Directional Control Valves
MRV13-12

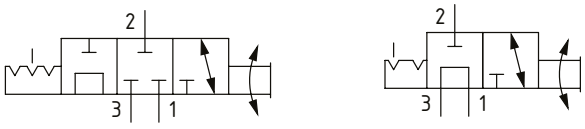
Manual Rotary Valve, 3-Way, Spool Type

350 bar [5000 psi] • 45 l/min [12 US gpm]

DESCRIPTION AND OPERATION

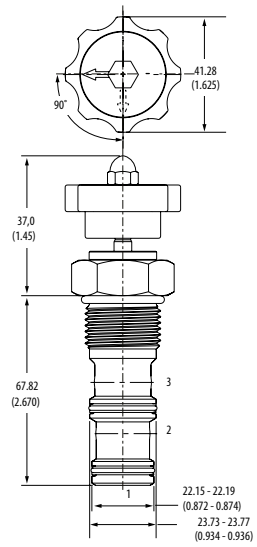
This is a 3-way, spool type, 2 or 3 position manually operated semi-rotary directional control valve. By rotating the manual actuator, the flow path will change from port 1 connected to port 3 (port 2 blocked) to port 1 connected to port 2 (port 3 blocked). Using the manual actuator and detent, the crossover condition can be used to create a third position with all ports blocked. This valve can be used as a diverter or as a dump valve.

SCHEMATIC



DIMENSIONS

mm [in]

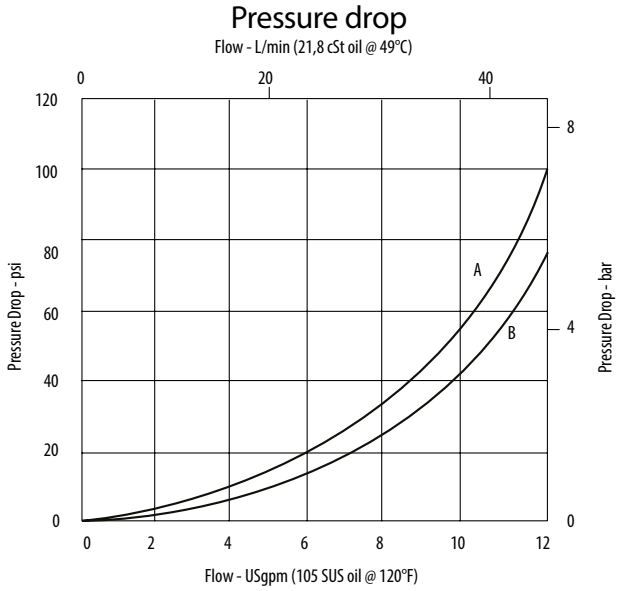


Installation torque
A- 81-95 Nm [60-70 ft. lbs]
S-102-115 Nm [75-85 ft. lbs]

PERFORMANCE DATA

Rated pressure	**350 bar [5000 psi]**
Rated flow	**45 l/min [12 US gpm]**
Leakage	250 ml/min [15 in³/min] @ 350 bar [5000 psi]
Weight	0.32 kg [0.70 lb]
Cavity	C-12-3

PERFORMANCE CURVES



A-Port 1 to 3 • **B**-Port 1 to 2

MODEL CODE

MRV13 - 12 - V - D - A - 4G

Seal Option

Code	Seal Kit
Omit-Buna-N	02-180095
V-Viton	02-165887

Actuator Option

O-Cartridge only (no actuator)
D-Lever (3-position detent)
D2-Lever (2-position detent)
E-Ball (3-position detent)
E2-Ball (2-position detent)
K-Knob (2 position, no detent)

Housing Material

Omit-No housing
A-Aluminum
S-Steel

Housing

Code	Ports	Aluminum Heavy duty	Steel
0	No housing		
4G	1/2" BSP	02-161817	02-169815
6G	3/4" BSP	02-161816	02-169814
10H	#10 SAE	02-160642	
12H	#12 SAE	02-160646	
10T	#10 SAE		02-161070
12T	#12 SAE		02-169816

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available