

6000 m Multi-Frequency Imaging Sonar Head with Composite Transducer



KONGSBERG

P/N 975-22030000

The 6000 m 1171 series of sonar heads has been optimized to meet the requirements of deep-ocean applications. These sonar heads provide a high level of image quality. The wide-band composite transducer is protected within an oil-filled, pressure-compensating dome. The multi-frequency design allows optimization of the imaging frequency for different applications. The telemetry is RS485 and RS232 compatible and is automatically sensed and configured at startup. The sonar head is configured and controlled using the MS1000 Software.

| | | | | | |
|------------------------|---|--|------------|------------|------------|
| Frequency Range: | Tunable in 5 kHz steps from 400 kHz - 1000 ¹ kHz in both CW and LFM modes | | | | |
| Preset Frequencies: | 450 kHz | 500 kHz | 675 kHz | 800 kHz | 900 kHz |
| Beam Widths: | 2.0° x 36° | 1.7° x 39° | 1.3° x 29° | 1.2° x 25° | 1.0° x 21° |
| Maximum Ranges: | 200 m @ 450 kHz, 100 m @ 675 kHz, 75 m @ 800 kHz | | | | |
| Minimum Range: | 0.5 m | | | | |
| Range Resolution: | ≥ 3.75 mm (variable, determined by transmit-pulse width) | | | | |
| Range Sample Options: | 238, 476, 952, 1904 (Low Resolution, High Resolution, Zoomx2, Zoomx4) | | | | |
| Sampling Resolution: | 0.26 mm (0.5 m range @ 1904 samples), 21 mm (10 m range @ 476 samples) | | | | |
| Scan Speed: | Typical: 3.7 sec/360° @ 5 m and 1.8° step size (@ 460 kbps) Nominal: 34 sec/360° @ 100 m and 1.8° step size (@ 460 kbps) | | | | |
| Scan Angle: | 360° continuous (user adjustable for limited sector scans) | | | | |
| Step Size: | 0.45° - 7.2° (user selectable) | | | | |
| Transmit Pulse Widths: | 5µs to 1000µs (auto selected for optimized operation) | | | | |
| Receive Bandwidth: | Based on 'Wide' setting: 493 kHz (0.5 m range), 109 kHz (10 m range) | | | | |
| Telemetry : | RS485 or RS232 asynchronous serial data | | | | |
| | Fixed | Downlink: 9600 bps to 921 kbps (user selected for compatibility with other serial communication equipment) Uplink: same speed as downlink | | | |
| | Optimized | Downlink: 9600 bps to 921 kbps (auto set to highest rate allowed by the quality of the telemetry link) Uplink: same speed as downlink | | | |
| Power Requirement: | 22 - 26 VDC @ ≤ 0.8A | | | | |
| Temperature Range: | -10° to +40°C operating, -30° to +40°C storage | | | | |
| Operating Depth: | 6000 m | | | | |
| Connector: | Seacon RMG-4-BCL; optional connectors based on customer request | | | | |
| Materials: | Aluminum 6061-T6, 300-Series S.S., Urethane | | | | |
| Finish: | Anodized, Black/Blue MIL-A-8625 type II | | | | |
| Dimensions: | Diameter (Bulkhead): 5.49 in/140 mm Diameter (Housing): 4.47 in/114 mm Length: 12.2 in/310 mm (excluding connector) | | | | |
| Weight: | In Air: 14.2 lb/6.4 kg In Seawater: 7.3 lb/3.3 kg | | | | |

¹ Excluding 560 – 590 kHz, which is blocked from use.

