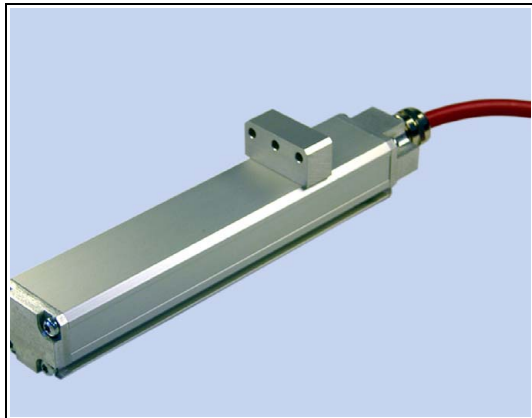
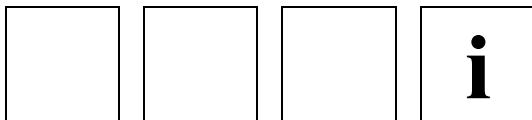


Linear-Transducer LMP-30 SSI

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Germany



- SSI interface
- For linear measurement
- Non-contact and wear free measurement system
- Easy mounting, by means of profile housing
- Parameterizable, at the factory only
- Zero - Adjustment
- Further interfaces available
- Customized adaptations upon request

7

Characteristics

Supply voltage.....	24 VDC; -20 %, +10 %
Current consumption without load	< 250 mA
Measuring principle	magnetostrictive
Measuring length, standard	50 mm...4000 mm > 4000 mm on request, in steps of 50 mm
Resolution	≤ 0.05 mm
Linearity deviation, related to the measuring length	± 0.15 mm up to 1.500 mm / ± 0.2 mm > 1.500 mm
Reproducibility.....	≤ 0.05 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 body.....	Aluminium extruded profile
Magnet.....	Type T1-S3818, 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_M	16 µs ≤ t_M ≤ 25 µs, typically 20 µs
Output code ¹⁾	Binary, Gray, BCD
Cycle times, internal	
≤ 1.0 m.....	1.00 ms
≤ 2.0 m.....	1.50 ms
≤ 3.0 m.....	2.00 ms
> 3.0 m.....	2.50 ms
Inputs, factory-adjusted	
- F/R.....	Count direction
- Preset	Zero - Adjustment
- Logic level.....	"0" < + 2 VDC, "1" = Supply voltage

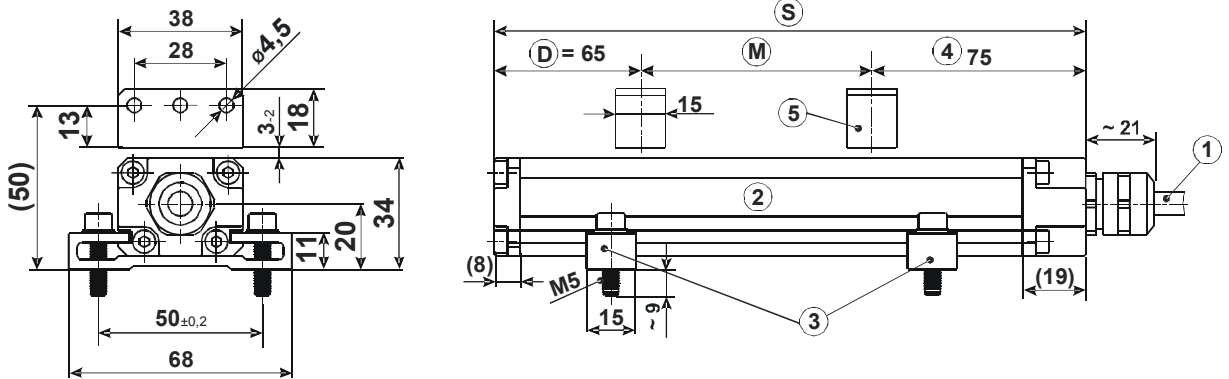
¹⁾ factory adjusted parameter

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..... $0 \text{ }^\circ\text{C} \dots +70 \text{ }^\circ\text{C}$, 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 ²⁾..... IP 65
Stray magnetic field, measured on the measuring level..... $< 3 \text{ mT}$

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

Dimension drawing



S	Rod length (Measurement body) (S = M+140mm)	2	Measurement body material aluminum extruded profile
D	Damping zone (incorrect measured value)	3	Clamp relocatable
M	Length of the effective range	4	T _{dead} – (incorrect measured value)
1	Data input / Data output / Power supply	5	Magnet T1S3818