ThrustMaster 6



The TrustMaster 6 is a high performance thruster control unit for large ROVs, trenchers and similar vehicles. It is a robust design suitable for most hydraulic work class ROV systems.

Thruster control is provided using 6 high-flow proportional control valves. One proportional pressure reducing valve is available for controlling the HPU pump pressure. The number and type of valves can be changed according to customer needs.

All thruster control is based on direct communication with a pressure tolerant electronic valve driver card mounted in the valve block. This removes the need for a big electronic pressure vessel for control electronics, and large and expensive cables to the valve pack. All that is needed is a 24VDC power supply and serial line.

The ThrusterMaster 6 is also equipped with instrumentation for monitoring parameters such as hydraulic pressure, water depth, HPU-temperature, leak sensors and reservoir level sensors.

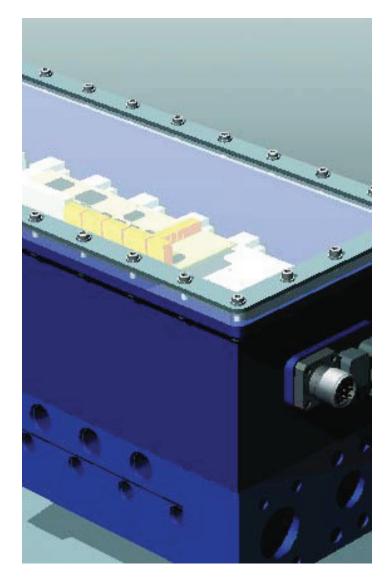
The concept of using proportional valve technology instead of servo valves for thruster control results in higher hydraulic efficiency, reducing overall power requirements of hydraulic power units. Proportional valves have insignificant internal leakage in the valve and low pressure drop at high flow compared to servo valves. This, combined with the design of the valve block, reduces the hydraulic power loss in each valve and increases overall hydraulic efficiency.

ThrustMaster 6 can be combined with additional thruster control units or other intelligent valve packs in a network. The unit communicates with Innova's product line of pressure tolerant controller boards and control systems to provide a complete control system concept.



INNOVA TECHNOLOGY

ThrustMaster 6



Technical data

Hydraulic functions

- 6 off 4/3-way NG 10 pilot operated proportional flow control valves, nominal flow = 80 l/min max flow = 220 l/min, max pressure = 315bar
- 1 off proportional pressure relief valve for direct pressure control of external hydraulic power units
- 2 hydraulic pressure sensors on the P and T port respectively
- Other valve configurations available

Electrical

- INNOVA CUTE PWM 16 Pressure tolerant embedded controller
- 16 x 24V PWM or on/off function 2A
- 4 x analogue inputs 4-20mA 10 bit resolution
- 4 x isolated digital inputs 24V
- 4 x spare analogue in or digital I/O ports
- Communication link: RS232 or RS485 serial line Software support provided.
- Power requirements: 24VDC, 125mA
- Connectors: Burton 5506-2006 power and signal
- Other connectors (sensors etc) on request

Mechanical/interface

- Anodised aluminium housing, acrylic lid
- LxBxD: 630 x 260 x 300 mm
- Weight: ca. 85 kg in air, 50 kg in water

Software

The ThrustMaster 6 is delivered with a Windows based test program and serial protocol documentation. Our software engineers will assist in integration with existing control systems.

Note: specifications are subject to change without notice. We accept no liability for any inaccuracy or printing errors.

Version: Rev.2/GGT

17.01.2013

Note: technical specifications are subject to change without notice. We accept no liability for any inaccuracy or printing errors.

INNOVA TECHNOLOGY



INNOVA AS, P.O. Box 390 Forus, 4067 Stavanger, Tel: +47 51 96 17 00, Fax: +47 51 96 17 01, E-mail: post@innova.no