

True-Melt™ Pressure Transmitter (XPTMA-)



Introduction

The problem with traditional melt pressure sensor is that zero and span deviations due to processing temperature change can impede measurement accuracy by as much as 5% to 20% of FSO.

True-Melt™ Pressure Transmitter (XPTMA-), while based on the traditional strain gauge, incorporates advanced temperature compensation technology. This results in a transducer with virtually no pressure output errors due to thermal zero shift; making *True-Melt* transducers ideal for high quality extrusions, advanced polymer processing, and scientific research applications.

Features and Benefits

- Less than 5psi/100°F thermal zero drift errors compared with industry average of 60psi/100°F
- Ideal for precision melt pressure measurement applications
- 4-20mA or 0-10VDC output with versatile excitations (up to 30 VDC)
- Standard 6-Pin 1/2-20" UNF configuration; 8-pin, 1/4NPT, M18 optional
- Customizable with a variety of options such as temperature output
- 2 years warranty

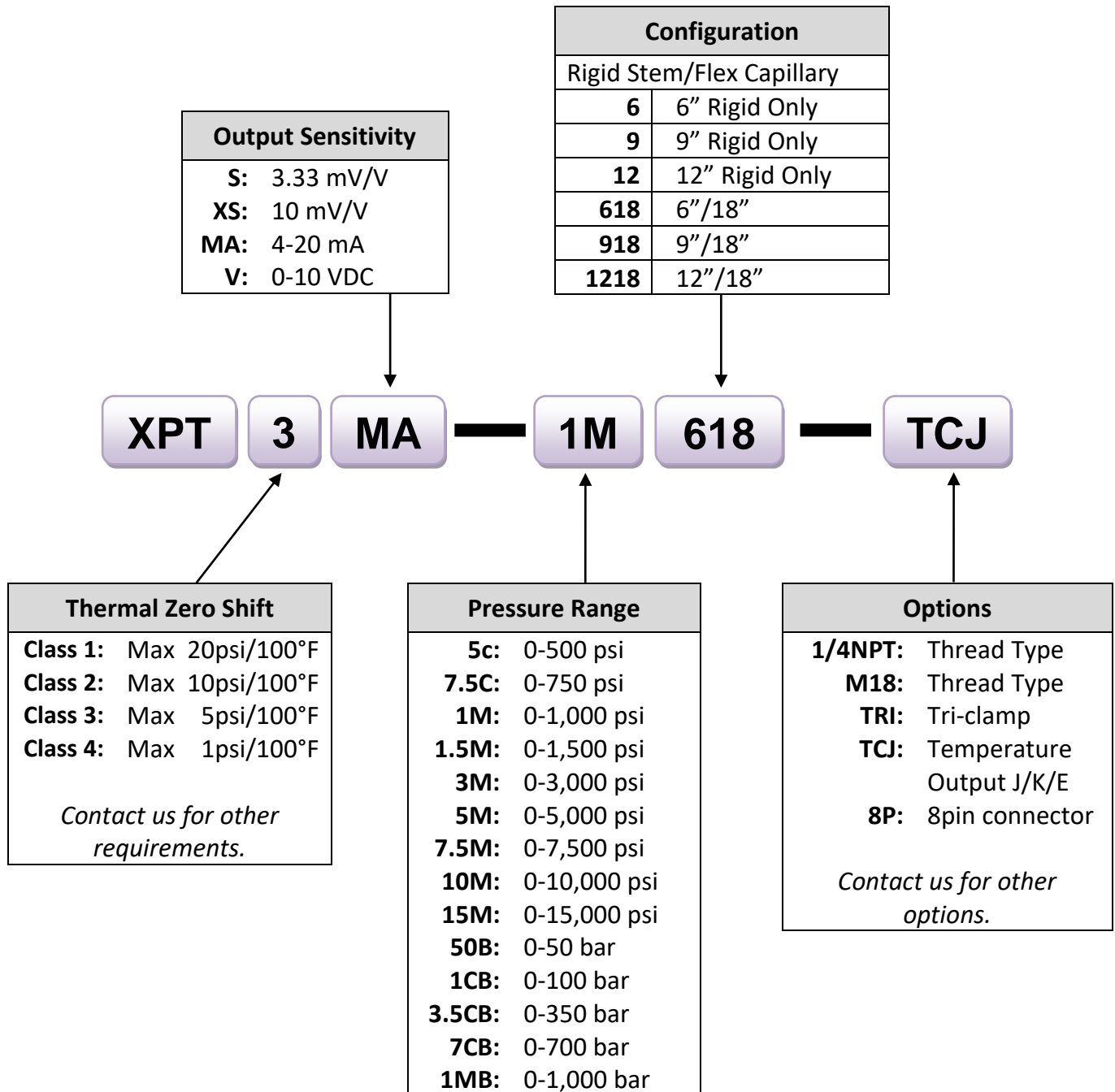
Performance Specifications

Excitation:	12 - 30 VDC
Output:	4-20mA, 0-10VDC
Pressure Range:	0-500 psi to 0-15,000 psi
Accuracy:	±0.5% FSO
Repeatability:	0.10% FSO
Over Pressure:	150% FSO
Zero Balance:	±0.5% FSO
Principle:	Wheatstone bridge, bonded strain design
Bridge Resistance:	350 Ohm
Shunt Calibration:	Internal 80% FSO

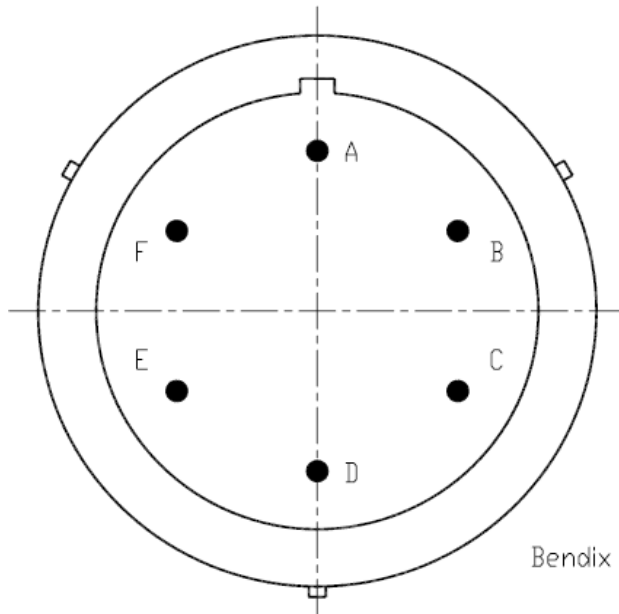
Temperature and Physical Specifications

Pressure Zero drift due to Processing Temp. Change	<i>Industry average 60psi/100°C</i>
XPT1- (Class 1):	20 psi/100°F (36 psi/100°C)
XPT2- (Class 2):	10 psi/100°F (18 psi/100°C)
XPT3- (Class 3):	<5 psi/100°F (<8 psi/100°C)
Diaphragm Filling:	Mercury /Oil/Liquidmetal
Max Diaphragm Temp.:	725°F or 400°C
Max Electronics Temp.:	220°F or 105°C
Mounting Torque:	250 inch/lbs MAX 500 inch/lbs
Standard Wetted Parts:	SS 316

Ordering Guide



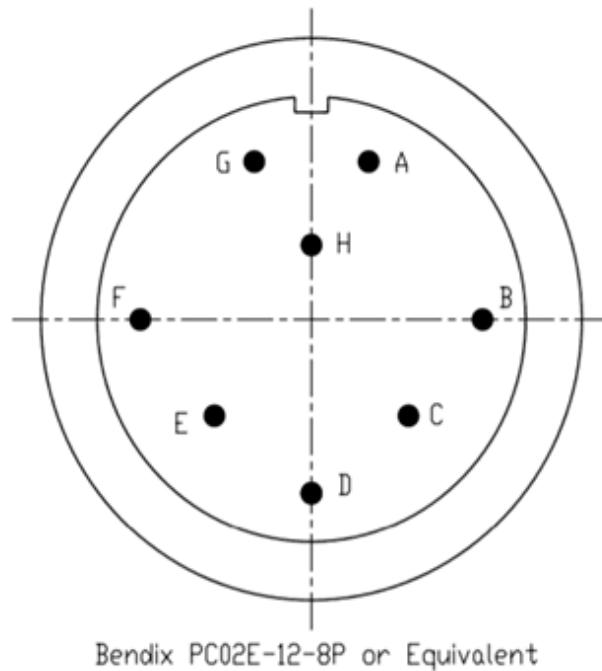
Wiring Diagram (6-pin)



