

SENSORS FOR MOTORSPORT



kasensors
SENSE | ANALYZE | CONTROL

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

KA SENSORS

At KA Sensors we understand that your sensors supplier must be able to respond to a series of challenges.

Our team has valuable experience applying sensors and control systems into demanding applications around the world. This helps us design and manufacture reliable, precise and rugged products.

KA Sensors is a global company with technical support across all major motorsport disciplines in the world. Our products are trusted and used in every major race series.

+HIGH QUALITY

Precision is designed into every product and process to provide the highest quality.

+RUGGED

Designed to withstand the most demanding environments, with protection from vibration, shock and temperature.

+RELIABLE

Reliability of supply and quality, backed up by dedicated staff and a large component inventory.

+SUPPORT

After sales support includes installation assistance, fault analysis, repair, refurbishment and return to base re-calibration Service.

+ACCURATE

We test and calibrate all items prior to shipment ensuring tight specifications are met.



LIGHTWEIGHT+

Modern race installations are very demanding. Our designs are compact and lightweight.

CUSTOM DESIGN+

For special applications we will customize sensors and systems to suit, using up to date 3D design and manufacturing tools.

RESPONSIVE+

Engineers respond quickly and efficiently to all inquiries. We continue to offer fast delivery times and strong after sales support.

INNOVATIVE+

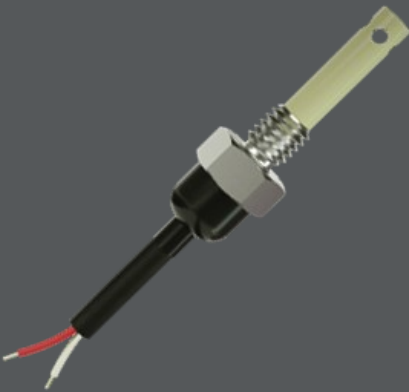
We review market demands and have a continuous development program. We are always excited to work on new projects that stretch technology boundaries.

OUR SENSOR RANGE



PRESSURE SENSORS

Our pressure sensor range has been developed to be lightweight, small and highly reliable. Accurately sensing fuel, oil, coolant and gases with ranges from <1psi up to 6000psi. All sensors can operate with either 5V or 8 to 16Vdc supply voltages, providing an output of 0.5 to 4.5V as standard. A range of process connections allow use in areas where weight, space and endurance are critical. We also offer combination pressure and temperature sensors.



TEMPERATURE SENSORS

Our comprehensive range of temperature sensors are designed to measure fluid, gas, tires, brakes or air temperature ranging from -40°F to 2200°F. Our innovative PEEK ISOTIP™ air temperature sensors allow fast and accurate measurements without heat soak interference. Materials of construction and dimensions ensure a compatibility with the majority of application.



FORCE AND TORQUE SENSORS

The KA Sensors range of gearshift load cells for 'FlatShift' are presented as either lever top mounted or in-line with a force range from ± 20 lbf to ± 450 lbf. Torque sensors can accurately measure drive shaft, torsion bar and steering torque. A microprocessor based amplifier ensures high accuracy within temperatures up to 300°F. We have developed wireless signal transmission for use on high speed rotating torque applications.

OUR SENSOR RANGE



POSITION SENSORS AND LASERS

Our position sensors have been developed for use in high performance motorsport applications, accurately measuring linear range from 0.04" to 40" or angular up to $\pm 720^\circ$. Designed for harsh environments including ingress protection our position sensors offer reliability even under extreme conditions including high temperatures and vibration.

Our range of laser sensors provide fast and accurate measurement of ride height while our linear and rotary sensors are typically used for suspension displacement, pedal, steering angles and aero surface deflection.



SPEED SENSORS

Our speed sensors can be used in a wide range of applications. Wheel speed and crank shaft speed sensors utilize high precision 'Hall Effect' technology with operation up to 300°F. For high speed we use 'Eddy Current Technology' to detect the speed of aluminum or titanium turbo blades up to 400,000rpm. For airspeed our pitot sensors can be used with a measurement range as low as ± 0.5 psi.



