



- **Flush mount stainless steel design**
- **Up to 60 Bar pressure range**
- **High precision $\leq 0.35\%$ BFSL**
- **Programmable for zero point (offset), characteristics and output options**
- **Wide choice of output signals**

The CIT-F range of pressure sensors guarantee a wide application field in a high accuracy, rugged and compact design. The stainless steel membrane is completely vacuumsealed, 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 CIT-F pressure transducers are individually pressure

and temperature tested to conform to DIN EN ISO 9001:2008. With compensation and adjustment performed electronically these pressure transmitters are characterised by a very low total error and excellent long-term stability.

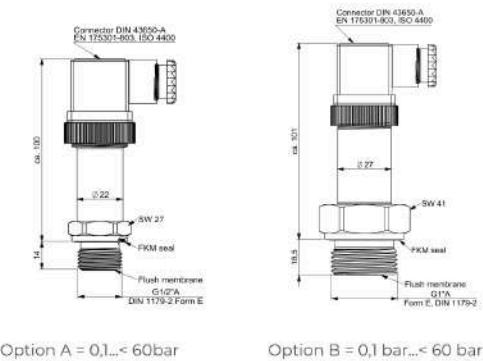
With the precision of modern electronics the measured data is captured and processed very accurately. The measuring range can be set up through the digital interface, and with permanent magnets the zero point can be easily and securely adjusted at any time.

Specifications			
Pressure ranges		bar	0.1, 0.16, 0.25, 0.4, 0.6, 1.0, 1.6, 2.5, 4, 6, 10, 16, 25, 40, 60
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
Kind of pressure			Gauge pressure
Wetted parts			Stainless steel 316L
Weight		g	app. 200
Supply voltage			10...32V-> 4-20mA 12-32VDC-> 0...10V 8...32VDC-> 0...5V
Output signals			4...20 mA - 2 wire. 0...5 V - 3 wire. 0...10V - 3 wire. Others on request
Adjustability of zero			Straightforward zero correction by using a magnet
Accuracy **		% FS	0.45% limit point / 0.35% BFSL (Including non-linearity, zero point and full scale error, hysteresis, non-linearity and repeatability). Compensation measurement and adjustment for vertical mounting position
Non-linearity ***		% FS	0.1% BFSL
Repeatability		% FS	0.1

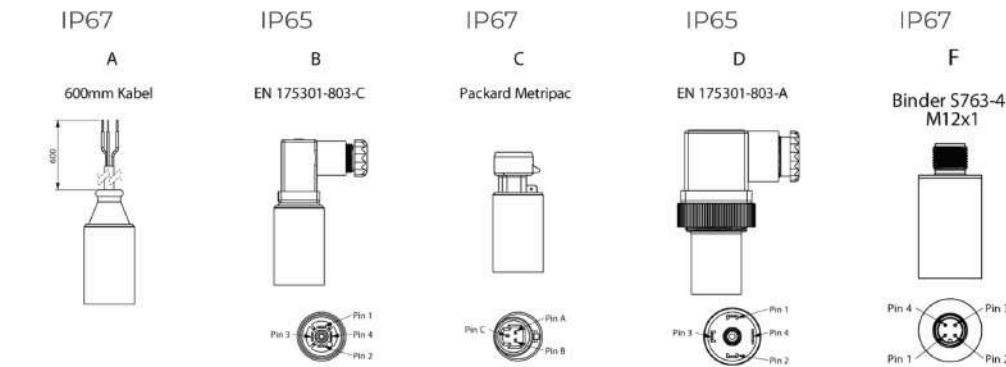
Specifications			
Long-term stability		% FS	0.1 1-year stability at reference conditions
Permissible temperatures		°C	-20...+ 100
		°C	-20...+ 80
		°C	-20...+ 100
Compensated temp. range		°C	-20...+ 80
Temperature coefficient	zero	% FS	0.15 / 10K
	FS	% FS	0.15 / 10K
CE-conformity	Pressure equipment directive		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 _B - (for 1s)
	Reverse polarity		U _B + / U _B -

* Others on request
** Special custom design with optional better accuracy on request
*** Integral linearity error (FS = Full Scale, BFSL = Best Fit Straight Line)

Dimensions



Electrical connection





Wiring

Type		Output	PIN 1	PIN 2	PIN 3	PIN 4
	DIN EN 175301- 803-A and C	0,5 - 4,5V / 1 - 5 V / 0 - 10 V	+ Supply	- Supply	Output +	
		4..20 mA	+ Supply	Current output -	N/A	
	Round connector M12 x 1 A	Output	PIN 1	PIN 2	PIN 3	PIN 4
		0,5 - 4,5V / 1 - 5 V / 0 - 10 V	+ Supply	N/A	- Supply	Output +
		4..20 mA	+ Supply	N/A	Current output -	N/A
	Packard Metripac	Output	PIN A	PIN B	PIN C	
		0,5 - 4,5V / 1 - 5 V / 0 - 10 V	- Anschluss	+ Supply	Output +	
		4..20 mA	Current output -	+ Supply	n belegt	
	Cable assembly	Output	Red	Black	White	
		0,5 - 4,5V / 1 - 5 V / 0 - 10 V	+ Supply	- Supply	Output +	
		4..20 mA	+ Supply	Current output -	N/A	

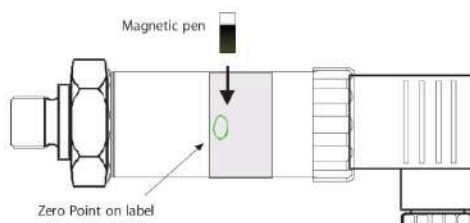
Installation

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 $\frac{1}{2}$ to $2\frac{1}{2}$ 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.

Service - The pressure sensors are maintenance-free.

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 construct your product code)

Sample code CIT-F - 1 - B - A - A - XXXXX

Series

CIT-F

Output signal

- | | |
|---|---------------|
| 1 | 0...10 VDC |
| 2 | 4...20 mA |
| 3 | 1...5 VDC |
| 4 | 0...5 VDC |
| 5 | 0.5...4.5 VDC |

Pressure type

- | | |
|---|------------------|
| B | Gauge |
| V | Vacuum |
| S | Sealed reference |

Process connection

- | | |
|---|--------------------|
| A | G1/2B-Form E 60bar |
| B | G1B-Form E |

Electrical connector

- | | |
|---|----------------------|
| A | 600mm standard cable |
| B | DIN EN 175301-803 C |
| C | Packard Metripac |
| D | DIN EN 175301-803 A |
| F | M12x1 4 poles |

Pressure range

See table below*

* Pressure range															
Bar	0,1	0,16	0,25	0,4	0,6	1,0	1,6	2,5	4	6	10	16	25	40	60
Order code	00010	00016	00025	00040	00060	00100	00160	00250	00400	00600	01000	016	02500	04000	06000

Custom options available on request.