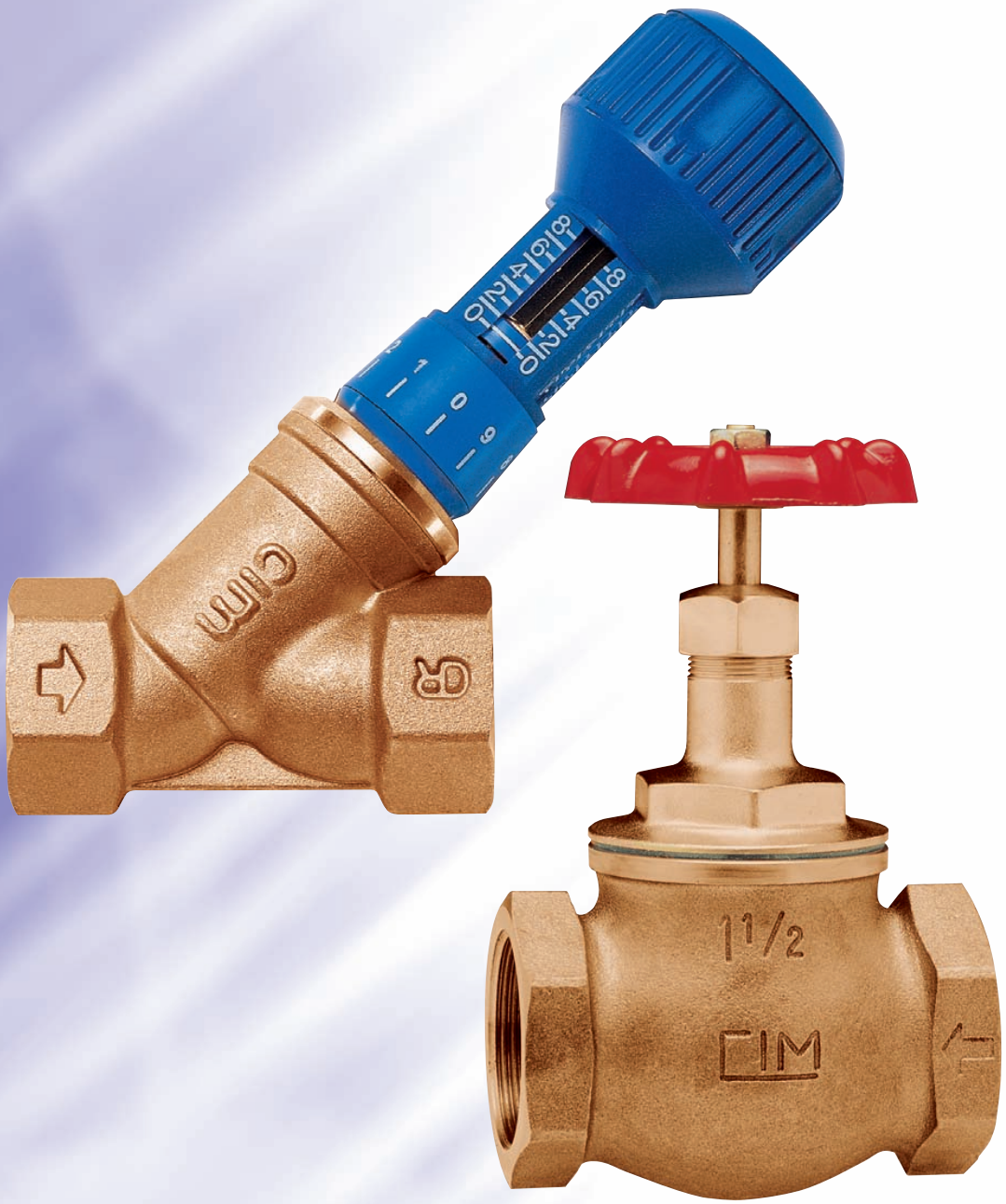
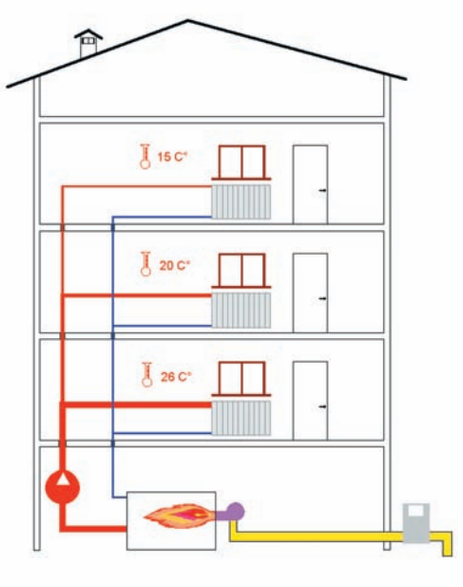
BALANCING VALVES
INDUSTRIAL VALVES



valve cimberio®
technological solutions

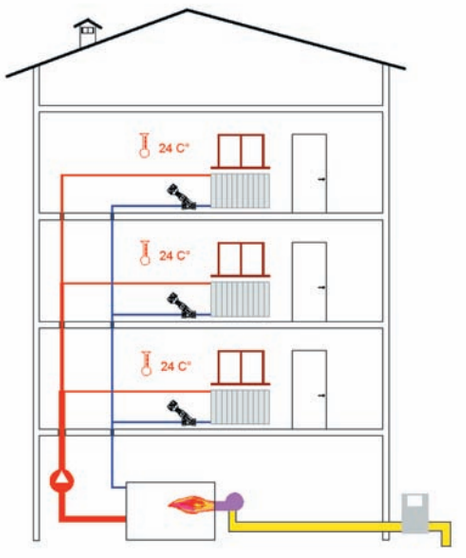
HIGH ACCURACY BALANCING AND FLOW MEASURAMENT VALVE

The modern cooling systems should be projected to ensure a high thermal performance with reduced energy consumption, satisfying not only the thermal comfort of the end-users, but meeting also with the technical normative and legislation.
In order to guarantee the above, the terminals should receive the intended amounts of heating or cooling to reach the best thermal performance. In other words, the hydraulic circuits must always be balanced perfectly.
To achieve this result, usually the design engineers project installations able to reach a kind of "auto-balancing" system, with suitable position and dimension of the circuits, using, for instance, reverse return circuits or terminals with the same resistance.
This kind of installations, in addition to high project and maintenance costs, does not guarantee a perfect circuit balancing, causing terminals hydraulic unbalances which are the main reason of fluctuating temperatures in the different areas of the building, with ensuing troubles to the end-users and increases in the energy consumption.



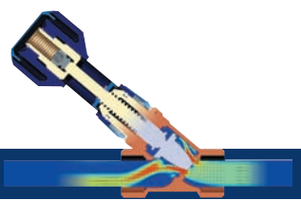
Unbalanced system

On the contrary, the installation of balancing valves CIMBERIO ensures a perfect balancing of the installation.

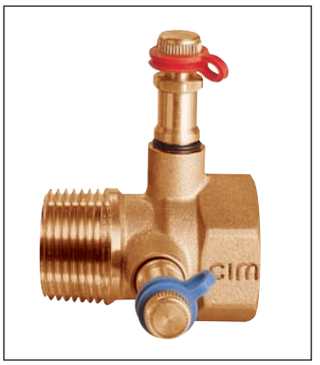


Balanced system

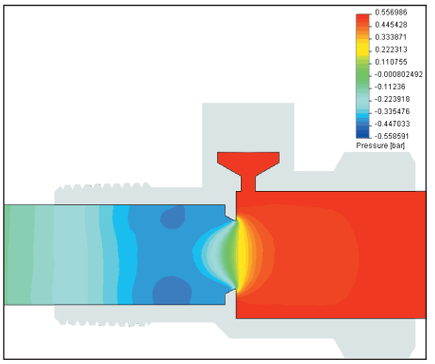
The high accuracy measurement, achieved by the special measuring system with "calibrated flow", and the easy installation of the CIMBERIO balancing set ensure each terminal to receive the intended amounts of heating or cooling for its best performance. This will also assure a constant temperature to all areas of the building, with reduced energy consumption.
Moreover, should the installation show any inconvenient, the CIMBERIO balancing set would enable the technicians to find out the position and the reason of the problem aroused.



ADVANTAGES OF FIXED ORIFICE OVER VARIABLE ORIFICE FLOW MEASUREMENT

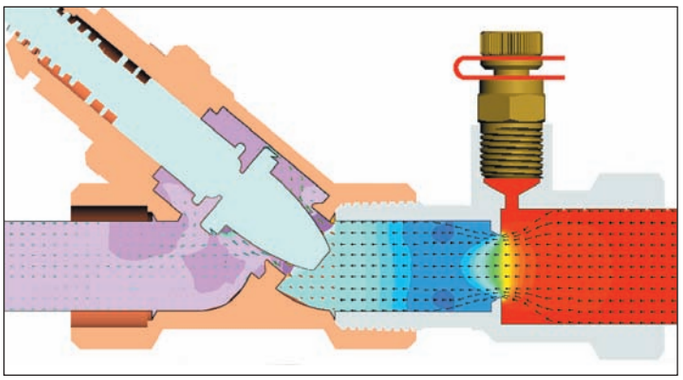


CIM 721
FIXED ORIFICE

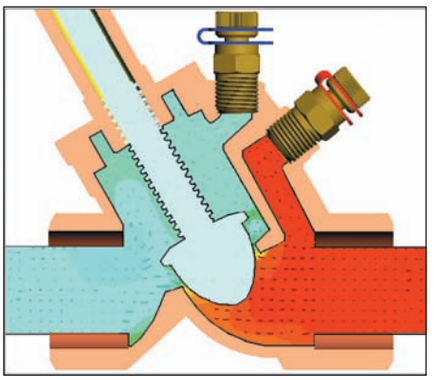


CIM 721
PRESSURE SIMULATION

The idea to couple a double regulating valve to a fixed orifice device evolved in the UK in the 1980s. This combination was designed specifically to overcome the accuracy problems associated with flow measurements utilising the pressure drops across variable orifice valves. Variable orifice valves seldom achieve the accuracy and reliability of fixed orifice valves. For a variable orifice valve, the pressure signal across the plug is used for flow measurement. A graph of the relationship between pressure drop and flow rate is required for each valve setting.
The fundamental weakness of this design is that manufacturing tolerances can cause significant flow measurement distortions beyond a certain closure point, typically 50% closed. Beyond this point the flow measurement accuracy can deteriorate dramatically, to ± 30% or more! Since most of the valve's resistance is added in the last part of its closure, the valve's balancing range is severely limited. The result is a valve, which has either limited balancing capability, poor flow measurement accuracy, or both. The limited operating range of variable orifice valves inevitably makes valve selection more difficult, often resulting in valve sizes, which are lower than adjoining pipe sizes.
Fixed orifice valves have none of these problems. Because the flow measurement function is separated from the balancing function they can be regulated to nearly closed positions, achieving much higher balancing pressures whilst maintaining flow measurement accuracy within ± 5% at any setting.
Since their introduction, fixed orifice commissioning sets have become by far the most preferred choice for UK design engineers and installation contractors.



FIXED ORIFICE



VARIABLE ORIFICE

cim 727

BALANCING AND FLOW MEASUREMENT VALVE
PN 20 - B.S. 7350 TYPE - KM LIC.NO. 75180

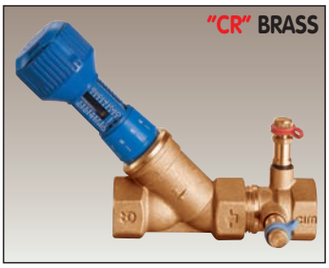
cim 727 OT

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	1	1	1	1	1	1
Cart.	12	12	12	6	6	6

cim 737

BALANCING VALVE WITH FLOW MEASUREMENT DEVICE
PN 20 - B.S. 7350 TYPE - KM LIC.NO. 75180

cim 737 OT



DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	1	1	1	1	1	1
Cart.	12	12	12	6	6	6

cim 747

BALANCING VALVE WITH FLOW MEASUREMENT DEVICE
AND PRESSURE PLUG - PN 16 - WATERMARK LIC. NO. WMKA 00217

cim 747 OT

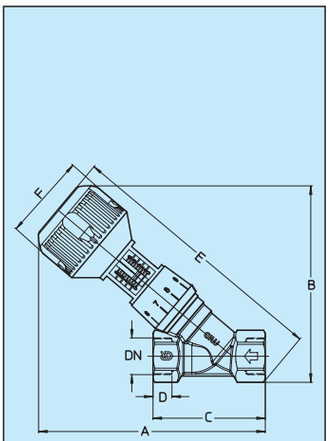
DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	1	1	1	1	1	1
Cart.	12	12	12	6	6	6

cim 745

BALANCING VALVE WITH FLOW MEASUREMENT DEVICE
PN 16 - WATERMARK LIC. NO. WMKA 00217

cim 748

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	1	1	1	1	1	1
Cart.	12	12	12	6	6	6

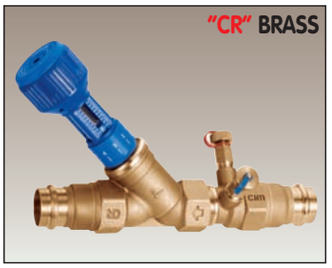


		Cim 727 Cim 727 OT							Cim 737 Cim 737 OT							Cim 747 Cim 747 OT							Cim 745							Cim 748						
DN		Grms.	A	B	C	D	E	F	Grms.	A	B	C	D	E	F	Grms.	A	B	C	D	E	F	Grms.	A	B	C	D	E	F	Grms.	A	B	C	D	E	F
1/2	CR	475	137,5	120	68	15	162,5	52	710	195	120	120	15	211	52	680	161	125	85	15	184,5	52	663	161	125	85	15	184,5	52	852	161	125	85	15	184,5	52
	OT	450	134,5	120	59	10	158,5	52	685	191	120	115,5	10	202	52	680	161	125	85	15	184,5	52	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3/4	CR	645	157	140	77	16,3	190	52	910	208	140	128	16,3	227	52	930	185	145,5	97	16,3	215,5	52	935	185	145,5	97	16,3	215,5	52	1124	185	145,5	97	16,3	215,5	52
	OT	622	152,4	140	68	11,5	184,4	52	887	207,5	140	123	11,5	227	52	930	185	145,5	97	16,3	215,5	52	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1"	CR	860	160	155	91	19,1	201,5	52	1180	210	155	140	19,1	236	52	1130	186	158,5	113	19,1	224	52	1090	186	158,5	113	19,1	224	52	1279	186	158,5	113	19,1	224	52
	OT	804	154	155	76	11,5	196	52	1124	206	155	128	11,5	233	52	1130	186	158,5	113	19,1	224	52	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11/4"	CR	1275	171	170,5	108	21,4	220	52	1755	230	170,5	165	21,4	267	52	1655	207	168,5	144	21,4	245,5	52	1589	207	168,5	144	21,4	245,5	52	1778	207	168,5	144	21,4	245,5	52
	OT	1142	165	170,5	92	13	214	52	1622	223	170,5	150	13	255	52	1655	207	168,5	144	21,4	245,5	52	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11/2"	CR	1890	212	212	116	21,4	276	58	2365	265	212	175	21,4	315	58	2465	259,5	212	163	21,4	309	58	2434	259,5	212	163	21,4	309	58	2623	259,5	212	163	21,4	309	58
	OT	1783	205	212	100	13	270	58	2258	266	212	161	13	313	58	2465	259,5	212	163	21,4	309	58	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2"	CR	2800	231	230	143	25,7	301,6	58	3530	290	230	200	25,7	346	58	3725	281	230	193	25,7	337,5	58	3686	281	230	193	25,7	337,5	58	3875	281	230	193	25,7	337,5	58
	OT	2577	227	230	125	17	294	58	3307	296	230	182	17	341	58	3725	281	230	193	25,7	337,5	58	–	–	–	–	–	–	–	–	–	–	–	–	–	–

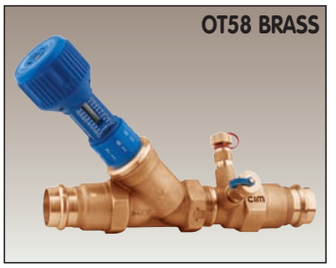
cim 727 PRS — BALANCING AND FLOW MEASUREMENT VALVE PRESS FITTINGS - PN 20 — cim 727 OTPRS

DN	15x15	18x18	22x22	28x28	35x35	42x42	54x54
Box	1	1	1	1	1	1	1
Cart.	12	12	12	12	6	6	6

cim 737 PRS — BALANCING VALVE WITH FLOW MEASUREMENT DEVICE PRESS FITTINGS - PN 20 — cim 737 OTPRS



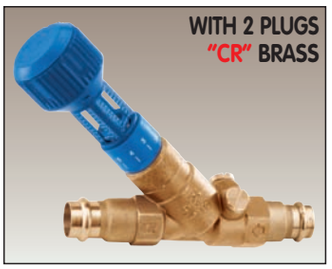
DN	15x15	18x18	22x22	28x28	35x35	42x42	54x54
Box	1	1	1	1	1	1	1
Cart.	12	12	12	12	6	6	6



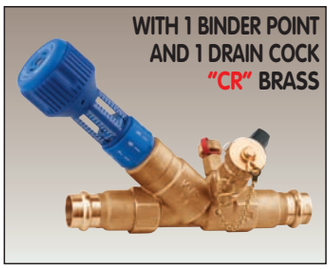
cim 747 PRS — BALANCING VALVE WITH FLOW MEASUREMENT DEVICE AND PRESSURE PLUG - PRESS FITTINGS - PN 16 — cim 747 OTPRS

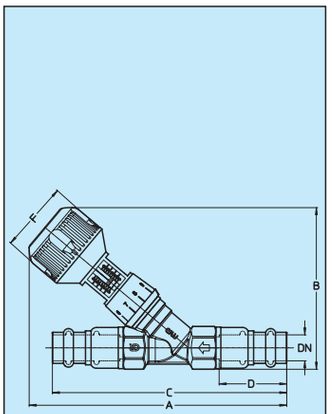
DN	15x15	18x18	22x22	28x28	35x35	42x42	54x54
Box	1	1	1	1	1	1	1
Cart.	12	12	12	12	6	6	6

cim 745 PRS — BALANCING VALVE WITH FLOW MEASUREMENT DEVICE WITH PRESSURE PLUG AND DRAIN COCK - PRESS FITTINGS PN 16 — cim 748 PRS



DN	15x15	18x18	22x22	28x28	35x35	42x42	54x54
Box	1	1	1	1	1	1	1
Cart.	12	12	12	12	6	6	6



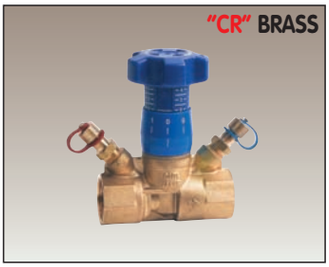


DN		Cim 727 PRS / Cim 727 OT PRS						Cim 747 PRS / Cim 747 OT PRS						Cim 737 PRS / Cim 737 OT PRS						Cim 745 PRS / Cim 748 PRS					
		Grms.	A	B	C	D	F	Grms.	A	B	C	D	F	Grms.	A	B	C	D	F	Grms.	A	B	C	D	F
15x15	CR	625	181	120	151,5	39,8	52	835	205	126,5	168,5	39,8	52	865	238	120	209	39,8	52	1005	205	126,5	168,5	39,8	52
	OT	600	176	120	142,5	39,8	52	835	205	126,5	168,5	39,8	52	840	233	120	199	39,8	52	1005	205	126,5	168,5	39,8	52
18x18	CR	820	199	140	161,5	41,3	52	1107	229	147	181,5	41,3	52	1090	250	140	212,5	41,3	52	1300	229	147	181,5	41,3	52
	OT	797	194,5	140	152,5	41,3	52	1107	229	147	181,5	41,3	52	1067	250	140	208	41,3	52	1300	229	147	181,5	41,3	52
22x22	CR	850	203,5	140	170	44	52	1135	233	147	190	44	52	1115	254	140	221	44	52	1330	233	147	190	44	52
	OT	827	199	140	161	44	52	1135	233	147	190	44	52	1092	254	140	216,5	44	52	1330	233	147	190	44	52
28x28	CR	1175	209	155	185,5	44	52	1445	235,5	160,5	207	44	52	1495	260	155	236	44	52	1595	235,5	160,5	207	44	52
	OT	1119	201	155	170	44	52	1445	235,5	160,5	207	44	52	1439	251	155	220,5	44	52	1595	235,5	160,5	207	44	52
35x35	CR	1715	220	170,5	202	43	52	2095	256	170	238	43	52	2195	277	170,5	260	43	52	2220	256	170	238	43	52
	OT	1582	212	170,5	186	43	52	2095	256	170	238	43	52	2062	270	170,5	244	43	52	2220	256	170	238	43	52
42x42	CR	2480	264,5	212	219	48	58	3055	311	212	266	48	58	2955	323,5	212	278	48	58	3215	311	212	266	48	58
	OT	2373	256,5	212	203	48	58	3055	311	212	266	48	58	2848	313,5	212	260	48	58	3215	311	212	266	48	58
54x54	CR	3702	292	230	263	54	58	4630	341,5	230	313	54	58	4435	350	230	322	54	58	4780	341,5	230	313	54	58
	OT	3479	283	230	245	54	58	4630	341,5	230	315	54	58	4212	345	230	307	54	58	4780	341,5	230	313	54	58

cim 787

STRAIGHT BALANCING VALVE WITH BINDER POINTS - PN 20

cim 787 OT



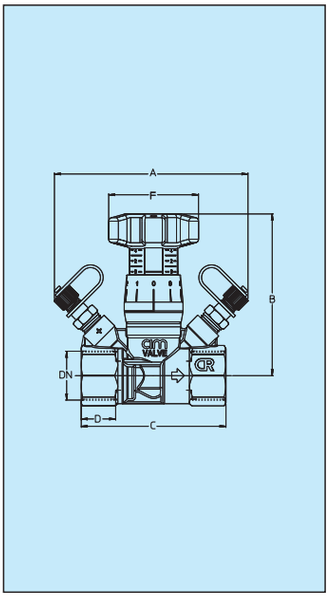
DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	1	1	1	1	1	1
Cart.	12	12	12	12	6	6

cim 787 PRS

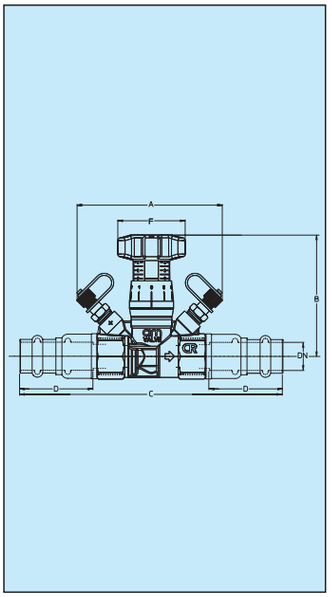
STRAIGHT BALANCING VALVE PRESS FITTINGS - PN 20

cim 787 OTPRS

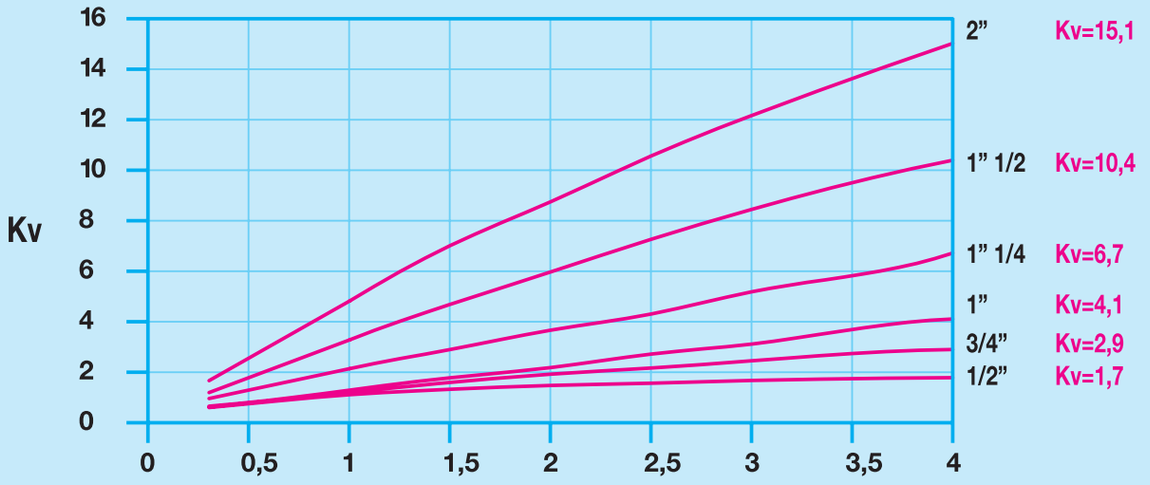
DN	15x15	22x22	28x28	35x35	42x42	54x54
Box	1	1	1	1	1	1
Cart.	12	12	12	12	6	6



