

Pressure Transmitter-Series

PS 1

Tank Pressure and Level Probe

Pressure range(relative):	5 kPa, max 0...2500 kPa (from 1 m WC /water column, 0...50 mbar, max 0...25 bar)
Ambient temperature:	+ 5 °C to + 70 °C
Output:	4...20 mA - 2 wire/ 0...10 V - 3 wire/ 0...5 V - 3 wire
Operating voltage:	12...30 V

- 1Protection class: DIN EN 60 529 - IP 68 down to 250 m navigable depth
- 1Media - contacting parts and housing made of CrNi steel and plastics with NBR O-ring
- 1Cable ventilated

Construction

- 1Piezo-resistive, vacuum-proof, stainless steel diaphragm with pressure range resistor (Poly-Si on SiO₂) or optional Silicon < 1 bar
- 1Mixed signal ASIC
- 1cable Santopren TPE-V or Pur optional grey
- 1 Case: Stainless steel, Length: ca. 140 mm, ø 22 mm
- 1Accuracy: Class 0,5 % F.S.
- 1Weight: 250 g

Application / possible uses

- 1Liquid-level and standard level measuring in tank-storage
- 1reservoirs
- 1Hydro-engineering plants

Description

The most reasonable ADZ Floater Probe SML-PS1 has been developed for standard level and filling level indication in hydro-plants, oil or other non-aggressive media down to 250 m in depth. For more aggressive media, there is an optional variant designed with a special coating.

It is easy to handle, very robust and supplied in a housing of stainless steel with an attached cable (pressure compensation integrated). There are two variants regarding cap configuration (as a weight of steel or as a plastic cap). The transmitters are long-term stable and may be supplied in variants with 0,25 % FS respectively.



Technical information		Type: PS 1			
Measuring range (bar / kPa) standard pressure ranges *)	bar	kPa	bar	kPa	
	0,10	10	4,0	400	
	0,25	25	6,0	600	
	0,40	40	10,0	1000	
	1,0	100	16,0	1600	
	1,6	160	25,0	2500	
	2,5	250			
Overload range (bar) *)	2-times > 350 bar, 1,5-times > 700 bar, 1,2-times up to 1000 bar				
Bursting pressure (bar) *)	3-times > 350 bar, 1,5-times > 700 bar, 1,2 times up to 1000 bar				
Pressure type	Relative pressure				
Pressure connection *)	G1/4 "E Standard plus weight				
Diaphragm	Stainless steel				
Material used Materials of parts with contact to measuring medium: Material of casing:	CrNiCuNb 17-4 PH - stainless steel no O-ring, no silicon oil				
Protection class according to DIN EN 60 529	IP 68				
Cable/material	PUR cable ventilated				
Span	Min.	Type	Max	unit	
Output at FS		16		mA	
Zero output		20		mA	
Total error (from 5°C to 40°C)		4		mA	
Response time			1,0	% FS **)	
Supply voltage (Vs)		0,5	1,5	msec	
Load resistor	10		32	V	
Isolation resistively	(Vs-10 V)/20 mA				
	100			MW	
Remarks:					
<ul style="list-style-type: none"> <input type="checkbox"/> All parameter guaranteed for specified conditions. <input type="checkbox"/> Output is calibrated at zero and full scale. <input type="checkbox"/> Total accuracy includes non-linearity, hysteresis, repeatability and temperature effects. (New parts, max. drift per 0,1 % FS). Compensated range. <input type="checkbox"/> Measured from initial value to output at 90 %. <input type="checkbox"/> Measured between case and pin (50 V_c for one minute) <input type="checkbox"/> Wetted components 17-4PH stainless steel. No O-ring, no silicone oil. <input type="checkbox"/> Measuring volume less than 1 mm³. <input type="checkbox"/> Piezo-resistive principle, calibrated using mixed signal ASIC, no potentiometer, no laser trimming. <input type="checkbox"/> Pressure port - submarine weight diameter 22mm, electrical connection - ventilated cable <input type="checkbox"/> Calibrated at the factory. 					

*) Others on request

**) Integral linearity deviation (FS = Full Scale)



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