

Linear-Transducer LP46 - EPL

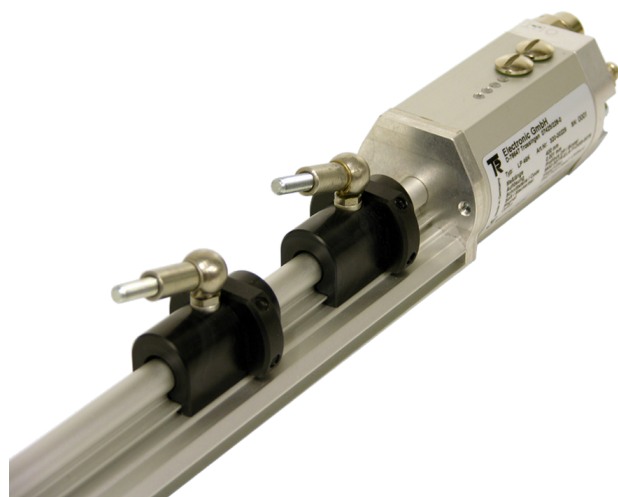
Ref.: K-LP46-EPL-1

14.11.2013

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Advantages

- Customer-specific solutions
- Flexible programming
- Further interfaces available
- Measures linear movements
- Position value - Adjustment
- Profile housing
- Simple integration
- Wear-free detection



General Data

Supply	
- Supply voltage	24 VDC, -20...+10 %
Current consumption no load	<= 250 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	Aluminium extruded profile
Magnet	Slider other on request
POWERLINK - Interface	
- POWERLINK	IEC 61784-2, IEC 61158 ff
- Physical Layer	Fast Ethernet, ISO/IEC 8802-3

Subject to change.

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General Data continuation

- Device profile	CoE, CiA DS-406
Transmission rate	
- Specific value	100 MBit/s
Cycle time	$\geq 400 \mu\text{s}$
Parameter/Function, changeable	Resolution
	Interpolation
	Preset parameter
	Position averaging
	Counting direction
	Velocity parameter
Type of parametrization	programmable
Prgramming - Tool	Fieldbus-Device
	TR-Soft: TRWinProg
Cycle time internal, $\leq 0.50 \text{ m}$	0.50 ms
Cycle time internal, $\leq 1.00 \text{ m}$	1.00 ms
Cycle time internal, $\leq 2.00 \text{ m}$	1.50 ms
Optional Magnets	
- Number of magnets	3
- Magnet - Minimum distance	80 mm

Environmental conditions

Vibration	
- Specific value	$\leq 100 \text{ m/s}^2$
- Sine	50...2000 Hz
Shock	
- Specific value	$\leq 1000 \text{ m/s}^2$
- 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
- Optional	-20...+70 °C;
Storage temperature, dry	-30...+85 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65
Stray magnetic field	$< 3 \text{ mT}$

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Environmental conditions continuation

Measuring reference

Measuring plane

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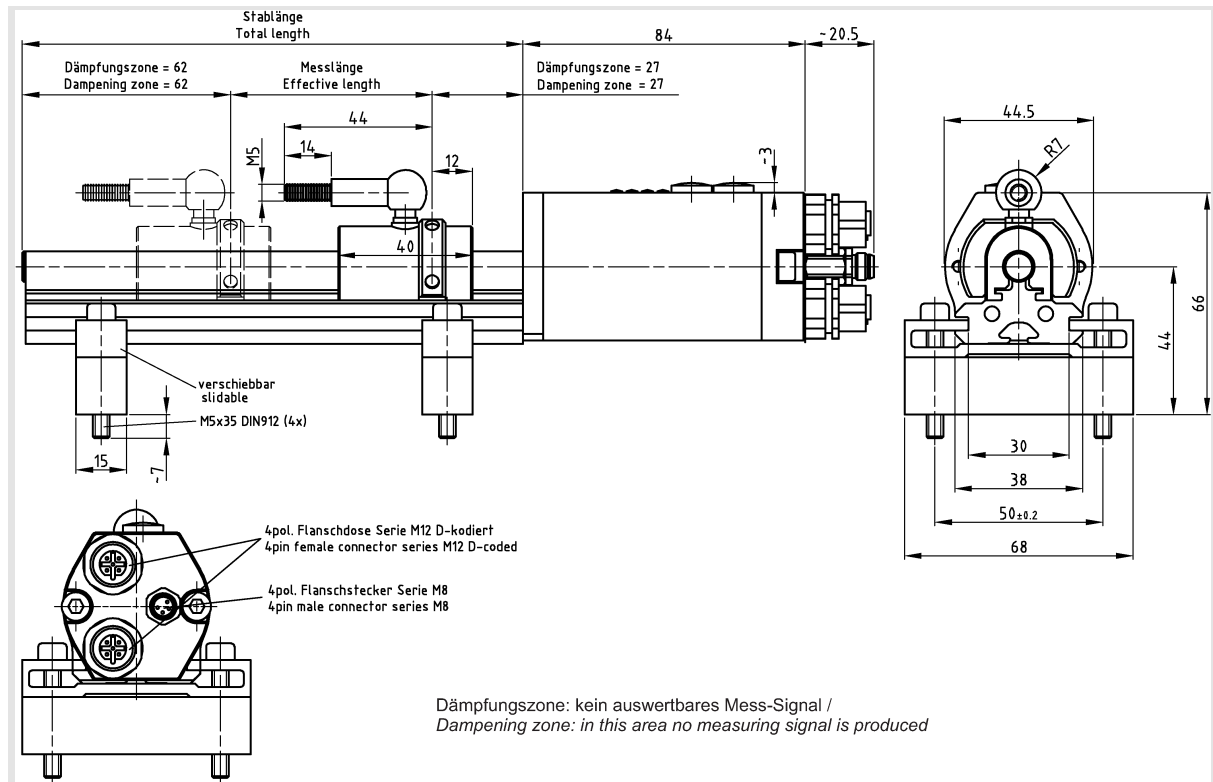
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Dimensional drawing



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