

**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 ²												
700 KG	0-700 Kg/cm ²												

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

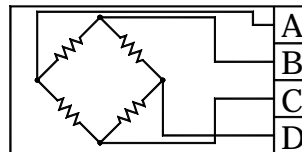
TYPICAL PART NUMBER

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)*

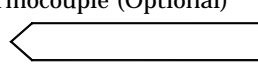


- A (+) Input
- B (+) Output
- C (-) Output
- D (-) Input

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/cm², 0-700 Kg/cm²

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

