

High Performance Melt Pressure Transducers The HP-Series



■ **Precise Pressure Measurement**

The Gentran HP-Series melt pressure transducers are designed to meet the highest criteria for performance in the plastics and rubber industries. The non-linearity specification of the GT72HP is $\pm 0.5\%$ and $\pm 1.0\%$ of full scale BFSL on the GT76HP.

■ **Rugged and Durable**

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

■ **Easily Installed**

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. Integral, flexible armored cable is also available. For special applications, we can custom design unique configurations to fit your needs.

Ordering Information

TYPICAL PART NUMBER

TRANSDUCER **GT72HP /6 J C D6 Z1 -10K**

Melt Pressure Transducer Model		Barrel Length		Thermocouple Type		Diaphragm Material		Wiring Options		"Z" Options		Pressure Range**		
GT72HP ¹	High Accuracy Unit ± 0.5%	3	3 inch "A" Length	J	"J" Type	None	17-4 PH SST	None	Standard 6-pin Cannon Connector	None	Standard Unit	5C	0-500*	
				K	"K" Type	C	Hard Chrome	Z1		18" Integral Flexible Armored Cable		1K	0-1,000*	
GT76HP ²	Standard Accuracy Unit ± 1.0%	6	6 inch "A" Length	T	"T" Type	H	Hastelloy C-276	D6	Bendix 6-pin Connector	Z2	24" Integral Flexible Armored Cable	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
12	12 inch "A" Length	Z3	30" Integral Flexible Armored Cable	10K	0-10,000									
				100 BAR	0-100 BAR									
				200 BAR	0-200 BAR									
											350 BAR	0-350 BAR		

¹HP 6" unit available in 10K and under.
²HP 12" unit available in 5K and under.

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

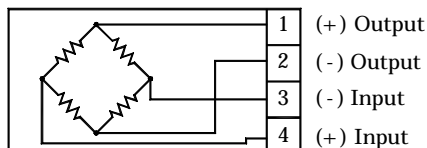
TYPICAL PART NUMBER

CABLE ASSEMBLY **72 04 02 -10**

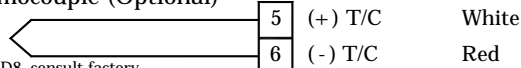
Cable Type		Thermocouple Type		Connector Type		Cable Length*			
72	Standard	04	No Thermocouple	02	Gentran	10	10 Feet		
75	Armored	64	"J" Type	11	Bendix 8-pin (D8)	20	20 Feet		
		74	"K" Type			13	Bendix 6-pin (D6)	40	40 Feet
		94	"T" Type						
		84	"RTD" Type						

*Special lengths available upon request.

Schematic and Pin Connections (Standard)*



Thermocouple (Optional)

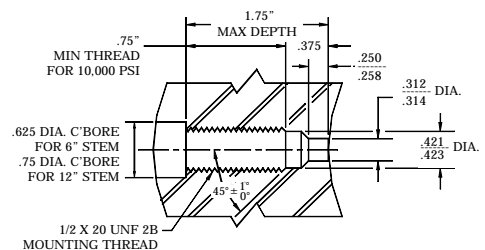


*D6 and D8, consult factory

Cable

Green
White
Black
Red
White
Red

RECOMMENDED WELL DIMENSIONS FOR 1/2 MOUNTING THREAD TRANSDUCER



Specifications: GT72HP & GT76HP

Performance Characteristics

Standard Pressure Ranges:

0-1,500 psig, 0-3,000 psig, 0-5,000 psig,
0-7,500 psig, 0-10,000 psig,
0-100 BAR, 0-200 BAR, 0-350 BAR,

Special Ranges:

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

Accuracy:

GT72HP: $\pm 0.5\%$ of full scale
maximum (BFSL)
GT76HP: $\pm 1.0\%$ of full scale
maximum (BFSL)

Repeatability:

Within $\pm 0.1\%$ 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, $\pm 5.0\%$

Sensitivity:

3.0 mV/V nominal (open circuit)

Zero Balance:

$\pm 10.0\%$

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:

$\pm 0.01\%$ of full scale/°F
 $\pm 0.02\%$ of full scale/°C

Sensitivity Drift: Drift:

$\pm 0.01\%$ of full scale/°F
 $\pm 0.02\%$ of full scale/°C

Mechanical Characteristics

Diaphragm Material

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

Pressure Fitting:

1/2 inch-20 UNF-2A.
Metric m 18 x 1.5 optional.
Custom Options Available.

Dimensions

