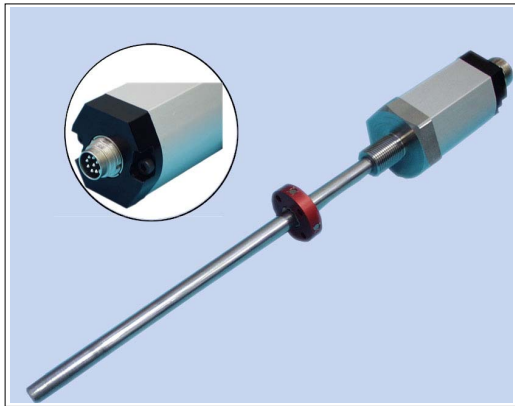


Linear transducer LA-46 A



- **Suitable for a direct installation in hydraulic cylinders**
- **Linear transducer exchangeable (option)**
- **Non-contact and wear free measurement system**
- **Adjustable measuring range**
- **Analog-interface**
- **Easy mounting**
- **Customizations upon request**
- **Other interfaces available (SSI, PROFIBUS-DP, DeviceNet, CANopen)**

Characteristics

| | |
|---|--|
| Measuring principle | magnetostrictive |
| Measuring length | 50 mm – 2000 mm > 2000mm upon request, in Steps of 50 mm |
| Resolution | max. 0,005 mm |
| Linearity deviation - related to the measuring length..... | ±0,1mm to 1.000mm / ±0,15mm > 1.000mm |
| Repeatability..... | ≤ 0,005 mm |
| Hysteresis..... | ≤ 0,02 mm |
| Temperature coefficient..... | < 5 µm / °C |
| Magnet velocity and mounting position | no restriction |
| Material - measuring rod..... | Cr/Ni - alloy |
| Magnet..... | T4-M33, other upon request |
| Power supply | 24 VDC -20%, +10 % |
| Power consumption (without load) | < 4 Watt |
| Analog output voltage U_a (16 Bit resolution)..... | 0 - 10 V, 10 - 0 V, ± 5 V, ± 10 V |
| Impedance | min. 680 Ω |
| Analog output current I_a (16 Bit resolution)..... | 0 - 20 mA, 4 - 20 mA |
| Impedance | max. 500 Ω |
| Cycle time | ≤ 1,0 m measuring length 0,50 ms |
| | ≤ 1,5 m measuring length 0,75 ms |
| | ≤ 2,0 m measuring length 1,00 ms |
| Inputs (Logic level "0=low" < 2 VDC, "1=high" ≥ 8 VDC ≤ 30 VDC) | |
| Set zero point | of output signal |
| Set end-point | of output signal |
| Cable length (dependent on electric shielding)..... | max. 10 m (analog output voltage) |
| | max. 1000 m (analog output current) |
| Rod end mounting | option |
| Linear transducer in the built-in condition exchangeable | option |
| Connection | 8-pin. Binder-connector, others upon request |

Environmental conditions

| | |
|---|--|
| Vibration | $\leq 100 \text{ m/s}^2$ (10g) sine 50-2000 Hz acc. DIN IEC 68-2-6 |
| Shock | $\leq 1000 \text{ m/s}^2$ (100g) 11ms acc. DIN IEC 68-2-27 |
| Stray magnetic field | $< 3 \text{ mT}$ (measured at measuring level) |
| EMC | DIN EN 61000-4-2 / DIN EN 61000-4-4 / DIN EN 61000-6-2 |
| Operating temperature | 0°C ... 70°C (as option -20°C...+70°C/ -40°C ...+85°C) |
| Storage temperature range | -30°C ... +85°C dry |
| Relative humidity | 98 % (non condensing) |
| Pressure resistance..... | 600 bar static |
| 1) Protection class..... | IP 65 compliant DIN 40 050 |
| 1) This is valid, if the plug connectors are connected correctly and/or the cable gland is screwed together correctly | Other protection class upon request. |

Dimension drawing