	Cim 787 - Cim 787 OT							Cim 787 PRS - Cim 787 OTPRS						
DN	Grms.	A	B	C	D	F	DN	Grms.	A	B	C	D	F
1/2	380	106	87,5	75	16	50	15x15	535	106	87,5	159	39,8	50
3/4	440	107	89,5	80	19	50	22x22	650	107	89,5	173,5	44	50
1"	535	107	91,5	87	21	50	28x28	850	107	91,5	181,5	44	50
11/4"	960	123	99	108	22,5	50	35x35	1400	123	99	202	43	50
11/2"	1120	128	99	115	23	50	42x42	1700	128	99	218	48	50
2"	1350	132	100	124	26,5	50	54x54	2250	132	100	244	54	50



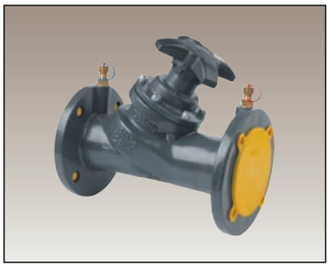
FLOW RATE Cim 787 SERIES



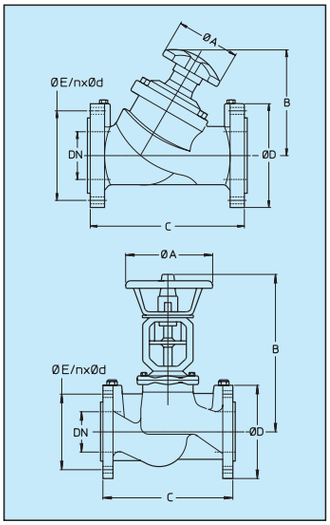
Kv: flow rate in m^3/h with 1 bar of pressure drop - MEDIUM: water - TEMPERATURE: 15,5°C

cim 3739

FLANGED GLOBE BALANCING VALVE - PN 16



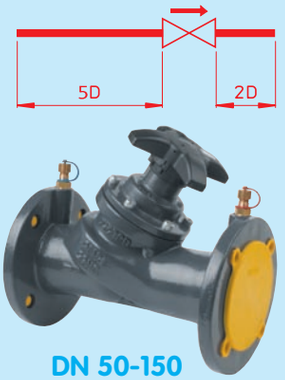
DN	50	65	80	100	125
DN	150	200	250	300	



DN	50	65	80	100	125	150	200	250	300
Kg.	10	16	20	29	42	54	196	358	464
Ø A	70	140	140	140	140	140	360	400	400
B	125	187	205	222	251	247	721	808	855
C	230	290	310	350	400	480	600	730	850
Ø D	165	185	200	220	250	285	340	405	460
Ø E	125	145	160	180	210	240	295	355	410
n x Ø d	4x19	4x19	8x19	8x19	8x19	8x23	12x23	12x28	12x28

Flanged balancing valves

Cim 3739 flanged balancing valves are used where an accurate flow measurement in big heating or cooling systems is needed. The cast iron valves have flanges PN 16 and a valve position storage device, enabling the opening and closing of the valve at the pre-set position.
They are supplied with binder points **Cim 723**. A correct installation of the balancing valves and of flow measurement joint **Cim 3723** shall be made in accordance with the distances stated in the drawing, in order to regularize the flow and allow an accurate flow measurement.

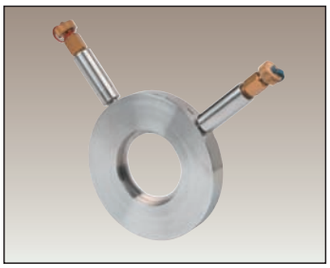


DN 50-150

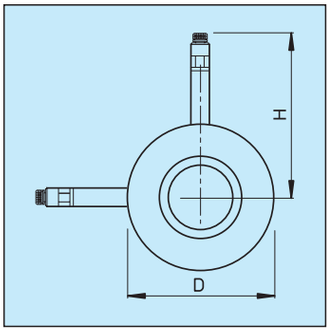
DN 200-300

cim 3723

FLANGED FLOW MEASUREMENT DEVICE



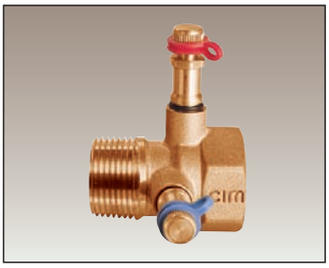
DN	50	65	80	100	125	150
DN	200	250	300	350	400	



DN	50	65	80	100	125	150	200	250	300	350	400
D	108	127	142	162	192	218	273	329	384	444	496
H	149	159	166	176	191	204	232	260	287	317	343
Flange Thickness	18	18	18	18	18	18	18	18	18	20	23
Kvs (m^3/h)	70,5	104,5	120,0	226,3	330,3	527,6	746,0	1.118,3	1.765,2	1.966,8	2.482,6

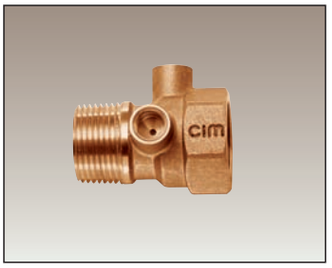
cim 721

FLOW MEASUREMENT DEVICE



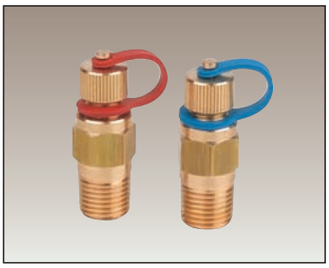
DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"

cim 722



cim 723

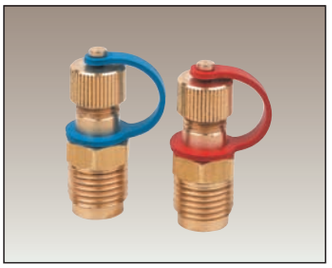
BINDER POINTS



DN	1/4
	cim 721 - 747 cim 3739 - 3723

cim 723L

DN	1/4
	cim 787

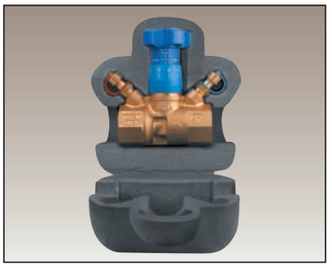


cim 728

INSULATING CASE FOR BALANCING VALVES

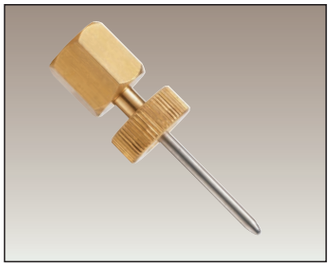
DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	1	1	1	1	1	1

cim 728C



cim 729

MEASURING NEEDLE

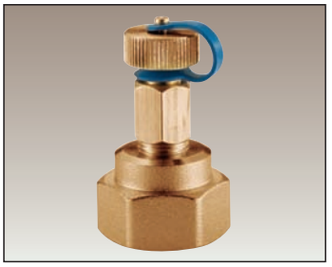


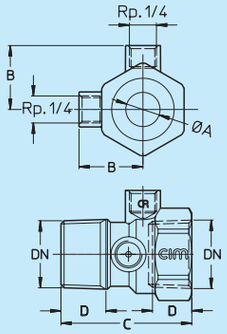
DN	1/4

cim 730

CAP WITH BINDER POINTS

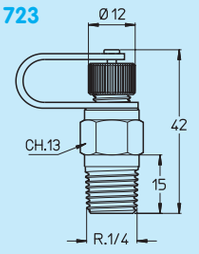
DN	3/4



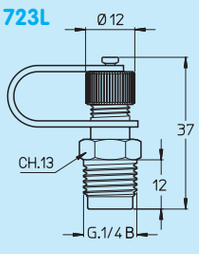


	Cim 722				
DN	Grms.	A	B	C	D
1/2"	161	8,4	25	66,5	15
3/4"	207	12,8	28	66,5	16,3
1"	252	16,6	31	63,5	19,1
1 1/4"	400	23,5	36	71	21,4
1 1/2"	460	28,4	39	71	21,4
2"	710	39,6	45	79,5	25,7

Cim 723



Cim 723L



MONOLINK

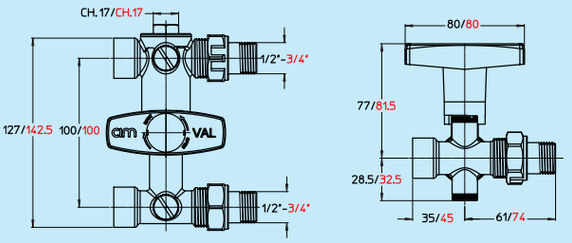
Cimberio **Monolink** is an innovative compact fan coil connection system, enabling to reduce installation and maintenance times of the plant. **Monolink** is a preassembled and pre-tested module gathering in one item all components needed for the fan coil working and that are usually assembled on the yard, i.e. valve with built-in strainer, by pass valve, drain cock, balancing valve.

PATENT PENDING

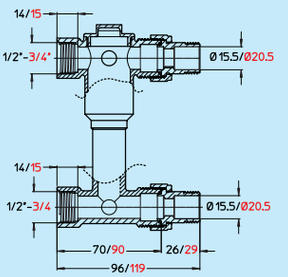
cim 731

CONNECTION SYSTEM FOR FAN-COIL F/M

1/2 x 1/2



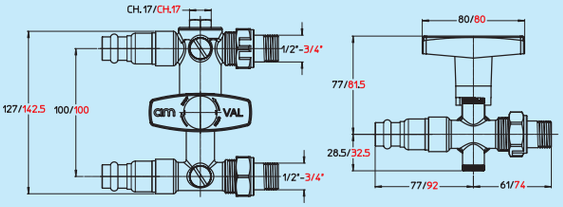
3/4 x 3/4



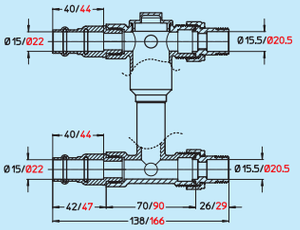
cim 732

CONNECTION SYSTEM FOR FAN-COIL M/PRS

1/2 x 15



3/4 x 22

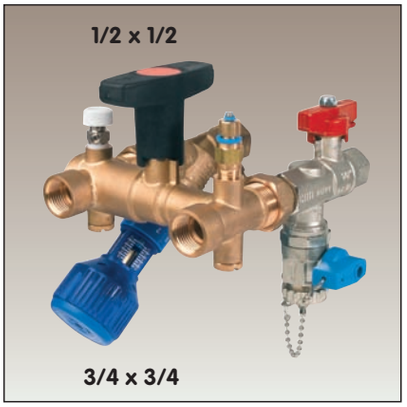


cim 733

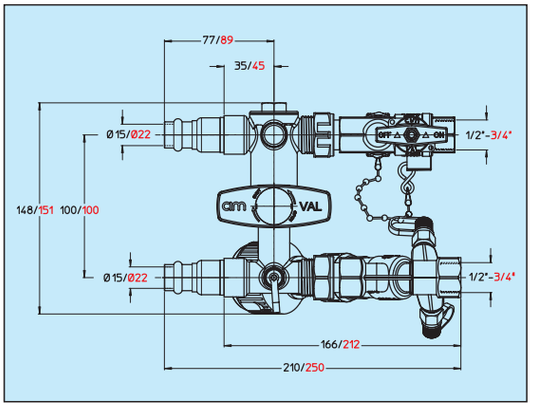
MONOLINK

cim 733 PRS

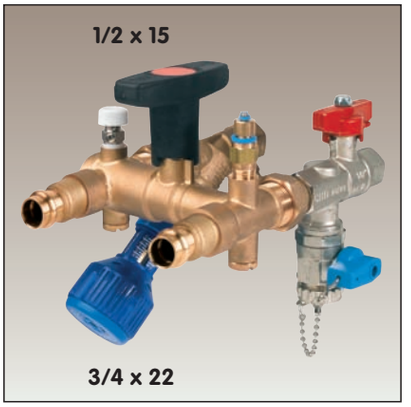
1/2 x 1/2



3/4 x 3/4



1/2 x 15



3/4 x 22

cimdronic® AC6 cim 726

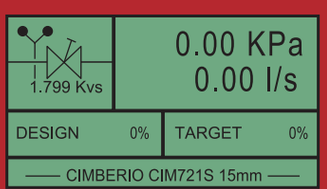
Commissioning Unit

ELECTRONIC COMMISSIONING TO A NEW LEVEL

Now with unique "DSP tecnology™" for sensor protection

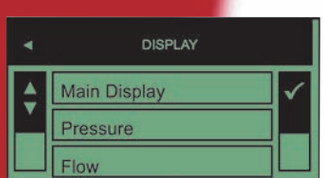
cimdronic® AC6 is a state of the art electronic commissioning meter for measurement of differential pressures and flow-rates of water in HVAC systems. A wide range of features coupled with a database of over 1300 valves, from 34 world manufacturers, make the cimdronic® AC6 the first choice meter for commissioning engineers.

PATENT PENDING



Multi parameter display
for complete system information.

Simple large
digit displays
for less complex
operations.



Easy to navigate
menu system.

Simplicity

Nine buttons designed for simple navigation allow quick and efficient use of the menu system. The cimdronic® AC6 is arranged with a choice of screen displays-whether it be the full parameter, showing all the data available or simply a screen showing in large text just the differential pressure, the user has the option to select the most appropriate screen for the work being carried out.

Convenience

Compactness and light weight enable the user to operate effectively without the inconvenience of bulky equipment. Backlit display, anti kink pipes, snap connectors and approximately 20 hours use from readily available PPS type batteries. The cimdronic® AC6 is supplied in a convenient carry case.

Accuracy

The cimdronic® AC6 uses a sensor calibrated to 20 points and protected by "DSP tecnology™" allowing the use of sensors most appropriate for the measurement ranges experienced in HVAC and not compromised by the need for sensors selected for high over-pressure with their poor accuracy and resolution at low dp readings.
Accuracy is better than 1% or 100 Pascals with system damping to further improve reading confidence on unstable systems.

Specification

Technical Description

The cimdronic AC6 is an electronic manometer programmed to carry out differential pressure measurements primarily on balancing valves in the building services industry. The state-of-the-art software and extensive database of the world's balancing valves allows direct reading of flow, differential pressure, percentage of design flow and target flow.

The nine button design allows simple navigation of the easy-to-follow menu system with all parameters visible on screen.

System accuracy is guaranteed by the use of carefully selected sensors protected by "DSP tecnology™" with resolution and accuracy most appropriate for the range of differential pressures being measured.

Measurement Accuracy

Differential pressure: better than 100 Pascals or 1% whichever is the greatest.

Measurement Range

0.1 kPa to 250 kPa
0 to 95 deg c

Effective Operating Time

20 hours with standard Alkaline PP3 battery.

User Interface

Software for the cimdronic AC6 has been designed around simple text files which are supplied on CD rom. Users wishing to edit the files can simply remove the MMC card from the cimdronic AC6 and using a suitable read/write device and text editor can make the desired changes. Typically, users might wish to add valves or devices not held on the database or, modify the list of valves displayed on the cimdronic AC6 to allow quicker access to preferred valves.

Database

1300 valves and measuring devices from 34 manufacturers.

Spares

Tool belt for hands free portability.
Replacement hoses up to 3 metres in length.
Mechseal style and insertion testpoints.

Functions

Displays

Main display: shows valve type, Kvs value, handwheel setting (Variable orifice), Design flow, target Flow, Differential pressure, Flow, valve maker, valve type, valve size.

Pressure display: large text Differential pressure.

Flow Display: Large text flow.

Predictive handwheel position: For adjusting variable orifice valves.

Chart recorder: Sample system characteristic.

Fast valve: Up to eight valves with model, size and design flow attributes can be saved to a quick access location for fast recall when balancing systems with multiple valve types/sizes.

Help: Context sensitive help is available for all functions.
Dedicated button available for this function

Units

Differential pressure: Pa, kPa, psi, bar, feet H2O, Inches H2O, mtrs H2O, mm H2O, cm H2O.

Flow: l/s, l/m, l/h, galls/m (imperial), gpm (US).

Temperature: Celsius, Fahrenheit.

