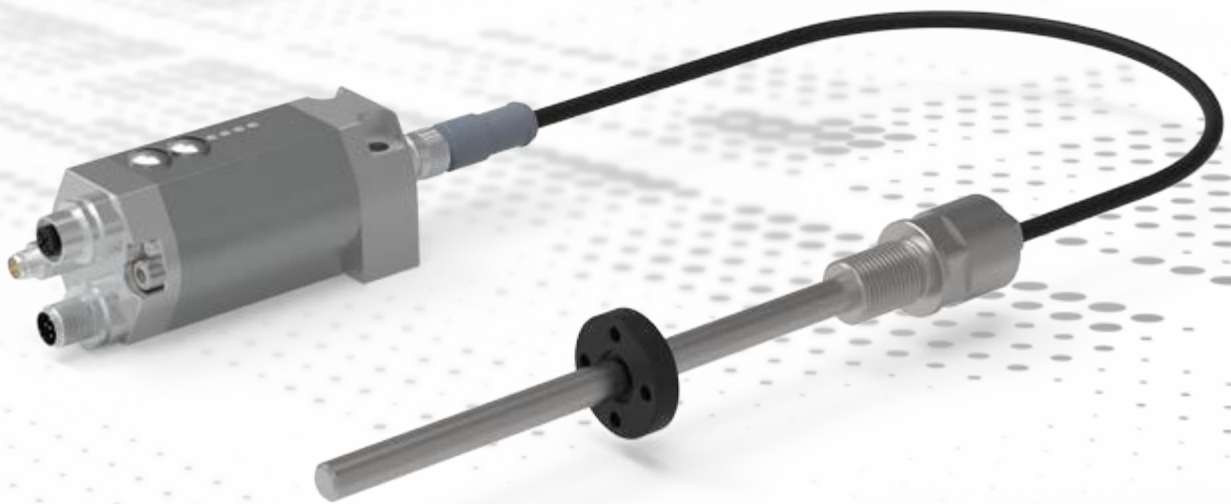


Compact Linear Position Sensors for Standard Applications

Tube- Types up to 3 m stroke – LMR_27



LMRS 27

PROFI
NET Ether**CAT**

EtherNet/IP ETHERNET
POWERLINK

PROFI
BUS

CANopen

SSI

Analog





Type	Order number	Product
Block-Magnet T1-S3818	49155015	
Block-Magnet T1-S5520	49155009	
Ring magnet 20 mm T4M20	49155026	
Ring magnet 22 mm T4M22	49155005	
Ring magnet 33 mm T4M33	49155016	
Float T1-M17,4	49915183	
Open ring magnet T4U3820	49155003	

Release note

Please note that the information, measure values and tolerances in the drawings are not binding. Subject to Modification in technology and design. They serve only as a means to illustrate the product. Please contact our sales team if you would like a concrete offer and a binding drawing.

All information and data can be found at:
www.tr-electronic.com/s/S023903

Access information even faster:
by scanning the QR code.



Modular design for standard applications



Modular design

- _ Sensor tube with cable
- _ Interface Module
- _ Interchangeable

Logistics

- _ Store different measurement length sensor elements (tubes)
- _ Store different interface boxes
- _ Fulfil customer requests directly from stock

For OEMs

- _ Pre-equip cylinders... with specific sensor element
- _ Add interface box later

Order logistics

- 1 complete system: order 3 positions

Sensor head

- _ Measurement length
- _ Cable length
- _ Flange geometry, tip ring support option

Magnet(s)

- _ multi magnet (3 magnets) on request
- _ Geometry

LMRS 27



Advantages

- _ remote interface
- _ pressure proof tube housing
- _ flexible programming
- _ customer-specific solutions
- _ measures linear movements
- _ position value - Adjustment
- _ wear-free scanning
- _ other interfaces
- _ wear-free detection

General Data

Supply

_ Supply voltage 24 VDC, -20...+10 %

Measuring length, standard 50 ... 4.000 mm in Stufen

Resolution 0,01 mm

Linearity deviation $\pm 0,015$ % FS (min ± 50 μ m)

Reproducibility $\pm 0,005$ % FS (min ± 10 μ m)

