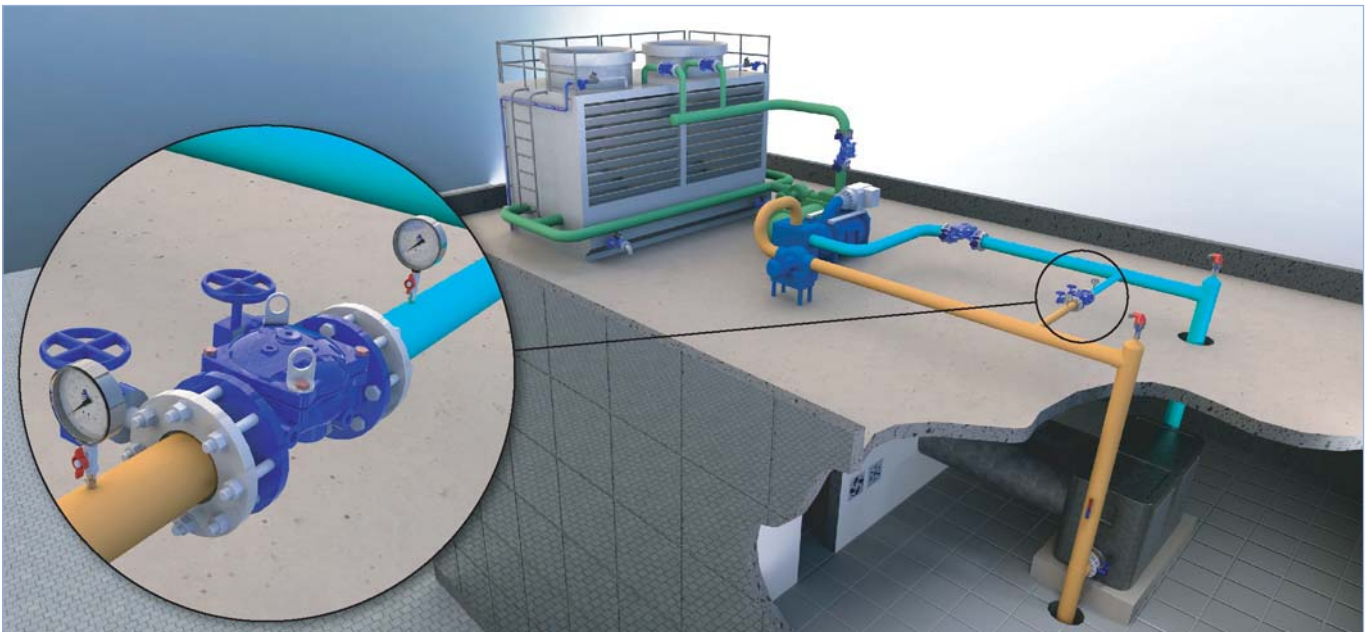


# Differential Pressure Sustaining Valve

Hydraulically operated, differential pressure-sustaining control valve that sustains minimum pre-set differential pressure between two local or remote points, regardless of fluctuating flow or varying upstream pressure.

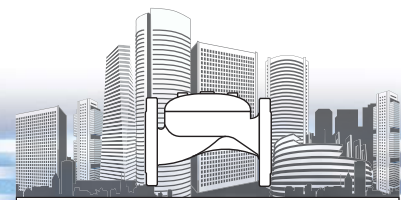
BERMAD 400 series valves are hydraulically operated, simple and reliable, globe valves with full bore hydrodynamic body providing an unobstructed flow path and superior performance. The valves balanced rolling-diaphragm assembly is vulcanized with a rugged radial seal disk construction, performing as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



For illustration only

## Typical Application

- Sustaining pre-set differential pressure between distribution and circulation in close circuit energy systems such as air conditioning and cold/hot water supply networks; preventing excessive pressure and reacting to varying consumer demand
- Sustaining pre-set differential pressure between open circuit hot/cold water supply networks in buildings; balancing and preventing pressure fluctuations between the hot and cold water supplied to consumers
- Sustaining pump differential pressure in circulation or where the supply line pressure regimes vary; preventing pump overload and cavitation damage

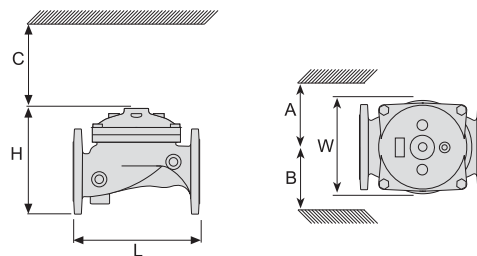


## Features and Benefits

- 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
- Upstream and downstream sensing – very accurate modulation according to local readings
- Advanced control loop design – linear, accurate and stable modulation
- Open/close/automatic override – enabling selection between various control regimes
- Easy on-site set point change – enables calibration of the control loop to various seasonal and other operation regimes
- Optional external isolation preparation for hot/cold water applications – prevents condensation and energy losses

## Technical Data

Size		Kv	A,B	C	L	H	W			Weight (kg)	
DN	Inch						Thr	Fla	Gro	Th/Fl	Gro
50	2"	57	330	68	205	155	119	155	119	9	5
65	2½"	78	340	110	205	178	129	178	n/a	10.5	10.5
80	3"	136	350	125	250	210	170	200	170	19	10.6
100	4"	204	360	145	320	242	n/a	223	204	28	16.2
150	6"	458	400	205	415	345	n/a	306	306	68	49
200	8"	781	430	260	500	430	n/a	365	n/a	125	125



## End Connections:

**Grooved:** ANSI C606

**Flanged:** ISO 7005-2 (PN10 & 16); ANSI B16.42 (#150)

**Threaded:** ISO-7-Rp or NPT

**Others:** Available on request

**Pressure Rating:** 16 bar (230 psi)

**Valve Pattern:** Globe & Angle (2"-4")

**Working Temperature:** Water up to 60°C (140°F)

## Main Construction Materials:

**Body, Cover and Actuator:** Ductile Iron

**Internals:** Stainless Steel & Elastomer

**Control Trim System:** Brass control components / accessories

Copper & Brass tubing & fittings

Optional: Stainless Steel 316

**Elastomers:** Nylon fabric Reinforced NR with rugged insert

**Coating / colour:** Electrostatic Polyester Powder Blue

Optional: Epoxy Fusion-Bonded Blue

For other optional materials consult BERMAD

## How to Order

Please specify the requested valve in the following sequence:

Size	Model	Category	End Connections
2"	436	BE	Flanged ISO-16 16
2½"			ANSI-150 A5
3"			ABNT-16 B6
4"			Threaded BSP BP
6"			NPT NP
8"			Grooved ANSI C606 V1



For full technical specifications, see Engineering section or consult BERMAD

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