

## Model CT ONEhalf20 Melt Pressure Transducer

for Extrusion and Polymer Processing

### **Product Introduction**

ONEhalf20 Model CT 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 CT Melt Pressure Transducer, has a 6" rigid stem along with 18" of flex capillary for optimal thermal isolation. The Model CT is the most common style melt pressure transducer configuration

## **General Specifications**

### Mechanical

Pressure Ranges: 0-1,500 psi to 0-30,000 psi

metric ranges available

1/2-20 UNF thread Mounting:

Mounting Torque: 500 inch pounds maximum

15-5PH stainless steel Diaphragm:

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 - recomended 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.
- 18" of flexible capillary for optimum thermal isolation

### Model CT



## Model CT 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 CT** ONEhalf20 Melt Pressure Transducer

for Extrusion and Polymer Processing

ww.one

## **Ordering Guide**

Model Number	Transducer Style
СТ	rigid stem with 18" of flex capillary

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

	Rigid Stem Length
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	

Standard Pressure Ranges					
-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		

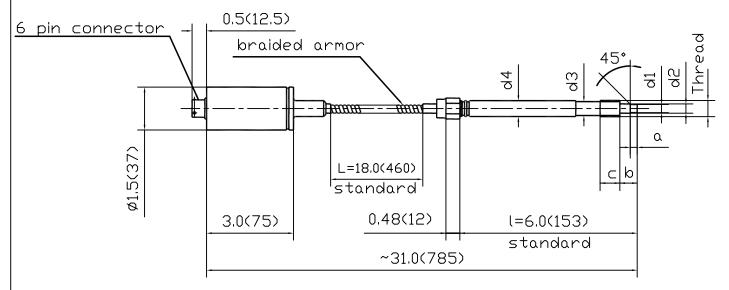
## **Common Options**

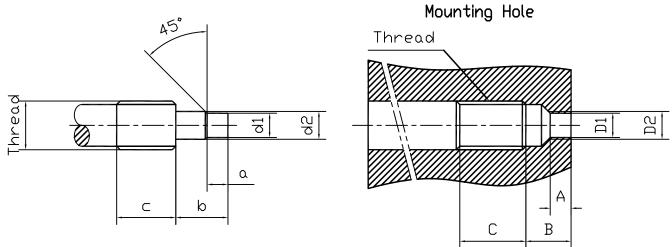
-8	BPIN	8 pin connector in place of standard 6 pin
-	TCJ	Thermocouple Type "J"
_	ГСК	Thermocouple Type "K"
-1	PT100	100 Ohm Platinum RTD
-[	И18	M18 X 1.5 metric thread in place of 1/2-20 UNF
-F	Axx	Non-Standard flex armour length
		(xx specify in inches)
	For configurations not list	sted please contact your local <i>ONEhalf20</i> distributor.





# Model: CT6S Dimensional Drawing Inches(mm)





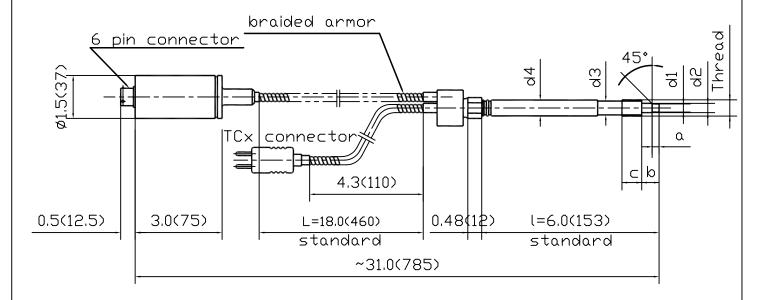
Thread	d1	d2	a	b		d3	d4
1/2"-20		Ø0.413(10.5)			N 629(16)	Ø0.41(10.5)	<b>ልበ 5</b> (12 7)
17 2 20	Ø0.303(7.7)	Ø0.407(10.35)	0.211(5.35)	0.433(11.0)	0.05 7(10)	VC:01711-104	PUID(ILI77
M14×1.5		Ø0.465(11.8)			n 700/10\	d0 47/12 0\	Ø0.54(13.7)
MIAXIO	Ø0.303(7.7)	Ø0.457(11.6)	0.211(5.35)	0.433(11.0)	0.700(10)	φυ.47(12.07	4(12:77
M18×1.5	Ø0.394(10.0)	Ø0.610(15.5)	0.236(6.0)	0.551(14.0)	0.707/20\	d0 < 2(1< 0)	ø0.669(17.0)
CITYOTIA	Ø0.386(9.8)	Ø0.602(15.3)	0.230(5.85)	0.543(13.8)	0.767(20)	עטים זוכסי חא	Mn'02/11/60

