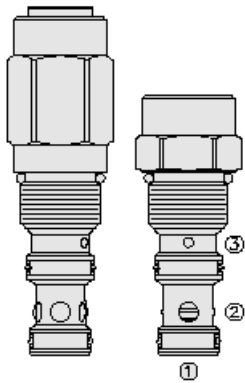




Overview



Description

The ep12-s35xx is a screw-in, cartridge style, pilot to close hydraulic directional element

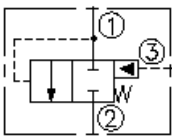
Operation

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.
- Low pressure drop.
- Industry-common cavity.
- Manual override option available with 80 psi spring.

Symbol



Ratings

Pressure Ratings

Pressure rating 345 bar (5000 psi)

Flow Ratings

Flow rating See performance graph
Maximum internal leakage 131 ml/min (8 in³/min) - **Note:** At 345 bar (5000 psi)

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
	-26 to 204 °C (-15 to 400 °F)	- Note: With high durometer 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

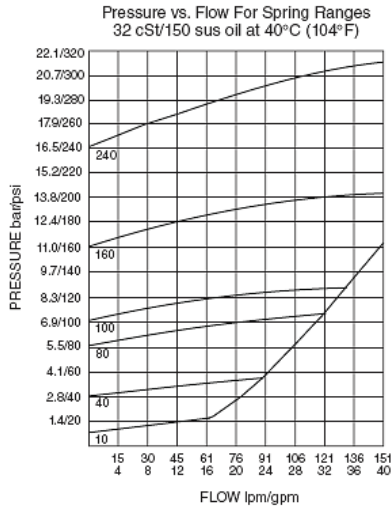
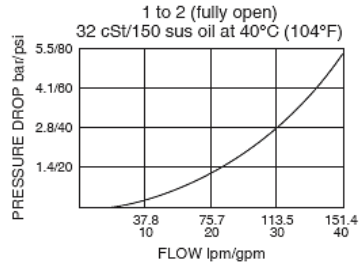
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

Properties

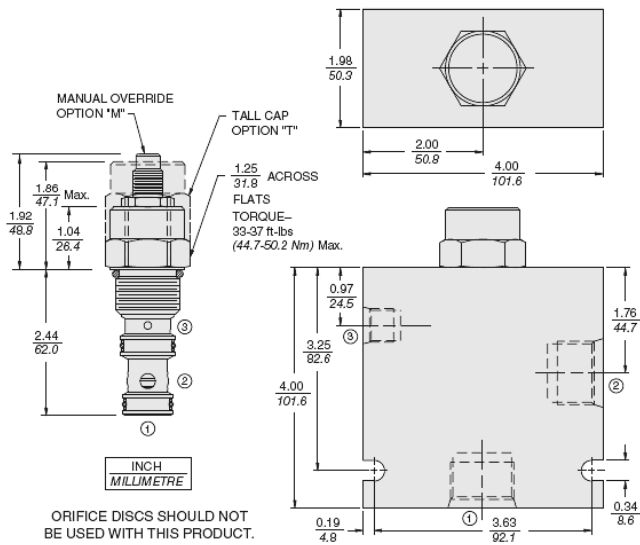
Unit weight	0.28 kg (0.61 lb)	- Note: EP12-S35
	0.44 kg (0.97 lb)	- Note: EP12-S35T
	0.31 kg (0.69 lb)	- Note: EP12-S35M
Internal wetted surface area	207 cm ² (32.15 in ²)	- Note: EP12-S35
	269 cm ² (41.63 in ²)	- Note: EP12-S35T
	190 cm ² (29.52 in ²)	- Note: EP12-S35M



Performance



Dimensions



Materials

Materials

Cartridge: Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.
Ported Body: Weight: 1.13 kg (2.5 lb) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies are available for pressures up to 350 bar (5000 psi); Weight and dimensions may differ.

Installation Specifications

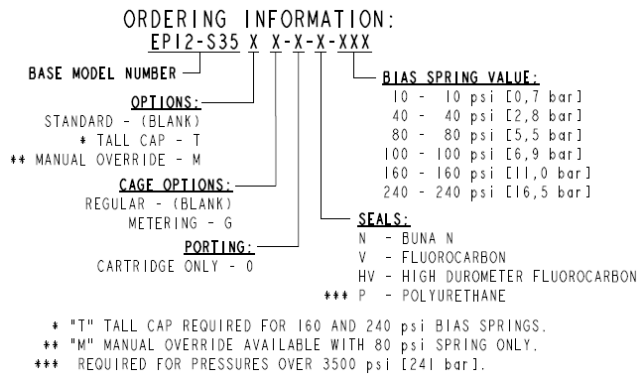
Cavity	VC12-S3
Cartridge torque	44.7 to 50.2 N-m (33 to 37 ft-lb)
Orientation restriction	None



Accessories

Seal kit SK12-S3X-MM - **Note:** X = seal option
Housings

Order Code



POSITION	CODE	DESCRIPTION
		EP12-S35CDF-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)
F		Stroke Limiter
F	BLANK	Standard
F	M	Stroke Limiter
H		Line Body
H	0	No Body
H	12T	Aluminum SAE 12
H	12TD	Ductile Iron SAE 12
H	6BD	Ductile Iron BSPP 3/4" (6)
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	100	100 psi Bias Spring
R	160	160 psi Bias Spring
R	240	240 psi Bias Spring