



Main characteristics

Measuring range	0 ... 60 bar up to 0 ... 1600 bar
Turn down	5:1
Long term stability	≤ ± 0.1% FS / Year
Accuracy (20 °C) <small>(Linearity, hysteresis, repeatability, error of span and zero point)</small>	≤ ± 0.5% FS, 0.25% FS, 0.1% FS
Performance after Turn-Down	[Turn-Down] * [Accuracy] FS

Technical specifications

Measuring principle	Resistive thin film
Measuring ranges	0 ... 60 bar up to 0 ... 1600 bar
Type of pressure	Relative
Turn down	5:1
Accuracy (20 °C) <small>(Linearity, hysteresis, repeatability, error of span and zero point)</small>	≤ ± 0.5% FS, 0.25% FS, 0.1% FS
Zero thermal drift	≤ ± 0.03% FS/10 K
Span thermal drift	≤ ± 0.03% FS/10 K
Long term stability	≤ ± 0.1% FS / Year
Response time (10 ... 90%)	≤ 5 ms
Process connections	See page 3

Environment

Temperature	
Storage	-40 ... + 85°C
Compensated range	-40 ... + 85°C
Medium	-40 ... +120°C
Ambient	-40 ... + 85°C

Main features

- Fully welded version
- Robust stainless steel housing
- External programming of zero point and span with FlexProgrammer 9701
- High overpressure resistance
- Available with optional ATEX approval

Applications

- Hydraulic
- Oxygen application

Protection rating	IP65 (EN 60529) up to IP67 depending on electrical connection
Vibration IEC60068-2-6	1.5 mm p-p (10 – 57 Hz), 10 g (58 Hz – 2 KHz) 10 cycles within 2.5 h per axis
Shock IEC60068-2-27	50 g/11 ms 100 g/6 ms 10 x Imp. per axis and direction
Bump IEC60068-2-27	100 g/2 ms 4000 x Imp. per axis and direction
Random IEC60068-2-64	0.1 g ² /Hz (20 Hz – 1 KHz) 30 min per axis (>10 g RMS)

Electrical specification

Output signal / Power supply	4 ... 20 mA / 8 ... 30 VDC 0...10 V / 13 ... 30 VDC
Load impedance	
Current output	$R_{\Omega} = (U_{supply} - 8 V) / 20 \text{ mA}$
Voltage output	> 5 KΩ
Insulation resistance	>100 MΩ at 500 VDC
Electrical connections	See page 3

Material

Process connection	SS 1.4301 AISI 304
Housing	SS 1.4404 AISI 316L
Diaphragm	SS 1.4542 AISI 630
Sealing	NBR or FKM (Viton®)
Cable	PUR

Surface cleanliness for oxygen application

Pieces in contact with ≤ 220 mg/m²
the medium free of oil
and grease

ATEX

ATEX II 1G Ex ia IIC T4/T6 Ga	All versions without DIN connector and with output signal code A1
ATEX II 1/2G Ex ia IIC T4/T6 Ga/Gb	All versions with DIN connector and output signal code A1
ATEX II 1D Ex ia IIIC T107°C IP6X Da	All versions with output signal code A1
Barrier data	$U_i \leq 30 \text{ V}$ $I_i \leq 100 \text{ mA}$ $P_i \leq 750 \text{ mW}$
Capacity	$C_i \leq 31 \text{ nF}$ $C_{\text{Cable}} \leq 0.12 \text{ nF/m}$
Inductivity	$L_i \leq 3 \text{ }\mu\text{H}$ $L_{\text{Cable}} \leq 1.1 \text{ }\mu\text{H/m}$
Temperature class (ambient temperature)	T1 ... T4: $-40 < T_{\text{amb}} < 85 \text{ }^\circ\text{C}$ T1 ... T6: $-40 < T_{\text{amb}} < 70 \text{ }^\circ\text{C}$
Temperature class (medium temperature)	T1 ... T4: $-40 < T_{\text{med}} < 115 \text{ }^\circ\text{C}$ T1 ... T6: $-40 < T_{\text{med}} < 75 \text{ }^\circ\text{C}$

For the application in Ex zone you have to respect the conditions mentioned in the ATEX Type Examination Certificate (SEV 11 ATEX 0129).

You find the certificates and manuals under <http://www.baumer.com/>

Approvals

CE conformity	EMC directive 2004/108/CE in accordance with EN61000-6-2, EN 61000-6-3
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Measuring ranges and overpressure safety

	Pressure in bar							
Pressure range	0 ... 60	0 ... 100	0 ... 160	0 ... 250	0 ... 400	0 ... 600	0 ... 1000	0 ... 1600
Over pressure	120	200	320	500	800	1200	2000	3200
Burst pressure	480	800	1280	2000	3200	4000	4000	4000