Edit Functions

Design flow, target flow, specific gravity, Kvs, valve maker, valve group, valve model, valve size, handwheel position.
Zero cutoff.

cim 725 ANALOGUE DIFFERENTIAL MANOMETER

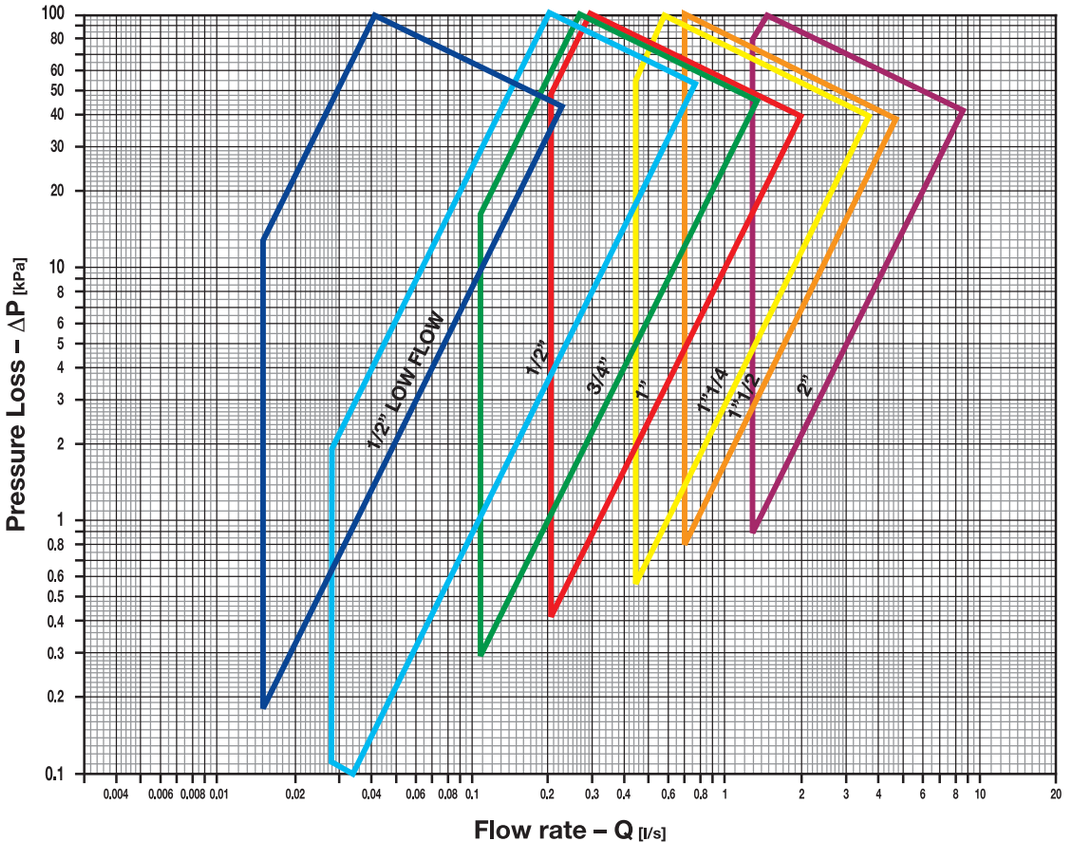
Box	1

cim 726 ELECTRONIC DIFFERENTIAL MANOMETER

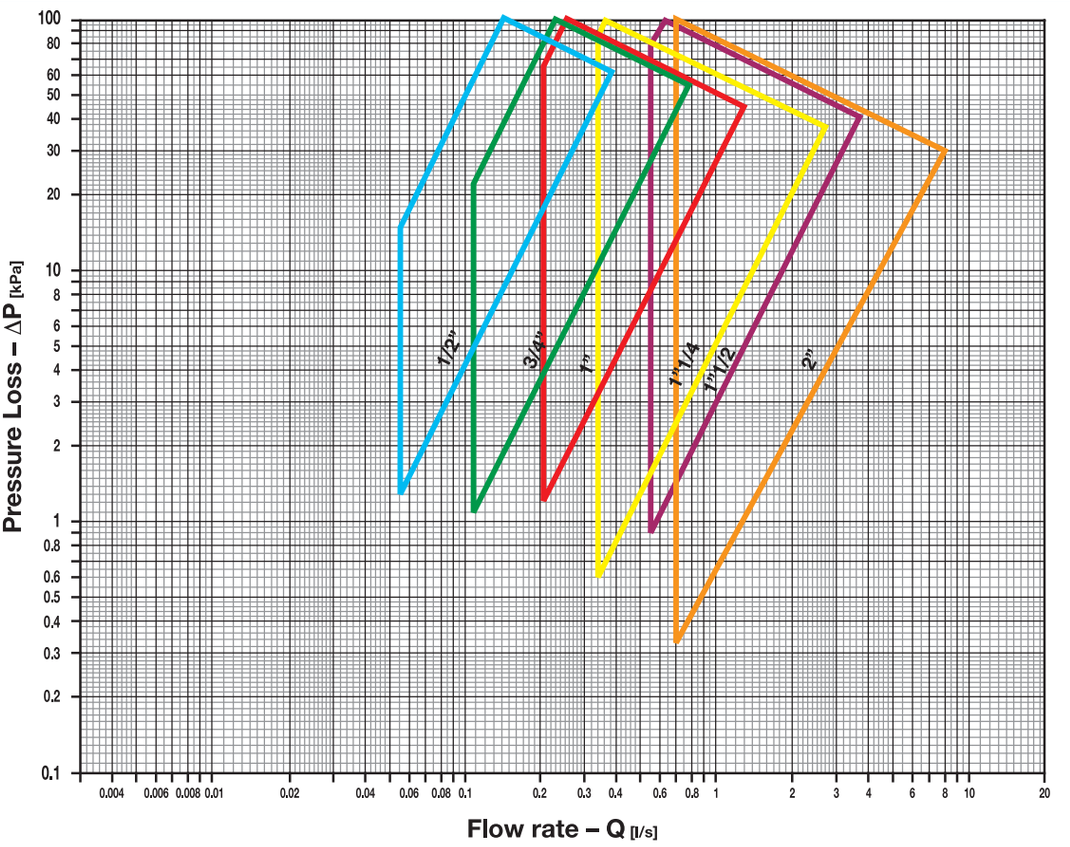
Box	1

Operating range

cim 727

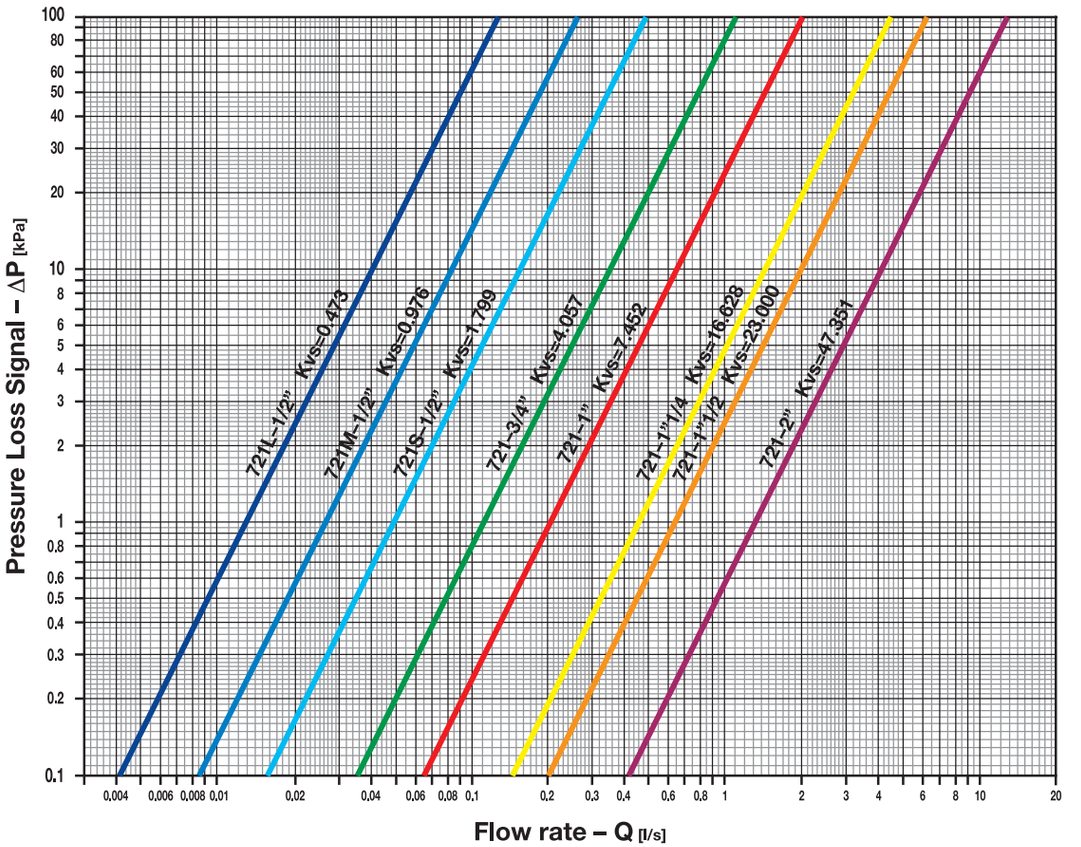


cim 747

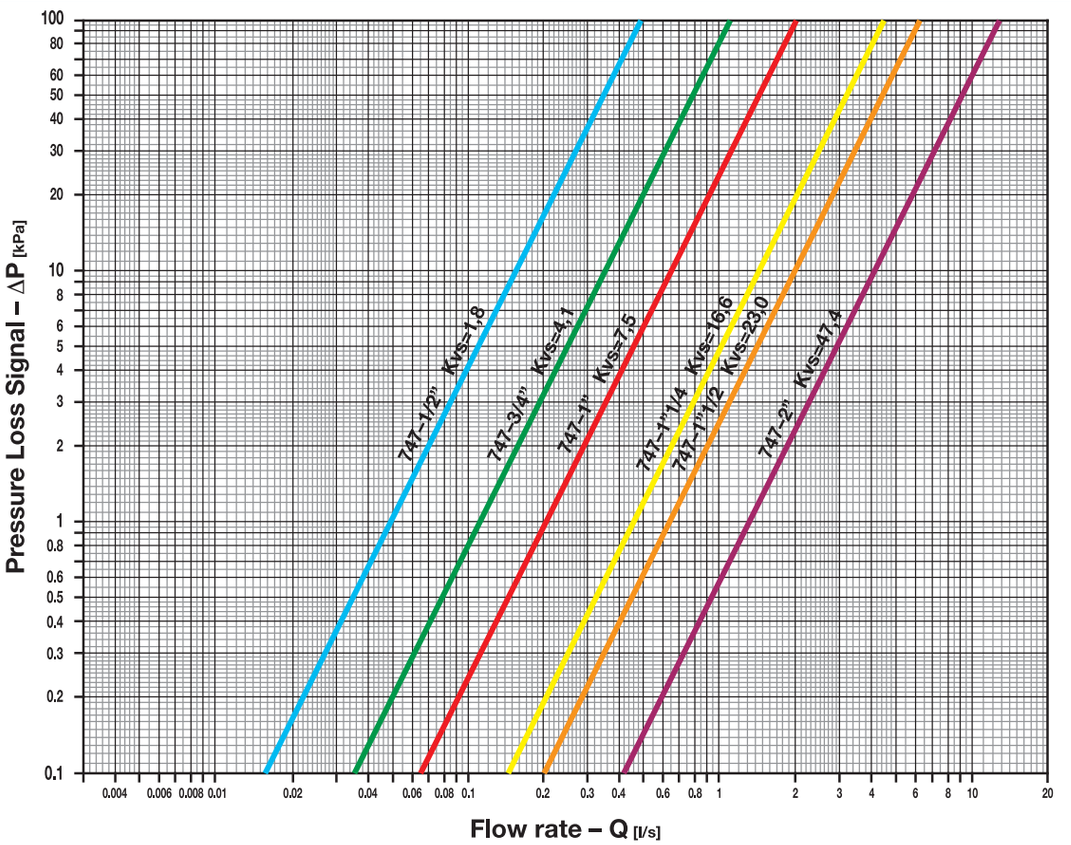


Pressure signal graph

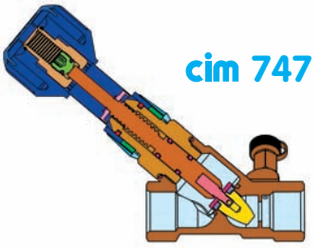
cim 721 - cim 737



cim 747 - cim 747 PRS



Body	CC752S
Bonnet	CW602N
Stem	CW602N
Gasket	EPDM
Shutter	CW602N
O-Ring	HNBR
Index	Hostaform
Seeger	Bronze
1/10 turn index	Hostaform



cim 747

Turn index	Hostaform
Memory	CW602N
Pin	Steel
Knob	Nylon 6
Entrainer	CW602N
Cap	Hostaform
Elastic ring	Steel
Outdistance (only for DN 3/4 - 1" - 1 1/4")	Nylon

KITEMARK

LICENCE

No. KM 75180

BSI hereby grants to:

Cav Uff Giacomo Cimberio SPA
Via Torchio 57
San Maurizio D'Opaglio
Novara
28017
Italy

In respect of:

BS 7350

Double regulating globe valves and flow measurement devices for heating and chilled water systems

the right and Licence to use the Kitemark in accordance with the Kitemark Licence Conditions of Contract governing the use of the Kitemark, as may be updated from time to time by BSI, and as approved by the Registrar under the Trade Marks Act 1994 (the "Conditions"). All defined terms in this Licence shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s), manufactured at, or provided from, the address above and in conformity with the standard(s) detailed on the following pages.

For and on behalf of BSI:

Anne Boyd, Divisional Director, Product Services Operations

First granted: 20 Jul 2004 **Date: 20 Jul 2004** Page: 1 of 2

BSI Product Services

KITEMARK

LICENCE

No. KM 75180

Cav Uff Giacomo Cimberio SPA
San Maurizio D'Opaglio

The Valves listed below are approved to BS 7350:1990.

Model Designation	Nominal Size	Nominal Pressure	Description	Test Report No.
721S	½"	PN20	Type 1 flow measurement device	285/4403149
721	¾"	PN20	Type 1 flow measurement device	
721	1"	PN20	Type 1 flow measurement device	
721	1 ¼"	PN20	Type 1 flow measurement device	
721	1 ½"	PN20	Type 1 flow measurement device	
721	2"	PN20	Type 1 flow measurement device	
727S	½"	PN20	Double regulating globe valve	
727	¾"	PN20	Double regulating globe valve	
727	1	PN20	Double regulating globe valve	
727	1 ¼"	PN20	Double regulating globe valve	
727	1 ½"	PN20	Double regulating globe valve	
727	2"	PN20	Double regulating globe valve	
737S	½"	PN20	Type 3 flow measurement device	
737	¾"	PN20	Type 3 flow measurement device	
737	1"	PN20	Type 3 flow measurement device	
737	1 ¼"	PN20	Type 3 flow measurement device	
737	1 ½"	PN20	Type 3 flow measurement device	
737	2"	PN20	Type 3 flow measurement device	

First granted: 20 Jul 2004 **Date: 20 Jul 2004** Page: 2 of 2

BSI Product Services

IAPMO R&T OCEANA

WaterMark

IAS-ANZ

WATERMARK LICENCE

Level 1

IAPMO R&T Oceana hereby grants to:

Cav. Uff. Giacomo Cimberio S.p.A.
Via Torchio, 57, San Maurizio d'Opaglio, (NO) ITALY

the right to use the WaterMark in accordance with the AS5200.000 and the Building Code of Australia only in respect of the certified product as described in the attached WaterMark Schedule. The Licence is granted subject to the rules governing the Watermark Certification Scheme and the Terms and Conditions for WaterMark Certification.

Evaluated to:

ATS 5200 Technical Specification for plumbing and drainage products: Part 012: In-line valves for use in plumbing water supply systems Miscellaneous types metallic and non-metallic

Manufacturer:
Cav. Uff. Giacomo Cimberio S.p.A.

Licence No.: WMKA00217 **Certified Date:** 26 June 2008
Issue Date: 26 June 2008 **Expiry Date:** 7 August 2011

Executive Director the IAPMO Group

WATERMARK SCHEDULE - LEVEL 1

IAPMO R&T OCEANA

WaterMark

IAS-ANZ

kiwa

Certificate

Certificate Number: AI030206

Date Issued: 17th January 2003

CIM 737 series of commissioning sets comprising double regulating valves and metering stations. Sizes: ½ inch to 2 inch.

This is to certify that the above range of products supplied by

Giacomo Cimberio s.p.a.

has been tested and found to comply with the requirements of the Water Supply (Water Fittings) Regulations 1999 for England and Wales, the Water Byelaws 2000, Scotland and the Water Regulations Northern Ireland.

To comply with the Regulations and Byelaws all products require the correct installation. Details of the installation requirements may be obtained from the installation instructions supplied with the products.

Director
Kiwa Quality Services Ltd

Supplier
Giacomo Cimberio s.p.a.
Via Torchio, 57
28017 San Maurizio D'Opaglio
Italy

kiwa

PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

N. PA004 Rev. 1

FOGLIO 1 / 3

Dati dell'Organismo Notificato	
Società Consortile PASCAL a.r.l.	
VIA SCARSELLINI, 13 – 20161 MILANO - ITALIA	
Numero Identificativo CE 1115	
Dati del Costruttore/Mandatario	
COSTRUTTORE (nome o marchio)	*Cav. Uff. Giacomo Cimberio s.p.a.*
INDIRIZZO	*Via Torchio, 57 28017 SAN MAURIZIO D'OPAGLIO (NO) - I -*
MANDATARIO	
INDIRIZZO	
Dati	
TIPO	*VALVOLE OBLIQUE* art.i CIM: 72, 74, 61, 62, 721, 727, 727PRS, 736, 737, 737PRS, 746, 747, 747OT, 747OTPRS, 747PRS, 748
CARATTERISTICHE DI ESERCIZIO (Per ciascun modello i parametri indicati sono dettagliati all'allegato I)	*Pressione massima di esercizio (bar): PN* 20 *Diametro (mm): DN* 32 ÷ 100 *Temperatura massima di esercizio (°C):* Vedere Allegato II *Fluidi:* acqua, aria compressa, vapor d'acqua, idrocarburi liquidi
Categoria di appartenenza	**I, II**

Elenco dei documenti significativi del fascicolo tecnico di cui PASCAL conserva una copia

Tipo verificato CIM.72 dis.2°	X	Documenti normativi e soluzioni adottate	X
Progetto di fabbricazione	X	Registrazioni relative alla qualificazione dei procedimenti di saldatura e dei saldatori e/o degli operatori del CND	
Istruzioni per l'uso	X	Attestati materiali / prodotti	X
Documento descrittivo dei materiali utilizzati, dei controlli effettuati con le informazioni pertinenti relative alla progettazione	X	Relazione sugli esami e sulle prove così e di procedura o la descrizione dei controlli previsti	X

Conclusioni dell'esame

Dall'esame del fascicolo tecnico e dalle prove eseguite risulta che il tipo soddisfa i requisiti essenziali dell'allegato I della Direttiva 97/23/CE

Condizioni di validità dell'attestato

Tutte le modifiche al tipo dovranno sono soggette ad ulteriore approvazione qualora tali modifiche possano influire sulla conformità ai requisiti essenziali o modalità di uso. Tale nuova approvazione verrà rilasciata sotto forma di un complemento dell'attestato originale. Il Fascicolo CE del Tipo è riferendo è soggetto alle condizioni generali di PASCAL allegate alla domanda di trattamento firmata dal fabbricante.

DATA PRIMA EMISSIONE 21/02/2002	Presidente PASCAL (Dott. Maurizio Brancaleoni)
DATA EMISSIONE CORRENTE 31/05/2006	

PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

N. PA004 Rev. 1

FOGLIO 2 / 3

Allegato I

VARIANTI

Designazione valvola: CIM ...	Gamma di diametri disponibili DN [mm]
...73, 74	tutta la gamma di DN riportata
...61, 62, 727, 736, 737, 721, 727PRS, 737PRS, 746, 747, 747OT, 747OTPRS, 747PRS, 748	Da 32 a 50

DATI CARATTERISTICI

DN	PS	PN	PSxDN	Categoria di rischio con idrocarburi Liquidi* (tab.6)	Categoria di rischio con aria o vapore (tab.7)	Categoria di rischio con idrocarburi Liquidi (tab. 8)	Categoria di rischio con Acqua (tab. 9)
32	20	20	640	I	art. 3.3	art. 3.3	art. 3.3
40	20	20	800	I	art. 3.3	art. 3.3	art. 3.3
50	20	20	1000	I	art. 3.3	art. 3.3	art. 3.3
65	20	20	1300	II	I	art. 3.3	art. 3.3
80	20	20	1600	II	I	art. 3.3	art. 3.3
100	20	20	2000	II	I	art. 3.3	art. 3.3

NOTE: * con tensione di vapore alla Tmax, superiore di 0,5 bar della Patm

DATA PRIMA EMISSIONE 21/02/2002	Presidente PASCAL (Dott. Maurizio Brancaleoni)
DATA EMISSIONE CORRENTE 31/05/2006	

PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

N. PA004 Rev. 1

FOGLIO 3 / 3

Allegato II

TEMPERATURE DI ESERCIZIO

Designazione valvola: CIM ...	Temperatura massima [°C]	Temperatura minima [°C]
...73, 74, 61, 62	100 °C (20 bar) 180 ° C (0 bar)	- 10 °C
... 727, 736, 737, 721, 727PRS, 737PRS, 746, 747, 747OT, 747OTPRS, 747PRS, 748	100 °C (20 bar) 120 ° C (1 bar)	- 10 °C

DATA PRIMA EMISSIONE 21/02/2002	Presidente PASCAL (Dott. Maurizio Brancaleoni)
DATA EMISSIONE CORRENTE 31/05/2006	

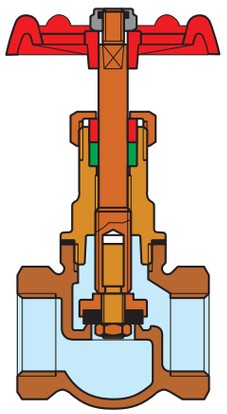
valve

cimberio®

technological solutions

High accuracy balancing and flow measurement valves

Cimberio industrial valves



EN ISO 9001:2000

Body	Bronze EN 1982 CC491K
Bonnet	Brass EN 12165 CW617 N
Stem	Brass EN 12164 CW617 N
Gland nut	Brass EN 12164 CW617 N
Gland	Brass EN 12164 CW617 N
Gland Packing	AF 15/MA
Packing	NA 1100
Disc Holder	Brass EN 12164 CW617 N
Disc	P.T.F.E.
Disc nut	Brass EN 12164 CW617 N
Self locking nut	Steel
Handwheel	Aluminium EN AB 46100

SERVICE RECOMMENDATIONS:

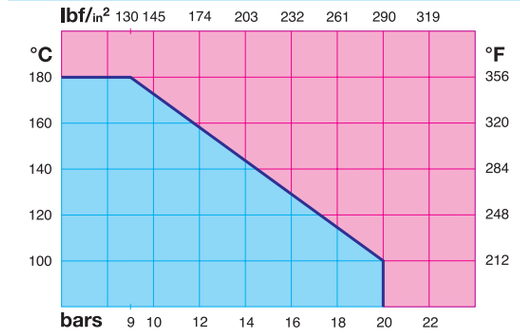
The **industrial valves** can be used in many installations among industrial and agricultural applications: heating plants, sanitary systems, plumbing services, compressed air, steam networks, gasoline and other hydrocarbons networks.

The globe valves are specially recommended in all installations where a fine and efficient regulation of the media is required.

The check valves Cimberio can be installed in pipelines to permit flow in one direction only, and close automatically if the flow reverses. The flow velocity of the media keeps the valve open whilst back pressure or gravity cause automatic shut-off thereby preventing flow reversal.

