Hydrostatic level measurement for a wide range of applications

High-grade stainless steel submersible pressure transmitter of different cable materials

- **PUR or FEP cable for high resistance to media**
- **Version with ATEX approval for group I cat. M1 and group II cat. 1G and 1D.**
- **Good overall accuracy and long-term stability**
- **Pressure compensation via internally vented cable**

Application areas

The PS series submersible pressure transmitters are used for level measurement in containers, tanks, wells, flowing water, bore holes and wastewater plants. The accuracy of 0.5 % and the long-term stability of 0.2 % per year contribute to the reliable operation of the transmitter.

Robust, reliable and flexible

All submersible pressure transmitters have a robust high-grade stainless steel housing. For standard applications the favourably priced PUR cable can be used. For applications where a high resistance to media is requested (e.g. slurry, oils or fuels) the FEP cable is available.

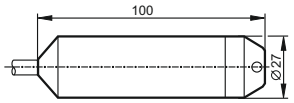
The ATEX submersible pressure transmitters of the PS3xxA series are designed for level measurement in areas subject to explosion. The sensors can be used in zone 0, 1, 2 or zone 20, 21, 22 as well as in mining. The GL approval allows an application in the maritime sector.

Level measurement in a water treatment plant

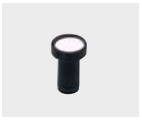
Measuring range Relative pressure [bar]	Overload pressure [bar]	Pull force cable	Cable length [m]	Approvals CE / EX / GL	Order no.
Submersible pressure transmitters with PUR cable for standard applications					
0.25	2	1000 N	5	• / – / –	**PS3208**
0.6	4	1000 N	10	• / – / –	**PS3407**
0.6	4	1000 N	15	• / – / –	**PS3427**
0.6	4	1000 N	30	• / – / –	**PS3607**
1	5	1000 N	15	• / – / –	**PS3417**
1	5	1000 N	30	• / – / –	**PS3617**
Submersible pressure transmitters with FEP cable for high resistance to media					
0.25	2	500 N	5	• / – / –	**PS4208**
0.6	3	500 N	10	• / – / –	**PS4407**
1	5	500 N	15	• / – / –	**PS4417**
Submersible pressure transmitters with FEP cable for hazardous areas					
0.25	2	500 N	5	• / • / •	**PS308A**
0.6	4	500 N	10	• / • / •	**PS307A**
1	5	500 N	15	• / • / •	**PS317A**

Dimensions

Example PS3208



Accessories

Type	Description	Order no.
	Cable fixing clamps *	**E30399**
	Filter element *	**E30400**
	Splitter box * with vent and terminal block	**E30401**
	Additional weight, approx. 500 g	**E30402**

* use only outside the hazardous area

Further technical data		
Operating voltage	[V DC]	18...30
Analogue output	[mA]	4...20
Accuracy / deviation (in % of the span)		
Accuracy (BFSL)		≤ 0.25 (PS3: 0.5)
Accuracy incl. non-linearity		≤ 0.5 (PS3: 1)
Non-linearity (BFSL)		≤ 0.2
Long-term stability per year		≤ 0.2
Temperature coefficients (TEMPCO) (in % of the span per 10 K)		
Greatest TEMPCO of zero		≤ 0.2
Greatest TEMPCO of the span		≤ 0.2
Design PS3 Ambient temperature / Medium temperature	[°C]	-10...50
Design PS4 Ambient temperature / Medium temperature	[°C]	-10...85
Design PS3 ATEX approval Ambient temperature / Medium temperature	[°C]	**1G, 1/2G, 2G:** T6 -10...60, T5: -10...80, T4: -10...85 **1D, 1/2D, 2D:** -10...40 (750 mW) / -10...70 (650 mW) / -10...85 (550 mW)
Housing material		High-grade stainless steel (316Ti / 1.4571)