



### Main characteristics

Measuring range	-1 ... 0 bar up to 0 ... 40 bar
Turn down	2:1
Performance after Turn-Down	[Turn-Down] * [Accuracy] FS
Long term stability	0.2% FS / Year
Accuracy (20 °C) <small>(Linearity, hysteresis, repeatability, error of span and zero point)</small>	≤ 0.5% FS

### Technical specifications

Measuring principle	Ceramic capacitive
Measuring ranges	-1 ... 0 bar up to 0 ... 40 bar
Type of pressure	Relative / Absolute
Accuracy (20 °C) <small>(Linearity, hysteresis, repeatability, error of span and zero point)</small>	≤ 0.5% FS
Zero thermal drift	≤ ± 0.08% FS/10 K
Span thermal drift	≤ ± 0.08% FS/10 K
Long term stability	0.2% FS / Year
Response time (10 ... 90%)	≤ 5 ms
Process connections	See page 3

### Environment

Temperature	
Storage	-25 ... + 70°C
Compensated range	-25 ... + 70°C
Medium	-25 ... + 70°C
Ambient	-25 ... + 70°C
Protection rating	IP65 (EN 60529) up to IP67 depending on electrical connection
Vibration IEC60068-2-6	1.5 mm p-p (10 – 55 Hz), 10 g (55 Hz – 2 KHz) 10 cycles within 2.5 h per axis

### Main features

- Capacitive ceramic sensor
- -1 ... 0 bar up to 0 ... 40 bar
- High overpressure resistance
- Abrasive and chemical resistant
- Robust stainless steel housing
- External programming of zero point and span with FlexProgrammer 9701

### Applications

- Pneumatic
- Medical gas
- Factory automation
- HVAC
- Agriculture vehicles
- Energy
- Water treatment
- Pumps and compressors

Shock IEC60068-2-27	50 g/11 ms 100 g/6 ms 3 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 <sup>2</sup> /Hz (20 Hz – 1 KHz) 30 min per axis (>10 g RMS)

### Electrical specification

Output signal / Power supply	4 ... 20 mA / 8 ... 32 VDC 0...10 V / 13 ... 32 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 1.4404 AISI 316L
Housing	SS 1.4301 AISI 304
Diaphragm	Ceramic (96% Al <sub>2</sub> O <sub>3</sub> )
Sealing	NBR, EPDM, FKM (Viton®)
Cable	PUR

### Approvals

CE conformity	EMC directive 2004/108/CE in accordance with EN 61000-4
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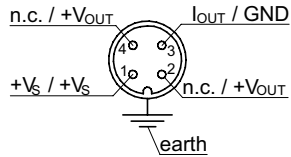
**Measuring ranges and overpressure safety**

Pressure in bar					
<b>Pressure range</b>	-1 ... 0 0 ... 1	-1 ... 0.6 0 ... 1.6 -1 ... 1.5 0 ... 2.5	-1 ... 3 0 ... 4 -1 ... 5 0 ... 6	-1 ... 9 0 ... 10 -1 ... 15 0 ... 16	-1 ... 24 0 ... 25 -1 ... 39 0 ... 40
<b>Over pressure</b>	< 5	< 14	< 30	< 50	< 105
<b>Burst pressure</b>	≥ 5	≥ 14	≥ 30	≥ 50	≥ 105

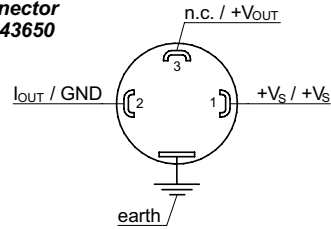
**Electrical connections**

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

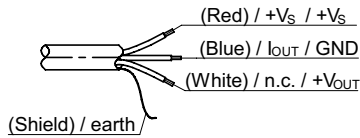
**M12  
4-pins**



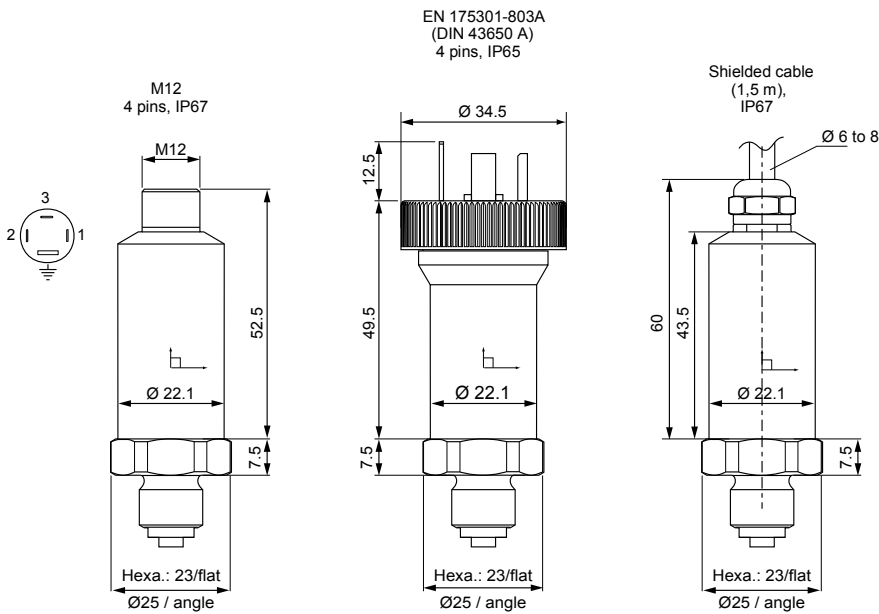
**Connector  
DIN 43650**



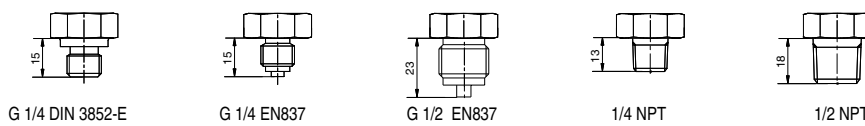
**Cable  
output**



**Dimensions (mm)**



**Hydraulic connections**



**Ordering details PBCN industrial**

	PBCN	-	1	.	3	.	xxx	.	x	.	xx	.	xx	.	xx	.	2	.	x
<b>Model</b>	Pressure transmitter	PBCN																	
<b>Housing material</b>	Stainless steel 1.4301 AISI 304		1																
<b>Accuracy</b>	0.5% FS				3														
<b>Pressure range and unit in bar</b>																			
-1...0																			B59
-1...0.6																			B72
-1...1.5																			B74
-1...3																			B76
-1...5																			B77
-1...9																			B79
-1...15																			B81
-1...24																			B82
-1...39																			B1L
0...1																			B15
0...1.6																			B16
0...2.5																			B18
0...4																			B19
0...6																			B20
0...10																			B22
0...16																			B24
0...25																			B26
0...40																			B27
<b>Kind of pressure</b>																			
Relative																			R
Absolute																			A
<b>Output signal</b>																			
4...20mA																			A1
0...10V																			A2
<b>Output connection</b>																			
M12, 4 pins																			14
DIN 43650, 4 pins																			44
Shielded cable (1.5 m)																			53
<b>Process connection</b>																			
G ¼ EN 837																			02
G ½ EN 837																			03
¼ NPT																			04
½ NPT																			05
G ¼ DIN 3852																			06
<b>Process connection material</b>																			
Stainless steel 1.4404 AISI 316L																			2
<b>Sealing</b>																			
NBR																			1
EPDM																			2
FKM (Viton®)																			3