



# Subsea Pressure Sensor

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**The Innova Subsea Pressure Sensor is a single channel analog pressure sensor for use in submerged conditions. The sensor comes in a robust, compact design.**

The pressure on the connection port is measured relative to the internal pressure in the sealed housing. The housing can be compensated to a reference pressure to measure relative pressure.

The compensation medium must be a di-electric fluid such as mineral based hydraulic oil.

## Key features

- Measurement range: Selection of measurement ranges up to 1600 bar
- Depth rating: 3000 m (compensated)
- Temperature range in water: -4 to 60 °C
- Connector: MCBH6MP
- Designed for easy disassembly when maintaining or replacing components

In addition to stand alone sensors, Innova has a range of building blocks, and we have the internal capabilities to deliver tailor made subsea measurement such as control systems, multichannel measurement and data loggers.

Innova also offers inhouse interconnecting cabling and testing facilities for subsea applications.

## HYDRAULIC PORT CONNECTIONS

Sensor port:	1/4" BSP
Vent/comp:	1/8" BSP x 2

## PRESSURE RANGES

Typical pressure ranges:	-1 to 10 bar
	0 to 100 bar
	0 to 250 bar
	0 to 400 bar

The output signal represents positive pressure at the connection port. A negative pressure at the inlet port will not damage the sensor, but signal will be out of range < 4 mA.

One version is configured for -1 bar to 10 bar. This allows measurement of line pressure in return circuits that may have lower pressure than the ambient pressure such as suction lines on pump systems.

## SIGNAL / POWER

Signal:	4 – 20 mA current loop
Supply voltage:	8-30 V
Precision:	0,5 % FS

## TEMPERATURE RANGE

In air:	-40 to 60 °C
In water:	-4 to 60 °C

## ELECTRICAL CONNECTIONS

Connector:	MCBH6MP	
Pinout:	Pin 1:	Supply +
	Pin 2:	Signal (to 0 VDC)
	Pin 3:	NC
	Pin 4:	NC
	Pin 5:	NC
	Pin 6:	PE

## MATERIALS

Sensor wetted parts:	17-4 Ph
Exterior housing:	AISI 316L
Connector body:	Brass
Seals:	NBR

## SIZE AND WEIGHT

Size:	Ø43 x 129 mm (+ connector)
Weight in air:	1 kg
Weight in water:	0,8 kg

The sensor can be used as a depth sensor if the compensation ports are blanked (as delivered). Depth measurement range will in this case correspond to the pressure range. Used as relative sensor (gauge), the measurement range will be independent of water depth. Measured value represents the pressure difference between the sensor port and the compensation port.

In most cases the reference port will be connected to a reference pressure that represents ambient pressure such as a subsea pressure compensator or a compensated circuit. This arrangement enables the use of low range sensor at deep water and hence high-resolution measurement as opposed to absolute measurement.