Industrial pressure transmitters
Series IDA3X2
2-wire technology

Description
Due to modern diaphragm and amplifier technology, these transducers are intended for use in the hardest industrial applications.
Specializing in dynamic, pulsating hydraulic pressure regulation for injection moulding machines and presses, they have for more than 20 years proven their excellent accuracy and long term stability.
Automotive cranes, industrial robots, concrete pumps, industrial test purposes and off-shore business are further installation possibilities with high demands with respect to accurate pressure, vibration and shock resistance, as well as weatherproofing.
The flush diaphragm version IDA 37X is designed for applications requiring a zero volume pressure port in measurement of gases, viscous liquids and slurries and has excellent cleanability.

Features
- Stainless steel construction withstands harsh operating environments and corrosive media
- Contoured diaphragm ensures greater accuracy, repeatability and fatigue strength
- Optimum diaphragm heat treatment contributes a longer operating life
- Internal Shunt-Calibration provides quick transducer and system calibration
- Potted electronics resists shock and vibration

Technical Data / Operating Data
<table>
<thead>
<tr>
<th>Pressure range</th>
<th>0 - 20* bar to 0 - 1000 bar</th>
<th>Burst pressure</th>
<th>4 x pressure range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>± 0.25 % f.s.v.</td>
<td>3 x pressure at 0 - 20 bar and 0 - 1000 bar</td>
<td></td>
</tr>
<tr>
<td>± 0.5 % for IDA372</td>
<td>Material in contact with media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeatability</td>
<td>± 0.1 % f.s.v.</td>
<td></td>
<td>15-5 Mat. No. 1.4545</td>
</tr>
<tr>
<td>Resolution</td>
<td>infinite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response</td>
<td>1.5 kHz (-3dB)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 20 bar range only with 35 bar element and Option D30/20 calibration 20 bar range

Electrical Characteristics
<table>
<thead>
<tr>
<th>Configuration</th>
<th>4-arm Wheatstone bridge strain gauge (DMS)</th>
<th>Zero adjustment</th>
<th>- 2 % / + 5 % f.s.v.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strain resistance</td>
<td>350 Ω</td>
<td>Supply voltage</td>
<td>10 - 36 V DC</td>
</tr>
<tr>
<td>Output signal</td>
<td>4 - 20 mA</td>
<td>Internal</td>
<td></td>
</tr>
<tr>
<td>Load resistance</td>
<td>( R_L &lt; 1.2 \text{ kΩ at 36 V} )</td>
<td>Shunt-Calibration</td>
<td>80 % f.s.v. ± 10 %</td>
</tr>
<tr>
<td>Leakage resistance</td>
<td></td>
<td>Leakage resistance</td>
<td>1000 MΩ at 50 V DC</td>
</tr>
</tbody>
</table>
Temperature influence
Max. media temperature 85 °C

Zero shift due to temperature change ± 0.1 % f.s.v. / 10 °C
IDA372 ± 0.4 % f.s.v. / 10 °C

Sensitivity shift due to temperature change ± 0.2 % f.s.v. / 10 °C
IDA372 ± 0.4 % f.s.v. / 10 °C

Max. operating temperature 85 °C

Dimensions

Order specifications

Pressure side connection
3 = Internal thread ISO 228/1-G1/4
5 = External thread DIN 3852-AG1/4A
7 = M18 x 1.5 flush diaphragm

Options
D05 = Cable connection
D06 = Cable connector IP65
D21 = Bendix-Connector
D30 = Special calibration for IDA with amplifier

Pressure range
(20*) 0 - 20 bar
(35*) 0 - 35 bar
50 = 0 - 50 bar
1C = 0 - 100 bar
1.5C = 0 - 150 bar
2C = 0 - 200 bar
3,5C = 0 - 350 bar
5C = 0 - 500 bar
7C = 0 - 700 bar
1M = 0 - 1000 bar

* only for IDA372, 20 bar range only with option D30/20 calibration 20 bar range