



Main characteristics

Measuring range	-1 ... 0 bar up to 0 ... 400 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	Piezoresistive silicon sensor
Measuring ranges	-1 ... 0 bar up to 0 ... 400 bar
Type of pressure	Relative / Absolute
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 <small>(without cooling neck)</small>	-40 ... +125 °C
Medium <small>(with cooling neck)</small>	-40 ... +200 °C
Ambient	-40 ... + 85 °C

Main features

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

Applications

- Food
- Beverage
- Water treatment
- Chemical

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 IEC60068-2-29	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	$R_{\Omega} = (U_{\text{supply}} - 8 \text{ V}) / 20 \text{ mA}$
Voltage output	> 5 K Ω
Insulation resistance	>100 M Ω at 500 VDC
Electrical connections	See page 3

Material

Process connection	SS 1.4404 AISI 316L or Hastelloy-C
Housing	SS 1.4404 AISI 316L
Diaphragm	SS 1.4435 AISI 316L or Hastelloy-C
Sealing	NBR, EPDM or FKM (Viton®)
Cable	PUR

ATEX	
ATEX II 1G Ex ia IIC T4/T6 Ga	All versions without cooling neck, without DIN connector and with output signal code A1
ATEX II 1/2G Ex ia IIC T4/T6 Ga/Gb	All versions without cooling neck, with DIN connector and output signal code A1
ATEX II 1G Ex ia IIC T3/T4/T6 Ga	All versions with cooling neck, without DIN connector and with output signal code A1
ATEX II 1/2G Ex ia IIC T3/T4/T6 Ga/Gb	All versions with cooling neck, 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 ... T3: $-40 < T_{\text{amb}} < 45/70/75/85 \text{ } ^\circ\text{C}$ 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 ... T3: $-40 < T_{\text{med}} < 130/150/160/170/200 \text{ } ^\circ\text{C}$ T1 ... T4: $-40 < T_{\text{med}} < 115/130 \text{ } ^\circ\text{C}$ T1 ... T6: $-40 < T_{\text{med}} < 75/80 \text{ } ^\circ\text{C}$
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

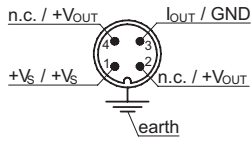
Measuring ranges and overpressure safety

	Pressure in bar							
Pressure range	0 ... 0.1	-0.1 ... 0.1	0 ... 1.6	0 ... 6	0 ... 25	0 ... 40	0 ... 100	-1 ... 399
	0 ... 0.16	-0.2 ... 0.2	0 ... 2	0 ... 10	-1 ... 24	-1 ... 39		0 ... 400
	0 ... 0.25	0 ... 0.4	0 ... 2.5	-1 ... 9				
		0 ... 0.6	-1 ... 1.5	0 ... 16				
		0 ... 1	0 ... 4	-1 ... 15				
	-1 ... 0	-1 ... 3	0 ... 20					
	-1 ... 0.6	-1 ... 5						
Over pressure	1	3	15	60	70	135	400	690
Burst pressure	2	6	30	120	140	270	800	1350

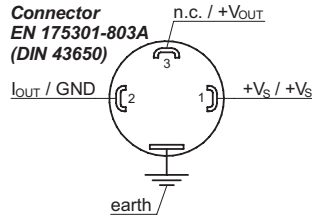
Electrical connections

Signal at 4 ... 20 mA / Signal at 0 ... 10 V

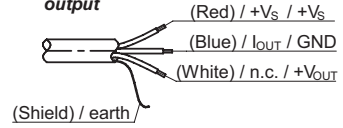
M12 4pins Connector



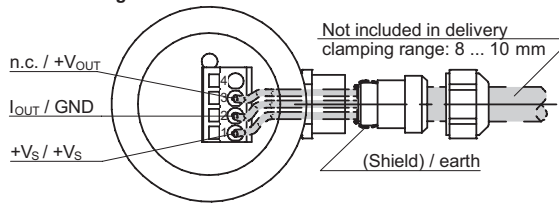
Connector EN 175301-803A (DIN 43650)



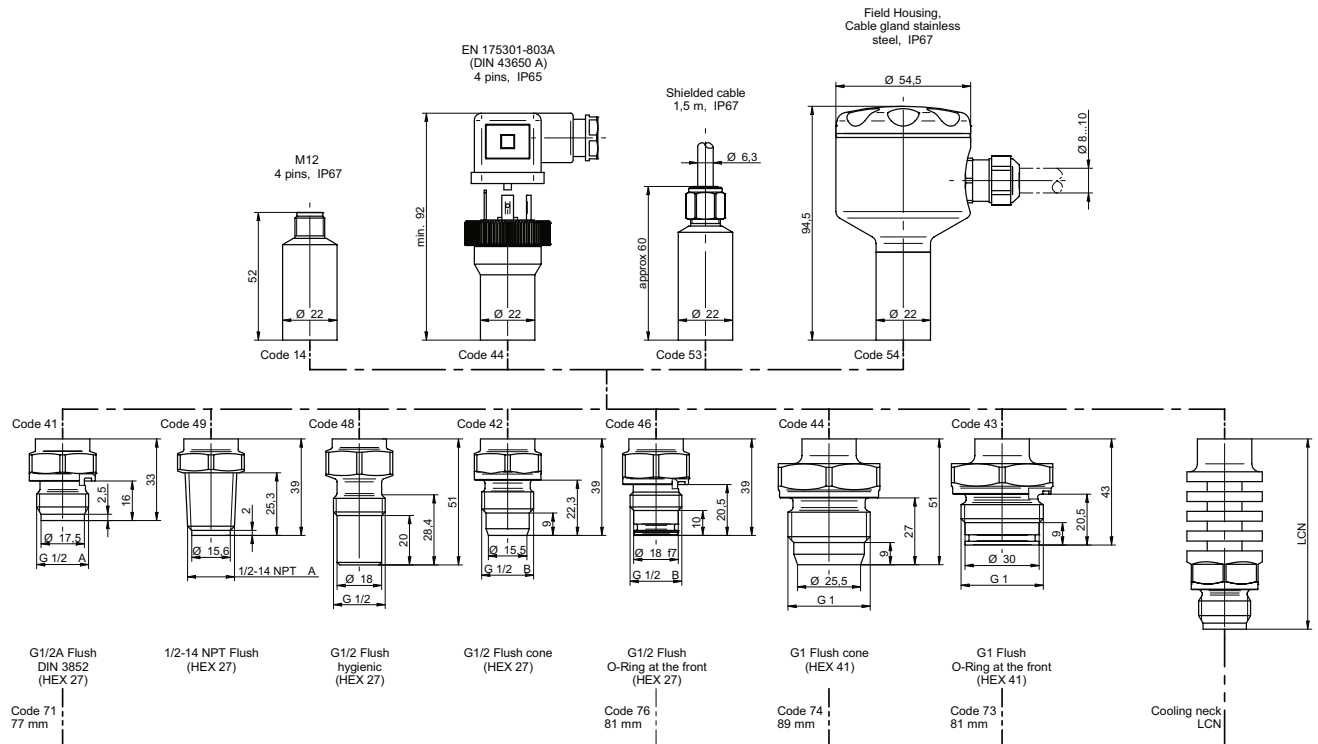
Cable output



Field housing



Dimensions (mm)



Design and specifications subject to change without notice

