

Serie HEM12E / Potentiometric Transducer with Integrated Amplifier

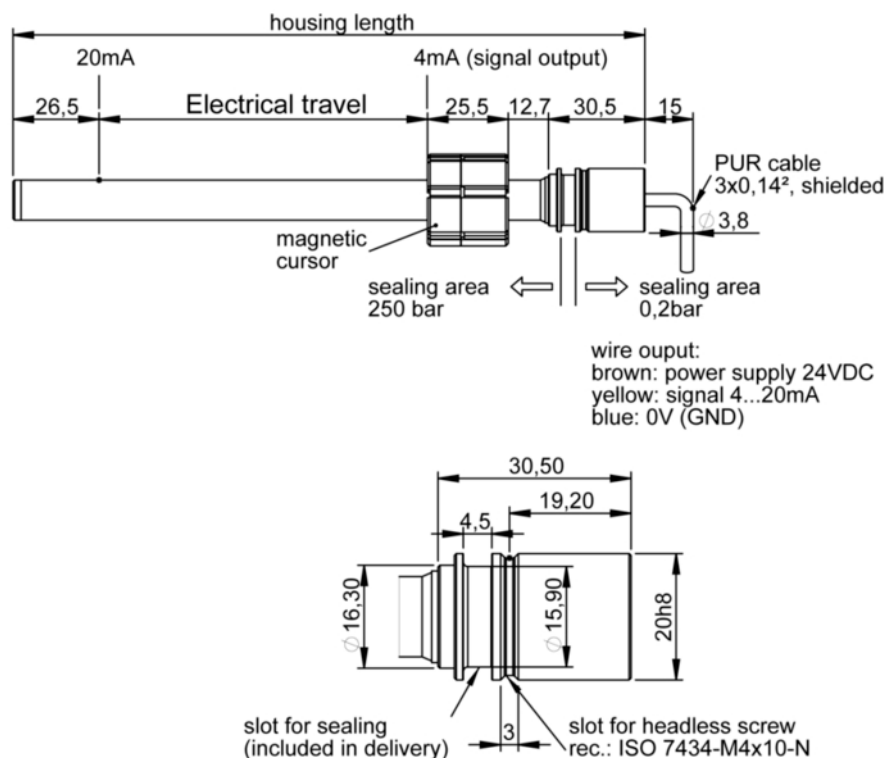
- Integrated signal converter (Ausgang 4...20mA)
- Strokes from 50 to 1000 mm
- For hydraulic applications up to 250 bar also
- Protection Class IP67 by magnetic wiper
- High-grade steel housing (AISI316 / AISI304)



The linear transducer of the HEM12E series is a further development of the potentiometric HEM12 series. In the flange head a signal converter is integrated to provide the analog signal 4...20mA according to the position (power supply 24V ± 20%). The compact design, only 13mm in the shaft diameter and only 20mm diameter in the flange diameter, makes the sensor adequate for various applications where space is critical. The sensor can also be used for hydraulic applications with max. pressure of 250 bar (400 bar peak). The measurement is taken with a magnetic cursor. Seal protection is IP67.

