



Pressure Sensor Differential DP-A



- ▶ **Relative air pressure measurements**
- ▶ **Measurement range 0 to 0.1 bar**
- ▶ **Analog output**
- ▶ **Very short response time**

This sensor is designed to measure the relative pressure of non-corrosive, non-ionic working gases e.g. dry air.

The sensor has two pressure connections for differential pressure measurements. A typical application is the measurement of air speed by using a pitot tube.

The main feature and benefit of this sensor is the combination of a high quality production part and robust design with metal housing and motorsport connector.

Application

Application	0 to 0.1 bar (r)
Pressure reference type	relative
Max. pressure	1,4 bar
Operating temp. range	-20 to 70°C
Media temp. range	-20 to 70°C
Storage temp. range	-40 to 85°C
Max. vibration	200 m/s ² , 10 to 500 Hz

Technical Specifications

Mechanical Data

Mounting	2 x M3
Fitting	4.5 mm
Installation torque	2 Nm
Weight w/o wire	58 g
Size	37 x 29 x 19 mm
Pressure port	5 mm

Electrical Data

Power supply U_S	4.8 to 15 V
Max. Power supply U_S max.	15 V
Full scale output U_A at 5 V	0.5 to 4.5 V
Current I_S	12 mA

Characteristic

Response time T10/90	0.1 ms
Compensated range	0 to 50°C
Thermal effects at 0 to 50°C rel. to 25°C	0.1 % FS/°C
Non-linearity and hysteresis	0.1 % FS
Long term stability (1 Mio cycles or 1 year)	± 0.2 % FS
Sensitivity	40,000 mV/bar
Offset	500 mV

Connectors and Wires

Connector	ASL 6-06-05PC-HE
Mating connector	ASL 0-06-05SC-HE
Pin 1	U _S
Pin 2	Gnd
Pin 3	Sig
Pin 4	-
Pin 5	-
Sleeve	DR-25
Wire size	AWG 24
Wire length L	15 to 100 cm

Please specify the requested wire length with your order.

Various motorsport and automotive connectors are available on request.

Installation Notes

Media: Non-corrosive, non-ionic working gases, such as dry air and dry gases.

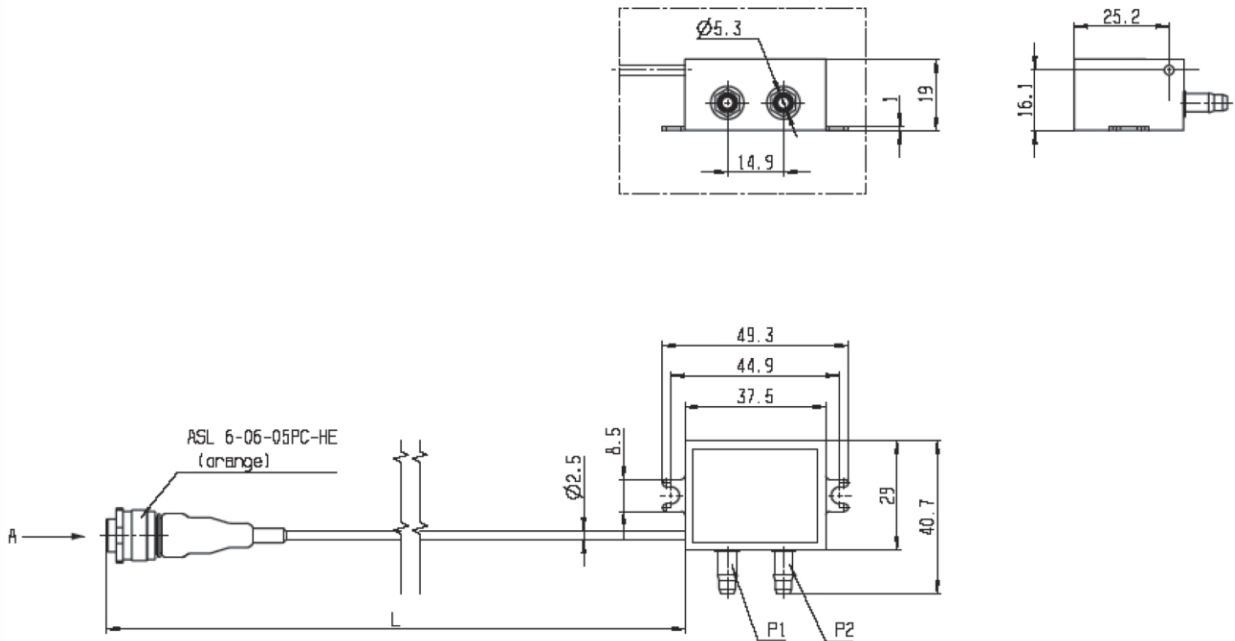
The DP-A can be connected directly to most control units.

Any mounting orientation is possible.

For a correct functionality be sure that the range of supplied pressure P2 ≥ P1.

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.

Dimensions



Ordering Information

Pressure Sensor Differential DP-A

B 261 209 696

Europe:
 Bosch Engineering GmbH
 Motorsport
 Robert-Bosch-Allee 1
 74232 Abstatt
 Germany
 Tel.: +49 7062 911 79101
 Fax: +49 7062 911 79104
 motorsport@bosch.com
 www.bosch-motorsport.de

North and South America:
 Bosch Engineering North America
 Motorsports
 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.
 Motor Sport Department
 3-33-8 Tsuruya-cho, Kanagawa-ku, Yokohama-shi
 Kanagawa 221-0835
 Japan
 Tel.: +81 45 410 1650
 Fax: +81 45 410 1651

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