



KONGSBERG

# Dual Transducer Imaging Sonar Head

P/N 975-21030000

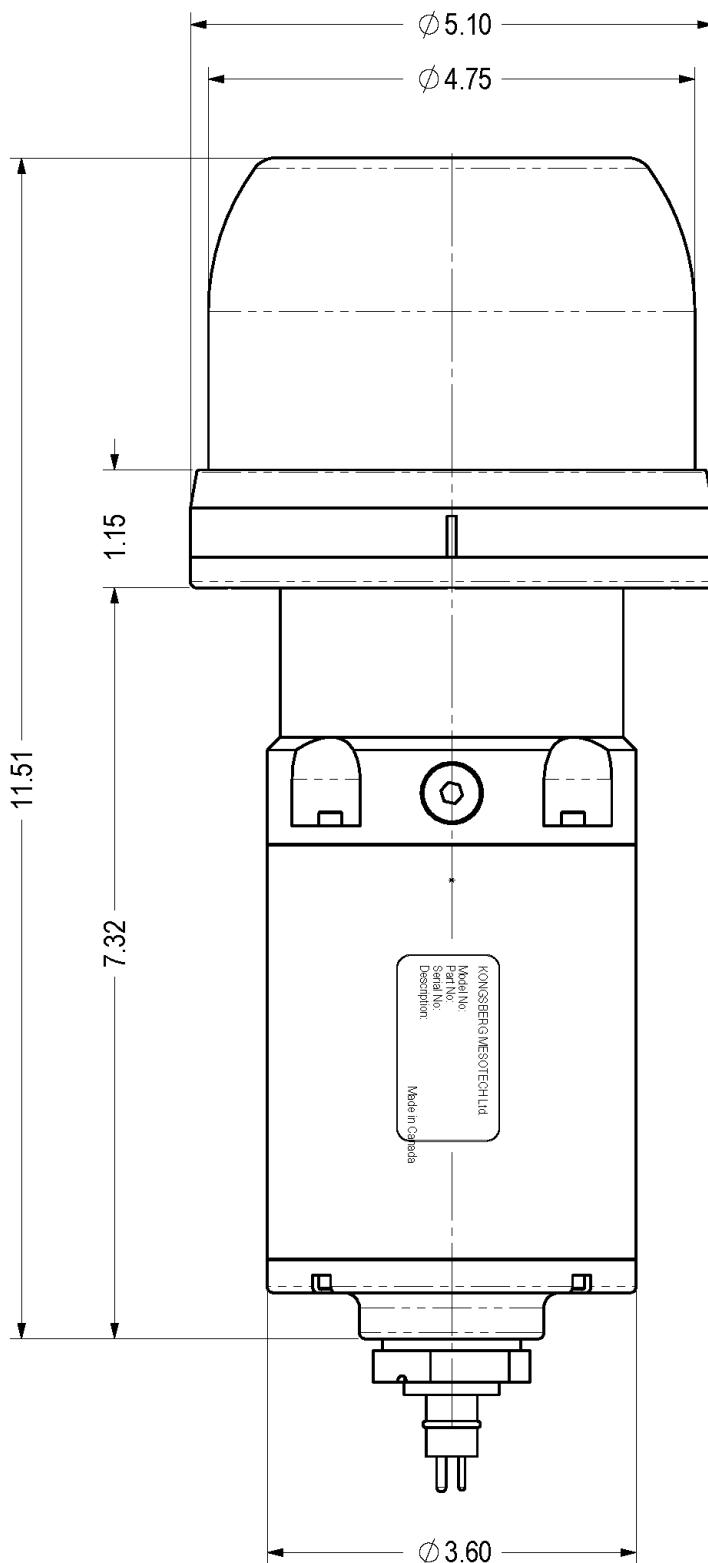
The 1171 Series of Sonar Heads have been developed to meet the requirements for deep ocean applications. The new sonar heads have reduced size and weight while providing the high level of data quality characteristic for all Kongsberg Mesotech sonars. The dual transducer design allows optimized operational configuration for both long range obstacle avoidance and shorter range imaging detail. The transducer is protected within an oil-filled, pressure compensating dome. The telemetry is RS485 and RS232 compatible and is automatically sensed and configured at start up to match the telemetry link used. The sonar head operation is configured and controlled using the MS1000 Software Processor.

|                           |   |  |
|---------------------------|---|--|
| Operating Frequency:      | <i>Transducer 1:</i> 300 kHz to 400 kHz   |  |
| Beam Width (@3dB):        | 2.7° x 30° Fan (@330kHz)  | <i>Transducer 2:</i> 450 kHz to 700kHz   |
| Maximum Range:            | 300 m typical (@330kHz)   | 1.4° x 40° Fan (@675kHz)   |
| Range Resolution:         | ≥ 2.0 cm  | 100 m typical (@675kHz)  |
| Transmit Pulse Widths:    | 25µs to 1000µs (auto selected)  | ≥ 0.5 cm   |
| Receive Bandwidth:        | 50kHz max. (auto selected)  | 5µs to 1000µs (auto selected)  |
| Range Sample Count:       | 238, 476, 952, 1904 (Low Resolution, High Resolution, Zoomx1, Zoomx2)   |  |
| Sampling Resolution:      | ≥ 0.5mm (function of range selection)   |  |
| Scan Speed:               | nom 5 sec/360° @ 10 m and 1.8° step size (@ 460 kbits/sec.)<br>nom 34 sec/360° @ 100 m and 1.8° step size (@ 460 kbits/sec.)                                |  |
| Scan Angle:               | 360° continuous   |  |
| Step Size:                | 0.45° - 7.2 user selectable   |  |
| Telemetry :               | RS485 or RS232 asynchronous serial data   |  |
| Telemetry configurations: | Legacy mode <i>Downlink:</i> 9600 bps fixed<br><i>Uplink :</i> 9600 bps to 460 kbps (auto set to highest rate allowed by the quality of the telemetry link) |  |
|                           | Fixed   | <i>Downlink:</i> 9600 bps to 460 kbps (user selected for compatibility with other serial communication equipment)<br><i>Uplink:</i> same speed as downlink |
|                           | Optimized   | <i>Downlink:</i> 9600 bps to 460 kbps (auto set to highest rate allowed by the quality of the telemetry link)<br><i>Uplink:</i> same speed as downlink     |
| Power Requirement:        | 22-26 VDC @ ≤ 0.8A  |  |
| Temperature Range:        | -10 to +40°C operating<br>-30 to +40°C storage  |  |
| Operating Depth:          | 4000 m max.   |  |
| Connector:                | Seacon RMG-4-BCL; optional connectors based on customer request   |  |
| Materials:                | Alum 6061-T6, 300 Series S.S., Urethane   |  |
| Finish:                   | Anodize, Black/Gold MIL-A-8625 type II  |  |
| Dimensions:               | Diameter:   | 5.1in/130mm  |
|                           | Length:   | 11.5in/292mm (excluding connector)   |
| Weight                    | In Air:   | 9.0lb/4.1kg  |
|                           | In Seawater:  | 3.9lb/1.8kg  |

Specifications subject to change without notice

P/N 975-21037901 Iss 1.2

KONGSBERG MESOTECH LTD. 1598 Kebet Way, Port Coquitlam B.C. Canada V3C 5M5  
Tel: (604) 464 8144 Fax: (604) 941 5423



Specifications subject to change without notice  
P/N 975-21037901 Iss 1.2

**KONGSBERG MESOTECH LTD. 1598 Kebet Way, Port Coquitlam B.C. Canada V3C 5M5**  
Tel: (604) 464 8144 Fax: (604) 941 5423