



ASHT SERIES HIGH PERFORMANCE PRESSURE & TEMPERATURE TRANSDUCER

The ASHT Series feature both Pressure and Temperature Sensors within a single transducer package. These High Accuracy Transducers are ideal for high precision data acquisition or control systems found on Automotive and Motorsport 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.

Using a modular construction and programmable amplifier provides a fast delivery time for standard and custom configurations.

Pressure ranges are available between 50 and 400 Bar in either Absolute, Gauge or Sealed Gauge reference. The industry standard 3-wire electrical connections for the Pressure and 2-wire for the Temperature allow configuration with most common ECU's and data logging systems. Also available with a fitted Hermetic Connector option.

TECHNICAL SPECIFICATIONS

Pressure Reference	Absolute, Gauge and Sealed Gauge
Standard Pressure Ranges (Bar)	50, 100, 200, 400
Proof Pressure (Over range)	150% of Range
Burst Pressure	>300% of Range
Accuracy	±0.2% FS Combined Linearity & Hysteresis (CNLH)
Thermal Accuracy	Zero ±0.01% FS/°C (Sensitivity ±0.01% of Reading /°C)
Outputs	Press: 0.5V to 4.5V (±0.5%) Temp: NTC, 2-Wire 10KΩ@25°C or 2-Wire PT1000
Supply	5V (±0.5V) Ratiometric or 8-16Vdc (<20mA)
Operating Temperature Range	-20°C to +150°C
Compensated Temperature Range	0°C to +125°C
Construction	Stainless Steel
Electrical Connection	26AWG, 55 Spec Wire + DR25 Sleeve Or, Hermetic Connector. 8STA1-Y02-05PN170
Process Connection (Thread Size)	Please see Part Number Configurator
Protection Class	IP67 (Cable Option), Hermetic Seal (Connector Option)
EMC Protection & Vibration	EN E50082-1 and Mil-Std-810C, Curve L, 20G
Weight	41g (Cable Option), 33g (Connector Option)
Options	Cable Spec, Connector Fitted, Labelling & Thread Size

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

Sensors For Motorsport

Features

- Built-In Temp. Sensor
- Cable or Connector
- 50 to 400 Bar Range
- 150°C Operation
- ±0.2% Accuracy

Applications

- Coolant
- Brakes
- Water
- Boost
- Fuel
- Oil

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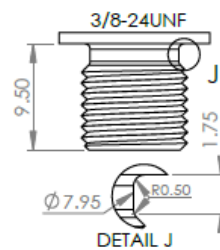
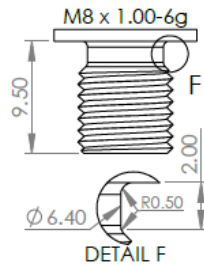
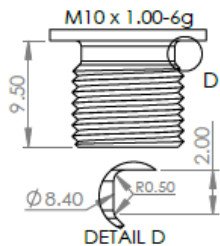
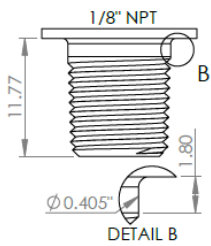
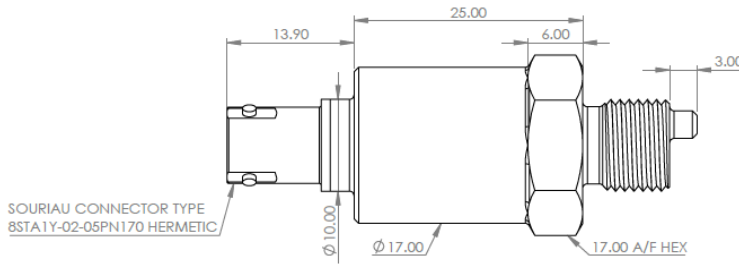
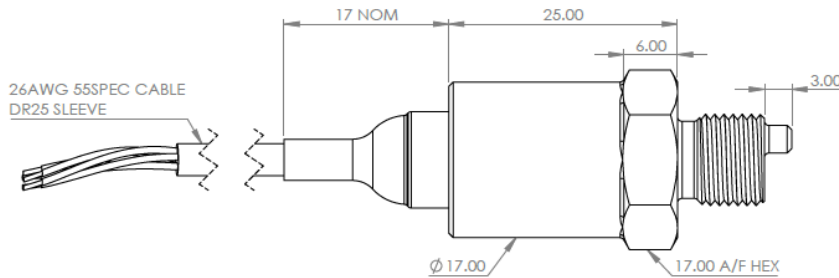
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PART NUMBER CONFIGURATOR

Pressure Reference	Absolute Gauge	A													
	Gauge	G													
	Sealed Gauge	S													
Pressure Range	50 Bar		5002												
	100 Bar		1003												
	200 Bar		2003												
	400 Bar		4003												
Supply Voltage	5V Ratiometric						4								
	8-16V						5								
Accuracy (CNLH)	±0.2% FS Combined Linearity & Hysteresis							A							
Accuracy (Thermal Shift)	Zero ±0.01% FS/°C (Sensitivity ±0.01% of Reading /°C)								1						
Electrical Connection	26AWG, 55 Spec Wire + DR25 Sleeve									A					
	Hermetic Connector.8STA1-Y02-05PN170										5PN				
Process Connection	1/8 Inch NPT Male (ANSI B1.20.1)											B			
	M10 x 1 Male (ISO 6149-2)												D		
	M8 x 1 Male (ISO 6149-2)													F	
	3/8 Inch 24 UNF - No Cone (SAE J1926-2)														J
Temperature Sensor Type	NTC, 2-Wire 10KΩ@25°C													F	
	PT1000, 2-Wire ClassA													H	
Cable Length	50cm														050
	None - Hermetic Connector Option Chosen														000
Special Codes	None														000

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

MECHANICAL DETAILS



Sense
Analyse
Control

Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

Contact us

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TEMPERATURE DETAILS

	NTC10K Ω	PT1000
Temp °C	Output Ω	Output Ω
-30	120370.00	882.200
-20	71668.00	921.600
-10	44087.00	960.900
0	27936.00	1000.000
10	18187.00	1039.000
20	12136.00	1077.900
25	10000.00	1097.300
30	8284.50	1116.700
40	5774.20	1155.400
50	4120.60	1194.000
60	2967.30	1232.400
70	2181.70	1270.800
80	1628.80	1309.000
90	1233.50	1347.100
100	946.59	1385.100
110	735.47	1422.900
120	578.10	1460.700
130	459.36	1498.300
140	368.75	1535.800
150	298.86	1573.300

CONNECTION DETAILS

Cable Option				
+Ve Supply	0V Supply	Output (P)	Output (T)	Output (T)
Red	Black	White	Blue	Green

Hermetic Connector Option				
+Ve Supply	0V Supply	Output (P)	Output (T)	Output (T)
Pin 1	Pin 2	Pin 3	Pin 4	Pin 5

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