Dynisco

Model
MDT435 F
MDT467 F

CE

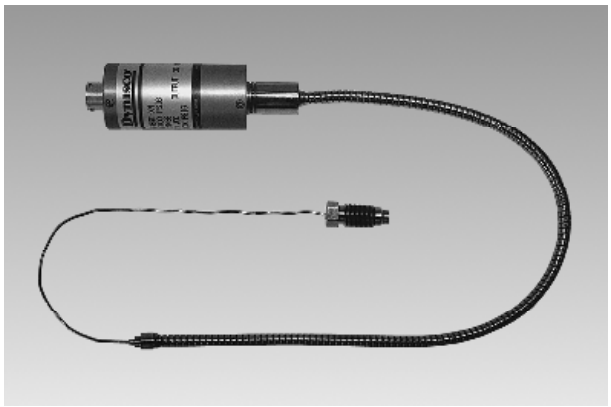
New Generation 2-wire Melt Pressure Transmitter with excellent Noise Suppression and “Auto-Zero” Push-Button-Function Series MDT435F / MDT467F

Description

The new Pressure Transmitter Series MDT provides special features for critical field applications in high noise surroundings.
The utilization of unshielded cables is also possible for long distance transmission free of noise interference for the converted process pressure signal 4-20 mA.
A further improvement is the new kind of Zero-adjustment through an integrated “Auto-Zero” function, initiated either directly in the field on the transmitter “zero push-button” or from the distance in the control room.
Many of the features found in Dyniscos standard MDA-series have been incorporated into the amplified MDT-series. These versions have an exposed thin capillary which allows 2mm radius bends in applications, where mounting space is limited. It also has a short pressure sensing element with a free spinning jam nut that simplifies installation.
Another advantage is the electrical built-in calibration.

Features

- Simple and cheap unshielded two-wire cable connection in high noise ambients
- Efficient “Auto-Zero” adjustment either through pushbutton on the transmitter or in the control room
- 4-20 mA two-wire Signal Output
- Electrical built-in calibration
- Installation for media temperatures up to 400 °C
- Small sensing tip with free spinning jam nut, thin capillary for tight places
- Failure detection through “fail-safe” signal levels acc.to NAMUR recommendation NE43



Technical Data

Pressure range	0 - 17 bar to 0 - 2000 bar
Accuracy	MDT435F ± 0.5 % FSO - up to 50 bar ± 1 % FSO MDT467F ± 1 % FSO
Repeatability	MDT435F ± 0.1 % FSO - up to 50 bar ± 0.2 % FSO MDT467F ± 0.2 % FSO
Resolution	infinite
Maximum overload (without influencing operating data)	2 x pressure range for range 1000 and 1400 bar max. 1750 bar and max. 2400 bar for range 2000 bar
Burst pressure	6 x pressure range max. 3000 bar
Material in contact with Media	15-5 PH SST (Mat. No. 1.4545) DyMAX™ coated

Electrical Characteristics

Configuration	4-arm Wheatstone bridge strain gauge (DMS)
Internal Shunt-Calibration	80 % of full scale ± 1 %
Output signal	2-wire 4 - 20 mA
Supply voltage	12 - 36 V DC
Zero balance	Through „Auto-Zero“-adjustment function
„Auto-Zero“ initiation	In the field on the transmitter, „Zero“-push-button, or externally via „short circuit“ between contacts „NP“ and „GND“
Range Calibration 80% FSO	„Short circuit“ between connection pins „CAL“ and „GND“ at the transmitter or externally from the control room
Load resistance	Maximum 1200Ω at 36 V DC Maximum 500Ω at 24V DC
Isolation resistance	1000 MΩ at 50 V DC
„Fail-Safe“ signal levels	Signal levels acc. to NAMUR recommendation NE43: <=3,6mA or >=21,5mA

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SCHNEIDER MESSTECHNIK GmbH

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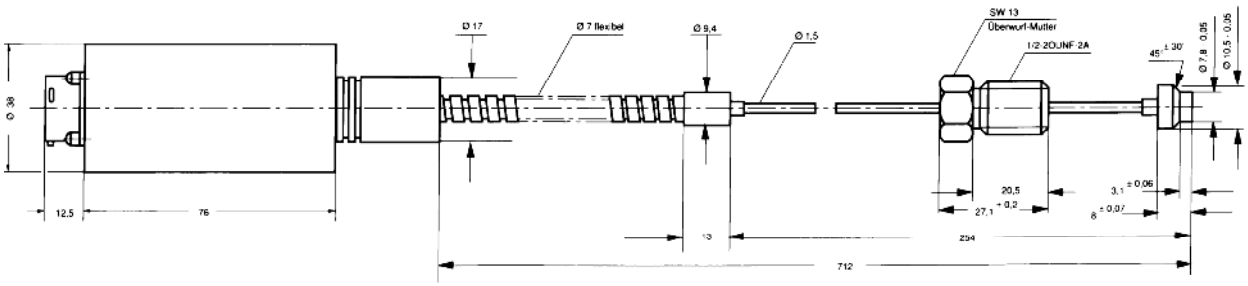
Temperature Influence

Diaphragm		**Housing**	
Max. Temperature	400 °C	Max. Temperature	85 °C
Zero shift due to temperature change	MDT435F < 0.2 bar / 10 °C MDT467F < 0.4 bar / 10 °C	Zero shift due to temperature change	± 0.2 % FSO / 10 °C
		Sensitivity shift due to temperature change	MDT435F ±0.1% FSO/10 °C -up to 50 bar ± 0.2% FSO/10 °C MDT467F ±0.3% FSO/10 °C

Dimensions



Accessories

Order Specifications

MDT4XX X - XXX - XXX

Output
F = 2-wire mA

Options

Pressure range

35 [1]	= 0 - 35 bar	**3,5C**	= 0 - 350 bar	**1,4M**	= 0 - 1400 bar
50 [1]	= 0 - 50 bar	**5C**	= 0 - 500 bar	**2M**	= 0 - 2000 bar
1C	= 0 - 100 bar	**7C**	= 0 - 700 bar		
2C	= 0 - 200 bar	**1M**	= 0 - 1000 bar		

[1] only MDT435 F

Conversion table psi/bar and inch/mm on page 141.

Options on page 136.

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