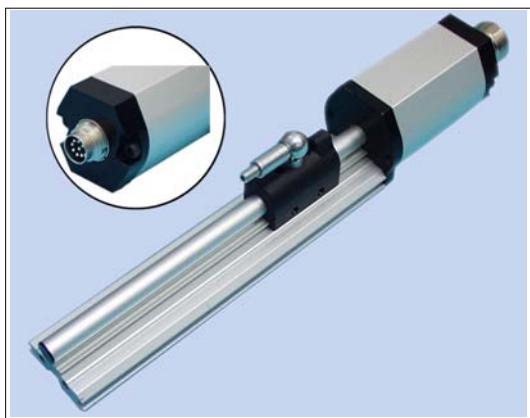
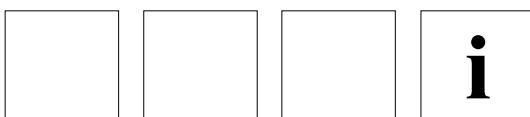


Linear-transducer LP-46 A



Eglishalde 6
D-78647 Trossingen
Tel. +49 - (0) 74 25 / 228 - 0
Fax +49 - (0) 74 25 / 228 - 33
<http://www.tr-electronic.de>
Germany

- **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)**

7

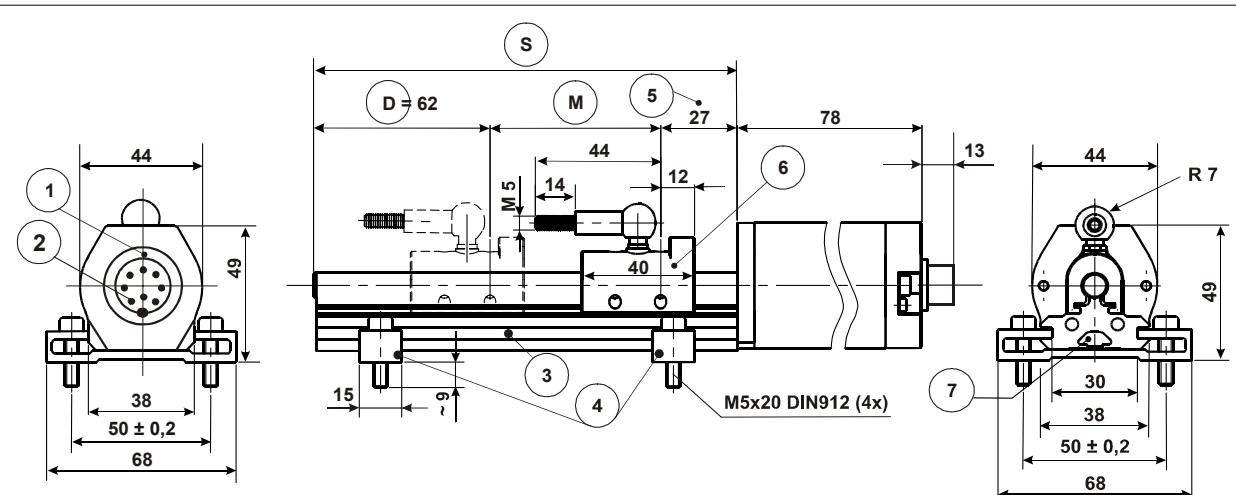
Characteristics

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 body.....	aluminium extruded profile
Magnet	captive-sliding magnet, other upon request
Operating voltage.....	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)
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 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) ¹⁾ Protection class	IP 65 compliant DIN 40 050
1) 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+89mm)	3	Measurement body material aluminium extruded profile
D	Damping zone (incorrect measured value)	4	Clamp relocatable
M	Length of the effective range	5	T_{dead} – (incorrect measured value)
1	Connector Binder 8-pin.	6	Captive-sliding magnet
2	Pin 1 clockwise	7	Pad M5 possible