

ONEhalf20

Model RT Melt Pressure Transducer for Extrusion and Polymer Processing

Product Introduction

ONEhalf20 Model RT Melt Pressure Transducer incorporates a filled capillary design. This tried and proven design provides an electronic signal which is proportional to the measured pressure, and allows the transducer to operate at a process temperature up to 750°F. The electronics of each transducer is a Wheatstone Bridge - bonded strain gauge design insuring high accuracy, reliability and repeatability.

The Model RT style melt pressure transducer, comes standard in a 6" rigid stem configuration with a 6-pin Bendix style connector.

General Specifications

Mechanical

Pressure Ranges: 0-1,500 psi to 0-30,000 psi
metric ranges available
Mounting: 1/2-20 UNF thread
Mounting Torque: 500 inch pounds maximum
Diaphragm: 15-5PH stainless steel
Overload Capacity: 2 times FSO
Temperatures: diaphragm 750°F
electronics 225°F
Accuracy: 0.5% FSO
Repeatability: better than 0.15% FSO
Zero Balance: +/- 10% FSO

Electrical

Type: bonded strain gauge,
4 leg Wheatstone Bridge
Bridge Resistance: 350 Ohm +/- 5%
Connector: 6 pin Bendix style bayonet
Output: 3.33 mV/Volt
Excitation Voltage: 10 Vdc - recommended
Calibration: internal 80% FSO
Insulation: 1,000 Megohms at 50 Vdc

Features

- industry standard 3.33 mV/Volt output
- internal 80% shunt calibration
- direct replacement for competitor's models utilizing the Bendix 6 pin bayonet style connector
- all welded all stainless steel sealed construction
- two accuracy grades available 0.5% standard accuracy, or 0.25% optional

Model RT



Model RT with Type J Thermocouple Option



Benefits

- significant price/performance advantage over competitor's models
- reliable, repeatable and accurate pressure measurements
- ease of calibration and installation
- optional thermocouple to provide both melt pressure and temperature measurement
- wide variety of pressure ranges
- two year warranty



Model RT

Melt Pressure Transducer

for Extrusion and Polymer Processing

Ordering Guide

| <u>Model Number</u> | <u>Transducer Style</u> |
|---------------------|-------------------------------------|
| RT | rigid stem only (no flex capillary) |

| | <u>Accuracy</u> |
|------------------|--------------------------|
| "no designation" | 0.5% Accuracy - standard |
| DLX | 0.25% Accuracy |

| | <u>Rigid Stem Length</u> |
|----|--------------------------|
| 3 | 3" |
| 6 | 6" - standard |
| 12 | 12" |

