LS04-B30 Load Shuttle, Ball-Type, “Down-Hole” Mount

DESCRIPTION
A load-shuttling, 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 LS04-B30 will allow flow from the higher pressure of ➀ or ➂ port to the ➁ port. The valve is commonly used to direct oil from the pressure side of a bidirectional hydraulic motor to a pressure-released hydraulic brake. It can also be used as a load-sense signaling valve.

FEATURES
• Rapid response to load direction changes.
• Miniature size.

RATINGS
Operating Pressure: 240 bar (3500 psi)
Flow Rating: 5.68 lpm (1.5 gpm)
Internal Leakage: 0.25 cc/minute (5 drops/minute) max. at 207 bar (3000 psi)
Temperature: -40 to 100°C (-40 to 212°F) with standard Buna seals;
-26 to 204°C (-15 to 400°F) with fluorocarbon seals;
-54 to 107°C (-65 to 225°F) with polyurethane seals
Filtration: See page 9.010.1
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1
Installation: No restrictions; See page 9.020.1
Cavity: VC04-B3; See page 9.104.1
Cavity Tool: CT04-B3XX; See page 8.600.1
Seal Kit: SK04-B3X-M; See page 8.650.1

PERFORMANCE (Cartridge Only)
Pressure Drop vs. Flow
3 to 2 or 1 to 2
32 cSt/150 sus oil at 40°C (104°F)
**DIMENSIONS**

**Cartridge:** Weight: 0.01 kg (0.2 lb)  
Steel with Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

**HEX SOCKET**  
TORQUE – 4 to 5 ft-lbs  
(5.4 to 6.7 Nm) Max.

**MATERIALS**

**TO ORDER**

**LS04-B30-0-**

**Mounting**  
Below the Surface B

**Seals**

- N Buna N (Std.)
- V Fluorocarbon
- P Polyurethane

**Porting**  
Cartridge Only 0

**Porting**

1. PORT
2. PORT
3. PORT

**DIMENSIONS**

- 7/16–20UNF–2A THREAD
- HEX SOCKET TORQUE – 4 to 5 ft-lbs (5.4 to 6.7 Nm) Max.
- DIA. 0.278 in (7.06 mm)
- INCH MILLIMETRE
- PORT 0.95 in (24.1 mm)
- PORT 0.19 in (4.8 mm)