



# MELT PRESSURE TRANSDUCERS PRECISE TO WITHIN 1.0% OF FULL SCALE OUTPUT

6-pin connector version

MODEL 0100



MODEL 0100

The 0100 converts applied pressure at the point of measurement to a proportional voltage output signal using well established bonded strain gage design principals. The small capillary tube filled with a special medium isolates the strain gage and electronics from potential thermal damage. The rigid stem makes installation fast and easy.

## FEATURES

These melt pressure transducers are specifically designed for accuracy, stability and repeatability. They give a 1.0% combined error, performance that equals or exceeds any other strain gage melt pressure transducer on the market today.

- Fully interchangeable with all existing strain gage melt pressure transducers
- Better than 1.0% combined error
- Fluid filled system for temperature stability
- 80% output signal for easy calibration
- Compatible with all strain gage signal conditioning and readout instrumentation
- Armoloy coated diaphragm
- Other diaphragms available

MODEL 0101



MODEL 0101

The 0101 offers all the advantages of Model 0100, but incorporates an 18-inch flexible capillary tubing with a stainless steel armored jacket between the strain gage housing and the stem.

These transducers are designed for applications requiring further thermal isolation or where installation would be otherwise difficult or impractical.

MODEL 0102



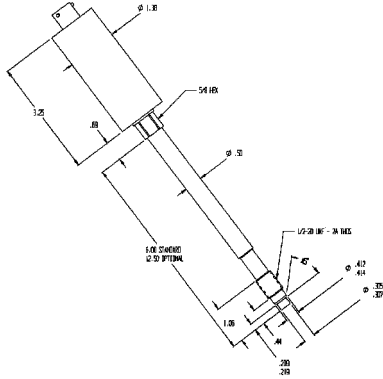
MODEL 0102

The 0102 provides simultaneous measurement of pressure and temperature at a single point.

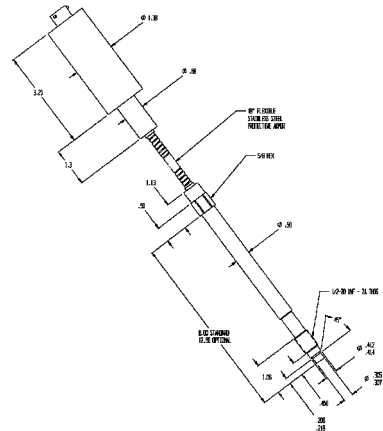
Only one mounting hole is required for installation. The thermocouple or optional RTD is protected from process hazards and can be replaced without interrupting the pressure signal. Pressure performance is identical to Models 0100 and 0101.



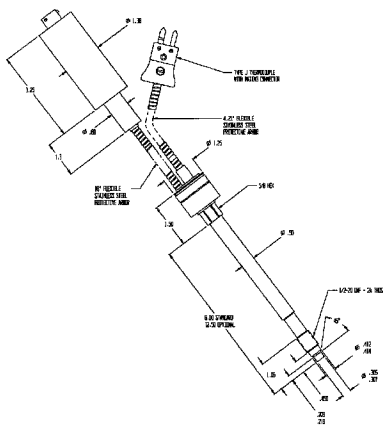
### MODEL 0100



### MODEL 0101



### MODEL 0102



## DEVICE SPECIFICATIONS

### MECHANICAL RANGES

PSIG	BAR	PSIG	BAR	PSIG	BAR
0-500	0-35	0-3,000	0-200	0-10,000	0-700
0-750	0-50	0-5,000	0-350	0-15,000	0-1,000
0-1,000	0-70	0-7,500	0-500	0-20,000	0-1,400
0-1,500	0-100				

Combined Error/Error Band	±1.0% of full scale output
Repeatability	±0.1% of full scale output
Hysteresis	0.1% of full scale output
Overload Capability	For ranges up to 20,000 PSIG: 2 times full scale output For ranges of 20,000 PSIG and above: 1.5 times full scale output
Mounting Torque	500 inch-pounds maximum (120 inch-pound recommended)
Diaphragm Material	15-5PH stainless steel (Armoly coated)

### ELECTRICAL

Measuring Element	Strain gage Wheatstone bridge
Element Resistance	350 ohm ±10%
Excitation Voltage	6-12 Volts DC (10 Volts recommended)
Sensitivity	3.33 millivolts/volt ±2%
Zero Balance	±5.0% full scale output
Internal Resistance Calibration (factory adjusted)	Produces a precise electrical signal which is 80% of full scale output within ±0.25%

### TEMPERATURE ON STRAIN GAGE HOUSING

Maximum Temperature	160°F or 70°C
Zero Shift	1.0%/100°F or 2.0%/100°C
Sensitivity Shift	1.0%/100°F or 2.0%/100°C

### TEMPERATURE ON DIAPHRAGM

Maximum Temperature	750°F or 400°C
Zero Shift	25 PSIG/100°F or 45 PSIG/100°C

### CONNECTIONS

Mounting	1/2-20 UNF thread (standard) M18x 1.5 (also available)
Electrical	6 pin Bendix (PT02A-10-6P)
Mating Connector (sold separately)	PT06A-10-6S(SR)

## ORDERING GUIDE

### MELT PRESSURE TRANSDUCERS

When ordering, specify: ISI Model, Code #, Stem Length and Flex Length\*

Example: ISI 0100-5.0T-6 or 0101-5.0T-6/18

ISI MODEL	PRESSURE RANGE			STEM LENGTH**	FLEX LENGTH**	
	PSIG	CODE #	BAR			
ISI 0100	0-500	0.50 T	0-35	0.35 CB	6 = 6 in.	18 in.
	0-750	0.75 T	0-50	0.50 CB		
	0-1,000	1.0 T	0-70	0.70CB		
	0-1,500	1.5 T	0-100	1.0 CB		
ISI 0101	0-3,000	3.0 T	0-200	2.0 CB	12 =12.5 in.	24 in.
	0-5,000	5.0 T	0-350	3.5 CB		
	0-7,500	7.5 T	0-500	5.0 CB		
ISI 0102	0-10,000	10.0 T	0-700	7.0 CB		30 in.
	0-15,000	15.0 T	0-1,000	1.0 MB		
	0-20,000	20.0 T	0-1,400	1.4 MB		

\*(0101 and 0102 version only) \*\*(other lengths available)