Opening Speed Control Device

One Way Adjustable Restrictor
Model: OSCD

The BERMAD Opening Speed Control Device (OSCD) is a valve control accessory that has an adjustable restricted flow in one flow direction and an unrestricted flow in the opposite direction.

The OSCD is designed to be installed on the control trim of BERMAD valves, to reduce the opening speed and thus decrease or eliminate damaging water surge or water hammer.

Reduction of the main valve's opening speed is achieved by adjusting the OSCD to restrict the rate of water flow exiting the main valve's control chamber controlling the rate at which the main valve opens.

The closing speed remains unaffected as flow in the opposite direction, entering the control chamber to close the main valve remains unrestricted.

Stainless Steel

Nickel Aluminum Bronze

(for illustration only)

Features

- Field Adjustable
- Corrosion Resistant Materials as standard
- Operates in any position
- Angled flow, less clogging
- Tamper-proof protective cap

Typical Applications

- Adjustment of Main valve opening speed
- Prevention of water-surge or water-hammer

Technical Data

Pressure Rating: Maximum: 25 bar/365 psi
Connections: Inlet: ½" NPT (F) Outlet: ½" NPT (F)
Temp Rating: Max. 80° C / 180°F
Flow Factor: Unrestricted flow direction Kv 1.2 / Cv 1.4
Restricted flow direction: See flow coefficient graph on next page

Materials

Body	Control Stem	Protective Cap	Seals
St Steel 316 CF8M	AISI 316	Polycarbonate	NBR
Ni al bronze ASTM B148	Monel 400	Polycarbonate	NBR

Contact us:

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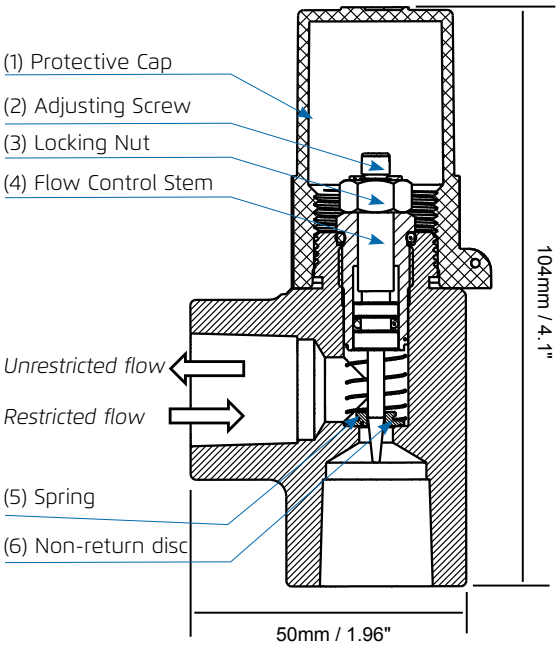
Principle of Operation

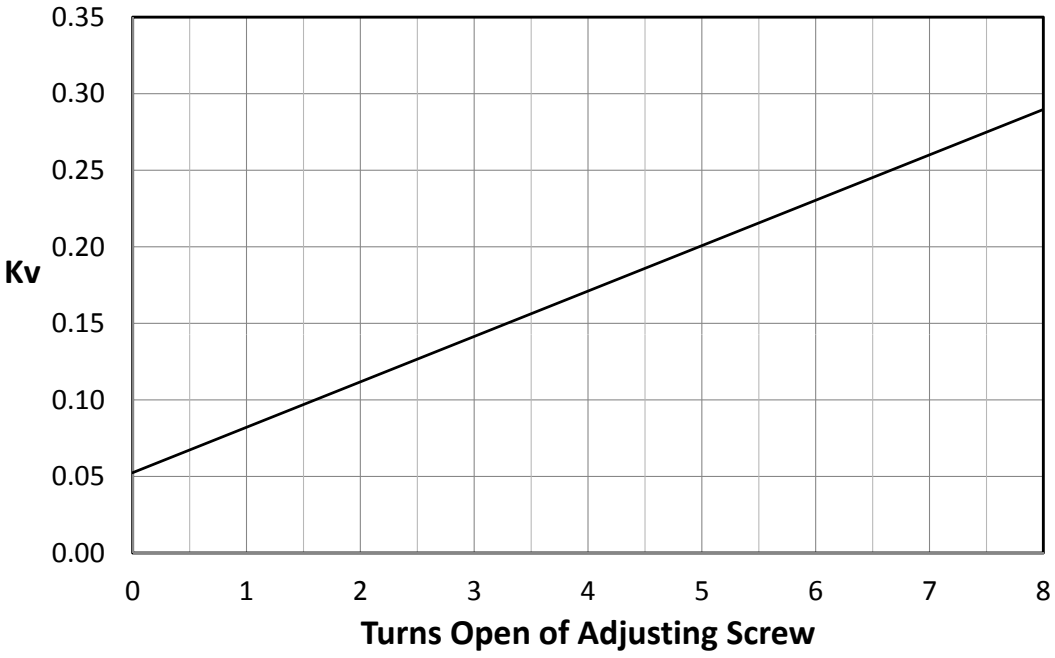
When the flow direction is in the "unrestricted flow" direction against the spring (5) and the flow control stem (4) the flow causes the non-return disc (6) to leave the seat presenting a relatively unrestricted flow path.
When the flow is reversed, and in the "restricted flow" direction the non return disc is held in place on the seat by the spring force and the flow, presenting a restricted flow path between the orifice in the non-return disc and the flow control stem.



Operation

Unscrew the protective cap (1) and loosen the locknut (3). Turning the adjusting screw (2) clockwise decreases the flow, and will slow the main valve opening. Turning the adjusting screw counter-clockwise increases the flow, and will quicken the main valve opening.
Caution: An OSCD supplied installed on a valve trim is factory adjusted for optimum performance and any further adjustment may impair the functionality of the main valve.

Flow Coefficient (Kv) Vs. Opening Turns for restricted flow direction:



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