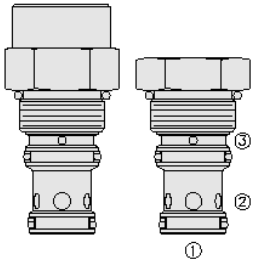




Overview



Description

The ep16-s35xxx is a screw-in, cartridge style, pilot to close hydraulic directional element.

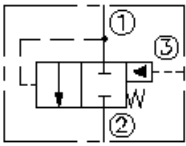
Operation

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 available with 90, 110, 160, and 240 psi bias springs.

Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 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)	- 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

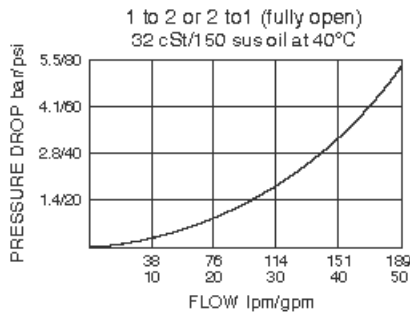
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

Properties

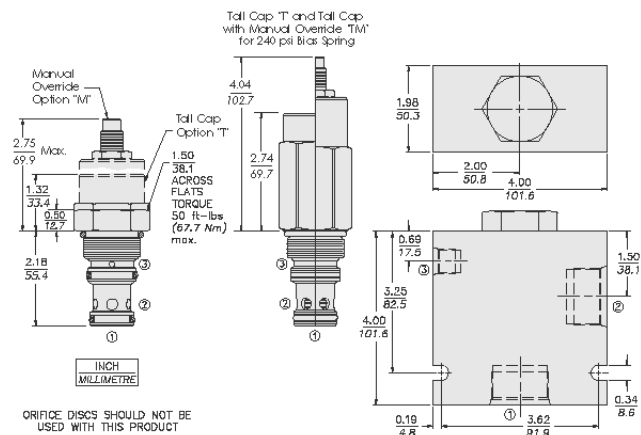
Unit weight	0.29 kg (0.63 lb)	- Note: Ep16-s35x-0-x-70
	0.41 kg (0.91 lb)	- Note: Ep16-s35tx-0-x-160
	0.72 kg (1.58 lb)	- Note: Ep16-s35tx-0-x-240
	0.57 kg (1.26 lb)	- Note: Ep16-s35tmx-0-x-160
	0.86 kg (1.90 lb)	- Note: Ep16-s35tmx-0-x-240
	0.62 kg (1.36 lb)	- Note: Ep16-s35tmcx-0-x-160
	0.91 kg (2.01 lb)	- Note: Ep16-s35tmcx-0-x-240
Internal wetted surface area	221 cm ² (34.25 in ²)	- Note: Ep16-s35x-0-x-70
	290 cm ² (44.92 in ²)	- Note: Ep16-s35tx-0-x-160
	372 cm ² (57.59 in ²)	- Note: Ep16-s35tx-0-x-240
	292 cm ² (45.30 in ²)	- Note: Ep16-s35tmx-0-x-160
	367 cm ² (56.91 in ²)	- Note: Ep16-s35tmx-0-x-240



Performance



Dimensions



Installation Specifications

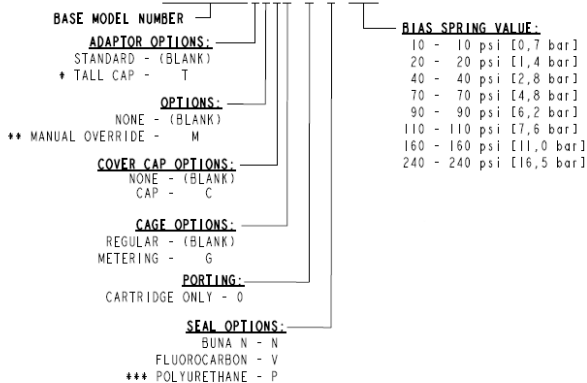
Cavity	VC16-S3
Cartridge installation torque	62.4 to 73.2 N-m (46 to 54 ft-lb)
Maximum allowable torque	136 N-m (100 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK16-S3X-MM	- Note: X = seal option
----------	-------------	-------------------------

Order Code

ORDERING INFORMATION: EP16-S35XXX-X-X-XXX



- * "T" TALL CAP REQUIRED FOR 90, 110, 160 AND 240 psi BIAS SPRINGS.
- ** "M" MANUAL OVERRIDE AVAILABLE WITH 40, 90, 110, 160 AND 240 psi SPRINGS ONLY.
- *** REQUIRED FOR PRESSURES OVER 3500 psi [241 bar].

Model Options

EP16-S35CDF-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)
---	----------------------------

F Stroke Limiter

CODE	DESCRIPTION
------	-------------

BLANK	Standard
-------	----------

M	Stroke Limiter
---	----------------

MC	Stroke Limiter with Cover Cap
----	-------------------------------

H Line Body

CODE	DESCRIPTION
------	-------------

0	No Body
---	---------

16T	Aluminum SAE 16
-----	-----------------

J Seal

CODE	DESCRIPTION
------	-------------

N	Buna-N
---	--------

V	Fluorocarbon
---	--------------

P	Polyurethane
---	--------------

U	PPDI Urethane
---	---------------

R Spring

CODE	DESCRIPTION
------	-------------

10	10 psi Bias Spring
----	--------------------

20	20 psi Bias Spring
----	--------------------

40	40 psi Bias Spring
----	--------------------

70	70 psi Bias Spring
----	--------------------

90	90 psi Bias Spring
----	--------------------

110	110 psi Bias Spring
-----	---------------------

160	160 psi Bias Spring
-----	---------------------

240	240 psi Bias Spring
-----	---------------------