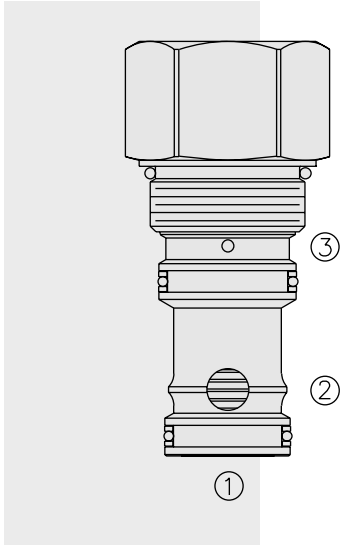


DIRECTIONAL VALVES

EV20-S34 Vented Spool-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 EV20-S34 is a spring-biased blocking valve which will shift to allow full flow from ① to ② only when ③ is vented to create a pressure drop across the internal orifice which exceeds the pressure value of the selected bias spring force.

EV20-S34 is a vent-to-open directional valve.

FEATURES

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

RATINGS

Maximum Operating Pressure: Cartridge Only: Ports ① & ②: 345 bar (5000 psi); Port ③: 320 bar (4600 psi); Polyurethane seals are recommended for 5000 psi operation. Aluminum bodies for this product are rated for 3500 psi.

Flow: See Performance Chart

Internal Leakage: 164 cc/minute (10 cu. in./minute) max. at 320 bar (4600 psi)

Bias Spring Pressure Options: 3.5 bar (50 psi); 5.5 bar (80 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

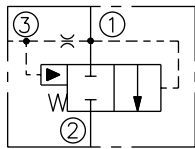
Cavity: VC20-S3; See page 9.120.1

Cavity Tool: CT20-S3XX; See page 8.600.1

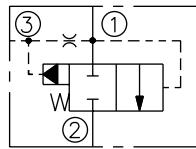
Seal Kit: SK20-3X-MM; See page 8.650.1

SYMBOLS

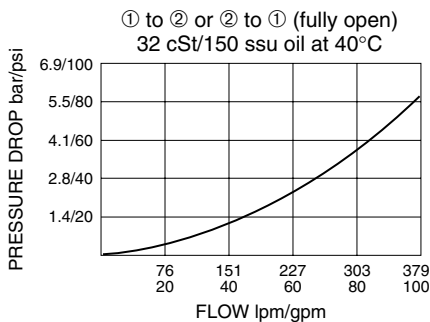
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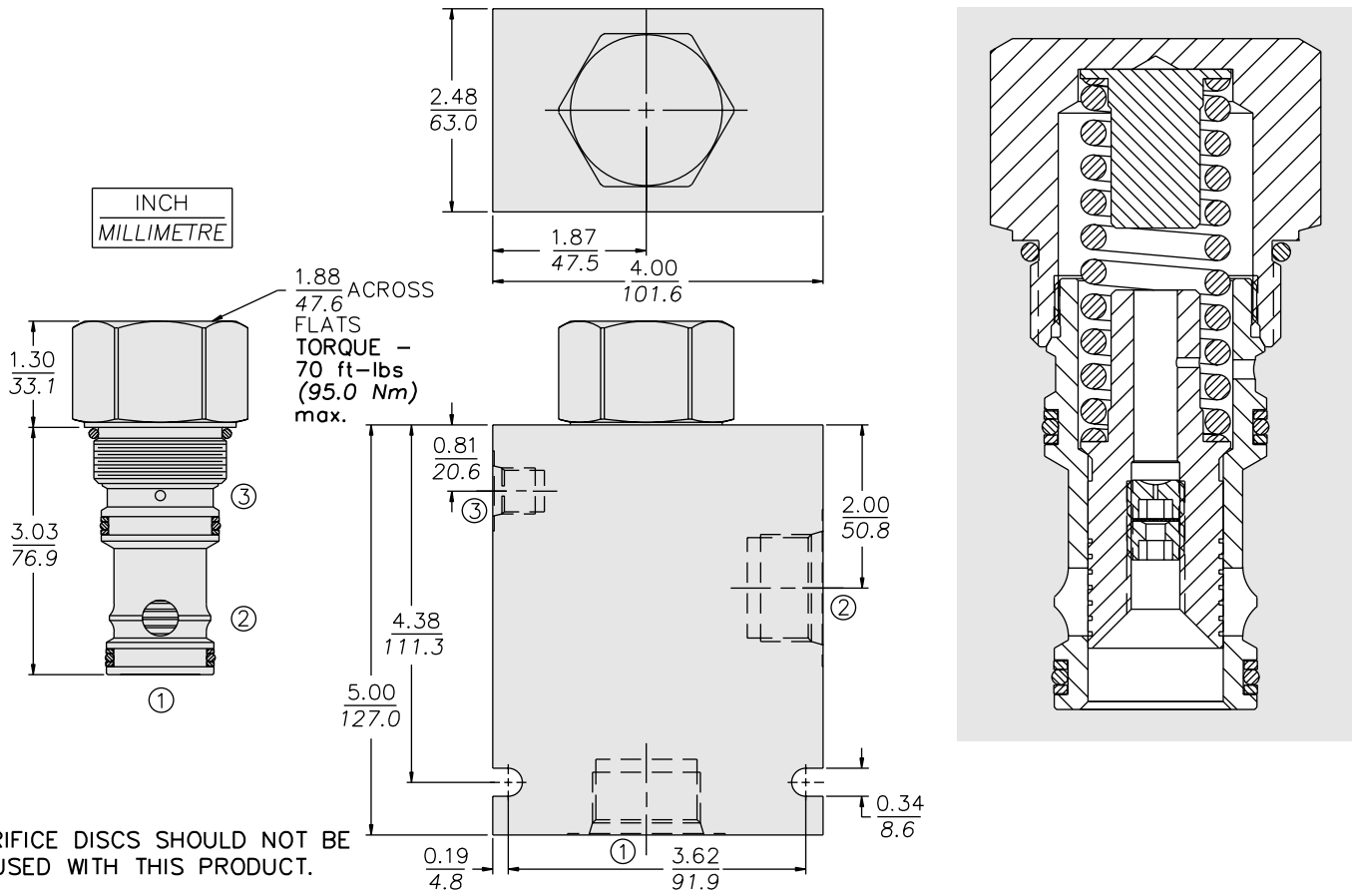


PERFORMANCE (Cartridge Only)



EV20-S34

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 available; dimensions may differ; consult factory.

TO ORDER

EV20-S34 - - -

Porting	0	Bias Spring (Crack)	20
Cartridge Only	16T	1.36 bar (20 psi)	50
SAE 16 w/SAE 6 Vent Port		3.5 bar (50 psi)	80
		5.5 bar (80 psi)	160
		11.0 bar (160 psi)	
		Seals	
		N Buna N (Std.)	
		V Fluorocarbon	
		P Polyurethane	
		(for pressures over 240 bar [3500 psi])	