

## Pressure transmitter Pressotronik 702

Monitoring the oil pressure is essential in hydraulic systems and oil supply systems. It's important to monitor both process-related pressure ranges as well as safety shutdowns, load limits or simply to determine if the lubricating pressure is adequate.

The pressure transmitters must meet a variety of requirements with respect to their pressure resistance, signal output, programmability or the plug connection style. A local or status display is often required for safety reasons

The Pressotronik 702 pressure transmitters have a compact installation size, different connector plugs and fine-tuned pressure levels ranging from low-pressure to high pressure range.

Pressure ratings up to 600 bar

Compact and robust design

Stainless steel measuring cell

Pressure measuring cell welded seal-free with pressure sensor, no elastomer seal

High burst strength

2 plug connection options available



Technical Data Pressotronik 702

Pressure Transmitter Pressotronik 702

|  |  |
|--|--|
| Pressure ranges                        | 0 - 10 bar<br>0 - 25 bar<br>0 - 100 bar<br>0 - 250 bar<br>0 - 400 bar<br>0 - 600 bar |
| Medium                                 | Liquids, gasses and refrigerants, incl. ammonia                                      |
| Pressure connection                    | G1/4 male thread, DIN 3852 Form E with profile gasket FPM                            |
| Overload                               | 3 x limit at 10 to 600 bar (but max. 1500 bar)                                       |
| <i>higher values upon request</i>      |  |
| Burst pressure                         | 6 x terminal value (max. 2500 bar)   |
| Mounting position                      | any  |
| Weight                                 | approx. 90 g   |
| <b>Material</b>                        |  |
| Housing                                | 1.4305   |
| Connector holder                       | Polyarylamide 50 % GF VO   |
| <b>Materials in contact with media</b> |  |
| Pressure connection                    | Stainless steel 1.4404 / AISI 316L   |
| Measuring element                      | Stainless steel  |
| <b>Temperature</b>                     |  |
| Medium                                 | -30 °C to +135 °C  |
| Ambient temperature                    | -30 °C to +85 °C   |
| Storage                                | -50 °C to +100 °C  |

|                                  |   |
|----------------------------------|---|
| <b>Electrical data</b>           |   |
| Response time                    | <= 2 ms / typical 1 ms  |
| Load cycle                       | <= 100 Hz   |
| Supply voltage (U <sub>b</sub> ) | 7 - 33 V DC   |
| Power input                      | <= 23 mA  |
| Output signal                    | 4 - 20 mA, 2 wire   |
| Load Ω                           | = (U <sub>b</sub> -7 V) / 0.02 A  |
| Reverse polarity safety          | Short circuit and reverse polarity safety (each connection to each with max. voltage) |
| Connection                       | M3 (IP 65)  |
| <i>other versions on request</i> | M12 (IP 67) / Delivered without connector head  |

**Accuracy (test conditions: 25 °C, 45 % RH, supply 24 VDC)**

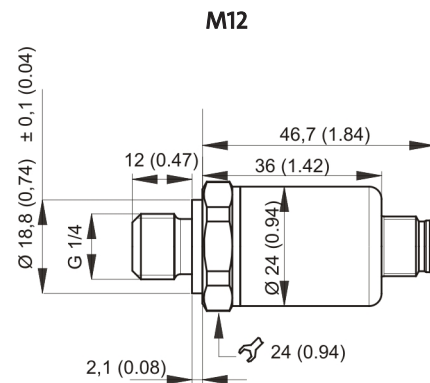
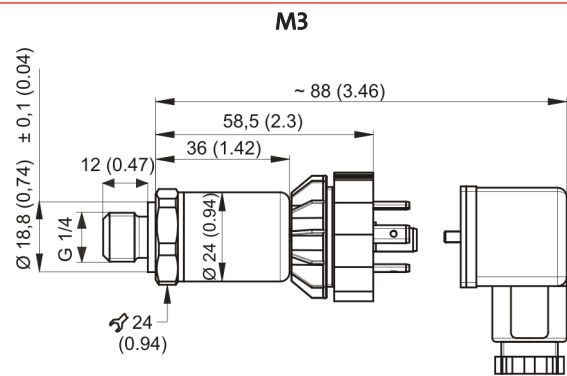
|  |                |
|--|----------------|
| Characteristic*                        | ± 0.3 % FS     |
| Resolution                             | 0.1 % FS       |
| Thermal behaviour**                    | ± 0.2 % FS/10K |
| Long-term stability per DIN EN 60770-1 | ± 0.25 % FS    |

