

PRESSURE REDUCING VALVE

Model 1020

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

The BERMAD 1000 is at the leading edge of control valve design, providing a valve that is free of the typical limitations associated with standard control valves. A unitized flexible diaphragm & guided plug provide a significantly 'look through' passage resulting in accurate & stable regulation and high flow capacity.

The 1000 unique composite structure allows fast & simple maintenance by easy replacing of lightweight diaphragm assembly. It has a wide range of end connection types and sizes, including articulated flange connections isolating the valve from pipeline bending & pressure stresses.



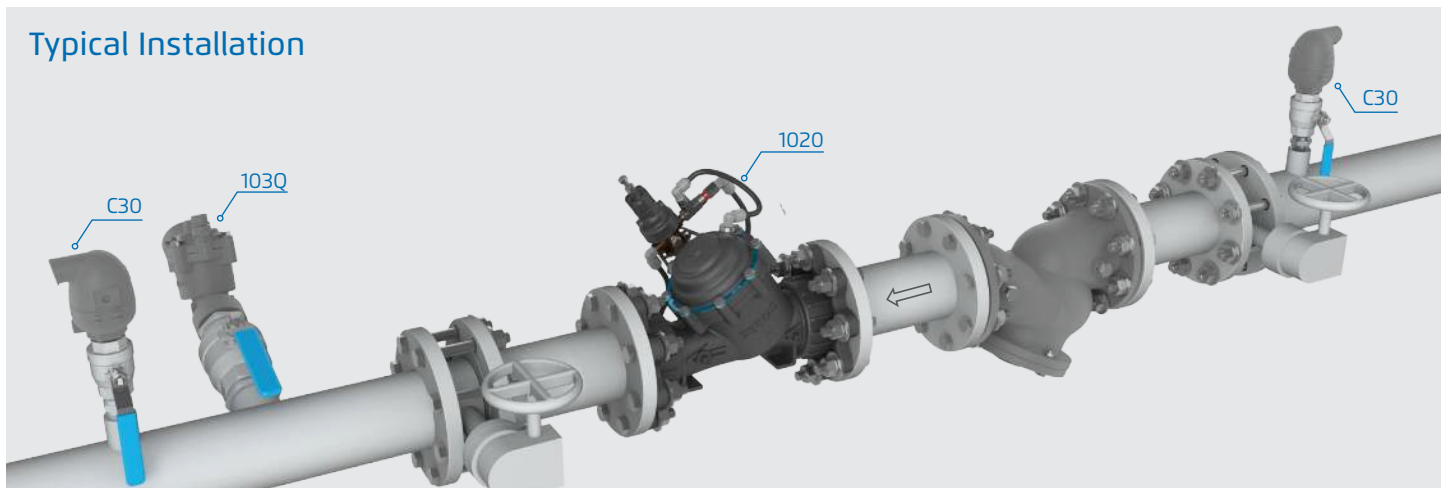
Features and Benefits

- Easy set-up
 - Super light weight
 - Line pressure driven - no external power needed
 - Easy pressure setting - in site or pre-ordered
 - Adaptable on-site to a wide range of end connection
- Simple and durable design
 - Excellent cavitation resistance
 - Highly durable construction & material - No rust
 - Unitized actuator unit - open, replace, close
 - In-line serviceable - no need to remove from line
- All the benefits of a diaphragm actuated control valve
 - Wide flow range
 - Low flow stability
 - Drip tight sealing
 - Obstacle free flow pass
 - Easy addition of hydraulic features

Typical Applications

- Maintaining pre-set maximum pressure in pipe lines through the day for leakage reduction
- Pressure reduction for main off-branching lines requiring lower pressure
- Elimination of pressure fluctuation from dynamic pressure losses at end consumers
- Supplying safe pressure to facilities and households with low pressure rated appliances

Typical Installation



All images in this catalog are for illustration only


Advanced Composite Polymer Material

Strong, inert and light weight; bringing the next generation of materials to the water supply industry

