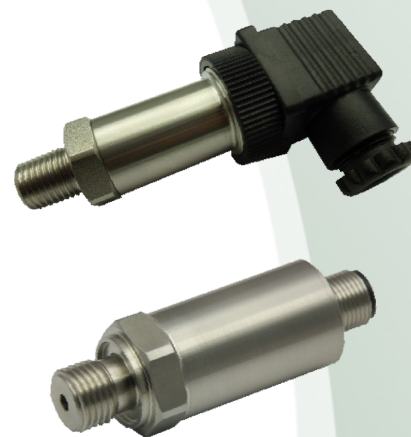


- **Stainless steel robust construction**
- **Specifically designed for very low pressure**
- **Pressure range 0-20 mbar up to 1 bar**
- **Straightforward zero correction by using a magnet**
- **Protection category IP65 / IP67**
- **Wide choice of output signals**



The CIT3100 range of pressure sensors guarantee a wide application field in a high accuracy, rugged and compact design. The stainless steel membrane is completely vacuum-sealed, extremely burst resistant and applicable for all standard media across hydraulics, pneumatics, environmental engineering, process technology, semiconductor technology and automotive engineering.

As part of the stringent manufacturing process, all CIT3100 pressure transducers are individually pressure and temperature tested to conform to DIN EN ISO 9001:2015. With compensation and adjustment performed electronically, these pressure transmitters are characterised by a very low total error and excellent long-term stability.

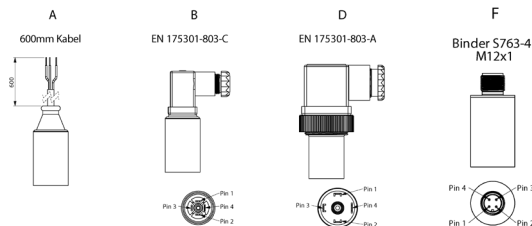
With the precision of modern electronics, the measured data is captured and processed very accurately; the zero point can be easily and securely adjusted at any time.

## Specification

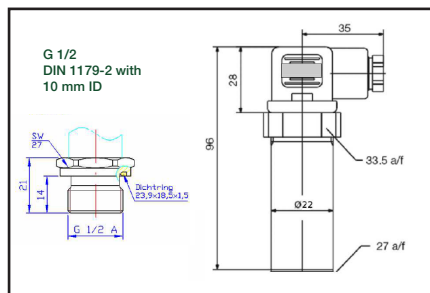
Pressure ranges	bar	0-20 m bar up to 1 bar		
Over pressure	bar	Max. 1.5 times / 1.2 times - depending on pressure range		
Burst pressure	bar	2 times / 1.5 times - depending on pressure range		
Pressure type		Gauge, vacuum		
Wetted parts :		316L Stainless steel		
Weight	g	app. 200		
Supply voltage		10...30V -> 4-20mA 14...30V -> 0...10V		
Output signals		4...20 mA - 2 wire. 0...5 V - 3 wire. 0...10V - 3 wire, ratiometric		
Adjustability of zero		Straightforward zero correction by using a magnet		
Accuracy	% FS	< 100 mbar 2,5 > 100 mbar 0,5		
Non-linearity	% FS	≤ 0.25 > 100m bar		
Repeatability	% FS	≤ 0.1		
Long-term stability	% FS	≤ 0.1 1-year stability at reference conditions		
Permissible temperatures	Media temperature	°C	-20...+ 80 (120)	
	Ambient temperature	°C	-20...+ 80	
	Storage temperature	°C	-20...+ 80	
Compensated temp. range		°C	-20...+ 80	
Temperature coefficient	zero	% FS	≤ 0.1 / 10K	
	FS	% FS	≤ 0.1 / 10K	
CE-conformity	Pressure equipment directive		2014/68/EU	
	EMC directive		2014/30/EU	
	Shock resistance	g	1000 to IEC 60068-2-27	mechanical
	Vibration resistance	g	20 to IEC 60068-2-6	resonance
Wiring protection	Overvoltage	VDC	32	
	Short-circuit strength		Out+ / U <sub>B</sub> - (for 1s)	
	Reverse polarity		U <sub>B</sub> + / U <sub>B</sub> -	

## Dimensions and wiring

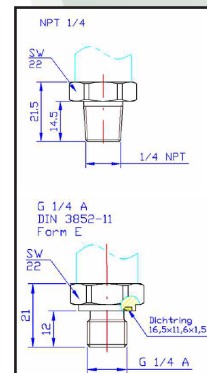
### Electrical connection





### Typical dimensions



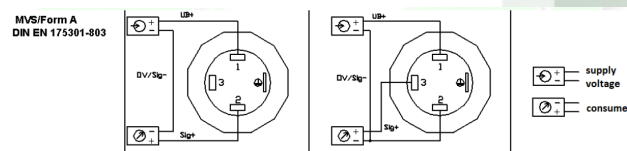
### On request



Type	Output	PIN 1	PIN 2	PIN 3	PIN 4
 <b>DIN EN 175301-803-A and C</b>	0.5 - 4.5V . 1 - 5 V . 0 - 10 V	+ Supply	- Supply	Output +	-
	4...20mA	+ Supply	Current output -	N/A	-
 <b>Round connector M12x1 A</b>	0.5 - 4.5V . 1 - 5 V . 0 - 10 V	+ Supply	N/A	- Supply	Output +
	4...20mA	+ Supply	N/A	Current output -	N/A
<b>Cable assembly</b>	Output	Red	Black	White	-
	0.5 - 4.5V . 1 - 5 V . 0 - 10 V	+ Supply	- Supply	Output +	-
	4...20mA	+ Supply	Current output -	N/A	-

### Connection diagramm

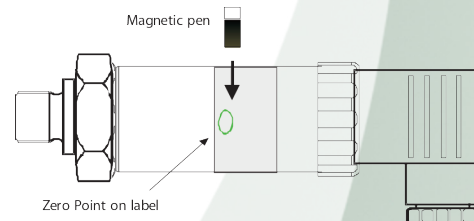
2-wire current (4...20mA)      3-wire voltage (0...10V, 0..5V)



## Installation

The zero can be set easily with a magnet within  $\pm 10\%$  of the nominal range.

For zero point correction a permanent magnet is held to the marked position on the pressure transmitter for 1/2 to 2 1/2 minutes after the power is turned on. The pressure applied at this time must be less than 12% of the nominal pressure range. This pressure value is saved as a new zero point. A magnetic field applied outside the time window does not affect the setting. This process can only be repeated after switching off and restarting the supply voltage.



### Safety information

When installing, commissioning and operating these pressure sensors, always observe the relevant safety regulations (for example, DIN VDE 0100).

## Ordering information

(Please use the characters in the chart below to create your product code)

**Sample Code: CIT3100 - G - 01000 - B - 4 - 4**

Series	Port Configuration	Pressure Range	Pressure type	Output Signal	Electrical Interface
CIT3100	G-1/2 DIN 1179-2 with 10 mm ID	Please use code from table below	B = Gauge V = Vacuum	1 = 0-10 VDC 2 = 4-20 mA 3 = 1...5 V unregulated supply 4 = 0...5 V unregulated supply 5 = 0.5 - 4.5 VDC	A = 600mm standard cable B = DIN EN 175301-803 C D = DIN EN 175301-803 A F = M12x1 4 pin connector

Custom options available on request

Pressure Range									
mbar	20	40	60	100	160	250	400	600	1000
Order Code	00002	00004	00006	00010	00016	00025	00040	00060	00100