



ASHT SERIES HIGH PERFORMANCE PRESSURE & TEMPERATURE TRANSDUCER - UP TO 500 PSI

The ASHT Series feature both pressure and temperature sensors within a single transducer package. These high accuracy transducers have been designed for use in a wide range of test, measurement and operational applications where high performance precision pressure measurement are required. See list of typical applications alongside. The ASHT can also be installed directly onto vehicles in both automotive and aerospace applications.

Offering a high level of reliability and endurance the ASHT is protected against the high vibration, shock and high temperatures found in harsh environments. Continuous operation up to 300°F allows for installations in hot zones. The modular construction and programmable amplifier provide a fast delivery time for standard and custom configurations. Pressure ranges are available between 0-15 psi and 0-500 psi in either Absolute, Gauge or Sealed Gauge reference.

TECHNICAL SPECIFICATIONS

Pressure Reference	Absolute, Gauge and Sealed Gauge
Standard Pressure Ranges (psi)	15, 30, 75, 150, 250, 300, 500 <i>For ranges above 500 psi see ASHT high range datasheet</i>
Proof Pressure (overload)	300% of range
Burst Pressure	>1000% of range
Accuracy	±0.08% FS combined linearity & hysteresis (CNLH)
Thermal Effects	<±0.25% FS TEB within Compensated Range
Outputs	Pressure: 0.5V to 4.5V (±0.5%) Temperature: NTC, 2-wire 10KΩ@25°C or 2-wire PT1000
Power Supply	5V (±0.5V) Ratiometric or 8-16Vdc (<20mA)
Operating Temperature Range	-5°F to 300°F (-20°C to +150°C)
Compensated Temperature Range	32°F to 250°F (0°C to +125°C)
Construction	Stainless Steel
Electrical Connection	20", 26AWG 55spec Wire + DR25 Sleeve or Connector or Hermetic Connector. 8STA1-Y02-05PN170
Process Connection (Thread Size)	Please see Part Number Configurator - Page 2
Protection Class	IP67 (Cable Option), Hermetic Seal (Connector Option)
EMC Protection & Vibration	EN 50082-1 and Mil-Std-810C, curve L, 20G
Weight	1.44oz (Cable Option), 1.16oz (Connector Option)
Options	Cable Spec, Connector Fitted, Thread Size & Labelling

Precision Sensors

Test Measurement OEM

Features

- Built-in Temp. Sensor
- Cable or Connector
- 0-15 to 0-500 psi
- 300°F Operation
- ±0.08% Accuracy

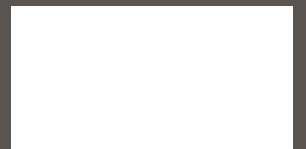
Applications

- Engine Test
 - Automotive
 - Aviation
 - Dynamometers
- Satellite Launch Vehicle
 - Propellants
 - Chamber Pressure
 - Fuel Level
- Flight Test
 - Hydraulic Systems
 - Flight Control Systems
 - HVAC Systems
- Drone/UAV/AUV/ROV
 - Hydraulic Systems
 - Avionics
- Manufacturing
- Motorsport

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Represented by:



PMC/KA Sensors adopts a continuous development program which sometimes necessitates specification changes without notice

PART NUMBER CONFIGURATOR

Pressure Reference

Pressure Range

Supply Voltage

Accuracy (CNLH)

Accuracy (Thermal Shift)

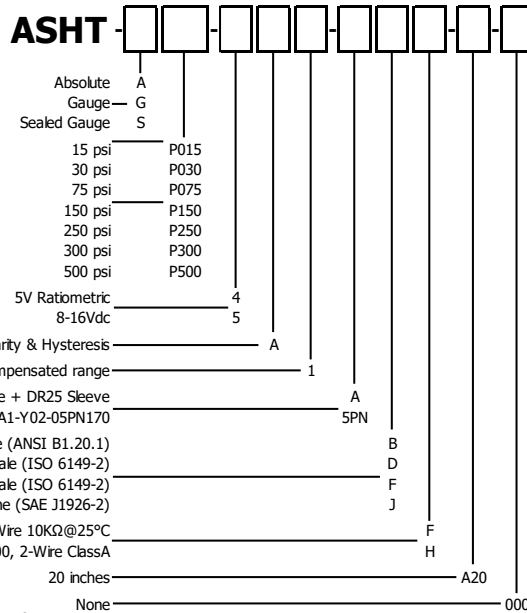
Electrical Connection

Process Connection

Temperature Sensor Ty

Cable Length

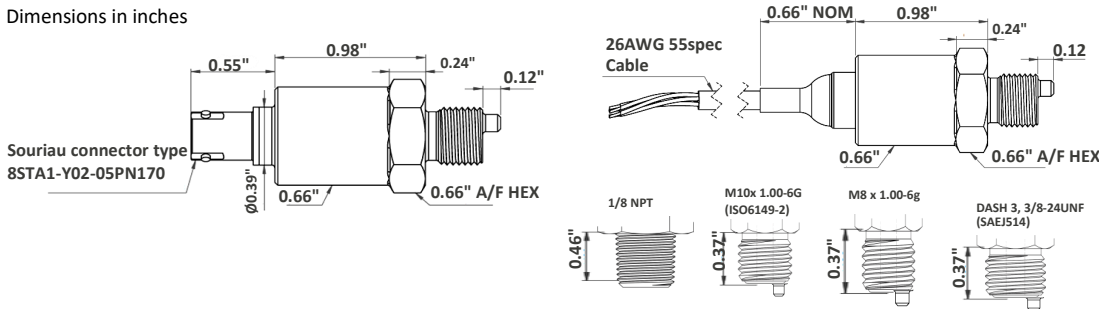
Special Codes



The KA configuration tool is used to specify a standard KA Sensor, other options are available.

MECHANICAL DETAILS

Dimensions in inches



TEMPERATURE DETAILS

	NTC10KΩ	PT1000
Temp °F	Output Ω	Output Ω
-25	120370.00	882.200
-5	71668.00	921.600
15	44087.00	960.900
32	27936.00	1000.000
50	18187.00	1039.000
70	12136.00	1077.900
75	10000.00	1097.300

	NTC10KΩ	PT1000
Temp °F	Output Ω	Output Ω
85	8284.50	1116.700
105	5774.20	1155.400
125	4120.60	1194.000
140	2967.30	1232.400
160	2181.70	1270.800
175	1628.80	1309.000
195	1233.50	1347.100

	NTC10KΩ	PT1000
Temp °F	Output Ω	Output Ω
215	946.59	1385.100
230	735.47	1422.900
250	578.10	1460.700
265	459.36	1498.300
285	368.75	1535.800
300	298.86	1573.300

ELECTRICAL DETAILS

Cable Option					Hermetic connector Option				
+Ve Supply	0V Supply	Output (P)	Output (T)	Output (T)	+Ve Supply	0V Supply	Output (P)	Output (T)	Output (T)
Red	Black	White	Blue	Green	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5

Precision
Sensors
Test
Measurement
OEM

Sensors For:

- Temperature
- Acceleration
- Pressure
- Position
- Torque
- Speed
- Angle
- Force

Services For:

- OEM
- On-Time Delivery
- Custom Engineering
- Application Engineering

Contact Us

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