



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.

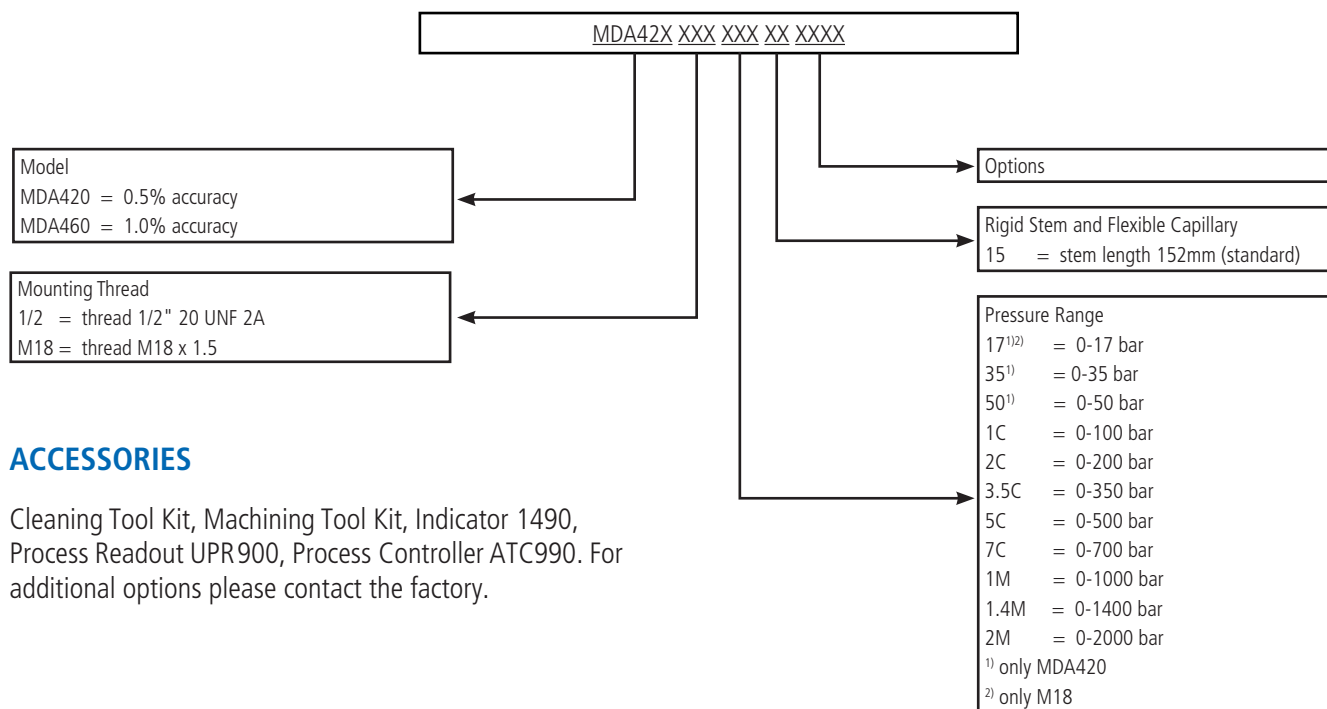
Features

- 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 [®] 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

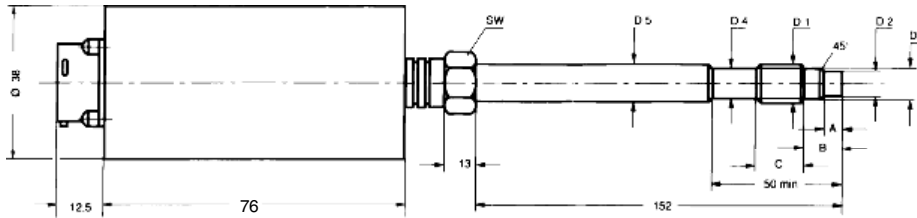
Ordering Guide for MDA420 and MDA460 Pressure Sensors



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 ^{-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.
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