

# PRESSURE REDUCING & SUSTAINING VALVE

## Model 1023

Hydraulically operated control valve with independent Pressure Sustaining and Pressure Reducing functions. It sustains minimum pre-set upstream pressure, regardless of fluctuating flow or varying downstream pressure, and it prevents downstream pressure from rising above maximum pre-set level, regardless of fluctuating flow or excessive upstream pressure.

The BERMAD 1000 control valve features advanced design, accurate regulation, and high flow capacity. Its unique structure allows easy maintenance and supports various end connections to reduce pipeline stress.



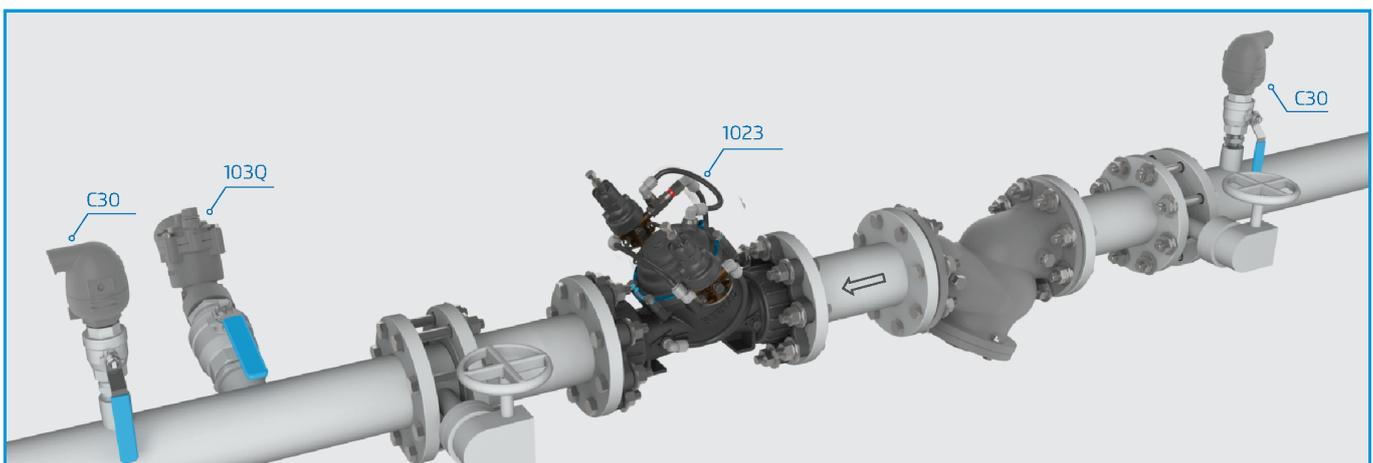
### Features & Benefits

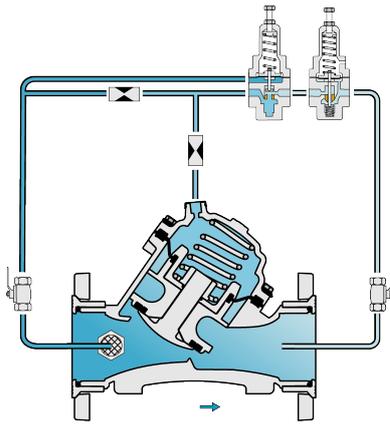
- Easy set-up
  - Super light weight
  - Line pressure driven - no external power needed
  - Easy pressure setting - in site or pre-ordered
  - Adaptable on-site to a wide range of end connection
- Simple and durable design
  - Excellent cavitation resistance
  - Highly durable construction & material - No rust
  - Unitized actuator unit - remove, replace, restore
  - 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 features

### Typical Applications

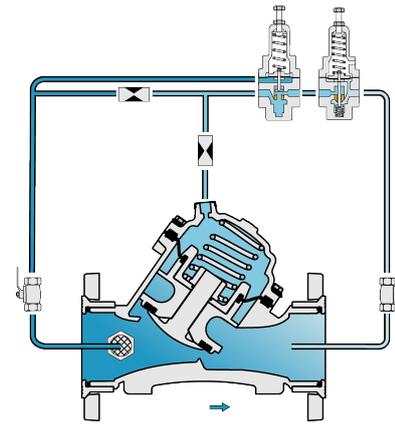
- Municipal systems - Reducing pressure at potable water connections to buildings and structures
- Water delivery system - Prioritizing upstream over downstream demand
- Water delivery system - Maintaining upstream pressure during pressure drop
- Leakage Reduction - Minimizing Non-Revenue Water
- Residential Water Supply - Protecting pipes, fixtures, and appliances from damage

### Typical Installation





Pressure Sustaining



Pressure Reducing

## Main Valve

### Size Range:

**EN Series:** 1½"-4"; DN40-100

**ES Series:** 2"-6"; DN50-150

**Pattern:** "Y" (globe)

**Pressure Rating:** 16 bar

**End Connection:** Threaded, Grooved, Flanged

**Temperature Rating:** For Cold Water Applications

**Optional higher temperature:** Consult BERMAD

### Standard Materials:

**Body & Cover:** Reinforced Polyamide

**Cover Bolts:** Stainless Steel 304

**Internals:** Reinforced Polyamide

**Diaphragm:** EPDM

**Spring:** Stainless Steel

**Seals:** EPDM

## Control System

### Standard Materials:

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

**Tubing:** Stainless Steel or Polypropylene

**Fittings:** Stainless Steel or Acetal

### Pilot standard materials:

**Body:** Stainless Steel, Bronze & Brass

**Elastomers:** Synthetic Rubber

**Internals and Spring:** Stainless Steel

### Pilot Options:

Various pilots and calibration springs are available.

Select according to valve size and operating conditions.

For more details check relevant pilots product pages.

## Notes

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

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

