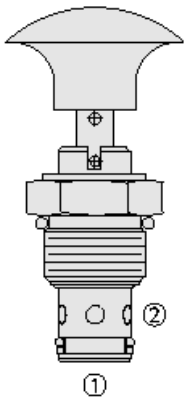




Overview



Description

The MP10-20 is a 2-way, manual pull to open, spring return, screw-in cartridge style, directional hydraulic valve.

Operation

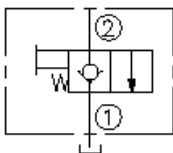
In the neutral position the valve blocks flow from ports 2 to 1 until it is manually actuated (pulled). When released the valve returns to its neutral position. Note: pressure at port 1 will directly act on the spring. Port 1 is intended to be a tank port only. The bias spring allows up to 180 psi [12,4 bar] back-pressure at port 1 before the valve will open. A unique 90° rotational lock is optional for positive "open" position holding. The valve resets to spring return-to-close with a 90° turn from the locked-open position.

note: pressure at port 1 will directly act on the spring.

Features

- Hardened seat for long life and low leakage.
- Remains closed to 12.4 bar (180 psi) back-pressure.
- Optional rotational lock position.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating	207 bar (3000 psi)	- Note: Port 2
	12.4 bar (180 psi)	- Note: Port 1

Flow Ratings

Flow rating	56.8 lpm (15 gpm)	
Maximum internal leakage	0.25 ml/min (5 drops/min)	- Note: At 207 bar (3000 psi)

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane seals

Other Ratings

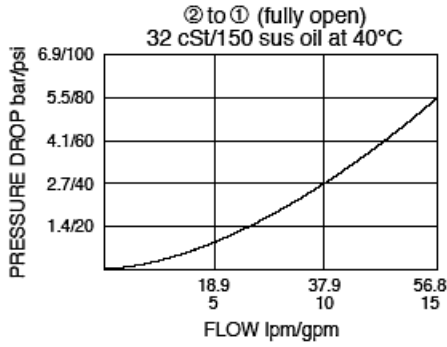
Corrosion protection	MP10-20 - 960 hr salt spray per ASTM b117 (gmp10-20x)
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Properties

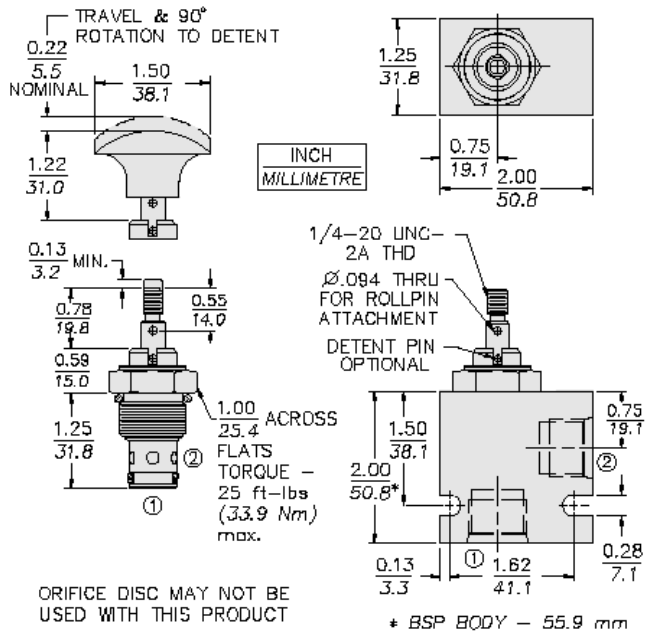
Mechanical pull effort required	7.3 kg (16 lb)	- Note: Initial
	10.4 kg (23 lb)	
Materials	Steel with hardened work surfaces	
Materials	Zinc plated exposed surfaces	
Unit weight	0.11 kg (0.25 lb)	
Internal wetted surface area	82 cm ² (12.7 in ²)	



Performance



Dimensions



ORIFICE DISC MAY NOT BE USED WITH THIS PRODUCT

Installation Specifications

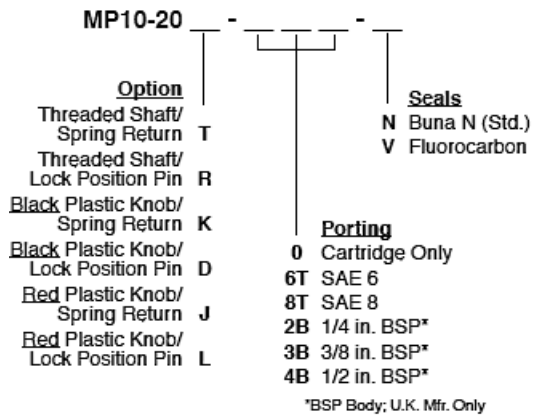
Cavity	VC10-2
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-2N-T	- Note: Buna N
	SK10-2V-T	- Note: Fluorocarbon
	SK10-2P-T	- Note: Polyurethane



Order Code



Model Options

MP10-20F-H-J

F Adjustment

CODE	DESCRIPTION
D	Black Plastic Knob with Lock Position Pin
J	Red Plastic Knob with Spring Return
K	Black Plastic Knob with Spring Return
L	Red Plastic Knob with Lock Position Pin
R	Threaded Shaft with Lock Position Pin
T	Threaded Shaft with Spring Return

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
2B	Aluminum BSPP 1/4" (2)
3B	Aluminum BSPP 3/8" (3)
4B	Aluminum BSPP 1/2" (4)
4BD	Ductile Iron BSPP 1/2" (4)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane
U	PPDI Urethane