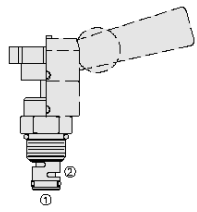
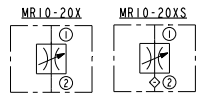


Manual rotary flow control, 180 degree rotation

Overview



SYMBOL



Description

The MR10-20XX is a manual rotary flow control. Flow is increased from minimum to maximum in a counterclockwise rotation. It is a cartridge style valve for use with general purpose hydraulic fluids.

Ratings

Pressure Ratings

Pressure rating: 3500 psi [241 bar]

Flow Ratings

Flow rating: See performance graphs

Maximum internal leakage: 10 in³/min [164 ml/min] note: At 3500 psi [241 bar]

Temperature Ratings

Operating fluid temperature: -40 °f to 212 °f [-40 °c to 100 °c] note: With Buna N seals

-15 °f to 400 °f [-26 °c to 204 °c] note: With fluorocarbon seals

-65 °f to 225 °f [-54 °c to 107 °c] note: With polyurethane seals

Storage temperature: -40 °f to 160 °f [-40 °c to 70 °c]

Ambient temperature: -40 °f to 194 °f [-40 °c to 90 °c]

Torque required: 35 in-lb [3.95 N-m] note: At 100 psi [6.7 bar]

45 in-lb [5.08 N-m] note: At 3500 psi [241 bar]

Operating Parameters

Fluids: Mineral based or synthetic hydraulic fluid note: With Lubricating properties.

Fluid viscosity range: 7.4 to 420 cSt

Maximum operating contamination level: 20/18/14 per ISO 4406

Properties

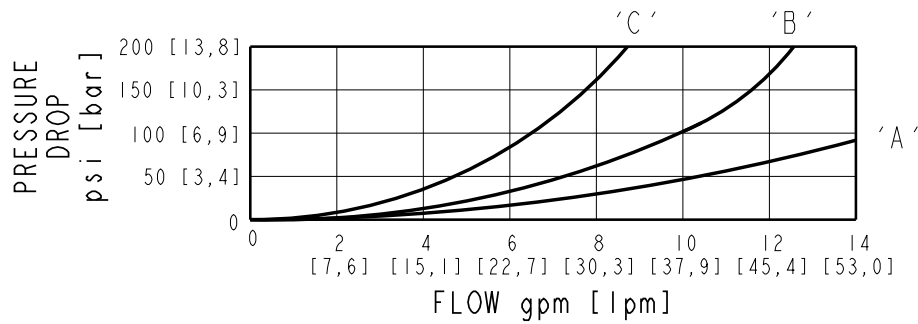
Unit weight: 0.3 lb [0.14 kg]

Internal wetted surface area: 17.5 in² [113 cm²]

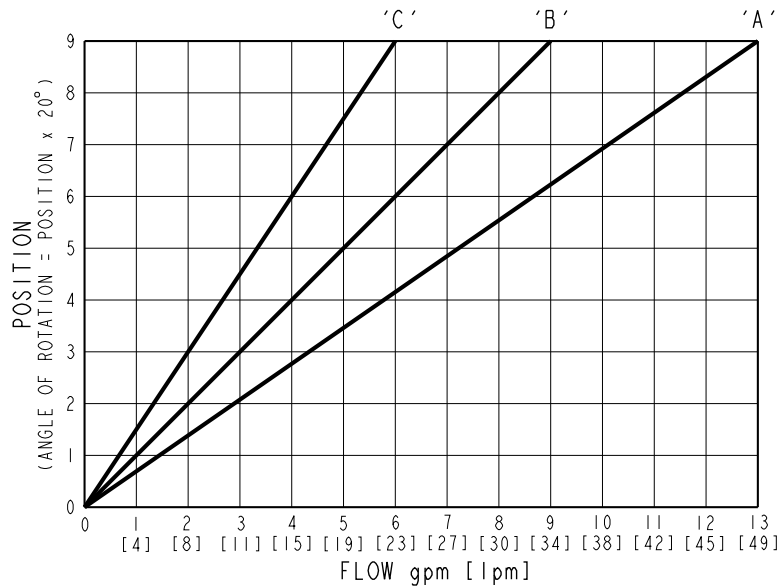
Manual rotary flow control, 180 degree rotation

