

Pressure Sensor Fluid PSC-10



- ▶ Application: 0 to 10 bar
- ▶ Response time: 1.5 ms (5 V Variant) or 1 ms (12 V Variant)
- ▶ Pressure reference type: Absolut
- ▶ Power supply: 5 or 12 V
- ▶ Weight: 45 g

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 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 10 bar (a)
Pressure reference type	absolute
Max. pressure	20 bar
Operating temp. range	-40 to 125°C
Media temp. range	-40 to 125°C
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

	PSC-10 (5 V)	PSC-10 (12 V)
Power supply U_s	4.75 to 5.25 V	9 to 30 V
Full scale output U_A	10 to 90 % U_s ratiometric	0 to 5 V non-ratiometric
Response time T10/90	1.5 ms	1.0 ms

Sensitivity	400 mV/bar at $U_s = 5$ V	500 mV/bar
Offset	500 mV at $U_s = 5$ V	0 mV
Pin 1	-	U_s
Pin 2	Gnd	Gnd
Pin 3	Sig	Sig
Pin 4	U_s	-
Pin 5	-	-

Mechanical Data

Male thread	M10x1
Wrench size	17 mm
Installation torque	15 Nm
Weight w/o wire	45 g
Sealing	O-ring 8.1 x 1.6 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) at $U_s = 5$ V	± 0.1 bar
Tolerance (FS)	± 1 %
Sensitivity	Please see variations
Offset	Please see variations

Connectors and Wires

Connector	ASL606-05PC-HE
Mating connector	F 02U 000 228-01
ASL006-05SC-HE	
Sleeve	DR-25
Wire size	AWG 24
Wire length L	13 to 95 cm
Various motorsport and automotive connectors are available on request.	
Please specify the required wire length with your order.	

Installation Notes

The PSC-10 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

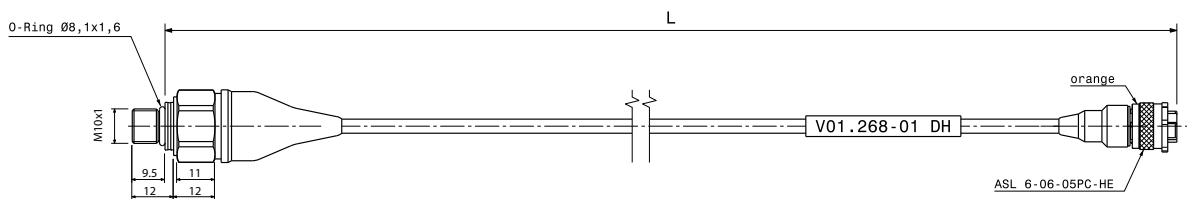
The sensor is not intended to be used for safety related applications without appropriate measures for signal validation in the application system.

Ordering Information

Pressure Sensor Fluid PSC-10
4.75 to 5.25 V
Order number **F 02U V01 268-01**

Pressure Sensor Fluid PSC-10
9 to 30 V
Order number **F 02U V01 295-01**

Dimensions



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