Environmental conditions

Relative humidity 98 %, non condensing

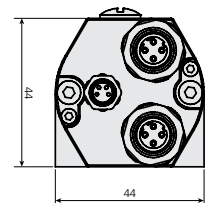
working temperature -20...+70°C

Protection class

_ standard IP65

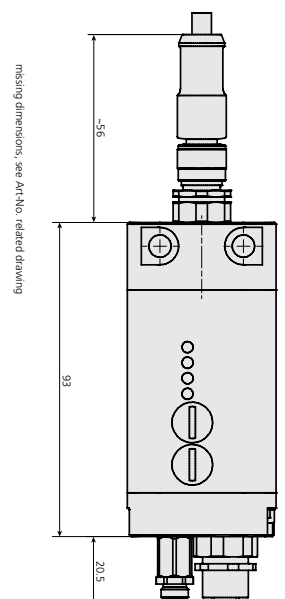
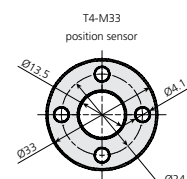
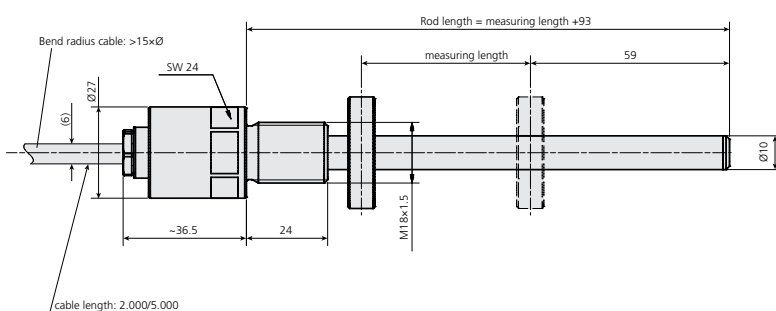
Rob, Signal converter and magnet, please order separately.

Sensor element and interface module can be freely combined.



Dimensional drawing

LMRS 27



Magnets, please order separately.

LMRB 27



Analog

IO-Link

Advantages

- _ pressure proof tube housing
- _ customer-specific solutions
- _ measures linear movements
- _ wear-free scanning
- _ other interfaces
- _ perfect fit for cylinders
- _ analog current/voltage

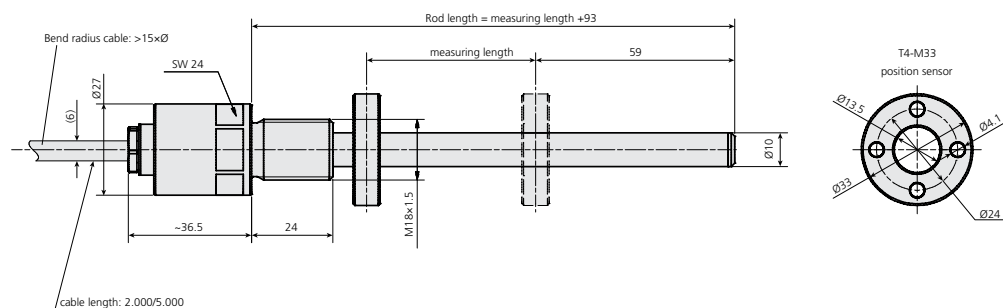
General Data

Supply	
_ Supply voltage	24 VDC, -20...+10 %
Measuring length, standard	50 ... 2.000 mm in Stufen
Resolution	0,1 mm (12 Bit)
Linearity deviation	$\pm 0,20$ mm ≤ 2000 mm
Reproducibility	0,1 mm
Environmental conditions	
Relative humidity	98 %, non condensing
working temperature	-20...+70°C
Protection class	
_ standard	IP 65
Rob and magnet, please order separately.	

No interface box required!

Dimensional drawing

LMRB 27



Magnets, please order separately.


