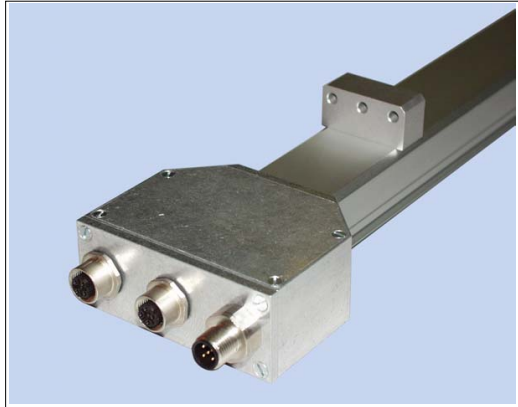


## Linear-transducer LMP-30 EtherCAT



- **Non-contact and wear free measurement System**
- **Adjustable measuring range**
- **EtherCAT-interface**
- **Easy mounting**
- **Customizations upon request**

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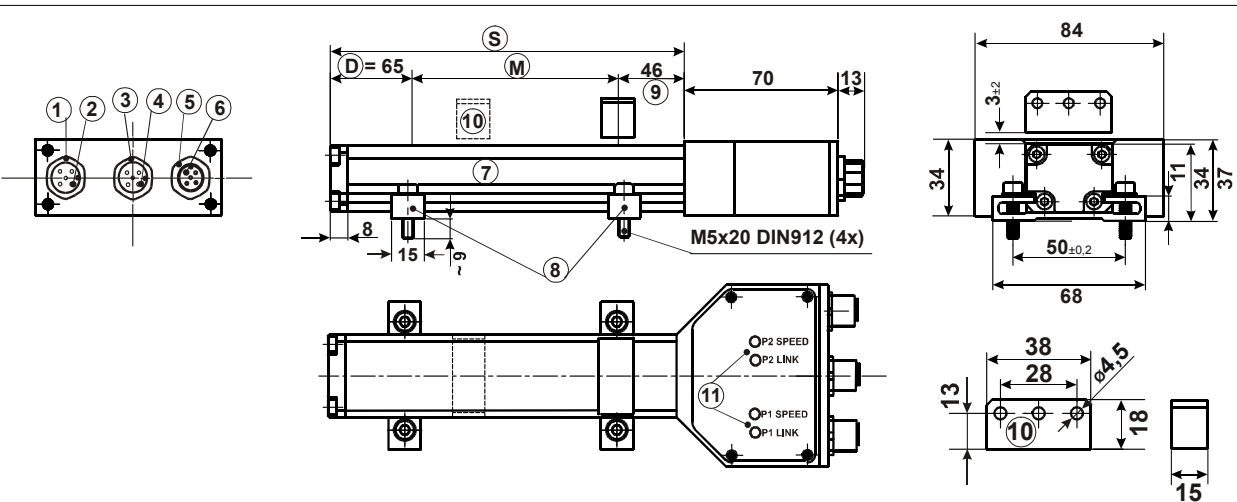
### Characteristics

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 .....	T1S3818, other upon request
Operating voltage.....	24 VDC -20%, +10 %
Power consumption ( without load ) .....	< 4 Watt
Data protocol.....	EtherCat ( Ethernet for control automation technology)
Output code.....	binary
Baudrate.....	100 Mbit
Cycle time	≤ 0,5 m measuring length ..... 0,50 ms
(internal)	≤ 1,0 m measuring length ..... 1,00 ms
	≤ 2,0 m measuring length ..... 1,50 ms
EtherCAT bus cycle time.....	1ms, 500µs, 250µs shorter bus cycles aren't supported.
Programmable via RS 485 .....	PC IBM compatible TRWinProg
Resolution	
Adjustment	
Connection .....	2 x Binder M12-socket, 1 x Binder M12 pin for power supply, others upon request

### Environmental conditions

Vibration .....	≤ 100 m/s <sup>2</sup> (10g) sine 50-2000 Hz acc. DIN IEC 68-2-6
Shock .....	≤ 1000 m/s <sup>2</sup> (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) 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+111mm )	5	Power supply Connector Binder M12 4-pin a-coded
D	Damping zone (incorrect measured value)	6	Pin 1 clockwise
M	Length of the effective range	7	Measurement body material aluminium extruded profile
1	Data input Connector Binder M12 4-pin d-coded.	8	Clamp relocatable
2	Pin 1 clockwise	9	T <sub>dead</sub> – (incorrect measured value )
3	Data output Connector Binder M12 4-pin d-coded.	10	Magnet T1S3818
4	Pin 1 clockwise	11	Display for signal speed and link