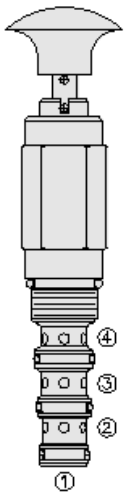




Overview



Description

The MP10-40X is a 4-way, manual, 2-position, pull to shift, spring return, directional hydraulic cartridge valve with locking feature.

Operation

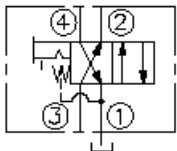
In its neutral position the valve directs flow from port 3 to port 2 and from port 4 to port 1. In the actuated (pulled) position it directs flow from port 3 to port 4 and from port 2 to port 1. All ports are open in transition. The spring chamber is vented at port 1. When released the valve returns to its neutral position.

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

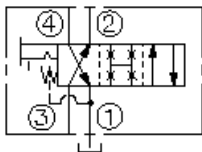
Features

- Hardened spool and cage for long life.
- Remains closed to 14 bar (200 psi) back-pressure.
- Optional rotational lock position.
- Industry-common cavity.

Symbol



TRANSITION:



Ratings

Pressure Ratings

Pressure rating	207 bar (3000 psi)	- Note: Ports 2, 3, and 4
	14 bar (200 psi)	- Note: Port 1

Flow Ratings

Flow rating	See performance graph	
Maximum internal leakage	82 ml/min (5 in ³ /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
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

Operating Parameters

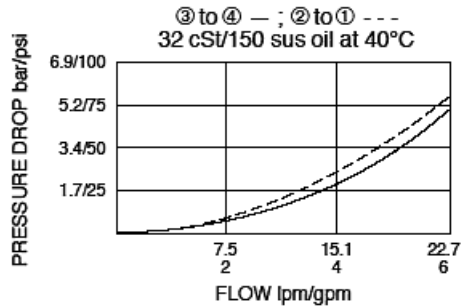
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406



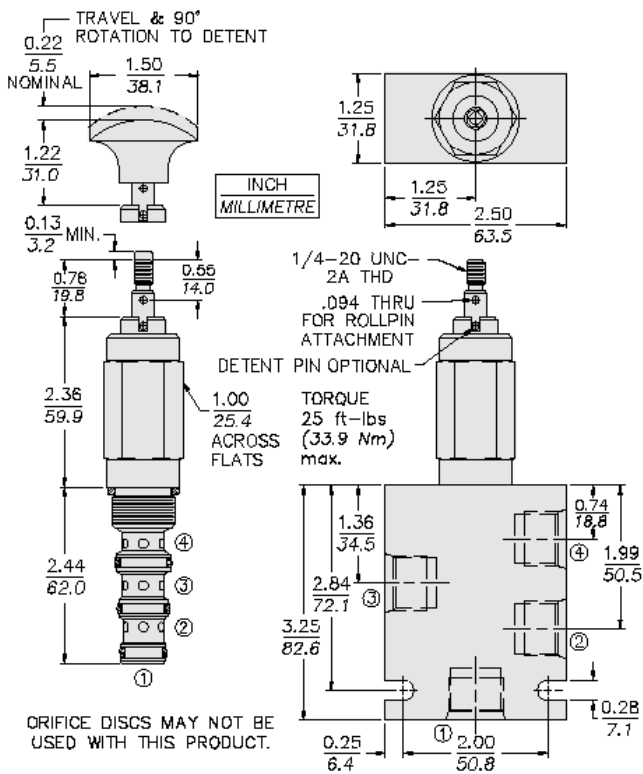
Properties

Mechanical pull effort required	7.3 kg (16 lb)	- Note: Installed
	8.2 kg (18 lb)	- Note: To travel
	8.6 kg (19 lb)	- Note: To detent
Unit weight	0.32 kg (0.7 lb)	
Internal wetted surface area	201 cm ² (31.1 in ²)	

Performance



Dimensions



Installation Specifications

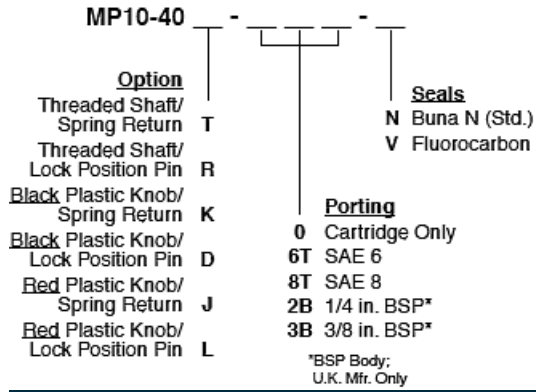
Cavity	VC10-4
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-4X-MMT	- Note: X = seal option
Housings		



Order Code



POSITION	CODE	DESCRIPTION
		MP10-40F-H-J
F		Adjustment
F	D	Black Plastic Knob with Lock Position Pin
F	J	Red Plastic Knob with Spring Return
F	K	Black Plastic Knob with Spring Return
F	L	Red Plastic Knob with Lock Position Pin
F	R	Threaded Shaft with Lock Position Pin
F	T	Threaded Shaft with Spring Return
H		Line Body
H	0	No Body
H	6T	Aluminum SAE 6
H	8T	Aluminum SAE 8
H	6TD	Ductile Iron SAE 6
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane