

Sensors Overview

ROTARY POSITION SENSORS



General Overview

About Strainsense

Established in 2002 and based in Milton Keynes. We focus on providing Sensor and Data Acquisition solutions in various markets not limited to Automotive/Autosport, Crash, Military, Aerospace and Research facilities.

All of us, Internal Engineers, Product Specialists & External Sales focus our time providing application solutions using various sensing technologies within our extensive portfolio. Uniquely we can provide custom products, solutions and systems.

Accredited ISO9001:2015 & ISO14001:2015

Full compliance Conflict Minerals, Reach, RoHS, Anti-Slavery, Anti-Bribery, Ethics & Standards.

Sensors and Data Acquisition

| | |
|-------------------------|--|
| Pressure | General Industrial, High Temperature, Miniature/Dynamic |
| Force/Torque | Pancake, S-Beam, Low Profile, Multi-axis, Custom solutions |
| Position | Linear & Rotary, LVDT, Inclinometers, String Pots |
| Vibration | AC & DC coupled & Servo Accelerometers |
| Strain | Specialise in high temperature, gauging In-house, on site |
| Inertial | Gyros, IMUs, INS & GPS |
| Current | Zero Flux & Rogowski coils, AC & DC coupled |
| Data Acquisition | Mobile, Test rigs & analysis software |

Solutions to integrate all the above with signal conditioning, displays, cables & amplifiers.



MICROSENSOR

PIEZOCRYST
ADVANCED SENSORIES GmbH



inelta
Sensorsysteme



Sherborne Sensors



Rotary Position Sensors

Rotary sensors from 10° to 360° range. Customised options available, designed for precision, rugged use and with exceptional support from the design teams, we offer an optimum choice of high quality sensors.

Rotary Potentiometers

Ranges from 0-125° to 0-350°

Anodised Aluminium body

Temperature range -40 to +175°C on selected ranges

Self lubricating internals

Mechanical 360° rotation



Rotary Hall-Effect sensors

Ranges from 0-10° to 0-360°

Dual outputs individually customisable

Contact-free technology

Optional additional pre-set trigger-point output



Encoders

Ranges from 0-30° to 0-3600°

Digital or pulse output

Multi-turn or 360° operation



Rotary Potentiometers

UK manufactured high quality rotary sensors with precision conductive plastic resistive track proven to over 25 million cycles MTBF. Free-running with all aluminium body and protection up to IP67. Motorsport grade low noise signal cable and low friction internal bearing.

MS-22R

Range 0-45°, 0-125° or 0-350°

PEEK rotary bearing, self lubricating and non-absorbent

Single or Dual output (Dual 125° only)

Choice of fixings, standard or compact flange mount

IP67 protection

Temperature range -40 to +175°C

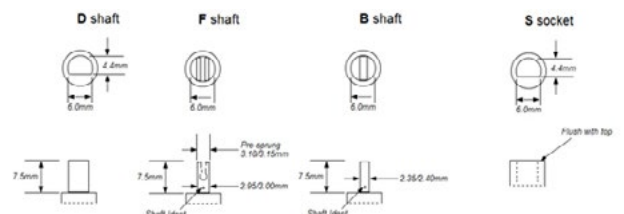
Choice of Stainless Steel shaft couplings

High quality motorsport grade cable

Compatible with standard fitments

Precision made resistive plastic track

100% inspection & testing



Rotary Hall-Effect Sensors

UK manufactured high quality rotary sensors with precision Hall-Effect integrated sensor. Fully programmable with all aluminium body and protection up to IP67. Motorsport grade low noise signal cable and low friction internal bearing.

MS-22H/MS-22HD/MS-23H

Range 0-20° to 0-360°

Output fully customisable, start/finish position and offset phasing

PEEK rotary bearing, self lubricating and non-absorbent

Single/dual multi-voltage output options with 5VDC or 6-30VDC supply

Choice of standard or compact flange mounts

MS23H is a 'true non-contact' sensor

IP67 protection

Temperature range -40 to +175°C

Choice of shaft couplings

High quality motorsport grade cable

Compatible with standard fitments

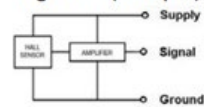
Option of up to 2 trigger point outputs

OEM designs available

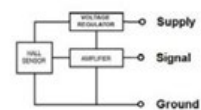
100% inspection and testing



Regulated (5V input) Sensor



Un-regulated (6-30V) Sensor



Rotary Encoder Sensors

High quality rotary encoders with precision outputs. Compatible with other brands and versatile in design. Options of analogue, digital, or pulse output to suit your acquisition system.

Range 0-30° to 0-3600°

Analogue outputs: Voltage or 4-20mA

Analogue Quasi-infinite resolution
(operating system dependent)

Angular rotation output available

Digital output options: RS232, RS422

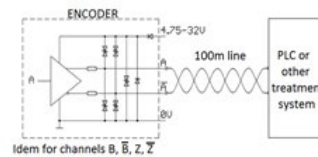
Pulse output option

CANBUS output option

Multiple designs of body and shaft

Resolution from 1 to 3600 pulses per degree

Absolute option with up to 65536 pulses per revolution



RVDT and RVIT Sensors

Rotary Variable Differential Transformers and Rotary Variable Induction transducers for precision rotary applications. Using the same principle as an LVDT linear sensor, an RVDT transmits an AC signal between primary and secondary windings. An RVIT is lower cost than an RVDT as it uses variable inductance rather than AC transmission.

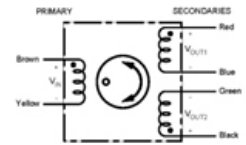
Range 0-30° to 0-60°

Analogue AC output or internally signal conditioned DC output

Compatible with LVDT signal conditioners

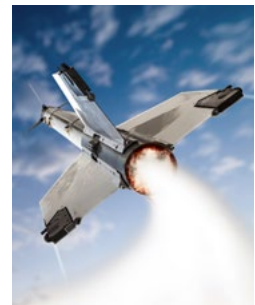
From $\pm 0.25\%$ FS non linearity

Temperature from -55 to 150°C



Thank you.

Contact us today for the latest sensor technology.



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