ka sensors
SENSE | ANALYZE | CONTROL
a bf1systems company

KAP Series
Differential Pressure Sensor

Sensors For Motorsport

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 on-vehicle automotive applications. They are ideal for high precision data acquisition or control systems. These transducers can be installed directly onto vehicles or 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.

The modular construction and programmable amplifier provide a fast delivery time for standard configurations. Pressure ranges of 25 to 75 mBar Differential are available. 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.

See our separate datasheet (KAPT) for details of the standard and custom Pitot Tubes that can be supplied.

Features

- Miniature Size
- 5V or 8-16Vdc Supply
- 25 to 75 mBar Range
- Amplified Output
- ±0.5% Accuracy

Technical Specifications

Pressure Reference	Differential
Standard Pressure Ranges (mBar)	25, 50, 75
Proof Pressure (overload)	300% of range
Burst Pressure	10x range
Accuracy	±0.5% FS combined linearity & hysteresis (CNLH)
Thermal Effects	Zero ±0.01% FS/°F (Sensitivity ±0.01% of reading /°F)
Output	0.5V to 4.5V (±0.5%)
Power Supply	5V (±0.5V) Ratiometric or 8-16Vdc
Operating Temperature Range	-40°F to 185°F (-40°C to +85°C)
Compensated Temperature Range	32°F to 185°F (0°C to +85°C)
Construction	Anodized Aluminum and Stainless Steel
Electrical Connection	20", 26AWG 55spec Wire + DR25 Sleeve
Process Connection	Barb Fitting (To suit 0.15" ID Tube)
Protection Class	IP65
EMC Protection & Vibration	EN 50082-1 and Mil-Std-810C, Curve L, 20G
Weight	Sensor: 1oz, Pitot Tube: 2oz

Applications

- Aerodynamics
- Air Speed

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Represented by:

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

Part Number Configurator

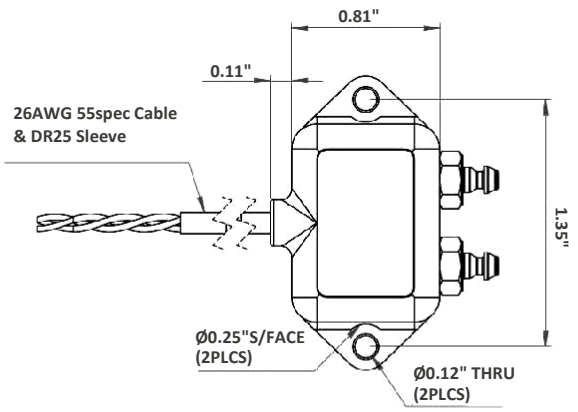
KAP - [ ] - [ ] - [ ]

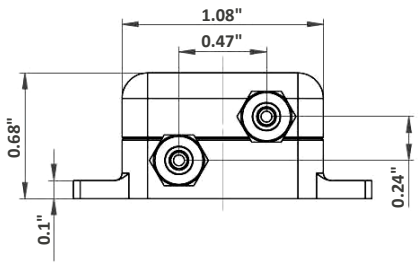
Pressure Range (mBar)	25	25	
	50	50	
	75	75	
Supply Voltage	5V Ratiometric		4
	8-16Vdc		5
Special Codes	None		000

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

Mechanical Details

Dimensions in inches





Electrical Details

+Ve Supply	0V Supply	Signal
Red	Black	White

Sense
Analyze
Control

Sensors For:

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

Services For:

- Data Logging
- Telemetry
- Controls
- Wiring

Contact Us

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