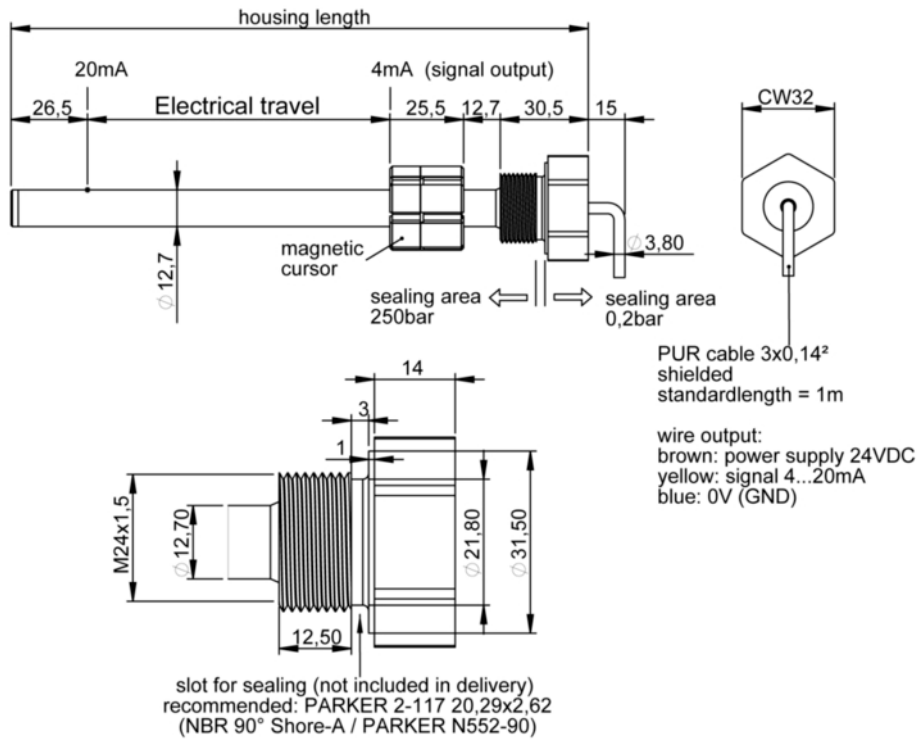
Drawing

Version internal flange

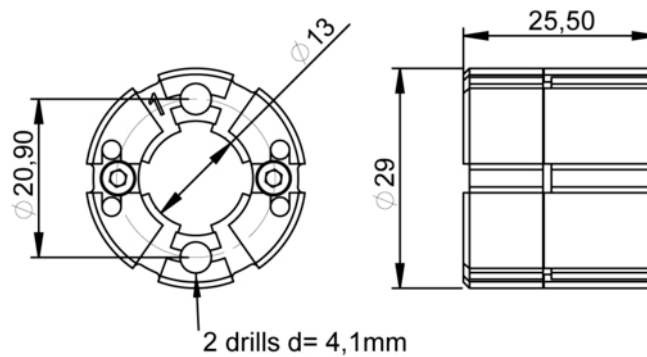


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Version external flange



magnetic cursor



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Electrical Data

Electrical Stroke [mm]	50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 750, 800, 850, 900, 950, 1000
Signal	4..20 mA Zero point (4mA) between 1% and 3% from measuring range Limit (20mA) between 96% and 99% from measuring range
Noise	0,08%FS RMS
Response	< 1ms
Independent Linearity Tolerance	±0,35 %
Resolution	infinite
Maximum Power Consumption	35 mA
Operating Voltage	10..30 VDC
Temperature Coefficient	0,02 %FS/°C
Insulation	> 100 MOhm at 45 V DC = 1 bar, 2s

Mechanical Data

Max. Displacement Speed	5 m/s
Max. Acceleration	10 m/s ²
Max. Friction	0,5 N
Hysteresis	<0,25 mm
Life Cycles	> 25 Mio m or > 100 Mio strokes (currently in force is the smaller value)

Ambient Conditions

Operating Temperature	-30 ... +80° C
Storage Temperature	-40 ... +100° C
Vibration	5...2000 Hz; Amax = 0,75mm; amax = 20g
Shock	50 g, 11 ms
Protection Class	IP67

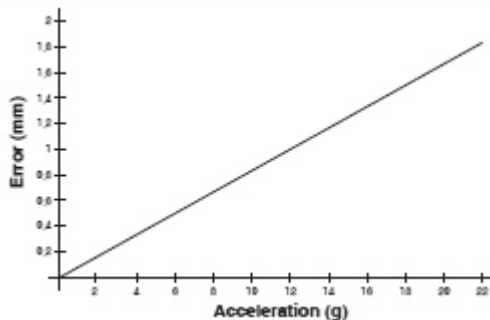
Options

- Special Cable Length

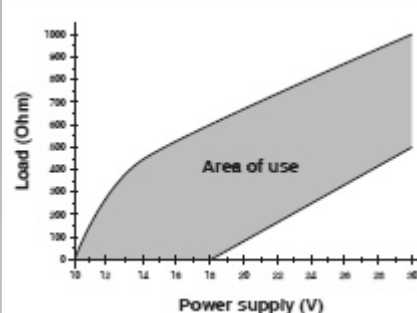
Accessories

- Magnetic Wiper (1 pc. included in delivery)

Tracking Error



Load Resistance Diagram



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Order Code

Series	HEM12E				
Stoke [mm]		50 (*)			
		100			
		200			
		300 (*)			
		400			
		500			
		750(*)			
		1000			
Design: internal flange			I		
external flange			E		
Connection: Cable				K	
Output signal: 4-20 mA					2442

"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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