Relative and differential pressure transmitter type 692

Pressure range
0 ... 0.1 – 25 bar

Type 692 pressure transmitters have a unique, well proven ceramic technology. There are variety of pressure and electrical connections available, together with several standardised output signals. The wide variety of options makes these transmitters ideal for applications across a broad spectrum of industries.

- Very low temperature sensitivity
- High resistance to extreme temperatures
- No mechanical creepage
- Modular system and choice of materials to suit individual applications
## Technical overview

### Pressure range

| Relative and differential | 0 ... 0.1 - 25 bar |

### Operating conditions

<table>
<thead>
<tr>
<th>Medium</th>
<th>Liquids and neutral gases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>Medium / ambient 15 ... 85 °C Storage -40 ... 85 °C</td>
</tr>
<tr>
<td>Tolerable overload on one side</td>
<td>See order code selection table</td>
</tr>
</tbody>
</table>

### System pressure

<table>
<thead>
<tr>
<th>≤ 6 bar</th>
<th>≤ 10 bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVDF</td>
<td>Stainless steel 1.4305 / AISI 303</td>
</tr>
<tr>
<td>12 bar</td>
<td>25 bar</td>
</tr>
</tbody>
</table>

### Rupture pressure

1.5x system pressure

### Materials

<table>
<thead>
<tr>
<th>Case</th>
<th>Stainless steel 1.4305 / AISI 303</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials in contact with the medium</td>
<td>PVDF, CuZn nickel plated</td>
</tr>
<tr>
<td>Sensor</td>
<td>ceramic Al2O3 (96%)</td>
</tr>
<tr>
<td>Sealing material</td>
<td>FPM, EPDM, NBR, MVQ</td>
</tr>
</tbody>
</table>

### Electrical overview

#### Output Power supply Load Current consumption (at nominal pressure)

<table>
<thead>
<tr>
<th>2 wire</th>
<th>4 ... 20 mA</th>
<th>11 ... 33 VDC</th>
<th>&gt; 10 kOhm</th>
<th>&lt; 5 mA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ... 5 V</td>
<td>11 ... 33 VDC / 24 VAC ±15%</td>
<td>&gt;10 kOhm</td>
<td>&lt; 5 mA</td>
<td></td>
</tr>
<tr>
<td>10 ... 19 V</td>
<td>18 ... 33 VDC / 24 VAC ±15%</td>
<td>&gt;10 kOhm</td>
<td>&lt; 5 mA</td>
<td></td>
</tr>
</tbody>
</table>

Polarity reversal protection

Short circuit proof and protected against polarity reversal. Each connection is protected against crossover up to max. supply voltage.

### Dynamic response

- Response time: < 5 ms
- Load cycle: < 50 Hz

### Protection standard

IP 65

### Electrical connection

Connector DIN EN 175301-803-A
Connector DIN EN 60130-9

### Pressure connection

| Pressure tube tip | ± 4 mm |
| Pressure tube tip | ± 6 mm |
| Pipe fitting | ± 6 mm |
| Outside thread | ± 8 mm |
| Inside thread | 7/16 -20 UNF |
| G 1/4 |
| G 1/4 |

### Mounting instruction

Installation arrangement: Unrestricted

Mounting: Mounting bracket

### Tests / Admissions

Electromagnetic compatibility: CE conformity acc. EN 61326-2-3

### Weight

< 480 g

### Packaging

Single packaging in cardboard accessories included

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**Legend to cross-section drawing**

1. Electrical connection
2. Seals
3. Ceramic element
4. P2 Pressure connection (lower pressure)
5. P1 Pressure connection (higher pressure)
### Technical Data

**Pressure connection**
- PVDF to ± 6 bar
- PVDF for pipe ± 8 mm
- Stainless steel 1.4305 / AISI 303 for pipe ± 6 mm
- Stainless steel 1.4571 / AISI 316Ti for tube ± 6 mm
- Stainless steel 1.4571 / AISI 316Ti for tube ± 4 mm
- PVDF hose connection ± 8 mm
- PVDF to ± 4 mm
- PVDF to ± 1.6 mm
- PVDF to ± 0.8 mm
- PVDF to ± 0.4 mm
- PVDF to ± 0.2 mm
- PVDF to ± 0.1 mm
- Test conditions: 25 °C, 45% RH, Power supply 24 VDC
- TC z.p. / TC s. -15...+80 °C

**Test conditions:**
- 25 °C, 45% RH, Power supply 24 VDC
- TC z.p. / TC s. -15...+80 °C

**Accessories**
- Female connector DIN EN 175301-803-A with seal IP 65, when installed and screwed: 103510
- Female connector DIN EN 60130-9: IP 65, when installed and screwed: 103524
- Mounting bracket incl. screws: 101999
- Calibration certificate: 104551

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### Accessories

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Tolerable overload on one side</th>
<th>Cal. certificate</th>
<th>Other pressure range</th>
<th>Delivery without female connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure range</td>
<td></td>
<td></td>
<td>104551</td>
<td></td>
<td>W</td>
</tr>
<tr>
<td>TC zero point</td>
<td>% fs/10 K</td>
<td></td>
<td>692. XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC sensitivity</td>
<td>% fs/10 K</td>
<td></td>
<td>692. XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hysteresis and repeatability</td>
<td>% fs</td>
<td></td>
<td>692. XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td>% fs</td>
<td></td>
<td>692. XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total of linearity, hysteresis and repeatability</td>
<td>% fs</td>
<td></td>
<td>692. XX</td>
<td></td>
<td></td>
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**Test conditions:**
- 25 °C, 45% RH, Power supply 24 VDC
- TC z.p. / TC s. -15...+80 °C

