

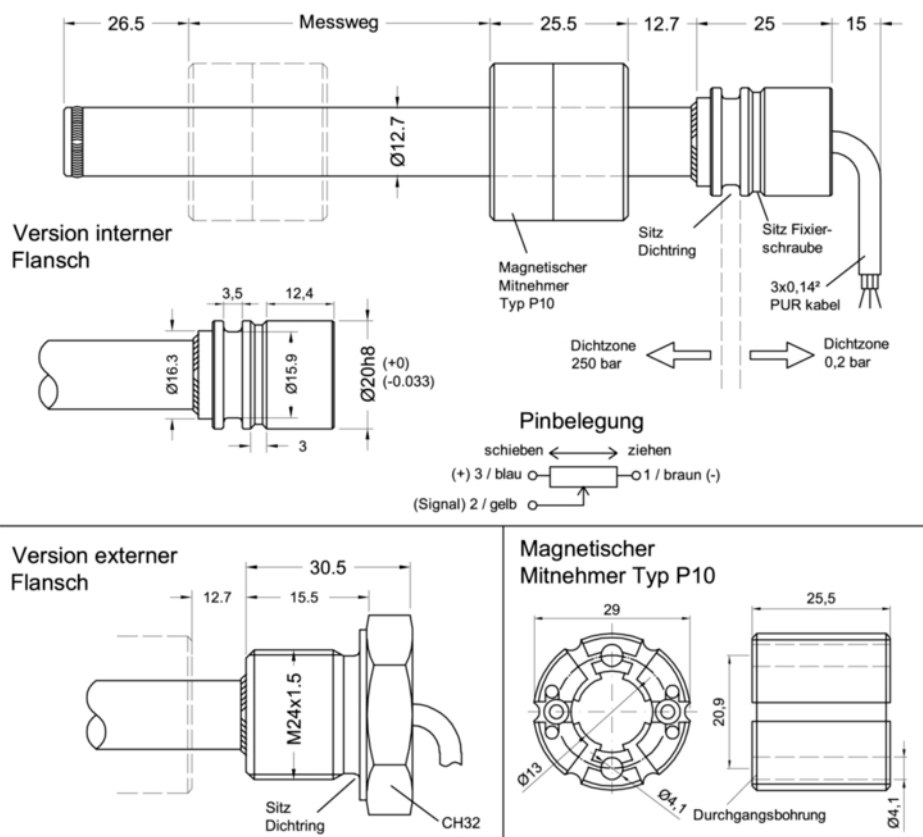
## Series HEM12 - Potentiometric Linear Transducer

- Electrical travel from 50 to 1000 mm
- Even for hydraulic applications up to 250 bar
- Operating temperature -30°C to +100°C
- IP67 sealed by magnetically coupled wiper

The type HEM12 is a further development of the proved HEM16 series. The smaller dimensions of shaft (Ø13mm) and housing (Ø20mm) enable an easy integration in hydraulic applications. The sensors are designed for a maximum working pressure of 250 bar, a peak of 400 bar is possible. The measurement is performed by an external magnetically wiper. A complete sealing of IP67 is obtained.



## Drawing



# Series HEM12 - Potentiometric Linear Transducer

## Electrical Data

Electrical Travel	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 750, 800, 850, 900, 950, 1000 mm
Resistance Value	5 kOhm (50-300mm) // 10kOhm (350-600mm) // 20kOhm (750-1000mm)
Standard Resistance Tolerance	± 20%
Independent Linearity tolerance	± 0,35%
Resolution mm	quasi unendlich
Maximum Power at 40°C	1 W (50mm) // 2W (100mm) // 3W (150-1000mm)
Maximum Operating Voltage	60 V
Temperature Coefficient of Resistor	400 ppm/K
Temperature Coefficient of Voltage Divider Circuit	5 ppm/K
Insulation Resistance	> 100 MOhm at 500 V DC
Dielectric Strength	< 500 Veff. (50 Hz)
Maximum Wiper Current on Malfunction	10 mA
Recommended Wiper Current	< 0,1 $\mu$ A

## Mechanical Data

Maximum Displacement Speed	5 m/s
Maximum Acceleration	10 m/s <sup>2</sup>
Maximum Operating Force	0,5 N
Hysteresis	< 0,25 mm

## Ambient Conditions

Operating Temperature	-30 ... + 100° C
Lagertemperatur	-50 ... + 120° C
Schutzart	IP67

## Options / Accessories

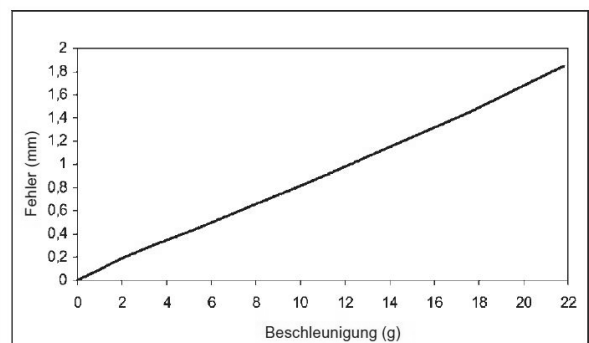
### Options

- Special cable length

### Accessories

- Magnetically wiper  
(1 pc. included in delivery)

## Tracking Error



## Series HEM12 - Potentiometric Linear Transducer

### Order Code

Series	<b>HEM12</b>			
Stroke [mm]		50 (*)		
		<b>100</b>		
		<b>200</b>		
		300 (*)		
		<b>400</b>		
		<b>500</b>		
		750(*)		
		<b>1000</b>		
Design: internal flange			I	
external flange			E	
Connection: Cable				<b>K</b>

"bold print = standard option"

short-term stock types can be found on: <http://www.megatron.de/en/stocklists/linear-sensors/lagerliste.html>

(\*) = on request available for projects

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