Differential Pressure Gauges
Airbox with Differential Pressure Switch
Type A2G-90, air2guide

Applications
- For monitoring the differential pressure of air and other non-inflammable and non-aggressive gases
- Monitoring of air filters, fans, industrial cooling circuits, flows in ventilation ducts and the control of air and fire dampers

Special Features
- Compact indicator and pressure switch fitted within a plastic case (Airbox)
- Single pole micro switch (change-over contact)
- Switch point settable when installed
- All connections already pre-assembled

Description
The air2guide Airbox is a combination of a mechanical analogue indicator and a differential pressure switch, which have been fitted within a plastic case. The case is made from PC/ABS 1625 plastic (H x W x D = 240 x 191 x 110 mm) and with all connections built in. The cover is screwed on.

The ingress protection is IP 54.

The air2guide Airbox is ideally suited to the measurement and switching of overpressures and differential pressures in the measuring ranges from 0 ... 250 Pa to 0 ... 6,000 Pa.
Standard version

Case
Plastic PC/ABS 1625

Dimensions
H x W x D = 240 x 191 x 110 mm

Cover
Screwed

Operating temperature
Ambient: -30 ... +60 °C
Medium: -16 ... +50 °C

Ingress protection
IP 54 per EN 60529 / IEC 529

Process connection
Aluminium, top mount,
Bulkhead quick connector for hose, 4 or 6 mm inner diameter

Electrical connection
L-connector DIN 43 650, 3-pin + PE

Weight
1,230 g

Differential pressure switch air2guide S
Data sheet SP 69.02

Design
In accordance with the European low-voltage directive 73/23/ EEC

Measuring ranges and accuracy of the switch point

<table>
<thead>
<tr>
<th>Measuring range</th>
<th>Lowest limit</th>
<th>Highest limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 ... 200 Pa</td>
<td>±5 Pa</td>
<td>±20 Pa</td>
</tr>
<tr>
<td>30 ... 300 Pa</td>
<td>±5 Pa</td>
<td>±30 Pa</td>
</tr>
<tr>
<td>30 ... 500 Pa</td>
<td>±5 Pa</td>
<td>±30 Pa</td>
</tr>
<tr>
<td>40 ... 600 Pa</td>
<td>±5 Pa</td>
<td>±30 Pa</td>
</tr>
<tr>
<td>100 ... 1,500 Pa</td>
<td>±10 Pa</td>
<td>±50 Pa</td>
</tr>
<tr>
<td>500 ... 4,500 Pa</td>
<td>±50 Pa</td>
<td>±200 Pa</td>
</tr>
</tbody>
</table>

Micro switch
Change-over contact, silver contacts

Wiring diagram
1-3 opens / 1-2 closes on reaching the differential pressure

Contact rating

<table>
<thead>
<tr>
<th>Measuring ranges</th>
<th>Contact rating With resistive load</th>
<th>Contact material</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 … 200 Pa</td>
<td>0.1 A / AC 250 V</td>
<td>Gold</td>
</tr>
<tr>
<td>30 … 300 Pa</td>
<td>3 A / AC 250 V</td>
<td>Silver</td>
</tr>
<tr>
<td>30 … 500 Pa</td>
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Options

■ Window in the case cover for pressure switch with pressure switch display

Analogue indicator air2guide P
Data sheet PM 07.40

Design
Per EN 837-3 and ventilation and air conditioning (VAC) regulations

Nominal size in mm
110

Accuracy class
±3.0

Scale ranges
0 ... 250 Pa
0 ... 500 Pa
0 ... 750 Pa
0 ... 1500 Pa
0 ... 2,000 Pa
0 ... 6,000 Pa

Overpressure safety
20 kPa

Max. working pressure (static pressure)
20 kPa

Temperature effect
When the temperature of the measuring system deviates from the reference temperature (+20 °C): max. ±0.4 %/10 K of full scale value
Dimensions of the Airbox in mm

The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.