

# Draw-Wire Sensors for Test Rigs and Road Tests



More Precision



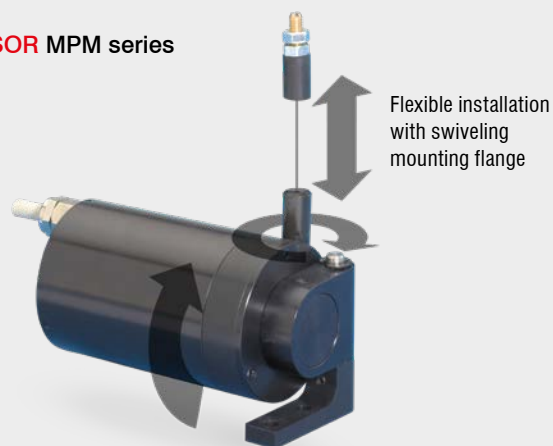
#### wireSENSOR MT series



#### Key advantages of the wireSENSOR MT series

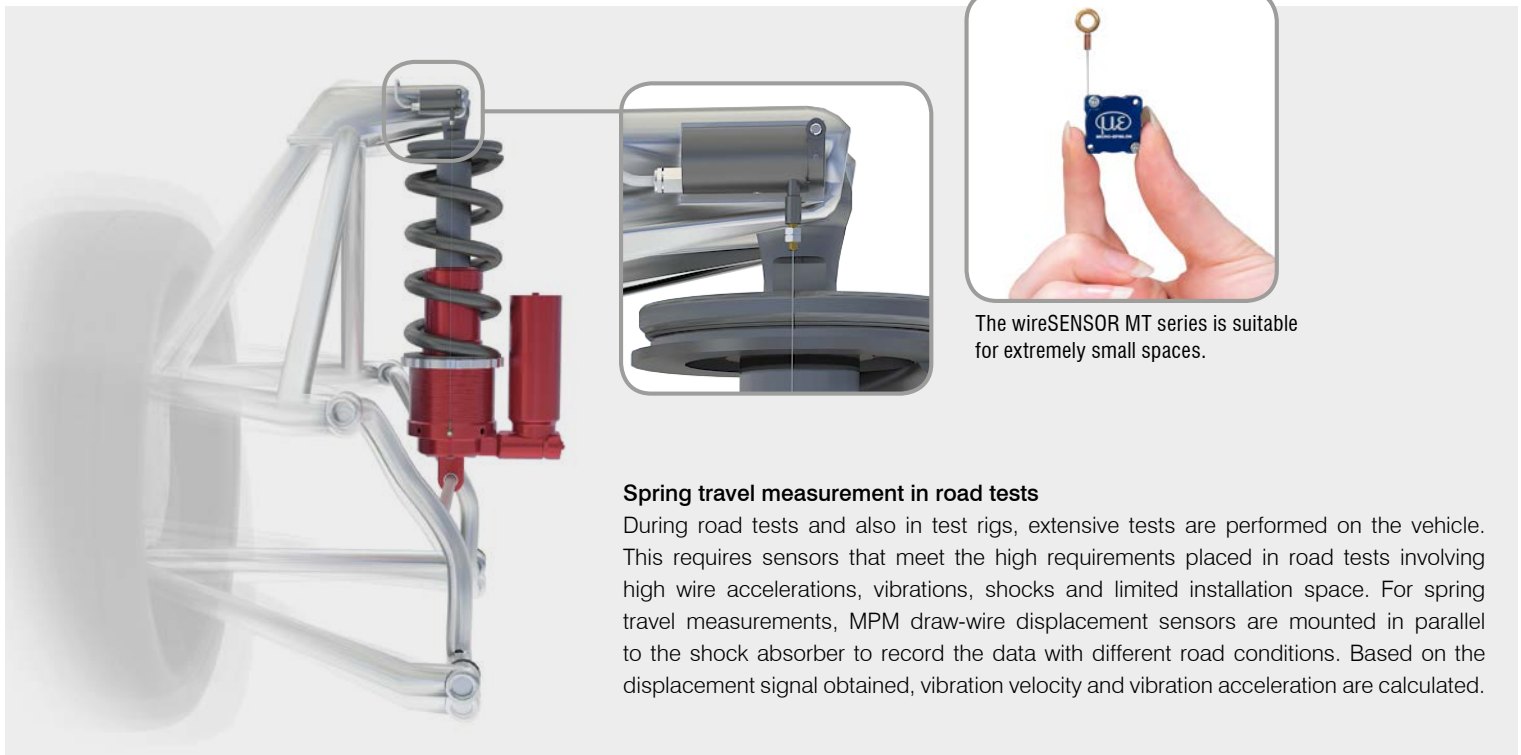
- Worldwide smallest draw-wire sensor
- Measuring ranges up to 130 mm
- Suitable for wire accelerations up to 60 g
- Easy, quick and flexible installation

#### wireSENSOR MPM series



#### Key advantages of the wireSENSOR MPM series

- Requires little space but offers large measuring range (telescopic)
- Very easy and flexible installation
- Measuring ranges up to 1000 mm
- Robust sensor design, insensitive to shock and vibrations
- Suitable for very high wire accelerations up to 100 g



The wireSENSOR MT series is suitable for extremely small spaces.

### Spring travel measurement in road tests

During road tests and also in test rigs, extensive tests are performed on the vehicle. This requires sensors that meet the high requirements placed in road tests involving high wire accelerations, vibrations, shocks and limited installation space. For spring travel measurements, MPM draw-wire displacement sensors are mounted in parallel to the shock absorber to record the data with different road conditions. Based on the displacement signal obtained, vibration velocity and vibration acceleration are calculated.



### Measuring the pedal travel

In order to optimize the braking behavior and the pedal travel involved, F50 draw-wire sensors are used. These sensors are specially designed for this measurement task and offer a rotatable potentiometer, which enables the user to freely select the measuring range within the entire extraction length (150 mm). The integrated deflection pulley allows the sensor to be flexibly integrated in the footwell or the engine compartment.



### Displacement measurement in crash tests

During the crash test, multiple sensors measure the effects on the car body and the passengers caused by the impact. In order to measure deformations and movements of car body parts and interior equipment, wireSENSOR MPM draw-wire sensors are used. The sensors are connected with the measurement object via a wire. Their high wire acceleration enables the sensors to detect the object movement.

## Sensors and Systems from Micro-Epsilon



Sensors and systems for displacement, distance and position



Sensors and measurement devices for non-contact temperature measurement



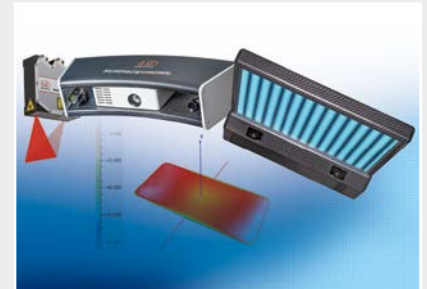
Measuring and inspection systems for metal strips, plastics and rubber



Optical micrometers and fiber optics, measuring and test amplifiers



Color recognition sensors, LED analyzers and inline color spectrometers



3D measurement technology for dimensional testing and surface inspection

## More Precision

Whether it is for quality assurance, predictive maintenance, process and machine monitoring, automation or R&D – sensors from Micro-Epsilon make a vital contribution to the improvement of products and processes. High precision sensors and measuring systems solve measurement tasks in all core industries – from machine building to automated production lines and integrated OEM solutions.



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