

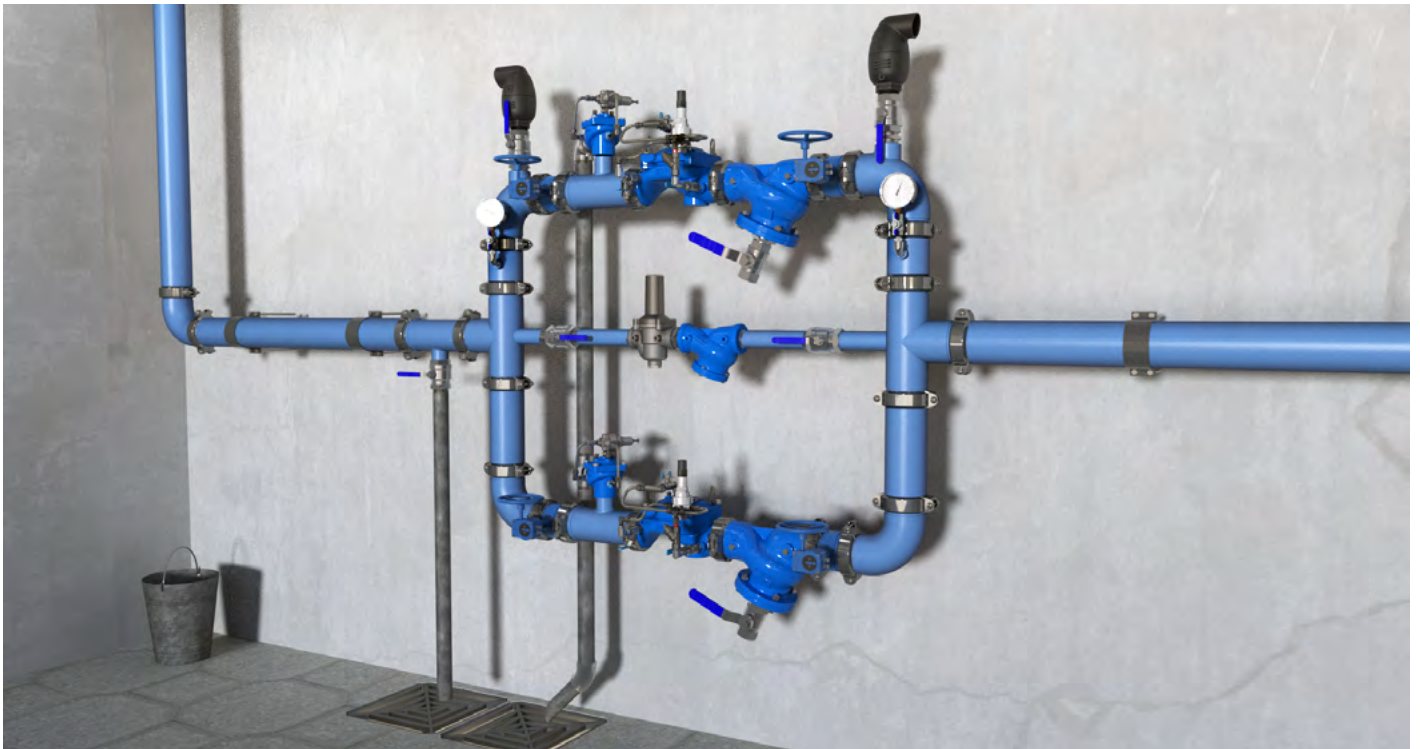


PRESSURE REDUCING VALVE

Model 420

Hydraulically operated, pressure reducing control valve that reduces higher upstream pressure to lower constant downstream pressure, regardless of fluctuating demand or varying upstream pressure

BERMAD 400 series valves are hydraulically operated, simple and reliable, globe valves with full bore hydrodynamic body providing an unobstructed flow path and superior performance. The valves balanced rolling-diaphragm assembly is vulcanized with a rugged radial seal disk construction, performing as the valves only moving part.



