

#### Product Introduction

**ONEhalf20** NaK filled Melt Pressure Transducers are designed specifically for food, packaging and medical processing applications. The food grade NaK fill material meets the requirements of both the FDA and the USDA. This series of melt pressure transducers utilize a Wheatstone Bridge - bonded strain gauge design insuring high accuracy, reliability and repeatability.

**ONEhalf20** NaK filled Melt Pressure Transducers are available in two distinct styles. The CTNAK style melt pressure transducer, is the classic melt pressure transducer design. The CTNAK style melt pressure transducer comprises a 6" rigid stem, along with 18" flexible capillary, for optimal thermal isolation. The RTNAK style melt pressure transducer, has only a 6" rigid stem, and is a rigid stem only version of the classic melt pressure transducer.

#### Features & Benefits

- wide variety of pressure ranges
- significant price benefit over competitor's models
- direct replacement for competitor's models utilizing the Bendix 6 pin bayonet style connector
- suitable for process temperatures up to 1000°F with standard inconel diaphragm
- NaK fill meets FDA and USDA requirements
- standard 3.33 mV/V output
- reliable, repeatable, and accurate pressure measurements
- two year warranty



#### General Specifications

##### Mechanical

Pressure Ranges: 0-500 psi to 0-10,000 psi  
metric ranges available  
Mounting: 1/2-20 UNF thread  
Mounting Torque: 500 inch pounds maximum  
Diaphragm: inconel  
Overload Capacity: 2 times FSO  
Temperatures: diaphragm 1,000°F  
electronics 225°F  
Accuracy: 0.5% FSO  
Repeatability: better than 0.20% FSO  
Zero Balance: +/- 10% FSO

##### Electrical

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



# Melt Pressure Transducers NaK Filled

Food, Packaging & Medical Processing Applications

## Ordering Guide

<u>Model Number</u>	<u>Transducer Style</u>
CTNAK	rigid stem with 18" flex armor
RTNAK	rigid stem only (not available with temperature sensor)

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

	<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>			
-5C	0 - 500 psi	-50B	0 - 50 bar
-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

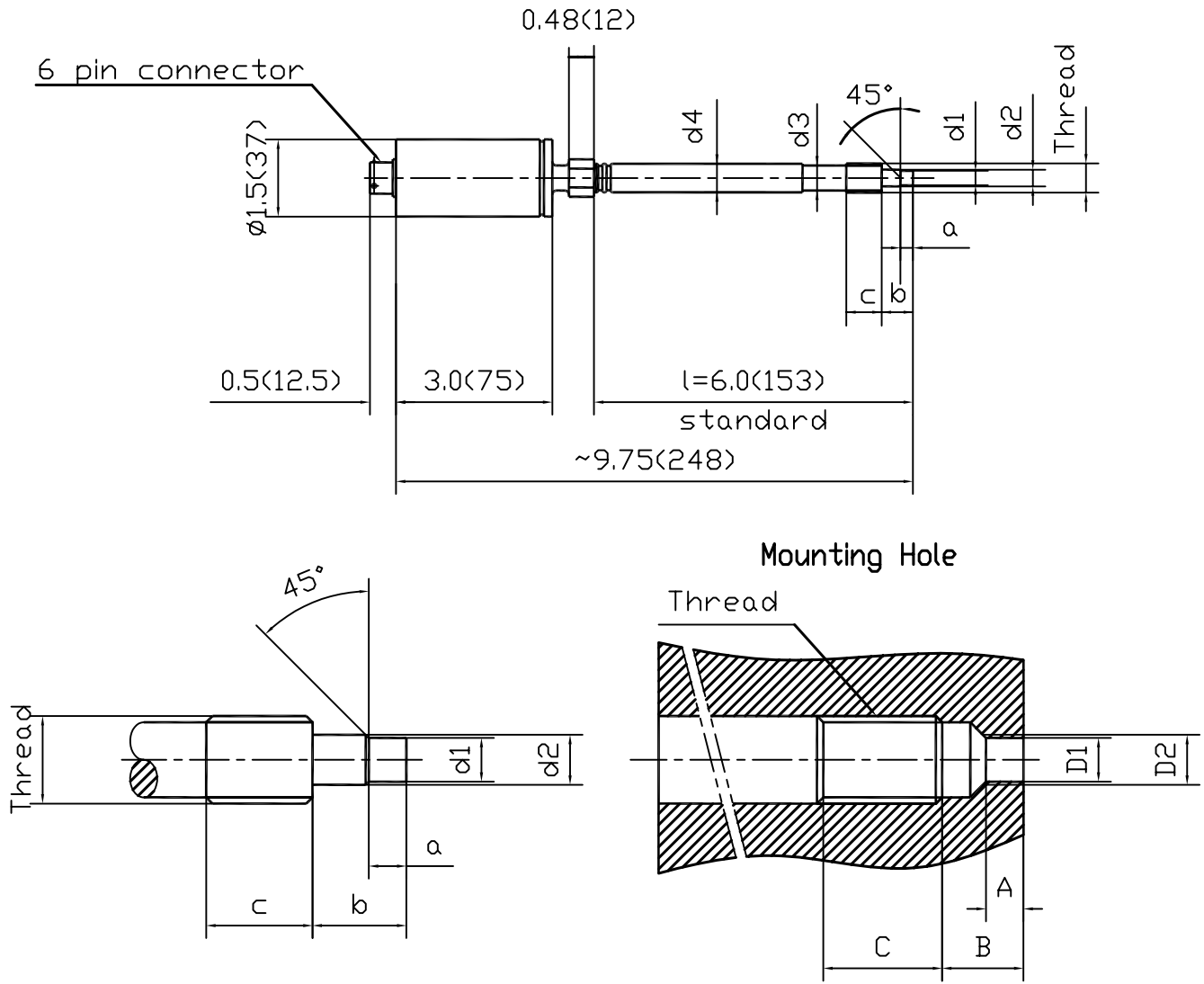
	<u>Common Options</u>
-8PIN	8 pin connector in place of standard 6 pin
-TCJ	Thermocouple Type "J" (not available on RTNAK model)
-TCK	Thermocouple Type "K" (not available on RTNAK model)
-PT100	100 Ohm Platinum RTD (not available on RTNAK model)
-M18	M18 X 1.5 metric thread in place of 1/2-20 UNF

