



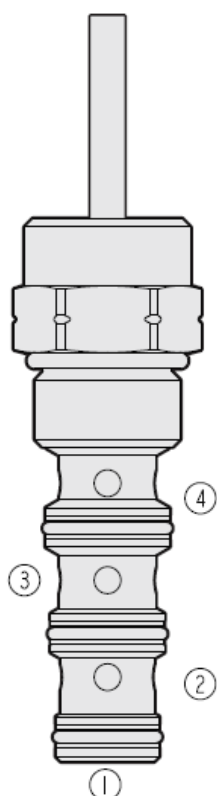
Overview

Description

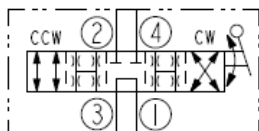
The MR10-47X is a direct acting, manual rotary, spool type, 3 position, 4 way directional control valve with adaptability to a variety of adjustment operators (order separately). It is a screw in cartridge type for use with general purpose hydraulic fluids.

Operation

Three positions: centered, 45° counterclockwise, and 45° clockwise. In the center position ports 1 and 3 are open while ports 2 and 4 are 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

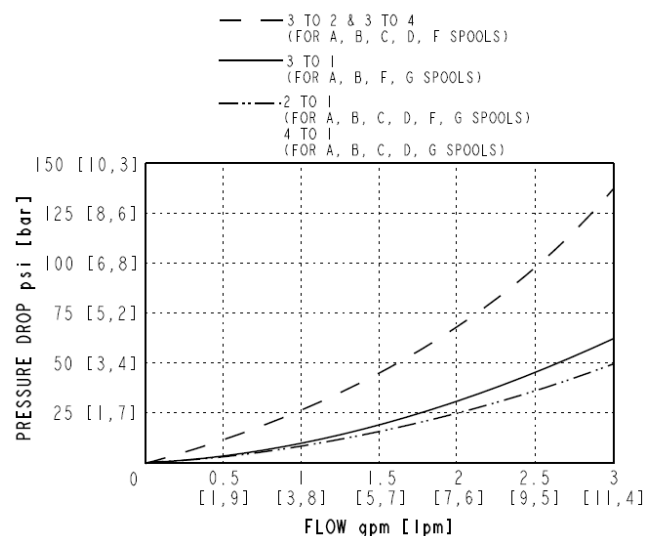
Properties

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

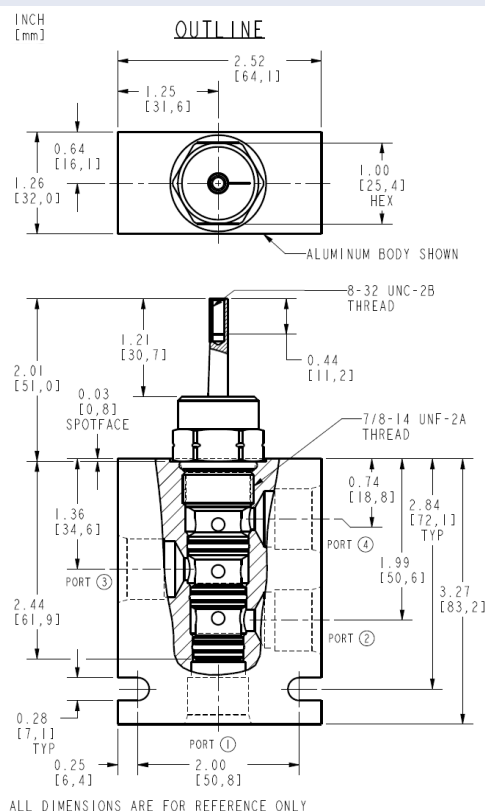
Performance

PERFORMANCE

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



Dimensions

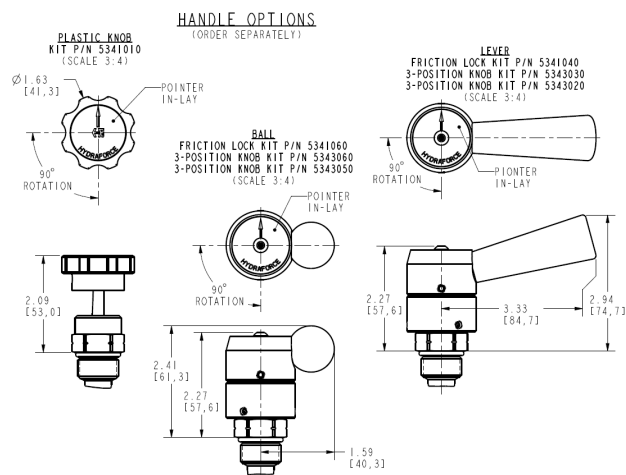




Installation Specifications

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

Accessories



Seal kit

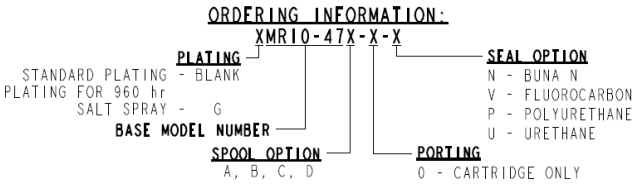
SK10-4N-MMM	- Note: BUNA-N
SK10-4V-MMM	- Note: Fluorocarbon
SK10-4P-MMM	- Note: Polyurethane
SK10-4U-OOO	- Note: Urethane

Handle option

! Handle Options (order separately)	
Kit: P/N 5341010	- Note: Plastic knob
Friction lock kit: P/N 5341060	- Note: Ball
3-position knob kit: P/N 5343060	- Note: Ball
3-position knob kit: P/N 5343050	- Note: Ball
Friction lock kit: P/N 5341040	- Note: Lever
3-position knob kit: P/N 5343030	- Note: Lever
3-position knob kit: P/N 5343020	- Note: Lever



Order Code



Model Options

MR10-47A-H-J

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6

J Seal

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