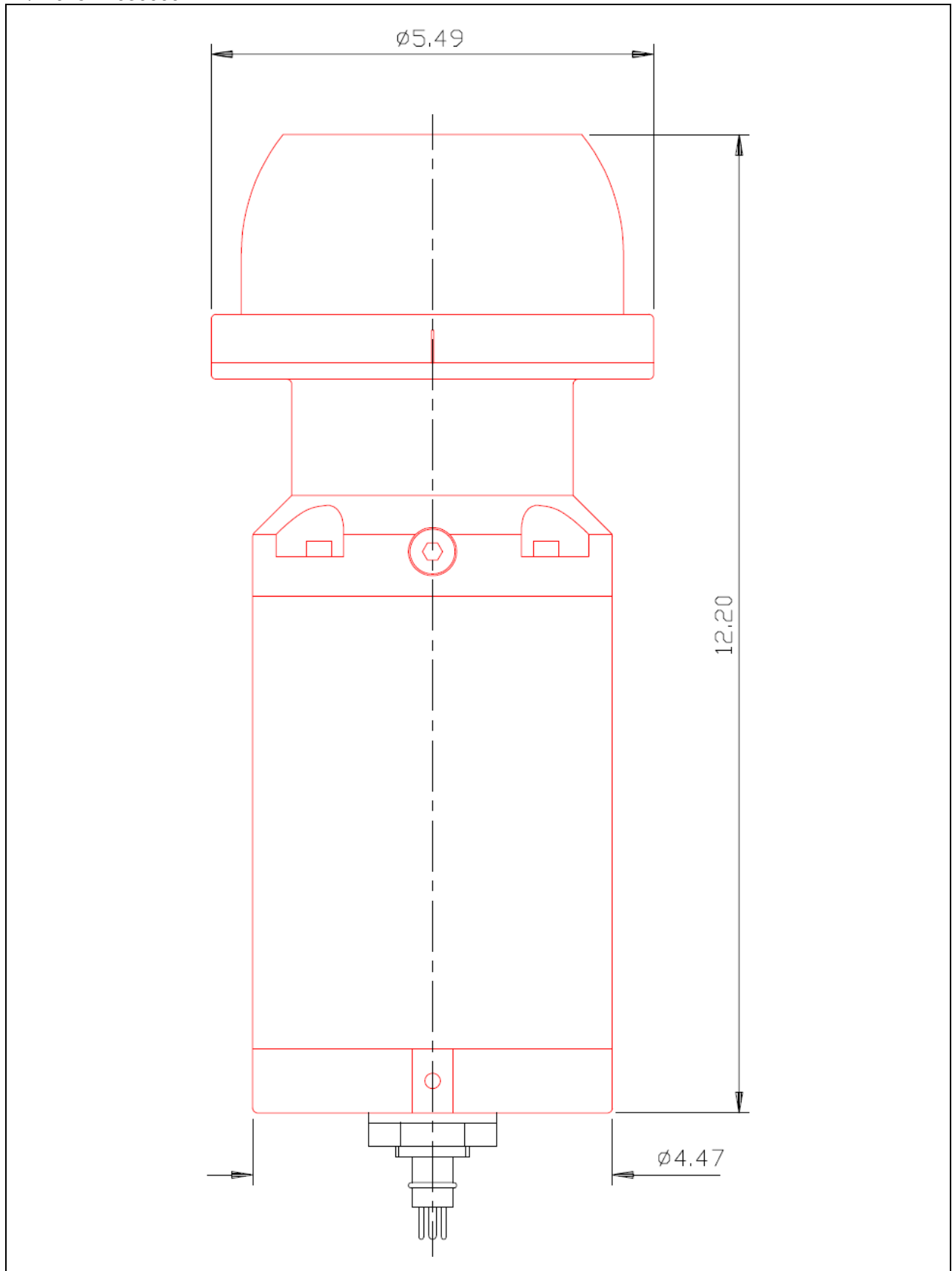
Specifications subject to change without notice

P/N 975-22037901 Iss 1.0

KONGSBERG MESOTECH LTD. 1598 Kebet Way, Port Coquitlam B.C. Canada V3C 5M5

Tel: (604) 464 8144 Fax: (604) 941 5423

P/N 975-22030000



Specifications subject to change without notice

P/N 975-22037901 Iss 1.0

KONSGBERG MESOTECH LTD. 1598 Kebet Way, Port Coquitlam B.C. Canada V3C 5M5

Tel: (604) 464 8144 Fax: (604) 941 5423