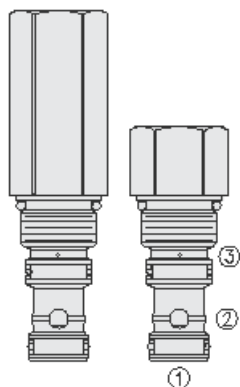




Overview



Description

The ev10-s34xx is a screw-in, cartridge style, spool-type, hydraulic directional element.

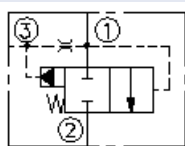
Operation

The ev10-s34xx is a spring-biased blocking valve which will shift to allow flow from 1 to 2 only when port 3 is vented to create a pressure drop across the internal orifice which exceeds the pressure of the bias spring force. EV10-S34 is a vent-to-open directional valve.

Features

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

Symbol



Ratings

Pressure Ratings

Pressure rating 345 bar (5000 psi)

Flow Ratings

Flow rating See performance graph

Maximum internal leakage 164 ml/min (10 in³/min) - **Note:** At 3000 psi [207 bar]

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 fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

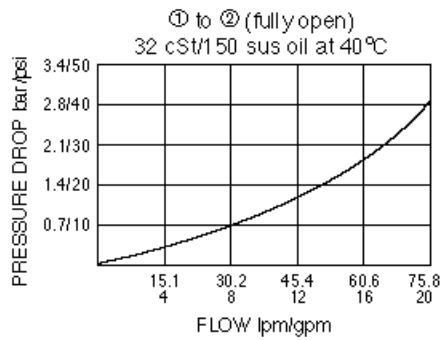
Operating Parameters

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

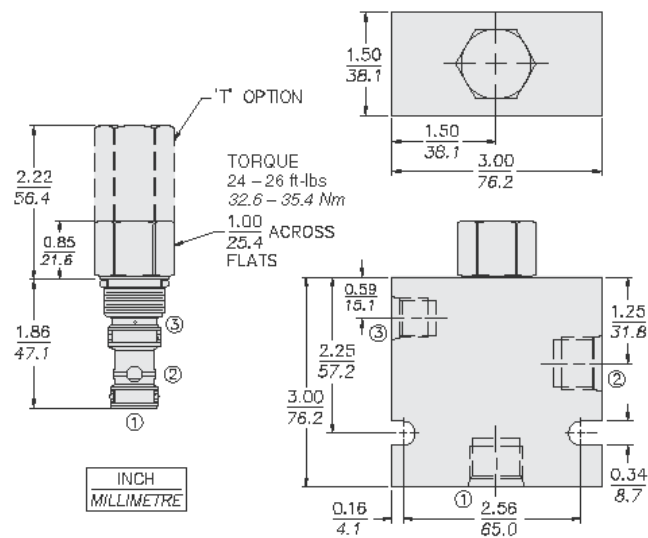
Properties

Unit weight	0.27 kg (0.6 lb)	- Note: Ev10-s34tx
	0.14 kg (0.3 lb)	- Note: EV10-S34X
Internal wetted surface area	189 cm ² (29.3 in ²)	- Note: Ev10-s34tx
	121 cm ² (31.9 in ²)	- Note: EV10-S34X

Performance



Dimensions



Installation Specifications

Cavity	VC10-S3
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-S3X-MM	- Note: X = seal option
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Order Code



ORDERING INFORMATION:

EV10-S34XX-X-X-XXX

BASE MODEL NUMBER

ADAPTOR OPTION:

STANDARD - (BLANK)

* TALL CAP - T

METERING OPTION:

REGULAR - (BLANK)

METERING - G

PORTING:

CARTRIDGE ONLY - 0

SEAL OPTION:

BUNA N - N

FLUOROCARBON - V

** POLYURETHANE - P

BIAS SPRING VALUE:

10 psi [0,7 bar] - 10

40 psi [2,8 bar] - 40

80 psi [5,5 bar] - 80

110 psi [7,6 bar] - 110

160 psi [11,0 bar] - 160

11,0 bar [160 psi] - M11

230 psi [15,9 bar] - 230

15,9 bar [230 psi] - M15.9

* "T" TALL CAP REQUIRED FOR
160 AND 230 BIAS SPRINGS.** REQUIRED FOR PRESSURES
OVER 3500 psi [241 bar].

Model Options

EV10-S34CD-H-J-R

C Adaptor Option

CODE	DESCRIPTION
BLANK	Standard Cap
T	Tall Cap

D Cage Option

CODE	DESCRIPTION
BLANK	Standard Cage
G	Metering (staggered holes)

H Line Body

CODE	DESCRIPTION
0	No Body

J Seal

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

R Spring

CODE	DESCRIPTION
10	10 psi Bias Spring
40	40 psi Bias Spring
80	80 psi Bias Spring
110	110 psi Bias Spring



CODE	DESCRIPTION
160	160 psi Bias Spring
230	230 psi Bias Spring