

Pressure Sensor Fluid PSM

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 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 ... 250 bar (a)
Pressure Reference Type	absolute
Max. Pressure	[1] 24 bar [2] 500 bar
Operating Temp. Range	-20 ... 120 °C
Media Temp. Range	-20 ... 120 °C
Storage Temp. Range	-20 ... 50 °C
Bio fuel compatibility	E85/M100
Max. Vibration	1,000 m/s ² max @ 5 ... 5,000 Hz (sine)

Mechanical Data	
Male Thread	M10x1
Wrench Size	16 mm
Installation Torque	10 Nm
Weight w/o Wire	24.5 g
Sealing	O-ring 7.65 x 1.63 mm

Electrical Data	
Power Supply U _s	8 ... 16 V
Full Scale Output U _A 4.9 V	± 1.5 %
Current I _s	25 mA

Characteristic	
Compensated Range	0 ... 120 °C
Tolerance (FS) @ $U_s = 5\text{ V}$	[1] $\pm 0.12\text{ bar}$ [2] $\pm 2.50\text{ bar}$
Tolerance (FS)	$\pm 1\%$
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 ... 100 cm
Various motorsport and automotive connectors are available on request.	
Please specify the required wire length with your order.	

Application Hint
The PSM 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 (http://www.bosch-motorsport.com).

Part Numbers	
PSM [1]	B 261 209 331
PSM [2]	B 261 209 332-01

