

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

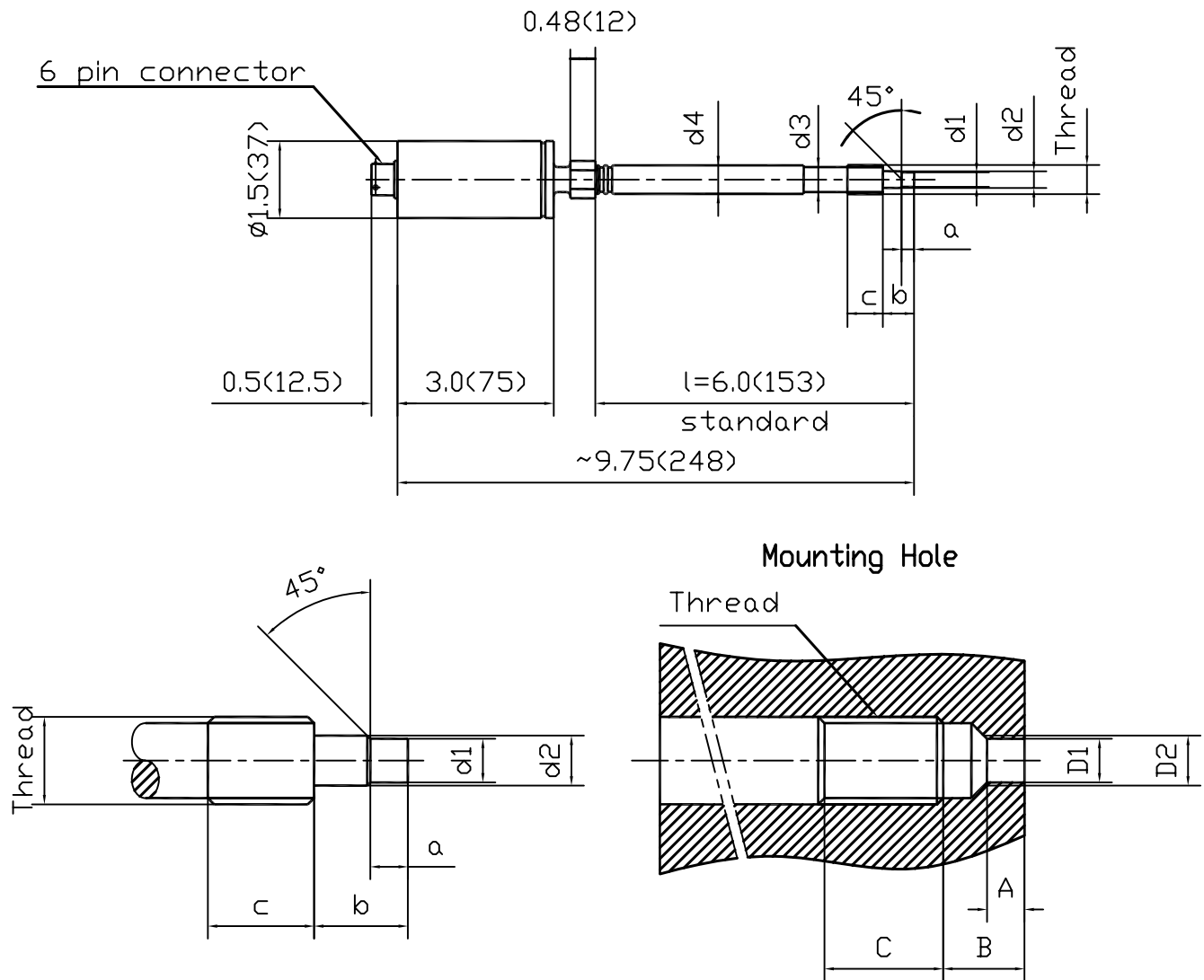
Melt Pressure Transducer

for Extrusion and Polymer Processing

Ordering Guide

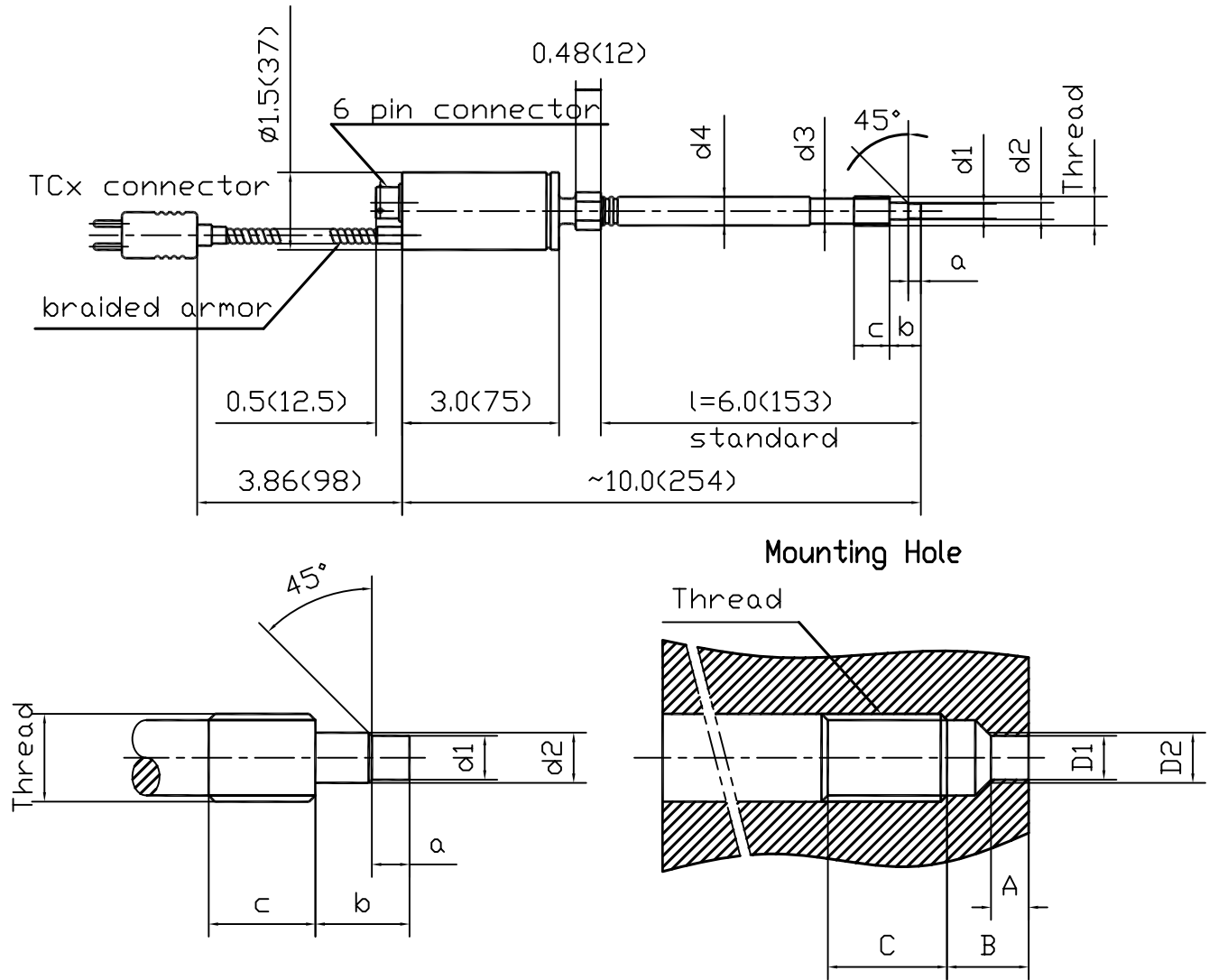
<u>Model Number</u>		<u>Transducer Style</u>	
RT		rigid stem only (no flex capillary)	
		<u>Accuracy</u>	
"no designation"		0.5% Accuracy - standard	
DLX		0.25% Accuracy	
		<u>Rigid Stem Length</u>	
3		3"	
6		6" - standard	
12		12"	
		<u>Output</u>	
Q		2.0 mV/Volt	
R		2.5 mV/Volt	
S		3.33 mV/Volt - standard	
<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