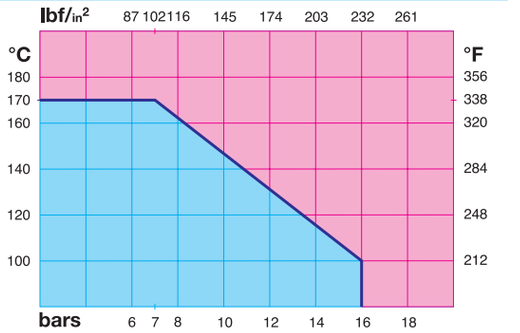
WORKING PRESSURE AND TEMPERATURE

cim 61 - 62 - 73 - 74 - 74A - 74 ACR - 81 - 60 - 79A



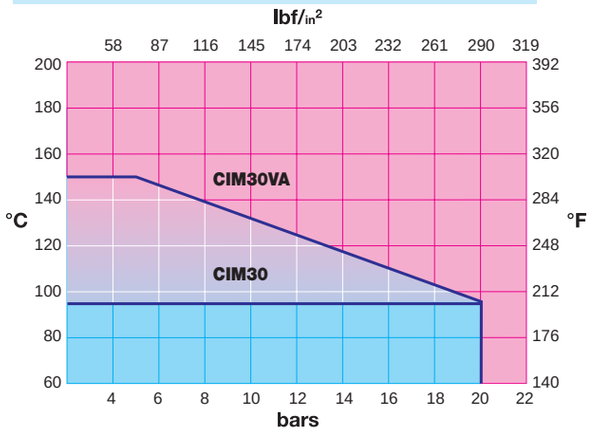
Cold service: 20 bar from –10 up to 100°C
Saturated steam: 9 bar at 180°C

cim 75 - 76 - 81L - 82 - 78 - 77 - 79



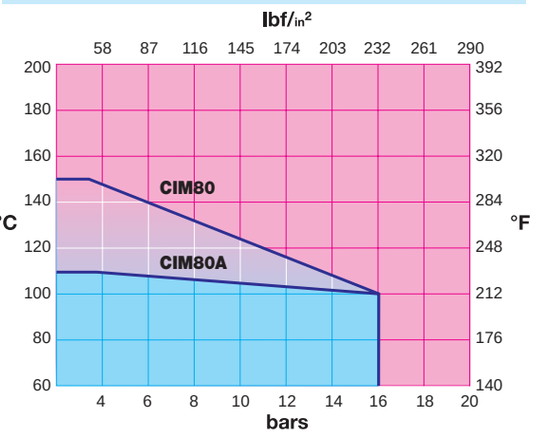
Cold service: 16 bar from –10 up to 100°C
Saturated steam: 7 bar at 170°C

cim 30 - 30VA - 30DK - 30PRS



Cold service: 20 bar from –10 up to 95°C
Saturated steam: 4 bar at 150°C

cim 80 - 80A

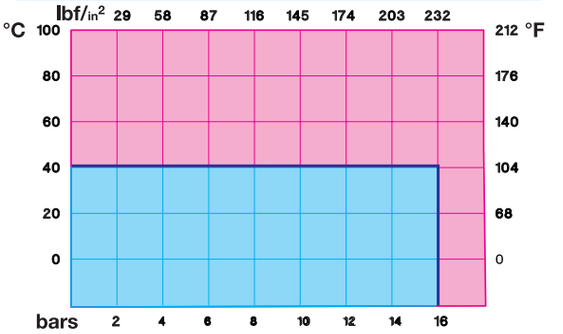


Cold service: 16 bar from –10 up to 100°C
Saturated steam: 4 bar at 150°C

cim 32 - 33CREA - 33CREA RB - 33CREA PRS

Cold service: 16 bar from –10 up to 95°C

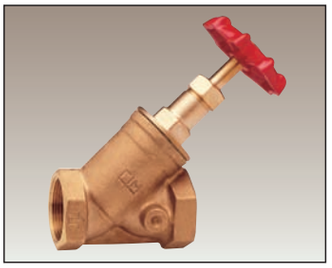
cim 95 - 95A



Cold service: 16 bar from –10 up to 40°C

cim 61

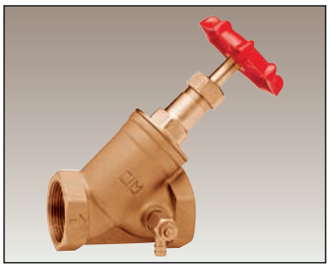
BRONZE OBLIQUE VALVE
WITH SPRING-LOADED NON RETURN VALVE - PN 20



DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	25	25	15	10	6	4	2			
Cart.	100	100	60	40	24	16	8			

cim 62

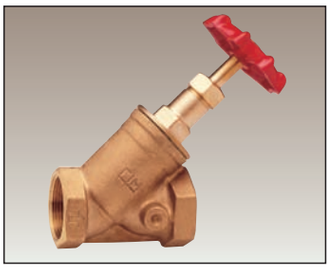
BRONZE OBLIQUE VALVE WITH SPRING LOADED N. R. VALVE
AND DRAIN COCK AND PLUG - PN 20



DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	25	25	15	10	6	4	2			
Cart.	100	100	60	40	24	16	8			

cim 73

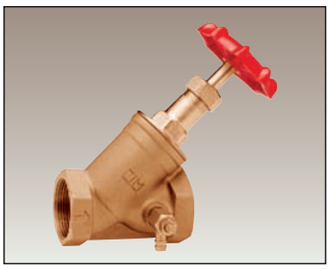
BRONZE OBLIQUE VALVE WITHOUT DRAIN - PN 20



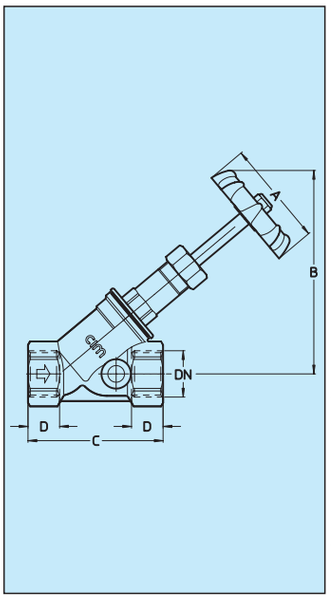
DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	25	25	15	10	6	4	2	2	1	1
Cart.	100	100	60	40	24	16	8	4	2	2

cim 74

BRONZE OBLIQUE VALVE WITH DRAIN AND PLUG - PN 20



DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	25	25	15	10	6	4	2	2	1	1
Cart.	100	100	60	40	24	16	8	4	2	2



	Cim 61 - Cim 62					Cim 73 - Cim 74				
DN	Grms.	A	B	C	D	Grms.	A	B	C	D
3/8	315	50	85	56	11	290	50	85	56	11
1/2	355	55	90	59	11	330	55	90	59	11
3/4	520	60	115	68	12	470	60	115	68	12
1"	810	65	135	76	14	690	65	135	76	14
1 1/4"	1160	75	160	92	15	1090	75	160	92	15
1 1/2"	1350	80	174	100	15	1390	80	174	100	15
2"	2250	90	210	125	18	2300	90	210	125	18
2 1/2"	–	–	–	–	–	3970	120	255	147	21
3"	–	–	–	–	–	5860	140	310	175	24
4"	–	–	–	–	–	10940	175	360	217	28

cim 74 A

BRONZE OBLIQUE STRAINER - PN 20

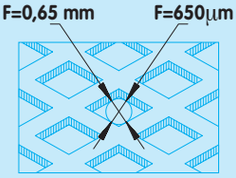
DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	50	50	30	20	12	10	4	4	1	1
Cart.	200	200	120	80	48	40	16	8	6	2

cim 74 AO

BRASS OBLIQUE STRAINER - PN 20

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box		50	30	20	12	10	4
Cart.		200	120	80	48	40	16

F=0,65 mm F=650µm



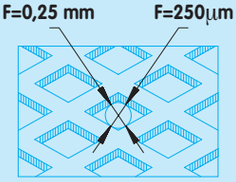
Mesh	N. holes cm²
30	52

cim 74 ACR

OBLIQUE STRAINER - IN DZR BRASS "CR" ALLOY - PN 20

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box		50	30	20	10	8	4
Cart.		200	120	80	40	32	16

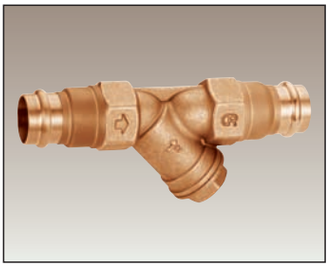
F=0,25 mm F=250µm



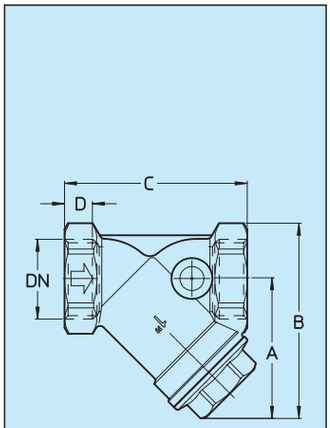
Mesh	N. holes cm²
60	280

cim 74 ACRP

OBLIQUE STRAINER - IN DZR BRASS "CR" ALLOY - PRESSFITTING - PN 20



DN		15x15	18x18	22x22	28x28	35x35	42x42	54x54		
Box		50	25	15	10	8	4	4		
Cart.		200	100	60	40	32	16	16		



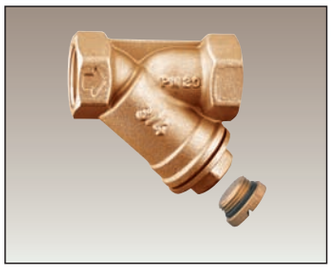
	Cim 74 A					Cim 74 AO					Cim 74 ACR						Cim 74 ACRP				
DN	Grms.	A	B	C	D	Grms.	A	B	C	D	Grms.	A	B	C	D	DN	Grms.	A	B	C	D
3/8	190	38	51	55	11	-	–	–	–	–	-	–	–	–	–	15x15	365	39	54	155	39,8
1/2	230	40	56	59	11	185	40	56	59	11	210	39	54	68	15	18x18	495	49,5	68	165	41,3
3/4	315	46	65	68	12	285	50	70	68	13,5	315	49,5	68	77	16,3	22x22	520	49,5	68	170	44
1"	485	58	81	76	14	405	60	83	76	13,5	455	59	82	91	19,1	28x28	770	59	82	280	44
1 1/4"	765	70	99	92	15	650	71	100	92	15	760	70	99	108	21,4	35x35	1200	70	99	202	43
1 1/2"	935	80	111	100	15	870	81,5	112,5	100	15	975	81	112	116	21,4	42x42	1565	81	112	220	48
2"	1710	100	140	125	18	1675	100	140	125	19	1825	99	138,5	143	25,7	54x54	2730	99	138,5	265	54
2 1/2"	2510	115	163	147	21																
3"	4230	136	195	175	24																
4"	7040	167	240	217	28																

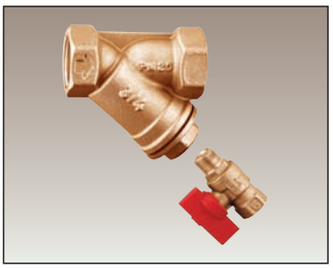
STRAINER: stainless steel 18/8
mm 0,65 suitable for water - mm 0,25 suitable for gas
Double tightening gasket between body and cap:
NA 1100 Fibre - O'ring HNBR

cim 74 A/1

BRONZE OBLIQUE STRAINER - PN 20
WITH DRAIN PLUG — **WITH DRAIN VALVE**

cim 74 A/2



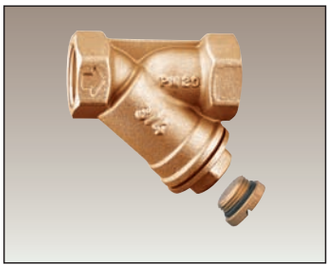


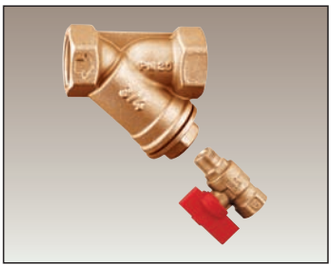
DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	50	30	20	12	10	4
Box	50	30	20	12	10	4

cim 74 AO/1

BRASS OBLIQUE STRAINER - PN 20
WITH DRAIN PLUG — **WITH DRAIN VALVE**

cim 74 AO/2



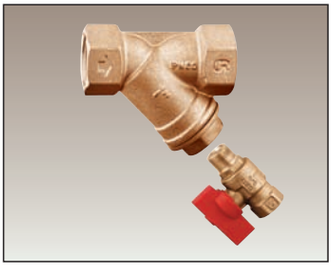


DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	50	30	20	12	10	4
Box	50	30	20	12	10	4

cim 74 ACR/1

OBLIQUE STRAINER - IN DZR BRASS "CR" ALLOY - PN 20
WITH DRAIN PLUG — **WITH DRAIN VALVE**

cim 74 ACR/2

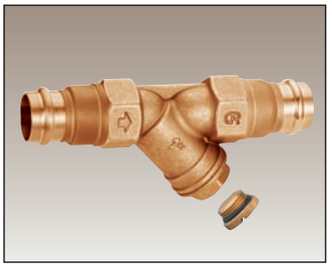


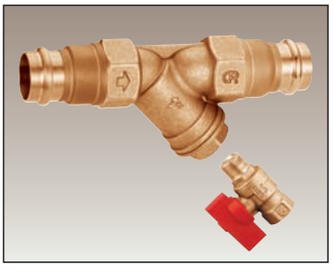
DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	50	30	20	10	8	4
Box	50	25	15	10	8	4

cim 74 ACRP/1

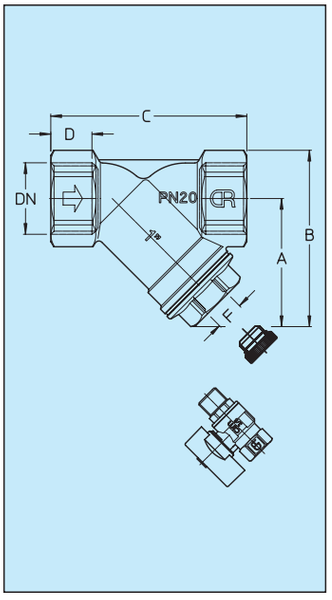
OBLIQUE STRAINER - IN DZR BRASS "CR" ALLOY PRESSFITTING - PN 20
WITH DRAIN PLUG — **WITH DRAIN VALVE**

cim 74 ACRP/2





DN	15x15	18x18	22x22	28x28	35x35	42x42	54x54
Box	50	25	15	10	8	4	4
Box	50	25	15	10	8	4	4



	Cim 74 A/1 - Cim 74A/2						Cim 74 AO/1 - Cim 74AO/2						Cim 74 ACR/1 - Cim 74ACR/2							Cim 74 ACRP/1 - Cim 74ACRP/2					
DN	Grms.	A	B	C	D	F	Grms.	A	B	C	D	F	Grms.	A	B	C	D	F	DN	Grms.	A	B	C	D	F
3/8	-	–	–	–	–	–	-	–	–	–	–	–	-	–	–	–	–	–	15x15	365	39	54	151,6	39,8	G1/4
1/2	230	40	56	59	11	G1/4	185	40	56	59	11	G1/4	215	39	54	68	15	G1/4	18x18	490	49,5	68	161,4	41,3	G1/4
3/4	315	50	65	68	12	G1/4	285	50	70	68	13,5	G1/4	325	49,5	68	77	16,3	G1/4	22x22	515	49,5	68	170	44	G1/4
1"	485	60	81	76	14	G3/8	405	60	83	76	13,5	G3/8	500	59	82	91	19,1	G3/8	28x28	815	59	82	185,3	44	G3/8
1 1/4"	765	70	99	92	15	G3/8	650	71	100	92	15	G3/8	850	70	99	108	21,4	G3/8	35x35	1285	70	99	202	43	G3/8
1 1/2"	935	80	111	100	15	G3/8	870	81,5	112,5	100	15	G3/8	1030	81	112	116	21,4	G3/8	42x42	1620	81	112	219	48	G3/8
2"	1710	100	140	125	18	G3/8	1675	100	140	125	19	G3/8	1885	99	138,5	143	25,7	G3/8	54x54	2805	99	138,5	263	54	G3/8

STRAINER: stainless steel 18/8 - mm 0,65 suggested for water
Double tightening gasket between body and cap: NA 1100 Fibre - O'ring HNBR

cim 75

BRONZE GLOBE VALVE - PN 16
METAL TO METAL SEATING — **P.T.F.E. DISC**

cim 81 L

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	50	35	25	16	8	6	4	2	1	1
Cart.	200	140	100	64	32	24	16	6	4	2

cim 81

BRONZE GLOBE VALVE - P.T.F.E. DISC - STANDARD TYPE - PN 20

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	30	25	18	10	8	4	2			
Cart.	120	100	72	40	32	16	8			

cim 78

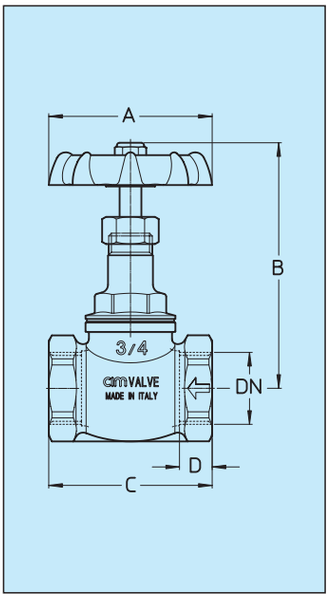
BRONZE CHECK VALVE METAL TO METAL SEATING - PN 16

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	50	50	50	30	15	12	6	4	2	1
Cart.	200	200	200	120	60	48	24	12	8	4

cim 79 A

BRONZE LIFT CHECK VALVE - P.T.F.E. DISC - PN 20

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	50	50	25	15	12	6	4	4	2	1
Cart.	200	200	100	60	48	24	16	12	8	4



	Cim 75					Cim 81 L					Cim 81					Cim 78					Cim 79 A				
DN	Grms.	A	B	C	D	Grms.	A	B	C	D	Grms.	A	B	C	D	Grms.	A	B	C	D	Grms.	A	B	C	D
3/8	225	50	75	45	9	225	50	80	45	9	305	55	95	57	11	160	–	30	45	9	225	–	32,5	58	11
1/2	295	55	77,5	50	11	295	55	83	50	11	370	55	97	60	11	205	–	30	50	11	280	–	36	60	12
3/4	420	60	90,5	60	12	415	60	95	61	12	545	60	109	70	10	315	–	35	60	12	450	–	40	70	12
1"	640	65	100,5	70	14	640	65	105	70	14	905	65	127	84	15	520	–	41	70	14	800	–	49	84	14
1 1/4"	950	65	117	85	16	950	65	125	85	16	1170	75	149	92	16	860	–	49	85	16	970	–	56	92	16
1 1/2"	1230	75	131	90	16	1225	75	150	90	16	1660	80	158	107	18	1060	–	56	90	16	1500	–	60	107	18
2"	1890	80	145	110	18	1860	80	165	110	18	3010	90	174	126	19	1710	–	63	110	18	2640	–	71,5	126	19
2 1/2"	4120	120	201	135	23	3950	120	225	135	23	-	–	–	–	–	3320	–	73,5	135	23	3450	–	73,5	135	23
3"	5270	120	224	148	22	5265	120	255	146	22	-	–	–	–	–	4250	–	88	148	22	4450	–	88	148	22
4"	10060	175	279,5	190	23	10690	175	320	190	23	-	–	–	–	–	8560	–	110	190	23	8480	–	110	190	23

cim 76

FLANGED BRONZE GLOBE VALVE METAL TO METAL SEATING - PN 16
DRILLING TO PN 6 - PN 10 - PN16

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
mm.	15	20	25	32	40	50	70	80	100

cim 82

FLANGED BRONZE GLOBE VALVE - P.T.F.E. DISC - PN 16
DRILLING TO PN 6 - PN 10 - PN 16

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
mm.	15	20	25	32	40	50	70	80	100

cim 77

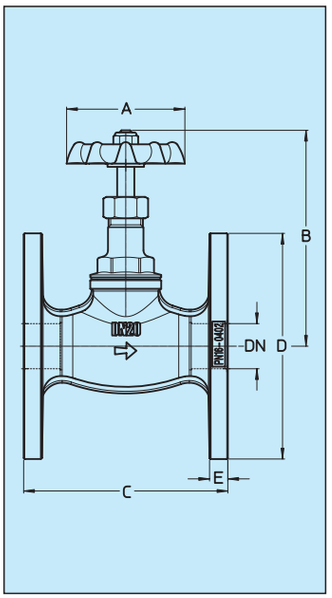
FLANGED BRONZE CHECK VALVE METAL TO METAL SEATING
DRILLING TO PN 6 - PN10 - PN16

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
mm.	15	20	25	32	40	50	70	80	100

cim 79

FLANGED BRONZE LIFT CHECK VALVE - P.T.F.E. DISC - PN 16
DRILLING TO PN 6 - PN 10 - PN 16

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
mm.	15	20	25	32	40	50	70	80	100

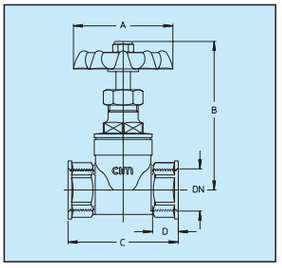


		Cim 76						Cim 82						Cim 77 - Cim 79			
DN	mm.	Grms.	A	B	C	D	E	Grms.	A	B	C	D	E	Grms.	C	D	E
1/2	15	1240	55	98	84	95	8	1230	55	98	84	95	8	1220	84	95	8
3/4	20	1720	55	108	95	105	8	1710	55	108	95	105	8	1650	95	105	8
1"	25	2290	65	120	105	120	9,5	2295	65	120	105	120	9,5	2330	105	120	9,5
1 1/4"	32	3330	65	130	115	140	9,5	3315	65	130	115	140	9,5	3450	115	140	9,5
1 1/2"	40	4610	80	155	134	150	11	4625	80	155	134	150	11	4430	134	150	11
2"	50	6100	80	165	156	165	11	6000	80	165	156	165	11	5750	156	165	11
2 1/2"	70	8890	120	210	170	185	13	8840	120	210	170	185	13	8050	170	185	13
3"	80	11650	120	265	180	200	13	11500	120	265	180	200	13	10270	180	200	13
4"	100	18110	175	305	200	230	17	17860	175	305	200	230	17	16140	200	230	17

cim 60

HOT PRESSED STOP COCK HEAVY TYPE - PN 20

DN	3/8	1/2	3/4	1"
Box	50	35	25	16
Cart.	200	140	100	64



DN	3/8	1/2	3/4	1"
Grms.	230	290	420	650
A	50	55	55	65
B	80	91	98	110
C	52	57	63	73
D	10	12	14	14

cim 80

BRASS SWING CHECK VALVE - METAL TO METAL SEATING - PN 16

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box		50	25	20	12	10	5	4	2	2
Cart.		200	100	80	48	40	20	16	8	4

cim 80 A

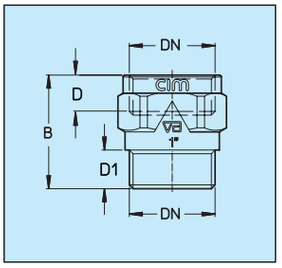
BRASS SWING CHECK VALVE - RENEWABLE EPDM DISC - PN 16

