 7.27 | | | |
| RG-GF | 1RGGF25 | 21.2 | VA-PF | 6VAPF18 | 7.27 | | | |
| RG-GF | 1RGGF100 | 21.2 | WBS H | 1WBS672H | 18.22 | | | |
| RG-GF | 1RGGF80 | 21.2 | WBS H | 1WBS1333H | 18.22 | | | |
| RG-GF | 1RGGF65 | 21.2 | WBS H | 1WBS542H | 18.22 | | | |
| RG-GF | 1RGGF50 | 21.2 | WBS H | 1WBS1593H | 18.22 | | | |
| RG-GF | 1RGGF32 | 21.2 | WBS H | 1WBS2215H | 18.22 | | | |
| RG-GF | 1RGGF20 | 21.2 | WBS H | 1WBS10825H | 18.22 | | | |
| RG-GF | 1RGGF15 | 21.2 | WBS H | 1WBS1042H | 18.22 | | | |
| RG-GF | 1RGGF40 | 21.2 | WBS H | 1WBS892H | 18.22 | | | |
| RG-LF | 1RGLF42 | 21.3 | WBS H | 1WBS802H | 18.22 | | | |
| RG-LF | 1RGLF133 | 21.3 | WBS H | 1WBS702H | 18.22 | | | |
| RG-LF | 1RGLF108 | 21.3 | WBS H | 1WBS642H | 18.22 | | | |
| RG-LF | 1RGLF89 | 21.3 | WBS H | 1WBS422H | 18.22 | | | |
| RG-LF | 1RGLF76 | 21.3 | WBS H | 1WBS4215H | 18.22 | | | |
| RG-LF | 1RGLF54 | 21.3 | WBS H | 1WBS3515H | 18.22 | | | |
| RG-LF | 1RGLF35 | 21.3 | WBS H | 1WBS2815H | 18.22 | | | |
| RG-LF | 1RGLF28 | 21.3 | WBS H | 1WBS762H | 18.22 | | | |
| RG-LF | 1RGLF22 | 21.3 | WBS H | 1WBS2193H | 18.22 | | | |
| RG-LF | 1RGLF18 | 21.3 | WBS V | 1WBS2815V | 20.3 | | | |
| RG-LF | 1RGLF64 | 21.3 | WBS V | 1WBS2193V | 20.3 | | | |
| RG-PF | 1RGPF108 | 1.20 | WBS V | 1WBS1593V | 20.3 | | | |
| RG-PF | 1RGPF108 | 21.3 | WBS V | 1WBS1333V | 20.3 | | | |
| RG-PF | 1RGPF89 | 21.3 | WBS V | 1WBS10825V | 20.3 | | | |
| RG-PF | 1RGPF76_DN80 | 21.3 | WBS V | 1WBS892V | 20.3 | | | |
| RG-PF | 1RGPF76 | 21.3 | WBS V | 1WBS762V | 20.3 | | | |
| RG-PF | 1RGPF67 | 21.3 | WBS V | 1WBS542V | 20.3 | | | |
| RG-PF | 1RGPF64 | 21.3 | WBS V | 1WBS3515V | 20.3 | | | |
| RG-PF | 1RGPF54 | 21.3 | WBS V | 1WBS2215V | 20.3 | | | |
| RG-PF | 1RGPF42 | 21.3 | WBS V | 1WBS4215V | 20.3 | | | |
| RG-PF | 1RGPF67 | 1.20 | | | | | | |
| RG-PF | 1RGPF28 | 21.3 | | | | | | |
| RG-PF | 1RGPF89 | 1.20 | | | | | | |
| RG-PF | 1RGPF76_DN80 | 1.20 | | | | | | |
| RG-PF | 1RGPF76 | 1.20 | | | | | | |