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

North America Toll Free 877 781-1881

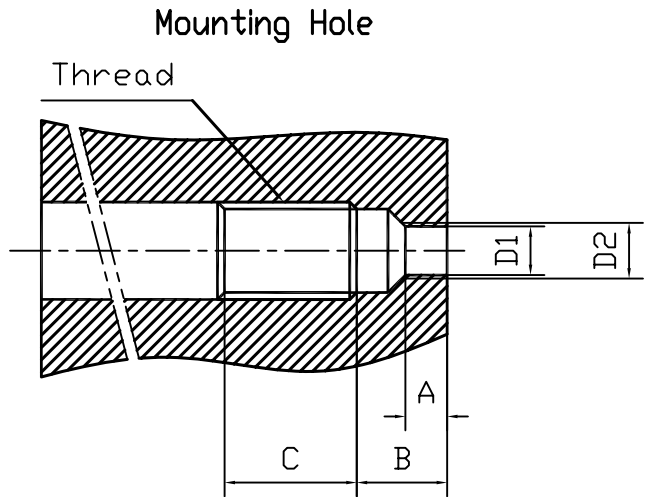
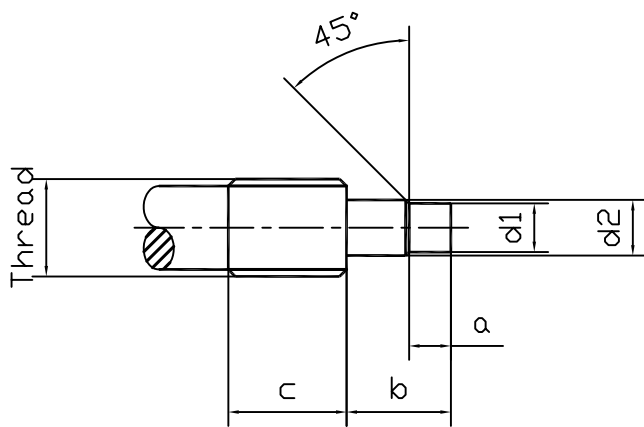
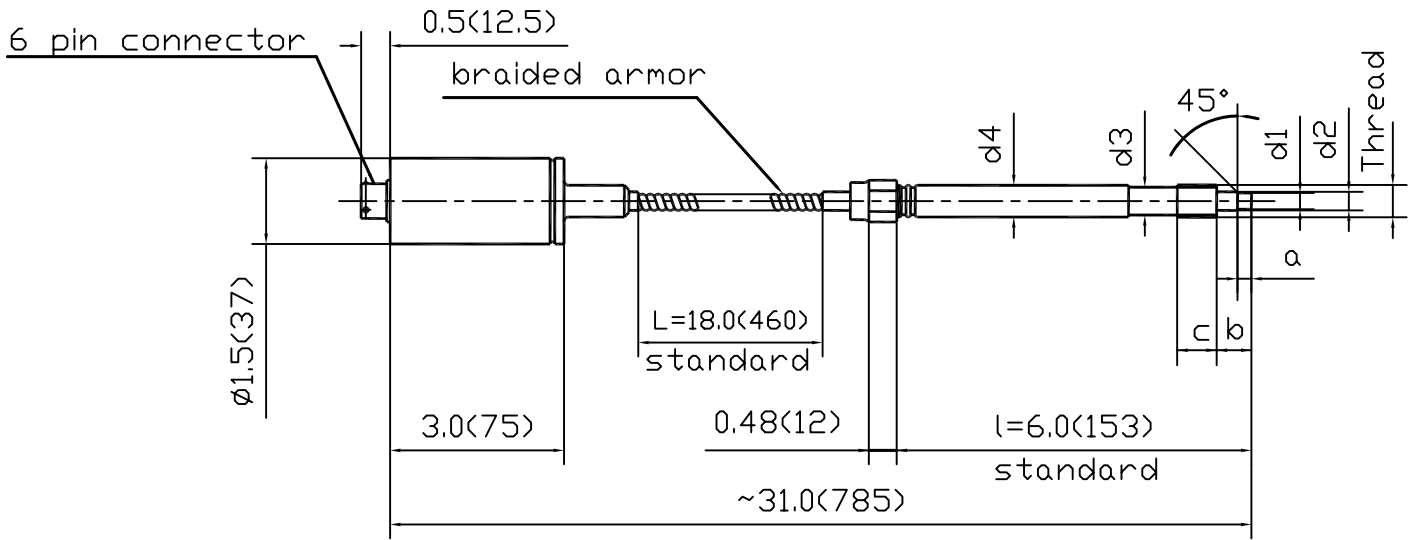
Other Locations 416 781-1881

