

Tankstar 260 Hydrostatic Level Transmitter for Marine Tank Gauging



Key features

- Designed and constructed specifically for marine applications with relevant industry body and type application approvals
- Full range of connections and sensor mounting options for side-of-tank or IP68 submersible installation
- Compatible with all common marine liquids and cargo applications: seawater, fuel and lubricating oil, bilge water etc.
- Wide span with a high measurement accuracy, long term stability and exceptional pressure overload resistance
- Remote transmitter provides ease of access for routine calibration checks
- Robust construction gives reliable operation and low maintenance costs

Part of the **TankView** product group

PSM Instrumentation Ltd, Unit 3 Burrell Road, Haywards Heath, West Sussex, RH16 1TW. UK

DAT 02N Feb 2020

Tankstar 260 Series Marine Liquid Level Transmitter

With many thousands of liquid level transmitters installed on all classes of ships from military vessels to tankers, the design of the Tankstar 260 series marine level transmitter draws on PSM's comprehensive marine application experience. Compliant with IEC and Marine Industry standards, the Tankstar 260's rugged construction provides reliable and accurate monitoring of liquid levels in the harsh environments of shipboard tanks.

The measuring principle of pressure in the Tankstar 260 hydrostatic level transmitter is a diaphragm and L.V.D.T. sensor with power and signal linearisation via a remote mounted transmitter.

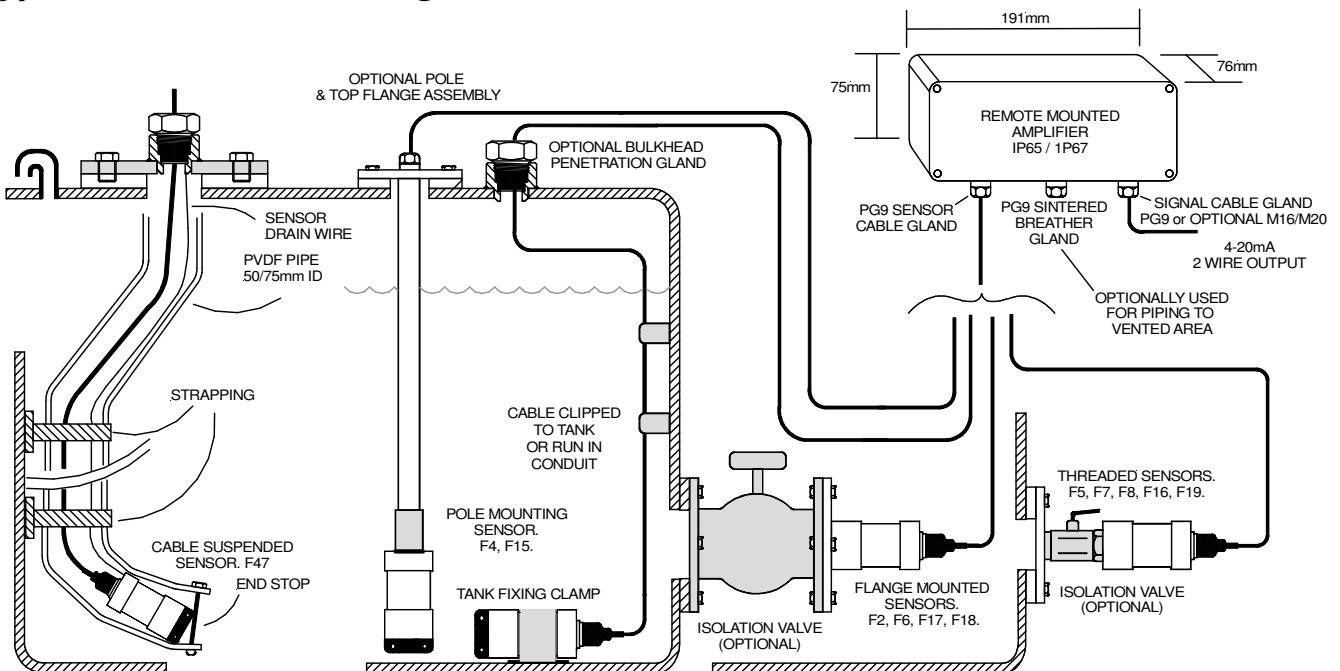
This combines excellent responsiveness and long term stability. The liquid level transmitter has the sensitivity needed to accurately measure shallow tanks but will resist a five times nominal range overload without damage. The all welded level sensor is manufactured from high-grade alloys specifically selected for their stability and corrosion resistance. A wide choice of fittings and the remotely mounted amplifier maximises installation flexibility and serviceability.

