

Model RT

Melt Pressure Transducer

for Extrusion and Polymer Processing

Product Introduction

GT Heaters 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
- welded stainless steel sealed construction

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

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Ordering Guide

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

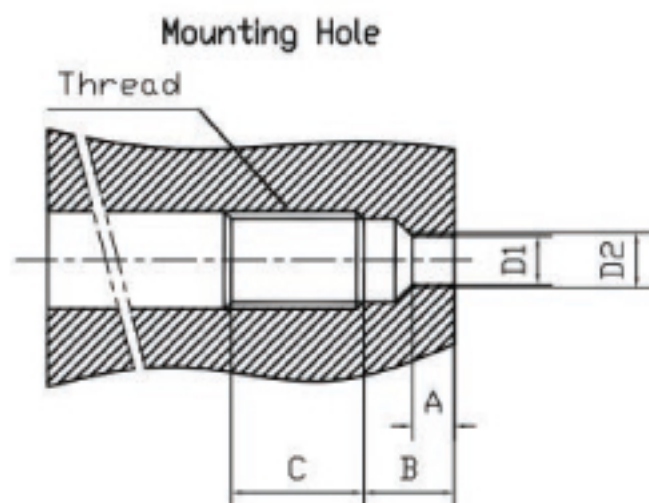
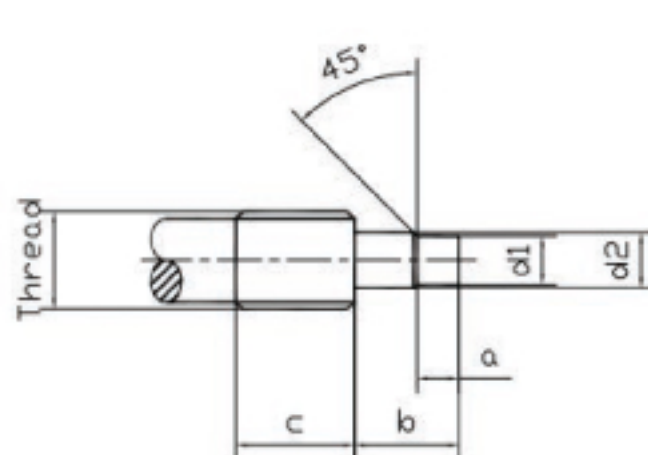
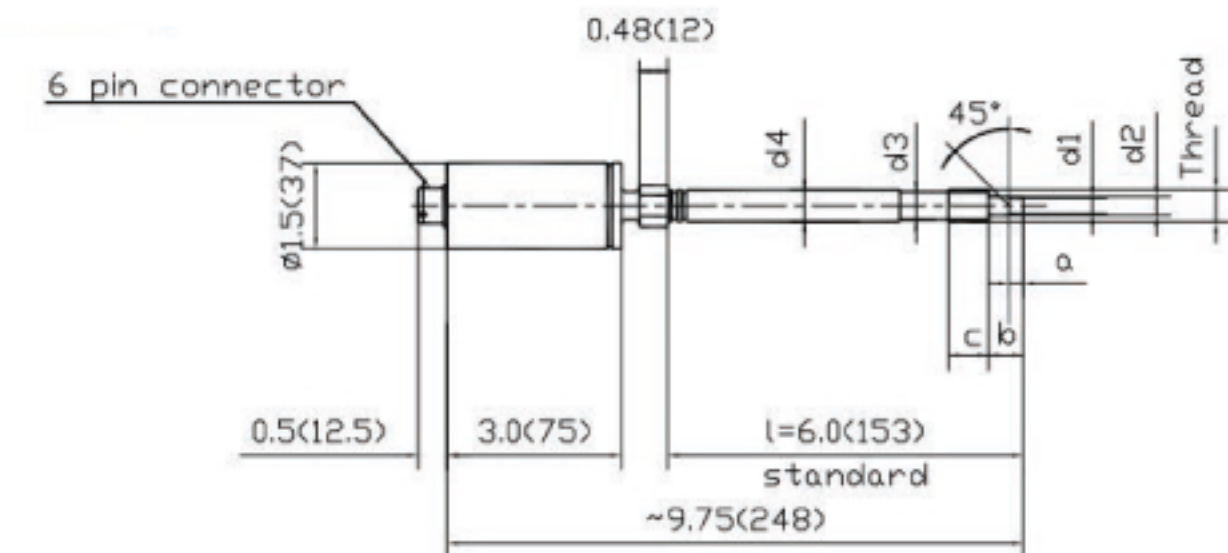
<u>Accuracy</u>	
"no designation"	0.5% Accuracy - standard
DLX	0.25% Accuracy

