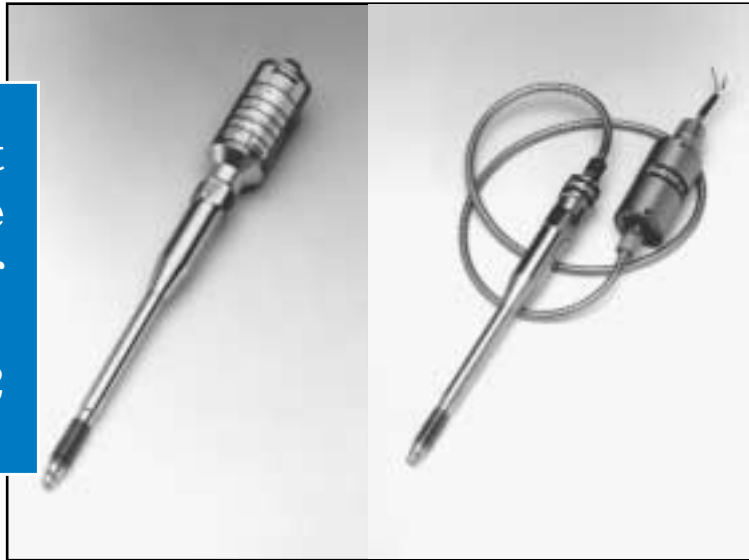


## Plastic Melt Pressure Transducer

### Model GT791 & GT792



---

■ **Precise Pressure  
Measurement**

Gentran's GT79 series has a non-linearity specification of  $\pm 1.0\%$  of full scale BFS, and repeatability is better than 0.1% of full scale.

■ **Easily Installed**

This series can be installed directly into an extruder, melt pump or other pressure tap. Wiring the GT791 is easy since the current transmitter design requires only a two-wire twisted pair between the transducer and the device it drives.

■ **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**

With a 4-20mA or 0-10 volt output it can be easily interfaced to process instrumentation. The GT79 series is available in two configurations with options available for various body lengths, thread dimensions and thermocouples.

■ **Rugged and  
Durable**

Our units last up to six times longer than other units because of our thicker 17-4 PH stainless steel diaphragms that operate from 0 to 750°F.