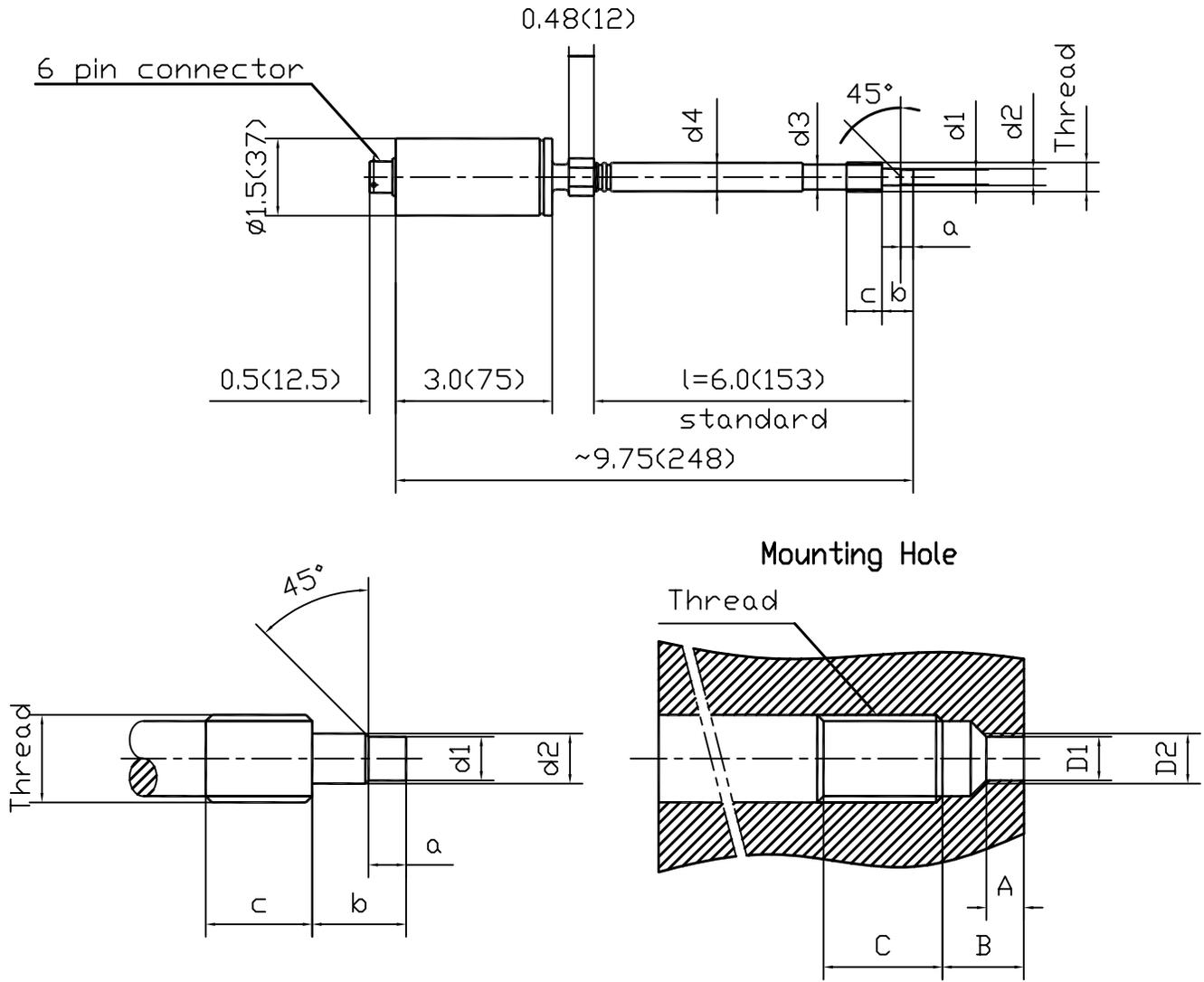
| | <u>Output</u> |
|---|-------------------------|
| Q | 2.0 mV/Volt |
| R | 2.5 mV/Volt |
| S | 3.33 mV/Volt - standard |

| <u>Standard Pressure Ranges</u> | | | |
|---------------------------------|----------------|--------|---------------|
| -1.5M | 0 - 1,500 psi | -1CB | 0 - 100 bar |
| -3M | 0 - 3,000 psi | -2CB | 0 - 200 bar |
| -5M | 0 - 5,000 psi | -3.5CB | 0 - 350 bar |
| -7.5M | 0 - 7,500 psi | -5CB | 0 - 500 bar |
| -10M | 0 - 10,000 psi | -7CB | 0 - 700 bar |
| -15M | 0 - 15,000 psi | -1MB | 0 - 1,000 bar |
| -20M | 0 - 20,000 psi | -1.4MB | 0 - 1,400 bar |
| -30M | 0 - 30,000 psi | -2MB | 0 - 2,000 bar |

| <u>Common Options</u> | |
|-----------------------|--|
| -8PIN | 8 pin connector in place of standard 6 pin |
| -TCJ | Thermocouple Type "J" |
| -TCK | Thermocouple Type "K" |
| -PT100 | 100 Ohm Platinum RTD |
| -M18 | M18 X 1.5 metric thread in place of 1/2-20 UNF |