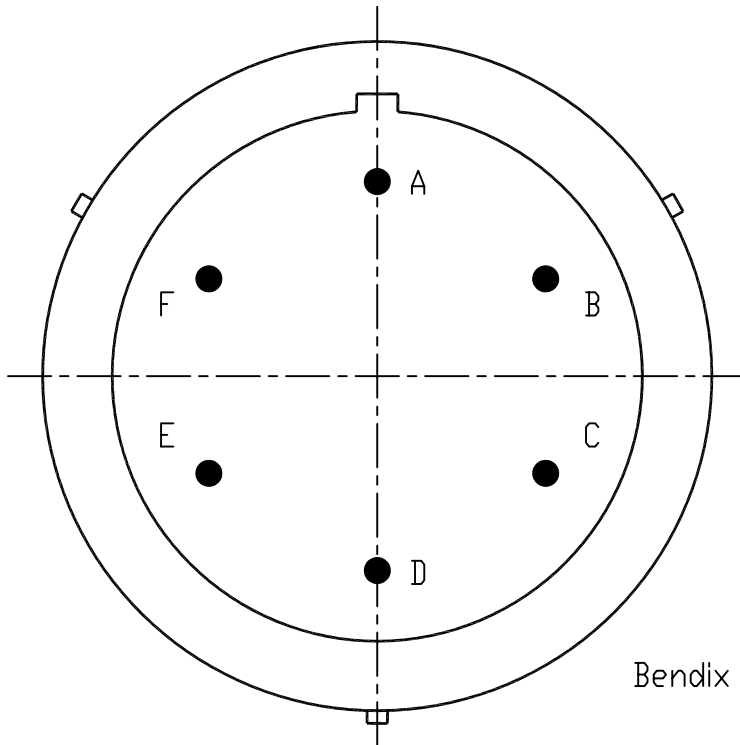
Thread	d1	d2	a	b	c	d3	d4
1/2"-20	$\phi 0.307(7.8)$ $\phi 0.303(7.7)$	$\phi 0.413(10.5)$ $\phi 0.407(10.35)$	0.217(5.5) 0.211(5.35)	0.441(11.2) 0.433(11.0)	0.629(16)	$\phi 0.41(10.5)$	$\phi 0.5(12.7)$
M14x1.5	$\phi 0.307(7.8)$ $\phi 0.303(7.7)$	$\phi 0.465(11.8)$ $\phi 0.457(11.6)$	0.217(5.5) 0.211(5.35)	0.441(11.2) 0.433(11.0)	0.708(18)	$\phi 0.47(12.0)$	$\phi 0.54(13.7)$
M18x1.5	$\phi 0.394(10.0)$ $\phi 0.386(9.8)$	$\phi 0.610(15.5)$ $\phi 0.602(15.3)$	0.236(6.0) 0.230(5.85)	0.551(14.0) 0.543(13.8)	0.787(20)	$\phi 0.63(16.0)$	$\phi 0.669(17.0)$

Thread	D1	D2	A	B	C
1/2"-20	$\phi 0.314(7.98)$ $\phi 0.312(7.92)$	$\phi 0.458(11.65)$ $\phi 0.452(11.47)$	0.225(5.72)	0.395(10.02)	0.75(19)
M14x1.5	$\phi 0.314(7.98)$ $\phi 0.312(7.92)$	$\phi 0.512(13.0)$ $\phi 0.504(12.8)$	0.225(5.72)	0.395(10.02)	0.827(21)
M18x1.5	$\phi 0.401(10.19)$ $\phi 0.399(10.13)$	$\phi 0.638(16.2)$ $\phi 0.634(16.1)$	0.242(6.15)	0.402(10.15)	1.00(25.4)



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)



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