

2-WAY LATCHING UNIVERSAL RELAY VALVE

Model URV-2-M

The BERMAD URV-2-M is a normally open, 2-way, spring-return, pressure-operated latching relay pilot valve featuring a balanced poppet and diaphragm actuator. Designed for use with BERMAD Deluge Valves, it actuates the main valve when control pressure is released (pressure-to-close operation). Once opened, the URV remains latched in the open position even if control pressure inadvertently returns and can only be reset manually after control pressure has been re-established. Its balanced poppet design provides reliable operation at low control pressures, while the frictionless isolation membrane design greatly enhances reliability and durability. This makes it particularly well suited for use with firewater, brackish water, seawater, and other corrosive fluids.

Features and Benefits

Frictionless operation: Isolation membrane improves safety and reliability

Latching design: Stays open until manually reset

Balanced poppet shaft: Low control pressure independent of line pressure

Heavy-duty construction: Suitable for onshore and offshore applications

Corrosion-resistant materials: For harsh environments and corrosive media

Technical Data

Pressure Rating: 25 bar / 360 psi

Minimum Recommended Control / Pilot Line Pressure: 2.5 bar / 36 psi

Temperature Rating: 80°C / 180°F

Flow Factor: Kv 1.5 / Cv 1.7

Port Connections: Line pressure ½" NPT Control ¼" NPT

Weight: 1.4 kg / 3 lbs

Standard Materials*

Body: Stainless Steel 316, CF8M

Wetted Parts: Stainless Steel 316

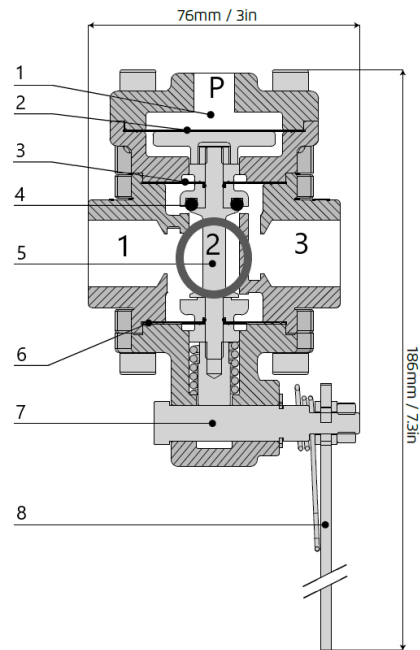
Covers (dry parts): Stainless Steel 316, CF8M

Elastomers: NBR (Buna-N)

Bolts: Stainless Steel 316

Spring: Stainless Steel 316

*for duplex and NAB material options see "Models Codes and Material Options" on last page



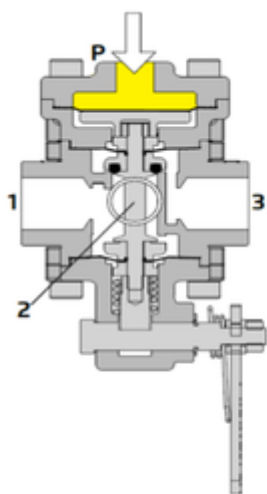
Part	Description
1	Control chamber
2	Diaphragm
3&6	Isolation membrane
4	Seal
5	Balanced poppet shaft
7	Latch Shaft
8	Latch Handle

Port	Size	Connections
1, 2, 3	½" NPT	Inlet / Outlet
P	¼" NPT	Valve Control Chamber

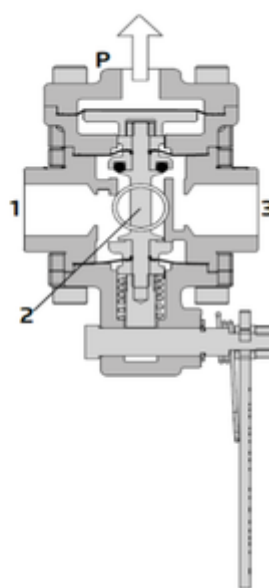
Operation

The URV 2-M utilizes a control chamber and three operational ports, 1, 2 and 3. Actuation or position change is achieved by applying a relatively low control pressure (air or water) to the Control Port (P). To facilitate visibility and/or operation, the facing position of the latch handle assembly may be positioned at 90° increments on the vertical axis.

The flow direction is interchangeable. Connect between ports 1 & 3 for straight flow and between ports 2 & 3 for angular flow.

