

MRT 463 Multiple Range Pressure Sensor

*MAXIMUM VERSATILITY FOR
CHANGING PROCESS CONDITIONS*



Description

Now, users can select from among four pressure ranges on one transducer with the new Dynisco MRT, the first multi - range pressure transducer. By simply turning a rotary switch via an access pot on the transducer, four potential pressure ranges can be selected. The transducer can be ordered so that the equivalent psi, bar, Kg/cm² or MPa ranges can be chosen. This revolutionary melt pressure transducer offers maximum versatility to handle changing process conditions and materials.

Features

- Accuracy of better than $\pm 1.0\%$
- Four user selectable pressure ranges in one model
- Externally selectable range via rotary switch process conditions
- 3.33 mV/V FSO for selected range
- Internal 80% shunt calibration
- All stainless steel wetted parts
- Proven sensor design

Performance Characteristics

Ranges:	psi: 0 - 3,000, 0 - 5,000, 0 - 7,500, 0 - 10,000 bar: 0 - 200, 0 - 350, 0 - 500, 0 - 700 kg/cm ² : 0 - 200, 0 - 350, 0 - 500, 0 - 700 MPa: 0 - 20, 0 - 35, 0 - 50, 0 - 70
Accuracy:	±1.0% FSO
Repeatability:	±0.1% FSO
Mounting Torque:	500 inch - lbs. maximum
Overload Rating:	20,000 psi (1,400 bar)
Material in Contact with Pressure Media:	15 - 5 PH stainless steel, Dymax® coated
Weight:	2.5 lbs.

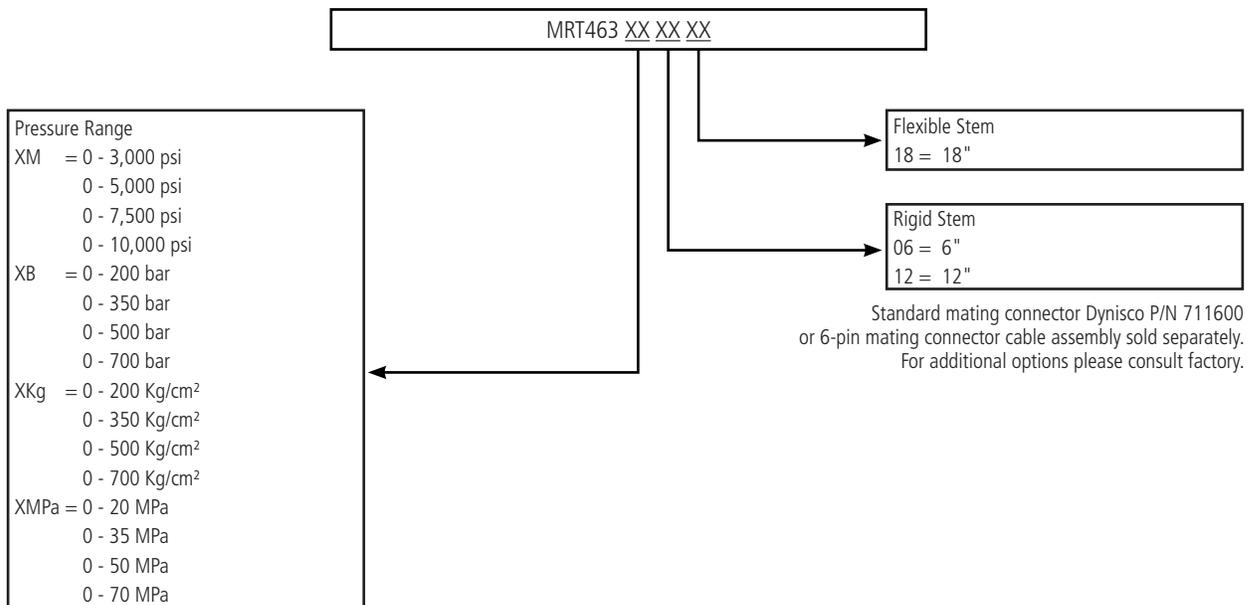
Electrical Characteristics

Configuration:	Four active arm bonded Wheatstone bridge strain gage
Bridge Resistance:	Input: 345 Ohms minimum; Output: 350 Ohms ±10%
Full Scale Output:	3.33 mV/V ±2.0%
Zero Balance:	±10% full scale
Excitation:	10 Vdc recommended, 12 Vdc maximum
Internal Shunt Calibration (R-Cal):	80% FSO ±1.0%
Insulation Resistance:	100 megohms at 50 Vdc

