

# Model 222THP

## High Pressure Transmitter



Model 222THP

### Applications

- Industrial Environments
- Hydraulic Systems
- Pneumatics
- Hydro-Power
- Diesel Engine Technologies
- Test Stands

### Features

- Ranges from 0 to 20,000 psi thru 0 to 60,000 psi
- 4-20mA and 0-10Vdc Standard Industrial Output Signals
- Fully welded "Dry Measuring Cell", requires no internal transmission fluid or seals
- 17-4 PH stainless steel wetted parts
- 304 stainless steel body
- Industry standard electrical connections including DIN 175301-803A, C and Shielded Cable
- Highly flexible modular design
- Protection Class IP65/NEMA 4X (Shielded Cable Connection IP67/NEMA 6)

The **TRERICE 222THP** "High-Pressure" Transmitter is the ideal choice for measurement of high pressures (up to 60,000 psi) in industrial, test & measurement and process control applications. Thanks to the stainless steel/thin-film sensor element being directly welded to the process connection, the 222THP requires no internal transmission media or seals insuring a high degree of reliability and stability. Stainless steel wetted parts provide long-term durability even in the harshest environments.

In addition, the modular design of the 222THP Pressure Transmitter allows for a wide variety of electrical connections, output signals and process connections to be specified to meet the requirements of any application.

\* For ranges over 30,000 psi  
Thick film resistors fused into Sapphire glass on a Titanium Diaphragm

### HOW TO ORDER

Model	Process Connection	Accuracy	Units of Measure	Range Code	Electrical Connection	Cable Length (omit if none)	Output Signal
222THP	08 9/16"-18 UNF-2B female port**	C 0.5% FS (0.35% BFSL)	A psi	See Standard Ranges	E1 DIN 175301-803 (A) "std"	Specify Length in Feet (ie., 3 Ft=003)	3 4-20mA (2-wire)
					E2 DIN 175301-803 (C) "mini"		2 0-10 Vdc (3-wire)
					E3 Shielded Cable (3 Ft Std)		

\*\*For use with coned and threaded 1/4" O.D. high pressure tubing (reference "Autoclave® F-250-C")  
Multiple electrical connections, output signals and process connections are available, Please consult factory.

### Specifications

<b>Model</b>	227THP • High Pressure Transmitter		
<b>Sensor Element</b>	Thin film resistors directly deposited on a Stainless Steel Diaphragm*		
<b>Process Connection</b>	9/16"-18 UNF-2B female port. For use with coned and threaded high pressure tubing (reference "Autoclave® F-250-C")		
<b>Materials of Construction</b>	Housing: 304 stainless steel Wetted Parts: 17-4 PH stainless steel, over 30,000 psi Titanium		
<b>Accuracy at 77° F (25°C)</b>	<b>BFSL</b>	<b>Full Scale</b>	
Non-Linearity:	0.35%	0.50%	
Hysteresis:	0.15%	0.30%	
Repeatability:	0.10%	0.10%	
For ranges >30,000 psi see "High Range Accuracy"			
<b>Operating Temperature Ranges</b>			
Medium:	-40/+257°F (-40/+125°C)		
Ambient:	-40/+221°F (-40/+105°C)		
<b>Temperature Error Band</b>	Temperature compensated to within 1% between -4°F to 185°F (-20 to +85 °C)		
<b>Humidity</b>	95% RH Non-condensing 100% RH with Shielded Cable Connection (E3)		
<b>Electronic Connection</b>	90° Angle "Standard" Connector / DIN 175301-803 (A) 90° Angle "Mini" Connector / DIN 175301-803 (C) Shielded Cable (3 Feet Standard)		
<b>Output Signal</b>	4-20mA (2 wire) and 0-10Vdc (3 wire)		
<b>Overpressure Limit</b>	at least: 1.2 x FS burst pressure at least: 1.5 x FS		
<b>Response Time (10-90%)</b>	< 1 ms		
<b>Power Supply</b>	Output Signal:	Minimum	Maximum Recommended
	4-20mA:	10Vdc	32Vdc 24Vdc
	0-10Vdc:	12Vdc	32Vdc 24Vdc
<b>Load Resistance</b>	4-20mA:	$\leq V_{SUPPLY} - 10 Vdc$ 0.02 A	
	0-10 Vdc:	> 5 kOhm	
<b>Circuit Protection</b>	Protected against reverse polarity and short circuits		
<b>CE Conformity</b>	RoHS2 Directive 2011/65/EU EMC Directive: 2014/30/EU - PED Directive: 2014/68/EU Applied standards: EN 61326-1:2013, EN 61326-2-3:2013		
<b>Ingress Protection Rating</b>	90° Angle Connector: IP65 / NEMA 4X Shielded Cable: IP67 / NEMA 6		
<b>Approximate Shipping Weight</b>	0.3 lbs (0.14kg)		

