

Manipulator Jaw Rotate

The HLK-25000 manipulator jaw rotate was developed as a standard fit for all medium duty manipulators available with- in the Hydro-Lek range of manipulators but can be retrofitted to any system requiring a jaw rotate function or mechanism.

The rotate function uses an industry standard hydraulic orbital motor to drive within the main housing body and a double acting cylinder to open and close the jaw assembly. The low speed, high torque hydraulic motor can deliver a continuous torque of 60Nm @ 140bar (44.25lbf.ft @ 2000psi) and the jaw mechanism can exert a compressive force of 630N @ 140bar (141.63lbf @ 2000psi).

Welded into each jaw tine is a pair of circular cutting blades to provide a soft rope cutting capability up to 19mm (3/4") and a cross drilling of 12.7mm (1/2") is available for the gripping of t-handles or other types of ROV tooling handles.



Features

- Low speed, high torque motor capable of delivering 60Nm @ 140bar (44.25lbf.ft @ 2000psi)
- Jaw force capacity of 630N @ 140bar (141.63lbf @ 2000psi)
- Soft rope cutting blades available as standard

Technical Specifications

General

Function	Jaw & Wrist Rotate
Materials	316 Stainless Steel, 6082 Aluminium
Product Finish	Hard Anodised
Seal Material	Nitrile/NBR/Buna-N, PTFE
Ports	7/16" SAE (SAE J1926-1)
Dimensions	(L) 428mm x (W) 116mm x (D) 75mm (16.8" x 4.6" x 3)
Weight in Air	7.5kg (16.53lbs)
Weight in Water	5.92kg (13lbs)
Wrist Travel (Degree)	Continuous
Jaw Opening	154mm (6")
T-Handle Groove Diameter	12.7mm (1/2")

Hydraulic Performance

Maximum Working Pressure	140bar (2000psi)
Flow	0.5lpm to 6lpm (0.13gpm to 1.32gpm)
Fluid Type	Mineral: DIN 51524, ISO 11158, ISO 6743-4, ASTM D6158 Synthetic: Panolin Atlantis, HLP-Synth
Viscosity	16cSt to 220cSt. VG 22-32 Recommended
Temperature	5-60°C (41-140°F)
Cleanliness Requirements	ISO 4406:19/17/14, NAS 1638:8, AS4059:9A/8B/8C

Forces

Wrist Torque	60Nm @ 140bar (44.25lbf.ft @ 2000psi)
Jaw Force	630N @ 140bar (141.63lbf @ 2000psi)
Soft Rope Cut Diameter	19mm (3/4")

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

Saab UK - World leader in electric underwater robotics

Phone: +44 (0) 1489 898000

Web: www.saabseaeye.com

Email: solutions@saabseaeye.com

© Saab UK 2023 Revision no.: 1

SPECIFICATIONS MAY CHANGE WITHOUT PRIOR NOTICE AND ARE SUBJECT TO SYSTEM CONFIGURATION