

MDA410 Pressure Sensors

*IDEAL CHOICE FOR NON-MERCURY, FOOD
AND MEDICAL EXTRUSION APPLICATIONS*



Description

Dynisco's MDA410 Series of pressure transducers are the ideal choice for non-mercury, food and medical extrusion applications requiring a fill material that meets FDA and USDA requirements. Model MDA410 uses a special high temperature fill (NaK, Potassium Sodium) and an Inconel diaphragm to allow accurate pressure measurements in processes with temperatures as high as 1000°F. The transducers are supplied with a high accuracy (0.25%), great repeatability and reliability. An 6-pin bendix-style connector is used for easy connect and disconnect. The MDA410 is the most commonly used alternate fill melt pressure transducer in the world.

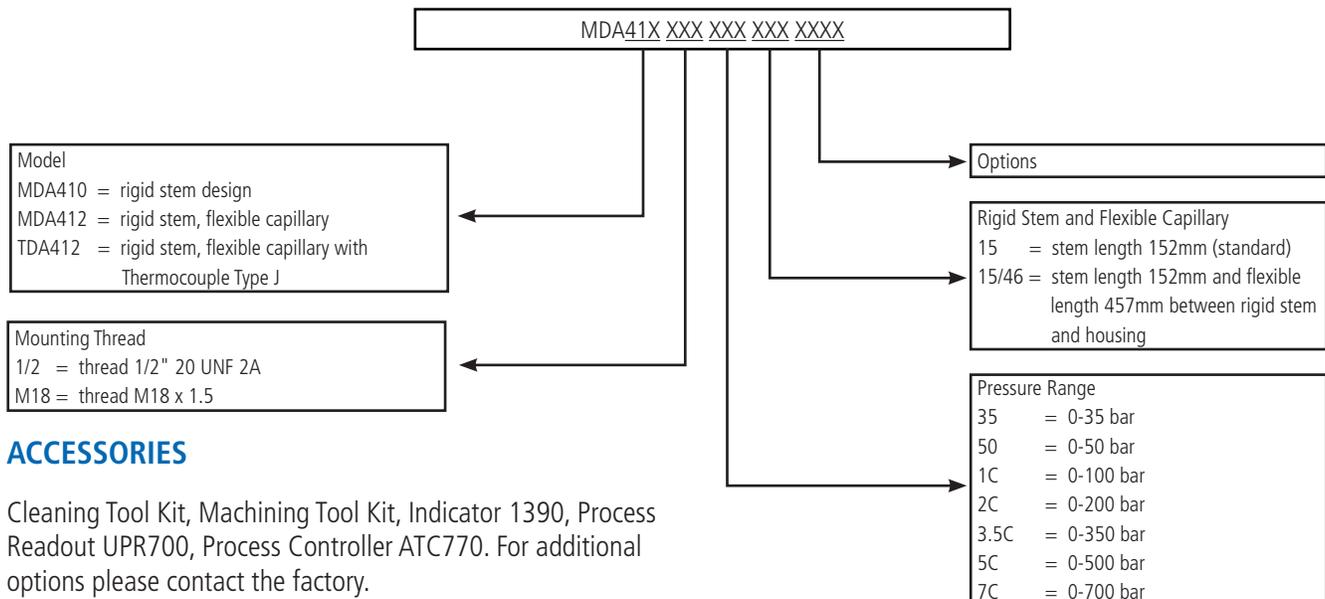
Features

- 3.33 mV/V full scale output
- Accuracy of better than $\pm 0.25\%$
- Pressure ranges from 0 - 35 BAR to 0 - 700 BAR
- Handles temperatures up to 1000°F
- Superior thermal compensation
- Inconel diaphragm
- Internal 80% shunt calibration
- CE Approved

Technical Data and Operating Data	
Pressure Range:	0 - 35 bar to 0 - 700 bar
Temperature Measurement:	Thermocouple Type J (TDA412)
Accuracy:	±0.5% f.s.v. up to 50 bar ±1% f.s.v.
Repeatability:	±0.1% f.s.v. up to 50 bar ±0.2% f.s.v.
Resolution:	infinite
Maximum Overload (without influencing operating data):	2 x pressure range
Burst Pressure:	6 x pressure range max. 3000 bar
Material in Contact with Media:	Inconel 718
Electrical Characteristics	
Configuration:	Four-arm Wheatstone bridge strain gage (DMS)
Strain Resistance:	350Ω
Output Signal:	3.33 mV/V ±2%
Zero Balance:	±5% f.s.v. adjustable
Supply Voltage:	10 V DC, max. 12 V DC
Internal Shunt-Calibration:	80% f.s.v. ±0.5%
Leakage Resistance:	1000 MΩ at 50 V DC

Temperature Influence	
Diaphragm:	
Max. Temperature:	540°C
Zero Shift (due to temperature change):	< 0.4 bar/10°C
Housing:	
Max. Temperature:	120°C
Zero Shift (due to temperature change):	±0.2% f.s.v./10°C
Sensitivity Shift (due to temperature change):	±0.1% f.s.v./10°C up to 50 bar ±0.2% f.s.v./10°C

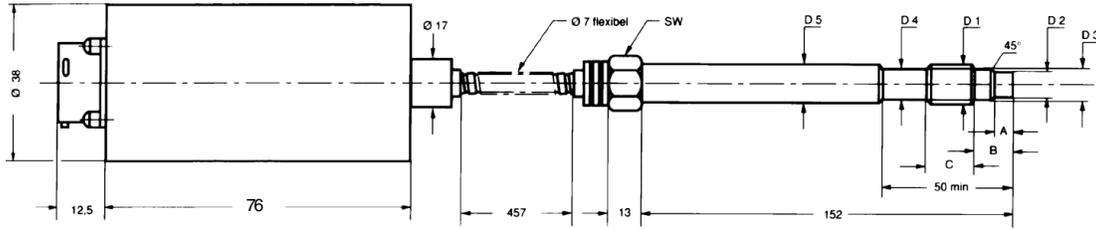
Ordering Guide for MDA410 Pressure Sensors



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 M18 x 1,5	7,8 ^{-0,05} 10 ^{-0,05}	10,5 ^{-0,05} 16 ^{-0,1}	11 ^{-0,5} 16 ^{-0,5}	12,5 18	5,3 ^{+0,25} 6 ^{+0,25}	11 14	16 20	16 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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