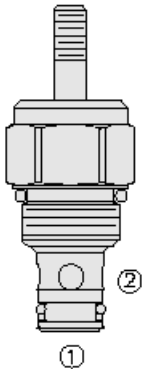




Overview



Description

The MP08-20X is a 2-way, manual pull to shift, spring return, screw-in, cartridge style directional hydraulic valve

Operation

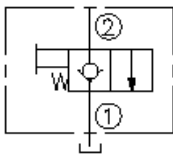
In the neutral position the MP08-20X valve blocks flow from port 2 to 1 until it is manually actuated (pulled). When released the valve returns to its neutral position. The bias spring allows up to 180 psi [12,4 bar] back pressure at port 1 before the valve will open

note: pressure at port 1 will directly act on the spring. Port 1 is intended to be a tank port only

Features

- Hardened seat for long life and low leakage.
- Remains closed to 12.4 bar (180 psi) back-pressure.
- Compact, 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	See performance graph	
Maximum internal leakage	0.25 ml/min (5 drops/min)	- Note: Port 2 to 1 max 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
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

Other Ratings

Corrosion protection	960 hr salt spray per ASTM b117 (gmp08-20x)
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Operating Parameters

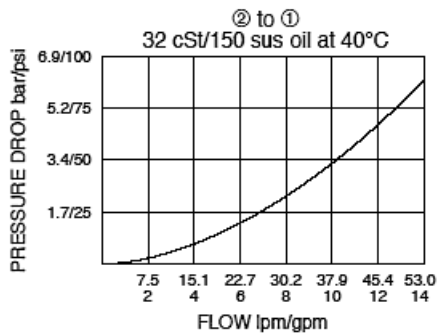
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

Properties

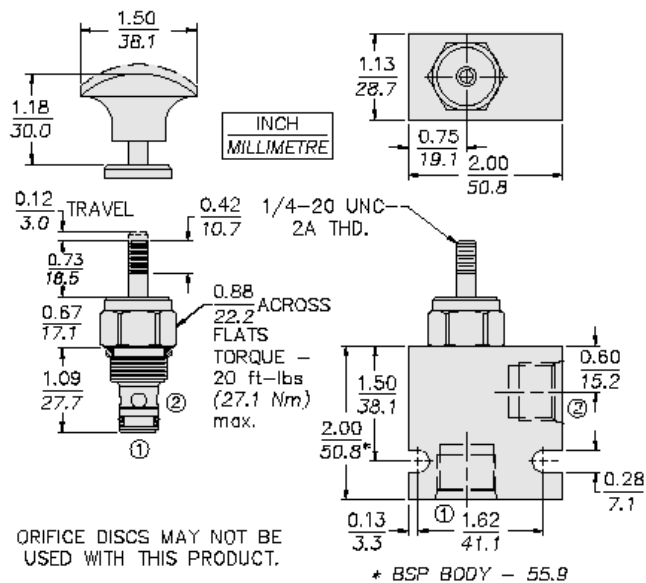
Mechanical pull effort required	4.5 kg (10 lbf)	- Note: Initial;
	6.8 kg (15 lbf)	- Note: At full travel
Unit weight	0.09 kg (0.19 lb)	- Note: "t" option
	0.10 kg (0.22 lb)	- Note: "k" and "j" options
Internal wetted surface area	142 cm ² (22 in ²)	



Performance



Dimensions



Materials

Materials

Cartridge: Weight: 0.10 kg (0.22 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard. Plastic knob optional.

Standard Ported Body: Weight: 0.16 kg (0.35 lb) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ.

Installation Specifications

Cavity	VC08-2
Cartridge installation torque	25.8 to 28.5 N-m (19 to 21 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK08-2X-T	- Note: X = seal option
Housings		



Order Code

POSITION	CODE	DESCRIPTION
		MP08-20FG-H-J
F		Adjustment
F	D	Black Plastic Knob with Lock Position Pin
F	L	Red Plastic Knob with Lock Position Pin
F	R	Threaded Shaft with Lock Position Pin
F	T	Threaded Shaft with Spring Return
G		Screen
G	BLANK	NONE
G	S	100 Mesh Screen
H		Line Body
H	0	No Body
H	6T	Aluminum SAE 6
H	8T	Aluminum SAE 8
H	6TD	Ductile Iron SAE 6
H	8TD	Ductile Iron SAE 8
H	2B	Aluminum BSPP 1/4" (2)
H	3B	Aluminum BSPP 3/8" (3)
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane

