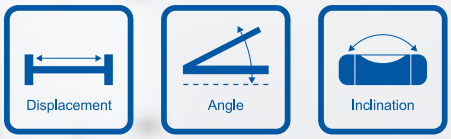
ASM®

perfect in sensors.

Sensors for Industrial Applications



Sensors for Industrial Applications

With almost 40 years of company tradition ASM is your expert partner for mechatronic displacement, angle and inclination sensors.
The ASM product program includes various sensor technologies and comprises seven product lines offering a broad range of innovative solutions to measure displacement, angle and inclination.

This overview includes sensors for use in industrial applications. Sensors for other applications can be found in the ASM product overview.

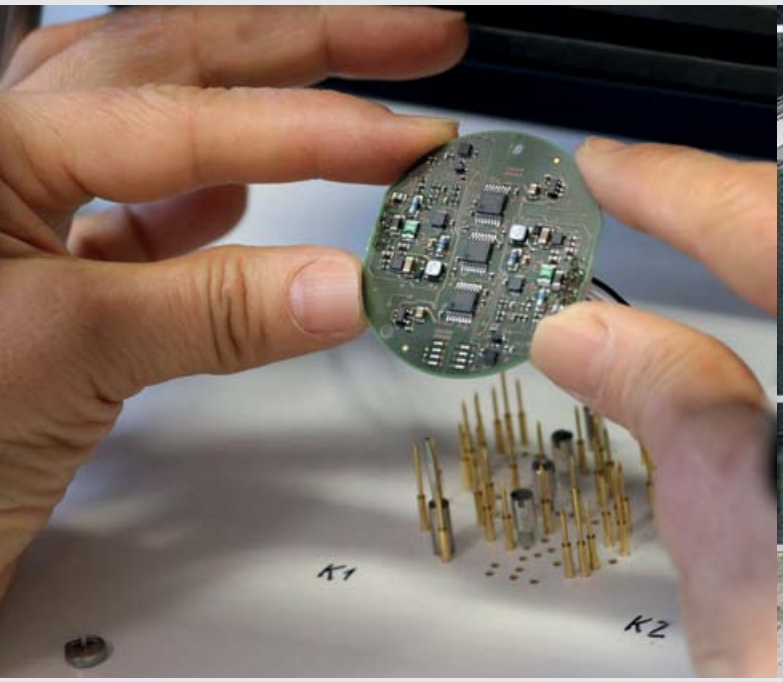
Quality and reliability
ASM high-quality products are subjected to a stringent quality management certified according to DIN EN ISO 9001:2015.
Your application specific requests are evaluated by ASM product specialists in a comprehensive technical consultation to find out which solution best meets your requirements – this can be a standard or a customer specific technology solution.

Product range

posi**wire**® Cable Extension Position Sensors
posi**tape**® Tape Extension Position Sensors
posi**chron**® Magnetostrictive Position Sensors
posi**mag**® Magnetic Scale Position Sensors

posi**rot**® Magnetic Angle Sensors
posi**hall**® Magnetic Multiturn Encoders

posi**tilt**® Inclination Sensors
posi**tilt**® PTK Gyro-compensated Inclination Sensors



Displacement

Displacement Sensors

posi**wire**®

Cable Extension Position Sensors

WS31

WS10

WS61

posi**wire**® Cable Extension Position Sensors can be equipped with the new magnetic absolute encoder technology. The non-contact magnetic multihall-encoders are wear-free and thus superior to optical encoders and potentiometers in terms of robustness.

- **Measuring range up to 20,000 mm**
- **With new technology more robust than conventional draw-wire sensors**
- **Protection class up to IP67/IP69**
- **Resistant to shock and vibration**
- **Linearity up to 0.01%**
- **Available with redundant encoder systems**

posi**tape**®

Tape Extension Position Sensors

WB10

WB61

WB21

posi**tape**® Tape Extension Sensors measure linear position utilizing a robust stainless-steel tape. The measuring tape can be repeatedly deflected over pulleys in all directions without significant wear. posi**tape**® sensors are exclusively equipped with robust absolute encoder technology.

- **Measuring range up to 20,000 mm**
- **Nearly unlimited life cycle of the measuring tape**
- **Continuous deflection over pulleys in all directions**
- **Robust magnetic absolute encoder technology**
- **Up to IP67/IP69**
- **High measurement accuracy due to electronic linearization (up to 0.05%)**
- **Available with redundant encoder systems**

posi**chron**®

Magnetostrictive Position Sensors

PCRP21

PCFP25

PCST25

posi**chron**® is an absolute, non-contact and wear-free position measuring system with high resistance to shock up to 50 g. The availability of various construcions - rod, square and flat profile - adapt to different installation conditions.

- **Measurement range up to 5,750 mm**
- **Wear- and maintenance-free**
- **High resistance to shock up to 50 g (100 shocks, higher values on request)**
- **Magnet guidance distance up to 19 mm (depending on magnet/profile)**
- **Up to IP67**
- **Linearity up to 0.02% f.s.**

posi**mag**®

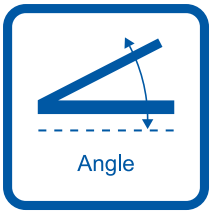
Magnetic Scale Position Sensors

PMIS3

Magnetprofile

posi**mag**® is a non-contact, high resolution magnetic position measuring system for measuring lengths up to 30 meters. posi**mag**® is a wear-free robust system which is suitable for use under challenging environmental conditions.

- **Measuring range up to 30,000 mm**
- **Non-contact and wear-free**
- **Resistant to dirt**
- **Shielded metal housing**
- **Simple installation and adjustment**
- **Protection class IP67**



Angle Sensors

posi**hall**®

Magnetic Multiturn Encoders

PH36

PH58

PH68

posi**hall**® sensors measure absolute angular position over multiple revolutions using a true-absolute, non-contact magnetic multi-hall technology. The sensors work precisely and reliably with high levels of shock and vibration and under extreme temperatures of -40°C up to +85°.

- **Measurement range up to 255 x 360°**
- **True-absolute technology**
- **Resistant to shock, vibration and dirt**
- **Integral shielding against magnetic fields**
- **Singleturn-linearity 0.3%**
- **Up to IP67/IP69**

posi**rot**®

Magnetic Angle Sensors

PRAS1 / PRDS1

PRAS29

PRAS26

posi**rot**® Magnetic Angle Sensors operate on rotating elements using a non-contact magnetic positioning system. Laserwelded hermetically sealed stainless steel housings are available for harsh environmental conditions (PRAS29, PRAS6).

- **Measurement range 0° to 360°**
- **Non-contact**
- **Resistant to shock and vibration**
- **Laserwelded hermetically sealed housings**
- **Up to IP67/IP69**
- **Temperature range of -40°C up to +85°**

Inclination

Inclination Sensors

positilt®

Inclination Sensors in MEMS Technology

PTAM27

PTAM2

positilt® Inclination Sensors measure inclination between 0 and ±180° in a non-contact, wear-free and absolute way. positilt® Inclination Sensors are extremely resistant to environmental influences and therefore suited for outdoor and even underwater applications.

- **Measurement range ±180°**
- **Wear-free**
- **Resistant to dirt**
- **MEMS technology**
- **One-axis or two-axis measurement**
- **Up to IP67/IP69**

positilt® PTK Series

Gyro-compensated Inclination Sensors in MEMS Technology

PTK29

PTK6

positilt® PTK Series Inclination Sensors compensate for shock, vibration and acceleration utilizing a gyro-compensated MEMS-technology.
The sensors provide correct measuring data.

- **Measurement range ±180° (1 axis), ±60° (2 axes)**
- **Dynamic inclination measurement**
- **Static linearity up to 0.05°**
- **Hermetically sealed stainless steel housings**
- **Up to IP67/IP69**
- **Redundant version available (PTK6)**

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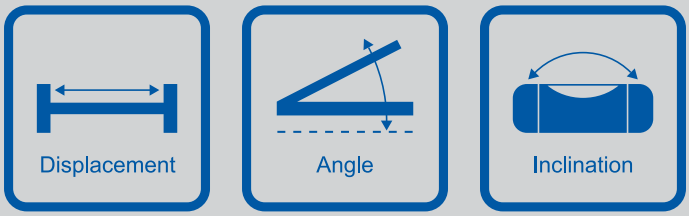
www.asm-sensor.com



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