

Pressure Sensor Differential DP-A

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 ... 0.1 bar (r)
Pressure Reference Type	relative
Max. Pressure	1,4 bar
Operating Temp. Range	-20 ... 70 °C
Media Temp. Range	-20 ... 70 °C
Storage Temp. Range	-40 ... 85 °C
Max. Vibration	200 m/s ² , 10 ... 500 Hz

Electrical Data	
Power Supply U _s	4.8 ... 15 V
Max. Power Supply U _s max.	15 V
Full Scale Output U _A @ 5 V	0.5 ... 4.5 V
Current I _s	12 mA

Mechanical Data	
Mounting	M3x2
Fitting	4.5 mm
Installation Torque	2 Nm
Weight w/o Wire	58 g
Size	37(49) x 29(41) x 19 mm
Pressure Port	5 mm

Characteristic	
Response Time T _{10/90}	0.1 ms
Compensated Range	0 ... 50 °C
Thermal Effects @ 0 ... 50 °C rel to 25 °C	0.1 % FS/°C
Non-Linearity and Hysteresis	0.1 % FS
Long Term Stability (1 Mio cyl. 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	Us
Pin 2	Gnd
Pin 3	Sig
Pin 4	-
Pin 5	-
Various motorsport and automotive connectors are available on request.	
Sleeve	DR-25
Wire Size	AWG 24
Wire Length L	15 ... 100 cm
Please specify the required wire length with your order.	

Application Hint
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 $P2 \geq P1$.
Please find further application hints in the offer drawing (http://www.bosch-motorsport.com).
Free download of the sensor configuration file (*.sdf) for the Bosch Data Logging System (http://www.bosch-motorsport.com).

Accessories	
Pitot static tube PT	B 261 209 700
Part Numbers	
DP-A	B 261 209 696

