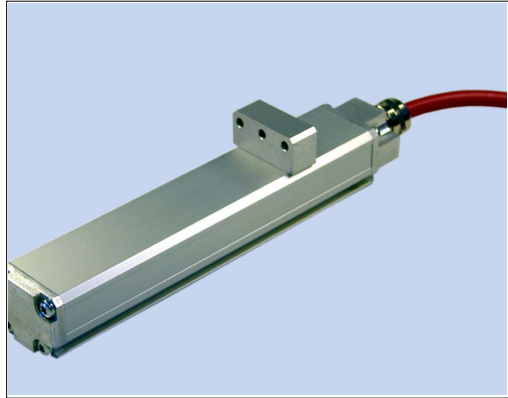


## Linear-transducer LMP-30 A



- **Non-contact and wear free measurement system**
- **Adjustable measuring range**
- **Analog-interface**
- **Easy mounting**
- **Customizations upon request**
- **Other interfaces available (SSI, EtherCAT)**

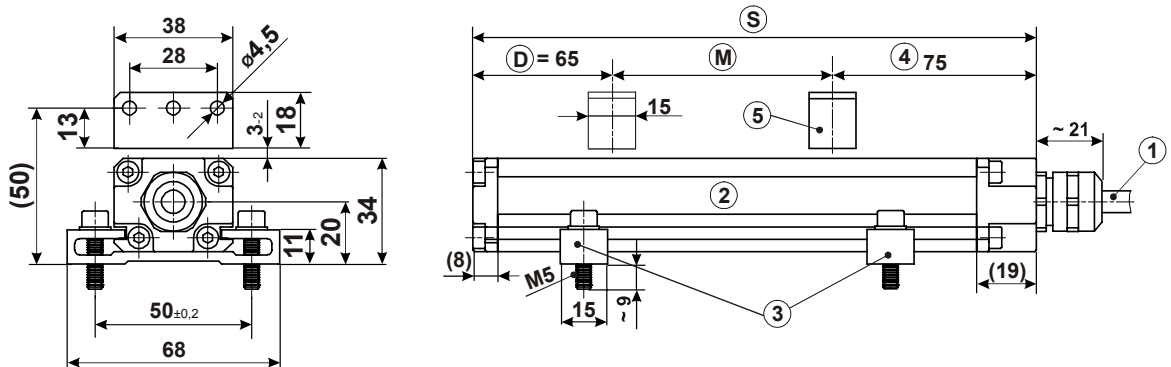
### Characteristics

Measuring principle .....	magnetostrictive
Measuring length .....	50 mm – 4000 mm > 4000mm upon request, in Steps of 50 mm
Resolution .....	max. 0,05 mm (12Bit D/A Converter)
Linearity deviation - related to the measuring length .....	±0,15mm to 2.000mm / ±0,2mm > 2.000mm
Repeatability .....	≤ 0,05 mm
Hysteresis .....	≤ 0,02 mm
Temperature coefficient .....	< 5 µm / °C
Magnet velocity and mounting position .....	no restriction
Material - measuring body.....	aluminium extruded profile
Magnet .....	T1S3818, other upon request
Operating voltage.....	24 VDC -20%, +10 %
Power consumption ( without load ) .....	< 4 Watt
Analog output voltage U <sub>a</sub> (12 Bit resolution) .....	0 - 10 V, 10 - 0 V
Impedance.....	min. 680 Ω
Cycle time	up to 1,0 m measuring length .....0,50 ms
	up to 1,5 m measuring length .....0,75 ms
	up to 2,0 m measuring length .....1,00 ms
	up to 4,0 m measuring length .....1,50 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 at the analog output voltage
Connection .....	Cable

### 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)
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



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