

## Linear-Transducer LA46K (H) - A



Ref.: K-LA46-A-1

24.05.2021

0102010050

### Advantages

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

### General Data

|                             |                              |
|-----------------------------|------------------------------|
| Supply                      |                              |
| - Supply voltage            | 24 VDC $\pm$ 10 %            |
| Current consumption no load | $\leq$ 100 mA                |
| Measuring principle         | magnetostrictive             |
| Measuring length, standard  | 50...4000 mm, in steps       |
| Resolution                  | 0.001 mm                     |
| Linearity deviation         | $\pm$ 0.10 mm $\leq$ 1500 mm |
|                             | $\pm$ 0.15 mm $>$ 1500 mm    |
| Reproducibility             | 0.005 mm                     |
| Hysteresis                  | 0.02 mm $\leq$ 1500 mm       |
|                             | 0.1 mm $>$ 1500 mm           |
| Characteristics - Validity  | using original TR Magnets    |
| Temperature coefficient     | $<$ 40 ppm/ $^{\circ}$ C FS  |
| - FS:                       | Full-Scale                   |
| 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             |

Subject to change.

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## General Data continuation

|                                    |                            |
|------------------------------------|----------------------------|
| Analog - Interface                 | Factory setting            |
| - Voltage/Current                  |                            |
| - Resolution                       | 16 Bit D/A converter       |
| - Voltage output                   | 0...+10 VDC                |
| - Voltage output                   | -10...+10 VDC              |
| - Load resistance (U)              | $\geq 0.68$ kOhm           |
| - Current output                   | 0...20 mA                  |
| - Current output                   | 4...20 mA                  |
| - Load resistance (I)              | $\leq 500$ Ohm             |
| Cycle time internal, $\leq 1.00$ m | 0.50 ms                    |
| Cycle time internal, $\leq 1.50$ m | 0.75 ms                    |
| Cycle time internal, $\leq 2.00$ m | 1.00 ms                    |
| Cycle time internal, $\leq 3.00$ m | 2.00 ms                    |
| Cycle time internal, $> 3.00$ m    | 4.00 ms                    |
| External inputs                    |                            |
| - Set-Input 1                      | Analog initial point       |
| - Set-Input 2                      | Analog end point           |
| - Logic level                      | "0" $< +2V$ , "1" = Supply |

## Environmental conditions

|                          |                                |
|--------------------------|--------------------------------|
| Vibration                |                                |
| - Specific value         | $\leq 100$ m/s <sup>2</sup>    |
| - Sine                   | 50...2000 Hz                   |
| Shock                    |                                |
| - Specific value         | $\leq 1000$ 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                     |
| - Optional               | -20...+70 °C;                  |
| Storage temperature, dry | -30...+85 °C                   |
| Relative humidity        | 98 %, non condensing           |
| Protection class         |                                |
| - Standard               | IP65                           |
| Stray magnetic field     | DIN EN 61000-4-8, Test Level 4 |
| Measuring reference      | Measuring plane                |

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### Environmental conditions continuation

Pressure resistance  
- Static

PN = 600 bar

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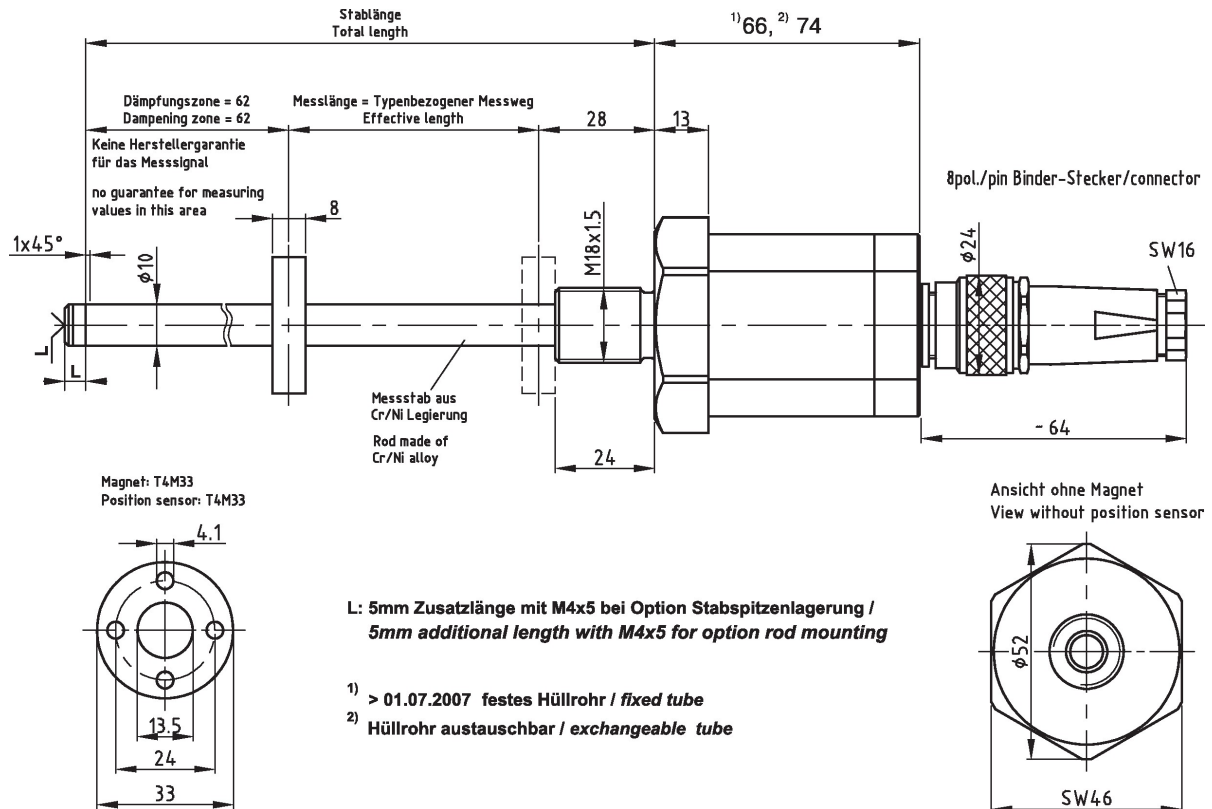
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## Dimensional drawing



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