

# MDA420 and MDA460 Pressure Sensors

*HIGH ACCURACY, SIMPLE INSTALLATION,  
REPEATABILITY AND RELIABILITY*



## Description

The Dynisco MDA420 Series transducer is a  $\pm 0.25\%$  sensor ideal for melt pressure applications requiring high accuracy, simple installation, repeatability and reliability. The MDA460 Series transducer is a  $\pm 0.5\%$  sensor ideal for melt pressure applications requiring simple installation, repeatability and reliability. The MDA420 and MDA460 transducers provide the industry standard 3.33 mV/V signal designed to work with most pressure indicators. The MDA420 comes equipped with an eight pin Bendix connector. The MDA460 comes equipped with a six pin bendix connector. Optional thermocouple or RTD configurations are available to provide melt temperature. The MDA420 and MDA460 features a 1/2-20 UNF thread for installation in standard transducer mounting holes and can be supplied with a variety of other electrical connections if desired.

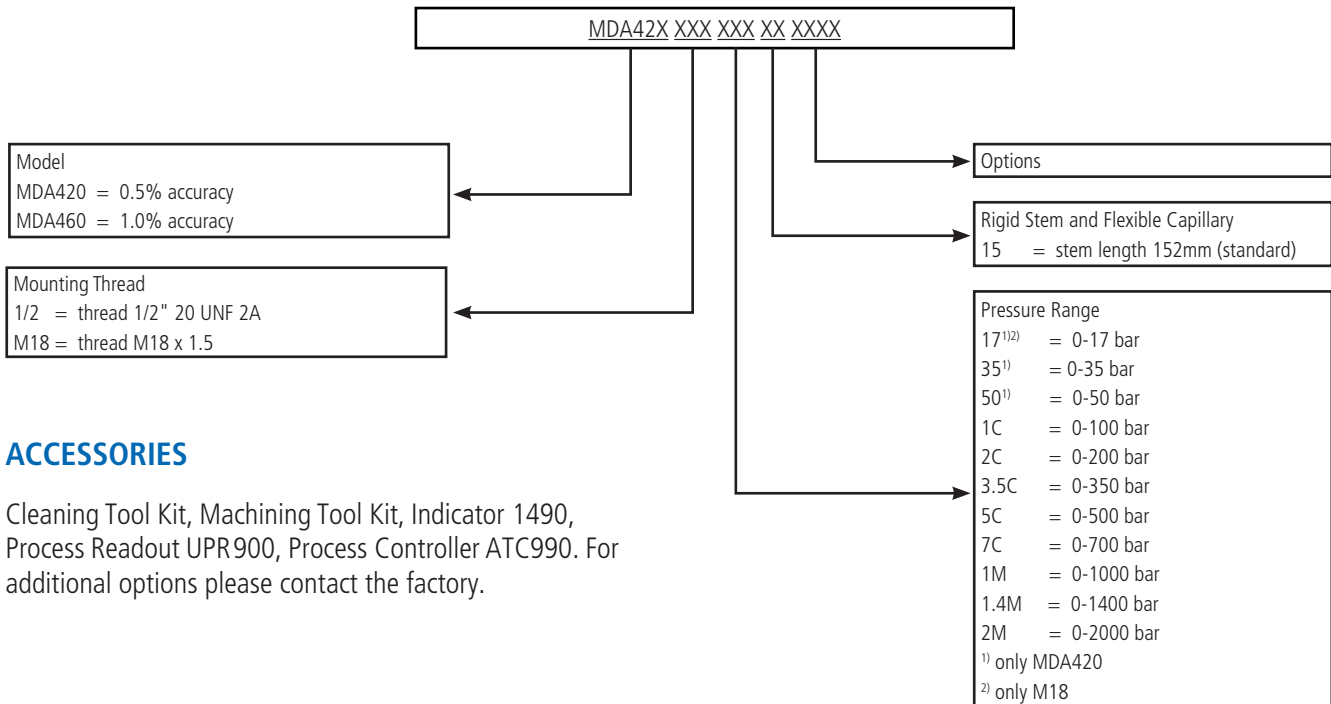
## Features

- Accuracy better than  $\pm 0.25\%$  -  $\pm 0.5\%$
- DyMax® coated stainless steel wetted parts
- Proven sensor design
- Excellent thermal stability and repeatability
- 0 - 500 to 0 - 30,000 psi
- Internal 80% shunt calibration

Performance Characteristics	
Pressure Range:	0-17 bar to 0-2000 bar
Accuracy:	MDA420 $\pm 0.5\%$ f.s.v. (up to 50 bar $\pm 1\%$ f.s.v.); MDA460 $\pm 1\%$ f.s.v.
Repeatability:	MDA420 $\pm 0.1\%$ f.s.v. (up to 50 bar $\pm 0.2\%$ f.s.v.); MDA460 $\pm 0.2\%$ f.s.v.
Resolution:	Infinite
Maximum Overload (without influencing operating data):	2x pressure range for range 1000 and 1400 bar max. 1750 bar and max. 2400 bar for range 2000 bar
Burst Pressure:	6x pressure range max. 3000 bar
Material in Contact with Media:	15-5 PH SST (Mat. No. 1.4545) DyMax <sup>®</sup> coated

Temperature Influence	
Diaphragm	
Max. Temperature:	400°C
Zero Shift Due to Temperature Change:	MDA420 <0.2 bar / 10°C MDA460 <0.4 bar / 10°C
Housing	
Max. Temperature:	120°C
Zero Shift Due to Temperature Change:	MDA420 $\pm 0.2\%$ f.s.v./10°C MDA460 $\pm 1.0\%$ f.s.v./10°C
Sensitivity Shift Due to Temperature Change:	MDA420 $\pm 0.1\%$ f.s.v./10°C (up to 50 bar $\pm 0.2\%$ f.s.v./10°C); MDA460 $\pm 0.4\%$ f.s.v./10°C
Electrical Characteristics	
Configuration:	4-arm Wheatstone bridge strain gage
Internal Shunt Calibration:	80% f.s.v $\pm 0.5\%$ MDA420 $\pm 1.0\%$ MDA460
Output Signal:	3.33 mV/V
Supply Voltage:	10 V DC, max. 12 V DC
Zero Balance:	$\pm 5\%$ f.s.v MDA420 $\pm 10\%$ f.s.v MDA460
Strain Resistance:	350Ω
Leakage Resistance:	1000MΩ at 50 Vdc

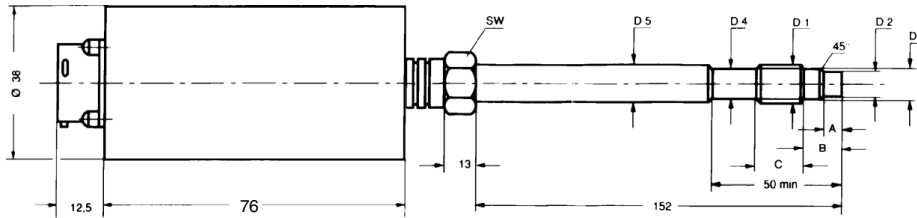
## Ordering Guide for MDA420 and MDA460 Pressure Sensors



### ACCESSORIES

Cleaning Tool Kit, Machining Tool Kit, Indicator 1490, Process Readout UPR900, Process Controller ATC990. 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.  
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