Performance

PRESSURE DROP VS FLOW
FOR DIFFERENT SPOOL METERING CAPABILITY

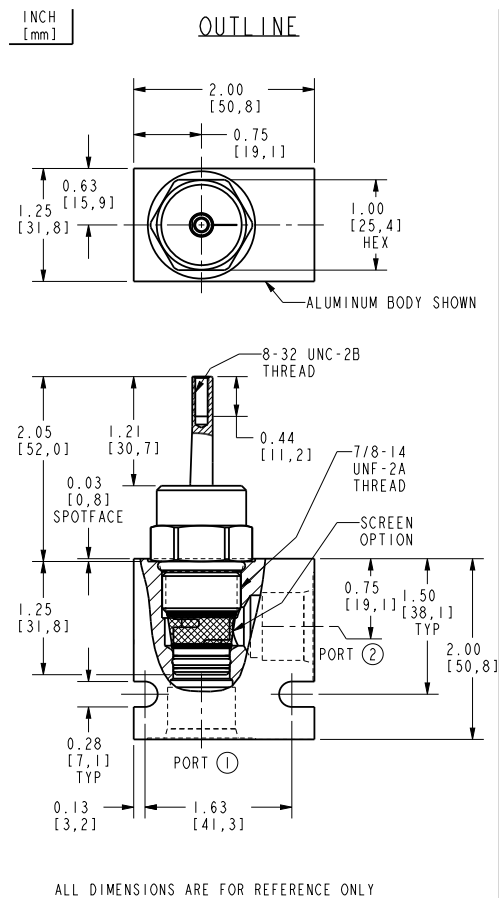


FLOW VS POSITION AT 80 psi [5,5 bar]
FOR DIFFERENT SPOOL METERING CAPABILITY

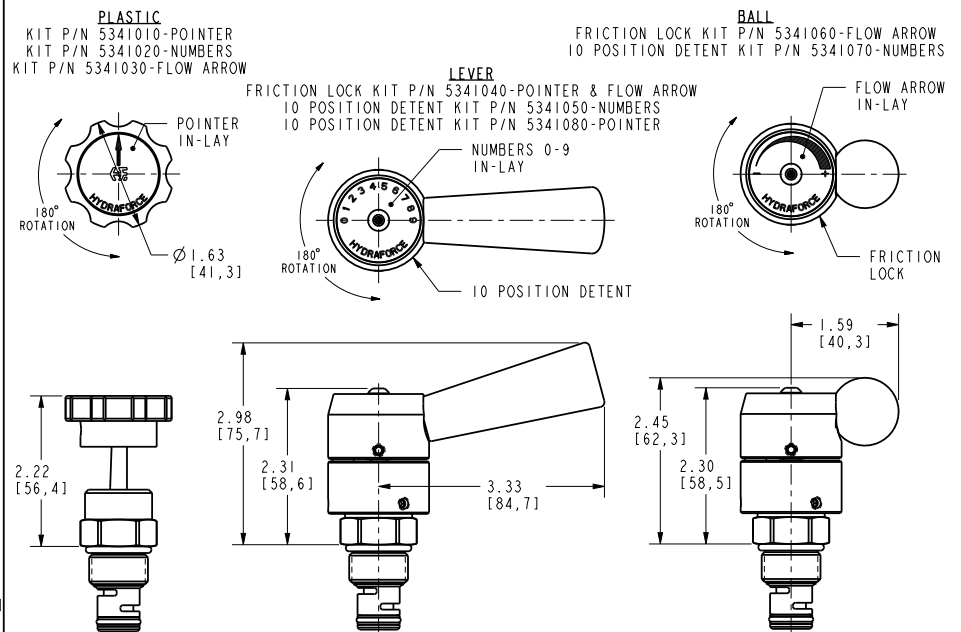


Manual rotary flow control, 180 degree rotation

Dimensions



HANDLE OPTIONS
(ORDER SEPARATELY)



Installation Specifications

Cavity: VC10-2

Cartridge installation torque: 24-26 ft-lb [32.6-35.4 N-m]

Maximum allowable torque: 50 ft-lb [67.8 N-m]

Orientation restriction: None

Accessories

Seal kit: SK10-2B-M note: (Buna N)

SK10-2V-M note: (Fluorocarbon)

SK10-2P-M note: Polyurethane

Manual rotary flow control, 180 degree rotation

Order Code

ORDERING INFORMATION:

MR10-20XX-X-X

BASE MODEL NUMBER
 SPOOL METERING CAPABILITY
 A: 0 - 13 gpm [49 lpm]
 B: 0 - 9 gpm [34 lpm]
 C: 0 - 6 gpm [22 lpm]

(CONSULT FACTORY AND CATALOG
 FOR OTHER AVAILABLE OPTIONS)

SEAL OPTION:
 N - BUNA N
 V - FLUOROCARBON
 P - POLYURETHANE **

PORTING:
 0 - CARTRIDGE ONLY

SCREEN OPTION: *
 BLANK - NONE
 S - SCREEN

* ALTHOUGH BI-DIRECTIONAL FLOW IS ALLOWED, PLEASE
 NOTE THAT FILTRATION FOR THE SCREEN OPTION IS ONLY
 IN THE PORT 2 TO PORT 1 DIRECTION. AS THERE IS NO
 SCREEN AT PORT 1, CONTAMINANTS PRESENT IN HYDRAULIC
 FLUID FLOWING FROM PORT 1 TO PORT 2 WILL ENTER THE
 VALVE ASSEMBLY POTENTIALLY CAUSING PERFORMANCE ISSUES
 AND/OR COLLECT ON THE INSIDE OF THE SCREEN AT PORT 2.

** POLYURETHANE SEALS RECOMMENDED
 FOR OPERATING PRESSURES ABOVE
 3500 psi [241 bar]

Model Options

MR10-20BG-H-J*B Spool Metering Capability*

CODE	DESCRIPTION
A	0 to 13 gpm (0 to 49.2 lpm)
B	0 to 9 gpm (0 to 34.1 lpm)
C	0 to 6 gpm (0 to 22.7 lpm)

G Screen

CODE	DESCRIPTION
BLANK	NONE
S	100 Mesh Screen

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)
4B	Aluminum BSPP 1/2" (4)
4BD	Ductile Iron BSPP 1/2" (4)

J Seal

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