

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 2200 Bar
- ▣ Submersible to 3000 m 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
 Material: AISI316L

Hydraulic

Connection Comp: 1/8" BSP
 Connection Comp: 1/8" BSP
 Connection Pressure: 1/4" BSP / 1/4" Autoclave

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 liquid (10-90%): >0.5 ms
 Durability, P: 10-90% FS: >10 x 10⁶ 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

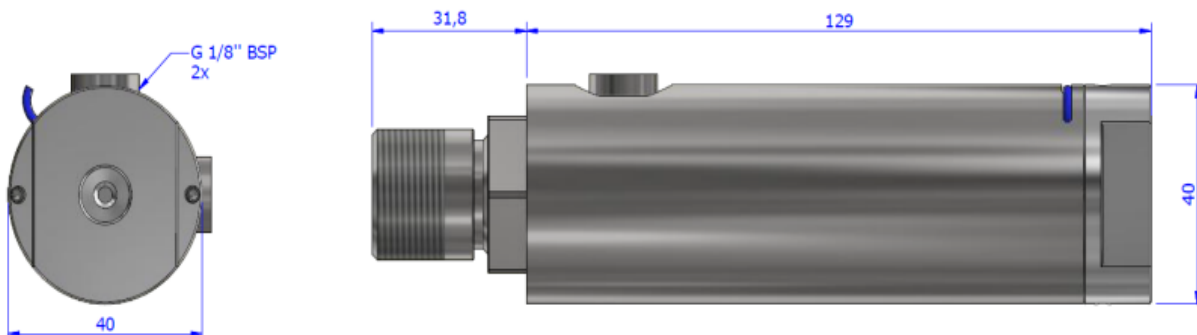
*Only available with 1/4" Medium Pressure Port

Environmental Specification

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

Dimensions



SPECIFICATIONS

ESPS 3000 PRESSURE SENSOR SERIES

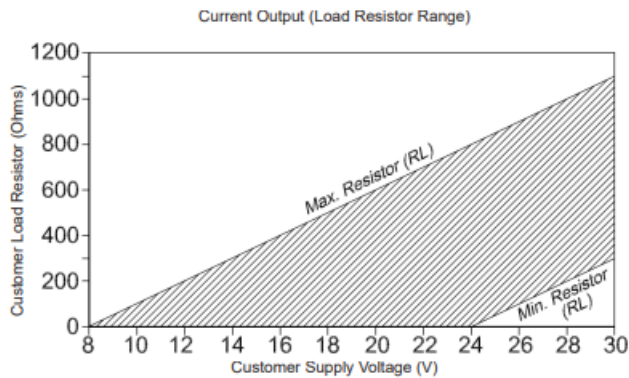
Electrical Specifications

Output Signal
Supply Voltage
Connector Type

4-20mA or RS232 / CAN-bus
8 to 30VDC
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

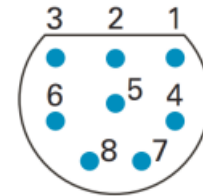
4-20mA

Pin 01: NC
Pin 02: 24VDC
Pin 03: 4-20mA
Pin 04: NC
Pin 05: NC
Pin 06: NC
Pin 07: NC
Pin 08: NC

RS232 / CAN-bus

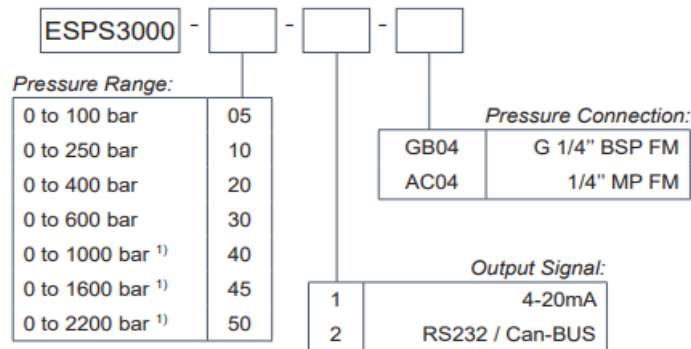
Pin 01: 0V
Pin 02: 24VDC
Pin 03: CAN Hi
Pin 04: CAN Lo
Pin 05: RS232 TX
Pin 06: RS232 RX
Pin 07: RS232 GND
Pin 08: NC

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



5507-1508 Face view

Ordering Codes



¹⁾ Only available with AC04 Pressure Connection

Accessories

- Pigtail Cable G5501-15-08-004 (1,20 m)	V101486
- Mini Compensator 30 ml 1" BSP	V100217
- Mini Compensator Adapter 1" – 1/4" BSP	V100218