



# ASHT SERIES HIGH PERFORMANCE COMBINATION PRESSURE & TEMPERATURE TRANSDUCER - UP TO 6000 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 >500 psi and 6000 psi in either Absolute, Gauge or Sealed Gauge reference.

#### **TECHNICAL SPECIFICATIONS**

Pressure Reference	Absolute, Gauge and Sealed Gauge	
Standard Pressure Ranges (psi)	500, 750, 1500, 3000, and 6000 Any range >500 psi can be specified For ranges below 500 psi see ASHT Low Range datasheet	
Proof Pressure (overload)	150% of range	
Burst Pressure	>300% of range	
Accuracy	±0.2% FS combined linearity & hysteresis (CNLH)	
Thermal Effects	Zero ±0.005% FS/°F (Sensitivity ±0.005% of reading /°F)	
Outputs	Pressure: 0.5V to 4.5V ( $\pm$ 0.5%) Temperature: NTC, 2-wire $\pm$ 10K $\Omega$ @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	
<b>Protection Class</b>	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	

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

#### Precision Sensors

# Test Measurement OEM

#### **Features**

- Built-in Temp. Sensor
- Cable or Connector
- >500 to 6000 psi
- 300°F Operation
- ±0.2% Accuracy

#### **Applications**

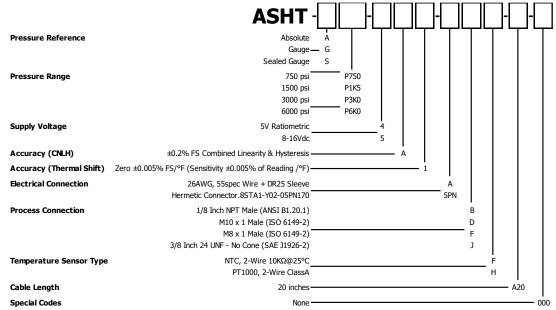
- Engine Test
  - Automotive
  - Aviation
  - Dynamometers
- Satellite Launch Vehicles
  - Propellants
  - Chamber Pressure
  - Fuel Level
- Flight Test
  - Hydraulic Systems
  - Flight Control Systems
  - HVAC Systems
  - More...
- Drone/UAV/AUV/ROV
  - Hydraulic Systems
  - -Avionics
  - Моге....
- Manufacturing
- Motorsport sales@pmcl.com www.kasensors.com Represented by:

PRESSURE | TEMPERATURE | FORCE | TORQUE | POSITION | SPEED | ACCELERATION | GYRO

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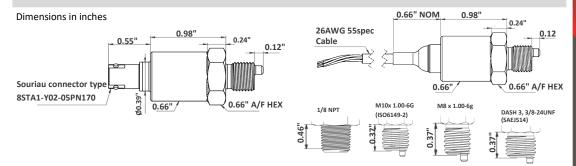
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# PART NUMBER CONFIGURATOR



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

#### **MECHANICAL DETAILS**



### **TEMPERATURE DETAILS**

	ΝΤC10ΚΩ	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	

	ΝΤC10ΚΩ	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	

ΝΤC10ΚΩ	PT1000	
Output Ω	Output Ω	
946.59	1385.100	
735.47	1422.900	
578.10	1460.700	
459.36	1498.300	
368.75	1535.800	
298.86	1573.300	
	Output Ω 946.59 735.47 578.10 459.36 368.75	

# **ELECTRICAL DETAILS**

Cable Option				
+Ve Supply	<b>OV Supply</b>	Output (P)	Output (T)	Output (T)
Red	Black	White	Blue	Green

Hermetic connector Option				
+Ve Supply	<b>OV Supply</b>	Output (P)	Output (T)	Output (T)
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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