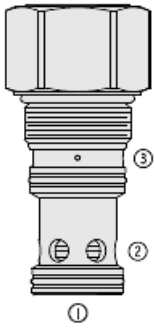
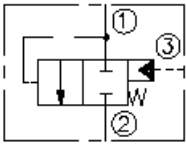




Overview



Symbol



Description

The HEP42-S35 is a high pressure, 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 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. The HEP42-S35 is a pilot-to-close directional element. With no pressure at port 3 flow will be allowed from port 1 to 2 once the bias spring force is overcome with pressure at port 1.

Features

- Multiple function/application potential.
- Low pressure drop.
- All HyPerformance products are tested to the rigorous standards of the NFPA specification T2.6.1.
- All HyPerformance valves are tested at a verification level of 90% and an assurance of 99%.

Ratings

Pressure Ratings

Pressure rating	350 bar (5075 psi)	- Note: 10% cycle life
	420 bar (6090 psi)	
Proof pressure	690 bar (10000 psi)	
Burst pressure	1380 bar (20000 psi)	

Flow Ratings

Flow rating	379 lpm (100 gpm)	- Note: At 350 bar (5075 psi)
Maximum internal leakage	164 ml/min (10 in ³ /min)	

Other Ratings

Cycle life	One million cycles
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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 urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

Operating Parameters

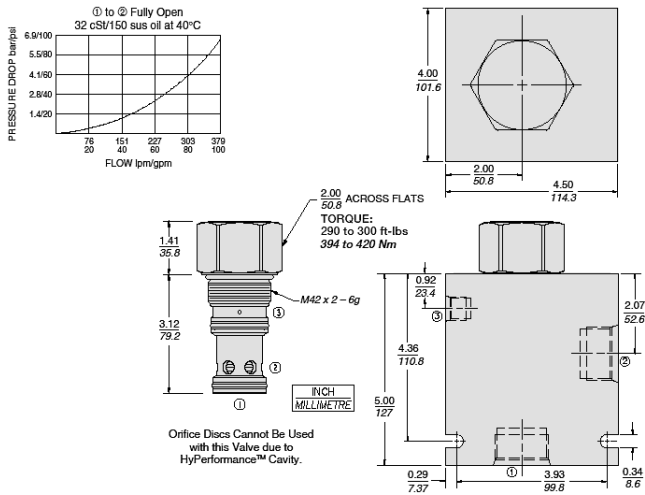
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

Properties

Unit weight	1.04 kg (2.30 lb)
Internal wetted surface area	484 cm ² (75 in ²)



Performance



Installation Specifications

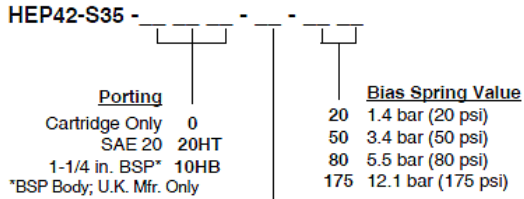
Cavity	HVC42-s3	
Cartridge installation torque	394 to 420 N-m (290 to 310 ft-lb) 298 to 311 N-m (220 to 230 ft-lb)	- Note: Steel/ductile iron cavity - Note: Aluminum cavity
Orientation restriction	None	

Accessories

Seal kit	SK42-S3N-MM SK42-S3V-MM SK42-S3U-OO	- Note: Buna N - Note: Fluorocarbon - Note: Urethane
Housings		



Order Code



Seals
U PPDI Urethane

NOTE: Urethane seals recommended for operating pressures above 241 bar (3500 psi).

NOTE: Consult factory for additional seal options.

POSITION	CODE	DESCRIPTION
		HEP42-S35-H-J-R
H		Line Body
H	0	No Body
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	U	PPDI Urethane
R		Spring
R	20	20 psi Bias Spring
R	50	50 psi Bias Spring
R	80	80 psi Bias Spring
R	175	175 psi Bias Spring