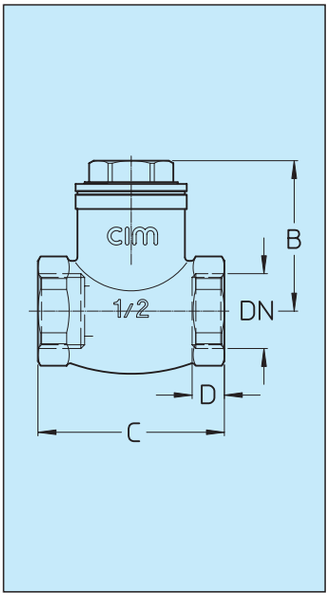
DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box		50	25	20	12	10	5	4	2	2
Cart.		200	100	80	48	40	20	16	8	4

cim 32

SPRING-LOADED CHECK VALVE - PN 16

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box		50	50	25	15	10	8
Cart.		200	200	100	60	40	32





	Cim 80 - Cim 80 A				Opening pressure inner valve O = horiz. inst. - V = vert. inst.				Cim 32			
DN	Grms.	B	C	D	Cim 80		Cim 80/A		Grms.	B	D	D1
3/8	–	–	–	–	O	V	O	V	–	–	–	–
1/2	230	42	52	13	0,7	11	0,7	11	50	33	13,5	14,5
3/4	335	45	62	13	0,7	9	0,7	9	95	38	13,5	14,5
1"	480	53	70	14	0,7	9	0,7	9	160	44	15	15,5
1 1/4"	720	61	84	16	0,7	8	0,7	8	260	49	17	17
1 1/2"	880	62,5	87	16	0,7	8	0,7	8	360	57	19	19
2"	1455	70	106	17	0,7	9	0,7	9	715	75	22	20
2 1/2"	2080	86	118,5	23	0,4	9	0,4	9				
3"	3010	94	136,5	28	0,4	9	0,4	9				
4"	5550	115	170	25	0,5	9	0,5	9				

The spring loaded inner valve opens and lifts with a pressure of 10 mbar (0,14 psi)

cim 30

"SPRINT" SPRING-LOADED CHECK VALVE - PN 20

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	50	50	25	20	12	8	5	4	3	2
Cart.	200	200	100	80	48	32	20	12	6	4

cim 30 DK

"SPRINT" SPRING-LOADED CHECK VALVE FOR HYDROCARBONS - PN 20

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	50	50	25	20	12	8	5	4	3	2
Cart.	200	200	100	80	48	32	20	12	6	4

cim 30 VA

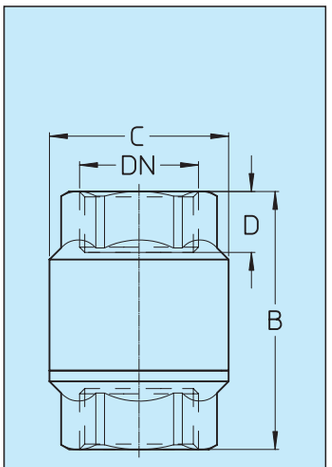
"SPRINT" SPRING-LOADED CHECK VALVE FOR STEAM - 4 BAR - 150°C

DN	3/8	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	50	50	25	20	12	8	5	4	3	2
Cart.	200	200	100	80	48	32	20	12	6	4

cim 30 PRS

"SPRINT" SPRING-LOADED CHECK VALVE - PRESSFITTING - PN 20

DN	15x15	18x18	22x22	28x28	35x35	42x42	54x54			
Box	30	30	30	15	10	5	2			
Cart.	120	120	120	60	40	20	8			

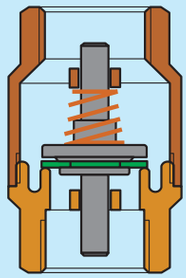


	Cim 30 - Cim 30 DK - Cim 30 VA					Cim 30 PRS		
DN	Grms.	B	C	D	DN	Grms.	B	D
3/8	175	55	35	10	15x15	310	140	39,8
1/2	155	55	35	12	18x18	420	150	41,3
3/4	240	62	42	13	22x22	445	155	44
1"	370	72	50	14	28x28	685	170	44
1 1/4"	480	82	60	16	35x35	920	175	43
1 1/2"	915	96	70	18	42x42	1505	200	48
2"	1320	109	83	20	54x54	2225	230	54
2 1/2"	2505	129	103	25				
3"	3490	141	123	25				
4"	5140	146	160	26				

The inner valve opens and lifts with a pressure of 25 mbar (0,36 psi)

Inner valve: Cim 30: hostaform; Cim 30/DK: hostaform; Cim 30/VA: PPS

Inn. val. gasket: Cim 30: EPDM; Cim 30/DK: FKM; Cim 30/VA: EPDM PEROX



Body	Brass EN 12165 CW617N
Screwed end	Brass EN 12165 CW617N
Inner valve	Hostaform
Inner valve gasket	EPDM
Spring	stainless steel 18/8

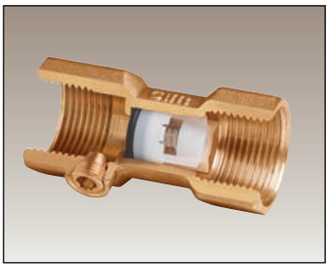
CONTROLLABLE ANTI-POLLUTION CHECK VALVE

The **CIM33CREA** CONTROLLABLE ANTI-POLLUTION check valve is manufactured in accordance with the EN 1717 Class EA European Standard.
This standard deals with methods for preventing the contamination of potable water as a result of backflow. The hygienic protection of the water supply system is achieved by using components fabricated from materials compatible with potable water, guarding against cross connections, preventing backflow and ensuring that the components are controllable.

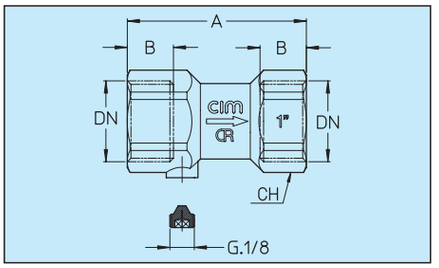
Manufactured in **"CR"** (dezincification resistant) brass, this valve can be installed in any position, and will allow only uni-directional flow.
The valve opens automatically when the upstream pressure is greater than downstream pressure. If the downstream pressure is greater, or a "no flow" situation exists, the valve is closed by the action of a spring.
The spring valve is KIWA, WRC, NF, DVGW approved.
Opening pressure 10 mbar. Working temperature from -10° until 95°C.

cim 33 CREA

CONTROLLABLE ANTI POLLUTION CHECK VALVE IN DZR BRASS "CR" ALLOY - PN 16



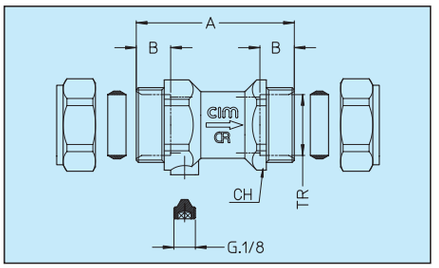
DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	40	24	20	20	15	10
Cart.	160	96	80	80	60	40



cim 33 CREARB

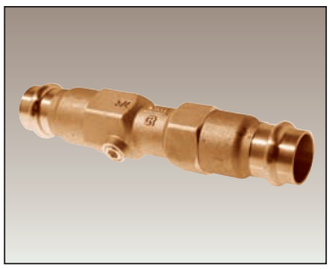
CONTROLLABLE ANTI-POLLUTION CHECK VALVE IN DZR BRASS "CR" ALLOY COMPRESSION ENDS - PN 16

mm.	15x15		22x22	28x28			
Box	25		20	12			
Cart.	100		80	48			

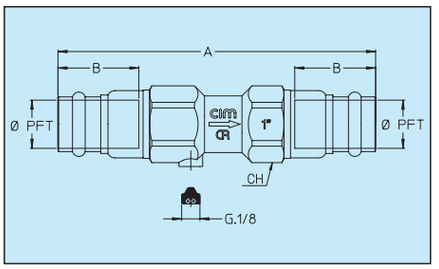


cim 33 CREAPRS

CONTROLLABLE ANTI-POLLUTION CHECK VALVE IN DZR BRASS "CR" ALLOY PRESS ENDS - PN 16



mm.	15x15	18x18	22x22	28x28	35x35	42x42	54x54
Box	20	15	15	10	8	4	2
Cart.	80	60	60	40	32	16	8



Opening pressure inner valve: 10mbar

Body	CW602N
Housing	POM
Valve	POM
Torpedo	POM
Seal	NBR
Spring	Stainless steel 18/8
O-Ring	NBR
Plug	CW602N

		Cim 33 CREA					Cim 33 CREARB				Cim 33 CREAPRS			
DN	THRD.	Grms.	A	B	CH	mm.	Grms.	A	B	CH	Grms.	A	B	CH
1/2		115	59,5	15	25	15x15	174	59,5	13	25	267	143	39,8	25
3/4	ISO7/1	173	67	16,3	31	18x18	–	–	–	–	350	151,5	41,3	31
1"		271	78	19,1	38	22x22	249	67	15	31	377	160	44	31
1 1/4"		350	76	15	47	28x28	400	78	16	38	585	172	44	38
1 1/2"	ISO228	510	86	17	54	35x35	–	–	–	–	786	170	43	47
2"		780	102	18	66	42x42	–	–	–	–	1055	189	48	54
–		–	–	–	–	54x54	–	–	–	–	1650	222	54	66

cim 95

FILTERING FOOT VALVE - PN 16

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
Box	50	40	24	15	12	7	3	2	2	1	
Cart.	200	160	96	60	48	28	12	8	4	2	1

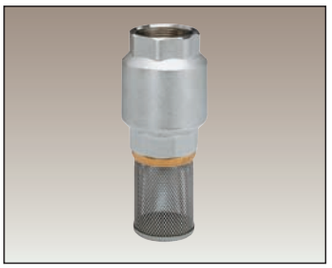
cim 95 A

FILTERING FOOT CHECK VALVE - PN 16
Filtering Foot in Inox from 1/2 to 1 1/2" in Brass from 2" to 4"

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
Box	50	50	30	15	10	7	2	2	2		
Cart.	200	200	120	60	40	28	12	12	4		

cim 30 A

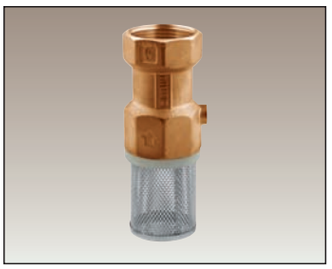
"SPRINT" SPRING-LOADED FILTERING FOOT VALVE - PN 20 Filtering Foot in Inox



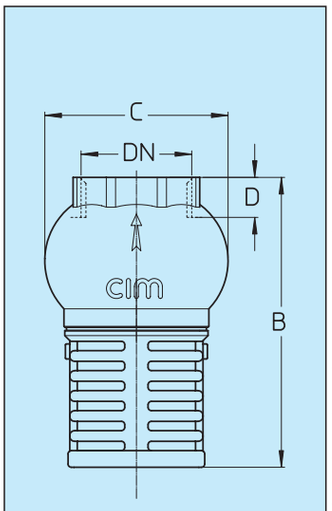
DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
Box	20	14	12	5	5	2	2	2	1		
Cart.	80	56	48	20	20	8	8	4	2		

cim 33 ACREA

FILTERING FOOT VALVE "TYPE 33 CREA" - "CR" - PN 16 - Filtering Foot in Inox



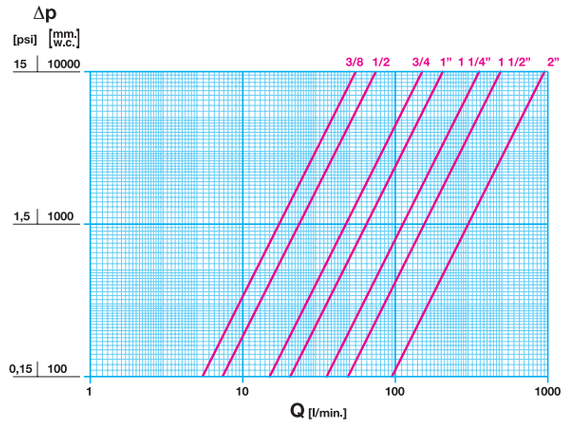
DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
Box	20	14	12	5	5	2					
Cart.	80	56	48	20	20	8					



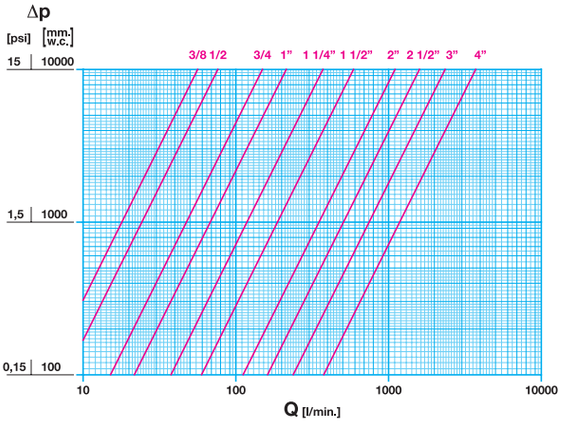
	Cim 95				Cim 95 A				Cim 30 A				Cim 33 ACREA			
DN	Grms.	B	C	D	Grms.	B	C	D	Grms.	B	C	D	Grms.	B	C	D
1/2	185	62	39	9	130	97	26	10	165	98	35	12	126,5	103	31	15
3/4	275	76	46	11	225	114	32	12	270	110	42	13	188	114,5	37	16,3
1"	375	87	55	11	310	130	38	13	415	120	50	14	294,5	125,5	44,5	19,1
1 1/4"	495	98	64	13	480	145	47	15	620	134,5	60	16	383	133	53	15
1 1/2"	640	106	69	13	695	169	54	15	960	163	70	18	550	153	59,5	17
2"	1010	120	87	13	1220	171	66	22	1375	192	83	20	836	185	72	18
2 1/2"	1910	145	108	15	2205	208	83	20	2600	213	103	25	-	-	-	-
3"	2465	160	126	15	2940	228	96	20	3615	240	123	25	-	-	-	-
4"	4870	209	166	17	4890	259	123	24	5310	260,5	160	26	-	-	-	-
5"	11950	290	200	19	-	-	-	-	-	-	-	-	-	-	-	-
6"	14850	336	235	21	-	-	-	-	-	-	-	-	-	-	-	-

Flow and pressure drop

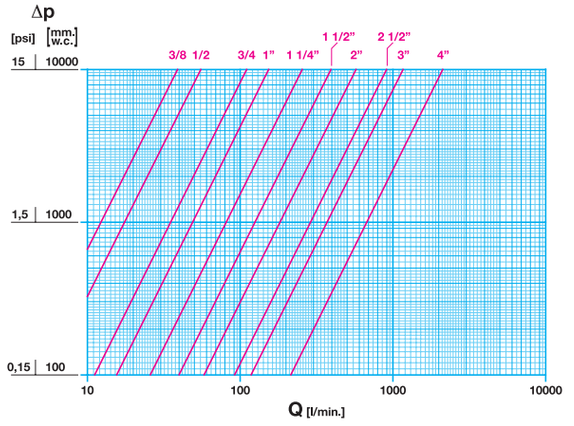
cim 61 - 62



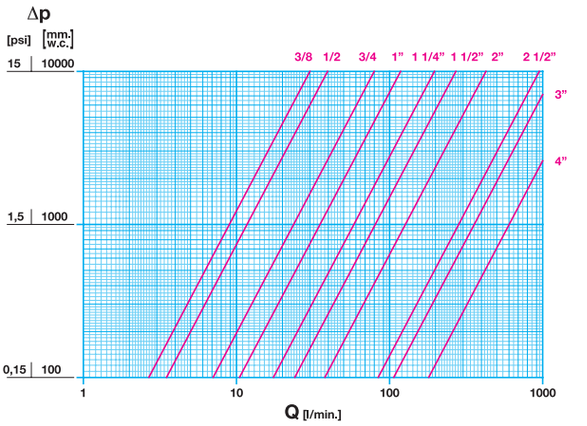
cim 73 - 74



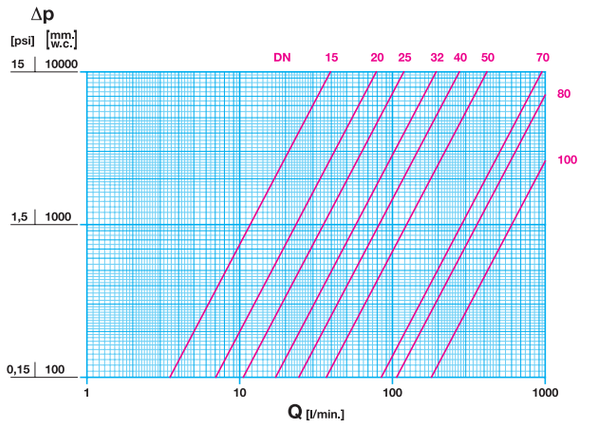
cim 74A - 74ACR - 74AO



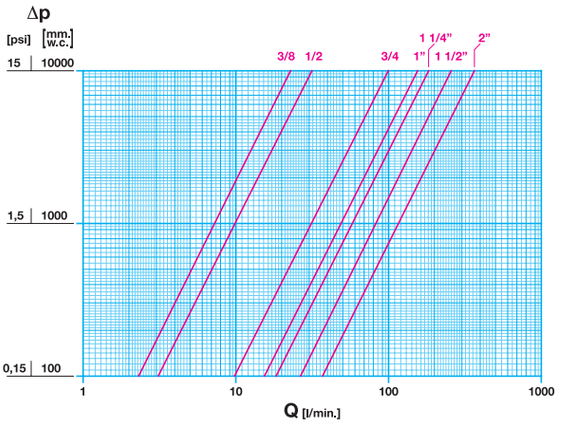
cim 75 - 81L



cim 76 - 82

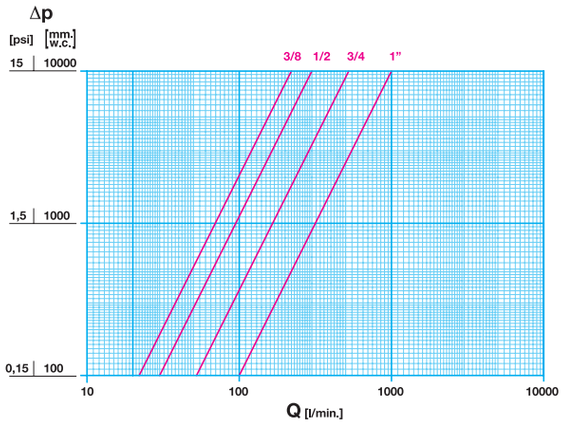


cim 81

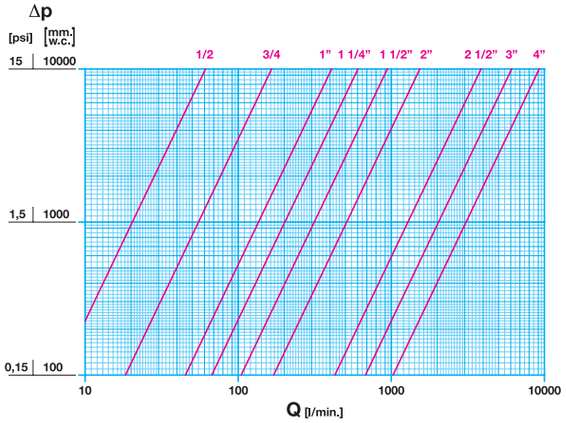


Flow and pressure drop

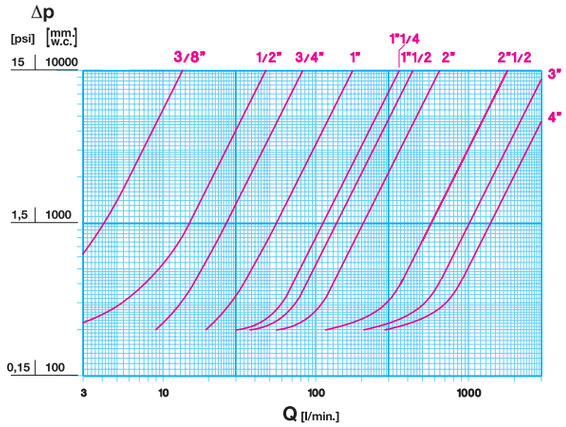
cim 60



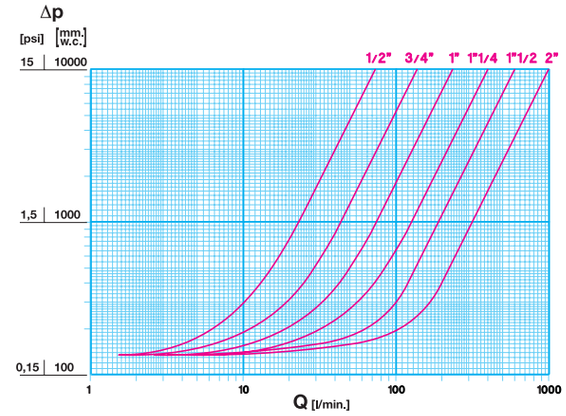
cim 80 - 80 A



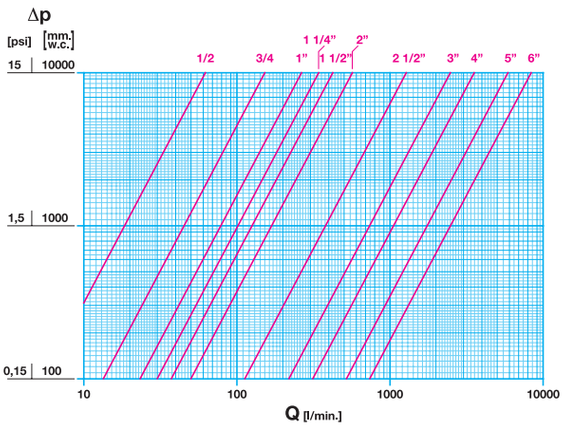
cim 30



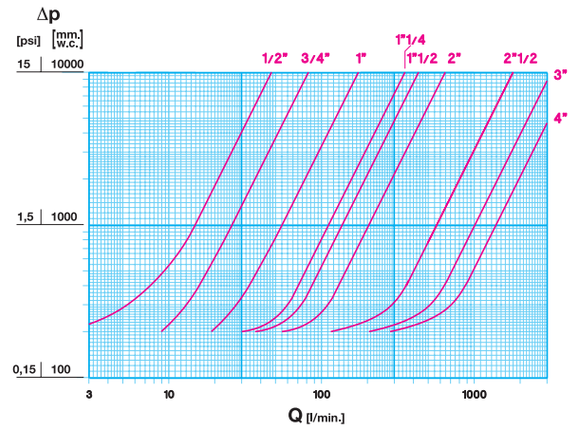
cim 32 - 33 CREA

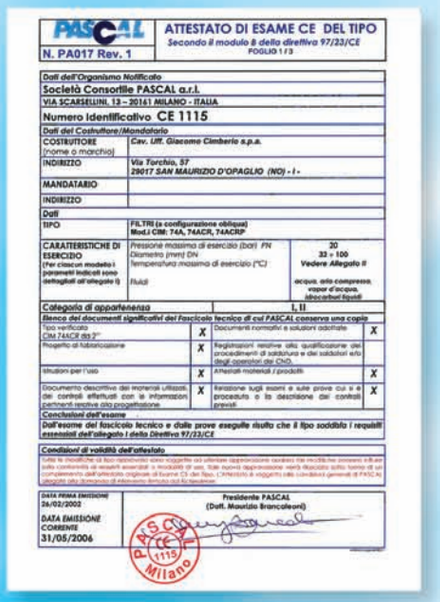


cim 95



cim 30A





PASCAL — ATTESTATO DI ESAME CE DEL TIPO
Secondo il modulo B della direttiva 97/23/CE
N. PA017 Rev. 1 — FOGLIO 1 / 3

Dati dell'Organismo Notificato
Società Consortile PASCAL a.r.l.
VIA SCARSELLINI, 13 – 20161 MILANO - ITALIA
Numero identificativo CE 1115

Dati del Costruttore/Mandatario

COSTRUTTORE (nome o marchio)	Cav. Uff. Giacomo Cimberio s.p.a.	
INDIRIZZO	Via Torchio, 57 29017 SAN MAURIZIO D'OPAGLIO (NO) - I -	
MANDATARIO		
INDIRIZZO		

Dati

TIPO	FILTRI (a configurazione obliqua) Mod.i CIM: 74A, 74ACR, 74ACRP	
CARATTERISTICHE DI ESERCIZIO (Per ciascun modello i parametri indicati sono dettagliati all'allegato I)	Pressione massima di esercizio (bar) PN Diametro (mm) DN Temperatura massima di esercizio (°C) Fluidi	20 32 ÷ 100 Vedere Allegato II acqua, aria compressa, vapor d'acqua, idrocarburi liquidi
Categoria di appartenenza		I, II

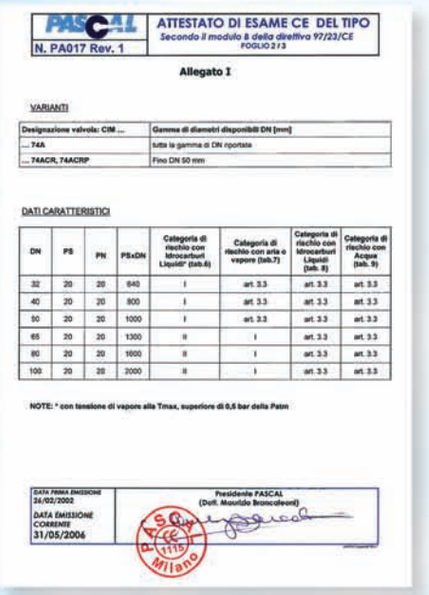
Elenco dei documenti significativi del Fascicolo tecnico di cui PASCAL conserva una copia

Tipo verificato CIM 74ACR dis 2"	X	Documenti normativi e soluzioni adottate	X
Progetto di fabbricazione	X	Registrazioni relative alla qualificazione dei procedimenti di saldatura e dei saldatori e/o degli operatori dei CND.	
Istruzioni per l'uso	X	Attestati materiali / prodotti	X
Documento descrittivo dei materiali utilizzati, dei controlli effettuati con le informazioni pertinenti relative alla progettazione	X	Relazione sugli esami e sulle prove cui si è proceduto o la descrizione dei controlli previsti	X

Conclusioni dell'esame
Dall'esame del fascicolo tecnico e dalle prove eseguite risulta che il tipo soddisfa i requisiti essenziali dell'allegato I della Direttiva 97/23/CE

Condizioni di validità dell'attestato
Tutte le modifiche al tipo approvato sono soggette ad ulteriore approvazione qualora tali modifiche possano influire sulla conformità ai requisiti essenziali o modalità di uso. Tale nuova approvazione verrà rilasciata sotto forma di un complemento dell'attestato originale di Esame CE del Tipo. L'Attestato è soggetto alle condizioni generali di PASCAL allegate alla domanda di intervento firmata dal fabbricante.

DATA PRIMA EMISSIONE	Presidente PASCAL
26/02/2002	(Dott. Maurizio Brancaleoni)
DATA EMISSIONE CORRENTE 31/05/2006	



PASCAL — ATTESTATO DI ESAME CE DEL TIPO
Secondo il modulo B della direttiva 97/23/CE
N. PA017 Rev. 1 — FOGLIO 2 / 3

Allegato I

VARIANTI

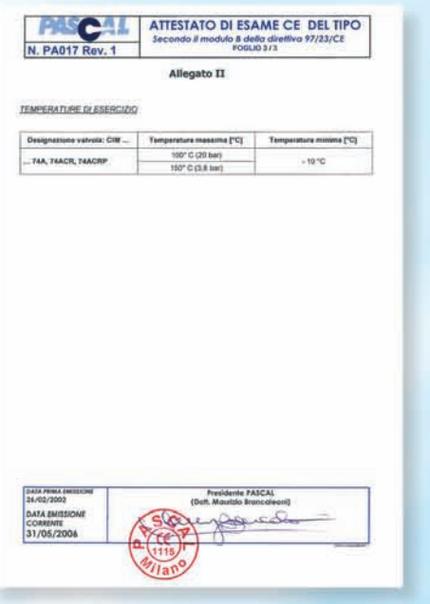
Designazione valvola: CIM ...	Gamma di diametri disponibili DN [mm]
... 74A	tutta la gamma di DN riportata
... 74ACR, 74ACRP	Fino DN 50 mm

DATI CARATTERISTICI

DN	PS	PN	PSxDN	Categoria di rischio con Idrocarburi Liquidi* (tab.6)	Categoria di rischio con aria e vapore (tab.7)	Categoria di rischio con Idrocarburi Liquidi (tab. 8)	Categoria di rischio con Acqua (tab. 9)
32	20	20	640	I	art. 3.3	art. 3.3	art. 3.3
40	20	20	800	I	art. 3.3	art. 3.3	art. 3.3
50	20	20	1000	I	art. 3.3	art. 3.3	art. 3.3
65	20	20	1300	II	I	art. 3.3	art. 3.3
80	20	20	1600	II	I	art. 3.3	art. 3.3
100	20	20	2000	II	I	art. 3.3	art. 3.3

NOTE: * con tensione di vapore alla Tmax, superiore di 0,5 bar della Patm

DATA PRIMA EMISSIONE	Presidente PASCAL
26/02/2002	(Dott. Maurizio Brancaleoni)
DATA EMISSIONE CORRENTE 31/05/2006	



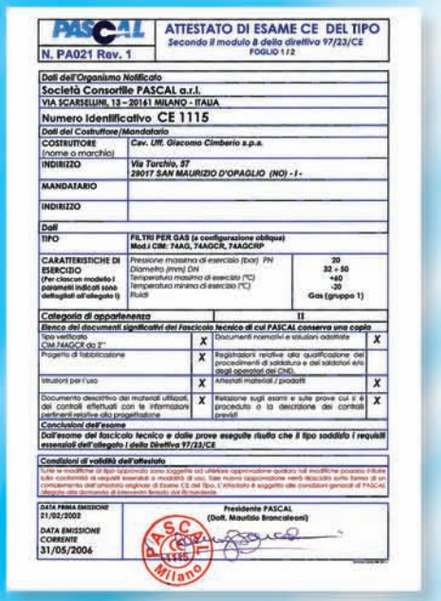
PASCAL — ATTESTATO DI ESAME CE DEL TIPO
Secondo il modulo B della direttiva 97/23/CE
N. PA017 Rev. 1 — FOGLIO 3 / 3

Allegato II

TEMPERATURE DI ESERCIZIO

Designazione valvola: CIM ...	Temperatura massima [°C]	Temperatura minima [°C]
... 74A, 74ACR, 74ACRP	100° C (20 bar) 150° C (3,8 bar)	- 10 °C

DATA PRIMA EMISSIONE	Presidente PASCAL
26/02/2002	(Dott. Maurizio Brancaleoni)
DATA EMISSIONE CORRENTE 31/05/2006	



PASCAL — ATTESTATO DI ESAME CE DEL TIPO
Secondo il modulo B della direttiva 97/23/CE
N. PA021 Rev. 1 — FOGLIO 1 / 2

Dati dell'Organismo Notificato
Società Consortile PASCAL a.r.l.
VIA SCARSELLINI, 13 – 20161 MILANO - ITALIA
Numero identificativo CE 1115

Dati del Costruttore/Mandatario

COSTRUTTORE (nome o marchio)	Cav. Uff. Giacomo Cimberio s.p.a.	
INDIRIZZO	Via Torchio, 57 29017 SAN MAURIZIO D'OPAGLIO (NO) - I -	
MANDATARIO		
INDIRIZZO		

Dati

TIPO	FILTRI PER GAS (a configurazione obliqua) Mod.i CIM: 74AG, 74AGCR, 74AGCRP	
CARATTERISTICHE DI ESERCIZIO (Per ciascun modello i parametri indicati sono dettagliati all'allegato I)	Pressione massima di esercizio (bar) PN Diametro (mm) DN Temperatura massima di esercizio (°C) Temperatura minima di esercizio (°C) Fluidi	20 32 ÷ 50 +60 -20 Gas (gruppo 1)
Categoria di appartenenza		II

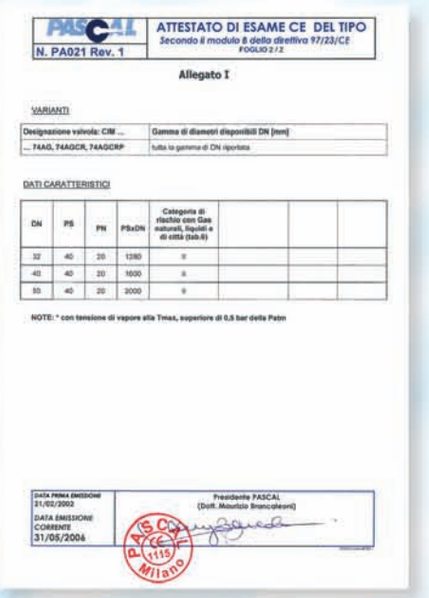
Elenco dei documenti significativi del Fascicolo tecnico di cui PASCAL conserva una copia

Tipo verificato CIM 74AGCR da 2"	X	Documenti normativi e soluzioni adottate	X
Progetto di fabbricazione	X	Registrazioni relative alla qualificazione dei procedimenti di saldatura e dei saldatori e/o degli operatori dei CND.	
Istruzioni per l'uso	X	Attestati materiali / prodotti	X
Documento descrittivo dei materiali utilizzati, dei controlli effettuati con le informazioni pertinenti relative alla progettazione	X	Relazione sugli esami e sulle prove cui si è proceduto o la descrizione dei controlli previsti	X

Conclusioni dell'esame
Dall'esame del fascicolo tecnico e dalle prove eseguite risulta che il tipo soddisfa i requisiti essenziali dell'allegato I della Direttiva 97/23/CE

Condizioni di validità dell'attestato
Tutte le modifiche al tipo approvato sono soggette ad ulteriore approvazione qualora tali modifiche possano influire sulla conformità ai requisiti essenziali o modalità di uso. Tale nuova approvazione verrà rilasciata sotto forma di un complemento dell'attestato originale di Esame CE del Tipo. L'Attestato è soggetto alle condizioni generali di PASCAL allegate alla domanda di intervento firmata dal fabbricante.

DATA PRIMA EMISSIONE	Presidente PASCAL
21/02/2002	(Dott. Maurizio Brancaleoni)
DATA EMISSIONE CORRENTE 31/05/2006	



PASCAL — ATTESTATO DI ESAME CE DEL TIPO
Secondo il modulo B della direttiva 97/23/CE
N. PA021 Rev. 1 — FOGLIO 2 / 2

Allegato I

VARIANTI

Designazione valvola: CIM ...	Gamma di diametri disponibili DN [mm]
... 74AG, 74AGCR, 74AGCRP	tutta la gamma di DN riportata

DATI CARATTERISTICI

DN	PS	PN	PSxDN	Categoria di rischio con Gas naturali, liquidi e di città (tab.6)			
32	40	20	1280	II			
40	40	20	1600	II			
50	40	20	2000	II			

NOTE: * con tensione di vapore alla Tmax, superiore di 0,5 bar della Patm

DATA PRIMA EMISSIONE	Presidente PASCAL
21/02/2002	(Dott. Maurizio Brancaleoni)
DATA EMISSIONE CORRENTE 31/05/2006	

kiwa — Partner for progress

Certificate

Certificate Number: A050232

Date Issued: 16th May 2003

CIM Strainer
Model: CIM 74A
Sizes: 3/8" to 4"

This is to certify that the above range of products manufactured by

Giacomo Cimberio s.p.a.

has been tested and found to comply with the requirements of the Water Supply (Water Fittings) Regulations 1999 for England and Wales, the Water Byelaws 2000, Scotland and the Water Regulations Northern Ireland.

To comply with the Regulations and Byelaws all products require the correct installation. Details of the installation requirements may be obtained from the installation instructions supplied with the products.

D. J. Hodges
Director
Kiwa Quality Services Ltd

Manufacturer
Giacomo Cimberio s.p.a.
Via Torchio, 57
29017 San Maurizio D'Opaglio
Italy

kiwa

PASCAL — ATTESTATO DI ESAME CE DEL TIPO
Secondo il modulo B della direttiva 97/23/CE
N. PA006 — FOGLIO 1 / 3

Dati dell'Organismo Notificato
Società Consortile PASCAL a.r.l.
VIA G.GIARDINO, 4 - 20123 - MILANO – ITALIA
Numero identificativo CE 1115

Dati del Costruttore/Mandatario

COSTRUTTORE (nome o marchio)	Cav. Uff. Giacomo Cimberio s.p.a.	
INDIRIZZO	Via Torchio, 57 29017 SAN MAURIZIO D'OPAGLIO (NO) - I -	
MANDATARIO		
INDIRIZZO		

Dati

TIPO	VALVOLE A GLOBO (a configurazione diritta) Mod.i CIM: 75, 76, 81L, 82	
CARATTERISTICHE DI ESERCIZIO	Pressione massima di esercizio (bar) PN Diametro (mm) DN Temperatura massima di esercizio (°C) Fluidi	16 32 ÷ 100 100 (16 bar) 170 (7 bar) acqua, aria compressa, vapor d'acqua, idrocarburi liquidi
Categoria di appartenenza		I, II

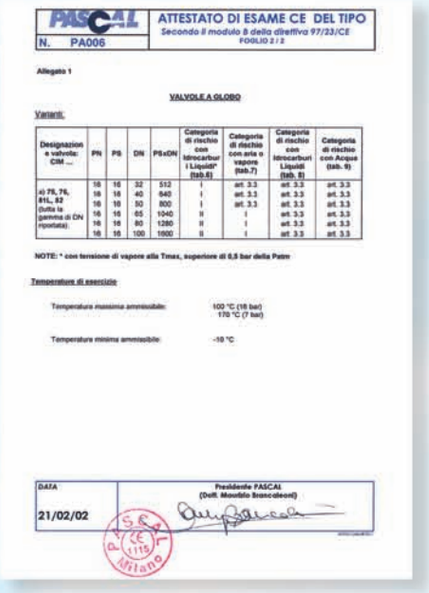
Elenco dei documenti significativi del Fascicolo tecnico di cui PASCAL conserva una copia

Tipo verificato CIM 75 da 2"	X	Documenti normativi e soluzioni adottate	X
Progetto di fabbricazione	X	Registrazioni relative alla qualificazione dei procedimenti di saldatura e dei saldatori e/o degli operatori dei CND.	
Istruzioni per l'uso	X	Attestati materiali / prodotti	X
Documento descrittivo dei materiali utilizzati, dei controlli effettuati con le informazioni pertinenti relative alla progettazione	X	Relazione sugli esami e sulle prove cui si è proceduto o la descrizione dei controlli previsti	X

Conclusioni dell'esame
Dall'esame del fascicolo tecnico e dalle prove eseguite risulta che il tipo soddisfa i requisiti essenziali dell'allegato I della Direttiva 97/23/CE

Condizioni di validità dell'attestato
Tutte le modifiche al tipo approvato sono soggette ad ulteriore approvazione qualora tali modifiche possano influire sulla conformità ai requisiti essenziali o modalità di uso. Tale nuova approvazione verrà rilasciata sotto forma di un complemento dell'attestato originale di Esame CE del Tipo. L'Attestato è soggetto alle condizioni generali di PASCAL allegate alla domanda di intervento firmata dal fabbricante.

DATA	Presidente PASCAL
21/02/02	(Dott. Maurizio Brancaleoni)



PASCAL — ATTESTATO DI ESAME CE DEL TIPO
Secondo il modulo B della direttiva 97/23/CE
N. PA006 — FOGLIO 2 / 2

Allegato 1

VALVOLE A GLOBO

Varianti:

Designazione valvola: CIM ...	PN	PS	DN	PSxDN	Categoria di rischio con Idrocarburi Liquidi* (tab.6)	Categoria di rischio con aria o vapore (tab.7)	Categoria di rischio con Idrocarburi Liquidi (tab. 8)	Categoria di rischio con Acqua (tab. 9)
75, 76, 81L, 82 (tutta la gamma di DN riportata)	16	16	32	512	I	art. 3.3	art. 3.3	art. 3.3
	16	16	40	640	I	art. 3.3	art. 3.3	art. 3.3
	16	16	50	800	I	art. 3.3	art. 3.3	art. 3.3
	16	16	65	1040	II	I	art. 3.3	art. 3.3
	16	16	80	1280	II	I	art. 3.3	art. 3.3
	16	16	100	1600	II	I	art. 3.3	art. 3.3

NOTE: * con tensione di vapore alla Tmax, superiore di 0,5 bar della Patm

Temperature di esercizio

Temperatura massima ammissibile:	100 °C (16 bar) 170 °C (7 bar)
Temperatura minima ammissibile:	-10 °C

DATA	Presidente PASCAL
21/02/02	(Dott. Maurizio Brancaleoni)

kiwa — Partner for progress

Certificate

Certificate Number: A050229

Date Issued: 16th May 2003

CIM 70 BS & CIM 81 series of isolation valves.

Sizes: CIM 70 BS ½" to 4"
CIM 81 ½" to 4"

This is to certify that the above range of products manufactured by

Giacomo Cimberio s.p.a.

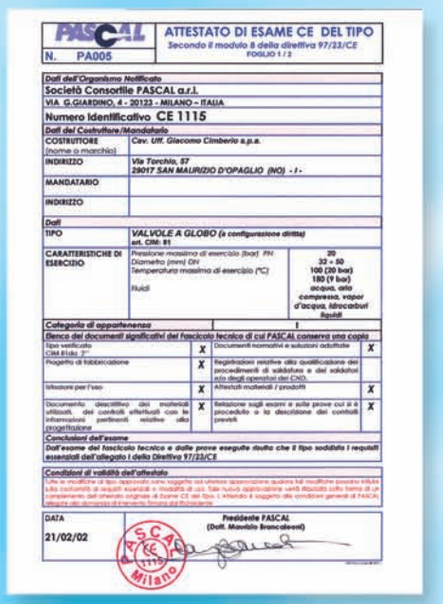
has been tested and found to comply with the requirements of the Water Supply (Water Fittings) Regulations 1999 for England and Wales, the Water Byelaws 2000, Scotland and the Water Regulations Northern Ireland.

To comply with the Regulations and Byelaws all products require the correct installation. Details of the installation requirements may be obtained from the installation instructions supplied with the products.