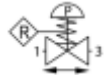
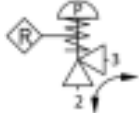


Closed: Control chamber pressurized



Open: Control chamber depressurized

Connections

Configuration	Function	Port	Schematic
Straight Flow	Inlet/Outlet	1 & 3	
	Control	P	
Angular Flow	Inlet/Outlet	2 & 3	
	Control	P	



Control / Pilot Line Pressure Chart - Standard Control Pressure Version

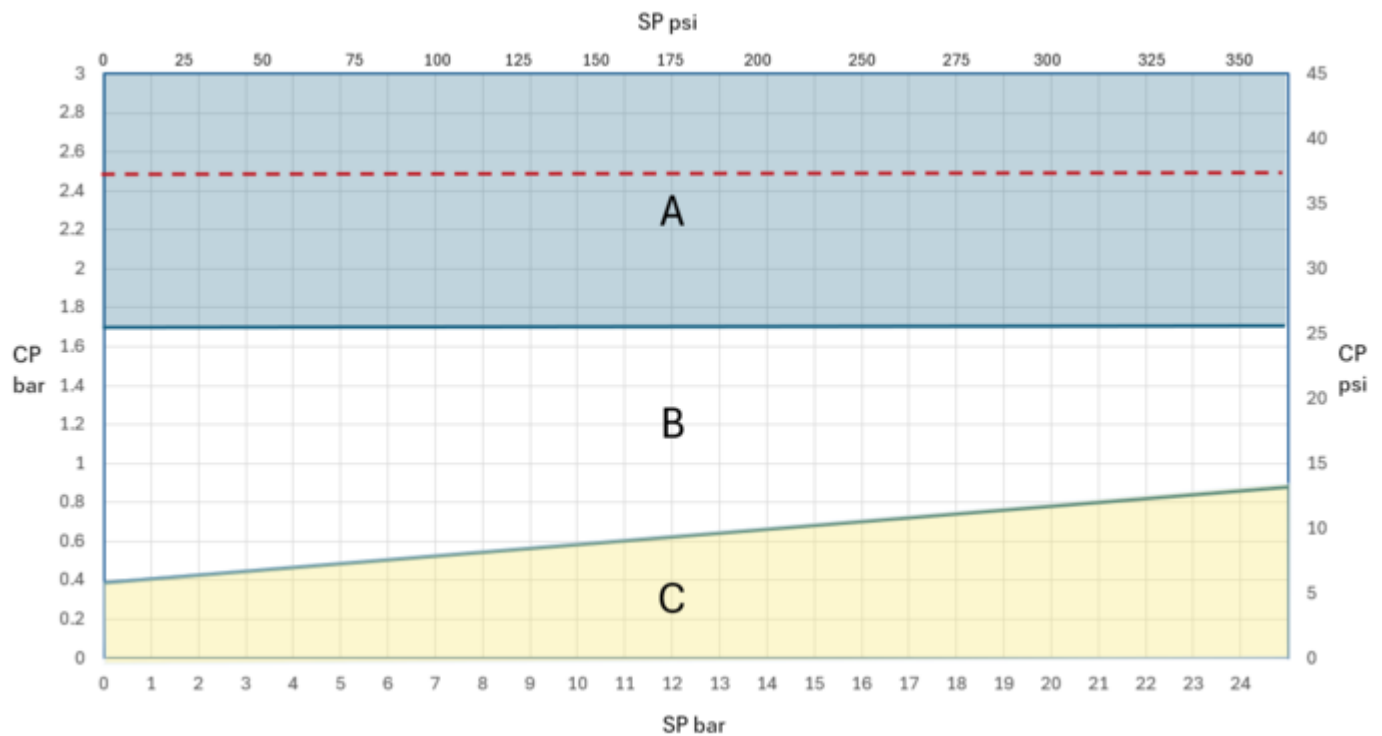


Chart Symbols:

Symbol	Description	Symbol	Description
A	URV Fully Closed Zone	---	Recommended Control Pressure
B	URV Closing or Opening Zone (transitional)	SP	Supply / System Pressure
C	URV Fully Open Zone	CP	Control Pressure



SS316



NAB/SS316



Duplex/Titanium/SS316

Model Codes and Material Options

Standard Actuator: Recommended Pilot Line / Control Pressure 2.5 bar / 36 psi		
Model Code	Materials: Body & Wetted Parts	Materials: Actuator/Covers
URV-2-M-N-N	Stainless Steel 316	Stainless Steel 316
URV-2-M-U-N	Ni.Aluminium Bronze (Monel shaft)	Stainless Steel 316
URV-2-M-U-U	Ni.Aluminium Bronze (Monel shaft)	Ni.Aluminium Bronze
URV-2-M-D-N	Super-Duplex	Stainless Steel 316
URV-2-M-T-N	Titanium	Stainless Steel 316

* for other material options contact BERMAD