



## Linear Position Transmitter HLT 2550-L2

Magnetostrictive

For external mount

Resolution 0.05 mm

### Analogue

#### Description:

The HLT 2550 is a linear position transmitter which, due to its compact design, was developed in particular for use in applications where space is very limited. The measuring profile can be individually adapted to various mounting conditions by means of spacers.

The HLT 2550 is suited for measuring ranges up to 3 m.

The different output signals (analogue current / voltage) enable connection to all HYDAC ELECTRONIC GmbH measurement and control devices as well as connection to standard evaluation systems (e.g. to PLC controls).

The main fields of application for the HLT 2550 are, for example, general positioning tasks in mechanical engineering and in stationary hydraulics, or as a wear-free alternative for existing measuring equipment such as potentiometers.

#### Technical data:

##### Input data

Measuring ranges <sup>1)</sup> 30 .. 3000 mm in steps of 50 mm

Model Profile, with top magnet guidance joint

Material Measuring body: Aluminium

##### Output data

Output signal, permitted load resistance

Current: 4 .. 20 mA or 20 .. 4 mA  
Load resist.: 200 .. 500 Ω

Voltage: 0 .. 10 V or 10 .. 0 V  
Load resist.: min. 2 kΩ

Resolution 12 bit, ≥ 0.05 mm

Non-linearity ≤ ± 0.01 % FS, ≥ 0.06 mm

Hysteresis ≤ ± 0.1 mm

Repeatability ≤ ± 0.005 % FS, ≥ 0.05 mm

Temperature coefficient ≤ ± 0.01 % FS / °C typ.

Sampling rate Depending on length:  
0.5 ms (measuring range ≤ 1200 mm)  
1.0 ms (measuring range ≤ 2400 mm)  
2.0 ms (measuring range ≤ 3000 mm)

##### Environmental conditions

Operating temperature range -20 .. +75 °C, optionally -40 .. +75 °C

Storage temperature range -30 .. +85 °C

CE mark EN 61000-6-1 / 2 / 3 / 4

Vibration resistance acc. to  
DIN EN 60068-2-6 at 50 .. 2000 Hz ≤ 10 g

Shock resistance acc. to  
DIN EN 60068-2-27 (11 ms / half sine) ≤ 100 g

Protection class acc. to DIN EN 60529 <sup>2)</sup> IP 67

Installation position No restrictions

##### Other data

Supply voltage 24 V DC ± 20 %

Residual ripple of supply voltage ≤ 250 mVpp

Current consumption without output < 100 mA

Weight Depending on length:  
30 mm: ~ 300 g  
3000 mm: ~ 3900 g

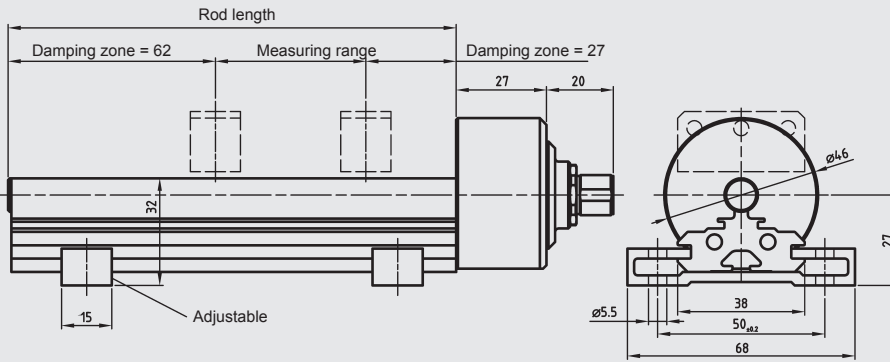
Note: Reverse polarity protection of the supply voltage, excess voltage and short circuit protection are provided.

FS (Full Scale) = relative to complete measuring range

<sup>1)</sup> Other measuring ranges on request.

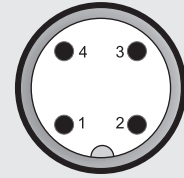
<sup>2)</sup> With mounted mating connector in corresponding protection class

## Dimensions:



## Pin connections:

M12x1, 4 pole



| Pin |                 |
|-----|-----------------|
| 1   | +U <sub>B</sub> |
| 2   | n.c.            |
| 3   | 0 V             |
| 4   | Signal          |

## Model code:

**HLT 2 5 5 0 - L2 - 006 - XXX - XXXX - 000**

### Design / geometry type

5 = profile

### Model

L2 = profile, with top magnet guidance joint

### Electrical connection

006 = male M12x1, 4 pole

### Output signal

C01 = analogue 4 .. 20 mA, 3-conductor

C02 = analogue 20 .. 4 mA, 3-conductor

B01 = analogue 0 .. 10 V

B02 = analogue 10 .. 0 V

### Measuring range in mm (30 .. 3000 mm in steps of 50 mm)

Example

0130 = 130 mm

### Modification

000 = standard

### Notes:

The position magnet must be ordered separately.

### Scope of delivery:

- HLT 2550
- Operating manual

### Accessories: (not supplied with instrument)

|              |                 |                   |
|--------------|-----------------|-------------------|
| ZBL MVS35-39 | magnet slide    | part no.: 6105654 |
| ZBL MV63     | position magnet | part no.: 6084454 |
| ZBL MF38-18  | position magnet | part no.: 6084456 |
| ZBL MU38-20  | position magnet | part no.: 6084455 |
| Mounting kit |                 | part no.: 6105653 |

More detailed information on accessories as well as on further accessories, such as mating connectors, can be found in the Accessories brochure.

## Note:

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

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