



Pressure transmitter Pressotronik 703

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 703 pressure transmitters offer compact installation dimensions, various connectors and precisely tuned pressure ratings from low pressure to high pressure ranges.

Pressure ratings up to 600 bar

Compact and robust design

Thin film stainless steel measuring cell

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

High burst strength

Various style options



Technical Data

Pressure transmitter Pressotronik 703

Pressure ranges: <i>others available on request</i>	Pressure range	Overload	Burst pressure
	0 – 10 bar	30 bar	200 bar
	0 – 25 bar	75 bar	300 bar
	0 – 100 bar	300 bar	500 bar
	0 – 250 bar	750 bar	1000 bar
	0 – 400 bar	1000 bar	2000 bar
	0 – 600 bar	1500 bar	2500 bar

Medium: Liquid and gaseous media
Observe material compatibility

Pressure connection: G1/4 male thread, DIN 3869
others available on request with FPM profile gasket
from 100 bar with integrated pressure peak orifice

Mounting position: any

Weight: approx. 50 g

Material

Housing/plug: 1.4301

Materials in contact with media

Pressure connection: Stainless steel 1.4542

Measuring element: Stainless steel 1.4542

Temperature

Medium: -40 °C to +125 °C

Ambient temperature: -40 °C to +125 °C

Electrical data

Response time: typically 1 ms (10...90 %)

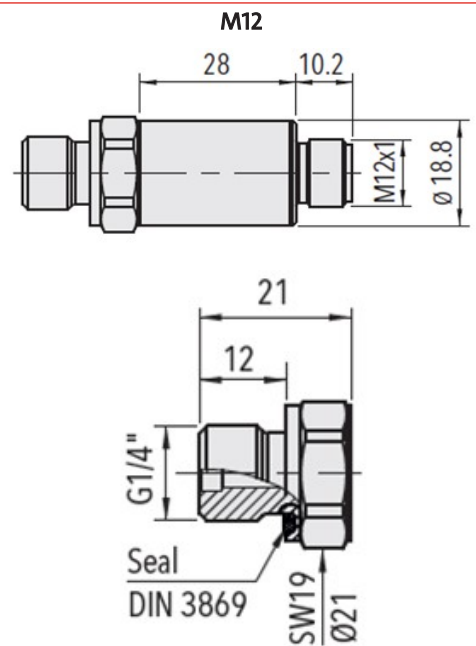
Supply voltage (U_b): 9 - 32 V DC

Power input: 22,2 mA

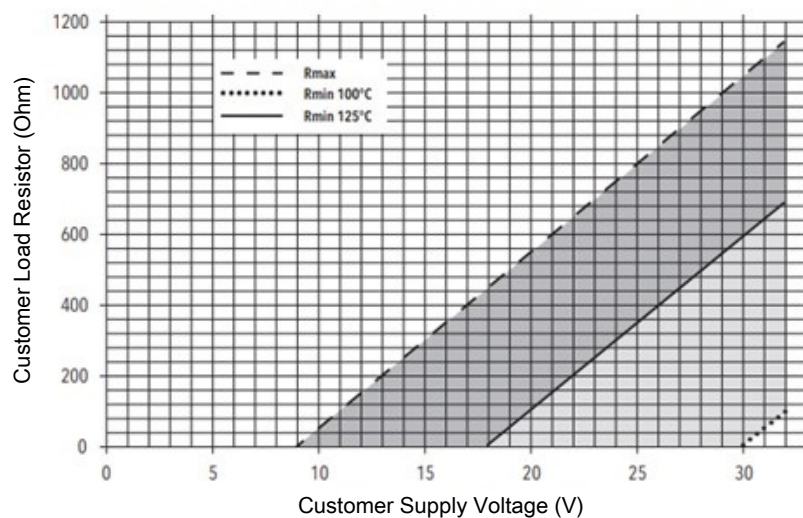
Output signal: 4 - 20 mA, 2 wire

Load Ω:

Dimensions



4...20 mA: min./max resistor vs. supply voltage @Pmax = 100 %



Reverse polarity safety: Short circuit and reverse polarity safety (each connection to each with max. voltage)

Connection: M12 (IP 67)/delivered without connector head
other versions on request

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

Characteristic: ± 0.5 % FS

Non-linearity (BSL): ± 0.2 % FS

Thermal behaviour: ± 0.03 % FS/K

Long-term stability (1 year): z± 0.1 % FS

Certificates/Approvals

Electromagnetic compatibility	CE compliant per EN 61000-6-2 and EN 61000-6-3	
Shock per IEC 60068-2-27	100 g, 6 ms - 50 g, 11 ms	
Continuous shock per IEC 60068-2-64	15 g RMS, 20...2000 Hz 25 g sin, 80...2000 Hz, 1 octave/minute	
MTBF, MTTF(d) per EN ISO 13849-1:2008	MTBF „Parts-Count“:	308 Years
	MTTF „Parts-Count“:	308 Years
	MTTFd „Parts Count“ (50 % dangerous failure of MTTF):	Typical: 616 Years Worst case: 62 Years
	MTTFd/Channel (50 % dangerous Failure of MTTF):	Typical: high Worst case: high

Ordering Instructions Pressotronik 703

PT 703 -XXX -XXX -XXX -XXX

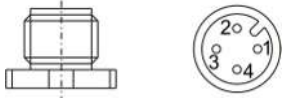












<p>Series</p> <p>Pressure range</p> <p>010 0 - 10 bar</p> <p>025 0 - 25 bar</p> <p>100 0 - 100 bar</p> <p>250 0 - 250 bar</p> <p>400 0 - 400 bar</p> <p>600 0 - 600 bar</p> <p>Process connection</p> <p>G14 - G1/4" outside incl. seal</p>	<p>Pin assignment</p> <p>12 - 1 = Ub+ / 2 = signal</p> <p>13 - 1 = Ub+ / 3 = signal</p> <p>14 - 1 = Ub+ / 4 = signal</p> <p>Plug connection</p> <p>M12</p>
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Item no.	Pressure range	Process connection	Plug connection	Pin assignment
1370320010	10	G14	M12	13
1370320025	25	G14	M12	13
1370320100	100	G14	M12	13
1370320250	250	G14	M12	13
1370320400	400	G14	M12	13
1370320600	600	G14	M12	13

Accessories

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 703

	M12 plug A coded 4-pin DIN EN 61076-2-101 IP67
Pin assignment	
12	 1 +24 V DC  2 4-20 mA out  3  4
13	 1 +24 V DC  2  3 4-20 mA out  4
14	 1 +24 V DC  2  3  4 4-20 mA out