

Pressure Transmitter

CTMcFB

With flush welded membrane for food / bio / pharmaceutical industries
Pressure ranges 0 – 40 mbar to 0 – 60 bar

Applications

Capacitive pressure transmitter models CTMcFB are suitable for overpressure and absolute pressure measurement of liquid or gaseous media, which do not corrode stainless steel 316L (1.4404), Viton (FPM) and aluminum oxide Al₂O₃. They are suitable for the application in food / bio / pharmaceutical industries.

Construction

The measured pressure acts directly on a ceramic membrane that deflects when pressurised. This mechanical deflection leads to a proportional change in electrical capacity, which is measured directly at the electrodes of the measuring diaphragm and the ceramic substrate. The electronics integrated in the transmitter housing transform the electrical signal into a pressure proportional output signal of 4...20 mA.

Standard Versions

Construction Type

Construction length: standard

Process Connection

Stainless steel 316L (1.4404)

- Dairy pipe DN 25/32/40 DIN 11851
- Clamp DN 25/32/40 ISO 2852
- G 1 B, G 1 ½ B
- Varivent 32/40, 50/40
- DRD flange DN 50

Measuring Cell / Sensor

Ultrapure aluminum oxide Al₂O₃

Sensor Sealing

FPM (Viton®)

Case

Stainless steel 304 (1.4301), degree of protection IP65

Pressure Ranges

Overpressure, absolute pressure (a), overrange protection (üs)

Pressure ranges	(a)	üs	Pressure ranges	(a)	üs
in bar					
0 – 40 mbar			0 – 4	x	25
0 – 60 mbar			0 – 6	x	40
0 – 100 mbar		4	0 – 10	x	40
0 – 160 mbar		5	0 – 16	x	40
0 – 250 mbar		6	0 – 25	x	60
0 – 0.4		6	0 – 40	x	60
0 – 0.6		10	0 – 60	x	100
0 – 1	x	10			
0 – 1.6	x	18			
0 – 2.5	x	25			

Overpressure Version

The corresponding vacuum and compound ranges according to DIN EN are also available.

Output Signal

4...20 mA 2-wire

Supply voltage

9...32 V DC

Load impedance

(U_b – 9 V) / 0.02 A

Measuring Accuracy

< ±0.2 % of full scale value (including non-linearity, hysteresis and non-repeatability)



Temperature Ranges

Operating temperature

–25 / +80 °C (–13 / +176 °F)

Diaphragm

–40 / +100 °C (–40 / +212 °F),
<0.5 h up to +125 °C (+257 °F)

Temperature Influence in the Rated Temperature Range

Zero point

<0.015 % / 10 K

Span

<0.01 % / 10 K

Long-Term Stability of Zero Point and Span

Better than ±0.15 % p.a.

Reverse Voltage Protection

Available

Electrical Connection

Plug connector DIN EN 175301-803 type A

Position of Installation / Position of Connection

Any

EMC

EN 61000-6-3, 61000-6-2

Options

- Connection thread ½" NPT, G ¼ B
- Sensor sealing NBR, EPDM
- With attached digital display model DASA according to data sheet 9912
- Ceramic sensor 99.9 %

Special Versions Upon Request

- Other connection threads
- Other sensor sealings
- Other pressure ranges
- Other electrical connections
- Other wetted parts

Ordering Information

Basic model
Absolute pressure
Process connection
Pressure range
Output signal
Any options

CTMcFB
(a)
e.g. clamp DN 25
e.g. 0 – 6 bar
4...20 mA
cf. above

Example

**CTMcFB (a), clamp DN 25,
0 – 6 bar, 4...20 mA**

www.armano-messtechnik.com

ARMANO

ARMANO Messtechnik GmbH

Location Beierfeld

Am Gewerbepark 9 • 08344 Grünhain-Beierfeld
Tel.: +49 3774 58 – 0 • Fax: +49 3774 58 – 545
mail@armano-beierfeld.com

Location Wesel

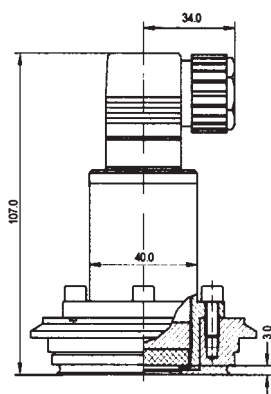
Manometerstraße 5 • 46487 Wesel-Ginderich
Tel.: +49 2803 9130 – 0 • Fax: +49 2803 1035
mail@armano-wesel.com

9820.3

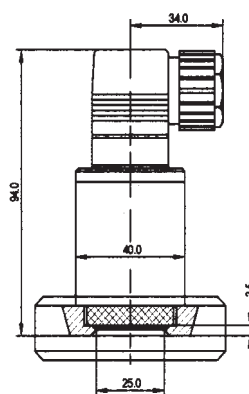
04/22

Case Configuration, Dimensional Data and Weight, Wiring Diagram

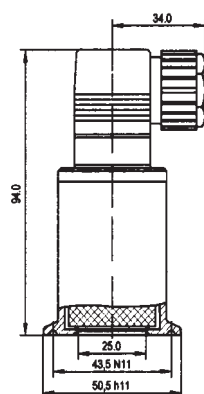
Varivent



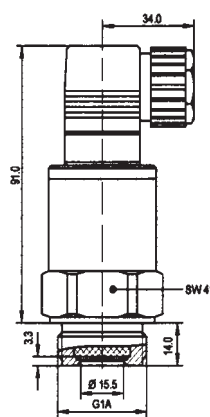
Dairy Pipe DN 25



Clamp DN 25



G 1 A



Wiring Diagram

2-wire