Pressure Reducing Station, featuring BERMAD 420 valves to reduce high incoming pressure to a lower downstream set-point, a redundant, parallel branch to minimize the possibility of total water shut-off and

a low flow bypass branch for low demand operation. For information on the other BERMAD products in this system please see the product data sheet for the BERMAD 43Q and BERMAD 70F

Typical Application

- Pressure control of potable water supply lines in building operating under moderate conditions
- Excessive pressure protection of low-grade plastic supply lines in buildings
- Protection of main supply lines of high-rise buildings where the building's lower zones are exposed to excessive pressure
- Protection of high pressure zones and emergency systems of high-rise buildings
- In parallel, redundant and duty cycled branches where uninterrupted water supply systems are required

BERMAD Buildings & Construction



400 Series

Potable Water • Pressure Control

Model 420

Features and Benefits

- High quality construction materials ensure reliable, long lasting operation
- Full bore valve port area and hydrodynamic body ensure unobstructed flow path; minimal pressure loss with low cavitation damage
- Fully supported and balanced rolling diaphragm - low actuation pressure and excellent low flow regulation performance
- Ensured operation after long standby periods
- Straightforward three major components design - easy and simple on-site inline maintenance with minimal down time
- 2-way pilot and control loop that continuously sense downstream pressure and immediately control the valve accordingly, providing stable, reliable and accurate pressure modulation under a wide range of flow-rate and pressure conditions
- Line Pressure Driven - Independent operation, no external power needed
- On-site adjustable pilot allows simple and easy calibration of required pressure level

Technical Data

General:

End connections:

Grooved: 2", 3"-8"
Flanged: 1½"-14"
Threaded: 1½"-3"

Pressure Rating: 250 psi; PN16

Valve Pattern: Globe / Angle

Working Temperature:

Cold Water up to 122°F; 50°C

Optional Higher Temperatures:

Available on request

Main Valve Materials:

Body, Cover and Partition:

Standard: Ductile Iron
Optional: Stainless Steel 316

Spring: Stainless Steel

Diaphragm Assembly:

NR / EPDM with Reinforcing Vulcanized Radial Seal Disk:
1½"-6": Plastic
8"- 10": Iron
12"-14": Iron with St.St Upper Guide

Coating: Blue Fusion bonded epoxy

Control Trim Materials:

Control Accessories:

Stainless Steel / Bronze & Brass
NBR / EPDM

Tubing: Stainless Steel / Copper

Fittings: Stainless Steel / Brass

Solenoid:

Body: Stainless Steel / Brass

Elastomers: Synthetic Rubber

Enclosure: Molded Epoxy

* For other optional material consult BERMAD.

** Materials may vary according to sanitary standard.

How To Order

Please Specify the requested valve in the following sequence:

BC - **2"** - **420** - **P2** - **G** - **C** - **16** - **EB** - **4AC** - **CB** - **C**

Segment	Model	Orientation	Code	End Connection	Standard	Code	Solenoid Voltage	Code	Additional Attributes (Multiple Options Permitted)	Code
BC	420	Globe	G	Grooved	ANSI C606	VI	No Solenoid	000	Valve Position Indicator	I
		Angle	A	Flanged	BS 1387	VB	24VAC/50Hz	4A	Limit Switch	S
				(Other standards available)	ISO-16	16	24VDC	4D	St.St. 316 All Control Accessories	N
Size	Potable Compatibility			Threaded	ANSI 150	A5	220VAC/50-60Hz	2A	Pressure Gauge	6
1½" DN40	European Standards	P2			AST-*	S*	220VDC	2D	Orifice Assembly	U
2" DN50	Unregistered	P0			BSPT	BP	110VAC/50-60Hz	5A	Large Control Filter	F
2½" DN65					NPT	NP	110VDC	5D	In Line Filter	C
3" DN80							12VDC	1D		
4" DN100										
6" DN150	Construction Material									
8" DN200	Ductile Iron		C	Coating						
10" DN250				Epoxy Blue		EB	Main Valve Position (When Solenoid De-energized)	C	Tubings & Fittings	
12" DN300				Epoxy Blue with UV Protection		EV	Normally Closed	C	Copper Tubing & Brass Fittings	CB
14" DN350							Normally Open	O	Stainless Tubing & Fittings	NN
							Last Position	P		
							Latch Solenoid	S		



Bulgarkontrola
Bulgaria



ACS
France



GOST
Russia



PZH
Poland



PUB
Singapore

Manufactured and Tested According to
AWWA C530-12 Requirements

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