



Lastingly stable, precise measuring results –
PSS and PSM series submersible pressure transmitter

Monitoring filling levels precisely and reliably

Fast, accurate measuring results – in all media

Submersible pressure transmitter measure filling levels, water columns and other levels by means of pressure sensing. Similar to the human ear, they react very sensitively to pressure variations and transmit them to the control as regulating variables. Unlike other physical level-monitoring systems, the pressure membrane is in direct contact with the medium and resists disturbances by external influences. This ensures accurate, consistently stable measurements even in the most challenging applications.

Lastingly stable, highly precise measuring results – regardless of medium and environment

You can profit from the new piezoresistive silicon sensor technology of the PSM series in potentially hazardous environments and applications where minimal pressure ranges must be distinguished. The highly sensitive emitters reliably and accurately measure pressure ranges from as low as 1 mH₂O. The flush-mounted design of the level-monitoring sensors enables them to be installed from outside too, whether they are flange-mounted (e.g. at the side) or flush on the tank bottom. An ATEX version (PSMX) is available for explosion-endangered areas.

Rugged, reliable level-monitoring technology – at a good price/performance ratio

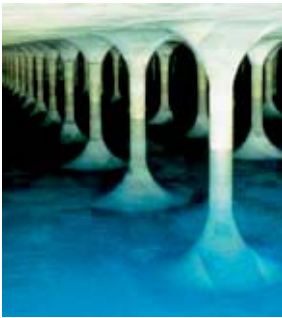
The PSS series is based on a ceramic thick-film measuring cell. The mechanically rugged probes withstand direct contact and can therefore be installed directly in most media. Tedious service intervals are unnecessary because the sensor membranes are easy to clean.



Piezoresistive silicon technology

Highly precise measurements – individual parameterization

High-precision measuring results, compatibility with a wide range of media and the optional flexibility of direct, on-site parameterization add up to features that qualify the PSM series for challenging applications. If you also want long-term reliability and temperature stability, the new submersible pressure transmitter serie PSM will satisfy your needs.



Fresh water cistern
(volume measurement)



Reservoir
(level control)



Chemical/petrochemical
(monitoring limits)

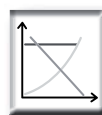
Advantages

- ✓ Highly exact measuring
- ✓ High longevity through fully welded housing (no seals)
- ✓ High long-term stability
- ✓ Can be used for small measuring ranges (1 mH₂O)
- ✓ Can be used in explosion-endangered areas (ATEX)
- ✓ Can be parameterized on-site and in built-in state



0,1%
FS

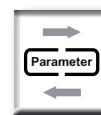
Measuring
precision



Long-term
stability



Flush-mounted
measuring
membrane



Flexible
parameterization



All-metal
housing



Measuring range
from 1.0 meters



Explosion-risk
versions



Very tightly
sealed



Resists seawater

Designed for use in:

- Cisterns, tank installations, water bodies, reservoirs
- Monitoring and water transport systems
- Hydroelectric power plants
- Ship building
- Seawater desalination plants
- Chemical / oil / gas industry
- Pharmaceutical industry
- Food and beverage industry

PSM series

Ceramic resistive technology

Rugged and extremely economic level monitoring

The PSS series is easy to handle (e.g. uncomplicated cleaning), rugged (e.g. versus aggressive media) and has an excellent price-performance ratio. That makes it particularly suitable for relatively low-precision measurements of pressure ranges > 6 meters.



Swimming pools
(level/volume control)



Wastewater treatment plants
(overflow protection)



Tank farms
(level monitoring)

Advantages

- ✓ Outstanding price-performance ratio
- ✓ Good media resistance (chlorine, sludge etc.)
- ✓ Easy-to-clean membranes
- ✓ Rugged measuring system
- ✓ Plug-and-play (install, measure and forget)



Price-performance ratio



Measuring precision



All-metal housing



Measuring range from 6 meters



Easy to clean

Designed for use in:

- Tank installations
- Wastewater treatment plants
- Swimming pools
- Pump systems

PSS series

Your advantages at a glance

- ✓ High long-term stability – reliable and precise measuring results
- ✓ Excellent price-performance ratio
- ✓ Impervious to external adhesions
- ✓ Can be parameterized in built-in state
- ✓ Freely selectable measuring range
- ✓ Impervious to external influences (e.g. dynamic medium surface, disturbances occurring from foam formation, currents, dirt or variations in temperature etc.)
- ✓ Comparable, equally precise level-monitoring systems are considerably costlier
- ✓ Compact design – configured for direct installation in 1" measuring tubes
- ✓ Excellent reliability – very tightly sealed
- ✓ Wide range of applications, including in explosive environments (ATEX version)

Baumer knows what you need – long experience with level monitoring sensors

We team up with our customers to develop industrial level-monitoring solutions. Baumer assists you with competent consultation all the way from the projecting stage. Besides a wide range of standard products, Baumer also develops custom-tailored solutions. Our comprehensive technological competence qualifies us to offer you the right solution for your application. Give us a call.



Level monitoring sensors

Hydrostatic measuring devices
Ultrasonic sensors
Capacitive sensors
Photoelectric sensors
Conductivity-based measuring devices

Suitable accessories simplify initial start-up – Baumer knows what you need



On-site flexibility

Service and flexibility are our strengths. That applies to our software too. The submersible pressure transmitters are easy to configure via USB and Baumer's FlexProgramm software, which offers intuitive menu guidance and practical control functions for greater convenience. In addition to direct configuration on the PC, the measuring devices can also be remotely programmed by means of the mobile FlexProgrammer 9701.

On-site and without PC – for even greater flexibility.

Submersible pressure transmitter for hydrostatic level control



PSM series

- Piezoresistive silicon sensor
- Measuring range 0...1 mH₂O to 0...250 mH₂O
- Precision 0.1% FS
- Long-term stability 0.1% FS/year
- Temp. range -5...+80 °C
- Output signals: mA/V
- ATEX (PSMX) and seawater versions available



PSS series

- Thick film on ceramic
- Measuring range 0...6 mH₂O to 0...20 mH₂O
- Precision 1% FS
- Long-term stability 0.3% FS/year
- Temp. range 5...+40 °C
- Output signal: mA

Further information can be found at www.baumer.com/level

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