

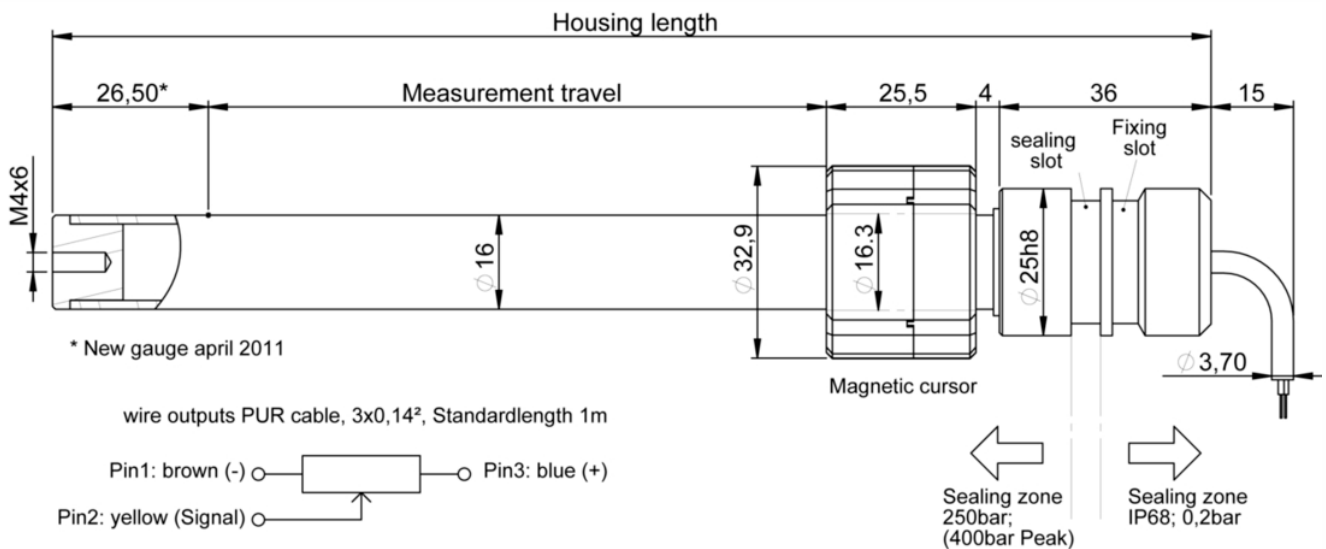
Series HEM16 - Potentiometric Linear Transducer

- Electrical travel from 50 to 1000 mm
- Linearity tolerances down to $\pm 0,05\%$
- Resolution quasi infinite
- Operating temperature -30°C to $+100^{\circ}\text{C}$
- Acceleration 5 m/s
- Electrical connection:
shielded cable, 3-wire, length 1 m



The type HEM16 is especially suited for applications with a high ambient pressure. They are developed for a maximum working pressure of 250 bar with a peak of 400 bar, useable in a temperature range of -30°C to $+100^{\circ}\text{C}$. The measurement is performed by an external magnetically wiper, thereby a complete sealing of IP68 has been obtained.

