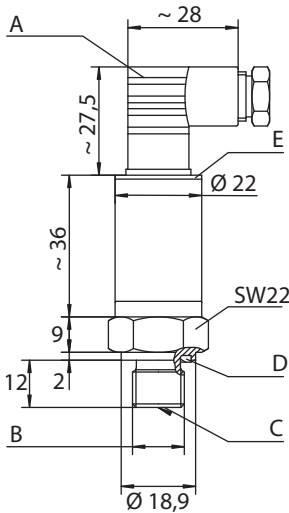




### Dimensions



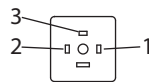
- A 4 pole device connector EN 175301-803, type C  
 B ISO 228 – G 1/4 A  
 C Restrictor insert  $\varnothing$  0.6 for measuring ranges  
 > 0 ... 60 bar (0 ... 6.0 MPa)  
 D Profile seal acc. to DIN 3869, FKM  
 E Profile seal

### Qualities

Measuring principle	piezo-resistive (poly-crystalline silicon thin film structure on high-grade steel membrane)
Pressure type	relative pressure
Output signal	4 ... 20 mA
Electrical measuring connector	4 pole device connector, DIN EN 175301-803, type C, Pg7
Mechanical connection thread	ISO 228 – G 1/4 A
Sealing material	Profile seal ring acc. to DIN 3869, FKM
Protection type (EN 60529 / IEC 529)	IP 65 (with connecting cable $\varnothing$ 4.5 ... 6 mm)
Casing material	non-corrosive high-grade steel
Membrane material	non-corrosive high-grade steel
Tightening torque	40 Nm ( $\pm$ 5 Nm)
Weight	~ 100 g
Ex-approval	Ex II 2G
Explosion protection	EEx ia IIC T4
Approval number	IBExU 06 ATEX 1159

### Pin assignment

4 ... 20 mA (two wires)



- 1 free  
 2 – Ub / signal – / GND  
 3 + Ub / signal +

Measuring range		Order number
bar	MPa	4 ... 20 mA
-1 ... 1	-0.1 ... 0.1	3X03-20-03.37
0 ... 25	0 ... 2.5	3X03-40-03.37
0 ... 60	0 ... 6.0	3X03-21-03.37
0 ... 100	0 ... 10	3X03-16-03.37
0 ... 250	0 ... 25	3X03-17-03.37
0 ... 400	0 ... 40	3X03-15-03.37
0 ... 600	0 ... 60	3X03-18-03.37
0 ... 1.000	0 ... 100	3X03-29-03.37

Common technical data on page 14. Further output signals on request.  
 Measuring ranges > 1000 ... 2000 bar (100 ... 200 MPa) on request.

## Common technical data

The technical data shown here is valid for the sensors in the HySense® PR 1xx range, mentioned on the previous pages:

- PR 130
- PR 140
- PR 150
- PR 155
- PR 190

Technical data	PR 130 / PR 140 / PR 150 / PR 190	PR 155
Overload range	1.5 x nominal pressure	
Burst pressure	3 x nominal pressure	
Signal type	Two wire analog (4 ... 20 mA), three wire analog (0 ... 10 VDC)	
Supply voltage $U_b$		
... at 4 ... 20 mA	10 ... 30 VDC	30 V
... at 0 ... 10 VDC	12 ... 32 VDC	–
Current consumption	6.5 mA	50 mA
Overvoltage protection	32 VDC	
Error limit (of final value)	comprises the influences non-linearity, hysteresis, repeatability, zero-point- and span error	
... at +22 °C (room temperature)	± 0.5 %	
... at -15 ... +85°C	< ± 1.0 %	
... at +85 ... +100°C	< ± 2.5 %	
... at -40 ... -15°C	< ± 2.5 %	
Compensation temperature range	-40 ... +100 °C	
Non-linearity	< ± 0.4 % of final value	
Reproducibility	< ± 0.1 % of final value	
Hysteresis	< ± 0.1 % of final value	
Long-term stability	< ± 0.1 % of final value/year	
Response time	< = 1 ms (10 ... 90 %)	
Frequency range	< = 1 kHz	
Isolation resistance	min. 100 MΩ	
Total resistance	$R_g = (U_b - 10 V) / 20 \text{ mA}$ (at output signal 4 ... 20 mA)	
Load resistance	$R_L = > 5 \text{ k}\Omega$ (at output signal 0 ... 10 VDC)	
Number of load cycles	> $1 \times 10^7$	
Medium temperature	-40 ... +125 °C	
Environmental temperature	-40 ... +105 °C (short term +125 °C)	-40 ... +85 °C
Storage temperature	-40 ... +125 °C	
EMV test	EN 50081-2, EN 50082-2	
Vibrational stability	5 mm 10 ... 32 Hz, 20 g 32 ... 500 Hz, DIN EN 60068-2-6	
Shock stability	50 g (11 ms half-sine)	
Mounting orientation	arbitrary	