

## Linear absolute position measuring systems for standard industrial applications

Linear position measuring systems based on magnetostriction detect the position of moving machine parts without contact and thus wear-free in many applications.

Currently TR-Electronic offers the high-end solution LM\_I 46 with resolutions of 0.001 mm, which can be equipped with Industrial Ethernet. And LM\_B 48 cost-effectively supplies simple applications with a measuring range of 2.5 m and a resolution of 0.1 mm.

The new series LM\_S 34 closes the gap between these two devices. The first family member is the sensor rod LMRS 34 for direct installation in hydraulic cylinders. Measuring lengths of up to 3 m are supplied with the common direct linear sensor interfaces SSI, Analogue, and CAN. LMRS 34 achieves a resolution of 0.01 mm. The head's width across flats is 34 mm, hence the size designation "34". This is noticeably smaller than the 48 mm or 46 mm of the other families and is undercut only by the ultra compact LMRB 27. However, it requires an external converter box for all interfaces except Analogue.

LMRS 34 offers a very compact sensor solution in the middle range that can be equipped with the most important interfaces. LMRS 34 works completely wear-free as does every magnetostriction measuring system from TR-Electronic. The stainless steel casing is pressure tested. The screw thread fits into many standard cylinders. All ring, half-round, float and block magnets available from TR-Electronic can be used with LMRS 34 to install the measuring system in a hydraulic cylinder, for level measurements or in a machine with an open tube as a normal position sensor.

LMRS 34 is also available with IO link interface for accessing further areas of application. LMRS 34 can internally monitor positions and ranges and derive the state of the initiator-compatible digital output. For instance, this enables simple level monitoring using digital signals. The fill level is also available to a corresponding controller as a continuous measurement signal via IO link.

Further product information:

<http://www.tr-electronic.com/s/S018142>

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LMRS34.jpg

Compact linear absolute measurement system for integration into hydraulic cylinders by TR-Electronic.