D. J. Hodges
Director
Kiwa Quality Services Ltd

Supplier
Giacomo Cimberio s.p.a.
Via Torchio, 57
29017 San Maurizio D'Opaglio
Italy

kiwa



PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

FOGLIO 1 / 2

N. PA005

Dati dell'Organismo Notificato

Società Consortile PASCAL a.r.l.

VIA G.GIARDINO, 4 - 20123 - MILANO – ITALIA

Numero Identificativo CE 1115

Dati del Costruttore/Mandatario

COSTRUTTORE (nome o marchio)	***Cav. Uff. Giacomo Cimberio s.p.a.***
INDIRIZZO	***Via Torchio, 57 29017 SAN MAURIZIO D'OPAGLIO (NO) - I -***
MANDATARIO	
INDIRIZZO	

Dati

TIPO	***VALVOLE A GLOBO (a configurazione diritta) art. CIM: 81***	
CARATTERISTICHE DI ESERCIZIO	Pressione massima di esercizio (bar) PN Diametro (mm) DN Temperatura massima di esercizio (°C) Fluidi	**20** **32 ÷ 50** **100 (20 bar)** **180 (9 bar)** ***acqua, aria compressa, vapor d'acqua, idrocarburi liquidi***

Categoria di appartenenza **I**

Elenco dei documenti significativi del fascicolo tecnico di cui PASCAL conserva una copia

Tipo verificato CIM 81 da 3"	X	Documenti normativi e soluzioni adottate	X
Progetto di fabbricazione	X	Registrazioni relative alla qualificazione dei procedimenti di saldatura e dei saldatori e/o degli operatori del CND.	
Istruzioni per l'uso	X	Attestati materiali / prodotti	X
Documento descrittivo dei materiali utilizzati, dei controlli effettuati con le informazioni pertinenti relative alla progettazione	X	Relazione sugli esami e sulle prove cui si è proceduto o la descrizione dei controlli previsti	X

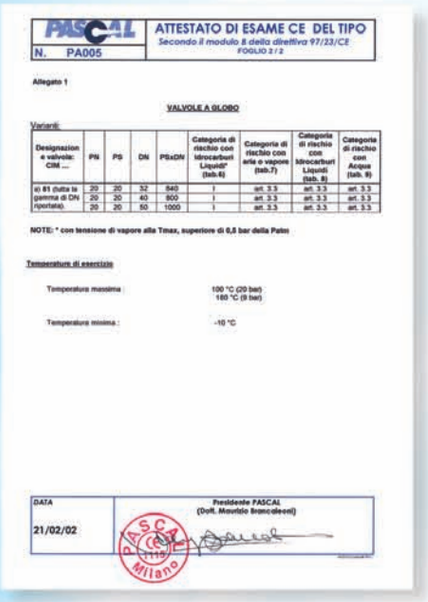
Conclusioni dell'esame

Dall'esame del fascicolo tecnico e dalle prove eseguite risulta che il tipo soddisfa i requisiti essenziali dell'allegato I della Direttiva 97/23/CE

Condizioni di validità dell'attestato

Ove le modifiche al tipo approvato siano soggette ad ulteriore approvazione qualora tali modifiche possano influire sulla conformità ai requisiti essenziali o modalità di uso. Tale nuova approvazione verrà rilasciata sotto forma di un complemento dell'attestato originale di Esame CE del Tipo. L'Attestato è soggetto alle condizioni generali di PASCAL cliegate alla domanda di rilascio firmata dal Richiedente.

DATA	Presidente PASCAL (Dott. Maurizio Brancaleoni)
21/02/02	



PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

FOGLIO 2 / 2

N. PA005

Allegato 1

VALVOLE A GLOBO

Varianti:

Designazione valvola: CIM ...	PN	PS	DN	PSxDN	Categoria di rischio con idrocarburi Liquidi* (tab.6)	Categoria di rischio con aria o vapore (tab.7)	Categoria di rischio con Idrocarburi Liquidi (tab. 8)	Categoria di rischio con Acqua (tab. 9)
a) 81 (tutta la gamma di DN riportata).	20	20	32	640	I	art. 3.3	art. 3.3	art. 3.3
	20	20	40	800	I	art. 3.3	art. 3.3	art. 3.3
	20	20	50	1000	I	art. 3.3	art. 3.3	art. 3.3

NOTE: * con tensione di vapore alla Tmax, superiore di 0,5 bar della Patm

Temperature di esercizio

Temperatura massima : 100 °C (20 bar)
180 °C (9 bar)

Temperatura minima : -10 °C

DATA	Presidente PASCAL (Dott. Maurizio Brancaleoni)
21/02/02	

kiwa

Certificate

Certificate Number: A030237

Date Issued: 16th May 2003

CIM "Sprint" non return valve
Model: CIM 38
Sizes: 3/8" to 4"

This is to certify that the above range of products manufactured by

Giacomo Cimberio s.p.a.

has been tested and found to comply with the requirements of the Water Supply (Water Fittings) Regulations 1999 for England and Wales, the Water Byelaws 2000, Scotland and the Water Regulations Northern Ireland.

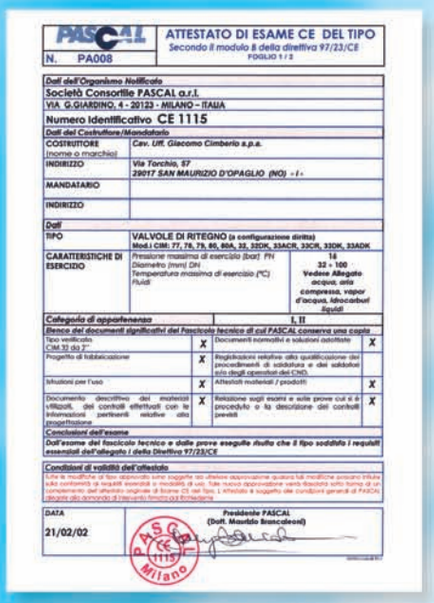
To comply with the Regulations and Byelaws all products require the correct installation. Details of the installation requirements may be obtained from the installation instructions supplied with the products.

D.J. Hodges

Director
Kiwa Quality Services Ltd

Manufacturer
Giacomo Cimberio s.p.a
Via Torchio, 57
28017 San Maurizio D'Opaglio
Italy
Tel: 0039 0322 923001
Fax: 0039 0322 967214
E-mail: info@cimberio.it
Web: www.cimberio.it

kiwa



PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

FOGLIO 1 / 2

N. PA008

Dati dell'Organismo Notificato

Società Consortile PASCAL a.r.l.

VIA G.GIARDINO, 4 - 20123 - MILANO – ITALIA

Numero Identificativo CE 1115

Dati del Costruttore/Mandatario

COSTRUTTORE (nome o marchio)	***Cav. Uff. Giacomo Cimberio s.p.a.***
INDIRIZZO	***Via Torchio, 57 29017 SAN MAURIZIO D'OPAGLIO (NO) - I -***
MANDATARIO	
INDIRIZZO	

Dati

TIPO	**VALVOLE DI RITEGNO (a configurazione diritta) Mod.i CIM: 77, 78, 79, 80, 80A, 32, 32DK, 33ACR, 33CR, 33DK, 33ADK**	
CARATTERISTICHE DI ESERCIZIO	Pressione massima di esercizio (bar) PN Diametro (mm) DN Temperatura massima di esercizio (°C) Fluidi	**16** **32 ÷ 100** **Vedere Allegato** ***acqua, aria compressa, vapor d'acqua, idrocarburi liquidi***

Categoria di appartenenza **I, II**

Elenco dei documenti significativi del fascicolo tecnico di cui PASCAL conserva una copia

Tipo verificato CIM 32 da 2"	X	Documenti normativi e soluzioni adottate	X
Progetto di fabbricazione	X	Registrazioni relative alla qualificazione dei procedimenti di saldatura e dei saldatori e/o degli operatori del CND.	
Istruzioni per l'uso	X	Attestati materiali / prodotti	X
Documento descrittivo dei materiali utilizzati, dei controlli effettuati con le informazioni pertinenti relative alla progettazione	X	Relazione sugli esami e sulle prove cui si è proceduto o la descrizione dei controlli previsti	X

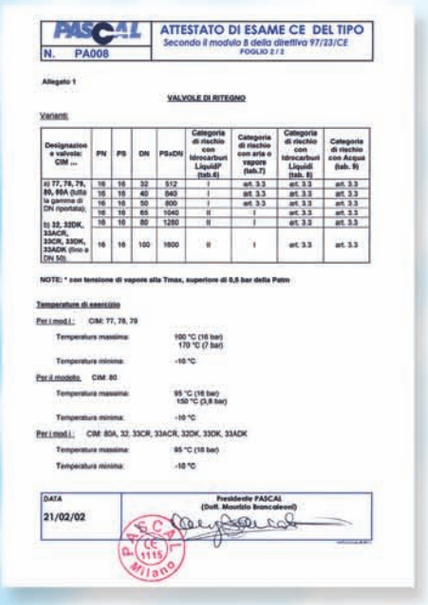
Conclusioni dell'esame

Dall'esame del fascicolo tecnico e dalle prove eseguite risulta che il tipo soddisfa i requisiti essenziali dell'allegato I della Direttiva 97/23/CE

Condizioni di validità dell'attestato

Ove le modifiche al tipo approvato siano soggette ad ulteriore approvazione qualora tali modifiche possano influire sulla conformità ai requisiti essenziali o modalità di uso. Tale nuova approvazione verrà rilasciata sotto forma di un complemento dell'attestato originale di Esame CE del Tipo. L'Attestato è soggetto alle condizioni generali di PASCAL cliegate alla domanda di rilascio firmata dal Richiedente.

DATA	Presidente PASCAL (Dott. Maurizio Brancaleoni)
21/02/02	



PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

FOGLIO 2 / 2

N. PA008

Allegato 1

VALVOLE DI RITEGNO

Varianti:

Designazione e valvola: CIM ...	PN	PS	DN	PSxDN	Categoria di rischio con Idrocarburi Liquidi* (tab.6)	Categoria di rischio con aria o vapore (tab.7)	Categoria di rischio con Idrocarburi Liquidi (tab. 8)	Categoria di rischio con Acqua (tab. 9)
a) 77, 78, 79, 80, 80A (tutta la gamma di DN riportata);	16	16	32	512	I	art. 3.3	art. 3.3	art. 3.3
	16	16	40	640	I	art. 3.3	art. 3.3	art. 3.3
	16	16	50	800	I	art. 3.3	art. 3.3	art. 3.3
	16	16	65	1040	II	I	art. 3.3	art. 3.3
b) 32, 32DK, 33ACR, 33CR, 33DK, 33ADK (fino a DN 50).	16	16	80	1280	II	I	art. 3.3	art. 3.3
	16	16	100	1600	II	I	art. 3.3	art. 3.3

NOTE: * con tensione di vapore alla Tmax, superiore di 0,5 bar della Patm

Temperature di esercizio

Per i mod.i : CIM: 77, 78, 79

Temperatura massima: 100 °C (16 bar)
170 °C (7 bar)

Temperatura minima: -10 °C

Per il modello CIM: 80

Temperatura massima: 95 °C (16 bar)
150 °C (3,9 bar)

Temperatura minima: -10 °C

Per i mod.i : CIM: 80A, 32, 33CR, 33ACR, 32DK, 33DK, 33ADK

Temperatura massima: 95 °C (16 bar)

Temperatura minima: -10 °C

DATA	Presidente PASCAL (Dott. Maurizio Brancaleoni)
21/02/02	

kiwa

Certificate

Certificate Number: A030235

Date Issued: 16th May 2003

CIM Single Check Valve
Model: CIM 32CR
Sizes: ½" to 2"

This is to certify that the above range of products manufactured by

Giacomo Cimberio s.p.a

has been tested and found to comply with the requirements of the Water Supply (Water Fittings) Regulations 1999 for England and Wales, the Water Byelaws 2000, Scotland and the Water Regulations Northern Ireland.

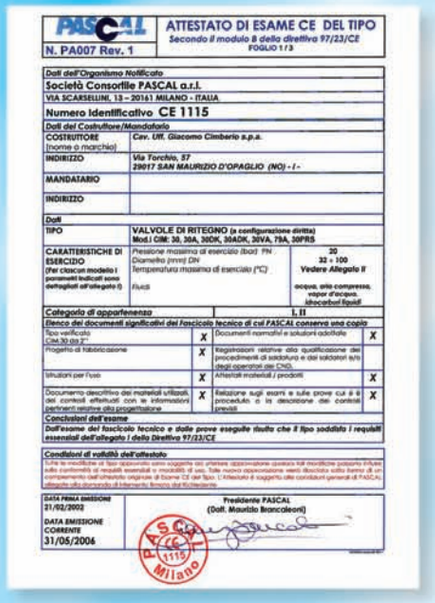
To comply with the Regulations and Byelaws all products require the correct installation. Details of the installation requirements may be obtained from the installation instructions supplied with the products.

D.J. Hodges

Director
Kiwa Quality Services Ltd

Manufacturer
Giacomo Cimberio s.p.a
Via Torchio, 57
28017 San Maurizio D'Opaglio
Italy
Tel: 0039 0322 923001
Fax: 0039 0322 967214
E-mail: info@cimberio.it
Web: www.cimberio.it

kiwa



PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

FOGLIO 1 / 3

N. PA007 Rev. 1

Dati dell'Organismo Notificato

Società Consortile PASCAL a.r.l.

VIA SCARSELLINI, 13 – 20161 MILANO - ITALIA

Numero Identificativo CE 1115

Dati del Costruttore/Mandatario

COSTRUTTORE (nome o marchio)	***Cav. Uff. Giacomo Cimberio s.p.a.***
INDIRIZZO	***Via Torchio, 57 29017 SAN MAURIZIO D'OPAGLIO (NO) - I -***
MANDATARIO	
INDIRIZZO	

Dati

TIPO	**VALVOLE DI RITEGNO (a configurazione diritta) Mod.i CIM: 30, 30A, 30DK, 30ADK, 30VA, 79A, 30PRS**	
CARATTERISTICHE DI ESERCIZIO (Per ciascun modello i parametri indicati sono dettagliati all'allegato I)	Pressione massima di esercizio (bar) PN Diametro (mm) DN Temperatura massima di esercizio (°C) Fluidi	**20** **32 ÷ 100** **Vedere Allegato II** ***acqua, aria compressa, vapor d'acqua, idrocarburi liquidi***

Categoria di appartenenza **I, II**

Elenco dei documenti significativi del fascicolo tecnico di cui PASCAL conserva una copia

Tipo verificato CIM 30 da 2"	X	Documenti normativi e soluzioni adottate	X
Progetto di fabbricazione	X	Registrazioni relative alla qualificazione dei procedimenti di saldatura e dei saldatori e/o degli operatori del CND.	
Istruzioni per l'uso	X	Attestati materiali / prodotti	X
Documento descrittivo dei materiali utilizzati, dei controlli effettuati con le informazioni pertinenti relative alla progettazione	X	Relazione sugli esami e sulle prove cui si è proceduto o la descrizione dei controlli previsti	X

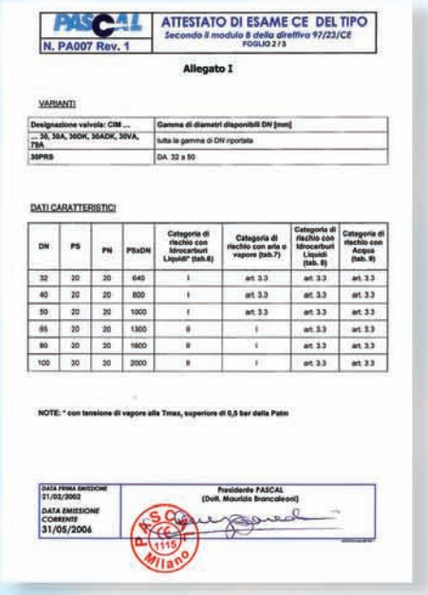
Conclusioni dell'esame

Dall'esame del fascicolo tecnico e dalle prove eseguite risulta che il tipo soddisfa i requisiti essenziali dell'allegato I della Direttiva 97/23/CE

Condizioni di validità dell'attestato

Ove le modifiche al tipo approvato siano soggette ad ulteriore approvazione qualora tali modifiche possano influire sulla conformità ai requisiti essenziali o modalità di uso. Tale nuova approvazione verrà rilasciata sotto forma di un complemento dell'attestato originale di Esame CE del Tipo. L'Attestato è soggetto alle condizioni generali di PASCAL cliegate alla domanda di rilascio firmata dal Richiedente.

DATA PRIMA EMISSIONE	Presidente PASCAL (Dott. Maurizio Brancaleoni)
21/02/2002	
DATA EMISSIONE CORRENTE	
31/05/2006	



PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

FOGLIO 2 / 3

N. PA007 Rev. 1

Allegato I

VARIANTI

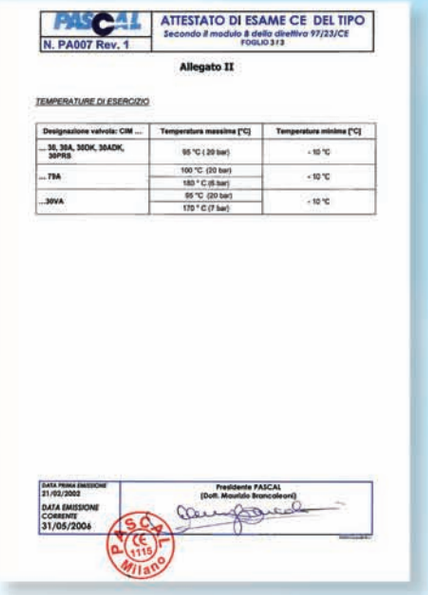
Designazione valvola: CIM ...	Gamma di diametri disponibili DN [mm]
... 30, 30A, 30DK, 30ADK, 30VA, 79A	tutta la gamma di DN riportata
30PRS	DA 32 a 80

DATI CARATTERISTICI

DN	PS	PN	PSxDN	Categoria di rischio con Idrocarburi Liquidi* (tab.6)	Categoria di rischio con aria o vapore (tab.7)	Categoria di rischio con Idrocarburi Liquidi (tab. 8)	Categoria di rischio con Acqua (tab. 9)
32	20	20	640	I	art. 3.3	art. 3.3	art. 3.3
40	20	20	800	I	art. 3.3	art. 3.3	art. 3.3
50	20	20	1000	I	art. 3.3	art. 3.3	art. 3.3
65	20	20	1300	II	I	art. 3.3	art. 3.3
80	20	20	1600	II	I	art. 3.3	art. 3.3
100	20	20	2000	II	I	art. 3.3	art. 3.3

NOTE: * con tensione di vapore alla Tmax, superiore di 0,5 bar della Patm

DATA PRIMA EMISSIONE	Presidente PASCAL (Dott. Maurizio Brancaleoni)
21/02/2002	
DATA EMISSIONE CORRENTE	
31/05/2006	



PASCAL

ATTESTATO DI ESAME CE DEL TIPO

Secondo il modulo B della direttiva 97/23/CE

FOGLIO 3 / 3

N. PA007 Rev. 1

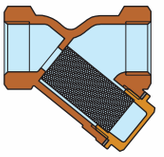
Allegato II

TEMPERATURE DI ESERCIZIO

Designazione valvola: CIM ...	Temperatura massima [°C]	Temperatura minima [°C]
... 30, 30A, 30DK, 30ADK, 30PRS	95 °C (20 bar)	- 10 °C
... 79A	100 °C (20 bar) 180 ° C (6 bar)	- 10 °C
...30VA	95 °C (20 bar) 170 ° C (7 bar)	- 10 °C

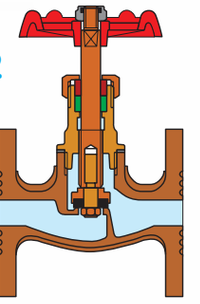
DATA PRIMA EMISSIONE	Presidente PASCAL (Dott. Maurizio Brancaleoni)
21/02/2002	
DATA EMISSIONE CORRENTE	
31/05/2006	

cim 74A



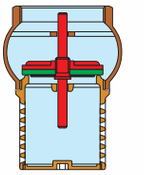
Bonnet	EN12165 CW617N
O-ring	HNBR
Steel strainer	STAINLESS STEEL
Body Packing	NA1100
Body	Bronze EN1982 CC491K

cim 82



Flanged body	Bronze EN1982 CC491K
Bonnet	EN12165 CW617N
Stem	EN12164 CW617N
Packing	PTFE
Disc Nut	EN12164 CW617N
Body Packing	NA 1100
Disc holder	EN12164 CW617N
Stem packing	PTFE
Gland	EN12164 CW617N
Gland nut	EN12164 CW617N
Handwheel	EN AB46100
Self locking nut	Steel

cim 95



Body	EN12165 CW617N
Strainer	EN12165 CW617N
Strainer cap	EN12165 CW617N
Body packing	GREY FIBER
Inner valve	CW617N
Inner valve	CW617N
Valve face	RED RUBBER
Ring	CW617N

IAPMO R&T OCEANA

WATERMARK LICENCE

Level 1

IAPMO R&T Oceana hereby grants to:

Cav. Uff. Giacomo Cimberio S.p.A.

