

SUBSEA PRESSURE SENSOR

ESPS 3000
SENSOR
SERIES



DESIGNED
for demanding
subsea environments

Description

The compact subsea pressure transmitter **ESPS 3000** is designed for use in almost all subsea applications, and offers a reliable pressure measurement, even under harsh environmental conditions.

Excellent vibration stability, robust construction, and a high degree of EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

Next to the delivery of stand-alone sensors, Envirex Group supplies full-fledged subsea monitoring / control systems, which include all related sub-systems: mechanics, hydraulics, software, electronics, controls, and more.

Features

- High accuracy
- Wetted parts made of stainless steel
- Compact and robust design
- Pressure ranges from 0 to 2200Bar
- For temperatures up to 125°C.
- Submersible to 3000M seawater
- Service and user friendly
- 4-20mA or RS232 / CAN-Bus COMS

SPECIFICATIONS

ESPS 3000 PRESSURE SENSOR SERIES

General Technical Specifications

Type	ESPS 3000 Series, Subsea Pressure Sensor
Materials	Enclosure - AISI316L Wetted Parts - 17-4PH Pressure Connection - AISI316L / 17-4PH

Technical Data

Accuracy (incl. nonlinearity, hysteresis and repeatability)	±0.5% FS
Thermal zero point shift	<± 0.15% FS/ 10K
Thermal span shift	<±0.15% FS/ 10K
Response time liquids(10-90%)	> 0.5 ms
Durability, P: 10-90% FS	>10 ×10 ⁶ cycles

Overload / Burst Pressure Table

Nominal Pressure [bar]	250	400	600	1000*	1600*	2200*
Overload Pressure	500	800	1400	2000	2500	3000
Burst Pressure	2500	4000	>4000	>4000	>4000	>4000

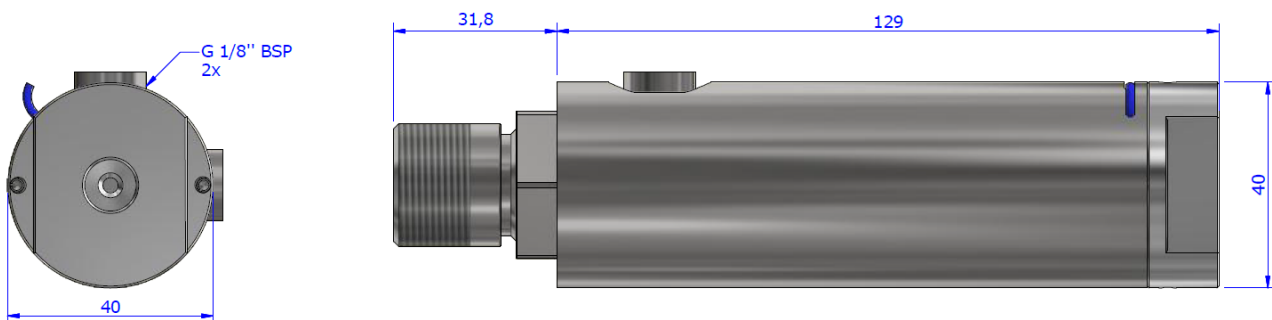
* Only available with 1/4" Medium Pressure port.

Environmental Specifications

Media Temperature Range	-40°C → +125°C
Ambient Temperature Range	-15°C → +70°C
Compensated Temperature Range	-15°C → +70°C
Electrical Performance Compliance	ISO 7637
Vibration stability	[20g, 10-2000 Hz, sinus] EN 60068-2-6
Shock Resistance	[100g] EN 60068-2-27
Pressure Reference	Atmosphere (Relative) *

* To achieve subsea reading with the local ambient pressure at depth with the zero point being equal to the ambient pressure a compensator must be connected to the sensor. Envirex can also supply suitable subsea pressure compensator on request.

Dimensions



SPECIFICATIONS

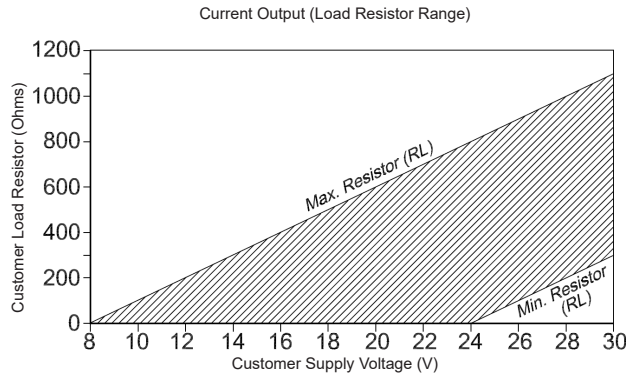
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Electrical Specifications

Output Signal	4-20mA or RS232 / CAN-Bus
Supply Voltage	8 to 30VDC
Connector Type	G5507-1508*
	* Compatible with Burton / Seacon connectors

Load Chart

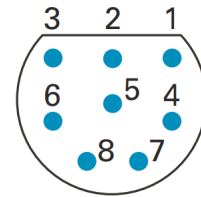
4 to 20mA output - min. / max. resistance vs supply voltage



Note:
Loop current should not exceed 22 mA continuous or 25 mA temporarily due to pressure peaks

Connector Pin-Out

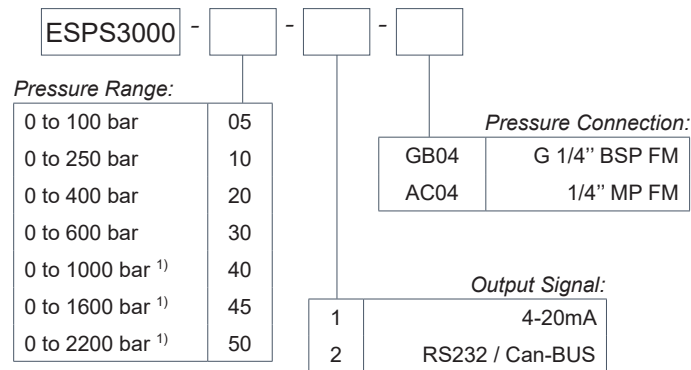
4-20mA	RS232 / CAN-Bus
Pin 01: 0V	Pin 01: 0V
Pin 02: 24VDC	Pin 02: 24VDC
Pin 03: 4-20mA	Pin 03: CAN Hi
Pin 04: NC	Pin 04: Can Lo
Pin 05: NC	Pin 05: RS232 TX
Pin 06: NC	Pin 06: RS232 RX
Pin 07: NC	Pin 07: RS232 GND
Pin 08: NC	Pin 08: NC



5507-1508 Face view

Note:
Versions from 2017 and older have other pin-out. Contact us for further information.

Ordering Codes



¹⁾ Only available with AC04 Pressure Connection

Accessories

- Pigtail Cable G5501-15-08-0004 (4 Feet long) Part Number: 112345
- EVX Mini Compensator 30ml 1" BSP Part Number: 101905
- EVX Mini Compensator adapter 1"-1/4" BSP Part Number: 102933

Included Documentation

- Sensor Test Report
- DoC (Declaration of Conformity)
- Technical Datasheet

Optional Documentation

- Calibration Certificate
- Other required tests and documentation
- Optional documentation only delivered on request.