



ASHT SERIES HIGH PERFORMANCE PRESSURE & TEMPERATURE TRANSDUCER (LOW RANGE)

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 1 and 35 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) | 1, 2, 5, 10, 15, 20, 35 |
| Proof Pressure (Over range) | 300% of Range |
| Burst Pressure | >1000% of Range |
| Accuracy | ±0.08% FS Combined Linearity & Hysteresis (CNLH) |
| Thermal Accuracy (Total Error Band) | <±0.25% FS TEB within Compensated Range |
| 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
- 1 to 35 Bar Range
- 150°C Operation
- ±0.08% Accuracy

Applications

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

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ASHT LOW 10.19

PART NUMBER CONFIGURATOR

| | ASHT | | | | | | | | |
|---------------------------------|--|------|---|---|---|-----|---|-----|-----|
| Pressure Reference | Absolute Gauge | A | | | | | | | |
| | Sealed Gauge | S | | | | | | | |
| Pressure Range | 1 Bar | 1000 | | | | | | | |
| | 2 Bar | 2000 | | | | | | | |
| | 5 Bar | 5000 | | | | | | | |
| | 10 Bar | 1002 | | | | | | | |
| | 15 Bar | 1502 | | | | | | | |
| | 20 Bar | 2002 | | | | | | | |
| | 35 Bar | 3502 | | | | | | | |
| Supply Voltage | 5V Ratiometric | | 4 | | | | | | |
| | 8-16V | | 5 | | | | | | |
| Accuracy (CNLH) | ±0.08% FS Combined Linearity & Hysteresis (CNLH) | | | A | | | | | |
| Accuracy (Thermal Shift) | <±0.25% FS TEB within Compensated Range | | | | 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 |

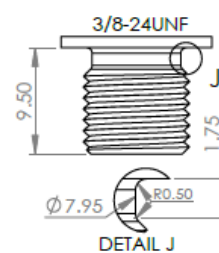
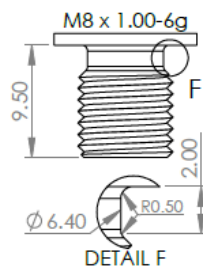
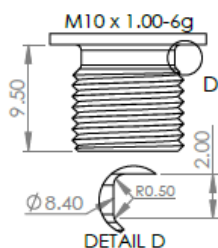
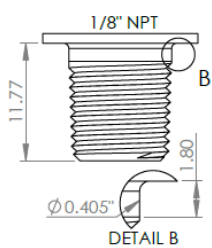
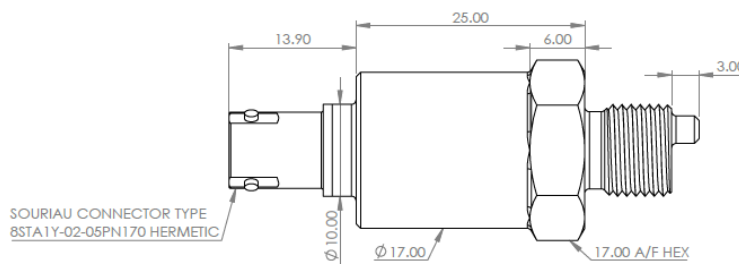
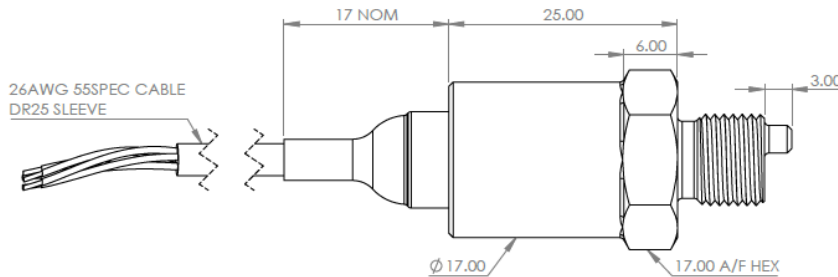
The KA configuration tool is used to specify a standard KA Sensor, other options are available.

Sense
Analyse
Control

Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

MECHANICAL DETAILS



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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