

# PRESSURE RELIEF/ SUSTAINING VALVE

with Solenoid Control

## Model 1030-55

Solenoid controlled valve that can be set to close drip tight or modulate as pressure relief or sustaining in response to an electric signal. When modulating the valve sustains minimum pre-set, upstream pressure. If installed as a "branched from the line" it relieves excessive line pressure when above maximum pre-set.

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.



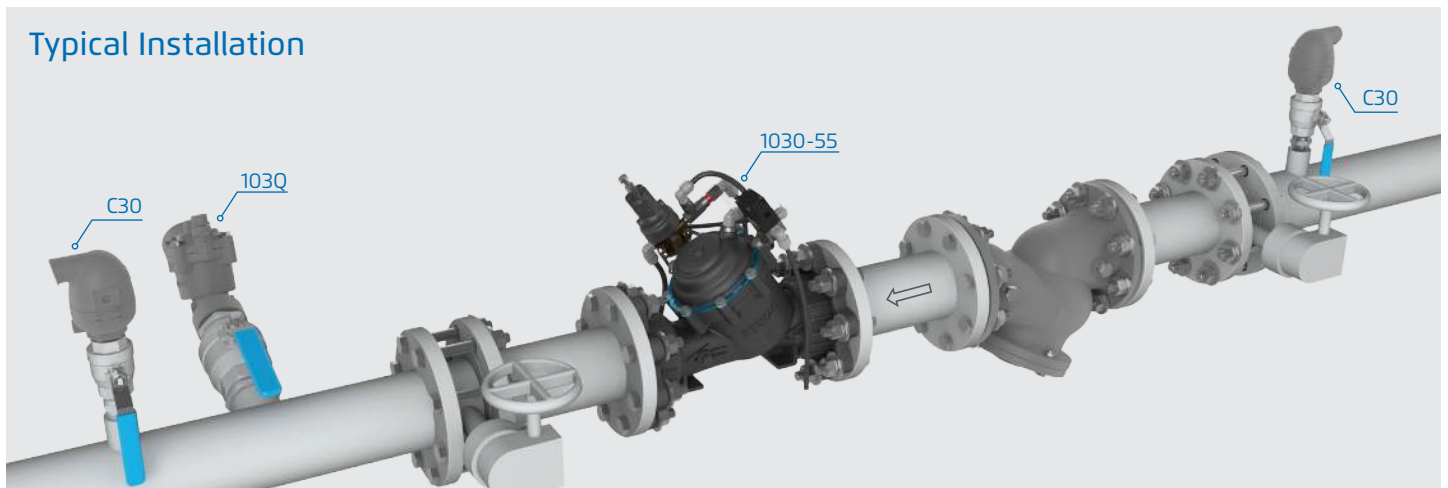
## Features and Benefits

- Easy set-up
  - Super light weight
  - Line pressure driven - no external driving 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

- Prioritizing upstream consumes over downstream high demand
- Sustaining sufficient pressure at upstream in case of pressure drop
- High pressure safety relief valve in potable water pressure reduction systems
- As a safety device for pumping stations temporarily operated out of their regular regime, where stable and constant pressure relief is required
- Sustains pump discharge pressure, preventing pump overload and cavitation damage caused by excessive demand
- Preventing line emptying in gravity lines
- Process flow control in facilitates requiring pressure control

## 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**

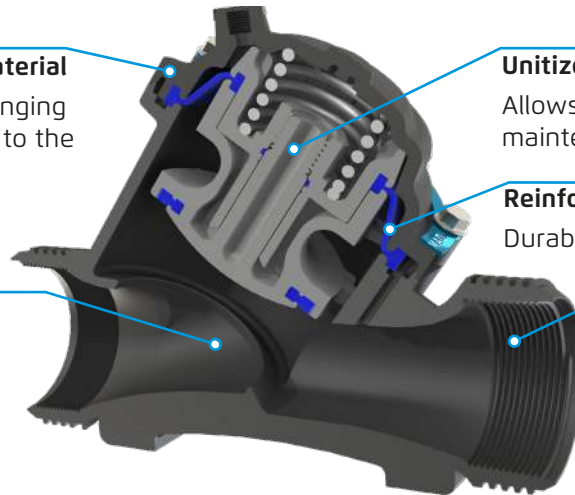
Durable and flexible operation

**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 / 0.7bar. For lower pressure requirements consult factory

## How To Order

Please Specify the requested valve in the following sequence:

**WW** - **2"** - **1030-55** - **EN** - **P2** - **Y** - **Q** - **VN** - **UC** - **460** - **PA** - **HR**

Segment	Model	End Connection	Body Threads	Code	Voltage	Code	Additional Attributes (Multiple Options Permitted)	Code
WW BC	1030-55	Threaded	BSPT Female	BP	24VAC/50Hz	4A	St.St. 316 All Control Accessories	N
			NPT Female	NP	<b>24VAC/60Hz</b>	<b>46</b>	3-Way Control	X
			BSPT Female	VV	24VDC	4D	Trim Isolation Ball Valves	h
			<b>NPT Female</b>	<b>VN</b>	220VAC/50-60Hz	2A	Pressure Gauge	6
		Grooved	BSPT Female	CC	220VDC	2D	Horizontal Installation, Left Side Circuit (Standard)	HL
			NPT Female	CN	110VAC/50-60Hz	5A	<b>Horizontal Installation, Right Side Circuit</b>	<b>HR</b>
		Flanged	BSPT Female	CC	110VDC	5D		
			NPT Female	CN	12VDC	1D		

Size	Code	Type	Code
Design	EN	ES	
1½", DN40	1½"	-	
<b>2", DN50</b>	<b>2"</b>	<b>2"</b>	
3", DN80	3"	3"	
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
<b>Normally Open</b>	<b>0</b>
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](http://www.bermad.com)

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