



Pressure Sensor Fluid PSM-S



- ▶ **Absolute fluid pressure measurements**
- ▶ **Pressure measurement range 0 to 12 bar or 0 to 70 bar**
- ▶ **High robustness against vibrations**
- ▶ **Compact design**
- ▶ **Analog output**

This sensor is designed to measure absolute pressure of various kinds of media e.g. Diesel, gasoline, water, engine oil, transmission oil or air. The sensor is available for two different supply voltage ranges.

The sensor utilizes a flush metal diaphragm as a force collector. The force is transferred to a solid state piezo-resistive sensing element via a thin intervening film of noncompressible silicone oil. The housing is welded hermetically.

An individual calibration sheet will be delivered with each sensor.

The main feature and benefit of this sensor is a good protection against vibrations.

Application

Application	0 to 12 bar (a)
Pressure reference type	absolute
Max. pressure	Please see variations
Operating temp. range	-55 to 140°C
Media temp. range	-55 to 140°C
Storage temp. range	-20 to 50°C
Bio fuel compatibility	E85/M100
Max. vibration	1,000 m/s ² max at 5 to 10,000 Hz (sine)

Technical Specifications

Variations

	0 to 12	0 to 70
Measuring range	0 to 12 bar	0 to 70 bar
Tolerance (FS) at U _S = 5 V	± 0.24 bar	± 0.7 bar
Tolerance (FS)	± 2 %	± 1 %
Max. pressure	36 bar	210 bar

Mechanical Data

Male thread	M8x1
Wrench size	13 mm
Installation torque	6 Nm
Weight w/o wire	20 g
Sealing	O-ring 6.07 x 1.62 mm

Electrical Data

Power supply U _S	8 to 16 V
Full scale output U _A	4.7 V ± 1.5 %

Characteristic

Compensated range	0 to 125 °C
Tolerance (FS) at U _S = 5 V	Please see variations
Tolerance (FS)	Please see variations
Sensitivity/Offset	(an individual calibration sheet will be delivered)

Connectors and Wires

Connector	ASL 6-06-05PC-HE
Mating connector	ASL 0-06-05SC-HE
Pin 1	U _S
Pin 2	GND
Pin 3	SIG
Pin 4	-
Pin 5	SCR
Sleeve	Viton
Wire size	AWG 24
Wire length L	15 to 100 cm

Various motorsport and automotive connectors are available on request.
Please specify the required wire length with your order.

Installation Notes

The PSM-S can be connected directly to most control units.
Each mounting orientation is possible.
Please do not fix the sensor directly to the engine block to avoid undesired strong vibrations.
100 % relative humidity is possible.
The sensor meets all EMV, EMC and ESD automotive standards.
Please find further application hints in the offer drawing at our homepage.

Dimensions



Ordering Information

PSM-S 0 to 12 bar, 36 bar, ± 0.24 bar, ± 2%	F 01T A21 315-01
PSM-S 0 to 70 bar, 210, 36 bar, ± 0.7 bar, ± 1%	F 01T A21 316-01

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