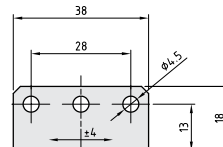

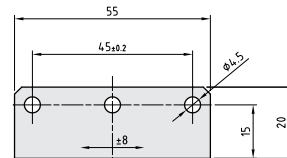

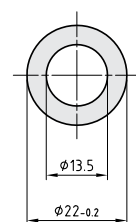
Overview – accessories for LMR_27*


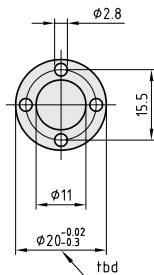

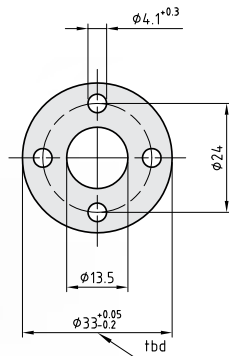
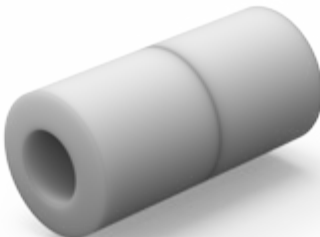
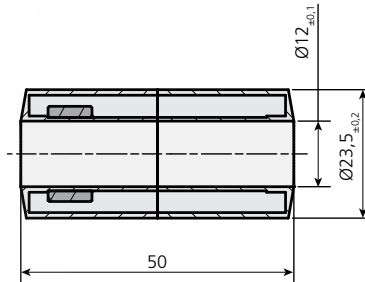

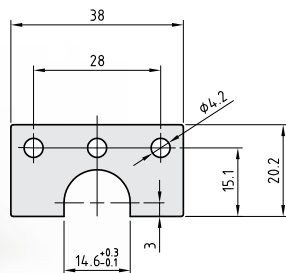
Magnets and spacers

Products

- Block-Magnete
- Open ring magnets
- Ring-magnet
- Float
- Please order magnets and clampings separately

*When inquiring about suitable accessories, please always specify the encoder

Type	Order number	Product	Scale drawing
Block-Magnet T1-S3818	49155015		
Block-Magnet T1-S5520	49155009		
Ring magnet 20 mm T4M20	49155026		

Type	Order number	Product	Scale drawing
Ring magnet 22 mm T4M22	49155005		
Ring magnet 33 mm T4M33	49155016		
Float and magnet T1-M17,4	49915183		
Open ring magnet T4U3820	49155003		

Further accessories can be found in our main TR-catalog.

TR-Electronic – your partner in automation

Rotary encoders

Absolute encoder, incremental rotary encoder, wire-actuated encoder

Rotary encoders with optical and magnetic scanning function register the precise position in a wide variety of applications and industries. In medical engineering, miniature versions ensure correct positioning while SIL3-approved absolute rotary encoders provide the necessary safety. We offer not only high-quality rotary encoders (from Ø 22 to 160 mm) for almost any application but also comprehensive accessories.

Linear encoders

Linear absolute measuring systems, laser displacement measurement

Linear encoders register linear motions in machines, tools and systems according to specific requirements using different technologies. Linear encoders allow measuring distances of max. 20 m almost without any wear. This value is max. 240 m for laser measuring systems. Machines and systems can be precisely controlled to reach their desired positions.

Motion

Compact actuating and positioning drives

Intelligent encoTRive drives are available with the current field bus systems, such as PROFIBUS, PROFINET and CANopen, within a power range of up to 300 watts. The drives are configured to meet customer requirements and can be freely combined with precision gear, holding brake and I/O. Values of up to 4,350 rpm and powerful 200 Nm are available to cope with demanding applications.



Components

**Industrial PC, field bus I/O,
PLC, HMI controller**

Industrial PCs are available in numerous variants and offer customized calculation power for PC-assisted automation. Programmable logic controllers (PLC) are the traditional means for automation. HMI controllers establish the interface to the user. Field bus nodes, I/O modules and cam controllers complete the range of automation components.

Automation

**Consulting and implementation
for new machines and retrofit**

You want to set up a largely automated new machine or retrofit and modernize your existing machine with automation systems? Then you just need our extensive expert knowledge and the more than 20 years of our experience.

Unidor

**Blanking and forming,
systems, controls and sensors**

Trendsetting blanking and forming technology for more than 30 years. We are your reliable partner in the world of blanking and pressing and can prove this with thousands of machines which we have successfully installed all over the world. Sensors, controls and systems ensure optimal results in machines, tools and retrofit projects.

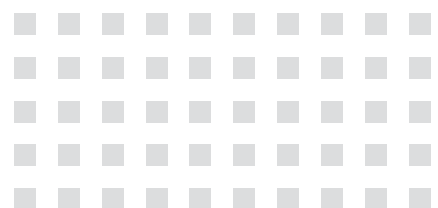


TR-Electronic GmbH

Eglishalde 6
D - 78647 Trossingen

Tel. +49 7425 228-0
Fax +49 7425 228-33

info@tr-electronic.de
www.tr-electronic.de



Last update: 11/2021

68-105-134 · TR-V-PR-GB-0039-00

Subject to technology and design modifications.

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