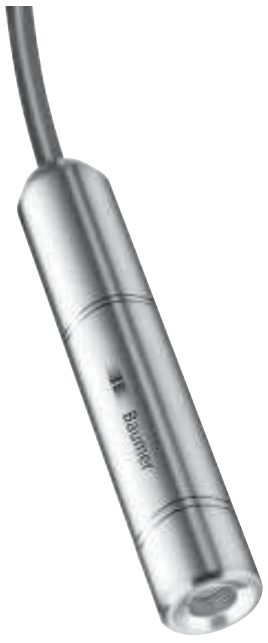
PSSN
Pressure transmitter for hydrostatic level measurement

Main features

- **High long term stability**
- **Abrasive and chemical resistant**
- **Accuracy class of 1% FS**
- **Ceramic sensor**



Applications

■ **Process technic**	□ Health care
□ Hydraulic	□ Biotechnology
□ Pneumatic	■ **Food**
□ Refrigeration	■ **Beverage**
■ **Water treatment**	□ Pharmaceutical
□ Car industry	■ **Petro-chemical**
□ Test benches	■ **Chemical**
□ Safety	□ HVAC
□ Aerospace	■ **Energy**
□ Railways	□ Medical gas
■ **Shipbuilding**	□ Agriculture vehicules
□ Heavy vehicule	■ **Pumps and compressors**

Main characteristics

Long term stability	0.3% FS / Year
Accuracy	1% FS
Medium temperature	5 … 40 °C

Ordering details - PSSN

	PSS	N	2	1	J15	R	A1	U1	90	2	1
Model / type											
PSS		N									
Material											
Stainless steel 1.4404 AISI 316L			2								
Accuracy											
1.00% FS				1							
Pressure range											
0 … 6 mH_2O					J12						
0 … 10 mH_2O					J15						
0 … 16 mH_2O					J16						
0 … 20 mH_2O					J17						
Pressure type											
Relative						R					
Output signal											
4 ... 20 mA							A1				
Cable length											
PUR 10 meter								U1			
PUR 15 meter								U2			
PUR 20 meter								U3			
PUR 25 meter								U4			
Versions											
Open									90		
Closed protection cap POM material									95		
Material diaphragm											
Ceramic										C	
O-Ring sensor and sealing cable											
NBR											1

Model / type PSSN

Technical specification

Measuring principle	Thick film on ceramic
Measuring ranges	0 … 6 mH_2O 0 … 10 mH_2O 0 … 16 mH_2O 0 … 20 mH_2O
Type of pressure	Relative
Accuracy (20°)	1% FS
Annual stability	0.3% FS / Year
Response time (10…90%)	5 ms
Switch on time	< 350 ms
Versions	Open or closed Version (see drawing page 4)

Weight

Transmitter	0.200 kg
Cable	0.048 kg / meter

Environment

Temperature	
Medium	5 … 40 °C
Storage	-25 … 80 °C
Protection rating	IP 68
Vibration IEC60068-2-6	1.5 mm p.p (10-57 Hz), 10 g (58 Hz – 2 KHz) 10 cycles within 2.5 h per axis
Shock IEC600068-2-27	50 g / 11 ms 100g / 6 ms 10 x Imp. per axis and direction
Bump IEC600068-2-29	100 g / 2 ms 4000 x Imp. per axis and direction
Random IEC600068-2-64	0.1 g 2 / Hz (20 Hz - 1 KHz) 30 min per axis and direction (> 10 g RMS)

Electrical specification

Output signal	4 … 20 mA
Power Supply	8 … 30 VDC
Load impedance	
Current output	RΩ = (U_{Supply}.-8 V) / 0.02 A
Insulation resistance	>100 MΩ to 500 VDC
Electrical connections	PUR Cable with capillary tube

Material

Housing	Stainless steel 1.4404 AISI 316L
Diaphragm	Ceramic Al_2O_3 (96%)
Cable	PUR black with integrated humidity filter
Sealing cable gland	NBR
O-ring sensor	NBR

Approvals

CE conformity	EMC directive 2004/108/CE in accordance with EN 61000-6-2, EN 61000-6-3, EN 61326-1 (Tab.2) Pressure directive 97/23/CE

Measuring Ranges

	Pressure (bar)			
Measuring range (mH_2O)	0 … 6	0 … 10	0 … 16	0 … 20
Pressure range (bar)	0 … 0.6	0 … 1	0 … 1.6	0 … 2
Overpressure (bar)	2	2	4	4
Burst pressure (bar)	4	4	5	5

Model / type PSSN

Electrical connections

Cable output with integrated capillary tube
(length according to the ordering code)

Connection

4 … 20 mA

+ Supply : Red
- Supply : Blue
⏚ : Shield

Dimensions (mm), connections