

MODEL 260 DC BRUSHLESS THRUSTERS

Proven in the world's harshest subsea environments, Tecnadyne's thrusters have been at the forefront of propulsion technology for over 20 years. The Model 260 thruster, a 1/4hp unit with over 5kg forward thrust, is ideally suited for small ROV's, AUV's and other subsea applications. Over 450 Model 260's (including the earlier Model 250) have been delivered to customers worldwide.



The propeller of the Model 260 is magnetically coupled using a design perfected by Tecnadyne. With this design, a magnet array in the hub of the propeller is driven by a matching magnet array attached to the drive motor. By eliminating the rotating drive shaft and shaft seals that always seem to leak over time, the Model 260 achieves extremely high reliability. Additionally, the magnetic coupling will ratchet if overloaded, preventing damage caused by objects jammed in the propeller. And since the water lubricated propeller bearings are external to the pressure housing, they can be easily replaced in several minutes.

Employing a high RPM, low inertia DC brushless motor, coupled to a 6/1 ratio planetary gearset, the Model 260 delivers maximum reliability, high efficiency and high power in an extremely compact, lightweight and easy to maintain package. A Nylon propeller and Kort nozzle combine to give the Model 260 extremely high Bollard thrust and open water efficiency. An optional bronze propeller gives improved bidirectional performance.

For depths to 1,500 meters, the power and control electronics are housed within the hard anodized aluminum motor casing, greatly simplifying the installation and electrical interface. For full ocean depth rating, the electronics are installed in a remote, one atmosphere housing (either the customer's housing or one supplied by Tecnadyne) and the thruster is oil filled for pressure tolerance.

The Model 260 is available for operation at voltages from 24vdc to 330vdc (150vdc standard) supplied by a well filtered battery bank, rectified and filtered AC or a DC power supply. In addition to the main power, the thruster requires isolated 12vdc instrumentation power and a +/-5v analog speed and direction control signal. Alternately, a full servo RS232 or RS485 input controller is available but this must be installed in a remote, one atmosphere housing. Please refer to the Tecnadyne website for detailed installation and interface instructions.

The standard depth rating of the Model 260 is 850 meters -1,500 meters and full ocean depth are available options. Customer specified subsea connectors and cables, stainless steel or titanium housings and custom mountings are also available.

MODEL 260 SPECIFICATIONS

Bollard Output

12lbf (5.4kg) forward
4lbf (1.8kg) reverse
w/ Nylon propeller
8lbf (3.6kg) forward
6lbf (2.7kg) reverse
w/ bronze propeller

Input

150vdc, 2.1A power
(325 watts at alternate
voltages)
+12v, 200mA isolated
instrumentation power
+/-5v analog speed
command

Weight

2.0lb (0.9kg) in air
1.5lb (0.7kg) in water
w/ Nylon propeller
2.2lb (1.0kg) in air
1.6lb (0.7kg) in water
w/ bronze propeller

Depth Rating

2,800ft (850m) standard,
5,000ft (1,500m) & full
ocean depth (oil filled)
optional

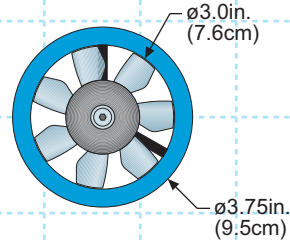
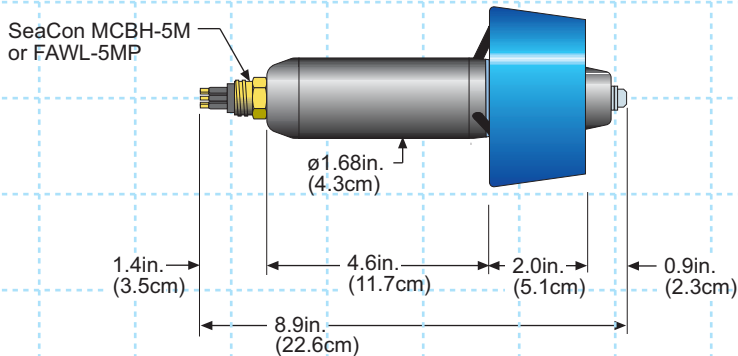
(1,000m & greater depth subject to
US Govt. export approval)

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Part Number: 260 -

- (24-28vdc) 024
- (48-55vdc) 048
- (68-75vdc) 070
- (85-95vdc) 090
- (100-110vdc) 105
- (145-165vdc) 150
- (200-220vdc) 210
- (250-280vdc) 260

- N (Nylon prop)
- B (bronze prop)
- 0850 (850m depth)
- 1500 (1500m depth)
- OFRE (oil filled remote electronics)
- M (SeaCon MCBH-5M)
- F (SeaCon FAWL-5P-BC-RA)
- Ln (SeaCon LMG-6FS w/ cable length of n meters)
- Mn (SeaCon LMG-6MP w/ cable length of n meters)
- X (Customer specified connector)



SCALE 1:4

Note: Due to motor tolerances, voltage required to achieve rated Bollard thrust can vary +/-5%
Specifications subject to change without notice

