



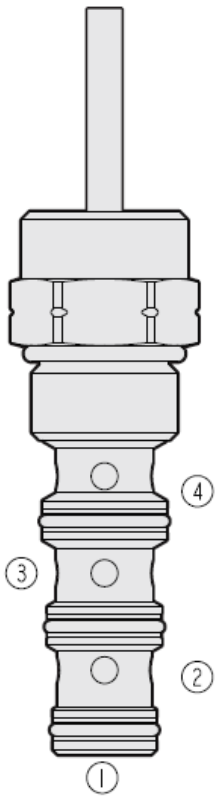
Overview

Description

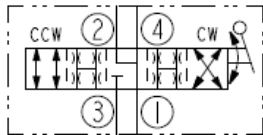
The MR10-47X is a direct acting, manual rotary, spool type, 3 position, 4 way directional control valve with adaptability to a variety of adjustment operators (order separately). It is a screw in cartridge type for use with general purpose hydraulic fluids

Operation

Three positions: centered, 45° counterclockwise, and 45° clockwise. In the center position ports 1, 2 and 4 are open while port 3 is closed. In the 45° counterclockwise from center position, ports 1 and 4 are open while ports 2 and 3 are open. In the 45° clockwise from center position, ports 1 and 2 are open while ports 3 and 4 are open. All ports are partially open in transition.



Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Flow Ratings

Flow rating See chart
Maximum internal leakage 164 ml/min (10 in³) - **Note:** At 241 bar (3500 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	-60 to 71 °C (-76 to 160 °F)	
Ambient temperature	-60 to 90 °C (-76 to 194 °F)	

Other Ratings

Corrosion protection 960 hr salt spray per ASTM b117 (gmr10-47x)

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

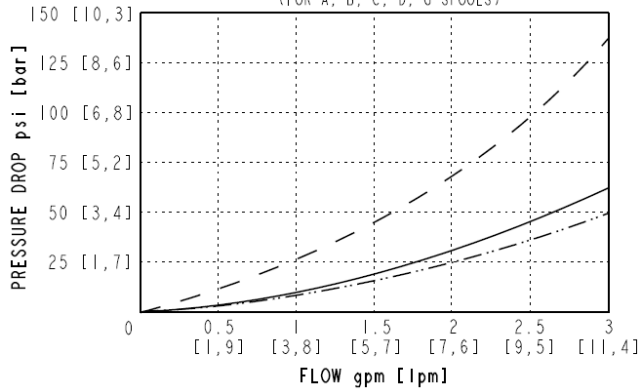
Unit weight	0.17 kg (0.37 lb)
Internal wetted surface area	175 cm ² (27.2 in ²)

Performance

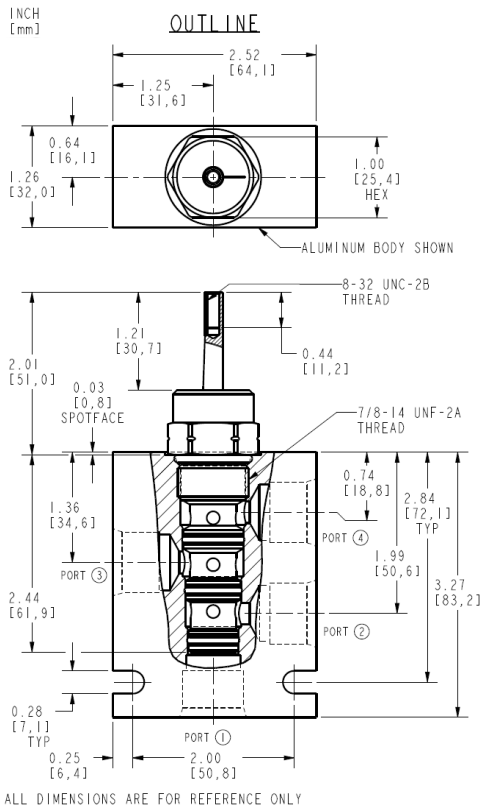
PERFORMANCE

PRESSURE DROP VS FLOW
32 cSt AT 104°F [40°C]

- 3 TO 2 & 3 TO 4
(FOR A, B, C, D, F SPOOLS)
- 3 TO 1
(FOR A, B, F, G SPOOLS)
- - - 2 TO 1
(FOR A, B, C, D, F, G SPOOLS)
- - - 4 TO 1
(FOR A, B, C, D, G SPOOLS)



Dimensions

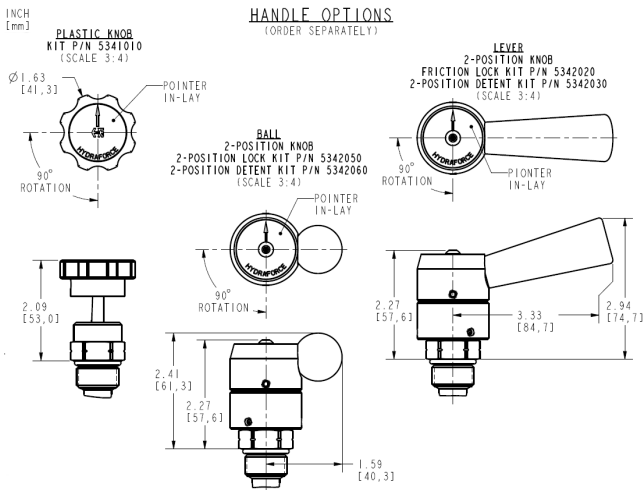


Installation Specifications

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



Accessories



Seal kit

- SK10-4N-MMM - **Note:** BUNA-N
- SK10-4V-MMM - **Note:** Fluorocarbon
- SK10-4P-MMM - **Note:** Polyurethane
- SK10-4U-OOO - **Note:** Urethane

Handle Options (order separately)

Plastic Knob	Kit: P/N 5341010
Ball	2-position friction kit: P/N 5342050 2-position detent kit: P/N 5342060
Lever	2-position friction kit: P/N 5342020 2-position detent kit: P/N 5342030

Order Code

POSITION	CODE	DESCRIPTION
		MR10-47D-H-J
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

