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Manomètre digital sortie analogique



DS 217

Characteristics:

- accuracy according to IEC 60770: 0.5 % FSO
- nominal pressure ranges from 0 ... 6 bar up to 0 ... 600 bar
- 1 analogue output and up to 2 contacts
- display and housing rotatable suitable for oxygen applications

Input pressure range

Nominal pressure gauge [bar]	6	10	16	25	40	60	100	160	250	400	600
Overpressure (static)[bar]	14	35	35	70	140	140	350	350	700	1 200	1 200
Burst pressure ? [bar]	28	70	70	140	280	280	700	700	1 400	1 500	1 500
Vacuum resistance	unlimited										

Contact

standard	1 PNP contact
option	max. 2 independent PNP contact; 1 analogue output
Switching current	standard: contact rating max. 125 mA, short-circuit resistant
Accuracy of switching points 1	? ± 1.5 % FSO
Repeatability	? ± 0.5 % FSO
Switching frequency	max. 10 Hz
Switching cycles	> 100 x 10 ⁶
Delay time	0 ... 100 sec

Analogue output (optionally) / Supply

3-wire current signal	4 ... 20 mA / VS = 24 VDC ± 10 %
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Accuracy 1	? ± 0.5 % FSO
Permissible load	3-wire: Rmax = 500 W
Influence effects	supply: 0.05 % FSO / 10 V 0.05 % FSO / kW
Measuring rate	10 Hz
<i>1 accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)</i>	
Thermal effects (Offset and Span) / Permissible temperatures	
Thermal error	? ± 0.5 % FSO / 10 K in compensated range -25 ... 85 °C
Permissible temperatures	medium: -25 ... 125 °C electronics / environment: -25 ... 85 °C storage: -40 ... 85 °C

Electrical protection

Short-circuit protection	permanent
Reverse polarity protection	no damage, but also no function
Electromagnetic compatibility	emission and immunity according to EN 61326

Mechanical stability

Vibration	10 g (25 ... 2000 Hz) according to DIN EN 60068-2-6
Shock	500 g / 1 according to DIN EN 60068-2-27

Materials

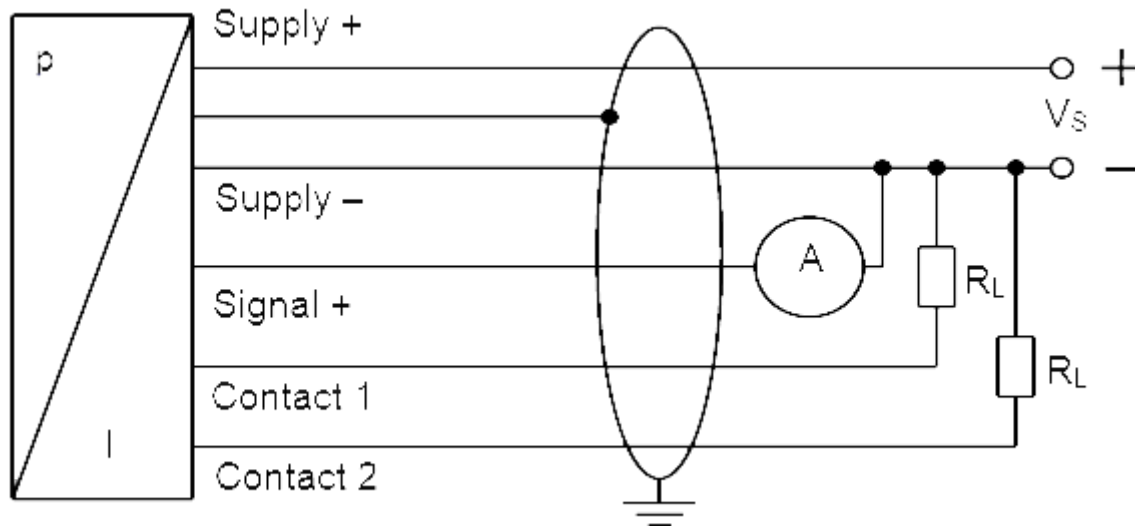
Pressure port / Housing	stainless steel 1.4571 (316 Ti) / stainless steel 1.4301 (304)
Display housing	PA 6.6, polycarbonate
Seal sensor	none (welded)
Diaphragm	stainless steel 1.4542 (17-4PH)
Media wetted parts	pressure port, seal pressure port, diaphragm

Miscellaneous

Weight	approx. 160 g
Display	4-digit, red LED display, digit height 7 mm, digit width 4.85 mm (angle 10°); range of indication -1999 ... +9999; accuracy 0.1% ± 1 digit; digital damping 0.3 ... 30 sec (programmable); measured value update 0.0 ... 10 sec (programmable)
Long term stability	? ± 0.3 % FSO / year at reference conditions
CE-conformity	EMC Directive: 2004/108/EC Pressure Equipment Directive: 97/23/EC (module A) 2

2 This directive is only valid for devices with maximum permissible overpressure > 200 bar.

Wiring diagrams



Pin configuration

Electrical connections	M12x1 (5-pin) plastic
supply +	1
supply -	3
signal + (only for 3-wire)	2
contact 1	4
contact 2	5
shield	via pressure port

Connections (dimensions in mm)

