

Pressure Sensor Fluid PSS-10

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 uses stainless steel measuring cells with piezo-resistive measuring bridges in thin layer technique. These are hermetically welded together with stainless steel pressure ports. This guarantees a complete media compatibility.

The main benefit of this sensor is the high quality of a production part at a low price. The sensor is available for two different supply voltage ranges.



Application	
Application	0.5 ... 11 bar (a)
Pressure Reference Type	absolute
Max. Pressure	20 bar
Operating Temp. Range	-40 ... 125 °C (140 °C)
Media Temp. Range	-40 ... 125 °C (140 °C)
Storage Temp. Range	-20 ... 50 °C
Bio fuel compatibility	-
Max. Vibration	100 m/s ² rms @ 10 ... 2,000 Hz

Electrical Data	
Power Supply U _s	[1] 4.75 ... 5.25 V [2] 8 ... 30 V
Max Power Supply U _s max	± 30 V
Full Scale Output U _A	[1] 10 ... 90 % U _s ratiometric [2] 0.5 ... 4.5 V non-ratiometric
Current I _s	8 mA

Mechanical Data	
Male Thread	M10x1
Wrench Size	17 mm
Installation Torque	15 Nm
Weight w/o Cable	45 g
Sealing	O-ring 7.65 x 1.63 mm

Characteristic	
Response Time T _{10/90}	[1] 1.5 ms [2] 1.0 ms
Compensated Range	0 ... 90 °C
Tolerance (FS) @ U _s = 5 V	± 0.1 bar
Tolerance (FS)	± 1 %
Sensitivity	[1] 400 mV/bar @ U _s = 5 V [2] 400 mV/bar
Offset	[1] 100 mV @ U _s = 5 V [2] 100 mV

Connectors and Wires	
Connector	Bosch Compact
Mating connector	[1] D 261 205 339 [2] D 261 205 334
Pin 1	GND
Pin 2	SIG
Pin 3	Us
Pin 4	-
Pin 5	-
Sleeve	DR-25
Wire size	AWG 24
Wire length	13 ... 95 cm

Application Hint
The PSS-10 can be connected directly to most control units.
The sensor has a protection for over voltage, reverse polarity and short-circuit.
Each mounting orientation 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).
Free download of the sensor configuration file (*.sdf) for the Bosch Data Logging System (http://www.bosch-motorsport.com).

Part Numbers	
PSS-10 [1]	B 261 209 341-01
PSS-10 [2]	B 261 209 064-01

