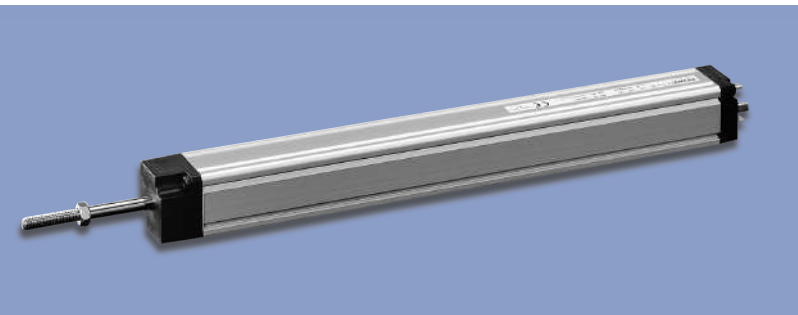


Position Transducers
potentiometric
up to 900 mm, IP55

Series LWH



Special features

- long life up to 100 Mio. movements, depending on application
- outstanding linearity up to $\pm 0.04\%$
- high resolution 0.01 mm
- very high operating speed
- connection via plug and socket to DIN 43 650 (hydraulic connector)
- protection class IP 55

Position transducers with resistive and collector track made from conductive plastic for direct, accurate measurement of travel in display- or feedback applications.

High resolution (0.01 mm) combined with a stroke length of up to 900 mm permits the accurate measurement of linear displacement.

Rack and pinions or similar devices are not required because the design of the transducers is such that they may be built directly into the mechanical system.

Tighter tolerances on the extruded body combined with a special surface treatment permit high operating speeds and reduced wear. A pivoting front bearing over comes „stick-slip“ type of operation even where some angular or out of parallel errors are present.

The technique for fixing and making connections to the resistance track ensures the highest degree of reliability even under harsh working conditions.

By mounting overhead on difficult-to-reach machines it is possible to premount the clamps to the mounting surface and then simply “snap-on” the transducer.

The transducer has mounting grooves on all four housing surfaces. Thus the transducer can always be mounted with the resistance element directed upwards (recognizable by the position of the middle mounting groove directly across from the resistance element), independent of the mounting surface.

Erosion particles from inside the transducer will therefore not remain on the resistance element, improving the life-span of the sensor.

Description	
Housing	aluminium, anodized
Fixings	adjustable clamps, snap in on all sides
Actuator	stainless steel (1.4305), rotatable, external thread M6
Bearings	pendular fixed slide bearing
Resistance element	conductive plastic
Wiper assembly	precious metal multi-finger wiper, elastomer-damped
Electrical connections	4-pin plug socket to DIN 43650

Environmental Data		
Temperature range	-30... +100	°C
Vibration	5... 2000 A _{max} = 0.75 a _{max} = 20	Hz mm g
Shock	50 11	g ms
Life	>100 x 10 ⁶	movements
Operating speed	10	m/s max.
Operational acceleration	200 (20 g)	m/s ² max.
Protection class	IP55 (DIN EN 60529)	

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Order designations	
Type	P/N
LWH-0050*	024302
LWH-0075	024303
LWH-0100	024304
LWH-0110*	024360
LWH-0130	024305
LWH-0150	024306
LWH-0175	027307
LWH-0200	024308
LWH-0225	024309
LWH-0250	024310
LWH-0275	024311
LWH-0300	024312
LWH-0325	024313
LWH-0360	024314
LWH-0375	024315
LWH-0400	024316
LWH-0425*	024317
LWH-0450	024318
LWH-0500	024320
LWH-0550	024322
LWH-0600	024324
LWH-0650*	024326
LWH-0750	024330
LWH-0800*	024332
LWH-0900	024336

*) Technical datas on request
 Other lengths on request

Included in delivery

1 plug connector GDM 3009,
 (Ø 4,5 mm - 7 mm),
 1 sealing gasket GDM 3-16,
 2 fixing clamps with 4 screws

Optional accessories

Pivot head Z-60 with internal
 thread M6x12, P/N 058100.
 Process-controlled indicators
 MAP... with display.



Signal conditioner MUW...
 (integrated in plug connector)
 with supply voltage 24 V and
 standard output signals.

Important

All values specified in this data
 sheet for linearity, lifetime and
 temperature coefficient are
 only valid for a sensor used as
 a voltage divider with virtually
 no load applied to the wiper
 ($I_E \leq 1 \mu A$).