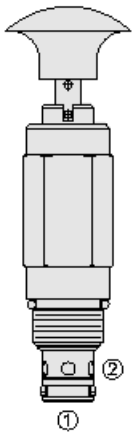




## Overview



### Description

The MP10-22X is a manual, 2-way, normally closed, pull-to-open, screw-in directional hydraulic cartridge valve.

### Operation

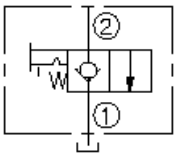
The MP10-22X blocks flow from port 2 to port 1 in its neutral position. In the actuated (pulled) position, valve allows flow from port 2 to port 1. When released, the valve returns to its neutral position. A 90° rotational lock is optional for open position holding.

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

### Features

- Hardened seat for long life and low leakage.
- Remains closed to 27.6 bar (400 psi) back-pressure.
- Optional rotational lock position.
- Industry-common cavity.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating	207 bar (3000 psi)	- <b>Note:</b> Maximum, port 2
	14 bar (200 psi)	- <b>Note:</b> maximum, port 1
Proof pressure	350 bar (5075 psi)	

### Flow Ratings

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

### Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- <b>Note:</b> With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- <b>Note:</b> With viton seals
	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> With polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

## Operating Parameters

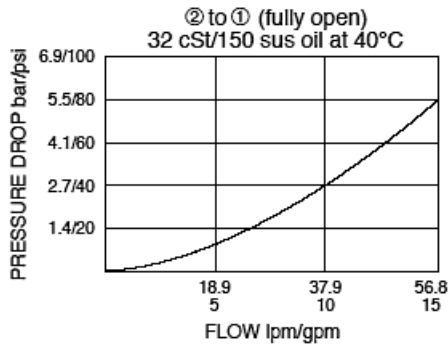
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

## Properties

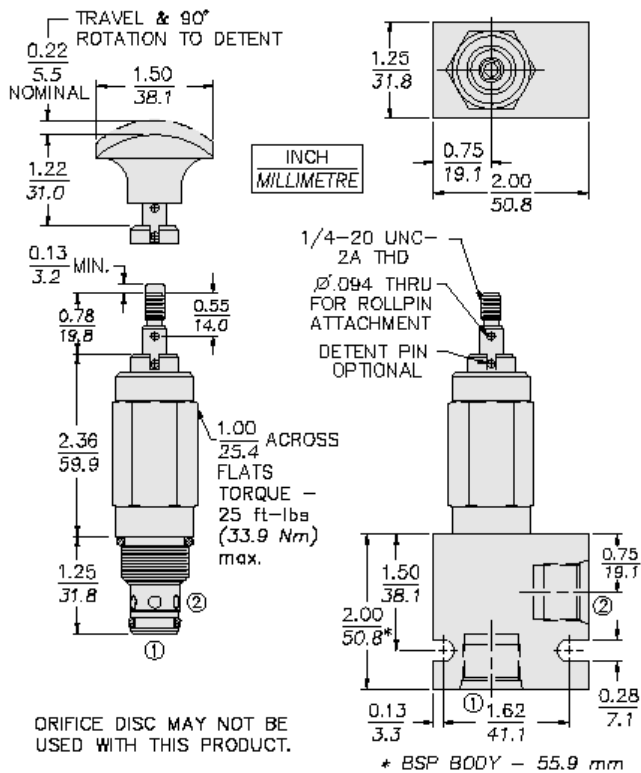
Mechanical pull effort required	14.0 kg (30.8 lb)	- <b>Note:</b> Installed
	16.1 kg (35.5 lb)	- <b>Note:</b> To travel 0.125 [3,2]
	17.5 kg (38.65 lb)	- <b>Note:</b> To detent
Unit weight	0.3 kg (0.65 lb)	
Internal wetted surface area	144 cm <sup>2</sup> (22.3 in <sup>2</sup> )	



## Performance



## Dimensions



## Installation Specifications

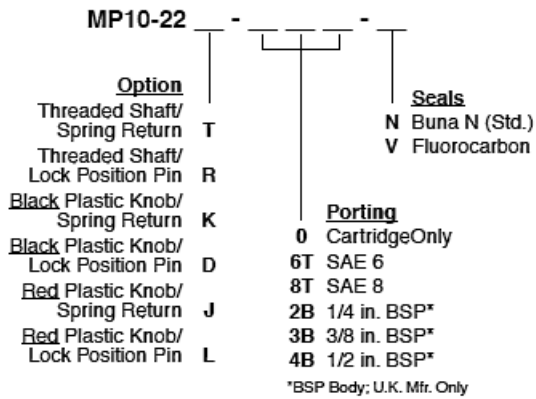
Cavity	VC10-2
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK10-2X-T	- Note: X = seal option
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## Order Code



### Model Options

#### MP10-22F-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