<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

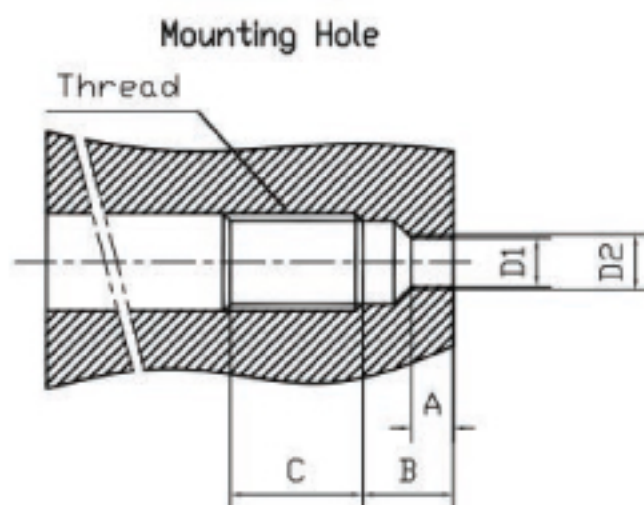
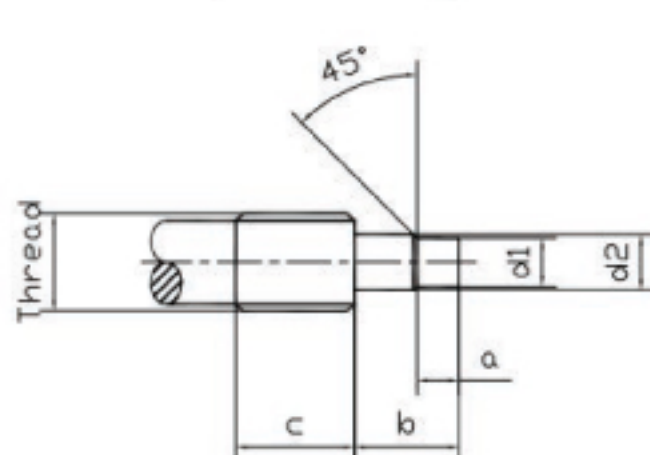
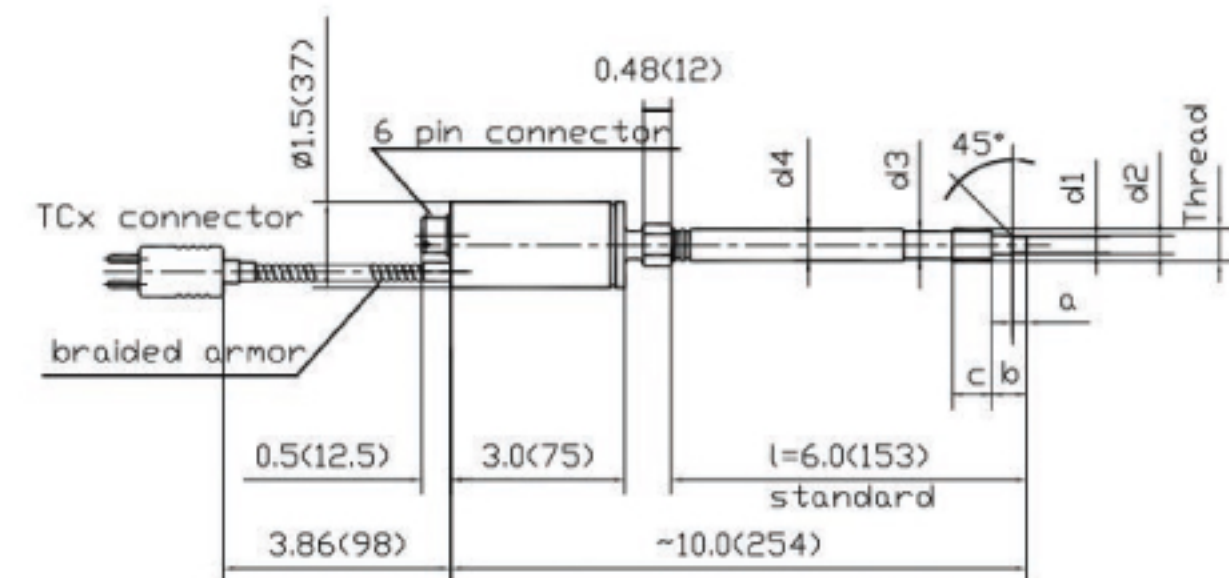
<u>Standard Pressure Ranges</u>			
-1.5M	0 - 1,500 psi	-1CB	0 - 100 bar
-3M	0 - 3,000 psi	-2CB	0 - 200 bar
-5M	0 - 5,000 psi	-3.5CB	0 - 350 bar
-7.5M	0 - 7,500 psi	-5CB	0 - 500 bar
-10M	0 - 10,000 psi	-7CB	0 - 700 bar
-15M	0 - 15,000 psi	-1MB	0 - 1,000 bar
-20M	0 - 20,000 psi	-1.4MB	0 - 1,400 bar
-30M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



