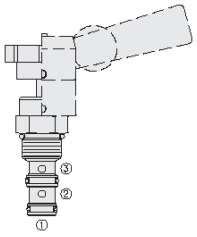
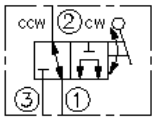
MANUAL ROTARY 3 WAY, 2 POSITION DIRECTIONAL VALVE

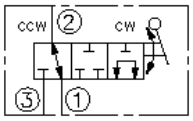
Overview



SYMBOL



TRANSITION:



Description

The MR10-31 is a manually operated, 3-way, 2-position, screw-in, cartridge style, directional valve with adaptability to a variety of adjustment operators (order separately).

Operation

In extreme counterclockwise position, ports 1 and 2 are open while port 3 is closed. In extreme clockwise position (90 degree rotation of stem), ports 1 and 3 are open while port 2 is closed. All ports are closed in transition.

Features

- Two-position detent or infinite friction lock ordered separately.
- May be fully pressurized at all ports.
- Optional lock-down bracket.
- Heavy-duty construction.
- Industry common cavity.

Ratings

Pressure Ratings

Pressure rating: 241 bar (3500 psi)

Flow Ratings

Maximum internal leakage: 164 ml/min (10 in^3)

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 viton 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 71 °C (-76 to 160 °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

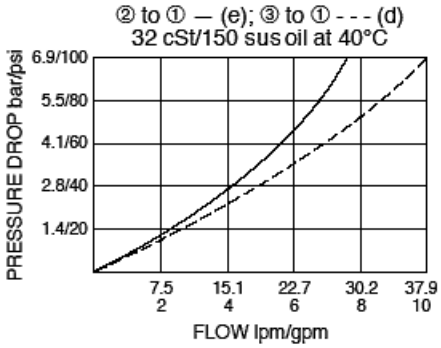
Properties

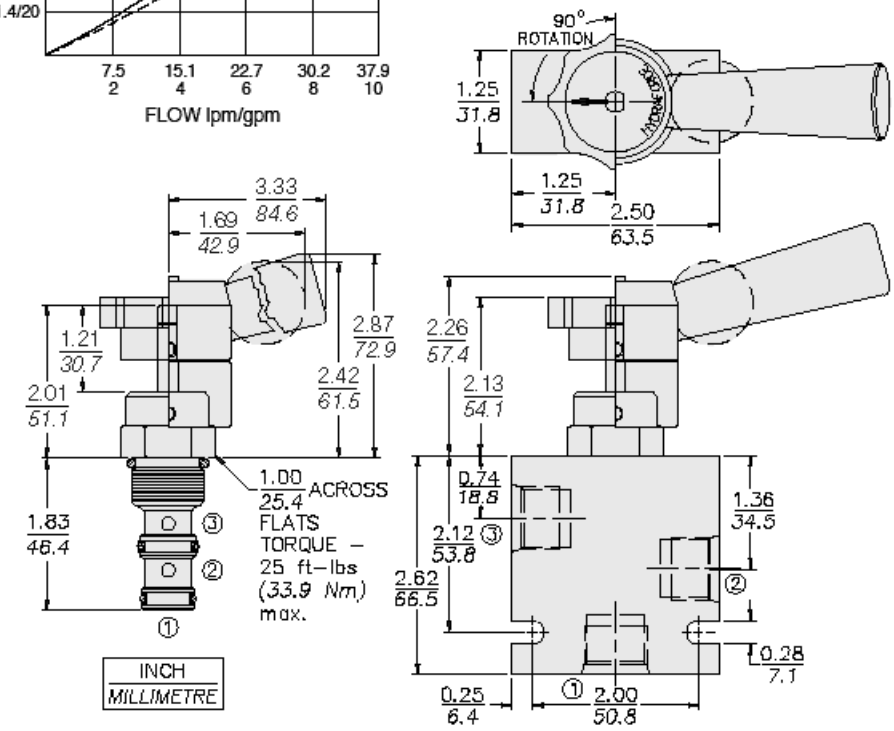
Unit weight: 0.15 kg (0.33 lb)

Internal wetted surface area: 141 cm^2 (21.8 in^2)

MANUAL ROTARY 3 WAY, 2 POSITION DIRECTIONAL VALVE

Performance





Installation Specifications

Cavity: VC10-3

10-size-3-way Cavities

Cartridge installation torque: 32.5 to 35.3 N-m (24 to 26 ft-lb)

Orientation restriction: None

Accessories

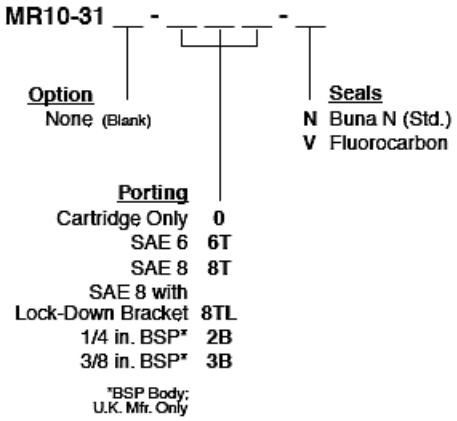
Seal kit: SK10-3X-MM

Seal kit installation instructions

Housings: Available 10-3w valve bodies

MANUAL ROTARY 3 WAY, 2 POSITION DIRECTIONAL VALVE

Order Code



Model Options

MR10-31-H-J

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
8TL	Aluminum SAE 8L
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

J Seal

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