Pressure Sensor Fluid PSS-140



- Application: 0 to 140 bar
- Response time: 2 ms
- Pressure reference type: Absolut
- Power supply: 5 V
- Weight: 35 g

The PSS is specially designed to measure absolute pressure in gasoline direct injection applications. This sensor is also compatible with other kind of fluids e.g. Diesel, engine oil, transmission oil or brake fluid.
The sensor uses a thin layer technique to achieve high accuracy pressure measurements. The stainless steel measuring cells with piezoresistive bridges are hermetically welded with stainless steel pressure ports. The internal reference ensures ambient pressure independent measurements.
The main benefits of this sensor are its high accuracy, its wide measurement range and its robust and compact design.

Application

Application	0 to 140 bar
Max. pressure	180 bar
Sensitivity at U_S = 5 V	28.57 mV/bar
Pressure reference type	absolute
Operating and media temp. range	-40 to 130°C (140°C)
Storage temp. range	-30 to 60°C
Max. vibration	210 m/s² at 147 to 1,350 Hz 175 m/s² at 1,350 to 2,000 Hz

Technical Specifications

Mechanical Data

Male thread	M10 x 1
Wrench size	27 mm
Installation torque	22 ± 2 Nm in aluminum 32.5 ± 2.5 Nm in steel
Weight w/o wire	35.2 g
Sealing	sealed cone

Electrical Data

Power supply U_S	4.75 to 5.25 V
Max power supply U_S max	16 V
Full scale output U_A	10 to 90 % U_S ratiometric
Current I_S	12 mA

Characteristic

Load capacity	10 nF
Output resistance	10 Ohm
Tolerance (FS)	+ 1 % (0 to 100°C) + 1.5 % (-40 to 0°C and 100 to 130°C)
Sensitivity	Please see Variations
Offset	500 mV at U_S = 5 V

Connectors and Wires

Connector	Bosch Compact
Mating connector	3-pole Compact D261.205.366-01
Pin 1	Gnd
Pin 2	Sig
Pin 3	U_S

Installation Notes

The PSS- can be connected directly to most control units. Please consider the TCI for the electrical connection of the sensor.

The sensor has a protection for overvoltage, 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.

Please consider using the adapter F02U.002.711-01.

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.

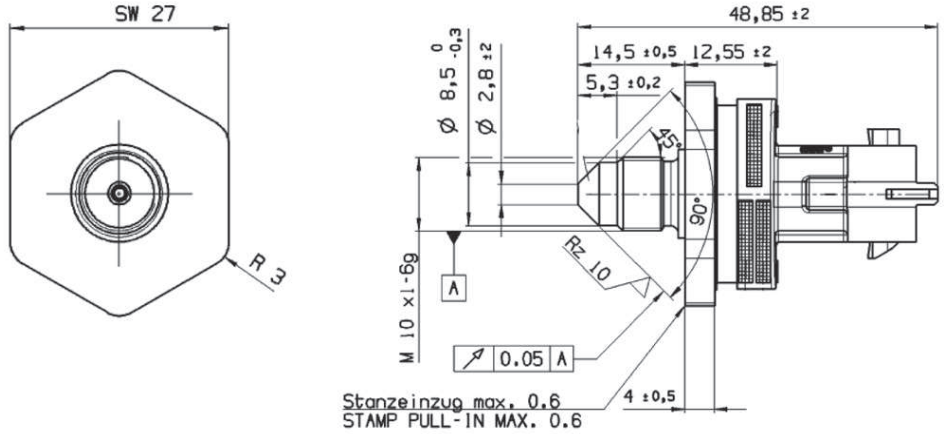
Ordering Information

Pressure Sensor Fluid PSS-140
Order number **0261.545.053**

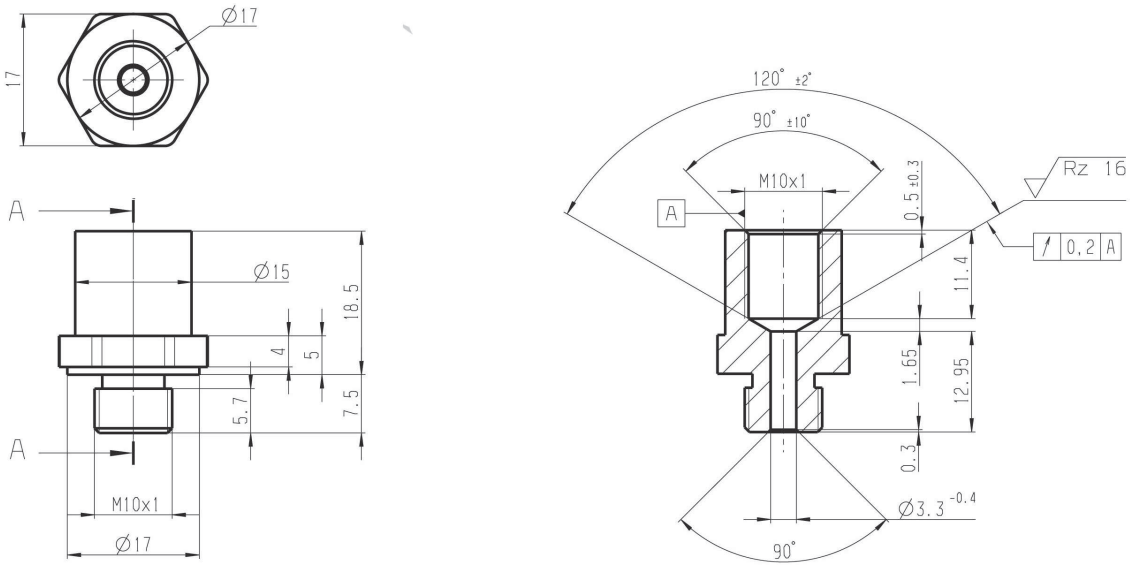
Accessories

Adapter
Order number **F02U.002.711-01**

Dimensions



Sensor



Adapter

Represented by:

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