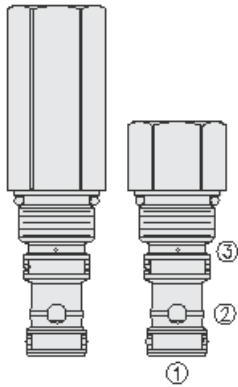




Overview



Description

The ep10-s35xx is a screw-in, cartridge style, pilot to close hydraulic directional element

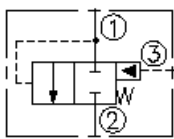
Operation

The valve is a spring-biased blocking valve which will shift to allow full flow from port 1 to 2 only when the pressure at port 1 exceeds the cumulative pressure of port 3 plus the bias spring pressure value

Features

- Multiple function/application potential.
- Range of bias spring pressure options. Tall cap required for 160, M11, 230, and M15.9 spring options.
- 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 207 bar (3000 psi)

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F) -26 to 204 °C (-15 to 400 °F) -26 to 204 °C (-15 to 400 °F) -54 to 107 °C (-65 to 225 °F)	- Note: With buna N seals - Note: With fluorocarbon seals - Note: With high durometer fluorocarbon seals - 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

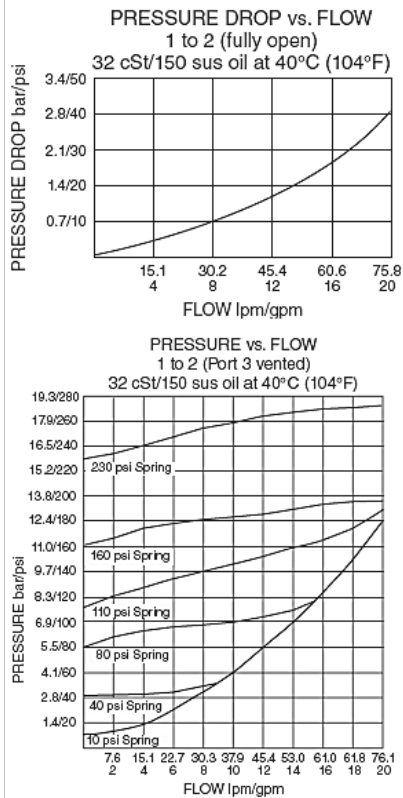
Fluids Mineral based or synthetic hydraulic fluid with lubricating properties
 Fluid viscosity range 7.4 to 420 cSt
 Maximum operating contamination level 20/18/14 per ISO 4406

Properties

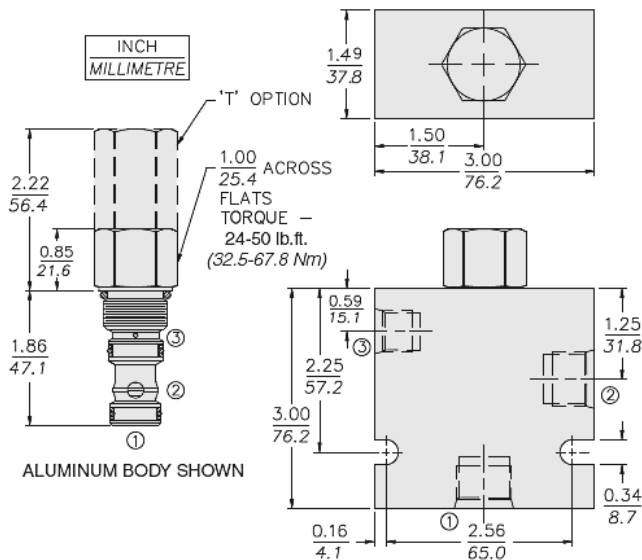
Unit weight	0.14 kg (0.31 lb) 0.27 kg (0.60 lb)	- Note: EP10-S35 - Note: EP10-S35T
Internal wetted surface area	123 cm ² (19.0 in ²) 191 cm ² (29.6 in ²)	- Note: Ep10s35 - Note: Ep10s35t



Performance



Dimensions



Materials

Materials

Cartridge: Weight: 0.14 kg (0.31 lb); with tall cap option 0.27 kg (0.60 lb). Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

Ported Body : Weight: 0.32 kg (0.70 lb) Anodized high-strength 60k61 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron (8TD) bodies are available for pressures up to 350 bar (5000 psi); Weight and dimensions may differ.



Installation Specifications

Cavity	VC10-S3
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
Maximum allowable torque	67.8 N-m (50 ft-lb)
Orientation restriction	None

Accessories

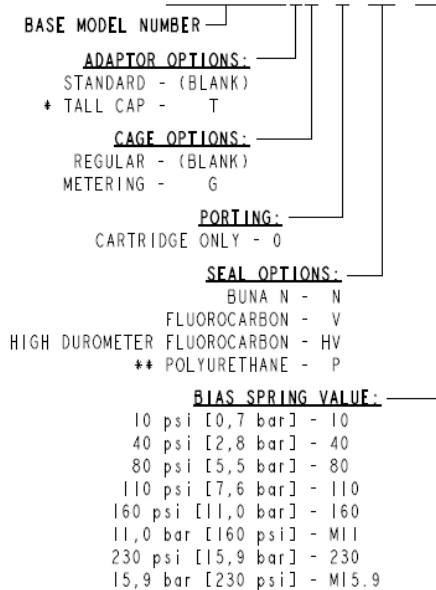
Seal kit	SK10-S3X-MM	- Note: X = seal option
Housings		



Order Code

POSITION	CODE	DESCRIPTION
		EP10-S35CD-H-J-R
C		Adaptor Option
C	BLANK	Standard Cap
C	T	Tall Cap
D		Cage Option
D	BLANK	Standard Cage
D	G	Metering (staggered holes)
H		Line Body
H	0	No Body
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
R		Spring
R	10	10 psi Bias Spring
R	40	40 psi Bias Spring
R	80	80 psi Bias Spring
R	110	110 psi Bias Spring
R	M11	11 bar Bias Spring
R	160	160 psi Bias Spring
R	230	230 psi Bias Spring
R	M15.9	15.9 bar Bias Spring

ORDERING INFORMATION
EP10-S35XX-X-XX-XXX



* "T" TALL CAP REQUIRED FOR 160, M11, 230 AND M15.9 BIAS SPRINGS.

** REQUIRED FOR PRESSURES OVER 3500 psi [241 bar].