

## Linear-Transducer LA46K (H) - EPN

Ref.: K-LA46-PN-1

18.11.2013

0102010050

### Advantages

- \_ Customer-specific solutions
- \_ Flexible programming
- \_ Further interfaces available
- \_ Measures linear movements
- \_ Option: Exchangeable sensor
- \_ Perfect fit for cylinders
- \_ Position value - Adjustment
- \_ Pressure proof tube housing
- \_ Wear-free detection



### General Data

Supply	
- Supply voltage	24 VDC, -20...+10 %
Current consumption no load	<= 150 mA
Measuring principle	magnetostrictive
Measuring length, standard	50...2000 mm, in steps
Resolution	0.001 mm
Linearity deviation	± 0.10 mm <= 1500 mm ± 0.15 mm > 1500 mm
Reproducibility	0.005 mm
Hysteresis	0.02 mm <= 1500 mm 0.1 mm > 1500 mm
Temperature coefficient	< 8 µm/°C <= 500 mm < 15 ppm/°C > 500 mm
Straight line velocity	no restrictions
Mounting position	no restrictions
Material - Measuring body	Cr/Ni - alloy
Rod end mounting	Option
Magnet	T4-M33 other on request
PROFINET IO - Interface	
- PROFINET IO – Device	IEC 61158, IEC 61784-1

Subject to change.

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## General Data continuation

- Physical Layer	Fast Ethernet, ISO/IEC 8802-3
- PROFINET-Specification	V2.2
- Conformance Class	B
- Real-Time-Classes	Class 1, 2 (RT), Class 3 (IRT)
Transmission rate	
- Specific value	10 MBit/s
- Specific value	100 MBit/s
Cycle time	>= 1000 µs (IRT/RT)
Parameter/Function, changeable	Resolution
	Number of magnets
	Interpolation
	Preset parameter
	Position averaging
	Counting direction
	Velocity parameter
Type of parametrization	programmable
Prgramming - Tool	Fieldbus-Device
	TR-Soft: TRWinProg
Cycle time internal, <= 0.50 m	0.50 ms
Cycle time internal, <= 1.00 m	1.00 ms
Cycle time internal, <= 2.00 m	1.50 ms
Optional Magnets	
- Number of magnets	3
- Magnet - Minimum distance	80 mm

## Environmental conditions

Vibration	
- Specific value	<= 100 m/s <sup>2</sup>
- Sine	50...2000 Hz
Shock	
- Specific value	<= 1000 m/s <sup>2</sup>
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	0...+70 °C

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### Environmental conditions continuation

- Optional	-20...+70 °C;
Storage temperature, dry	-30...+85 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65
Stray magnetic field	< 3 mT
Measuring reference	Measuring plane
Pressure resistance	
- Optional	600 bar, static

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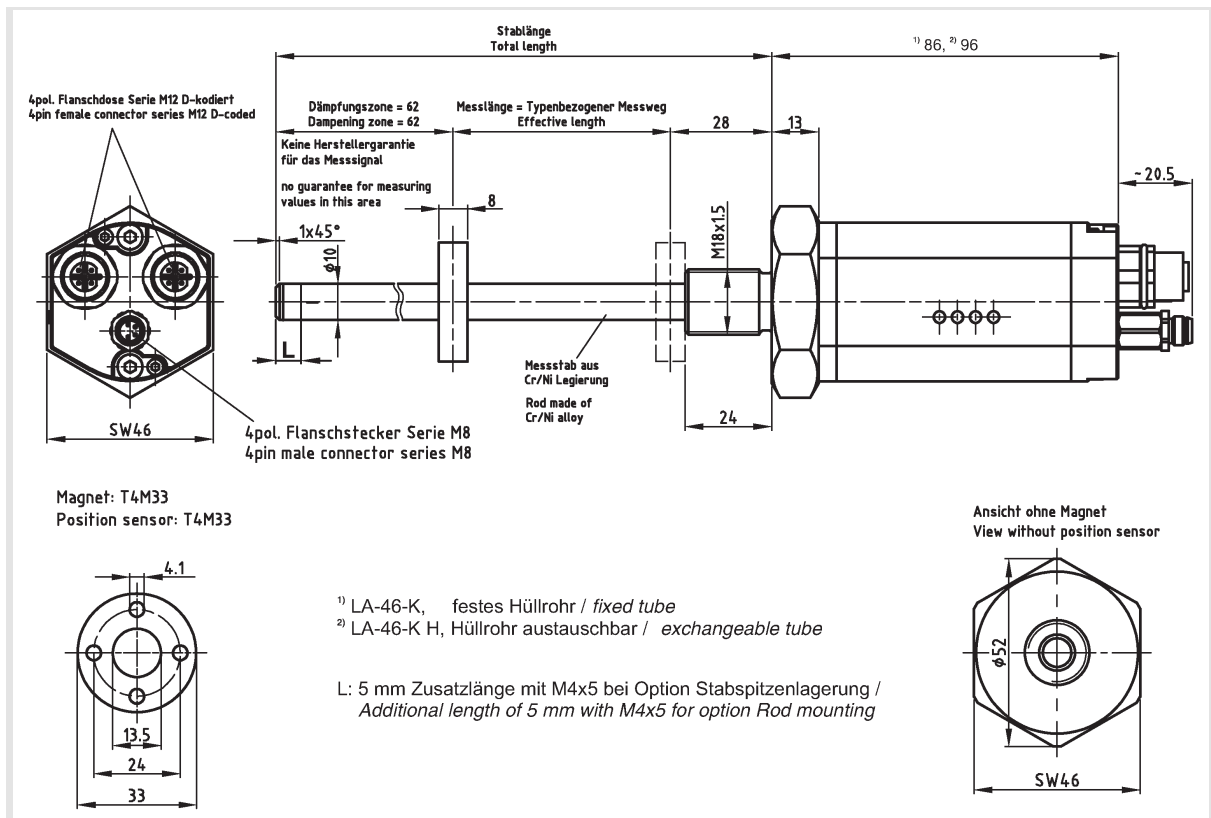
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## Dimensional drawing



## Suggested products

LA_46*750 EPN R 0,005mm 2x4polM12 1x4polM8	321-00809
LA_46*300 EPN R 0,005mm 2x4polM12 1x4polM8	321-00884
LA_46*1000 EPN R 0,005mm 2x4polM12 1x4polM8	321-00942
LA_46*150 EPN R 0,005mm 2x4polM12 1x4polM8	321-01103

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