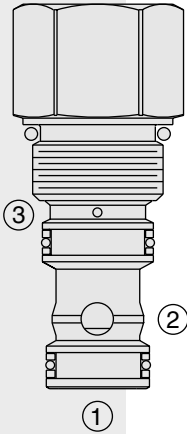


DIRECTIONAL VALVES

EP20-S38 Piloted Poppet-Type Logic Element



DESCRIPTION

A spool-type, screw-in, cartridge-style, hydraulic directional element, with multi-function potential when used with other directional, pressure, or flow control devices.

OPERATION

The EP20-S38 is a spring-biased poppet valve which will block ① to ② or ② to ① until pressure at ① or ② exceeds the cumulative pressure at ③ and bias spring. With no pressure at ③, flow will be allowed from ① to ② or ② to ① once the bias spring force is overcome with pressure at ① or ②. When the element is in the closed state, the ratio of areas ① and ② is 1:1, and the ratio of areas ① or ② to ③ is 1:2.

FEATURES

- Multiple function/application potential.
- Low pressure drop.
- Industry common cavity.

RATINGS

Maximum Operating Pressure: Cartridge Only: Ports ① & ②, 241 bar (3500 psi)

Flow: See Performance Chart

Internal Leakage: 0.6 cc/minute (12 drops/minute) max. at 241 bar (3500 psi)

Bias Spring Pressure Options: 2.8 bar (40 psi); 11.0 bar (160 psi)

Temperature: -40 to 120°C with standard Buna seals

Filtration: See page 9.010.1

Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 ssu)

Installation: No restrictions; See page 9.020.1

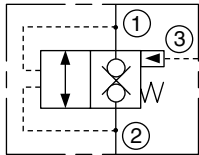
Cavity: VC20-S3; See page 9.120.1

Cavity Tool: CT20-S3XX; See page 8.600.1

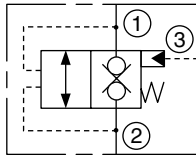
Seal Kit: SK20-3X-MM; See page 8.650.1

SYMBOLS

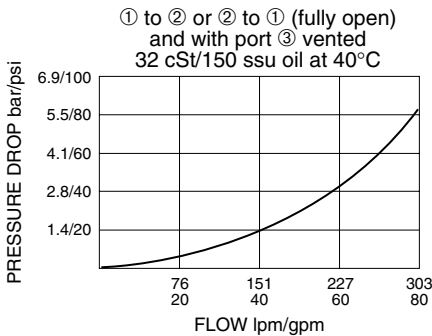
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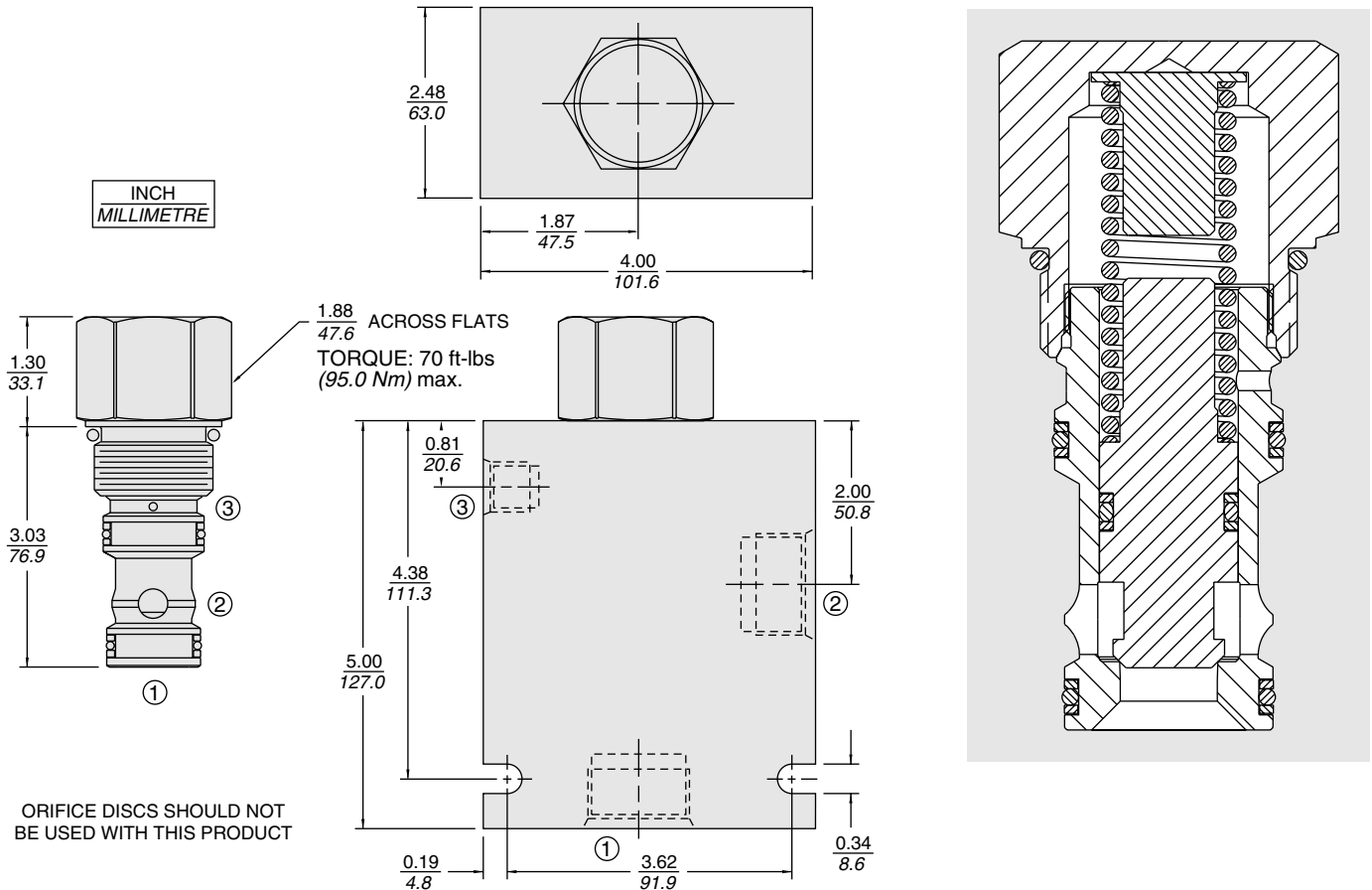


PERFORMANCE (Cartridge Only)



EP20-S38

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.82 kg. (1.8 lbs.);
Steel with hardened work surfaces.
Zinc-plated exposed surfaces. Buna
N O-rings and polyester elastomer
back-ups standard.

Standard Ported Body: Weight:
1.65 kg. (3.65 lbs.). Anodized high-
strength 6061 T6 aluminum alloy,
rated to 240 bar (3500 psi); see page
8.020.1. Ductile iron and steel bodies
can be made available; dimensions
may differ; consult factory.

TO ORDER

EP20-S38 -		-	-	-
	Porting			
	Cartridge Only	0		
	SAE 16 w/SAE 6 Pilot Port	16T		
			Bias Spring	
			40	2.8 bar (40 psi)
			80	5.5 bar (80 psi)
			160	11.0 bar (160 psi)
			Seals	
			N	Buna N (Std.)
			V	Fluorocarbon