

# 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.

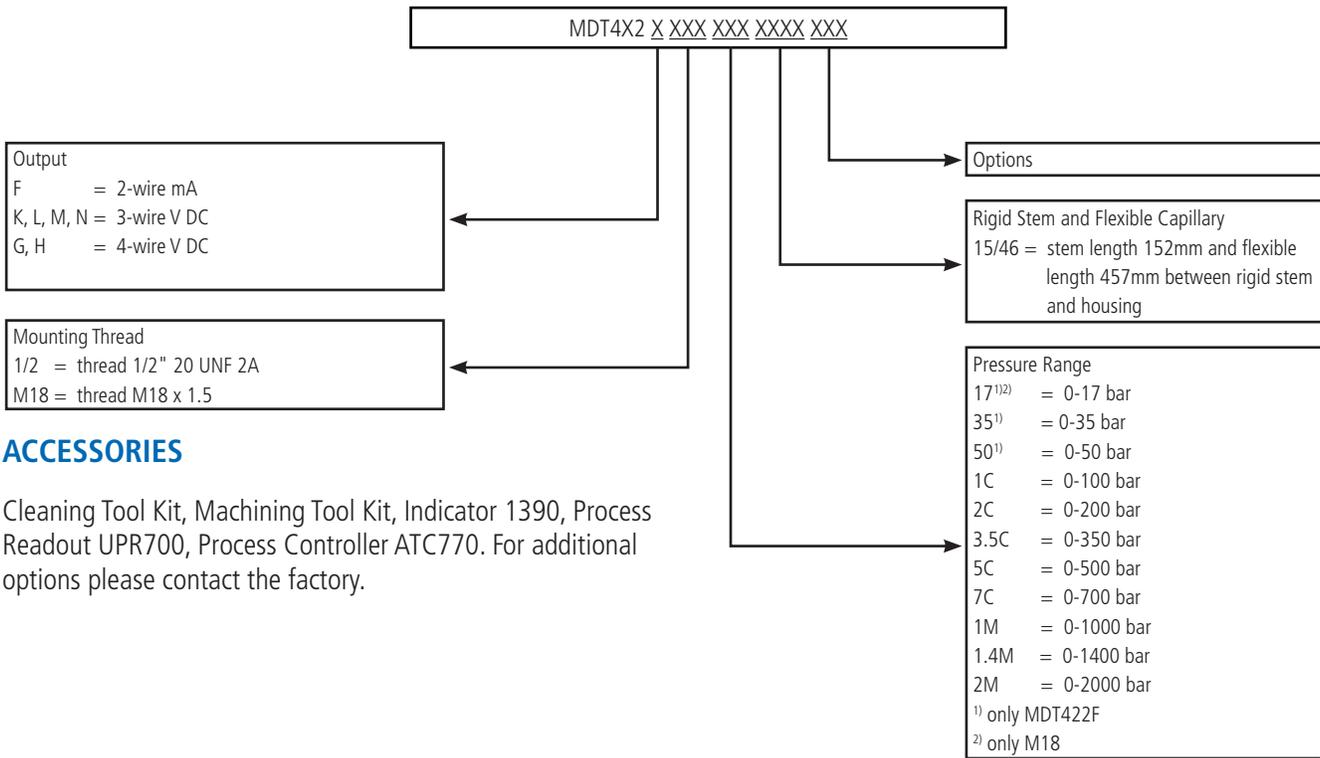
### Features

- 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 $\pm 5\%$
Leakage Resistance:	1000 M $\Omega$ at 50 V DC
MDT4X2F 2-wire mA:	
Output Signal:	4-20 mA
Supply Voltage:	10-36 V DC
Zero Balance:	2% $\pm 5\%$ of full scale adjustable
Load Resistance:	Maximum 1.2 $\Omega$ 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 k $\Omega$ , M: >5 k $\Omega$ , L: >10 k $\Omega$ , N: >10 k $\Omega$
MDT4X2 G/H	
Output Signal:	G: 0-5 V DC, H: 0-10 V DC
Supply Voltage:	dual $\pm 10$ to $\pm 16$ V DC single 19-32 V DC
Load Resistance:	G: >5 k $\Omega$ , H: >10 k $\Omega$

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):	$\pm 0.2\%$ f.s.v./10°C
Sensitivity Shift (due to temperature change):	MDT422 X $\pm 0.1\%$ f.s.v./10°C up to 50 bar $\pm 0.2\%$ f.s.v./10°C MDT462 X $\pm 0.4\%$ f.s.v./10°C
Technical Data and Operating Data	
Pressure Range:	0 - 17 bar to 0 - 2000 bar
Accuracy:	MDT 422 X $\pm 0.5\%$ f.s.v. up to 50 bar $\pm 1\%$ f.s.v. MDT 462 X $\pm 1.0\%$ 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

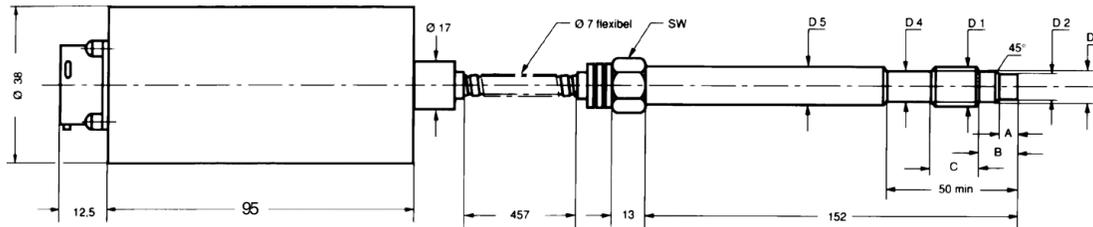
# Ordering Guide for MDT422 Pressure Sensors



## ACCESSORIES

Cleaning Tool Kit, Machining Tool Kit, Indicator 1390, Process Readout UPR700, Process Controller ATC770. For additional options please contact the factory.

## Dimensions



D1	D2	D3	D4	D5	A	B	C	SW
1/2"-20UNF-2A	7,8 <sup>-0,05</sup>	10,5 <sup>-0,05</sup>	11 <sup>-0,5</sup>	12,5	5,3 <sup>+0,25</sup>	11	16	16
M18 x 1,5	10 <sup>-0,05</sup>	16 <sup>-0,1</sup>	16 <sup>-0,5</sup>	18	6 <sup>-0,25</sup>	14	20	19

All dimensions are inches (mm) unless otherwise specified.



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 Refer to [www.dynisco.com](http://www.dynisco.com) for access to Operator Manual and other support documentation.  
 DSMDT422  
 Rev: 0117

[www.dynisco.com](http://www.dynisco.com)

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