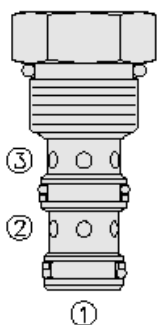




Overview



Description

FR10-32X is an adjustable, pressure compensated, bi-directional flow control valve.

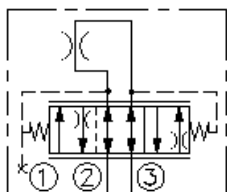
Operation

The valve provides regulated flow in both directions from port 2 to 3 or 3 to 2, port 1 should be blocked. Regulated flow increases from closed to fully open with clockwise rotation. The valve will maintain set up flow rate regardless of pressure variations at each of the ports.

Features

- Hardened seat for long life and low leakage.
- Excellent linearity and hysteresis.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating	241 bar (3500 psi)
Proof pressure	345 bar (5000 psi)
Burst pressure	896 bar (13000 psi)

Flow Ratings

Flow rating	0 to 19.0 lpm (0 to 5 gpm)
Maximum internal leakage	0.38 lpm (0.10 gpm)

Temperature Ratings

Operating fluid temperature	-40 to 120 °C (-40 to 250 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: With viton seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 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	18/16/13 per ISO 4406

Properties

Unit weight	0.16 kg (0.35 lb)	- Note: Option A
Internal wetted surface area	187.1 cm ² (29.0 in ²)	



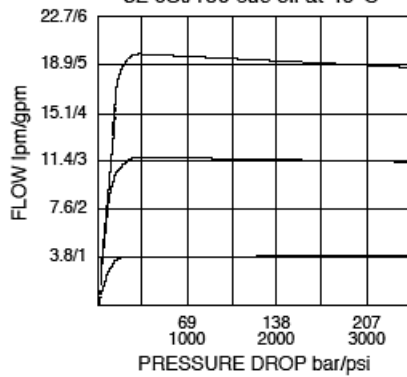
Performance

Regulated Flow vs. Pressure Drop

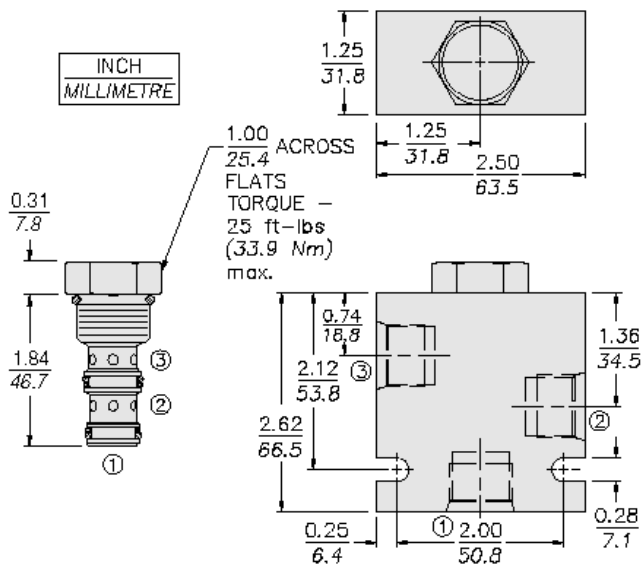
② to ③ or ③ to ②

1, 3 and 5 gpm settings shown

32 cSt/150 sus oil at 40°C



Dimensions



Installation Specifications

Cavity	VC10-3
Cartridge installation torque	33.9 N-m
Orientation restriction	None

Accessories

Seal kit	SK10-3X-MM	- Note: X = seal option
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Order Code

FR10-32F -	-	- /
Porting		Must Specify:
Cartridge Only	0	Setting in gpm
SAE 6	6T	Specify; For example:
SAE 8	8T	0.5 0.5 gpm
1/4 in. BSP*	2B	5.0 5.0 gpm
3/8 in. BSP*	3B	etc.
*BSP Body; U.K. Mfr. Only		Setting in lpm
		Specify; For example:
		M2.0 2.0 lpm
		M19.0 19.0 lpm
		etc.
Seals		
Buna N (Std.)	N	
Fluorocarbon	V	