

Sensors Overview

LINEAR MEASUREMENT



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

PIEZOCRIST
ADVANCED SENSORIES GmbH



inelta
Sensorsysteme



Sherborne Sensors



Linear Position Sensors

Linear sensors from $\pm 1\text{mm}$ up to 500mm range with accuracy from $1\mu\text{m}$. 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.

Linear Potentiometers

Ranges from 0 - 12.5mm to 0 - 450mm

Anodised Aluminium body with Stainless Steel shaft

Temperature range -40 to $+175^\circ\text{C}$ on selected ranges

Self lubricating internals with unique anti-vibration multipoint wiper

Available with potentiometric or amplified 4-20 mA output



LVDT Sensors

Ranges from $\pm 1\text{mm}$ to $\pm 250\text{mm}$ from $1\mu\text{m}$ accuracy

Free core, captive core, or spring loaded

Wide temperature range -55 to $+500^\circ\text{C}$

AC or signal conditioned DC output

Customisable ranges with high pressure and vacuum options



Draw-Wire Sensors

Ranges from 0-35mm to 0-50 metres

Temperature options -55 to $+125^\circ\text{C}$ on selected ranges

Customisable with many options

Potentiometric, amplified, or encoder output



Linear Potentiometers

UK manufactured high quality linear sensors with precision conductive plastic resistive track proven to over 25 million cycles MTBF. Spring loaded or free-running with all aluminium body and protection up to IP67. Unique Anti-vibration wiper design and motorsport grade low noise signal cable.

MS-94M/MS-94SR

Range 0-12.5mm to 0-175mm
(Spring loaded 12.5 to 75 mm)

Free-running or external spring loaded

Potentiometric output or inline cable amplifier

Choice of fixings



MS-13M/MS-13SR

Range 0-25mm to 0-250mm
(Spring loaded 25 to 150mm)

Free-running or external spring loaded

Choice of fixings

Potentiometric or amplified 0-10 VDC
or 4-20mA output

Single or Dual output



MS-19M/MS-19SR

Range 0-50mm to 0-450mm
(Spring loaded 50 to 150mm)

Choice of fixings

Potentiometric or amplified 0-10 VDC
or 4-20mA output

Free-running or internal spring loaded

Single or dual output



LVDTs

Linear Variable Differential Transformers (LVDT) are AC devices transmitting between primary and secondary coils via a moving core which varies the transmission signal. Available with built-in signal conditioning or for use with external signal conditioners LVDT sensors have accuracy to $1\mu\text{m}$. Customisable and available with high pressure or very high / very low temperature models.

Precision Short-Range

Spring return with or without protective gaiter

LVDT AC output

Range $\pm 1\text{mm}$ to $\pm 10\text{mm}$

$1\mu\text{m}$ accuracy



Industrial and Structural

Free-running, captive core or spring return

Range $\pm 2\text{mm}$ to $\pm 50\text{mm}$

LVDT AC or Signal-conditioned DC output

Choice of fixings

Rod-ends, threaded, ball contact, etc



Special Purpose

High temperature up to 500°C

High pressure and low pressure models

Long range up to 500mm

Custom designs

Body style, pressure rating, IP rating, core style, etc



Draw-wire (String Pots)

String potentiometers from the smallest in the world to 50 Metre ranges with a huge variety of custom options to satisfy any application need.

Precision Short-Range

Including the smallest sized draw-wire sensor in the world

Ranges from 0-38mm to 0-1080mm

Temperature range -55°C to +125°C

User serviceable with custom service kit

Precision accuracy potentiometric output

Roundabout™ draw wire exit



Standard and Long-Range String Potentiometers

Rugged all-Aluminium body

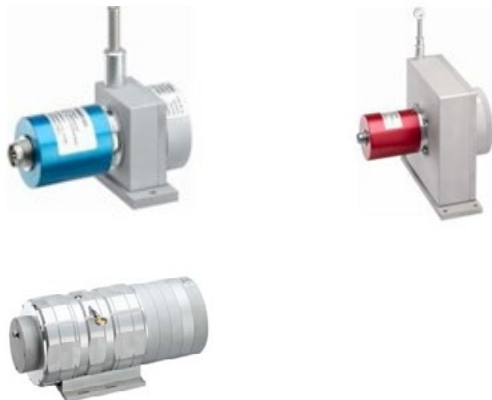
Ranges from 0-50mm to 0-50 metres

Potentiometric, amplified, or encoder output

Integral cable or connector on body

Water evacuation holes, dust wipers, coated cable (custom options)

Complete anodising, Dual output, Draw-wire extension



Signal Conditioners and Displays

Accessories to provide a complete measurement solution from basic display to a fully programmable high speed datalogger. Connector fitting, extension cables, signal conditioners, power supplies and more.

Amplifiers/Conditioners

Inline, DIN rail, modular

Sensor power signal (typical 3V RMS)

Analogue and digital output options



Displays

DIN panel mount

Digital display

Sensor power supply

Analogue, digital, alarm output



Integration

Connector fitting

Calibration

Complete measurement chain supply

Complete Test Rig solutions

Extension cables



Thank you.

Contact us today for the latest sensor technology.



Strainsense Limited

Old Stratford Business Park,
Falcon Drive, Old Stratford,
Milton Keynes MK19 6FG