



Melt pressure transducer with mounting thread M10 x 1

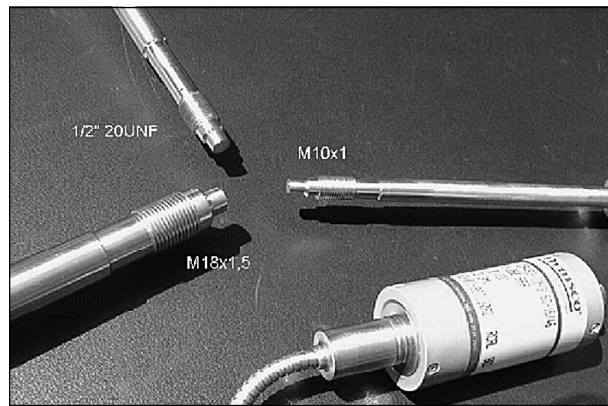
Description

The MDA transducer series with the M10 thread utilises a small 6mm diaphragm sensing element for space restricted areas making it the ideal choice for small extruders and rheometers.

The M10 thread is available in various mechanical configurations. It features all other Dynisco specifications such as 400°C max. diaphragm temperature, 2 x full range maximum pressure etc.

Features

- Diaphragm diameter 6 mm
- 40% smaller surface area vs. 1/2"-20 UNF-2A thread
- Suitable for small diameter of cylinders or pipes
- Metric mounting thread M10 x 1
- Accuracy 1.0%
- Temperature range up to 400 °C
- Pressure ranges from 0 - 350 bar to 0 - 700 bar



Technical Data / Operating Data

Pressure range	0 - 350 bar to 0-700 bar	Maximum overload (without influencing operating data)	2 x pressure range
Accuracy	± 1 % f.s.v.	Burst pressure	6 x pressure range max. 3000 bar
Repeatability	± 0.2 % f.s.v.	Material in contact with media	Inconel 718
Resolution	infinite		

Electrical Characteristics

Configuration	4-arm Wheatstone bridge strain gauge (DMS)	Supply voltage	10 V DC, max. 12 V DC
Strain resistance	350 Ω	Internal Shunt-Calibration	80 % f.s.v. ± 1.0 %
Output signal	3.33 mV/V	Leakage resistance	1000 MΩ at 50 V DC
Zero balance	± 10 % f.s.v., adjustable		

Temperature influence

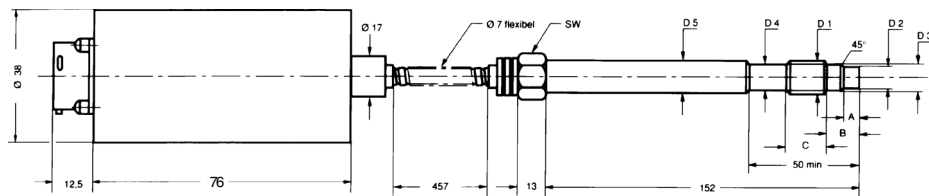
Diaphragm

Max. Temperature 400 °C
Zero shift due
to temperature
change < 0,4 bar / 10 °C

Housing

Max. Temperature 120 °C
Zero shift due
to temperature
change ± 1.0 % f.s.v./10 °C
Sensitivity shift
due to temperature
change ± 0.4 % f.s.v./10 °C

Dimensions

MDA460 M10


D1	D2	D3	D4	D5	A	B	C	SW
M10 x 1	6 ^{-0.05}	8,5 ^{-0.05}	8,5 ^{-0.5}	10	6,2 ^{-0.25}	10,8	16	11

Order specifications

MDA460 - M10 - XXX - XX
Model

MDA460 = rigid stem design
MDA462 = rigid stem, flexible capillary

M10 = Thread M10x1

Pressure range

3,5C = 0 - 350 Bar
5C = 0 - 500 Bar
7C = 0 - 700 Bar

Rigid stem / flexible stem

15 = Stem length 152 mm (Standard)
15/46 = Stem length 152 mm and
flexible length 457 mm between
rigid stem and housing

Conversion table psi/bar and
inch/mm on page 141.

Options on page 136.