07-8000077 – Hydraulic Power Unit



The 07-8000077 hydraulic power unit is a compact, high reliability solution designed for use on medium to large observation class ROV's and submersibles with hydraulic tooling capabilities. Built for harsh subsea environments, the unit features a corrosion resistant hard anodized aluminium housing and a depth rating of 4000msw (13,123ft). A fixed displacement gear pump is driven by a 440VAC or 660VAC 3 phase motor, with an integrated pressure relief valve housed within the pump manifold. Its compact design and low in-water weight make it ideal for deep water intervention tasks where performance and footprint are critical.



Key Features

- Flow Rate: 10.6 LPM @ 50 Hz / 12 LPM @ 60 Hz
- Compact and lightweight at only 14.8kgs (32.6lb) in water
- Constructed from corrosion resistant materials
- 3 phase voltages available in 440Vac or 660Vac
 - o **07-8000077-440**
 - o **07-8000077-660**
- Integrated pressure relief valve



Technical Specifications

Pump type	Fixed Displacement Gear
Motor Type	3 Phase AC Induction
Materials	6082 Aluminium
Seal Materials	Nitrile/NBR/Buna-N, PTFE
Product Finish	Hard Anodised
Work Ports	P = 1/4" BSPP (ISO 1179) T= 3/8" BSPP (ISO 1179)
Compensation Ports	P = 1/4" BSPP (ISO 1179)
Dimensions	(D) 177mm x (L) 422mm (7" x 16.6")
Weight in Air (Dry)	23kg (51lb)
Weight in Water (Dry)	14.8kg (32.6lb)
Electrical Connector Type & Pin	M2PL4M with 1.5mtr Whip

Hydraulic Performance

Max. Working Pressure	140bar (2000psi)
Flow (Ipm)	10.6lpm (2.8gpm) @ 50Hz, 12lpm (3.17gpm) @ 60Hz
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 4406:17/15/12, NAS 1638:6, AS4059:7A/6B/6C

Electrical Requirements

Supply Voltage	440/660Vac
Electrical Power	4.3kW
Current Consumption	6A @ 440Vac, 5A @ 660Vac
Frequency	50/60Hz

Environmental	
Operational Depth (msw)	4000msw (13,123ft)
Operating Temp (C)	5-60°C (41-140°F)
Storage Temp (C)	0-70°C (32-158°F)
Humidity (%)	0% to 100% Condensing

Saab UK - World leader in electric underwater robotics