



NOTES

All the data reported in this brochure and the data sheet, like linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor $I_c \leq 0.1 \text{ mA}$.

Do NOT use the position sensor as variable resistance!

When calibrating the transducer, be careful to set the stroke so that the output does not drop below 1% or rise above 99% of the voltage level.

MAINTENANCE

The sensors are maintenance free. It is not necessary to lubricate the moving parts.

DECLARATION OF EC-CONFORMITY

WayCon Positionsmesstechnik GmbH
Mehlbeerenstrasse 4
82024 Taufkirchen / Germany

This is to certify that the products

Classification
Series

Linear potentiometer
LME12, LMI12

fulfill the current request of the following EC-directives:
EMV-directive 2004/108/CE
applied harmonized standards:
EN 61000-6-2:2005, EN 61000-6-4:2007, EN 61326-1:2006

The declaration of conformity loses its validity if the product is misused or modified without proper authorisation.

Taufkirchen, 13.03.2013

Andreas Täger
CEO

INSTALLATION GUIDE

Linear Potentiometer Series LME12, LMI12

For further information please see the data sheet at www.waycon.biz/products/linear-potentiometers/

FIRST STEPS

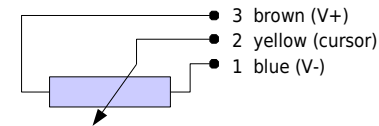
WayCon Positionsmesstechnik GmbH would like to thank you for the trust you have placed in us and our products. This manual will make you familiar with the installation and operation of our linear potentiometers. Please read this manual carefully before initial operation!

Unpacking and checking:

Carefully lift the device out of the box by grabbing the housing. After unpacking the device, check it for any visible damage as a result of rough handling during the shipment. Check the delivery for completeness.

If necessary consult the transportation company, or contact WayCon directly for further assistance.

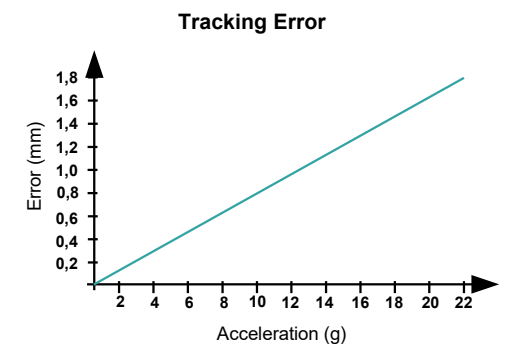
ELECTRICAL CONNECTION



Sensor is to be used as voltage divider, using a maximum cursor current of $I_c \leq 0.1 \mu\text{A}$ (do NOT use the sensor as variable resistance!). Please pay attention to the notes on the last page.

NOTES

After the installation of the sensor, the ring magnet has to be placed onto the sensor rod. In order to link the magnet to the sensor element, the magnet has to be pushed once fully to the end of the sensor rod (up to flange/cable connection).



INSTALLATION GUIDE

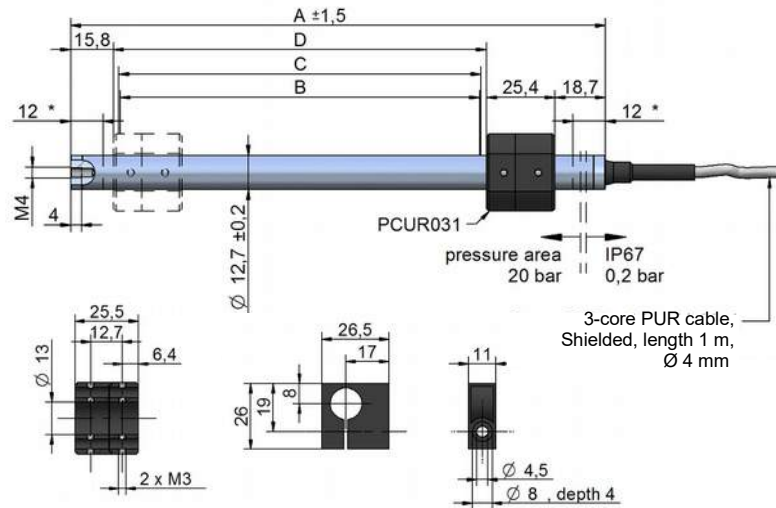
Linear potentiometer Series LME12, LMI12