Unitized Actuator Assembly

Allows fast and simple in-line maintenance

Reinforced Rolling Diaphragm

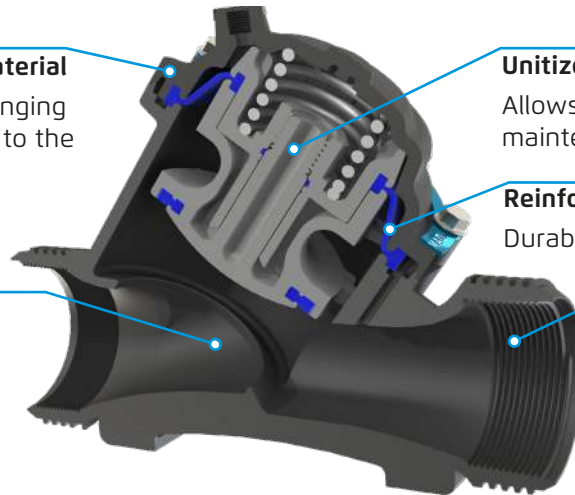
Durable and flexible operation

Unobstructed Flow

High capacity semi-straight flow for exceptionally low head loss

Internal Threads or Adaptors

Flexible option for Threaded, Groove or Flange connection



Technical Specifications

End Connections:
Threaded - Female NPT or BSPT:

- 1½"EN, 2"ES/EN, 3"ES/EN

Grooved - According to ANSI C606-81:

- Adaptors on Threaded Body: 2"ES/EN, 3"ES/EN, 4"ES

Flanged - ISO-7005-2 (PN10/PN16), ANSI #125/ANSI #150, JIS K-10:

- Universal Adaptors on Threaded Body: 3"ES/EN, 4"ES

Pressure Rating:

- 1½"EN-4"ES: 250 psi; PN16

Valve Pattern:

- Y (Oblique)
- Angle - consult factory for available sizes

Temperature: For Cold Water Applications

Consult Bermad For hot water applications.

Main Valve Materials:
Body, Cover and Actuator assembly:

Reinforced Polyamide

Cover Bolts: Stainless Steel 304

Spring: Stainless Steel 302 (Optional 316)

Diaphragm: EPDM

Seals: EPDM

Trim:
Accessories: Stainless Steel / Bronze & Brass / Polyamide

Tubing: Polypropylene

Fittings: Stainless Steel / Brass / Acetal

Notes

- Inlet pressure, outlet pressure and flow rate are required for optimal sizing and cavitation analysis
- Recommended continuous flow velocity: 0.3-20 ft/sec; 0.1-6.0 m/sec
- Minimum operating pressure: 10 psi / 0.7 bar. For lower pressure requirements consult factory

How To Order

Please Specify the requested valve in the following sequence:

WW	-	2"	-	1020	-	EN	-	P2	-	Y	-	Q	-	VN	-	UC	-	460	-	PA	-	HR
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Segment	Model	End Connection	Body Threads	Code	Voltage	Code	Additional Attributes (Multiple Options Permitted)	Code
WW BC	1020	Threaded	BSPT Female NPT Female	BP NP	24VAC/50Hz 24VAC/60Hz 24VDC	4A 46 4D	St.St. 316 All Control Accessories	N
		Grooved	BSPT Female NPT Female	VV VN	220VAC/50-60Hz 220VDC	2A 2D	3-Way Control	X
		Flanged	BSPT Female NPT Female	CC CN	110VAC/50-60Hz 110VDC 12VDC	5A 5D 1D	Trim Isolation Ball Valves Pressure Gauge	h 6

Size	Code	Type	Code
Design 1½", DN40	EN 1½"	ES -	
2", DN50	2"	2"	High Flow EN
3", DN80	3"	3"	Normal Flow ES
4", DN100	4"	4"	

Standard Configurations:	Main Valve Compliance	Code	Orientation	Code	Construction Material	Code	Coating	Code
	Potable Water	P2	Y Oblique	Y	Nylon Glass Reinforced	Q	Uncoated	UC

Main Valve Position (When Solenoid De-energized)	Code
Normally Closed	C
Normally Open	O
Last Position	P
Latch Solenoid	S

Tubings & Fittings	Code
Polypropylene Tubing and Acetal Fittings	PA



For detailed Engineering & Specification data, IOM and CAD Drawings, visit the Model Page on the [BERMAD](http://www.bermad.com) website.

www.bermad.com

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