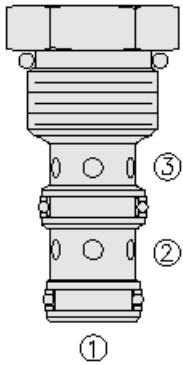




## Overview



### Description

The LS50-30 is a load shuttle, screw-in, cartridge style, hydraulic check valve, for use in blocking circuits where a priority of flow/direction is given to a higher pressure circuit over a lower one.

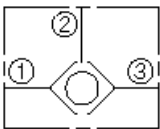
### Operation

The LS50-30 will allow flow from the higher pressure of port 1 or port 3 to port 2.

### Features

- Rapid response to load direction changes.
- Industry-common cavity.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating 345 bar (5000 psi)

### Flow Ratings

Flow rating 30.3 lpm (8 gpm)  
Maximum internal leakage 5 drops/min - **Note:** At 345 bar (5000 psi)

### Temperature Ratings

Operating fluid temperature	-26 to 204 °C (-15 to 400 °F)	- <b>Note:</b> With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> With polyurethane seals
	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> With urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

### Other Ratings

Corrosion protection 960 hr salt spray per ASTM b117 (gls50-30)

## Operating Parameters

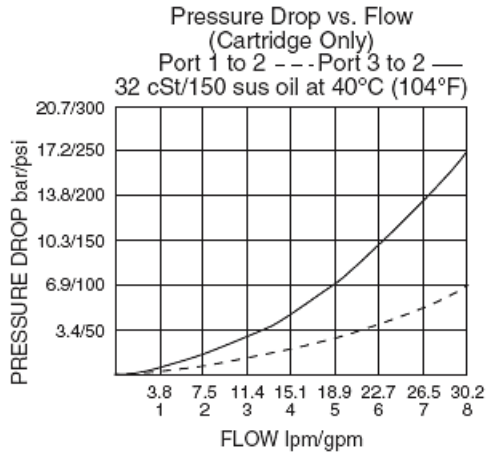
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

## Properties

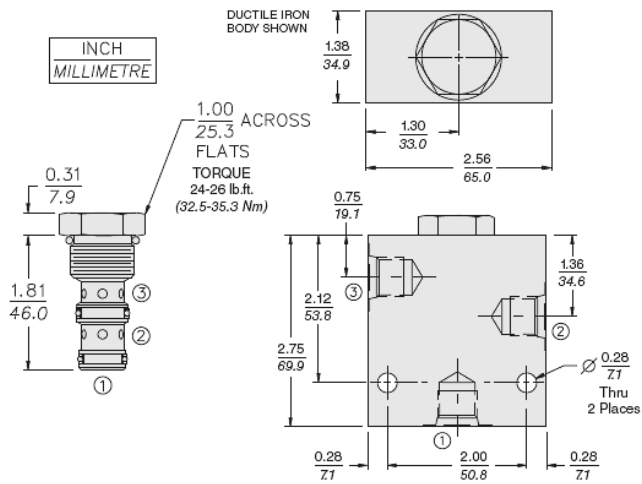
Unit weight	0.09 kg (0.2 lb)
Internal wetted surface area	89 cm <sup>2</sup> (13.8 in <sup>2</sup> )



## Performance



## Dimensions



## Installation Specifications

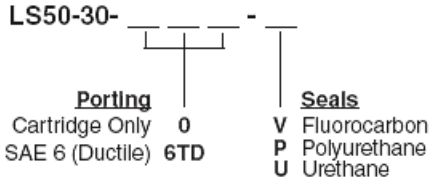
Cavity	VC10-3
Cartridge installation torque	44.7 to 50.2 N-m (33 to 37 ft-lb)
Maximum allowable torque	67.8 N-m (50 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK10-3HV-MM	- <b>Note:</b> Fluorocarbon
	SK10-3P-MM	- <b>Note:</b> Polyurethane
	SK10-3U-OO	- <b>Note:</b> Urethane



Order Code



Model Options

LS50-30-H-J

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane