

posichron® EasyMount

Magnetostrictive position sensors
for external mounting on hydraulic cylinders

Curious about a new, innovative sensor solution for hydraulic cylinders?

Maybe you know this scenario: The displacement sensors in your hydraulic cylinders have served their purpose without trouble for many thousands of operating hours, then suddenly - standstill! Nothing works anymore, the sensor is defective, the machine is stopped.

Now maintenance and repair work are necessary. As the sensors are usually mounted inside the hydraulic cylinders, this requires the cost-intensive and time-consuming removal of hydraulic cylinders and complete sensors. It's worth noting that costs have already been incurred during sensor installation by drilling the piston rod - because this is necessary for internally mounted sensors.

ASM now presents a new non-contact and wear-free sensor solution that significantly simplifies installation, maintenance and repair and thus saves time and money. With this new concept, only the sensor magnet is installed inside the hydraulic cylinder.

The sensor itself from the proven and robust posichron® sensor line is mounted on the outside of the hydraulic cylinder. Only the external and therefore easily accessible sensor has to be repaired or replaced if necessary.

Continue reading and find out more about

- how the new sensor solution works in detail
- what other advantages this innovative concept offers
- which product variants are available

For further questions, please contact one of our sensor specialists at any time. Contact details can be found on the last cover page of this brochure.

The technology of posichron® EasyMount at a glance

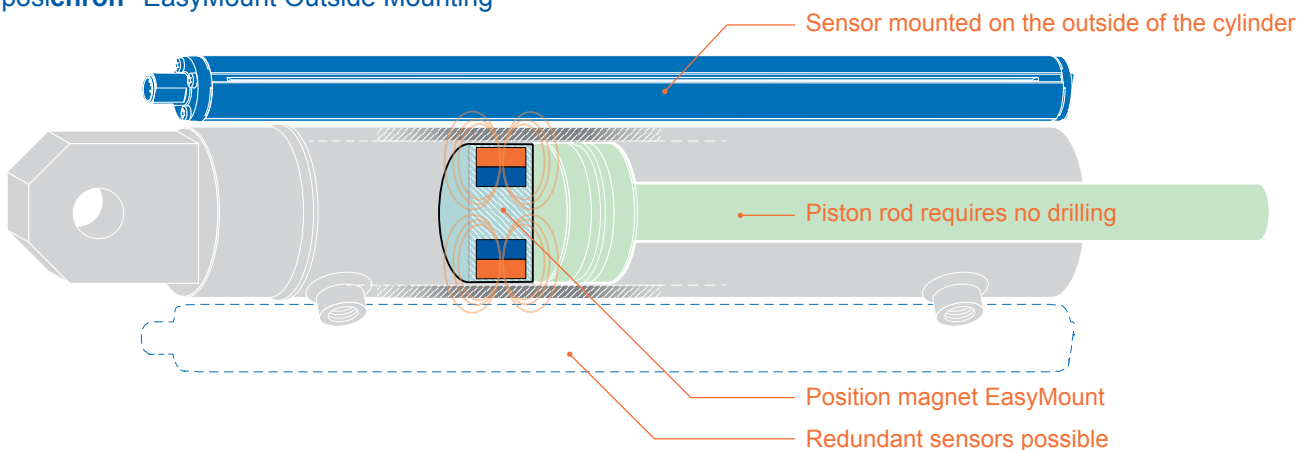
posichron® sensors measure linear positions absolutely, contact-free and wear-free. Due to their robustness and high shock resistance, they are ideal for use under harsh environmental conditions. The sensors are available in various designs and can thus be adapted to different installation conditions.

The new solution developed by our engineers makes the posichron® system for hydraulic cylinder applications even more variable: due to the new, strong magnet fixed inside the cylinder, the sensor can be mounted on the outside of the hydraulic cylinder instead of inside the cylinder as usual.

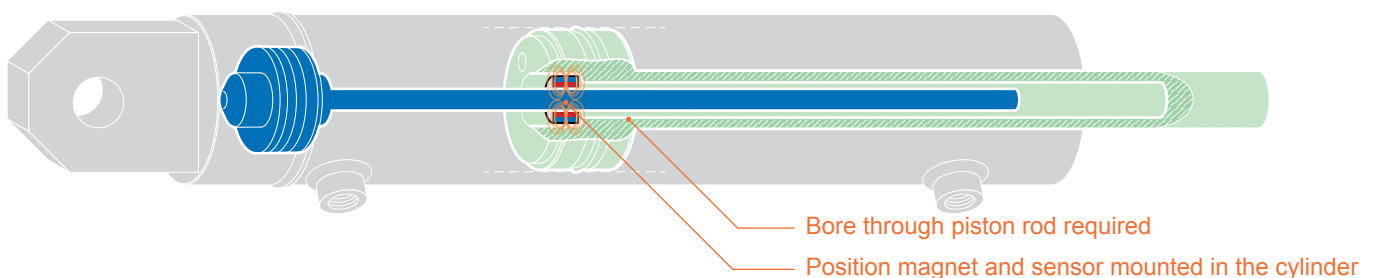
With this new design, hydraulic cylinders can now be equipped with displacement sensors much more cost-effectively. Small piston diameters with insufficient installation space can be furnished with sensors for the first time. The time-consuming drilling of the piston rod to accommodate the sensor is no longer necessary. In case of maintenance or repair, the sensor is easily accessible from the outside.

Whether you want this new solution with an internal magnet and an externally mounted sensor or prefer the classic posichron® version - you get a well proven and reliable technology.

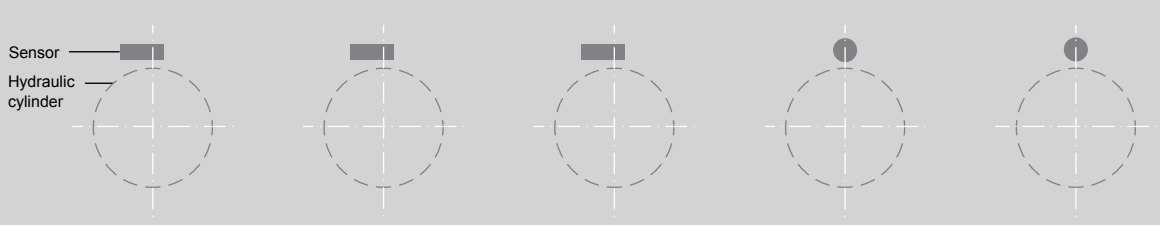
posichron® EasyMount Outside Mounting



posichron® Interior Mounting



Selection guide posichron® sensors for EasyMount

	PCFP23	PCFP24	PCFP25	PCRP21	PCRP32
Applications		Tight mounting spaces		Standard industrial applications	Underwater
Profile cross-section	36 x 13 mm	43 x 12 mm	28 x 8 mm	Ø 25 mm	Ø 28 mm
					
Protection class	IP64	IP67 optional IP67/69 ¹⁾	IP64 optional IP67	IP64	IP68/69 ¹⁾

¹⁾ = with IP69 connector

Specifications posichron® sensors for EasyMount

Measurement range	100 ... 5,750 mm
Housing material	AlMgSi1 / Zn / V4A
Resolution	Analogue: 16 Bit f.s., min. 10 µm SSI: 5, 10, 20, 50, 100 µm CAN-Bus: 50 µm
Linearity	L10 (±0,10 % f.s.)
Repeatability	±3 µm
Output	Voltage 0 ... 10 V, 0,5 ... 10V, 0,5 ... 4.5V Current 4 ... 20 mA, 3 wire Voltage or current output, programmable (PMU) Synchronous-serial (SSI) CANopen-Bus, SAE J1939
Temperature range	-40 ... +85°C

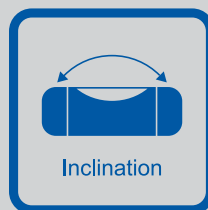
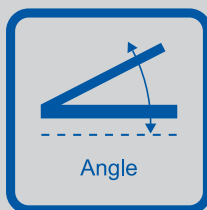
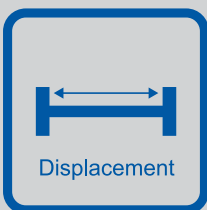
The advantages of posichron® EasyMount at a glance:

- Easy sensor installation due to external mounting
- No deep hole drilling necessary
- Easy maintenance and repair
- Redundant sensor assembly possible (up to 4-fold)
- Measuring lengths up to 5,750 mm
- Installation in synchronous cylinder possible

Applications

The posichron® EasyMount sensor solution is suitable for many hydraulic cylinder applications. In particular, posichron® EasyMount is also suitable for slim pistons where there is no space for internal sensor mounting. For long pistons where hole-drilling for internal sensor mounting incurs high costs, posichron® EasyMount provides significant cost savings. Well protected against shocks, vibrations, moisture and dirt, posichron® sensors are generally the solution for demanding and harsh operating conditions.

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perfect in sensors.

The new solution for hydraulic cylinders

posichron[®] EasyMount

Magnetostrictive position sensors
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Displacement



Angle



Inclination

