

General Purpose Valve Pack

The HLK-73300 series general function valve pack is a cost effective and lightweight solution for the control of hydraulic Manipulators, Pan/Tilts, Rotary actuators and other types of hydraulic tooling. Rated for an operational depth of 3000msw, it is ideally suited for use on all types of submersible systems.

Every work solenoid has a dual pilot operated check valve inbuilt to the manifold for actuator position holding along with a custom Hydro-Lek banjo adaptor on both work ports. The banjo adaptor has an inbuilt needle valve with free reverse flow capacity to provide "meter-in" adjustability for fluids returning from an actuator.

The four and six way configurations utilise five and seven port manifolds respectively and are fitted with an additional tandem centre cartridge to allow an open centre flow path within the manifold in an idle state. This provides a system or pump unload function to aid in power management within the hydraulic system power architecture. Achieving system pressure requires switching of the tandem valve and work valve simultaneously, directing the flow to a blind port within the manifold.



Features

- Dual pilot operated check valve on each port
- Custom banjo containing needle valve on each work port
- Four available configurations: 4 way with bypass, 5 way, 6 way with bypass and 7 way
- Compact & lightweight
- Pressure tolerant electronics tested to a depth of 3000msw

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Technical Specifications

General

Type of Valve Pack	4/6x Motor Spool & 1x Tandem or 5/7 Motor Spool & 1 Tandem Valve Type
Materials	6082 Aluminium
Seal Material	Nitrile/NBR/Buna-N, PTFE
Product Finish	Hard Anodised
Work Ports	1/8" BSPP (ISO 1179)
Compensation Ports	1/4" BSPP (ISO 1179)
Dimensions	4 & 5 Way = (W) 260mm x (H) 200mm x (D) 164mm (10.2" x 7.9" x 6.5") 6 & 7 Way = (W) 324mm x (H) 200mm x (D) 164mm (12.7" x 7.9" x 6.5")
Weight in Air	4 & 5 Way = 8.6kg (19lb) 6 & 7 Way = 11kg (24.2lb)
Weight in Water	4 & 5 Way = 5.2kg (11.5lb) 6 & 7 Way = 7kg (15.4lb)
Electrical Connector Type & Pin	Subconn MCBH16M 16 Pin

Hydraulic Performance

Max. Working Pressure	207bar (3000psi)
Flow (lpm)	11.4lpm (3gpm)
Check Valve Pilot Ratio	4:1
Individual Valve Internal Leakage	Maximum = 164cc/min @ 207bar (10in ³ /min @ 3000psi) Reference fluid = 32cSt @ 40°C
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 Working Pressure

Electrical Requirements

Supply Voltage	24Vdc
Current Draw	1.5A Nom.
Communications	Direct to Coil

Environmental

Operational Depth (msw)	3000msw (9,840ft)
Operating Temp (C)	5-60°C (41-140°F)
Storage Temp (C)	0-70°C (32-158°F)
Humidity (%)	0% to 100% Condensing