

# IsoPod PT

## A SCM Pressure Transmitter

- ✓ **4-20mA Subsea Pressure Transmitter**
- ✓ **Ranges from 0-300bar to 0-1200bar**
- ✓ **Designed for 3000 m depth**
- ✓ **Dual / Redundant Signal Option**
- ✓ **30 Years Design Life**
- ✓ **ISO 13628-6 Compliant**
- ✓ **High Total Accuracy < 0.5 % FS**
- ✓ **Fast response time**
- ✓ **EB welded diaphragm**



The IsoPod PT represents the ultimate solution for fast response, high accuracy and long life time performance.

Our thin-film strain gauge measuring technology sputtered on the Hastelloy diaphragm is superior at both dynamic and static measurements for long life time and high pressure applications. Mechanical parts made in Inconel 625 ensure superior strength and excellent material properties.

Highly skilled personnel manufacture, calibrate, and performs extensive ESS-testes according to established procedures.

The IsoPod PT is digitally calibrated and temperature compensated with two channels with an analogue 4-20mA output signal. It is manufactured, at our facilities in NORWAY.

Extensive pressure & temperature cycling tests guarantee this pressure transmitter to be the right choice for subsea installations.

Typical Applications are:

- ✓ Subsea Control Modules
- ✓ Subsea Processing
- ✓ Subsea Pumps
- ✓ Subsea Measurements



*"The Scan Sense IsoPod PT borrows its name from the Giant isopod. These creatures live on the seabed in the abyss of the open sea down to 2,150 meters, where pressure is high. Their bodies are dorso-ventrally compressed, protected by a rigid, calcareous exoskeleton. The large eyes are compound with nearly 4,000 facets, for perfect sensing in the dark, cold and deep waters."*

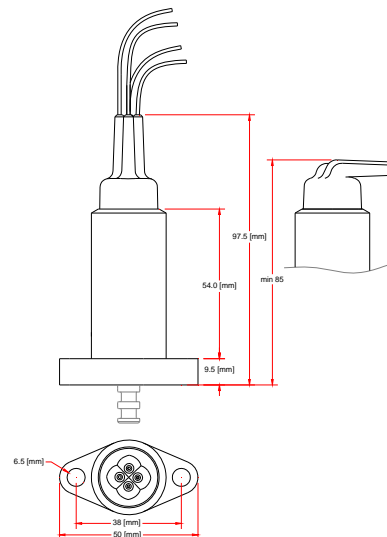
# Technical information

<b>Pressure Ranges</b>	0-300 ... 1200 bar (A and SG)
<b>Total Accuracy</b>	± 0,5% of Full Scale
<b>Long Term Drift</b>	< ± 0,1% of Full Scale / Year
<b>Output Signal</b>	4 - 20mA (2-wire configuration)
<b>Supply Voltage</b>	10 - 30Vdc
<b>Typical Response Time</b>	< 5 ms to 63% of final output value
<b>Stabilization after power up</b>	70 ms (Typical)
<b>Safe Overpressure</b>	≤ 1,5 x Full Scale up to 1035 bar ( 1,25 x FS above)
<b>Burst Pressure</b>	> 3 x Full Scale
<b>Operation Temperature</b>	-5°C to + 40°C
<b>Design and Test Temperature</b>	-18°C to + 70°C
<b>Storage Temperature</b>	-20°C to + 50°C
<b>Protections</b>	Inverted Polarity Protection Transient Protection
<b>Materials</b>	Pressure Port / Housing: Inconel 625 (UNS N06625) Diaphragm: Hastelloy C-22 (UNS N06022) Boot seal: HNBR 70Shore
<b>Pressure Fitting</b>	Flange with dual o-ring seal Refer to drawing ME03641
<b>Electrical Connection</b>	+ conductor: Ch1:White Ch2:White/ Red - conductor: Ch1:Black Ch2:White/ Black 2 meters twisted pair Raychem spec 44, 22 awg, 1000 V Raychem spec 44, 22 awg, 600 V on request
<b>Dimensions</b>	Max width. 50 mm, Min. height: 85mm (bend on bootseal)
<b>Weight</b>	250 grams
<b>Documentation</b>	SMDR, GA drawing and FAT report in MRB

Note: Due to continuous product improvements, published specifications may change without notice.

## Qualification Report Summary:

Hyperbaric pressure	< 330 Bar
Mechanical shock load	10g, 11ms, half sine wave on Q2 level (30g at Q1)
Vibration	20 - 2000 Hz (random Q2), 5-1000 (sweep Q1)
Insulation resistance	> 1G ohm at 50V dc
Loop resistance	250 ohm (typical)
CE-conformity	EMC tested to 2004/108/EC EN 61000-6-2, EN 61000-6-4
Wire strength	Straight pull: 1,5; Side pull: 1,0; Cyclic bending: 0,5 [kg]
Material compatibility	Compatibility tested towards: - Seawater - Silicone oil: Wacker AK350, Wacker AK1000, Dow Corning 200, Shell Diala S2 ZU-I - Hyd.oil: Marston Bentley HW525, 540,625,640, Brayco SV/A, Transaqua HT ...other fluids on request



Scan-Sense AS is a Norwegian company specializing in design and manufacturing of high quality sensor solutions for pressure, load and force. The company has more than 28 years of experience of making tailor-made solutions for the oil and gas industry.