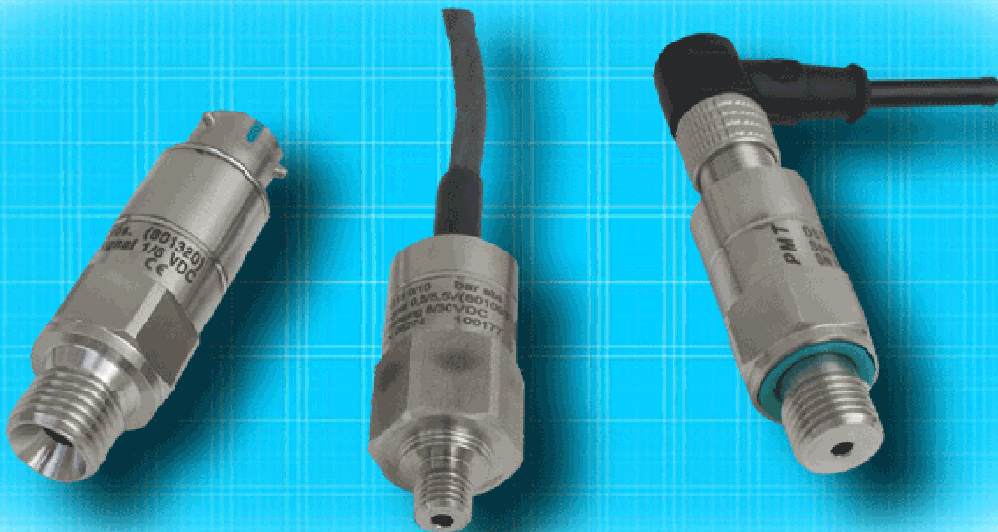

PMT

*Precise measurement technology
for pressure and flow*

Pressure sensor DS19

with piezoresistive silicon membrane



Total accuracy up to $\pm 0,5\%$ from -20 to $+125$ °C

Gauge and absolute version

Small sensor

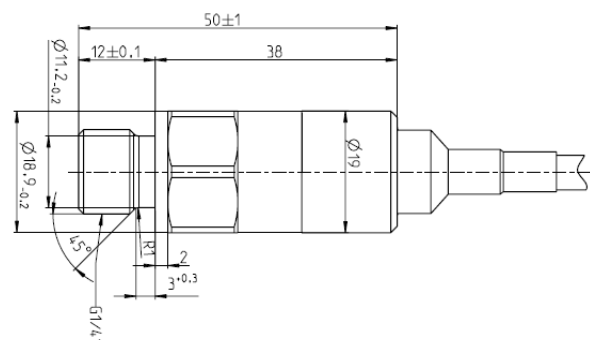
Pressure sensor DS19 — technical data

Sensor element	Oil-filled piezoresistive silicon cell, stainless steel membrane	Longterm stability	typ. $< \pm 0,1\%$ F.S. / year
Pressure range gauge	Bottom point -1 to 0 bar Top point 0,2 to 40 bar	Offset zero and full scale setting	typ. < 10 mV @ 5 V signal range @ 25°C
Pressure range absolut	0/1 bar to 0/40 bar	Response time T90	< 1 ms
Over pressure	2 x F.S.	Pressure connection	M10*1 male thread (DIN ISO6149-2) G1/4" male thread (DIN 3852-Teil 11) M14*1,5 male thread Other connections available
Burst pressure	> 3 x F.S.	Torque	max. 15 Nm
Measured media	Compatible to stainless steel 1.4301, 1.4401	Wrench	Hex 19
Analogue output	0 to 5 V, 1 to 6 V, 0 to 10 V Other output on request	Electrical connection	1 m cable; optional up to 10 m Connector MIL-C-26482 Connector M12 Other connections available
Power supply	8 to 30 VDC, max. 12 mA 12 to 30 VDC with output up to 10 V 3- or 4-wired-type available Inverse-polarity protection up to 30 V	Protection class	(EN 60529) IP 65 to IP 69K
Non-linearity, hysteresis and repeatability combined @ 25 °C	typ. $< \pm 0,15\%$ F.S.	Insulation resistance	> 10 M Ω
Operating temperature range	-40 to +125 °C temporary up to 140°C (max. 200 h)	ESD	(EN 61000-4-2) ± 8 kV to pins, ± 15 kV to housing
Total accuracy* from -40 to +125 °C	$< \pm 1,5\%$ F.S. Higher accuracy on request	EMC	(EN 61000-4-3) 150 V/m @ 1 MHz to 1 GHz
		Vibration	(EN 60068-2-64) 10 g effective @ 20 to 2000 Hz
		Shock	(EN 60068-2-27) 50 g (11 ms)
		Mass	typ. 45 g

* Accuracy includes temperature effects over pressure range, non-linearity, hysteresis, repeatability, zero and full scale offset.

Order information:

Type	DS19
Range	0 to +5 bar, absolute
Analogue output	1 to 6 VDC
Pressure connection	G1/4"
Electrical connection	2 m cable



Other measurement equipment:

- Pressure sensor DS16 \varnothing 19 mm, range 0 / 2 bar to 0 / 600 bar gauge
- Flowmeter for fluid and gas application
- MID magnetic inductive flowmeter

Version 04-2013 ▫ subject to alterations

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