\*Typical; max. 0.5 % FS, \*\* -15 °C to +85 °C

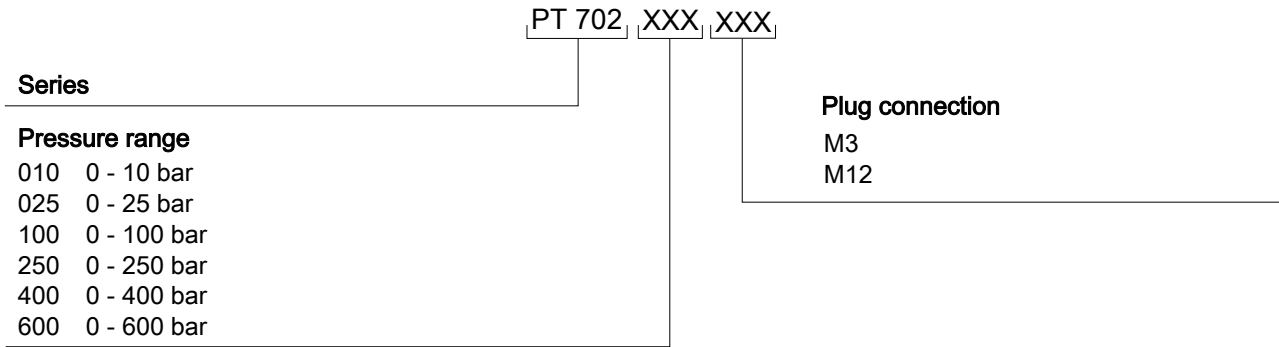
**Certificates/Approvals**

|                                     |  |
|-------------------------------------|--|
| Electromagnetic compatibility       | CE compliant per EN 61326-2-3  |
| Shock per IEC 60068-2-27            | 100 g, 11 ms, half-sine curve, all 6 directions, free fall from 1 m onto concrete (6x)                       |
| Continuous shock per IEC 60068-2-29 | 40 g over 6 ms, 1000x all 3 directions   |
| Vibration per IEC 60068-2-6         | 20 g, 15...2000 Hz, 15...25 Hz with amplitude ± 15 mm, 1 octave/minute all 3 directions, 50 continuous loads |

Dimensions

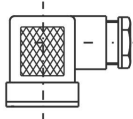
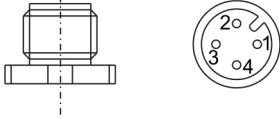


Ordering instructions Pressotronik 702



| Item no.     | Description      |  |
|--------------|------------------|--|
| 9144 05 0010 | Connecting cable | M12x1, 1.5 m, angled coupler and straight plug |
| 9144 05 0046 | Connecting cable | M12x1, 3.0 m, angled coupler and straight plug |
| 9144 05 0047 | Connecting cable | M12x1, 5.0 m, angled coupler and strands       |

Standard pin assignment Pressotronik 702

|                          | M3 valve connector<br>3-pin + PE<br>DIN EN 175301-803-A<br>IP65   | M12 plug A coded<br>4-pin<br>DIN EN 61076-2-101<br>IP67   |
|--------------------------|---|---|
| Plug connection          |                                   |                               |
| Pin assignment<br>2 lead | <ul style="list-style-type: none"> <li>— 1 +24 V DC</li> <li>— 2 4-20 mA out</li> <li>— 3</li> <li>— PE*</li> </ul> | <ul style="list-style-type: none"> <li>— 1 +24 V DC</li> <li>— 2</li> <li>— 3 4-20 mA out</li> <li>— 4</li> </ul> |

\* not connected to transmitter housing.