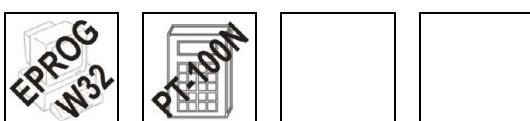


## Linear-Encoder LA-66-K SSI



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- **SSI interface**
- **Suitable for a direct installation in hydraulic cylinders, optional**
- **For linear measurement**
- **Non-contact and wear free measurement system**
- **Parameterizable**
- **Further interfaces available**
- **Customized adaptations upon request**

### Characteristics

Supply voltage.....	24 VDC; -20 %, +10 %
Current consumption without load .....	< 250 mA
Measuring principle.....	magnetostrictive
Measuring length in mm.....	150, 300, 500, 700, 750, 1000, 1500, 2000, 2500, 3000, > 3000 on request
Resolution <sup>1)</sup> .....	≤ 0.01 mm
Linearity deviation, related to the measuring length .....	< 0,05 %
Reproducibility.....	≤ 0.01 mm
Hysteresis .....	≤ 0.1 mm
Temperature coefficient, related to the measuring length.....	< 8 µm/°C ≤ 500 mm / < 15 ppm/°C > 500 mm
Straight line velocity and mounting position.....	no restrictions
Material - measuring rod .....	Cr/Ni - alloy
Rod end mounting.....	Option
Magnet .....	Type T4-M33, other on request
SSI .....	Synchronous-Serial-Interface
Clock input .....	Optocoupler
Data output.....	RS-422, 2-wire
Clock frequency .....	95 kHz – 1 MHz
Mono time t <sub>M</sub> .....	16 µs ≤ t <sub>M</sub> ≤ 25 µs, typically 20 µs
Output code <sup>1)</sup> .....	Binary, Gray, BCD
Output format <sup>1)</sup> .....	MSB left-justified, variable number of data bits, variable origin
Negative values <sup>1)</sup> .....	Sign + Value, Two's complement
Other SSI parameter <sup>1)</sup> .....	Failure value output (damping zone), Synchronization
Cycle times.....	see dimensional drawing
F/R <sup>1)</sup> .....	Count direction
Preset <sup>1)</sup> .....	electronic adjustment
Logic level .....	"0" < + 2 VDC, "1" = Supply voltage

<sup>1)</sup> programmable parameter

## **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 °C...+70 °C, optional -20 °C...+70 °C
Storage temperature .....	-30 °C...+85 °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 mT
Pressure resistance, optional .....	600 bar static

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

## Dimension drawing