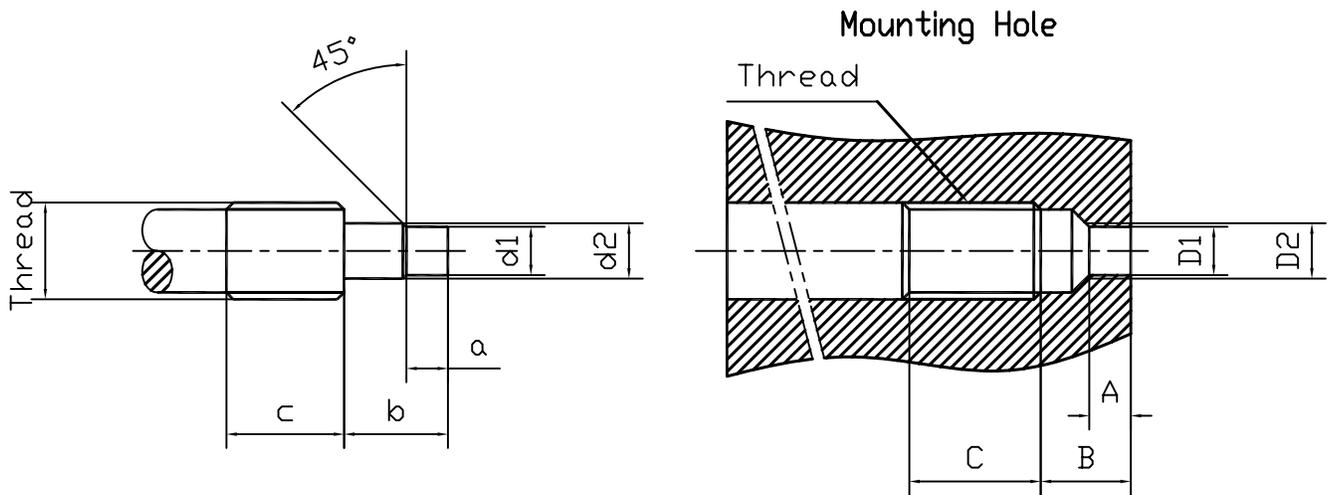
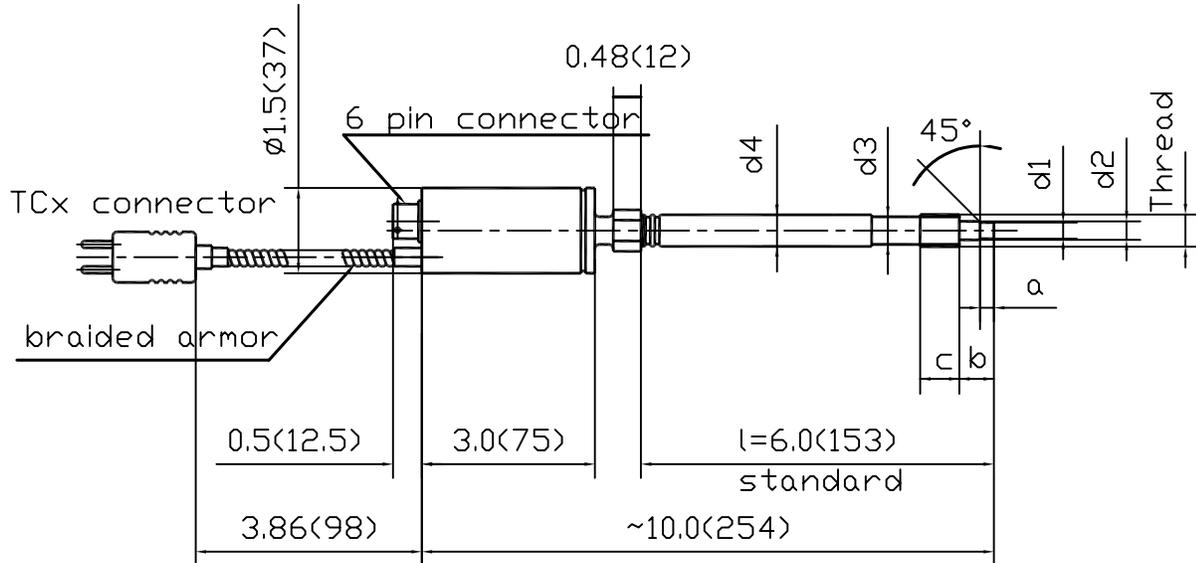
For configurations not listed please contact your local **ONEhalf20** distributor.