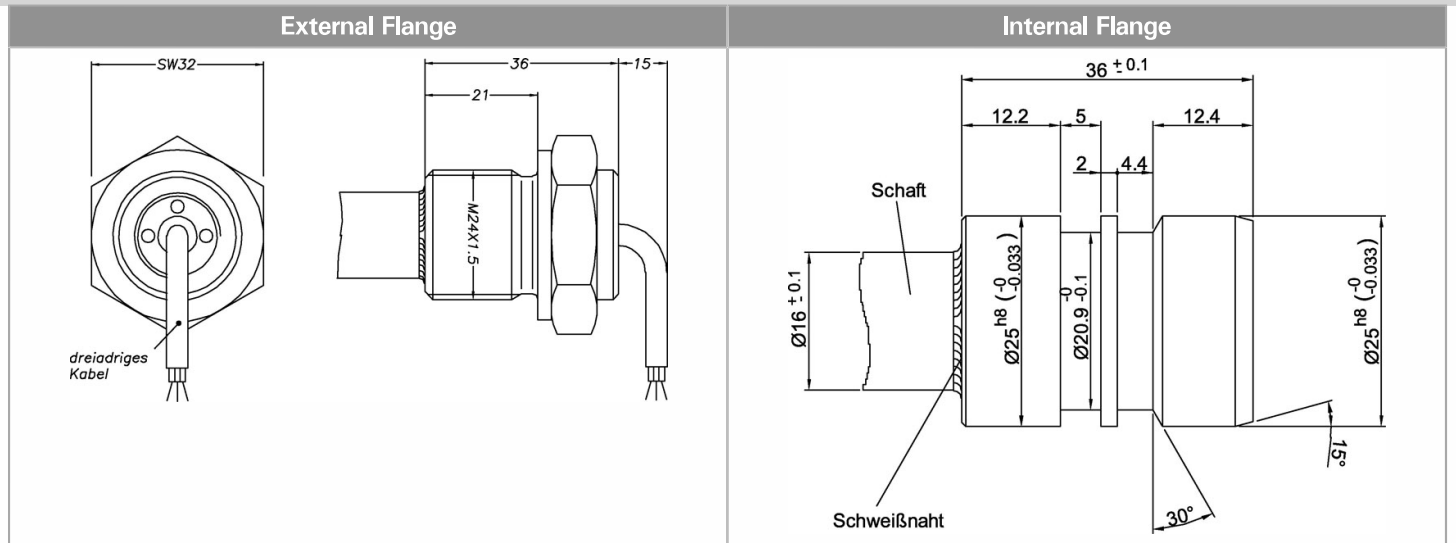
Drawing



Dimensions in mm

Series HEM16	50	100	150	200	250	300	350	400	450	500
Electrical travel +1	50	100	150	200	250	300	350	400	450	500
Mechanical travel	55	105	155	205	255	305	355	405	455	505
Housing length	147	197	247	297	347	397	447	497	547	597
Series HEM16	550	600	650	700	750	800	850	900	950	1000
Electrical travel +1	550	600	650	700	750	800	850	900	950	1000
Mechanical travel	555	605	655	705	755	805	855	905	955	1005
Housing length	647	697	747	797	847	897	947	997	1047	1097

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Electrical Data

Resistance Values	5 KOhm Measurement travels 50-300mm 10 KOhm Measurement travels 350-600mm 20 KOhm Measurement travels 650-1000mm
Resistance Tolerance, Standard	± 20%
Linearity Tolerance, independent	± 0,1% Measurement travels 50-100mm ± 0,05% Measurement travels 150-1000mm
Resolution [mm]	quasi infinite
Maximum Load at 40°C	1W for Measurement travel 50mm 2W for Measurement travel 100mm 3W Measurement travels 150-1000mm
Maximum Operating Voltage	40V for Measurement travel 50mm 60V Measurement travels 100-1000mm
Temperature Coefficient of Resistor	400 ppm/K
Insulation	> 100 MOhm at 500 V DC
Dielectric Strength	< 100 µA at 500 Veff. (50 Hz)
Maximum Wiper Current in case of malfunction	10 mA
Recommended Wiper Current	< 0,1 µA (divided voltage circuit)

Mechanical Data

Maximum Displacement Speed	5 m/s
Maximum Accleration	10 m/s ²
Average Life	> 25 x 10 ⁶ m or > 100 x 10 ⁶ movements - the smaller value is currently in force
Maximum Friction	< 0,5 N
Vibration	5...2000 Hz; Amax = 0.75mm; amax = 20g
Schock	50g, 11ms
Housing material	Stainless steel AISI 316 / 304

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Ambient Conditions

Operating Temperature	-30 ... + 100° C
Storage Temperature	-50 ... + 120° C
Protection Class	IP68

Options / Accessories

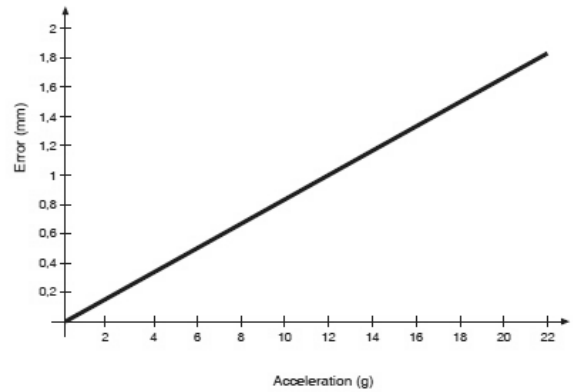
Options

- Special cable length

Accessories

- Magnetically wiper
(1 pc. included in delivery)

Tracking Error



Order Code

Series	Travel	Mech. Version	Connection
HEM16	50 ... 1000 (pls see. table above)	I = Internal Flange E = External Flange	K = cable

Example: HEM16 200 I K (Series HEM16, elec. travel 200mm, with internal flange, 1m cable)

The specifications and information in this datasheet cannot consider all special demands that are caused by the application. Because of this, they are no general description of the properties of the product.
04. March 2011. All specifications are subject to change without notice.