Features

- 5 degrees of freedom manipulator
- Compact & lightweight @ 18.2kg (40lb) in water
- Lift of 80Kg at full reach
- Continuous wrist rotate and a jaw opening of 154mm (6")
- Incorporates a 19mm soft rope cutter

Product Overview

The HLK-50010 manipulator is a 5 Function rate controlled manipulator making use of an HLK-25000 jaw rotate offering continuous rotation on the wrist and a jaw opening range of 154mm (6") and a softline cutting capability of 19mm (3/4") from the back side of the jaw plates.

This manipulator was specifically developed for use on observation to light duty work class vehicles to provide manipulation capabilities and is ideal for applications such as jetting and brushing operations, debris clearance, valve turning and bolt torqueing, rope cutting, cable repair, biological and geological sampling, archaeological work, transponder and probe installation, salvage and recovery

Product Specifications

General

Degrees of Freedom	5
Control Type	Rate Controlled
Materials	316 Stainless Steel, 6082 Alum., HDPE
Seal Materials	Nitrile/NBR/Buna-N, PTFE
Product Finish	Hard Anodised, Painted
Ports	1/8" BSPP (ISO 1179) 7/16" SAE (SAE J1926-1)
Dimensions	Refer to Drawing
Weight in Air	25.2kg (55.4lb)
Weight in Water	18.2kg (40lb)
Maximum Reach	922mm (36")
Wrist Travel	Continuous
Jaw Opening	154mm (6")

Hydraulic Performances

Max. Working Pressure	140bar (2000psi)
Flow	0.5lpm to 6lpm (0.13gpm to 1.58gpm)
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

Performances

Wrist Torque	60Nm @ 140bar (44lbf.ft @ 2000psi)
Jaw force	690N @ 140bar (155lbf @ 2000psi)
Soft Rope Cutting Diameter	19mm (3/4")
Lift at Full Extension	80kg (176lb)

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