

AST47HP High Pressure



Stainless Steel Pressure Sensor / Transducer / Transmitter

Overview

Manufactured to withstand pressures up to 60,000 PSI, the AST47HP high pressure sensor is the best solution for high pressure and high cycle systems such as hydraulic pressure or diesel common rail pressure.

Benefits

- One Piece Stainless Steel Construction
- Krystal Bond™ Technology is Free of Welds, Silicon Oil, & Internal O-Rings
- 100V/m EMI/RFI Protection
- Various Automotive / military Connectors & Custom Cable Lengths Available for Ease of Installation
 - Mini-DIN 43650 C
 - Bendix (PT02-10-6P)
 - Standard Cable lengths of 2, 4, 6, and 10ft.



Applications

- Water Jets
- Water Tanks
- Test Stands
- Pipeline Instrumentation
- High Pressure Wells
- Hydraulics Systems
- Injection Molding Equipment
- Pumps

Performance @ 25°C (77°F)	
Accuracy*	< ± 0.5% BFSL (<±1.0% BFSL for Voltage)
Stability (1 year)	±0.5% FS, typical
Pressure Cycles	> 100 Million
* Accuracy includes non-linearity, hysteresis & non-repeatability	
* All orders over 10K PSI must consult factory	

Environmental Data	
Temperature	
Operating	-40 to 85°C (-40 to 185°F)
Storage	-40 to 125°C (-40 to 250°F)
Thermal Limits	
Compensated Range	0 to 55°C (30 to 130°F)
TC Zero	<±1.5% of FS
TC Span	<±1.5% of FS
Other	
Shock	100G, 11 msec, 1/2 sine
Vibration	20G peak, 20 to 2400 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-68

Electrical Data			
Output	4-20mA	Voltage (3 or 4 Wire)	0-50mV (10mV/V)
Excitation	10-28VDC	10-28VDC	5VDC
Output Impedance	>10k Ohms	<100 Ohms, Nominal	1100 Ohms, Nominal
Current Consumption:	20mA, typical	<10mA	<5mA
Bandwidth	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz	(-3dB): DC to 5kHz, min
Output Noise:	-	<2mV RMS	-
Zero Offset:	<±1% of FS	<±1% of FS	<±2% of FS
Span Tolerance:	<±2% of FS	<±1.5% of FS	<±2% of FS
Output Load:	0-800 Ohms@10-28VDC	10k Ohms, min	>1M Ohms
Reverse Polarity Protection	Yes	Yes	-



Ordering Information

AST47HP W 30000 P 4 R 0 000

Series Type

Configuration Interface

W= F250C Female Autoclave
 X= 9/16-18 UNF Male with 37° flare
 X= M16* 1.5 Female with sealing cone

Pressure Range

Insert 5 digit pressure code

Pressure Unit

B= Bar • K= kg/cm2 • P= PSI

Outputs

2= 0-5V (3 wire) 3= 1-5VDC
 4= 4-20mA 5= 0-10V (3 wire)

Electrical⁺

A= 2 ft. (0.6m) E= Mini DIN 43650
 B= 4 ft. (1.2m) I= DIN 43650A
 C= 6 ft. (1.8m) R= Bendix 6 pin (PT02-10-6P)
 D= 10 ft. (3m)

Wetted Material

0= 17-4PH

Options

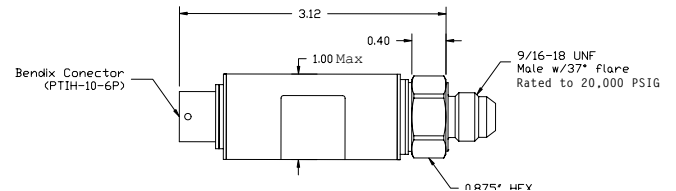
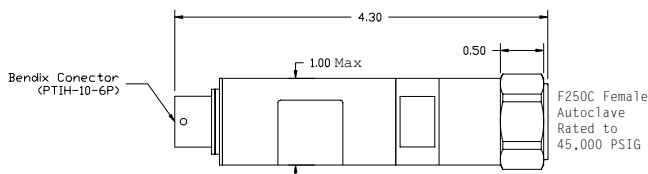
000= No special options
 123= M16*1.5 Female with sealing cone
 153= 9/16-18 UNF Male with 37° flare

High Pressure Fittings Include:

9/16-18 UNF Male with 37° Flare	10,000-20,000 PSI	(700-1400 BAR)
F250C Female Autoclave	10,000-45,000 PSI	(700-3,000 BAR)
M16*1.5 Female with Sealing Cone	10,000-60,000 PSI	(700-4000 BAR)

⁺ Wiring information available at: <http://www.astensors.com/wiring.php>

Dimensional Data



Warranty

Workmanship - AST, Inc. pressure transmitters have a limited one-year warranty to the original purchaser. AST, Inc. will replace or repair, free of charge, any defective transmitter. This warranty does not apply to any units that have been modified; misused, neglected or installed where the application exceeds published ratings. AST's sensors are made with pride in New Jersey, USA. If in the area please feel free to stop by for a visit!

Installation/Applications - The purchaser is responsible for media compatibility, functional adequacy, and correct installation of the transmitter.