

AST47PT Capteur de pression relatif et température

AST47PT

**Stainless Steel Media Isolated
Pressure / Temperature Sensor with
Twin 4-20mA Loops**

OVERVIEW

The AST47PT is the sensor solution for monitoring pressure and temperature with one device. With twin, 4-20mA loop-powered output signals, the AST47PT provides accurate pressure and temperature outputs for measurements of liquids and gases. Packaged with all stainless steel wetted materials and the base of AST's *Krystal Bond™* Technology, this pressure-temperature sensor is constructed to perform in harsh environments and high cycle applications. The AST47PT is available with pressure ranges up to 500 PSI and a temperature measurement range of -40° to 85° C.

BENEFITS

- ✓ High Accuracy
- ✓ High Strength Stainless Steel Construction
- ✓ Pressure Ranges up to 500 PSI
- ✓ Wide Range of Configurations
- ✓ Suitable for High Shock and Vibration

APPLICATIONS

- ✓ Test Stands & Lab Equipment
- ✓ Data Loggers
- ✓ Pressure Instrumentation
- ✓ Water Management
- ✓ Process Control



Performance @ 25°C (77°F)

Accuracy*	
Pressure	< ± 0.25% BFSL
Temperature	± 0.25°C, typ
Stability (1 year)	±0.25%FS, typ
Over Range Protection	2X Rated Pressure
Burst Pressure	5X Rated Pressure
Pressure Cycles	>100 Million

* Accuracy includes non-linearity, hysteresis & non-repeatability

Electrical Data

Output	Pressure 4-20mA	Temp 4-20mA
Excitation	10-28VDC	10-28VDC
Output Impedance	-	-
Current Consumption:	20mA max	20mA max
Bandwidth	(-3dB): DC to 250 Hz	-
Output Noise:	N/A	N/A
Zero Offset:	<±1% of FS	<±1% of FS
Span Tolerance:	<±2% of FS	<±2% of FS
Output Load:	0-800 Ohms @10-28VDC	0-800 Ohms @10-28VDC
Reverse Polarity Protection	Yes	Yes

Environmental Data

Temperature	
Operating	-40 to 85°C (-40 to 185°F)
Storage	-40 to 125°C (-40 to 250°F)
Thermal Limits (Pressure)	
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-66

ORDERING INFORMATION

AST47PT A 00100 P 4 A 1 000

Series Type

Process Connection
A=1/4" NPT Male

Pressure Range

Insert 5-digit pressure range code from chart

Pressure Unit

B=BAR
K=kg/cm²
P=PSI

Outputs

4=4-20mA (Loop Powered)

Electrical

D=10Ft. Cable
A=2Ft. Cable E=Mini DIN 43650C
B=4Ft. Cable I=DIN 43650A
C=6Ft. Cable R=Bendix 6 Pin

Wetted Material

1= 316 L
0= 17-4 PH

Options

000= No Special Options

PRESSURE RANGES*

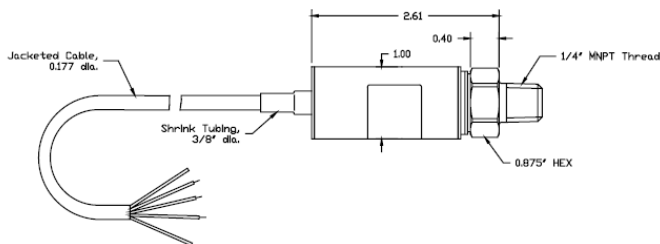
PSI Measurement Range	Pressure Range Code
-14.7 to 25**	V0025**
0-15	00015
0-25	00025
0-50	00050
0-100	00100
0-200	00200
0-500	00500

BARG Measurement Range	Pressure Range Code
-1 to 2**	V0002**
0-1	00001
0-2	00002
0-5	00005
0-7	00007
0-10	00010
0-20	00020
0-35	00035

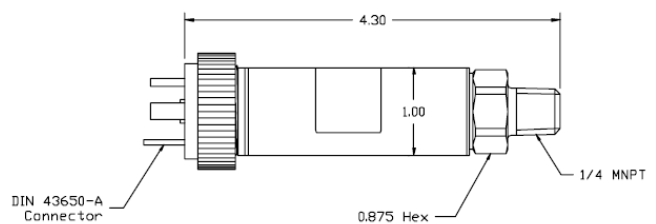
*Typical ranges. All ranges between 0-25 PSI and 0-500 psi available.

**Compound ranges up to -14.7 to 500 PSI available. Please consult factory.

DIMENSIONAL DATA



Standard Cable			
Red	Black	Green	White
+V (P)	-V (P)	+V (T)	-V (T)



Mini-DIN43650A 18.0mm			
Pin 1	Pin2	Pin 3	Wide Pin
+V (P)	-V (P)	+V (T)	-V (T)

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. AST47PT is not recommended for use with hydrogen. 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.