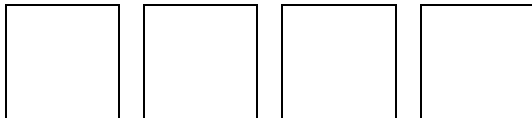


## Linear-Transducer LP-46-K A

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- **Analog interface**
- **For linear measurement**
- **Non-contact and wear free measurement system**
- **Easy mounting, by means of profile housing**
- **Adjustment via set-inputs**
- **Further interfaces available**
- **Customized adaptations upon request**

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## Characteristics

Supply voltage.....	24 VDC $\pm$ 10 %
Current consumption without load .....	< 100 mA
Measuring principle .....	magnetostrictive
Measuring length, standard .....	50 mm...2000 mm > 2000 mm on request, in steps of 50 mm
Resolution .....	$\geq$ 0.001 mm
Linearity deviation, related to the measuring length .....	$\pm$ 0.1 mm up to 1.500 mm / $\pm$ 0.15 mm > 1.500 mm
Reproducibility.....	$\leq$ 0.005 mm
Hysteresis .....	$\leq$ 0.02 mm up to 1.500 mm / $\leq$ 0.1 mm > 1.500 mm
Temperature coefficient, related to the measuring length.....	< 40 ppm/ $^{\circ}$ C
Straight line velocity and mounting position.....	no restrictions
Material - measuring body.....	Aluminium extruded profile
Magnet.....	Sliding, other on request
A.....	16 Bit - Analog interface
Analog voltage / Analog current.....	defined by factory setting
Voltage output.....	0 V...+10 V, +10 V...0 V, $\pm$ 5 V, $\pm$ 10 V
- Load resistance .....	$\geq$ 680 $\Omega$
Current output .....	0...20 mA, 4...20 mA
- Load resistance .....	$\leq$ 500 $\Omega$
Cable length, dependent on electric shielding	
- Voltage output .....	$\leq$ 10 m
- Current output.....	$\leq$ 1000 m
Cycle times, internal	
- $\leq$ 1.0 m.....	0.50 ms
- $\leq$ 1.5 m.....	0.75 ms
- $\leq$ 2.0 m.....	1.00 ms
Inputs	
- Starting point .....	Definition of the starting point of the analog signal
- Final point .....	Definition of the final point of the analog signal
- Logic level.....	"0" < + 2 VDC, "1" = Supply voltage

## Environmental conditions

Vibration, DIN EN 60068-2-6: 1996.....  $\leq 100 \text{ m/s}^2$ , sine 50-2000 Hz  
Shock, DIN EN 60068-2-27: 1995.....  $\leq 1000 \text{ m/s}^2$ , half-sine 11 ms  
EMC  
- Discharge of static electricity, DIN EN 61000-4-2: 2001  
- Burst, DIN EN 61000-4-4: 2004  
- Immunity to disturbance, DIN EN 61000-6-2: 2001  
Working temperature.....  $0 \text{ }^\circ\text{C} \dots +70 \text{ }^\circ\text{C}$ , optional  $-20 \text{ }^\circ\text{C} \dots +70 \text{ }^\circ\text{C}$   
Storage temperature.....  $-30 \text{ }^\circ\text{C} \dots +85 \text{ }^\circ\text{C}$ , dry  
Relative humidity, DIN EN 60068-3-4: 2002 ..... 98 %, non condensing  
Protection class, DIN EN 60529: 1991 <sup>2)</sup> ..... IP 65  
Stray magnetic field, measured on the measuring level.....  $< 3 \text{ mT}$

<sup>2)</sup> valid with screwed on mating connector and / or screwed together cable gland

## Dimension drawing