The Tankstar 260 sensor is maintenance free and contains no active electronic components. A factory sealed cable is supplied with a heavy-duty outer sheath of cross-linked polymers, suitable for continuous immersion in both sea water, fuels and hydrocarbons. An optional performance cable permits use of the sensor in extreme temperature limits of -40°C to $+145^{\circ}\text{C}$.

Specifications

Calibrated spans:	From 0 - 300mm H ₂ O to 0 - 50m H ₂ O	Diaphragm:	Hastelloy C276
Range adjustment:	3:1 turndown of normal range	Sensor Cable:	Heavy duty TPE vented
Zero adjustment:	± 10% of calibrated span	Sensor Operating Temperature:	-40°C to +105°C
Overload:	Minimum of 50 metres or 5 x nominal range	Electronics Housing:	IP65 GRP (NEMA 4) with internal RFI screen (IP67 optional)
Nominal Ranges:	1, 2, 4, 8, 16, 32 and 50 metres H ₂ O	Electronics operating temp.:	-40 to +55°C
Signal Output:	4 -20mA DC 2 wire	Accuracy:	Better than ±0.25% FRO
Power Supply:	12 - 35V DC	Temp. Coefficient:	Less than 0.02% per °C shift zero and range
Maximum Load:	1000 ohms at 30V	Sensor Body:	316L stainless steel

Typical installation arrangements



© PSM INSTRUMENTATION LTD

Data Sheet Ref: DAT 02N Feb 2020

Model code 8 position construction (ex: 260 / F47 / H8 / P / DW 3 / 7.5 / M20 / NA)

Position	Code	Description
1: TRANSMITTER	260	Sensor with RT168 remote transmitter 4 - 20 mA output
2: PROCESS CONNECTION	F47	Basic submersible sensor with drain wire adaptor
	F2	DN25 PN16 flange mounting
	F3	Tank fixing clamp
	F4	Pole adaptor fitting threaded 1/2" BSP female
	F5	Threaded process connection 1/2" BSP male
	F6	1" ANSI 150lb flange mounting to BS1560
	F7	1/2" NPT Male
	F8	3/4" BSP Female running nut
	F15	Welded pole assembly
	F16	3/4" BSP Female running nut NRV plunger
	F17	DN40 PN16 Flange mounting
F18	DN50 PN16 Flange mounting	
F19	Fixing clamp & 1/2" BSP female pole adaptor	
3: TRANSMITTER MAXIMUM PRESSURE	H1	1m H ₂ O
	H2	2m H ₂ O
	H4	4m H ₂ O
	H8	8m H ₂ O
	H16	16m H ₂ O
	H32	32m H ₂ O
	H50	50m H ₂ O
4: CABLE	P	Standard 3m cable length
5: CABLE LENGTH	X	Custom cable length on request (specify length X metres)
	DW X	Drain wire length in metres (F47 model only)
6: RANGE	X	Transmitter 4-20 mA configured range in X m H ₂ O
7: REMOTE ELECTRONICS CABLE GLAND	9	PG9 Cable Gland for signal cable (Standard)
	M16	M16 Cable Gland for signal cable (Optional)
	M20	M20 Cable Gland for signal cable (Optional)
8: APPROVALS	NA	Safe area installation