# Ordering Information

## TYPICAL PART NUMBER

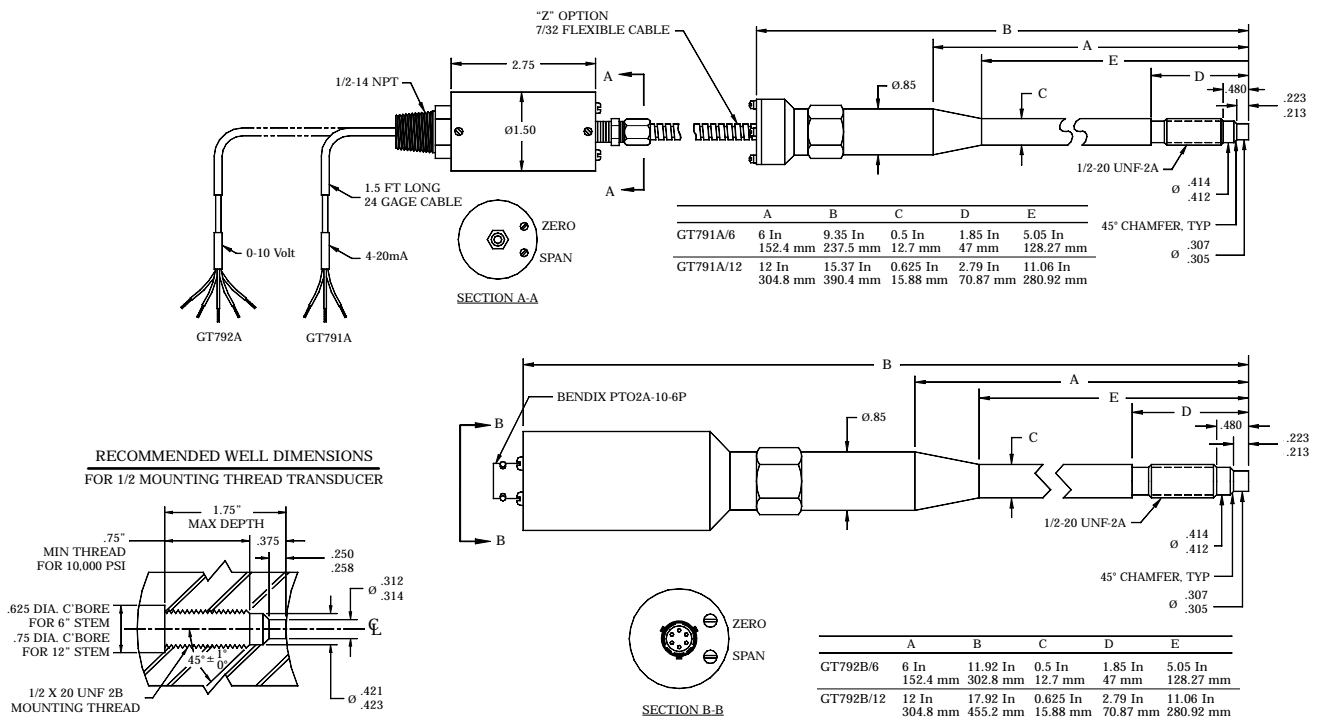
### TRANSDUCER

GT791 A /6 J C Z1 -10K

Melt Pressure Transducer Model		Electrical Connection		Barrel Length		Thermocouple Type		Diaphragm Material		"Z" Options		Pressure Range**		
GT791	4-20mA Output	A	½ NPT Fitting Integral Cable Out	6	6 inch "A" Length	J	"J" Type	None	17-4 PH SST	None	Standard Unit	5C	0-500*	
						K	"K" Type	C	Hard Chrome	Z1	18" Integral Flexible Armored Cable	1K	0-1,000*	
GT792	0-10Volt Output	B	Bendix Connector	12	12 inch "A" Length	T	"T" Type	H	Hastelloy C-276		Z2	24" Integral Flexible Armored Cable	1.5K	0-1,500
						R	"RTD" Type	I	Inconel 718		Z3	30" Integral Flexible Armored Cable	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.

# Dimensions



# Ordering Information

## CABLE ASSEMBLY

### TYPICAL PART NUMBER

Cable Type		Thermocouple Type		Connector Type		Cable Length*	
72	Standard	04	No Thermocouple	30	GT791B	10	10 Feet
75	Armored	64	"J" Type	13	GT792B	20	20 Feet
		74	"K" Type			40	40 Feet
		94	"T" Type				
		84	"RTD" Type				

\*Special lengths available upon request.

## WIRING

### GT791 Cable or Connector Wiring

Cable	Function	Pin
Black	(+) Output	A
White	(-) Output	B
Thermocouple (optional)		
White	(+) T/C	E
Red	(-) T/C	F

### GT792 Cable or Connector Wiring

Cable	Function	Pin
Red	(+) Output	A
Black	(-) Output	B
White	(+) Input	C
Green	(-) Input	D
Thermocouple (optional)		
White	(+) T/C	E
Red	(-) T/C	F

# Specifications: GT791 & GT792

## 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.

### Accuracy:

± 1.0% 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%

### Output:

Two-wire 4-20 mA  
Four-wire 0-10 volt

### Excitation:

13 VDC to 36 VDC for 4-20mA  
16 VDC to 32 VDC for 0-10 volt

### Maximum Loop Resistance:

$$R_L \text{ MAX} = \frac{V_{PS} - 11.6V}{20 \text{ mA}}$$

### Minimum Loop Resistance:

50 Ohms

### Power Connections:

Black is positive, White is negative

### Zero Balance:

± 10.0%

### Insulation Resistance:

> 1,000 Mohms @ 50 VDC

## Temperature Characteristics

### Diaphragm:

0 to 750°F (-18 to 400°C)

### Electrical Connector:

0 to 450°F (-18 to 235°C)

### Zero Drift:

± 0.01% of full scale/°F  
± 0.02% of full scale °C

### Sensitivity Drift:

± 0.01% of full scale/°F  
± 0.02% of full scale/°C

### Thermocouple:

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

## Mechanical Characteristics

### Diaphragm Material

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

### Pressure Fitting:

½ inch-20 UNF-2A  
Metric m 18 x 1.5 optional  
Custom Options Available

### Mounting Torque:

20 foot-pounds max

### Weight:

6 inch (standard) - 0.79 lbs.  
6 inch (cabled) - 1.17 lbs.  
12 inch (standard) - 1.34 lbs.  
12 inch (cabled) - 1.72 lbs.