Dynisco

Model EMT450 2

Intrinsically safe melt pressure transmitter for pressure measurement in hot media Series EMT450 2 with flange

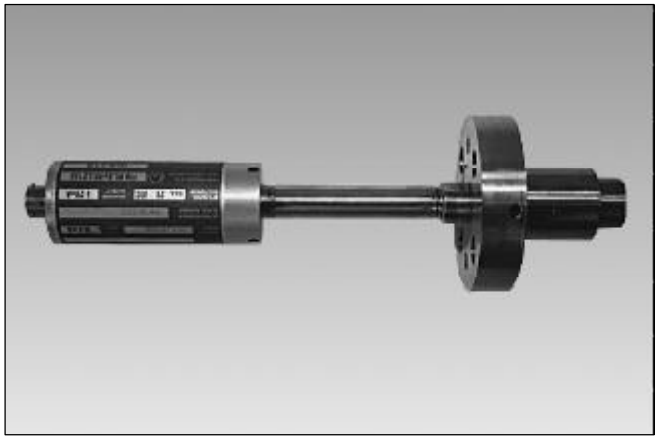
Description

The intrinsically safe melt pressure transducer series EMT based on the proven melt pressure transmitter series MDT. The integrated, PTB-approved, 2-wire mAmp amplifier converts the process pressure into an proportional output signal. The 2-wire mAmp-amplifier technique is insensitive to noise and well suited for economical long cable runs.

Many of the features found in Dyniscos standard MDT-series have been incorporated into the EMT-series, including proven bonded strain gauge construction for stable operation, a rigid stem between the amplifier housing and the diaphragm and a flush diaphragm.
Another advantage is the electrical built-in calibration.

Features

- Intrinsically safe according Ex-safety class EEx ia IIC T5 up to 80 °C and EEx ia IIC T1-T4 up to 85 °C
- Installation for media temperature up to 400 °C
- Rigid stem between diaphragm and housing
- Rigid stem with flange
- Electrical built-in calibration



Technical Data / Operating Data

Pressure range	0 - 1,75 bar to 0 - 7 bar	Maximum overload (without influencing operating data)	3 x pressure range
Accuracy	± 1.0 % f.s.v.		
Repeatability	± 0.2 % f.s.v.	Burst pressure	6 x pressure range
Resolution	infinite	Material in contact with media	15-5 Mat. No. 1.4545

Electrical Characteristics

Configuration	4-arm Wheatstone bridge strain gauge (DMS)	Power consumption	< 20 mA
		Zero balance	- 2 % / + 10 % of full scale adjustable
Output signal	4 - 20 mA (R_L<750 Ω at 28 V or <145 Ω at 15 V	Internal Shunt-Calibration	80 % of full scale ± 10 %
Supply voltage	15 - 28 V DC -15% +0% via approved electrical equipment acc. to EN 50 020	Isolation resistance	1000 MΩ at 50 V DC

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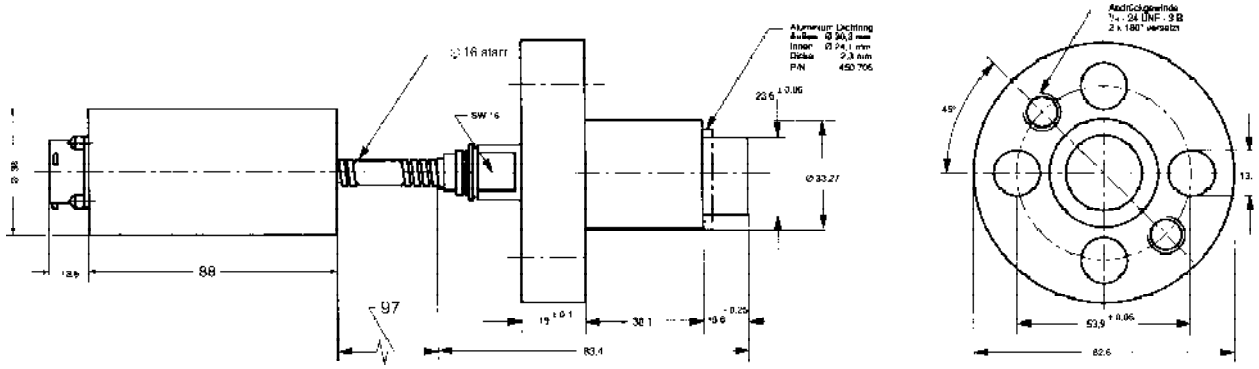
Temperature influence

Diaphragm		Housing	
Max. temperature	315 °C	Max. temperature	85 °C
Zero shift due to temperature change	± 0.01 bar / 10°C at 24°C to 232°C ± 0.04 bar / 10°C at 232°C to 315°C	Zero shift due to temperature change	± 0.2 % f.s.v. / 10 °C
		Sensitivity shift due to temperature change	± 0.1 % f.s.v. / 10 °C

Dimensions

EMT450 2



Accessories

Ex-Power Supply

Order specifications

EMT450 2 - F - XXX - XXX

Pressure range

1.75 = 0 - 1.75 bar
3.5 = 0 - 3.5 bar
7 = 0 - 7 bar

Option

Conversion table psi/bar and inch/mm on page 181.

Options on page 183.