North America Toll Free: 877 781-1881
 Other Locations 416 781-1881
www.onehalf20.com



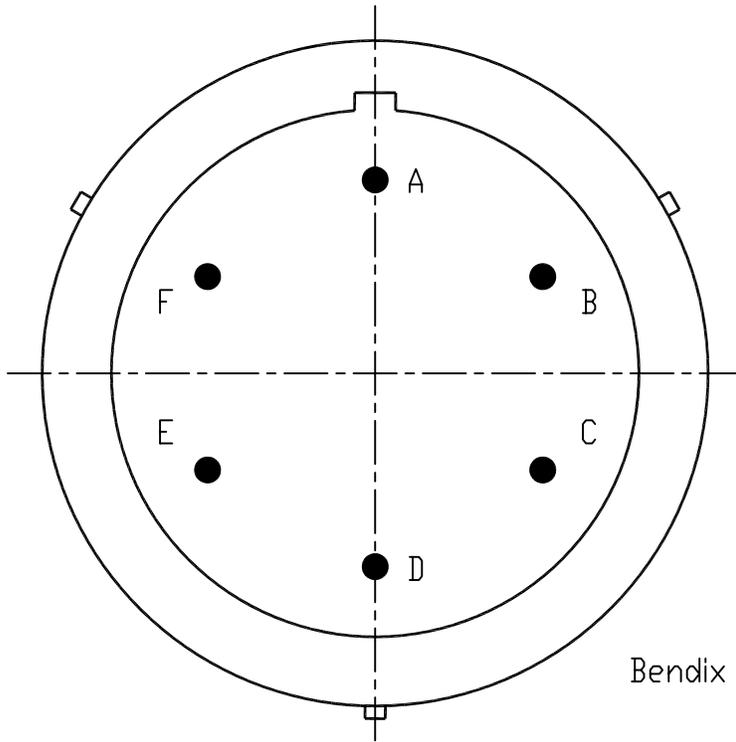
| Thread | d1 | d2 | a | b | c | d3 | d4 |
|---------|-----------------------------|-------------------------------|---------------------------|----------------------------|-----------|-------------|--------------|
| 1/2"-20 | ø0.307(7.8) ø0.303(7.7) | ø0.413(10.5) ø0.407(10.35) | 0.217(5.5) 0.211(5.35) | 0.441(11.2) 0.433(11.0) | 0.629(16) | ø0.41(10.5) | ø0.5(12.7) |
| M14x1.5 | ø0.307(7.8) ø0.303(7.7) | ø0.465(11.8) ø0.457(11.6) | 0.217(5.5) 0.211(5.35) | 0.441(11.2) 0.433(11.0) | 0.708(18) | ø0.47(12.0) | ø0.54(13.7) |
| M18x1.5 | ø0.394(10.0) ø0.386(9.8) | ø0.610(15.5) ø0.602(15.3) | 0.236(6.0) 0.230(5.85) | 0.551(14.0) 0.543(13.8) | 0.787(20) | ø0.63(16.0) | ø0.669(17.0) |

| Thread | D1 | D2 | A | B | C |
|---------|--------------------------------|--------------------------------|-------------|--------------|------------|
| 1/2"-20 | ø0.314(7.98) ø0.312(7.92) | ø0.458(11.65) ø0.452(11.47) | 0.225(5.72) | 0.395(10.02) | 0.75(19) |
| M14x1.5 | ø0.314(7.98) ø0.312(7.92) | ø0.512(13.0) ø0.504(12.8) | 0.225(5.72) | 0.395(10.02) | 0.827(21) |
| M18x1.5 | ø0.401(10.19) ø0.399(10.13) | ø0.638(16.2) ø0.634(16.1) | 0.242(6.15) | 0.402(10.15) | 1.00(25.4) |



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Bendix PT02-10-6P or Equivalent

| | mV/Volt Output (Excitation-10Vdc) |
|--------------|--------------------------------------|
| Pin A/Red | Signal(+) |
| Pin B/Black | Signal(-) |
| Pin C/White | Excitation(+) |
| Pin D/Green | Excitation(-) |
| Pin E/Blue | Calibration 1 |
| Pin F/Orange | Calibration 2 |