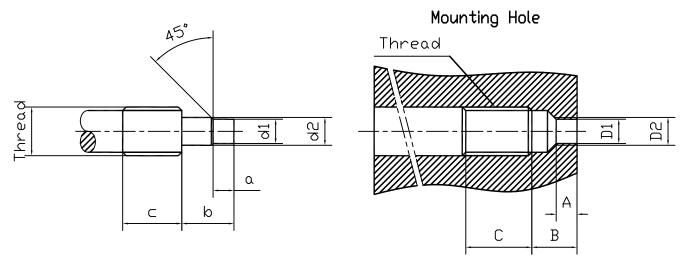
Thread	D1	D2	Α	В	С
1/2″-20	Ø0.314(7.98) Ø0.312(7.92)		0.225(5.72)	0.395(10.02)	0.75(19)
M14×1.5	Ø0.314(7.98) Ø0.312(7.92)		0.225(5.72)	0.395(10.02)	0.827(21)
M18×1.5	Ø0.401(10.19) Ø0.399(10.13)	Ø0.638(16.2) Ø0.634(16.1)	0.242(6.15)	0.402(10.15)	1.00(25.4)

DATE: April/2005 V2.0



# Model: CT6S-TCx Dimensional Drawing Inches(mm)



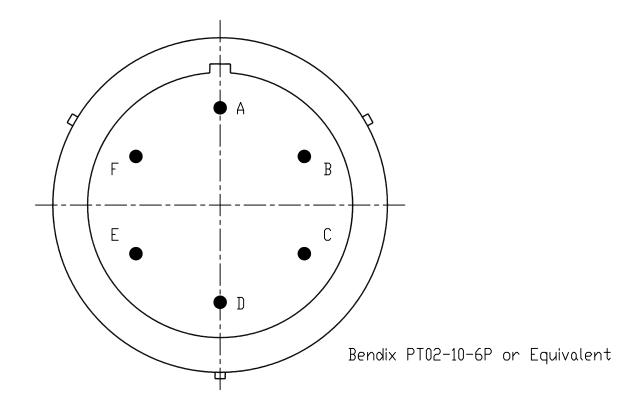


Thread	d1	d2	۵	b		d3	d4
1/2″-20		Ø0.413(10.5)			N 429(14)	Ø0.41(10.5)	du 2(12.7)
17 2 20	Ø0.303(7.7)	Ø0.407(10.35)	0.211(5.35)	0.433(11.0)	0.05 7(10)	\$0.41\10.37	\$0.3(1L.77
M14×1.5	Ø0.307(7.8)	Ø0.465(11.8)	0.217(5.5)	0.441(11.2)	0.700/10\	d0 47/12 0\	Ø0.54(13.7)
	Ø0.303(7.7)	Ø0.457(11.6)	0.211(5.35)	111.4333(11.11)			
M18×1.5	Ø0.394(10.0)	Ø0.610(15.5)	0.236(6.0)	0.551(14.0)	0.707/20\	d0 < 2(1< 0)	d0 < < 0(17.0)
MIOXI'O	Ø0.386(9.8)	Ø0.602(15.3)	0.230(5.85)	0.543(13.8)	0.767(20)	A0'92/19'0\	M0'4114 99'0A

Thread	D1	D2	Α	В	С
1/2″-20	Ø0.314(7.98) Ø0.312(7.92)		0.225(5.72)	0.395(10.02)	0.75(19)
M14×1.5	Ø0.312(7.98) Ø0.312(7.92)	Ø0.512(13.0)	0.225(5.72)	0.395(10.02)	0.827(21)
M18×1.5	Ø0.401(10.19) Ø0.399(10.13)	Ø0.638(16.2)	0.242(6.15)	0.402(10.15)	1.00(25.4)

DATE: April/2005 V2.0





	mV/Volt □utput
	(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

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