ACCELEROMETER & GYRO SENSORS

Custom designed and manufactured accelerometers and gyros in one, two or three axis. Our accelerometers accurately measure ranges from ± 1 G to ± 500 G with a frequency response of DC to 5kHz. Various packaging sizes ensure a wide flexibility for use on whole vehicle dynamics or to analyze sub-components such as suspension or transmission.

CUSTOM SENSORS & SYSTEMS

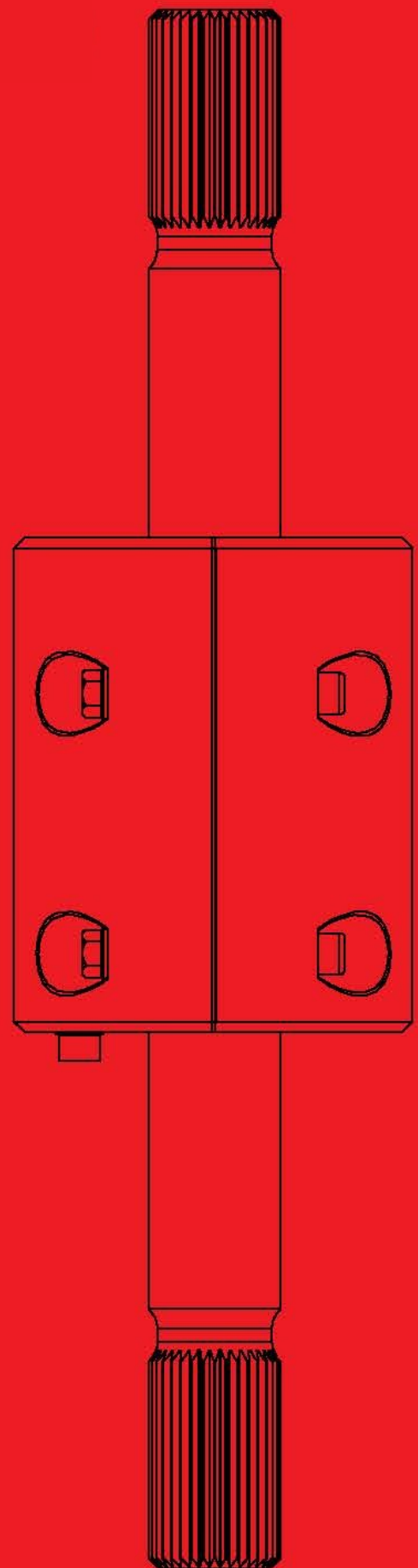
CUSTOM DESIGN & MANUFACTURE PROJECTS

To complement our standard product range we offer a modification service or a full ground-up custom design service. We will work with you to supply a single component or complete system designed to match your exact requirements.

Some recent projects include:

Oil contamination sensor: This miniature device utilizes a magnetic technology to detect ferrous particles within engine, transmission oils, enabling gear wear to be monitored. Potential failures can be detected before catastrophic breakdowns occur.

8-Channel CAN Hub: A miniature sensor connection hub which allows analog sensors and digital speed sensors to be configured and connected to a 16bit CAN network, therefore saving space and complexity in the vehicle wiring and electronics.



ABOUT US

KA Sensors are a global supplier and manufacturer of specialist sensors. With offices in the UK and the USA. Founded in 2006, our engineers have over 30 years of experience in sensor design and application. We offer a wide range of high quality standard sensors. To compliment this we also offer a custom design and build or modification service. Working with you to supply a single component or complete system, our technical sales and support team will ensure that every aspect of your sensor application is thoroughly analyzed to make sure the correct product is specified and supplied.

For more information: www.kasensors.com or call 203 792-8686

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OUR CUSTOMERS INCLUDE RACE TEAMS AND
MANUFACTURERS INVOLVED IN