Sample Order Number: **222THP 08 C A 0/30000 E1 3**

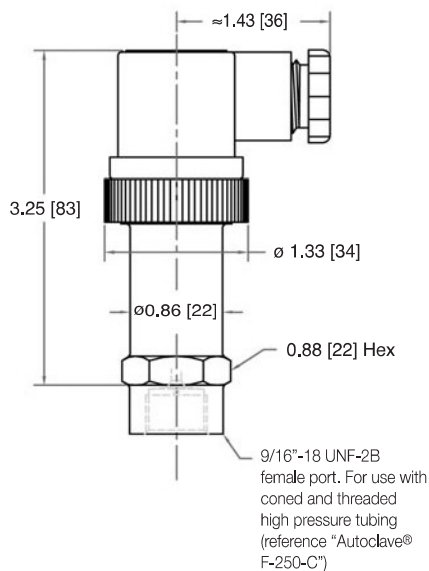
# Model 222THP

## High Pressure Transmitter

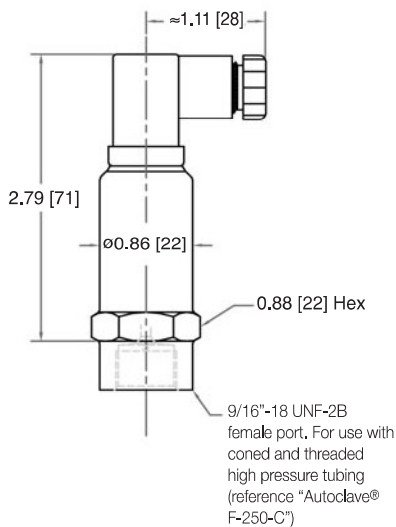
INDUSTRIAL TRANSMITTERS

All dimensions are nominal.  
Dimensions in [ ] are in millimeters.

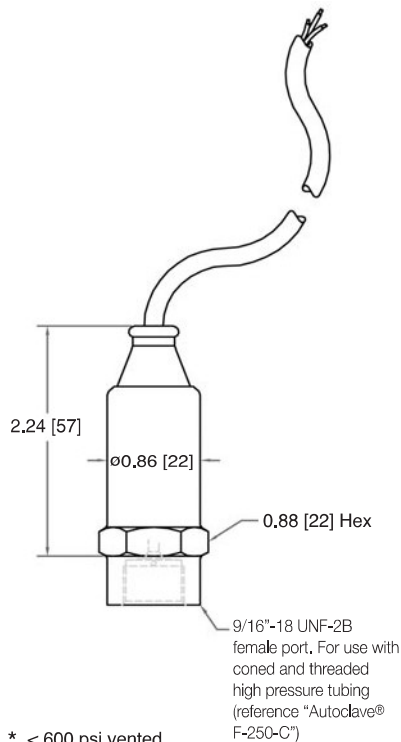
### E1 90° Angle "std" Connector DIN 175301-803 (A)



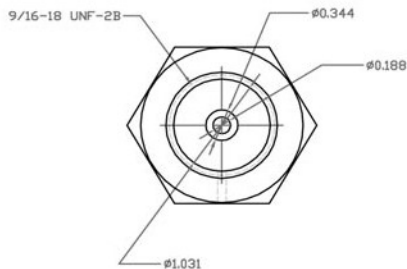
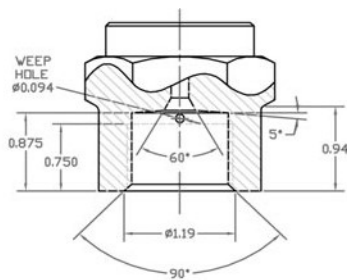
### E2 90° Angle "mini" Connector DIN 175301-803 (C)



### E3 Shielded Cable\* (3 Feet Standard)



\* ≤ 600 psi vented  
> 600 psi non-vented



CONNECTION DETAIL  
SCALE 2"=1"

### High Range Accuracy (>30,000 psi)

	BFSL	Full Scale
<b>Accuracy at 77° F (25°C)</b>	0.60%	1.00%
Non-Linearity:	0.40%	0.80%
Hysteresis:	0.10%	0.10%
Repeatability:	0.10%	0.10%

### Standard Ranges

psi Ranges (A)			
Range Code	Specific Range	Overpressure Limit	Burst Pressure
0/20000	0 to 20,000 psi	24,000 psi	30,000 psi
0/25000	0 to 25,000 psi	30,000 psi	37,500 psi
0/30000	0 to 30,000 psi	36,000 psi	45,000 psi
0/40000	0 to 40,000 psi	48,000 psi	60,000 psi
0/50000	0 to 50,000 psi	60,000 psi	75,000 psi
0/60000	0 to 60,000 psi	72,000 psi	90,000 psi

Actual working pressures should never exceed the "Specific Range" or the maximum process connection rating. "Overpressure Limits" and "Burst Pressures" shown refer to the sensor or body of the transmitter and are for reference purposes only. For correct use and application See: ASTM F2070-00.