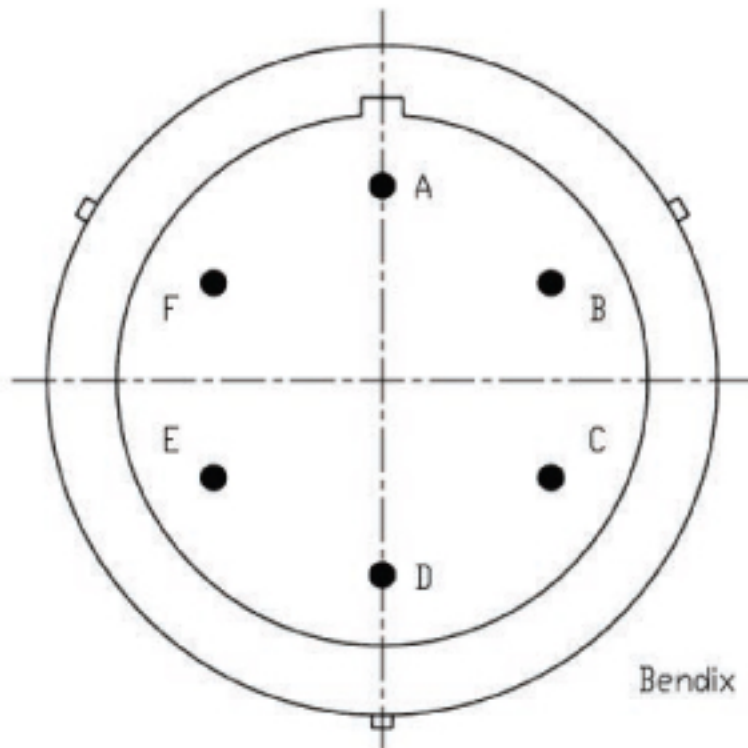
Thread	d1	d2	a	b	c	d3	d4
1/2"-20	0.307(7.8) 0.303(7.7)	0.413(10.5) 0.407(10.35)	0.217(5.5) 0.211(5.35)	0.441(11.2) 0.433(11.0)	0.629(16)	0.41(10.5)	0.5(12.7)
M14x1.5	0.307(7.8) 0.303(7.7)	0.465(11.8) 0.457(11.6)	0.217(5.5) 0.211(5.35)	0.441(11.2) 0.433(11.0)	0.708(18)	0.47(12.0)	0.54(13.7)
M18x1.5	0.394(10.0)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

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