

**S4009isc**

Low noise hydrophone



KONGSBERG



Frequency range from 1 to 90 kHz

Low noise

High performance

Titanium housing

High dynamic range

Low self noise

## Description

The S4009isc is an integrated underwater acoustic hydrophone system.

The hydrophone is designed with a 1-inch spherical sensor unit, and offers integrated preamplifier and cable driver circuitry. The hydrophone housing is made of Titanium. The interface is made using a 7-pin M-Series flange receptacle.

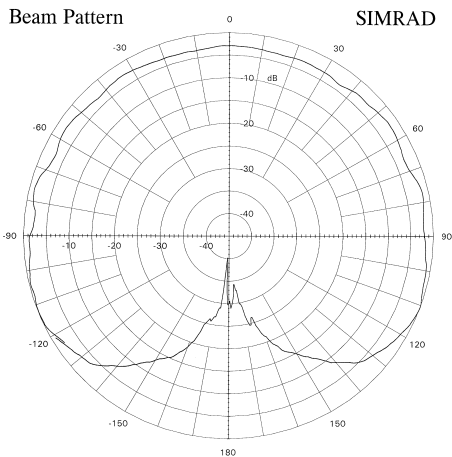
The S4009isc is available in two versions. One includes a bulkhead mounting plate, the other is provided with a cable penetrator.

The S4009isc offers a high dynamic range. It uses balanced differential signal transmission, this allows you to use long low capacitance cables. The self-noise of the S4009isc is very low, well below Wenz' minimum in the frequency range from 6 Hz to 90 kHz.

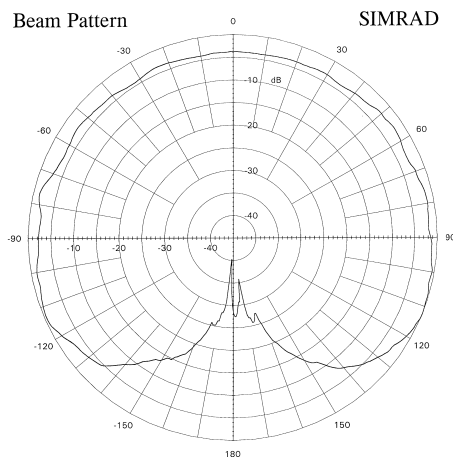
For calibration purposes, the S4009isc has a built-in calibration- and test input.

## Technical specifications

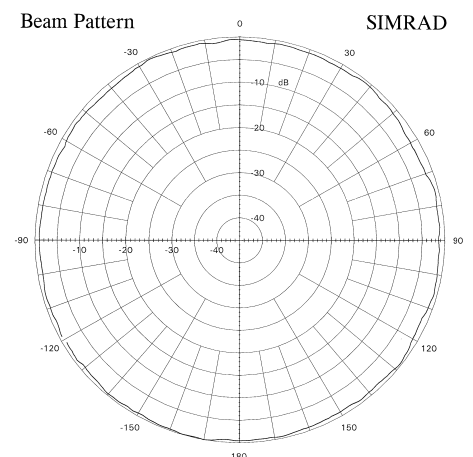
- Supply voltage: 18 to 30 Vdc
- Quiescent current drain: 70 mA
- Supply protection: Diode protection for reversed polarity and overvoltage
- Output protection: Sustains shorting of either output lead
- Sensitivity referred to output: -157 dB rel. 1 V/ $\mu$ Pa (@ 1 kHz and with high Z load)
- Output impedance: 110  $\Omega$
- Frequency range: 1 Hz to 90 kHz ( $\pm 2$  dB)
- Calibration input signal: Balanced with respect to ground
- Calibration input impedance: 1 k $\Omega$
- Calibration input gain: -11 dB (@ 1 kHz)
- Maximum recommended operational depth: 1000 m
- Mechanical dimensions (including connector):
  - Length: 24 cm
  - Diameter: 4.3 cm
- Material in housing: Titanium, grade 2
- Material in connector shell (Souriau): Nickel aluminium bronze
- Insulation material over sensor: Neoprene rubber



*YZ-plane, 80 KHz*



*XZ-plane, 80 KHz*



*XY-plane, 80 KHz*

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