

## Plastic Melt Pressure Transducer Model GT100



### ■ **Precise Pressure Measurement**

The Gentran Model GT100 is designed to meet the highest criteria for performance in the plastics and rubber industries. This series has a non-linearity specification of  $\pm 0.5\%$  and of full scale BFSL. Repeatability is better than 0.1% of full scale. This unit is filled with a special compound to minimize short-term thermal drift.

### ■ **Rugged and Durable**

The GT100 series is designed to operate from 0 to 750°F. The diaphragm is rugged and is available in various materials for special applications. The standard diaphragm material is 17-4 pH stainless steel. Many customers find that our units will last 2-6 times longer than other units.

### ■ **Easy Installation**

This series is installed directly into the extruder, melt pump or other pressure tap. There are no remote boxes to mount. The electrical cable is designed for easy connection and even comes with the spade lugs attached. Various cable lengths are available for your convenience.

### ■ **Industry Compatible**

All Gentran products are configured to industry standards for effortless replacement of parts. We offer compatible units complete with flexible armor stems so that you can replace a transducer without disturbing your existing wiring or indicator configuration.

### ■ **Versatility**

Gentran offers various body lengths, thread dimensions and options for thermocouples. For special applications, we can custom design unique configurations to fit your needs.

# Ordering Information

**TYPICAL PART NUMBER**

**TRANSDUCER**      **GT100** / **6**   **J**   **C**   **-10K**

Series GT100 Melt Pressure Transducer		Barrel Length		Thermocouple Type		Diaphragm Material		Other Options		Pressure Range**			
	6	6 inch "A" Length	J	"J" Type	None	17-4 PH SST	None	Standard Gentran Connector	5C	0-500*			
			K	"K" Type	C	Hard Chrome			1K	0-1,000*			
		12	12 inch "A" Length	T	"T" Type	H			Hastelloy C-276	D6	Bendix 6-pin Connector	1.5K	0-1,500
				R	"RTD" Type	I			Inconel 718	D8	Bendix 8-pin connector	3K	0-3,000
				N	Titanium Nitride- TiN	5K			0-5,000				
				NN	Double Coated TiN	7.5K			0-7,500				
	10K	0-10,000											
	15K	0-15,000											
	20K	0-20,000*											
	350 BAR	0-350 BAR											
	700 BAR	0-700 BAR											
	1400 BAR	0-1400 BAR											
500 KG	0-500 Kg/cm <sup>2</sup>												
700 KG	0-700 Kg/cm <sup>2</sup>												

\*\*Other ranges available upon request.  
\*Special range.

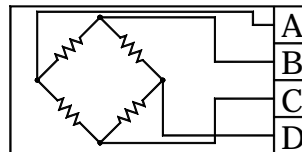
**TYPICAL PART NUMBER**

**CABLE ASSEMBLY**      **72**   **04**   **09**   **-10**

Cable Type		Thermocouple Type		Connector Type		Cable Length*	
72	Standard	04	No Thermocouple	09	Gentran	10	10 Feet
75	Armored	64	"J" Type	11	Bendix 8-pin (D8)	20	20 Feet
		74	"K" Type				
		94	"T" Type				
		84	"RTD" Type				
				13	Bendix 6-pin (D6)	40	40 Feet

\*Special lengths available upon request.

**Schematic and Pin Connections (Standard)\***

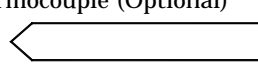


- A ( + ) Input
- B ( + ) Output
- C ( - ) Output
- D ( - ) Input

**Cable**

- Red
- Green
- White
- Black

**Thermocouple (Optional)**



- E ( + ) T/C
- F ( - ) T/C

- White
- Red

# Specifications: GT100

## Performance Characteristics

### Standard Pressure Ranges:

0-1,500 psig, 0-3,000 psig, 0-5,000 psig,  
0-10,000 psig, 0-15,000 psig,  
0-350 BAR, 0-700 BAR, 0-1,400 BAR,  
0-500 Kg/cm<sup>2</sup>, 0-700 Kg/cm<sup>2</sup>

### Special Ranges:

0-500 psig, 0-1,000 psig, 0-20,000 psig  
Other ranges available upon request.

### Non-linearity:

± 0.5% of full scale maximum (BFSL)

### Repeatability:

Within ± 0.1% of full scale maximum

### Resolution:

Infinite

### Overload Pressure:

150% of rated range, no damage

## Electrical Characteristics

### Sensor Type:

Bonded Strain-gage, 4 Leg Wheatstone  
Bridge

### Bridge Resistance:

350 ohms, ± 5.0%

### Sensitivity:

3.0 mV/V nominal (open circuit)

### Zero Balance:

± 10.0%

### Excitation:

5-12 VDC or AC (RMS), maximum 15  
Volts

### External Shunt Calibration Resistor

Standard Feature. Options Available.

### Insulation Resistance:

> 1,000 Mohms @ 50 VDC

### Thermocouple:

Types J, K, T and RTD available as an  
internal option

## Temperature Characteristics

### Diaphragm:

0 to 750°F (-18 to 400°C)

### Electrical Connector:

0 to 250°F (-18 to 121°C)

### Zero Drift:

± 0.005% of full scale/°F

± 0.01% of full scale/°C

### Sensitivity Drift:

± 0.01% of full scale/°F

± 0.02% of full scale/°C

## Mechanical Characteristics

### Diaphragm Material

Standard 17-4 PH Stainless steel.  
Options include Hard Chrome Plate,  
Hastelloy C-276, Inconel 718 &  
Titanium Nitride.

### Pressure Fitting:

1/2 inch-20 UNF-2A

Metric m 18 x 1.5 optional

### Mounting Torque:

10 foot-pounds minimum

20 foot-pounds maximum

### Electrical Connector:

Bendix PTO2A-10-6P

### Weight:

6 inch - 0.68 lbs.

12 inch - 1.23 lbs.

## Dimensions