[www.onehalf20.com](http://www.onehalf20.com)



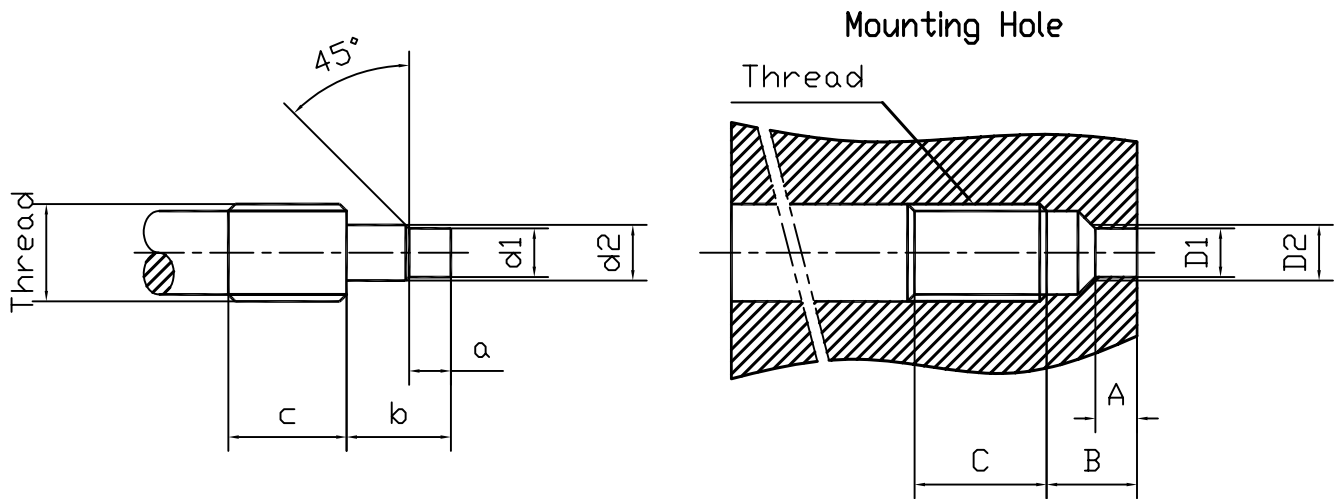
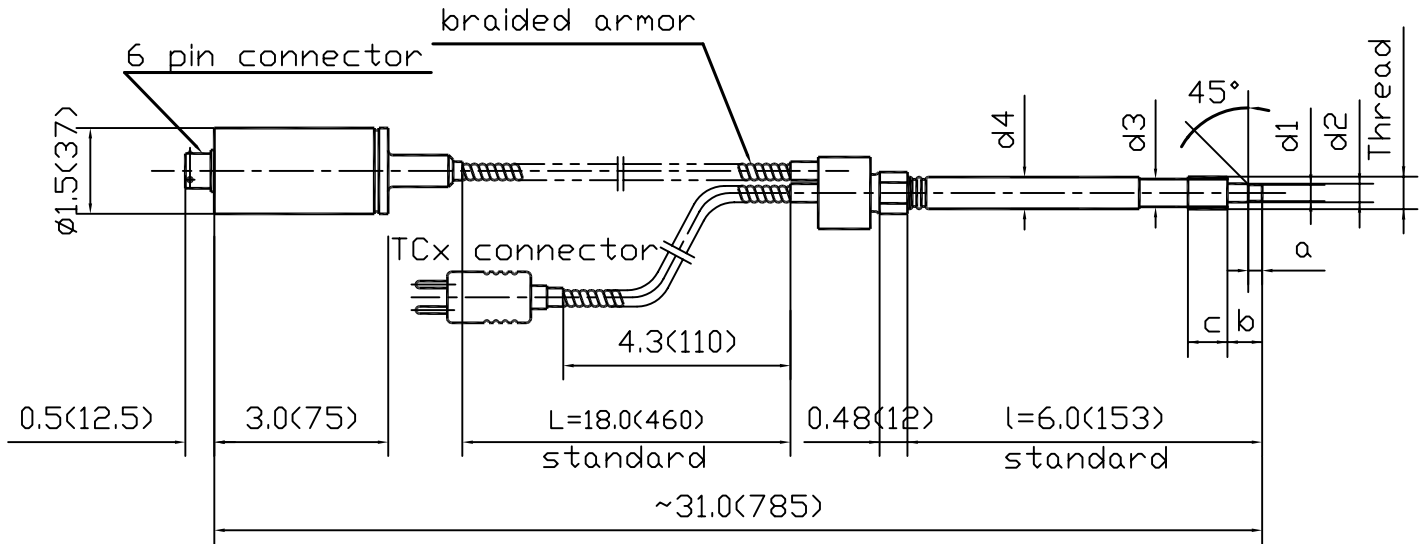
Thread	d1	d2	a	b	c	d3	d4
1/2"-20	ø0.307(7.8)	ø0.413(10.5)	0.217(5.5)	0.441(11.2)	0.629(16)	ø0.41(10.5)	ø0.5(12.7)
	ø0.303(7.7)	ø0.407(10.35)	0.211(5.35)	0.433(11.0)			
M14x1.5	ø0.307(7.8)	ø0.465(11.8)	0.217(5.5)	0.441(11.2)	0.708(18)	ø0.47(12.0)	ø0.54(13.7)
	ø0.303(7.7)	ø0.457(11.6)	0.211(5.35)	0.433(11.0)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

