flow switch for gaseous media

vent-caprot 3201.0x / 3201.5x

The vent-caprot type 3201.xx is an air flow monitor which is used where air and other gases in industrial processes need to be monitored. The compact, electronic sensor works according to the calorimetric measuring principle and without mechanically moving parts. It detects the flow velocity of the medium and converts it into an electrical signal.

- small compact unit
- adjustable switching point
- temperature independent
- robust construction (fully resin encapsulated)
- ISO 9001:2015

### Technical data

<table>
<thead>
<tr>
<th>Sensor data *</th>
<th>3201.0x / 3201.5x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>gaseous</td>
</tr>
<tr>
<td>Medium</td>
<td>1 m/s to 10 m/s, continuously adjustable</td>
</tr>
<tr>
<td>Switching range</td>
<td>-20 °C to +70 °C</td>
</tr>
<tr>
<td>Medium temperature</td>
<td>-20 °C to +70 °C</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>with flange: atmospheric, with PG21: max 1 bar</td>
</tr>
<tr>
<td>Pressure</td>
<td>min. 3 sec. / max. 100 sec. depends on set-point adjustment</td>
</tr>
<tr>
<td>Temperature drift</td>
<td>&lt; 0.5 % per Kelvin</td>
</tr>
<tr>
<td>Repeatability</td>
<td>&lt; 3 %</td>
</tr>
<tr>
<td>Hysteresis</td>
<td>&lt; 30 %</td>
</tr>
</tbody>
</table>

### Mechanical data

| Protection class | IP64 |
| Material sensor probe | ceramic |
| Material housing | Ultradur (PBTP) |
| Mounting accessories | flange (PG21 on request) |
| Electrical connection | 2 m oilflex cable / 3 x 0.5 mm² |
| Body dimensions | see drawing on second page |

### Electrical data

<table>
<thead>
<tr>
<th>Type</th>
<th>3201.00</th>
<th>3201.01</th>
<th>3201.02</th>
<th>3201.03</th>
<th>3201.50</th>
<th>3201.51</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical output</td>
<td>NPN n.c.</td>
<td>NPN n.o.</td>
<td>PNP n.c.</td>
<td>PNP n.o.</td>
<td>Thy. n.c.</td>
<td>Thy. n.o.</td>
</tr>
<tr>
<td>without flow:</td>
<td>current-carrying</td>
<td>currentless</td>
<td>current-carrying</td>
<td>currentless</td>
<td>current-carrying</td>
<td>currentless</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>24 VDC +10 % / -15 %, Ripple &lt; 20 %</td>
<td>115 VAC or 230 VAC +6 % / -15 % (other AC voltages on request)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switching current</td>
<td>max. 500 mA</td>
<td>5 - 200 mA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switch-on jumper</td>
<td>max. 90 sec.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* all data related to medium air
flow switch for gaseous media

vent-captor 3201.0x / 3201.5x

Body dimensions

![Body dimensions diagram]

Extended body (NMA) = 92

Connection diagram

![Connection diagram]

Thyristor output

NPN Transistor output

PNP Transistor output

AC ----.50 ----.51

DC ----.00 ----.01

DC ----.02 ----.03

1 black
3 brown
2 blue

1 brown
3 black
2 blue

1 brown
3 black
2 blue

Load

Load

Load

115 od. 230 VAC

24 VDC

24 VDC