

# **Pressure Sensor Fluid PSC-260**



► Application: 0 to 260 bar

► Response time: 2 ms

▶ Pressure reference type: Absolut

▶ Power supply: 5 V

▶ Weight: 35 g

The PSC-260 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**

0 to 260 bar (a)
absolute
320 bar
-40 to 130°C (140°C)
-40 to 130°C (140°C)
-30 to 60°C
$560 \text{ m/s}^2$ at $800 \text{ to } 900 \text{ Hz}$ $350 \text{ m/s}^2$ at $1.000 \text{ to } 2.500$ 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 <sub>s</sub>	4.75 to 5.25 V
Max power supply U <sub>s</sub> max	16 V
Full scale output U <sub>A</sub>	10 to 90 % $\rm U_{\rm S}$ ratio metric
Current I <sub>s</sub>	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	15.38 mV/bar at $U_s = 5 \text{ V}$
Offset	500 mV at $U_s = 5 \text{ V}$

#### **Connectors and Wires**

Connector	ASL606-05PC-HE	
Mating connector ASL006-05SC-HE	F02U.000.228-01	
Pin 1	-	
Pin 2	Gnd	
Pin 3	Sig	
Pin 4	$U_S$	
Pin 5	-	
Various motorsport and automotive connectors are available on request.		
Please specify the required wire length with your order.		

**DR-25** 

Wire length L

13 to 95 cm

## **Installation Notes**

The PSC-260 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.

## **Legal Restrictions**

Due to embargo restrictions, sale of this product in Russia, Belarus, Iran, Syria, and North Korea is prohibited.

## **Ordering Information**

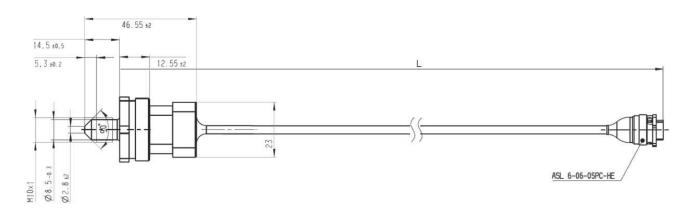
Pressure Sensor Fluid PSC-260 Order number F02U.V00.990-03

#### Accessories

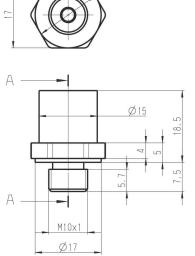
#### Adapter

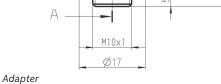
Order number F02U.002.711-01

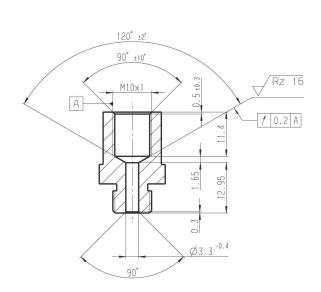
#### **Dimensions**



# Sensor







## Represented by:

Bosch Engineering GmbH Motorsport Robert-Bosch-Allee 1 74232 Abstatt Germany Tel.: +49 7062 911 9101 Fax: +49 7062 911 79104 motorsport@bosch.com www.bosch-motorsport.de

North America:
Bosch Engineering North America
Motorsport
38000 Hills Tech Drive
Farmington Hills, MI 48331-3417
United States of America
Tel.: +1 248 876 2977
Fax: +1 248 876 7373
motorsport@bosch.com
www.bosch-motorsport.com

Asia-Pacific:
Bosch Engineering Japan K.K.
Motorsports Department
1-9-32 Nakagawa Chuo, Tsuzuki-ku
Yokohama City
Kanagawa Prefecture 224-8601
Japan
Tel.: +81 45 605 3032
Fax: +81 45 605 3059
www.bosch-motorsport.jp

Australia, New Zealand and South Africa: Robert Bosch Pty. Ltd Motorsport 1555 Centre Road Clayton, Victoria, 3168 Australia Tel.: +61 (3) 9541 3901 motor.sport@au.bosch.com