Bendix PT02-10-6P or Equivalent

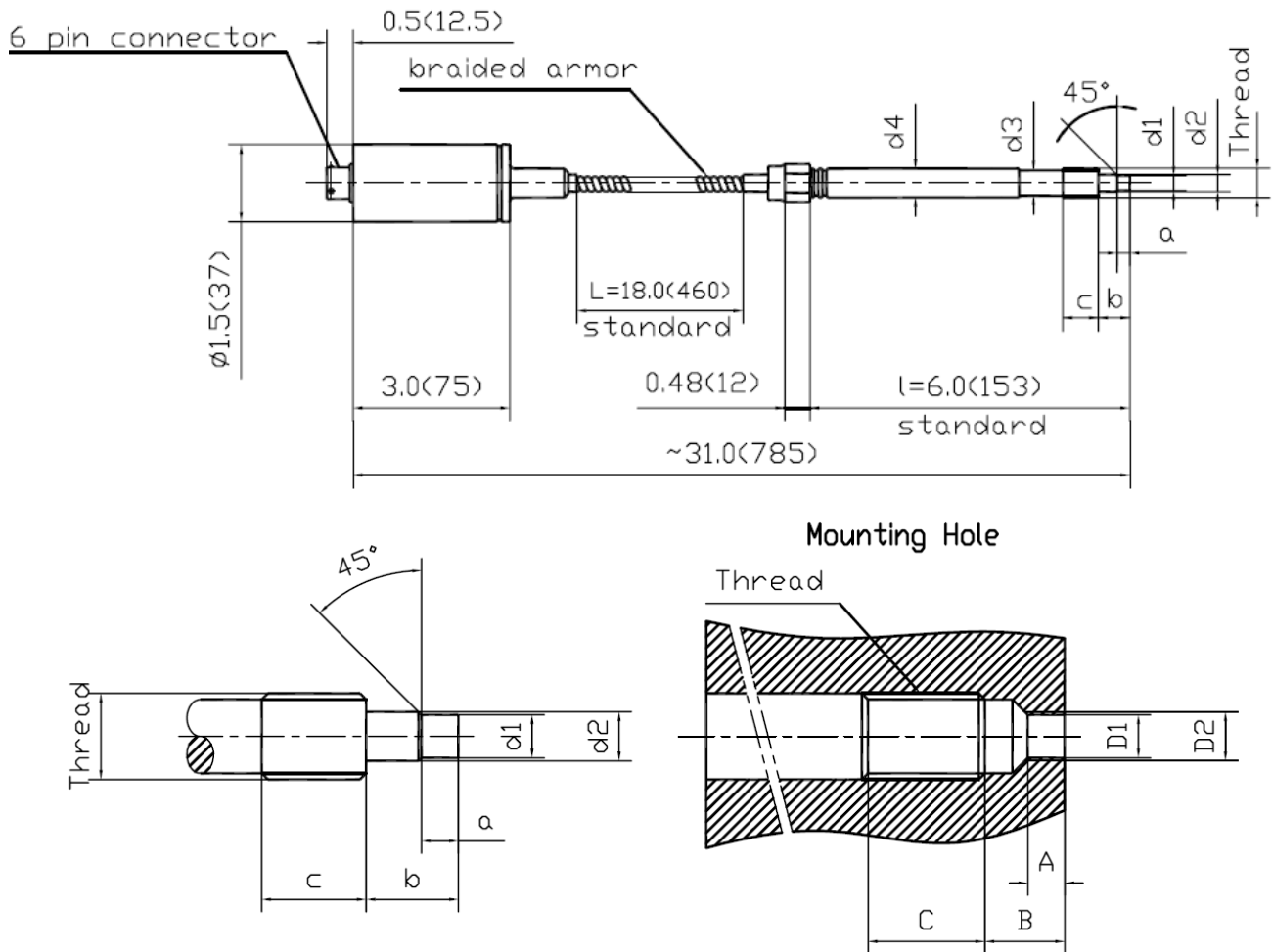
6-PIN Transmitter	mA Output	VDC Output
Pin A/Red	Input/Signal (+)	Signal (+)
Pin B/Black	Input/Signal (-)	Signal (-)
Pin C/White	No Connection	Power (+)
Pin D/Green	No Connection	Power (-)
Pin E/Blue	Calibration 1	Calibration 1
Pin F/Orange	Calibration 2	Calibration 2

Wiring Diagram (8-pin)



