

3700 Series

Submersible Transducer for Harsh Environmental Service

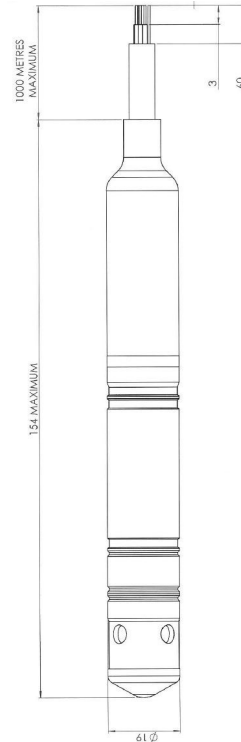
- > Hastelloy/UNS31803SS Construction
- > Triple sealed to ensure immersible integrity
- > <10ms switch on/settling period
- > 19mm diameter

Gems Sensors 3700 Series immersible pressure transducer has been specifically designed to meet the rigors of long term immersibility in harsh environments. A custom designed hermetic header guarantees that water cannot enter the transducer even if the cable sheath is damaged during use. The large bore vent tube is connected directly onto the back of the sensor which provides rapid venting, even on the longest cable run. The sensor itself is impervious to the effects of brackish and salt water. The all welded electronics enclosure is completely segregated from all other areas with the electronics themselves designed to provide fast switch on and settling to ensure maximum battery life and ease of calibration



Specifications

Input	
Pressure Range	0-3 to 0-100 mH ₂ O@4°C
Proof Pressure	3x
Burst Pressure	10x
Performance	
Long Term Drift	<0.2% FS/YR
Accuracy	0.25% FS
Thermal Error	±1% 176°F (80°C), 1.5% max
Compensated Temp	(-5°C to +45°C) non-freezing
Operating Temp	(-25°C to +70°C) non-freezing
Zero Tolerance, Max	±0.5% of Span
Span Tolerance, Max	±0.5% of Span
Fatigue Life	Designed for more than 100 M cycles
Mechanical Configuration	
Pressure Port	Open face with protective cover
Wetted Parts	Hastelloy C276 (Sensor) Duplex 318SS (Case)
Electrical Connection	Vented Cable
Enclosure	IP68, 100m
Vibration	BSEN 60068-2-6 (FC) Sine (20G) BSEN 60068-2-64 (FH) Random (14.1 Grn)
Shock	BSEN 60068-2-27 (Ea) (50G, 11ms)



Individual Specifications

Current	
Output (2 wire)	4-20mA
Supply Voltage	10-30Vdc measured at the input to the transducer terminals (24Vdc max >230°F/110°C)
Max Loop Resistance	(Supply Voltage-10) x 50 ohms

EMC Specifications

Emissions Tests: EN61326-1:2006 and EN61326-2-3:2006	
EN55011:2009 +A1	Radiated Emissions
Immunity Tests: EN61326-1:2006 and EN61326-2-3:2006	
EN61000-4-2:2009	Electrostatic Discharge
EN61000-4-3:2006 +A2	Radiated Immunity
EN61000-4-4:2012	Fast Transients
EN61000-4-6:2009	Conducted RF Immunity

