



PS-7000A PRESSURE SENSOR

PS-7000A

PRESSURE SENSOR WATER LEVEL & TEMPERATURE

DESCRIPTION

The enhanced features and performance of the proven PS-7000A pressure sensor provides users with an affordable solution to a wide range of water level and pressure monitoring applications. The PS-7000A has a standard, 2 wire, loop powered 4–20 mA output with an option for 0–2.5 V DC. Key features include the ability to re-range the sensor, as well as adjust the fluid density and gravity to suit specific applications.

The sensor is ideal for use in groundwater, surface water and a wide range of monitoring and environmental projects. A durable corrosion resistant body, rugged ceramic capacitance transducer and double O-ring sealing ensures suitability for harsh environment applications. The sensor comes fitted with a moulded polyurethane cable. An optional SDI-12 adaptor can provide level and temperature outputs for external controllers or data loggers.

The sensor can be supplied in various gauge (vented) or absolute (non vented) pressure ranges. Gauge sensors

utilise a closed vent system (CVS). This provides barometric pressure venting of the sensor, without the need to continually replace desiccant.

The PS-7000A sensor is easy to install and provides users with a rugged and reliable solution to long term monitoring. For more information please contact your nearest sales office.

FEATURES

- Loop powered – battery or solar
- 4–20 mA or 0–2.5 V DC outputs
- 0.1% FS accuracy
- Field re-ranging and calibration
- User inputs for fluid density and gravity
- Double O-ring design and moulded cable gland
- ½" diameter ceramic capacitance transducer
- Long term stability better than 0.2% per annum
- Optional SDI-12 adaptor for serial output
- Optional threaded fitting for process connection

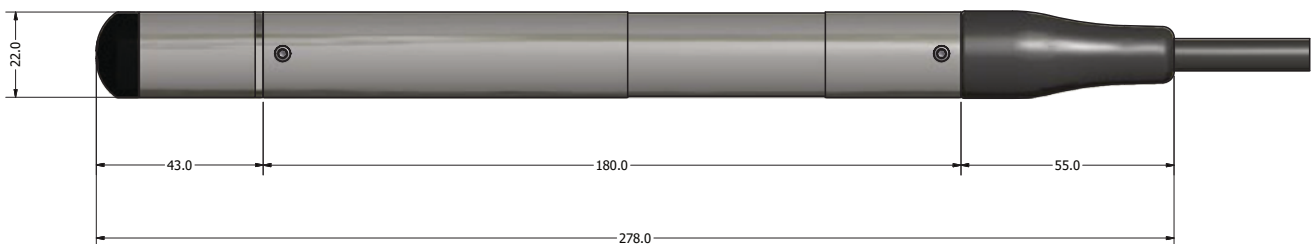
BENEFITS

- Robust 316 stainless steel body material for harsh environments
- No need for regular desiccant replacement resulting in fewer field visits
- Low cost of ownership and minimal maintenance
- Ease of use and long term reliability

APPLICATIONS

- Sewer wet wells
- Bore hole monitoring
- River and dam level monitoring
- Flood warning systems
- Tank level monitoring
- Process level and pressure monitoring

DIMENSIONS



PS7000 SPECIFICATION

Measurement technique	½" ceramic capacitance transducer	
Standard ranges available	Gauge Absolute	2.5, 5, 10, 20, 40, 75, 100 m 20, 40, 75, 100 m
Other Ranges available	Yes (consult sales office)	
Sensor output	4–20 mA, or optional 0–2.5 VDC (SDI12 via adaptor)	
Overall accuracy (combined linearity, hysteresis and repeatability)	+/-0.1% full scale	
Long term stability	0.2% full scale per annum	
Zero Offset and full scale maximum variation	+/-0.02 mA	
Cable type	Polyurethane sheathed cable, OD 8 mm, with 3 mm vent tube, Aramid reinforced, moulded entry, bare wire connection	
Standard cable lengths	10, 20, 30, 50, 100, 150 m	
Non-standard cable lengths	Yes (Extra cable moulding time may be required)	
Closed Vent System (CVS)	Gauge sensors must be fitted with a CVS	
Power supply	8 to 30 VDC (at sensor) loop powered	
Reverse polarity protection	Yes	
Surge current protected	To 2 kV	
Warm-up time to stable reading	<150ms	
Current consumption	Up to 20 mA while turned on, 0 mA when off	
Operating temperature	0–50°C	
Storage temperature	-5°C – +60°C	
Max over pressure	At least twice the full scale range	
Dimensions (L×OD)	278 mm× 22 mm(11"× 0.86")	
Weight	300 g plus cable weight (665 g per 10 m length)	
Wetted materials	Ceramic, 316 passivated stainless steel, polyurethane, viton	
Process connection	¼" BSP female (remove nose cover)	

OPTIONAL EXTRAS AND ACCESSORIES

- For all gauge (vented) sensors, a Closed Vent System must also be fitted. (each CVS unit can handle up to 70 m of vented cable)
- Sensors are normally supplied with a moulded cable pre cut to required length. Protective Copper Nose Cone – prevents marine and biological growth on sensor face and some galvanic corrosion protection *
- Serial Breakout Adaptor – provides easy wiring connection for field adjustments and calibration*
- SDI12 Adaptor Unit provides 3 wire SDI12 serial output for Data Logger*

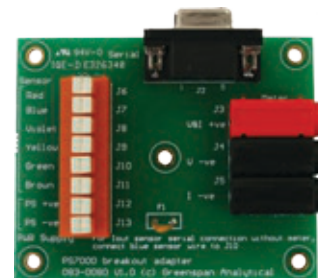
- ¼" G process adapter (Part No. 092-1038) – Allows connection to standard threaded fittings *

HOW TO ORDER

The following information will be required:

- Sensor Full Scale Range (specify range in m)
- Sensor Type (Gauge or Absolute)
- Output Required (4–20mA or 0–2.5V)
- Moulded Cable length (specify length in m)
- Closed Vent System (for Gauge Sensors)
- Accessories

* Consult your Greenspan sales representative for further details.



Serial Breakout Adaptor



Closed Vent System



SDI-12 Adaptor



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