

MDT422 Pressure Sensors

AMPLIFIED TRANSDUCERS



Description

Dynisco's MDT-series amplified transducers convert process pressure into an amplified signal for long distance transmission free of noise interference. All models are available in 4-20 mA, 0-5 VDC and 0-10 VDC, 2-, 3- and 4-wire high level outputs. Many of the features found in Dynisco's standard MDA-series have been incorporated into the amplified MDT-series, including proven bonded strain gauge construction for stable operation, a flexible armored capillary between the rigid stem and the amplifier housing and a flush diaphragm. Another advantage is the electrical built-in calibration.

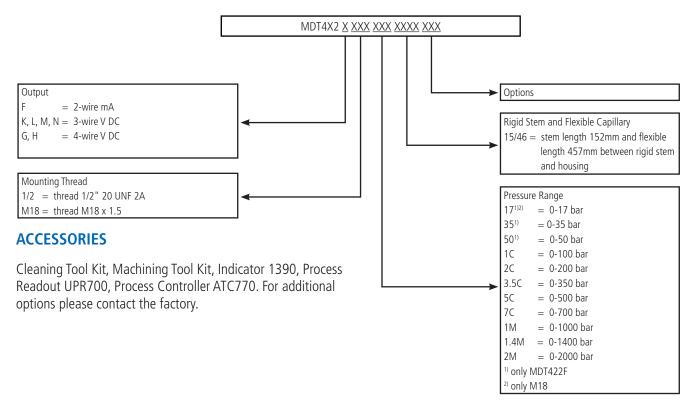
Features

- Installation for media temperature up to 400°C
- Flexible capillary between rigid stem and housing
- Electrical built-in calibration
- Various high level outputs
- 4-20 mA, 2-wire 0-10 V DC, 3/4-wire and other volt output signal ranges

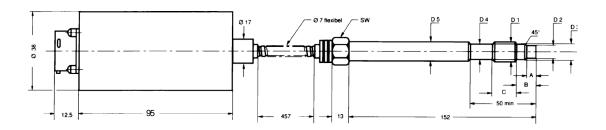
Electrical Characteristics							
Configuration:	Four-arm Wheatstone bridge strain gage (DMS)						
Internal Shunt-Calibration:	80% of full scale ±5%						
Leakage Resistance:	1000 MΩ at 50 V DC						
MDT4X2F 2-wire mA:							
Output Signal:	4-20 mA						
Supply Voltage:	10-36 V DC						
Zero Balance:	2% ±5% of full scale adjustable						
Load Resistance:	Maximum 1.2Ω at 36 V						
MDT4X2 K/L/M/N 3-wire V DC							
Output Signal:	K: 0-5 V DC, M: 1-6 V DC, L: 0-10 V DC, N: 1-11 V DC						
Supply Voltage:	15-32 V DC						
Load Resistance:	K: >5 kΩ, M: >5 kΩ, L: >10 kΩ, N: >10 kΩ						
MDT4X2 G/H							
Output Signal:	G: 0-5 V DC, H: 0-10 V DC						
Supply Voltage:	dual ±10 to ±16 V DC single 19-32 V DC						
Load Resistance:	G: >5 kΩ, H: >10 kΩ						

Temperature Influence							
Diaphragm:							
Max. Temperature:	400°C						
Zero Shift (due to temperature change):	MDT422 X < 0.2 bar/10°C MDT462 X < 0.4 bar/10°C						
Housing:							
Max. Temperature:	85°C						
Zero Shift (due to temperature change):	±0.2% f.s.v./10°C						
Sensitivity Shift (due to temperature change):	MDT422 X ±0.1% f.s.v./10°C up to 50 bar ±0.2% f.s.v./10°C MDT462 X ±0.4% f.s.v./10°C						
Technical Data and Operating Data							
Pressure Range:	0 - 17 bar to 0 - 2000 bar						
Accuracy:	MDT 422 X ±0.5% f.s.v. up to 50 bar ±1% f.s.v. MDT 462 X ±1.0% f.s.v.						
Repeatability:	MDT 422 \pm 0.1% f.s.v. up to 50 bar \pm 0.2% f.s.v. MDT 462 X \pm 0.2% f.s.v.						
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 Mat. No. 1.4545, DyMAX coated						

Ordering Guide for MDT422 Pressure Sensors



Dimensions



D1	D2	D3	D4	D5	Α	В	С	SW
1/2"-20UNF-2A	7,8 ^{-0,05}	10,5 ^{-0,05}	11 ^{-0,5}	12,5	5,3+0,25	11	16	16
M18 x 1,5	10 ^{-0,05}	16 ^{-0,1}	16 ^{-0,5}	18	6-0,25	14	20	19

All dimensions are inches (mm) unless otherwise specified.



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Refer to www.dynisco.com for access to Operator Manual and other support documentation. Rev: 0117

www.dynisco.com

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