

Dual Pilot-Operated Check Valve

HLK-6000 Dual Pilot-Operated Check Valves combine two check valves and a pilot shuttle to enable actuator position holding or the locking of a fluid inside a specific portion of a hydraulic circuit. Typical applications are position holding of hydraulic manipulators and pan & tilt units.

The check valves permit free flow in one direction and block flow in the other. When flow passes through one check valve and a suitable amount of back pressure is developed, the pilot spool shifts across to lift the opposing check valve off its seat to allow flow to return to the control valve through the opposite port. When the pilot pressure is removed, both check valves are re-seated by springs acting on the precision ball bearings.



Features

- Dual pilot-operated check valve to assist in actuator position holding
- Made of corrosion resistant materials
- Port types available in 1/8" BSPP or 7/16" SAE
- Compact and lightweight
- 4:1 pilot ratio

World leader in electric underwater robotics

Technical Specifications

General

| | |
|-----------------|--|
| Materials | 316 Stainless Steel |
| Product Finish | Electro Polished |
| Seal Material | Nitrile/NBR/Buna-N, PTFE |
| Ports | 3/8" BSPP (ISO 1179), 7/16" SAE (SAE J1926-1) |
| Dimensions | (L) 50mm x (H) 75mm x (W) 20mm (1.97" x 2.95" x 0.79") |
| Weight in Air | 0.53kg (1.17lb) |
| Weight in Water | 0.35kg (0.77lb) |

Hydraulic Performance

| | |
|--------------------------|---|
| Max. Working Pressure | 207bar (3000psi) |
| Flow | 12lpm (3.17gpm) |
| Pilot Ratio | 4:1 |
| Fluid Type | Mineral: DIN 51524, ISO 11158, ISO 6743-4 Synthetic: Panolin Atlantis, HLP-Synth |
| Viscosity | 16cSt to 220cSt. VG 22-32 Recommended |
| Fluid Temperature | 5-60°C (41-140°F) |
| Cleanliness Requirements | ISO 4406:19/17/14, NAS 1638:8, AS4059:9A/8B/8C |

Environmental

| | |
|-----------------------|-----------------------|
| Operational Depth | 6000msw (19,680ft) |
| Operating Temperature | 5-60°C (41-140°F) |
| Storage Temperature | 0-70°C (32-158°F) |
| Humidity | 0% to 100% Condensing |