Via Torchio, 57, San Maurizio d'Opaglio, (NO) ITALY

Evaluated to:

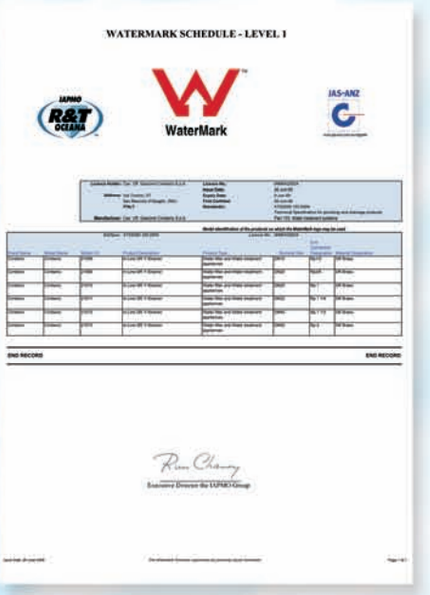
AS 3688 - Water Supply - Metallic fittings and end connectors

Manufacturer:

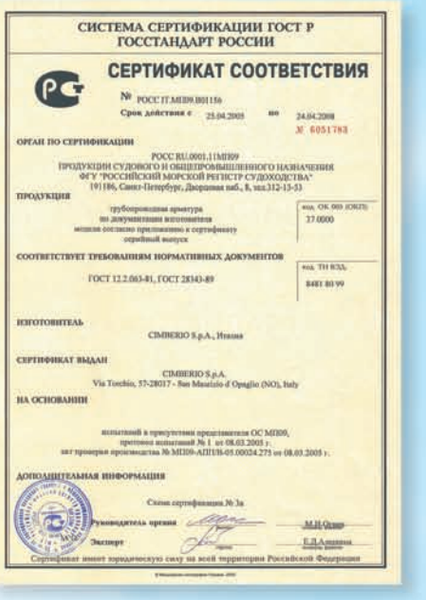
Cav. Uff. Giacomo Cimberio S.p.A.

Licence No.: WMKA20024 Certified Date: 26 June 2008

Issue Date: 15 September 2008 Expiry Date: 9 June 2009



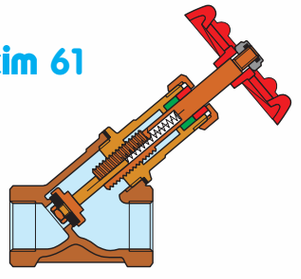
WATERMARK SCHEDULE - LEVEL 1



СИСТЕМА СЕРТИФИКАЦИИ ГОСТ Р
ГОССТАНДАРТ РОССИИ

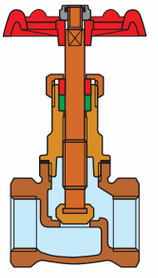
СЕРТИФИКАТ СООТВЕТСТВИЯ

cim 61



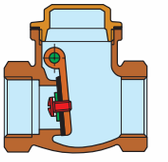
Body	Bronze EN1982 CC491K
Bonnet	EN12165 CW617N
Stem	EN12164 CW617N
Gland nut	EN12164 CW617N
Gland	EN12164 CW617N
Gland packing	PTFE
Packing	NA 1100
Spring	Phosphor bronze
Disc holder	EN12164 CW617N
Disc	EPDM
Disc nut	EN12164 CW617N
Self locking nut	Steel
Handwheel	EN AB46100

cim 75



Body	Bronze EN1982 CC491K
Bonnet	EN12165 CW617N
Stem	EN12164 CW617N
Gland nut	EN12164 CW617N
Gland	EN12164 CW617N
Gland packing	PTFE
Packing	NA 1100
Disc stem ring	EN12164 CW617N
Disc	EN12164 CW617N
Self locking nut	Steel
Handwheel	EN AB46100

cim 80A



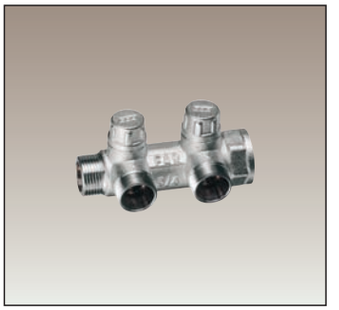
Body	EN1982 CC754S
Bonnet	EN12165 CW617N
Packing	NA 1100
Swing disc	EN12165 CW617N
Disc face	EPDM
Washer	EN12164 CW614N
Screw	EN12164 CW614N
Spindle	EN12164 CW614N

cim 580

MANIFOLDS WITH INTERCHANGEABLE FITTING FOR FAR ADAPTERS
COPPER - PLASTIC - MULTI-LAYER - PIPE - 2 BRANCHES

cim 581

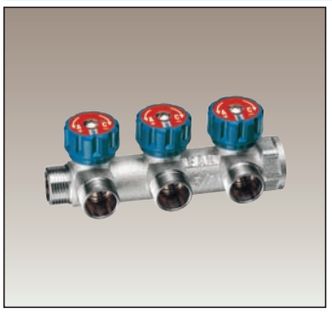
DN	3/4	1"	1 1/4"
Cart.	25	25	25



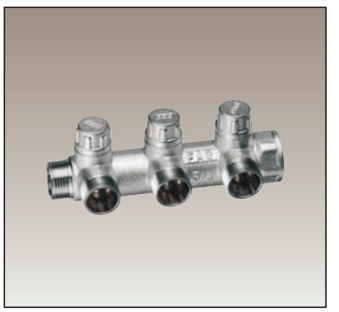
cim 582

MANIFOLDS WITH INTERCHANGEABLE FITTING FOR FAR ADAPTERS
COPPER - PLASTIC - MULTI-LAYER - PIPE - 3 BRANCHES

cim 583



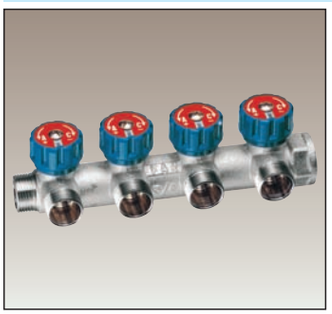
DN	3/4	1"	1 1/4"
Cart.	25	25	25



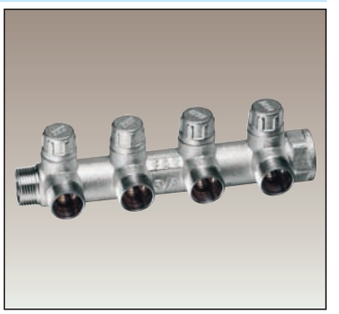
cim 584

MANIFOLDS WITH INTERCHANGEABLE FITTING FOR FAR ADAPTERS
COPPER - PLASTIC - MULTI-LAYER - PIPE - 4 BRANCHES

cim 585



DN	3/4	1"	1 1/4"
Cart.	25	25	25



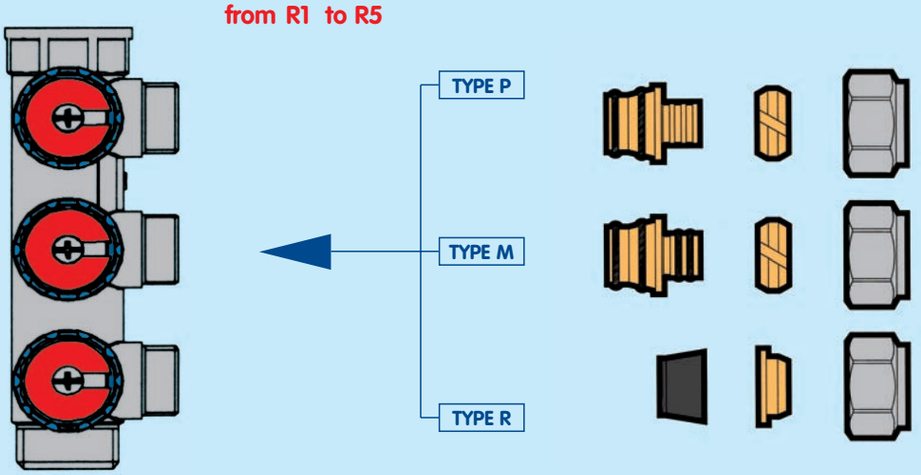
Chromed modular manifolds 2-3-4 branches with manual regulation supplied with handwheel, **BLUE-RED** double faced disc and disc with descriptions for sanitary or heating installations. Interchangeable fitting for copper, plastic and multilayer pipes.
INLET: 3/4 - 1" male-female gas - Distance between branches centres: mm.45.

MANIFOLDS MATCH TO ADAPTORS

ADAPTORS see page No. 95

DN 3/4 - 1" from P1 to P19
from M1 to M7
from R1 to R5

DN 1 1/4" from M8 to M9



WHEN PLACING AN ORDER, PLEASE STATE MANIFOLD CODE + ADAPTOR CODE : CIM 582 + P1

cim 1430

BRASS PRESSURE REDUCER FEMALE/FEMALE ENDS
MAXIMUM UPSTREAM PRESSURE: 25 BAR - DOWNSTREAM REDUCED PRESSURE: FROM 0,5 UP TO 6 BAR

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Box	1	1	1	1	1	1	1	1	1

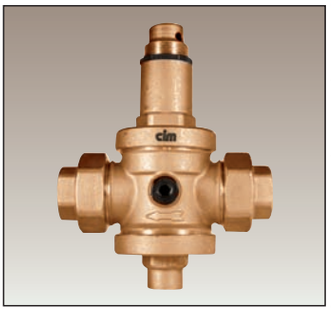
cim 1420

BRASS PRESSURE REDUCER MALE/MALE UNIONS
MAXIMUM UPSTREAM PRESSURE: 25 BAR - DOWNSTREAM REDUCED PRESSURE: FROM 0,5 UP TO 6 BAR

DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	1	1	1	1	1	1
Cart.	25	20	10	1	1	1

cim 1460

BRASS PRESSURE REDUCER FEMALE/FEMALE UNIONS
MAXIMUM UPSTREAM PRESSURE: 25 BAR - DOWNSTREAM REDUCED PRESSURE: FROM 0,5 UP TO 6 BAR



DN	1/2	3/4	1"	1 1/4"	1 1/2"	2"
Box	1	1	1	1	1	1
Cart.	20	10	10	1	1	1

cim 1020

BRASS PRESSURE REDUCER "MINI" - MAXIMUM UPSTREAM PRESSURE: 15 BAR
DOWNSTREAM REDUCED PRESSURE: FROM 1 UP TO 4 BAR

cim 1060

DN	3/8	1/2	3/4
Box / Cart.	1 / 50	1 / 50	1 / 50

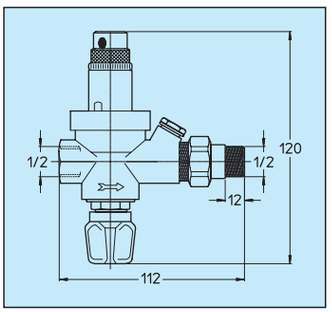
Thanks to their small dimension, the pressure reducer CIM 1020 and CIM 1060 are suitable to be installed in sanitary systems for sole end-users, loading boiler installations, hydraulic systems for special machineries with direct loading from the water networks.

cim 1110

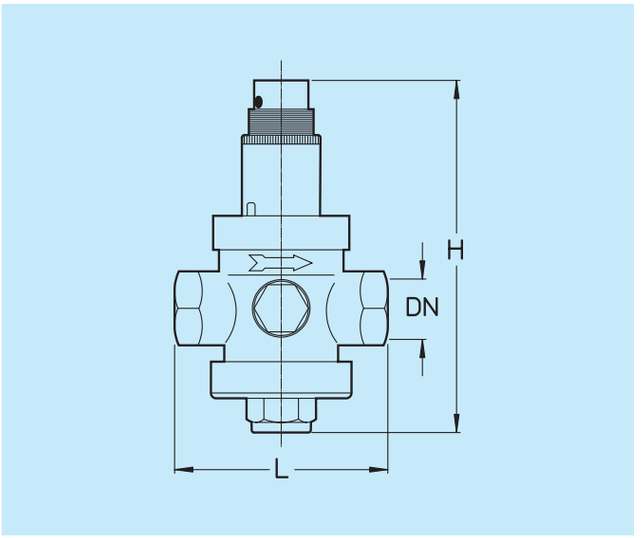
FILLING UNIT
MAXIMUM UPSTREAM PRESSURE: 16 BAR - DOWNSTREAM REDUCED PRESSURE: FROM 0,5 UP TO 4 BAR

DN	1/2
Box	1
Cart.	20

The automatic filling units series CIM 1110 are suitable to water supply in the closed circuit heating plants; it is a pressure reducer with stop cock and non return device which provides to stabilize the whole heating circuit and, when necessary, reloads water in the installation. Once the requested pressure is reached, the filling unit closes automatically.



Pressure reducer



	Cim 1430				Cim 1020 - Cim 1060			
DN	H	L	L/min.	m³/h	H	L	L/min.	m³/h
3/8	–	–	–	–	93	60	8-12	0,5-0,7
1/2	120	75	20-50	1,2-3	93	60	10-14	0,6-0,8
3/4	150	85	50-75	3-4,5	93	60	12-16	0,7-0,8
1"	160	89	75-95	4,5-6	–	–	–	–
1 1/4"	220	125	95-130	6-8	–	–	–	–
1 1/2"	220	130	110-140	7-8,5	–	–	–	–
2"	250	138	120-160	7,5-10	–	–	–	–
2 1/2"	260	145	140-180	8,5-11	–	–	–	–
3"	285	177	160-220	10-13,2	–	–	–	–
4"	310	190	200-260	12-15,6	–	–	–	–

Service recommendations:
Cimberio pressure reducers are suitable to reduce and control pressure in installations having the following features:

FEATURES

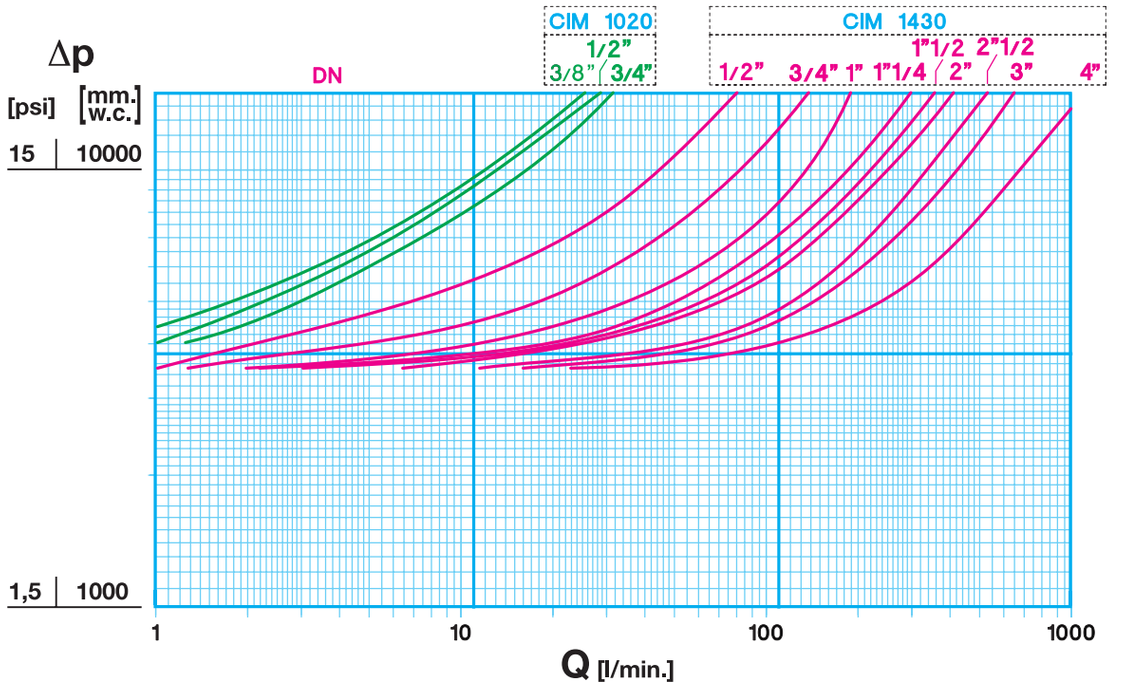
Upstream maximum pressure:	25 bar
Downstream reduced pressure:	from 0,5 until 6 bar
Max. working temperature:	80°C
Threads:	ISO 228/1
Tested according to:	DIN EN 1567
Use:	Water - Compressed air

MATERIALS

Body material:	EN 12165 - CW617N
Other comp. material:	EN 12164 - CW617N
Tightening seat	Stainless steel AISI 303
O-rings:	NBR 70 sh
Joints:	Fasit Italy
Plastic parts:	Acetalic resin

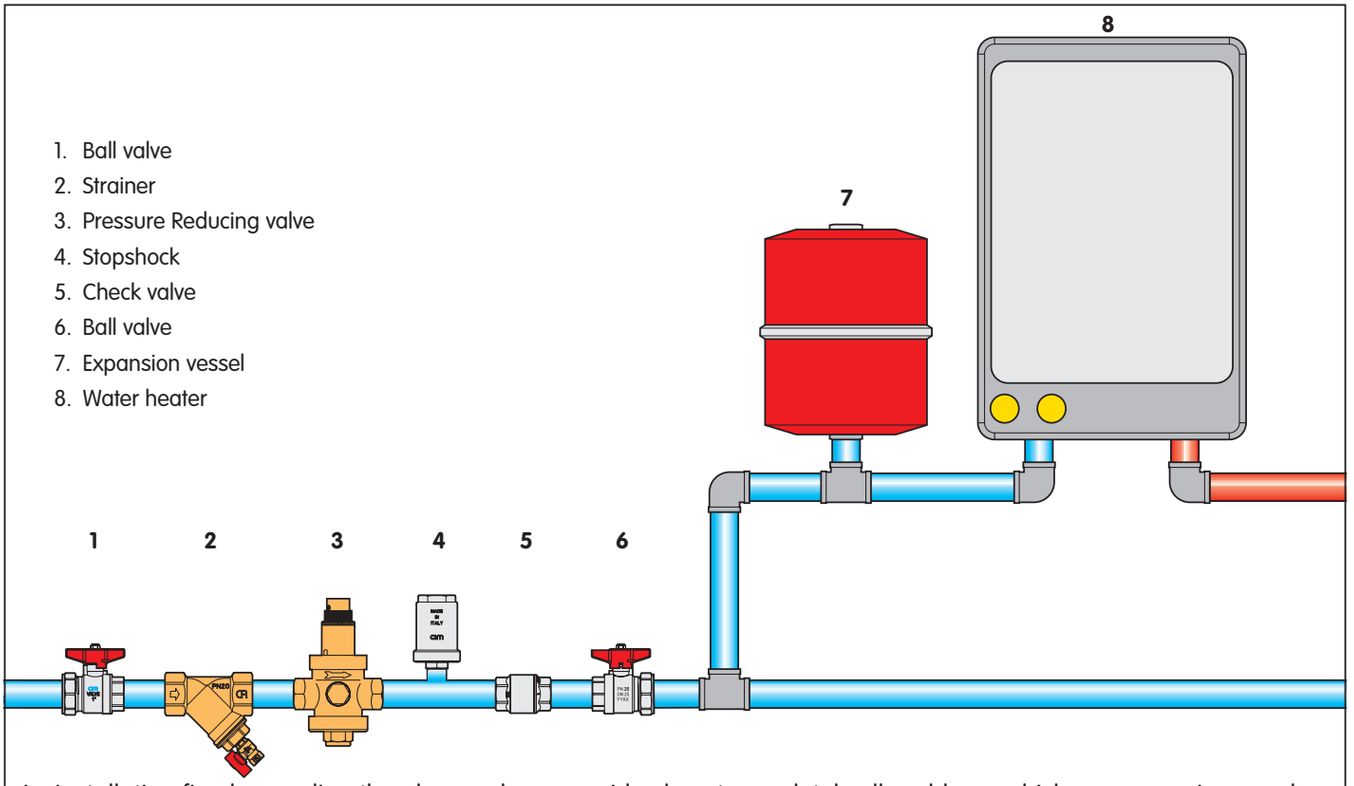
Guaranteed reduction ratio
Series Cim 1430: 10:1 - Series Cim 1020: 5:1

FLOW AND PRESSURE DROP

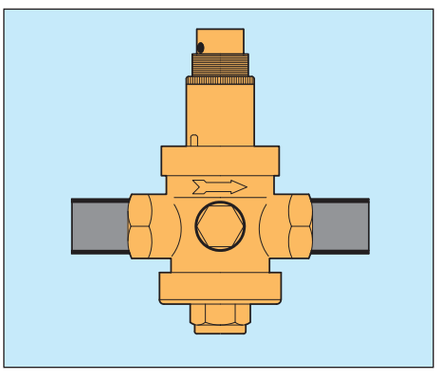


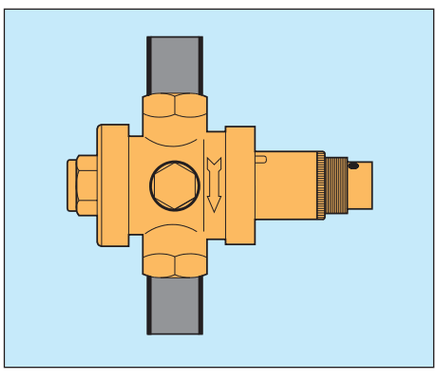
Pressure reducer

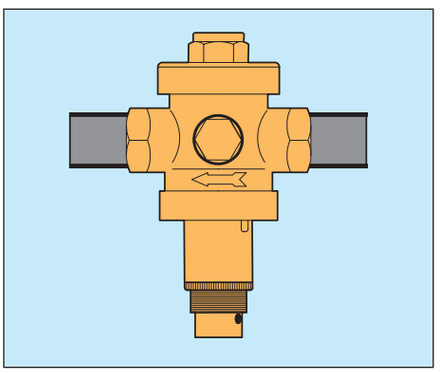
1. Ball valve
2. Strainer
3. Pressure Reducing valve
4. Stopshock
5. Check valve
6. Ball valve
7. Expansion vessel
8. Water heater



An installation fixed according the above scheme avoids almost completely all problems which may occur in a modern water system.







Scheme for pressure reducers installation:

How to adjust pressure:

All Cimberio pressure reducers are tested before being packaged; during test they are pre-set at outlet pressure of 3 bar; the outlet pressure can be modified easily when the pressure reducer is connected to the plant. To modify outlet pressure you simply need to loose the fixing ring and turn the spring holder as shown in the pictures here below; clock-wise turn increases outlet pressure, anti-clockwise turn reduces outlet pressure. A right setting should be made when the system is closed.