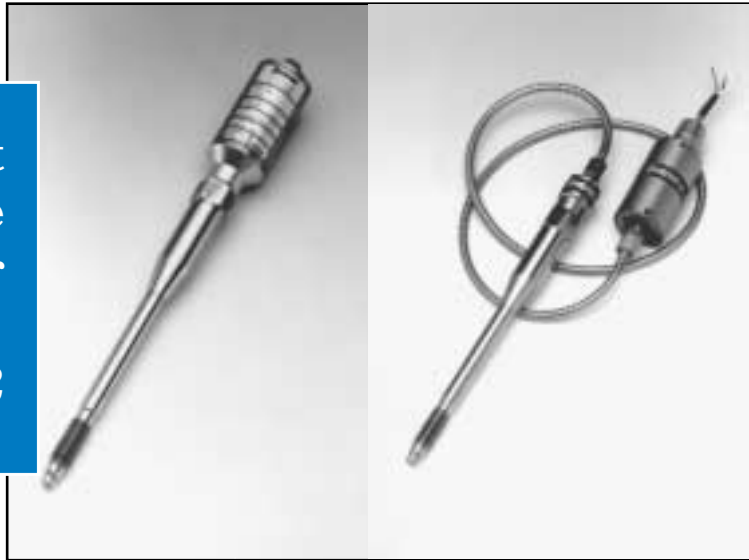


Plastic Melt Pressure Transducer

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

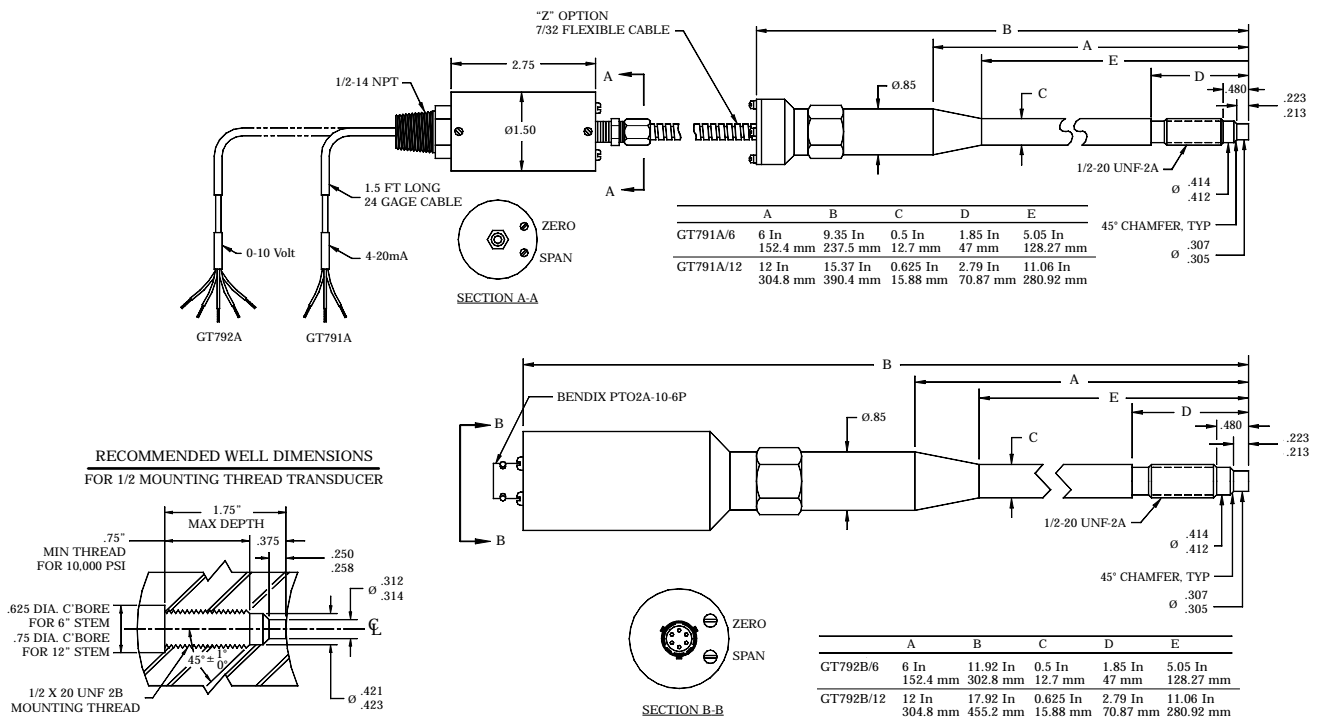
TRANSDUCER

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 ²							
						700 KG	0-700 Kg/cm ²							

**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/cm², 0-700 Kg/cm²

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.