



SENSORS FOR SPECIAL PURPOSE VEHICLES

Variohm
Group



SENSOR APPLICATIONS



Variom
Group

- Slew / Boom Angle & Extension
- Steering & Hydraulics
- Fluid level & Pressure
- Vehicle & Platform levelling
- Product weighing
- Overload monitoring
- Engine & Drive powertrain
- Foot pedals & Hand controls
- Switching & Latching
- Cabin climate control
- Coolant & Oil temperature monitoring
- Force & Torque measurement



KEY FEATURES

- E1 Approval
- Designs to Meet SIL II
- EC79 & EC406
- PL:d Compliance
- DIN EN ISO 13849
- IEC 61508
- EN 13309 for Construction Machinery
- ISO 14982 for Agricultural Machinery
- High Shock & Vibration
- Reliable Long-life Solutions
- Robust, Heavy-duty, Industry Proven
- Environmentally Sealed

We also offer a range of custom solutions to suit your more specific requirements.



PRODUCT RANGE - POSITION SENSORS

LINEAR POTENTIOMETERS

Products:

- VLP / VXP
- VSPSC
- ELPM / ELPM POP
- PZ12

Features:

- 0-10...3000 mm measurement range
- Voltage divider principle
- Repeatability down to ± 0.01 mm
- Temperature range -40°C to 150°C (175°C short term)
- Sealing up to IP67



LINEAR INDUCTIVE SENSORS

Products:

- ILT
- POSITEK P, S, X, M Series

Features:

- 0-2...1500 mm measurement range
- Analogue output signals
- Temperature range -40°C to 125°C
- Sealing up to IP68 (submersible version to 3500 m)
- Intrinsically safe versions with ATEX & CSA approval



ROTARY HALL EFFECT SENSORS

Products:

- Euro XPD, XPK
- Euro CMRx Series
- R2
- AM-RSS

Features:

- $0-30^{\circ}$... 360° angle measurement range
- Temperature range -40°C to 150°C
- Excellent customisation options
- Full contactless versions available



ROTARY INDUCTIVE SENSORS

Products:

- POSITEK 500 Series

Features:

- $0-5^{\circ}$... 160° angle measurement range
- Analogue output signals
- Temperature range -40°C to 125°C
- Sealing up to IP68 (submersible version)
- Intrinsically safe versions with ATEX & CSA approval



PRODUCT RANGE - POSITION SENSORS

MAGNETIC ENCODERS

Products:

- M - Series
- L - Series
- H - Series
- N - Series

Features:

- High and low resolution modules
- Excellent speed, direction and relative position feedback
- Operating temperature -40...+125°C
- Operating range 4 - 24 V



WATERPROOF SWITCHES

Products:

- K1005, K1005-18
- K1006-18
- B7151-18

Features:

- True waterproof solutions
- Momentary and latching function
- Different housing and rating options
- From -40°C to 150°C



BALL AND PLUNGER SWITCHES

Products:

- J4 Series
- D1021

Features:

- True waterproof solution over millions of cycles
- Full stainless steel
- Patented sealing mechanism
- Different housing and rating options
- From -40°C to 150°C



LIMIT SWITCHES

Products:

- E1092
- E1117
- E1134

Features:

- True waterproof solution with actuator
- Custom actuator and mounting plate designs
- Different housing and rating options
- From -53°C to 105°C (-65°F to 221°F)



PRODUCT RANGE - POSITION SENSORS

PROXIMITY SENSORS

Products:

- Phoenix W-Series



Features:

- Solid state and non-contact design
- Machined and moulded housing
- For use with permanent magnet target

GEAR TOOTH SENSORS

Products:

- K4
- K9



Features:

- Solid state ferrous detecting device
- Machined and molded housing
- From 0 speed up to high speed (15 kHz)
- Self adjusting to target gear tooth wheel
- Easy installation

INDUCTIVE TILT SENSORS

Products:

- Positek 600 Series



Features:

- 0- +/-15° ... +/-80° tilt angle measurement range
- Analogue output signals
- Temperature range -40°C to 125°C
- Sealing up to IP68 (submersible version)
- Intrinsically safe versions with ATEX & CSA approval

PRODUCT RANGE - TEMPERATURE SENSORS

TEMPERATURE PROBES

Products:

- ETP-MO
- ETP-AM-SP
- ETP-BC-M6
- ETP-RT

Features:

- Temperature ranges from -96°C up to 350°C
- RTD or NTC based probes
- Screw type, ring terminal, tubular probes
- Custom housings & connectors
- Wide range of cable options



TEMPERATURE TRANSDUCERS

Products:

- ETP21
- ETP-H2

Features:

- Temperature range -40°C to 150°C
- Analogue output signals
- Wide range of process connections
- Wide range of connector options



PRODUCT RANGE - PRESSURE SENSORS

PRESSURE TRANSDUCERS

Products:

- EPT3100
- EPT31H2, EPT31CN
- SMO31H2, SMO31H2 PId
- EPT1400
- EPT2100

Features:

- 0-20 mbar up to 5000 bar measurement range
- Analogue and digital output signals, incl. low energy
- Wide range of process connections
- Wide range of electrical connections
- Flush mount and level meter versions



PRESSURE SWITCHES

Products:

- VPS100A

Features:

- Ultra-sensitive patented dual-diaphragm / dual contact
- Switch range 0.25 - 124.59 mbar
- Extended temperature range
- Fitted with an AMP superseal connector



PRODUCT RANGE - COMBINED PRESSURE - / TEMPERATURE TRANSMITTERS

COMBINED PRESSURE - / TEMPERATURE TRANSMITTERS

Products:

- EPTTE1400
- EPTTE3100
- EPTTE5100

Features:

- 0-0.6 bar up to 1000 bar measurement range
- Temperature range -40... 150 °C
- Analogue output signal
- PT1000 or analogue output
- Integrated or exposed temperature probe



PRODUCT RANGE - MAGNETS

MULTIPOLE MAGNET RINGS

Products:

- Radial Multipole Magnet Rings G-Series
- Face Multipole Magnet Rings F-Series

Features:

- Tight tolerances on pole location
- Ideal for use with sensor i.e. magnetic encoders
- Multiple magnetic material mixes for different field strengths



PROXIMITY TARGET MAGNETS

Products:

- Solid State Sensors P - Series
- Reed Switch Sensors W-Series
- Proximity Magnets X-Series

Features:

- True waterproof solution over millions of cycles
- Full stainless steel
- Patented sealing mechanism
- Different housing and rating options
- From -40 °C to 150 °C



CUSTOM MOULDED MAGNETS

Products:

- D-Series

Features:

- Injection moulding with custom forms
- Several alloy compositions available
- Different Polymers for moulding
- Temperature capability up to 150° possible
- Typical tolerances are +/- 0.003 in



PRODUCT RANGE - LOAD CELLS

S-TYPE LOAD CELLS

Products:

- SS3G
- AS3
- AS3G

Features:

- 0-25 kg up to 30 t
- Accuracy class C3 and C4
- Temperature range -30...65° C
- Alloy steel and stainless steel construction
- Up to IP67 sealing
- Up to 10 Mio cycles



SHEAR BEAM LOAD CELLS

Products:

- AL6N
- ASM8C
- AS8C
- SS8D
- SSM8D
- SSM11

Features:

- 0-5 kg up to 30 t
- Accuracy class C3 and C4
- Temperature range -30... 65° C
- Alloy steel and stainless steel construction
- Up to IP68 sealing
- Up to 10 Mio operation cycles



COMPRESSION LOAD CELLS

Products:

- SSM24R

Features:

- 0-60 kg up to 200 t
- Accuracy class C3, C4 and C5
- Temperature range -30...65° C
- Stainless steel construction
- Up to IP68 sealing
- Up to 10 Mio operation cycles



PRODUCT RANGE - FOOT SWITCHES

GENERAL FOOT SWITCHES

Products:

- 6438
- 6227/6228
- 6289
- 6241
- 6243

Features:

- Plastic and metal housing
- Wide range of colour and logo options
- Different switch functions
- USB option
- Analogue output versions



PRODUCT RANGE - CAN OPEN KEYPADS

POWER TRACK



Features:

- Custom laser-etched icons
- High intensity LED status indicators and multicolour backlight
- Vertical and horizontal mount
- Encoder with push button

POWERKEY

Products:

- 1000 CAN
- 1400 CAN



Features:

- Custom laser-etched icons
- Multiple LED status indicators per function
- Lightweight and flexible
- Vertical and horizontal mount

POWERKEY PRO

Products:

- LI Series
- SI Series
- FR Series



Features:

- Laser-etched, reconfigurable keys
- LED state & status configurable
- Multicolour indicator rings
- Flush or front mount, vertical or horizontal

CONTACT US



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