8-PIN Transmitter	mA Output	VDC Output
Pin A/Red	Input/Signal (+)	Signal (+)
Pin B/Black	Input/Signal (-)	Signal (-)
Pin C/White	N/A	Power (+)
Pin D/Green	N/A	Power (-)
E/Blue	Calibration 1	Calibration 1
F/Orange	Calibration 2	Calibration 2
G	N/A	N/A
H	N/A	N/A

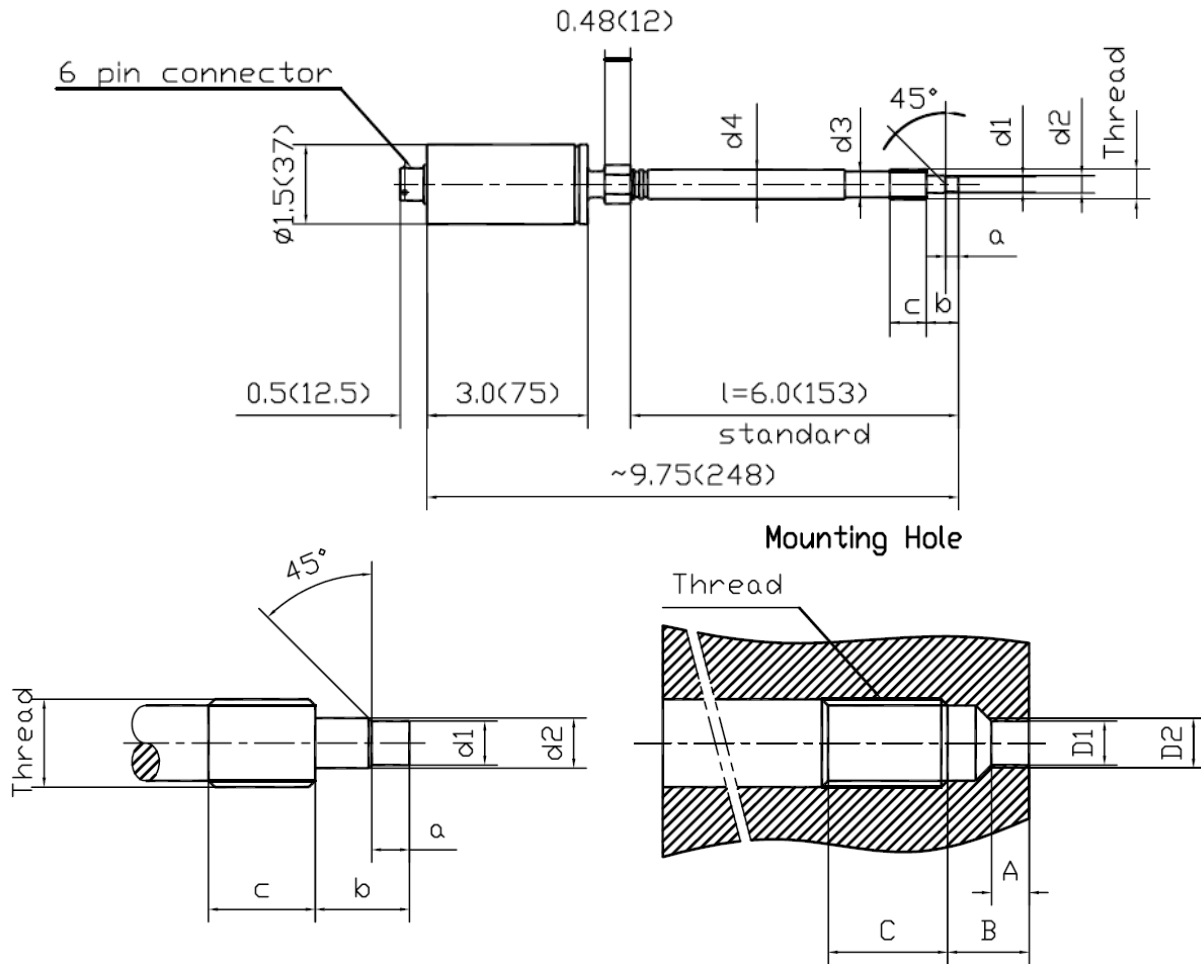
Drawings (Rigid + Flex Armor)



Rigid Stem + Flex Capillary Style

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)	0.750(19.0)		
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(21.0)		
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)	1.000(25.4)		

Drawings (Rigid Stem Only)



Rigid Stem Only Style							
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)			
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