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TECHNICAL DRAWING

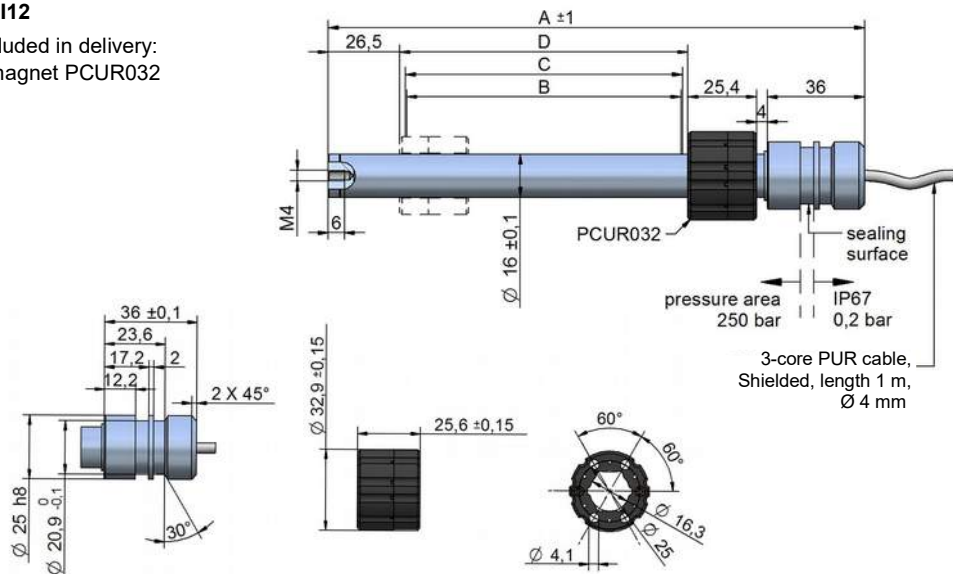
LME12

Included in delivery:
2 brackets STA001,
1 magnet PCUR031



LMI12

Included in delivery:
1 magnet PCUR032



TECHNICAL DATA

Useful electrical stroke B: corresponds to the sensors measurement range

Theoretical electrical stroke C: actual length of the conductive path, that has to be longer than B, in order to get a valid electrical signal at the start and end point of the measurement range.

When calibrating the transducer, be careful to set the stroke so that the output does not drop below 1% or rise above 99% of the voltage level.

Useful electrical stroke (B)	[mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
Theoretical electrical stroke (C)	[mm]	B + 1																			
Resistance	[kOhm]	5					10					20									
Linearity	[±%]	0.1										0.05									
Dissipation at 40°C (0 W at 120°C)	[W]	1	2	3																	
Maximum applicable voltage	[V]	40										60									
Mechanical stroke (D)	[mm]	B + 5																			
Case length (A) LME12	[mm]	B + 65																			
Case length (A) LMI12	[mm]	B + 97																			

ACCESSORIES

Spare parts

STA001	1 bracket for LME12 (2 pieces included in delivery)
PCUR031	1 magnet for LME12 (1 piece included in delivery)
PCUR032	1 magnet for LMI12 (1 piece included in delivery)

PMX-24 Signal Conditioner

- Converts potentiometer signals into analog output signals: 4...20 mA, 0...10 V, 0...5 V, ±10 V, ±5 V
- Input: potentiometer 1...20 kΩ
- Configurable output
- DIN-rail-mounting with face-side connector
- For further information please check the PMX-24 data sheet, or contact WayCon



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