---

### Order Code Selection Table

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolerable overload on one side</td>
<td>P1</td>
<td>P2</td>
</tr>
<tr>
<td>0...0.1 bar</td>
<td>max. 0.6 bar</td>
<td>0.6 bar</td>
</tr>
<tr>
<td>0...0.2 bar</td>
<td>max. 1.2 bar</td>
<td>1.2 bar</td>
</tr>
<tr>
<td>0...0.2 bar</td>
<td>max. 0.6 bar</td>
<td>0.6 bar</td>
</tr>
<tr>
<td>0...0.25 bar</td>
<td>max. 1.2 bar</td>
<td>1.2 bar</td>
</tr>
<tr>
<td>0...0.25 bar</td>
<td>max. 0.6 bar</td>
<td>0.6 bar</td>
</tr>
<tr>
<td>0...0.3 bar</td>
<td>max. 1.2 bar</td>
<td>1.2 bar</td>
</tr>
<tr>
<td>0...0.4 bar</td>
<td>max. 1.2 bar</td>
<td>1.2 bar</td>
</tr>
<tr>
<td>0...0.4 bar</td>
<td>max. 2.0 bar</td>
<td>2.0 bar</td>
</tr>
<tr>
<td>0...0.5 bar</td>
<td>max. 2.5 bar</td>
<td>2.5 bar</td>
</tr>
<tr>
<td>0...0.6 bar</td>
<td>max. 3.0 bar</td>
<td>3.0 bar</td>
</tr>
<tr>
<td>0...0.6 bar</td>
<td>max. 1.2 bar</td>
<td>1.2 bar</td>
</tr>
<tr>
<td>0...0.6 bar</td>
<td>max. 3.0 bar</td>
<td>3.0 bar</td>
</tr>
<tr>
<td>0...0.6 bar</td>
<td>max. 2.5 bar</td>
<td>2.5 bar</td>
</tr>
<tr>
<td>0...0.7 bar</td>
<td>max. 5.0 bar</td>
<td>5.0 bar</td>
</tr>
<tr>
<td>0...0.8 bar</td>
<td>max. 3.2 bar</td>
<td>3.2 bar</td>
</tr>
<tr>
<td>0...0.8 bar</td>
<td>max. 12 bar</td>
<td>12 bar</td>
</tr>
<tr>
<td>0...0.8 bar</td>
<td>max. 2.5 bar</td>
<td>2.5 bar</td>
</tr>
<tr>
<td>0...0.9 bar</td>
<td>max. 12 bar</td>
<td>12 bar</td>
</tr>
<tr>
<td>0...0.9 bar</td>
<td>max. 8.0 bar</td>
<td>8.0 bar</td>
</tr>
<tr>
<td>0...0.9 bar</td>
<td>max. 12 bar</td>
<td>12 bar</td>
</tr>
<tr>
<td>0...0.9 bar</td>
<td>max. 20 bar</td>
<td>20 bar</td>
</tr>
<tr>
<td>0...1.0 bar</td>
<td>max. 12 bar</td>
<td>12 bar</td>
</tr>
<tr>
<td>0...1.0 bar</td>
<td>max. 20 bar</td>
<td>20 bar</td>
</tr>
<tr>
<td>0...1.0 bar</td>
<td>max. 32 bar</td>
<td>32 bar</td>
</tr>
<tr>
<td>0...1.1 bar</td>
<td>max. 50 bar</td>
<td>50 bar</td>
</tr>
</tbody>
</table>

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### Huba Control type 692 - Technical data subject to change - Edition 04/2017

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**Sealing material**
- PTFE: Fluoro elastomers
- EPDM: Ethylene propylene
- NBR: Butadiene Acrylonitrile
- MVQ: Silicone polymer

**Adjustment**
- Factory: 0
- Output / power supply:
  - Voltage: 0, 0.5 V, 11...33 VDC / 24 VAC ±15%
  - Current: 0, 10 mA, 18...33 VDC / 24 VAC ±15%
  - 0, 4...20 mA, 11...33 VDC
  - Ratio: 10...90%, 0.5 VDC ±5%

**Electrical connection**
- Cable 1.5 m, PG7: 0
- Connector 1)
  - DIN EN 175301-803-A: 0
  - DIN EN 60130-9: 0

**Pressure connection**
- Inside thread: Stainless steel 3/8”-27 NPT or PVDF G 3/8”
- Hose connection: CuZn nickel plated for tube inside Ø 4 mm
- Pipe fitting: CuZn nickel plated for pipe outside Ø 6 mm
- Cv/ 1.4

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- Cv/ 1.4
Dimensions in mm / Electrical connections

**Stainless steel 1.4305 (AISI 303)**
- Inside thread $\frac{1}{8}$
- L = 12 a = 14 X = 53

**CuZn nickel plated**
- Hose connection for tube Ø 4
  - L = 20 a = 10 X = 61
- Hose connection for tube Ø 6
  - L = 25 a = 12 X = 66

**CuZn nickel plated**
- Outside thread $\frac{1}{4}$
  - L = 20 a = 10 X = 61
- Outside thread $\frac{3}{16}$-20 UNF
  - L = 18 a = 14 X = 59

**PVDF**
- Screw fitting for pipe Ø 6
  - L = 20 a = 12 X = 61
- Screw fitting for pipe Ø 8
  - L = 23 a = 14 X = 64
- Hose connection for tube Ø 6
  - L = 20 a = 10 X = 61

**Connector DIN EN 175301-803-A**
- 2 wire
  - IN brown
  - OUT green
- 3 wire
  - IN brown
  - OUT white
  - GND green

**Connector DIN EN 60130-9**
- 3 wire
  - IN brown
  - OUT white
  - GND green

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