



PRESSURE REDUCING VALVE WITH DIAPHRAGM PN 40  
WITH FILTER, COMPENSATION CHAMBER AND STAINLESS STEEL SEAT  
CONNECTIONS: DISMANTLING FITTING MALE - SLEEVE FEMALE



### HYDRAULIC FEATURES

The pressure reducing valve with diaphragm and with filter and compensation chamber (PN 40) is an automatic valve that reduces and stabilizes the pressure of a fluid in a water distribution conduit according to a preset value. The use of this hydraulic device is necessary if the maximum possible pressure at any point in the water distribution system can reach or exceed the relative maximum allowable working pressure, or if apparatus and equipment that function exclusively at lower levels of pressure are connectable. The mechanical brass vertical-type PN40 filter assembled on the reducing valve is ideal for installation outside of buildings, and is designed to separate foreign particles suspended in the water such as sand, rust flakes, calcareous fragments, etc.; by means of a physical steel mesh barrier. The impure particles transported by water could cause corrosion in the water pipeline and wear down pressure reducing valves or any other device installed downstream. The enhanced mechanical strength of the shell (which can support pressures up to 40 Bar) and its internal components renders this valve particularly suitable for sanitary installations for water distribution outside buildings (EN 805), where the water main pressure may reach values as high as 40 bar. Further, the compensated seat offsets the influence that variations in upstream pressure may have on the downstream pressure. The flexible diaphragm in EPDM rubber is reinforced with high mechanical strength polyamide textile and in conjunction with the antistick-slip O-ring made of Perox EPDM rubber, they allow a precise and long-lasting pressure regulation. The internal finish of the valve's body and the absence of moving parts guarantee an elevated flow capacity, even when the water draw is minimal. The diaphragm-type pressure reducing valve with compensation chamber (PN 40) is used in air conditioning plants, sanitary installations for water supply, irrigation systems, compressed air (not oil mist) distribution systems, sanitary installations for water supply within buildings, according to EN 806-2; and for fire suppression piping. It should nevertheless be borne in mind that local government standards for fire protection must always be observed. This product adheres to the standards set forth by the European health authorities for the transport of alimentary fluids and potable water.

**ATTENTION: THE PRESSURE GAUGE CONNECTED TO THE PRESSURE REDUCING VALVE INDICATES THE ALREADY-REDUCED PRESSURE (Ps) OF THE OUTLET LIQUID FLOW.**

### TECHNICAL FEATURES

<b>Pressioni:</b>	
Maximum allowable working pressure (PN)	40 bar
Outlet settings (Ps)	from 1 to 7 bar
Ps value set during testing	3 bar
Outlet Ps set tolerance on varying inlet pressure	± 5 %
<b>Temperature:</b>	
maximum working temperature (TS)	0°C (excluding ice) 80°C
<b>Compatible fluids:</b>	
water	
glycolate solutions	glycol 50%
compressed air	
<b>Filtration Rating:</b>	
Reference micron rating (S)	< 500µm
<b>Threading:</b>	
Pipeline connection	Threads according to ISO 228/1
Gauge connection	Threads according to EN 10226- Rp1/4" (ex ISO 7/1)
<b>Tests according to</b>	
Verification of the deviation from the pre-set pressure (Ps) according to	EN 1567
Verification of the setpoint range according to	EN 1567 § 8.3.2
Flow rate and outlet pressure according to	EN 1567 § 8.3.1
Acoustic group	EN 1567 § 8.3.4
Shell body filter tightness	II - Lmax (dBA) < 30
General type tests for mechanical filters	Test P11 - EN 12266-1
	EN 13443-1 (applicable parts)

### DESIGN

Body pressure reducer in brass EN 12165 - CW617N  
Body filter in cast brass EN 1982 - CW753S  
Filter plugs in brass EN 12165 - CW617N  
Bonnet pressure reducers in brass EN 12165 - CW617N  
Other forged components in brass EN 12165 - CW617N  
Other components in turned brass EN 12164 - CW614N  
EPDM rubber diaphragm, nylon reinforced to 70 Sh  
Seat gaskets in NBR RUBBER  
Static and dynamic O-ring washers in EPDM RUBBER (peroxide-cured)  
PRESSED FIBER filter gaskets  
SM GALVANIZED STEEL calibration spring - EN 10270-1  
MICROSTRETCHED STAINLESS STEEL mesh filtering cartridge EN 10088-1.4301 (AISI 304)  
STAINLESS STEEL insert seat EN 10088-1.4305 (AISI 303)

### PRODUCT CODES

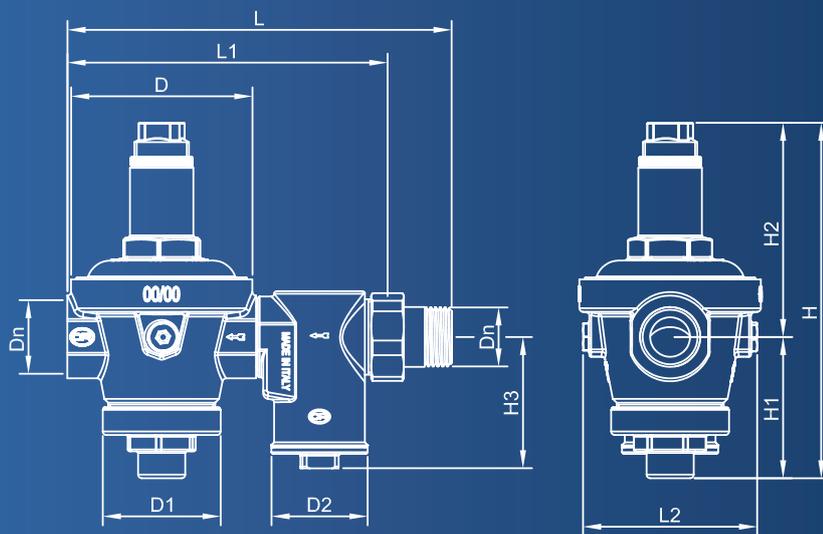
0223.015	dismantling male /sleeve female	1/2"	0223.033	dismantling male /sleeve female	1"1/4
0223.020	dismantling male /sleeve female	3/4"	0223.042	dismantling male /sleeve female	1"1/2
0223.025	dismantling male /sleeve female	1"	0223.050	dismantling male /sleeve female	2"



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# 0223 • 1/2" - 2"

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## FEATURES

Dn	D	D1	D2	L	L1	L2	H	H1	H2	H3
1/2"	Ø72,5	Ø44	Ø33	154,5	128,5	67	153	65	88	54
3/4"	Ø89	Ø52	Ø41,5	183,5	154	85	190	70,5	119,5	62
1"	Ø100	Ø65	Ø53	211	176,5	96	197,5	78,5	119	73
1"1/4	Ø123	Ø72	Ø60	263,5	235,5	92	234	82,5	152	86
1"1/2	Ø153	Ø80	Ø71	314,5	272	109	279,5	106,5	173	106,5
2"	Ø168	Ø90	Ø74	338,5	285	119	281	92,5	188,5	102

## PRESSURE REDUCING VALVE 0223 1/2" - 2"