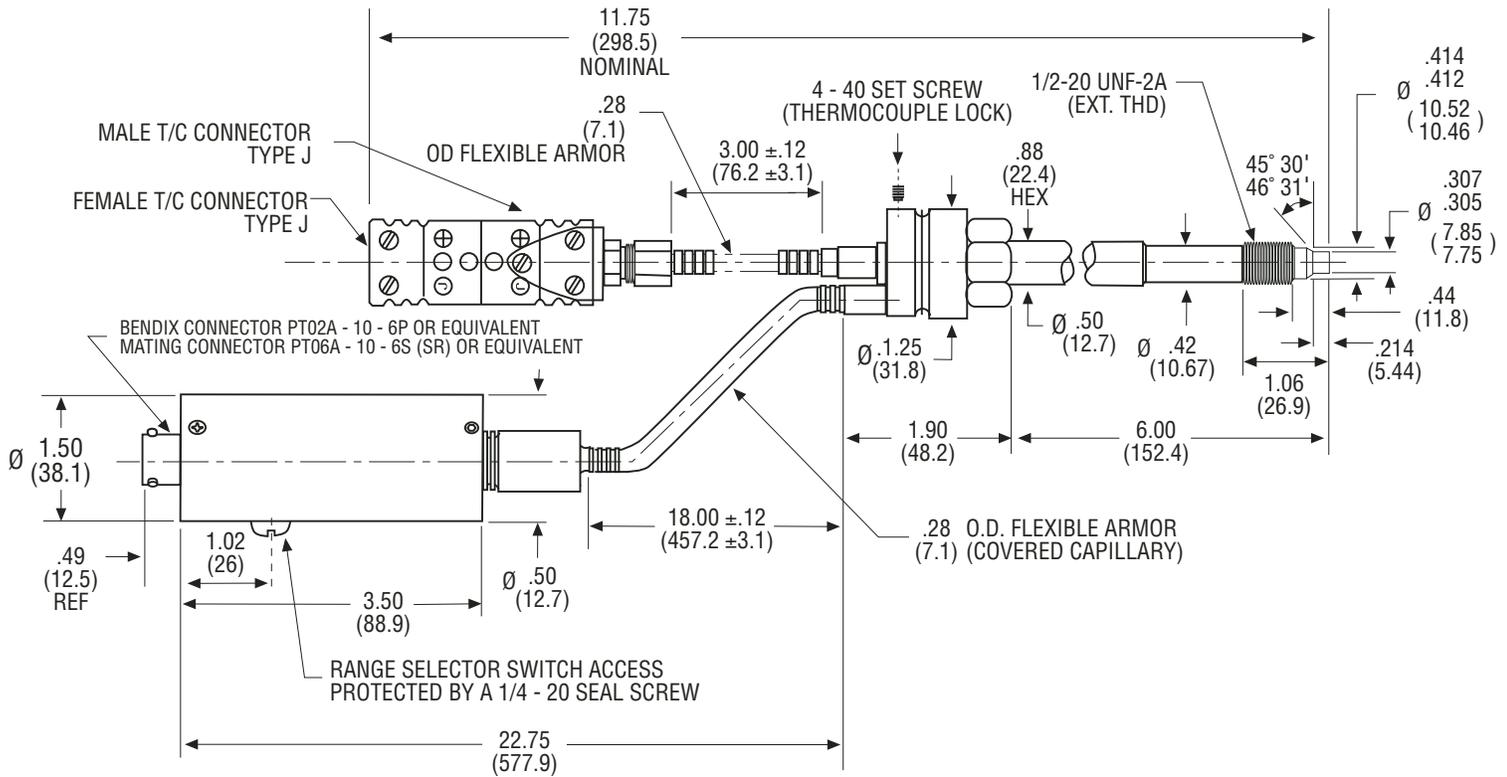
Temperature Characteristics

Transducer Diaphragm:	
Maximum Diaphragm Temperature:	750°F (400°C)
Zero Shift due to Temperature Change:	15 psi/100°F typical (27 psi/100°C)
Electronics Housing:	
Maximum Temperature:	160°F (71°C)
Zero Shift due to Temperature Change:	±0.05% full scale/°F maximum (±0.10% full scale/°C)
Sensitivity Shift due to Temperature Change:	±0.02% full scale/°F maximum (±0.04% full scale/°C)

Ordering Guide for MRT463



Dimensions



All dimensions are in inches (millimeters) unless otherwise specified