



# 700 series



## SUBMERSIBLE BOREHOLE / PROBE LEVEL TRANSMITTER

The PSM Series 700 Borehole and Probe Transmitters employ the proven principle of pressure sensitive diaphragm and LVDT. They are specifically designed for applications where access for installation is restricted such as deep wells or buried storage vessels.

The standard unit is simply suspended on its own cable. A threaded connection in the nose cap enables guides or weights to be attached to assist installation. Where a rigid installation is required the sensor is pole mounted, either as a demountable or an all welded construction, as the application requires.

A simple 1 inch ( 25mm ) compression fitting is all that is needed for insertion



- fully submersible sensor
- meets rfi/emc immunity standards
- Rugged shock - resistant design
- Compact 1 inch ( 25MM ) diameter
- simple installation wide range of duties
- EExia IIC T5 intrinsically safe models available
- full spans from 1 to 100 metres wg

The standard construction materials are suited to a wide range of liquid duties, and for aggressive chemicals the stainless body/pole may be replaced by uPVC.

The use of a remote electronic module means calibration controls can be sited at a convenient point greatly simplifying commissioning and periodic calibration checks.

### STANDARD SPECIFICATIONS

Minimum range:	0 - 1.3 metres H2O	Maximum load:	1000 ohms at 30V
Maximum range:	0 - 100 metres H2O	Signal output:	4 -20mA DC 2 wire
Nominal ranges:	1, 2, 4, 8, 16, 32, 50, 100 metres H2O	Accuracy:	Better than $\pm 0.5\%$ FRO
Range adjustment:	3:1 turndown of normal range	Sensor cable:	Heavy duty TPE vented
Zero adjustment:	$\pm 10\%$ of calibrated span	Maximum length:	300 metres
Overload:	5X nominal range	Operating temperature:	-25°C to +85°C
Sensor body:	316 stainless steel as standard. uPVC option	Temp. coefficient:	Less than 0.05% per °C shift zero and range
Diaphragms:	Hastelloy	Minimum survival:	-50°C

Power supply	12 - 30V DC	Electronics housing:	IP65 GRP (NEMA 4) with internal RFI screen (IP67 optional)
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700	Submersible sensor - stainless steel body, 3 metres of TPE cable and amplifier		
730	Probe type sensor - all welded st. stl. construction including 1 metre pole length		
	St. Stl. pole for 730 - per 50cms (or part of)		
740	Pole mounting type with 1/2" BSP female thread (customer supply pole)		
770	1" Body Insertion Type Sensor - Includes weld fitting		
	H	Hastelloy Diaphragm standard	
	P	PH15/7 Diaphragm - Not for Salt Water duties	
		1S	1m H2O
		2S	2m H2O
		4S	4m H2O
		8S	8m H2O
		16S	16m H2O
		32S	32m H2O
		50S	50m H2O
		100S	100m H2O
		P	Hytrell TPE heavy duty vented cable (standard)
		Q	Non standard cable
			<i>Cable length in metres (type P)-</i>
			Extra over 3 metres - up to 10 metres - per metre
			up to 20 metres - per metre
			up to 50 metres - per metre
			above 50 metres - per metre
		??	Transmitter set range in metres H2O
		S??	Special calibration - reversed output, elevated / suppressed zero
		-	No options required
		B	High temperature sensor - (up to 120°C submersible versions, 145°C external versions)
		E	Temperature compensated sensor - (coefficient +/- 0.01% per oC )
		F	High accuracy (0.1%)
		G	IP67 Amplifier enclosure
		NP	1/2"NPT pole connection (740)
		CF	1" BSP mild steel comp fitting (730)
		CFS	DN25 tank top mounting flange (730)
		DI	Integral digital indicator in amplifier enclosure (non-IS only)
		IS	Certified IS when used with an approved safety barrier
		NA	Intrinsic safety not required
		9	PG9 gland for signal cable- Standard
		11	PG11 gland for signal cable
		13	PG13.5 gland for signal cable
		16	PG16 gland for signal cable

