

## Pressure Sensor Fluid PSM-S

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 utilises 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	[1] 0 ... 12 bar (a) [2] 0 ... 70 bar (a)
Pressure Reference Type	absolute
Max. Pressure pabs max	[1] 36 bar [2] 210 bar
Operating Temp. Range	-55 ... 140 °C
Media Temp. Range	-55 ... 140 °C
Storage Temp. Range	-20 ... 50 °C
Bio fuel compatibility	E85/M100
Max. Vibration	15,000 m/s <sup>2</sup> max @ 5 ... 10,000 Hz (sine)

Mechanical Data	
Male Thread	M8x1
Wrench Size	13 mm
Installation Torque	6 Nm
Weight w/o Cable	20 g
Sealing	O-ring 6.07 x 1.62 mm

Electrical Data	
Power Supply Us	8 ... 16 V
Full Scale Output Ua	4.7 V ± 1.5 %

Characteristic	
Compensated Range	0 ... 125 °C
Tolerance (FS) @ U <sub>s</sub> = 5 V	[1] ± 0.24 bar [2] ± 0.7 bar
Tolerance (FS)	[1] ± 2 % [2] ± 1 %
Sensitivity/Offset	(an individual calibration sheet will be delivered)

Application Hint	
The PSM-S can be connected directly to most control units.	
Each mounting orientation is possible.	
100 % relative humidity is possible.	
The sensor meets all EMV, EMC and ESD automotive standards.	
Please find further application hints in the offer drawing ( <a href="http://www.bosch-motorsport.com">http://www.bosch-motorsport.com</a> ).	

Connectors and Wires	
Connector	ASL 6-06-05PC-HE
Mating connector	ASL 0-06-05SC-HE
Pin 1	U <sub>s</sub>
Pin 2	GND
Pin 3	SIG
Pin 4	-
Pin 5	SCR
Sleeve	Viton
Wire Size	AWG 24
Wire Length L	15 ... 100 cm
Various motorsport and automotive connectors are available on request.	
Please specify the required wire length with your order.	

Part Numbers	
PSM-S [1]	<b>F 01T A21 315-01</b>
PSM-S [2]	<b>F 01T A21 316-01</b>

