



Hydraulic Power Unit

15-280 kW

Our high efficiency submersible motors and HPU's are the most reliable available in the marketplace. Available in sizes varying from 15 to 280 Kw / 20 to 375 HP, they are the perfect power source supply for ROV's, Trenchers, TMS and tooling applications.

Our motors and HPU's are ideal for driving thruster systems, excavation and hydraulic tools requiring high power inputs. The submersible motor can also be used to drive other types of rotating machinery such as water pumps for trenching machines. The distinctive feature of our submersible motors is the finned end cap design that provides efficiency cooling due to the heat transfer surface area. This eliminates the need for forced external cooling on the larger motors. Motor winding temperature and water ingress sensors are included for connection to customers control systems.

FEATURES

- High Reliability
- Outputs Shaft Each End of the Motor
- Shaft Powers from 15 to 280 kW
- Industry Proven Windings
- 1800 rpm Synchronous Speed
- Water Ingress and Temp. Sensors
- Various Voltage Options (3000 Volts Standard)
- Interface Kits for a Range of Hydraulic Pumps
- Motor Options for Pump Drives with 3600 rpm Shaft Speed
- Efficient Design Requires no External Cooler

Kw Shaft	HP Shaft	Frame Size
15	20	160
56	75	180
93	125	180
112	150	225
150	200	225
280	385	280

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INTERFACING PUMP TO MOTOR

This comprehensive range of submersible motors is available in shaft power outputs from 15 to 280 kW (20 to 375 HP) across four motor frame sizes. All motors incorporate interfaces at each end of the unit, allowing two output drives to be run from a single motor. Dedicated pump interface kits allow the accurate matching of Hydraulic Pump model, type and displacement to obtain the desired hydraulic characteristics.

PUMP INTERFACE

Hydraulic pumps can be attached to each end of the motor by means of a dedicated 'plug-in' Interface Kit that includes a bell housing and flexible drive element. The flexible element reduces noise, shock loading and prevents problems associated with misalignment. Interface kits are available for most commonly used pumps and new designs can be supplied for customer specified or supplied pumps. If only one pump is required, the opposite end is fitted with a blanking kit. Pumps can be easily fitted and replaced in the field with the correct Interface Kit.

PUMP OPTIONS

Typical pumps used in ROV applications include, Rexroth A10/A4 ranges and Linde HPR range. Other pumps can be interfaced as required with a dedicated Interface Kit. Compensated pumps are generally fitted that automatically unload when there is no power demand.

VOLTAGE AND SPEED

Standard voltage is 3000 VAC but can be supplied as options such as 2400 or 1100 VAC. The standard speed is 1800 rpm synchronous @ 60 Hz, 4 pole but can be supplied as 3600 rpm synchronous @ 60Hz, 2 pole as an option (4 pole is preferred due to enhanced pump reliability).



TESTING

All motors and HPU's are fully run-in at full load prior to shipment. A test certificate is supplied with each unit stating all the recorded outputs such as power input and output, temperature, pressure, flow etc.

COMPENSATION OIL

The motor must be filled with compensation oil and positively compensated to approximately 0.5 bar/7psi overpressure. Transformer or Hydraulic oil can be used, although Hydraulic tends to be the preferred choice with ROV operators. Sprung compensators are available from Sub-Atlantic.

MAIN POWER CONNECTION



Units can be supplied with a Burton 3000 Volt Bulkhead connector or power outputs up to 91 Kw/125 HP and water blocked, cable tails in an oil filled Tygon tube for direct connection to the ROV power supply junction box.

WATER SENSOR

As standard configuration, a contact type water ingress sensor is included in the lowest part of the housing. Customer specified sensors can also be fitted upon request.

TEMPERATURE SENSOR

As a standard configuration, three PT-100 type sensors are included in each of the phase windings for monitoring their respective temperatures. Additionally, customer specified sensors can also be fitted upon request (to monitor oil temperature).

SIMPLE COOL RUNNING DESIGN



All Sub-Atlantic motors incorporate a unique high cooling capacity end cap design to ensure that the motor runs cool in all water conditions.

The specification details are illustrative for marketing purposes only. Actual equipment may be different as a result of product improvement or other reasons. Specific interface and performance information should be reconfirmed at time of order placement.

FORUM SUBSEA TECHNOLOGIES

Aberdeen: +44 (0) 1224 798660

Houston: 1 713 329 8230

Singapore: +65 6465 4850

Brazil: +55 21 2588 8016

Kirkbymoorside, York +44 (0)1751431751

sub-atlantic.sales@f-e-t.com

www.f-e-t.com/contact