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



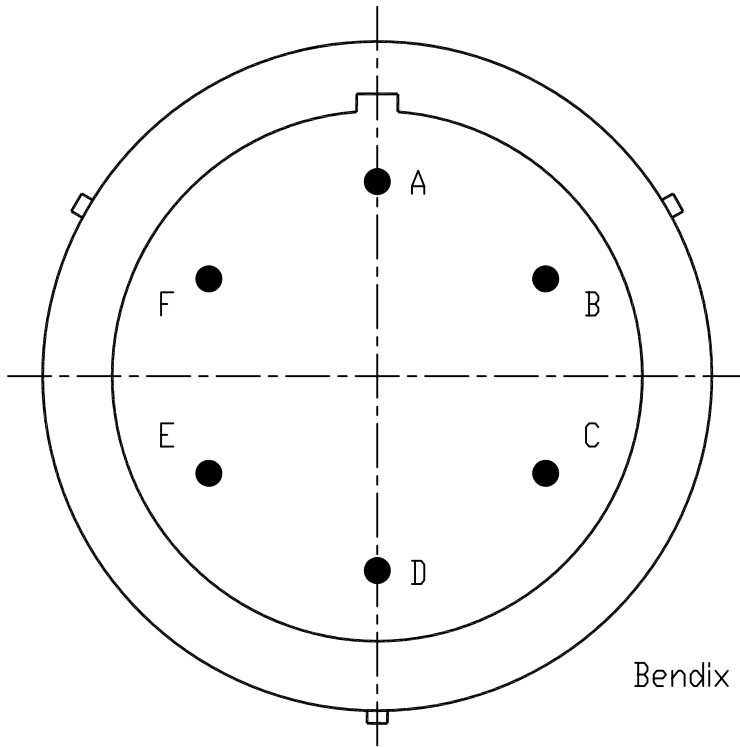
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Bendix PT02-10-6P or Equivalent

	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