



### KAP Series Differential Pressure Sensor

The KAP Series of cost effective High Performance Pressure Transducers have been designed for dynamic pressure measurements using a Pitot Tube in demanding motorsport and automotive applications; ideal for high precision data acquisition or control systems. These transducers can also be installed directly onto vehicles, as part of a test stand or dyno. Offering a high level of reliability and endurance the KAP is protected against the high vibration, shock and high temperatures found in motorsport. Also suitable for wet/wet installations.

With a modular construction and programmable amplifier, this provides a fast delivery time for standard and custom configurations. Pressure ranges are available between 25 to 75 mBar Differential.

Industry standard 3-wire electrical connections allow configuration with most common ECU's and data logging systems.

The KAP Series are race proven and can be found in many race series around the world. Please see our separate datasheet (KAPT) for details of the standard and custom Pitot Tubes that can be supplied.

# **TECHNICAL SPECIFICATIONS**

Pressure Reference	Differential	
Standard Pressure Ranges (mBar)	25, 50, 75	
Proof Pressure (Over range)	300% of Range	
Burst Pressure	10x Range	
Accuracy	±0.5% FS Combined Linearity & Hysteresis (CNLH)	
Thermal Accuracy	Zero ±0.02% FS/°C (Sensitivity ±0.02% of Reading /°C)	
Output	0.5V to 4.5V (±0.5%)	
Supply	5V (±0.5V) Ratiometric or 8-16Vdc	
Operating Temperature Range	-20°C to +85°C	
Compensated Temperature Range	0°C to +85°C	
Construction	Anodised Aluminium and Stainless Steel	
<b>Electrical Connection</b>	50cm 26AWG, 55Spec Wire + DR25 Sleeve	
Process Connection	Barb Fitting (To Suit 4mm ID Tube)	
Protection Class	IP65	
EMC Protection & Vibration	EN E50082-1 and Mil-Std-810C, Curve L, 20G	
Weight	Sensor: 30g, Pitot Tube: 60g	
Options	Cable Spec, Connector Fitted and Labelling	

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

Sensors For Motorsport

#### **Features**

- Miniature Size
- 5V or 8-16V Supply
- 25 to 75 mBar Range
- Rugged Design
- Amplified Output

#### **Applications**

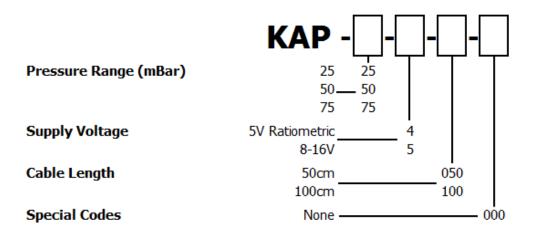
- Aerodynamics
- Air Speed

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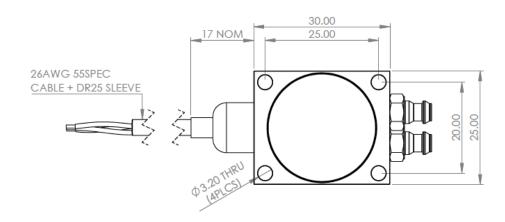
PRESSURE | TEMPERATURE | FORCE | TORQUE | POSITION | SPEED | ACCELERATION | GYRO

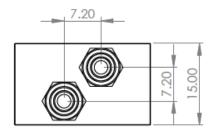
## PART NUMBER CONFIGURATOR



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

## **M**ECHANICAL **D**ETAILS





# **CONNECTION DETAILS**

+Ve Supply	<b>OV Supply</b>	Signal
Red	Black	White

Sense Analyse Control

#### Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

### Contact us

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