D1-Series, DW40
Pressure Wave Switch for pneumatic wave profiles

The pressure wave system stands out thanks to its high level of response sensitivity, which enables it to protect people and vehicles from practically all directions. Due to their robustness and durability, these switches are also really impressive when used as opening sensors for automatic gates and vehicle doors on buses and trains.

Just a slight pressure of 3 to 4 mbar on the sensor is all that is needed to guarantee reliable switching. Pressure-wave switch systems have highest requirements to failure safety, are absolute reliable and maintenance-free, plus they offers a particularly favourable price-performance ratio.

### Material data Overview

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>PBT GF30</td>
</tr>
<tr>
<td>Metal parts</td>
<td>CuZn, Ni plated</td>
</tr>
<tr>
<td>Metal spring parts</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Sealing</td>
<td>EPDM</td>
</tr>
<tr>
<td>Membrane</td>
<td>Silicone</td>
</tr>
<tr>
<td>Bush</td>
<td>POM</td>
</tr>
<tr>
<td>Switch contacts</td>
<td>AgNi</td>
</tr>
</tbody>
</table>

### Technical data

- **Dimensions in mm**: 49 x 41 x 34.5
- **Response pressure**: min. 2 mbar / max. 150 mbar
- **Pressure equalisation**: 100 ml / min (@ 2 mbar)
- **Min./max. current**: 20 mA / 500 mA (ACDC ohmic)
- **Min./max. operating voltage**: 24 - 250 VAC, 24 - 50 VDC
- **Output**: NC or NO
- **Mechanical service life**: 50 million switches
- **Ambient temperature**: -30°C to + 70°C

### Options for DW40, p/n

- **210018 DW40 standard**: Pressure closes contact
- **210019 DW40AMP option**: Pressure closes contact, for AMP connectors
- **210025 DW40DOE option**: Pressure opens contact
- **210095 DWGK1 option**: Screw-on housing incl. of pressure wave switch
- **210111 DWGK1DOE option**: Screw-on housing incl. of pressure wave switch, pressure opens contact
- **210096 DWGK11 option**: Snap-in housing incl. of pressure wave switch
- **210097 DWGK11DOE option**: Snap-in housing incl. of pressure wave switch, pressure opens contact

### Conformity

- **REACH compliance**: published on www.bircher.com
- **RoHS compliance**: published on www.bircher.com

Subject to change without notice.