# MRV14-10 - Manual Rotary Valve

Manual semi-rotary directional control valve 11 L/min (3 USgpm) • 350 bar (5000 psi)

#### 3 position models

# Operation



This valve will direct flow between ports 1 and 2 and ports 3 and 4 in one position. By turning the operator 90°, flow will be directed between ports 1 and 4 and port 3 to port 2. During the cross-over transition, ports 2 and 4 are blocked and ports 1 and 3 are connected.

#### Features

Hardened, ground and honed working parts to limit leakage and prolong life. Various levers and knobs available with and without detent. Working pressure 350 bar.

### Sectional View

D



## Description

This is a high pressure 4 way 2 or 3 position manual semirotary directional control valve. In the center condition port 3 is open to port 1. Ports 4 and 2 are closed.

#### Performance Data Batings and Specifications

Ratings and specifications	
Performance data is typical with fluid at 21,8 cSt (105	SUS) and 49°C (120°F)
Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	11 L/min (3 USgpm)
Internal leakage	300 cc/min (18in <sup>3</sup> /min) @ 350 bar (5000 psi)
Temperature range	-40°to 120°C(-40° to 248°F)
Manual operators	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)
Cavity	C-10-4
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20, etc.
Filtration	Cleanliness code 18/16/13
Standard housing materials	Aluminum or Steel
Weight cartridge only	0.17 kg (0.38 lbs))
Seal kit	565805 (Buna-N), 889600 (Viton <sup>®</sup> )
* LIGHT GUTV HOUSING ONIV	

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#### Pressure Drop Curves

Cartridge only





AB

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Model Code	MRV14 – 10 (V)	- ** - *** - 00 4 5 6	
1 Function MRV14 - Manual rotary valve 4 way	<ul> <li>4 Manual Operators</li> <li>0 - No operator</li> <li>D - Lever</li> </ul>	5 Port Size 0 - Cartridge only	6 Special Features 00 - Non (Only required if valve has special features, omitted
2 Size	<ul> <li>— (3-position detent)</li> <li>D2 - Lever</li> <li>(2-position detent)</li> </ul>	Code Port Size Housing N	if "00") Iumber
10 - 10 size	E - Ball (3-position detent) E2 - Ball (2-position detent	0 Aluminu Light du	m Aluminum ty Fatigue rated Steel
3 Seals	K - Knob	A3B 3/8" BSPP 02-1797	05
L Blank - Buna-N	(2-position,no detent)	A6T SAE 6 566161	
V - Viton <sup>®</sup>		A2G 1/4" BSPP	876709
		A3G 3/8" BSPP	876715
		A6H SAE 6	876708

A8H

AZG A3G

S6T

S8T

### Dimensions

mm (inch)

Cartridge Only



A - 47-54 Nm (35-40 ft. lbs) S - 68-75 Nm (50-55 ft. lbs)

Torque cartridge in housing

SAE 8 1/4" BSPP

SAE 6

SAE 8

3/8" BSPP

See section J for housing details.

Installation Drawing (Steel)





876713

WARNING

Aluminum housings can be used for pressures up to 210 bar (3000 psi). Steel housings must be used for operating pressures above 210 bar (3000 psi).





Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

D

02-175139

02-175140

02-175137

02-175138