



KONGSBERG

4000 M MULTI-FREQUENCY PROFILING SONAR HEAD

HIGH-PERFORMANCE DOMED PROFILING SONAR P/N 975-21340000

Kongsberg Mesotech is recognized as a leader in single-beam scanning sonars, developing systems with the highest quality and highest resolution on the market. Our sonars are feature-packed and continuously being developed to meet the stringent requirements of the ever-changing subsea industry.

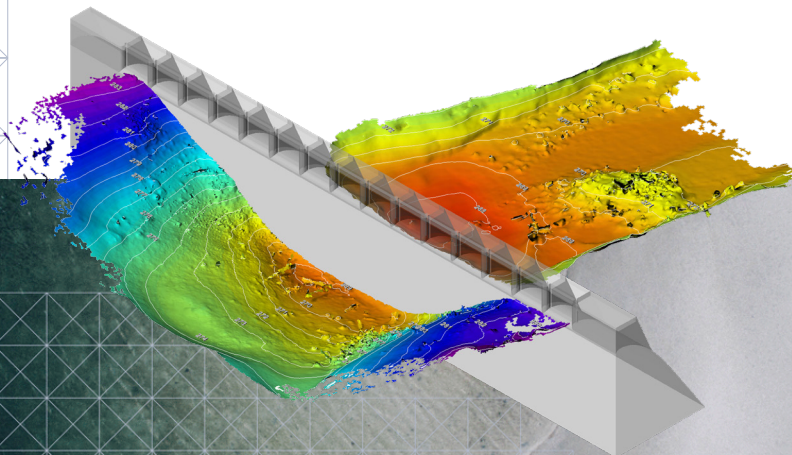
The 1171 Series of Sonar Heads have been developed to meet the requirements for deep ocean applications.

The new sonar heads have reduced size and weight while providing the high level of data quality characteristic for all Kongsberg Mesotech sonars. The Multi-Frequency design allows optimizing the profiling configuration for different applications.

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.

HIGHLIGHTS

- Depth rating: 4000 m
- Robust design
- Low maintenance
- Compact
- Lightweight
- Suitable for ROV / AUV applications



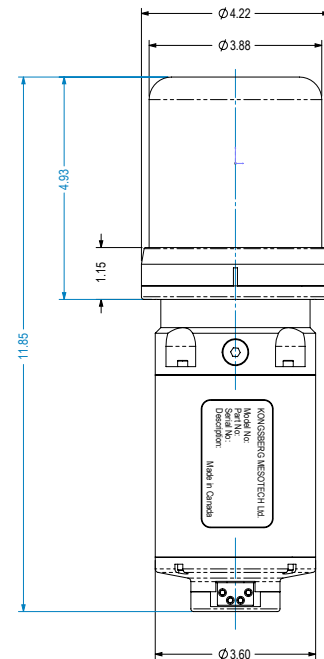
TECHNICAL SPECIFICATIONS

PERFORMANCE DATA

Operating Frequency	User selectable from 675 kHz to 1350 kHz
Beam Width	1.9° Cone (@675 kHz) to 1.0° Cone (@1350 kHz)
Range	0.5 - 75 m typical (@675 kHz)
Range Resolution	≥ 0.5 cm (determined by transmit pulse width and receive bandwidth)
Range Sample Count	238, 476, 952, 1904 (Low Resolution, High Resolution, Zoomx1, Zoomx2)
Sampling Resolution	≥ 0.5 mm (function of range selection)
Scan Speed	typical: 3.7 sec/360° @ 5 m and 1.8° step size nominal: 34 sec/360° @ 100 m and 1.8° step size
Scan Angle	360° continuous (user adjustable for limited sector scans)
Step Size	0.45° - 7.2 (user selectable)
Transmit Pulse Widths	5 µs to 1000 µs (auto selected for optimized operation)
Receive Bandwidth	200 kHz max. (auto selected to suit pulse length & sample rate)
Telemetry	RS485 or RS232 asynchronous serial data
Telemetry configurations	Legacy mode Downlink: 9600 bps fixed Uplink : 9600 bps to 460 kbps (auto set to highest rate allowed by the quality of the telemetry link)
	Fixed Downlink: 9600 bps to 460 kbps (user selected for compatibility with other serial communication equipment) Uplink: same speed as downlink
	Optimized Downlink: 9600 bps to 460 kbps (auto set to highest rate allowed by the quality of the telemetry link) Uplink: same speed as downlink

PHYSICAL SPECIFICATIONS

Power Requirement	22-26 VDC @ ≤ 0.8 A
Temperature Range	-10 to +40°C operating -30 to +40°C storage
Operating depth	4,000 m
Connector	FAWL-4P-BC-R/A
Materials	Aluminum 6061-T6, 300 Series S.S., Urethane
Finish	Anodize, Black/Red
Dimensions	MIL-A-8625 type II Diameter: 4.2 in / 107 mm Length: 11.4 in / 290 mm (excluding connector)
Weight	In Air: 7.7 lb / 3.5 kg In Seawater: 3.3 lb / 1.5 kg



Specifications subject to change without any further notice.

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