

Pressure Sensor Fluid PSS-250R

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Invented for life



- ▶ Relative fluid pressure measurements
- ▶ Measurement range 0 to 250 bar
- ▶ Analog output
- ▶ Integrated series connector

This sensor is designed to measure the pressure of media in relation to the ambient pressure (e.g. Diesel, gasoline, water, engine oil, transmission oil or air). The sensor is available for two different supply voltage ranges.

The sensor uses stainless steel measuring cells with piezo-resistive measuring bridges in thin layer technique, which 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

Application

Application	0 to 250 bar (r)
Pressure reference type	relative
Max. pressure	500 bar
Operating temp. range	Please see variations
Media temp. range	Please see variations
Storage temp. range	-20 to 50°C
Bio fuel compatibility	E 85 / M 100
Max. vibration	100 m/s ² rms at 10 to 2,000 Hz

Technical Specifications

Variations

	PSS-250R (5 V)	PSS-250R (12 V)
Operating temp. range	-40 to 125°C (140°C)	-40 to 125°C
Media temp. range	-40 to 125°C (140°C)	-40 to 125°C
Power supply U_s	4.75 to 5.25 V	8 to 26 V
Full scale output U_A	10 to 90 % U_s ratio-metric	0.5 to 4.5 V non-ratiometric
Response time $T_{10/90}$	1.5 ms	1.0 ms
Sensitivity	16 mV/bar at $U_s = 5 V$	16 mV/bar
Offset	500 mV at $U_s = 5 V$	500 mV
Mating connector	3-pole Compact D 261 205 339-01	3-pole Compact D 261 205 334-01

Mechanical Data

Male thread	M10x1
Wrench size	17 mm

Installation torque	15 Nm
Weight w/o wire	45 g
Sealing	O-ring 7.65 x 1.63 mm

Electrical Data

Power supply U_s	Please see variations
Max power supply U_s max	± 30 V
Full scale output U_A	Please see variations
Current I_s	8 mA

Characteristic

Response time T10/90	Please see variations
Compensated range	0 to 90°C
Tolerance (FS)	± 2.5 bar
Tolerance (FS)	± 1 %
Sensitivity	Please see variations
Offset	Please see variations

Connectors and Wires

Connector	Bosch Compact
Mating connector	Please see variations
Pin 1	Gnd
Pin 2	Sig
Pin 3	U_s
Pin 4	-
Pin 5	-

Installation Notes

The PSS-250R can be connected directly to most control units.

The sensor has a protection for over voltage, reverse polarity and short-circuit.

Please do not fix the sensor directly to the engine block to avoid undesired strong vibrations.

Each mounting orientation is possible.

The sensor meets all EMV, EMC and ESD automotive standards.

Please find further application hints in the offer drawing and free download of the sensor configuration file (*.sdf) for the Bosch Data Logging System at our homepage.

Safety Note

The sensor is not intended to be used for safety related applications without appropriate measures for signal validation in the application system.

Ordering Information

Pressure Sensor Fluid PSS-250R

4.75 to 5.25 V

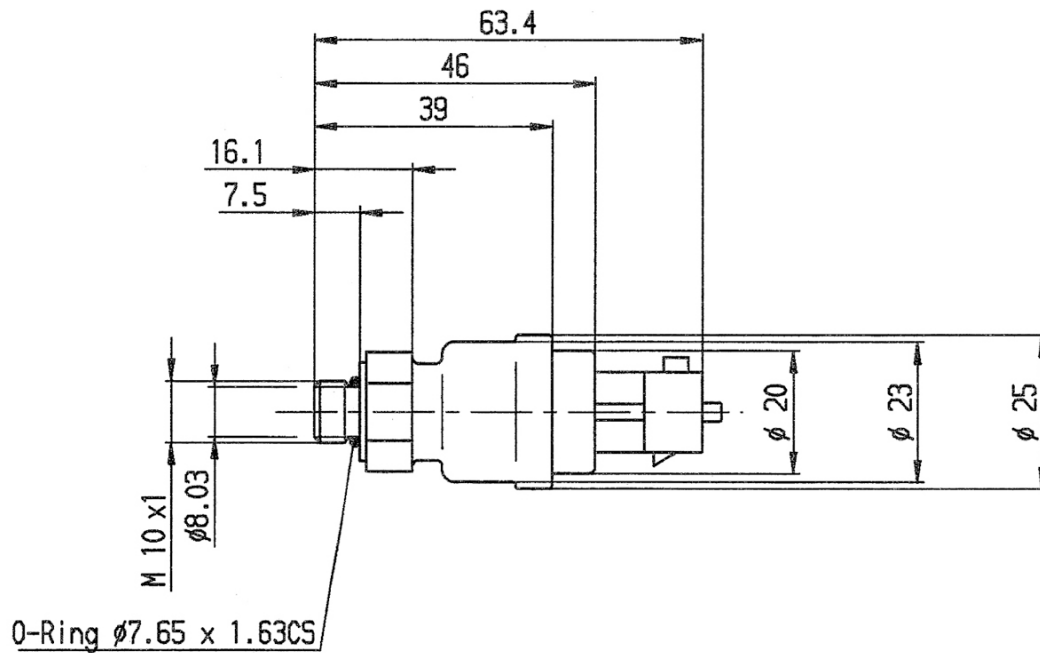
Order number **B 261 209 965-01**

Pressure Sensor Fluid PSS-250R

8 to 30 V

Order number **B 261 209 067-01**

Dimensions



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