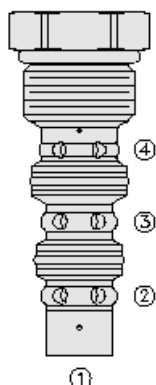




Overview



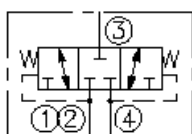
Description

The HS50-43 is a screw-in, cartridge style, spring centered spool, closed center, 3-position, 3-way hot oil shuttle valve for use with general purpose hydraulic fluids. The valve CAN be used for hydrostatic transmissions to direct charge pump oil to a heat exchanger or to tank.

Features

- Hardened spool and cage for long life.
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating	350 bar (5075 psi) 420 bar (6090 psi)	- Note: (10% cycle life)
Proof pressure	550 bar (8000 psi)	
Burst pressure	1100 bar (16000 psi)	
Bias spring value	4.1 bar (60 psi)	

Flow Ratings

Flow rating	45.4 lpm (12 gpm)	
Maximum internal leakage	328 ml/min (20 in ³ /min)	- Note: At 207 bar (3000 psi)

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 polyurethane 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

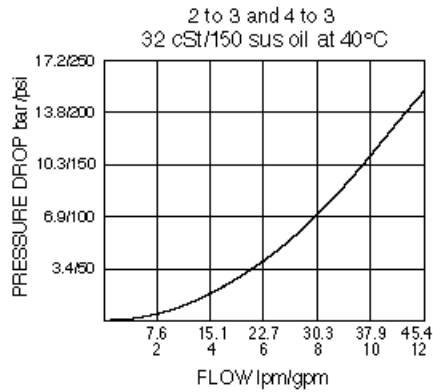
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406

Properties

Unit weight	0.12 kg (0.26 lb)
Internal wetted surface area	124 cm ² (19.3 in ²)



Performance



Installation Specifications

Cavity	VC10-4
Cartridge installation torque	74.6 to 85.4 N-m (55 to 63 ft-lb)
Maximum allowable torque	108.5 N-m (80 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-4X-MM	- Note: X = seal option
	SK10-4U-OO	- Note: Urethane

Order Code

HS50-43 -		
	Porting	Seals
Cartridge Only	0	N Buna N
SAE 6 (Ductile)	6TD	V Fluorocarbon
SAE 6 (Steel)	6TS	P Polyurethane
		U Urethane

Note: Polyurethane or urethane seals recommended for operation at 345 bar (5000 psi).

Model Options

HS50-43-H-J

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane