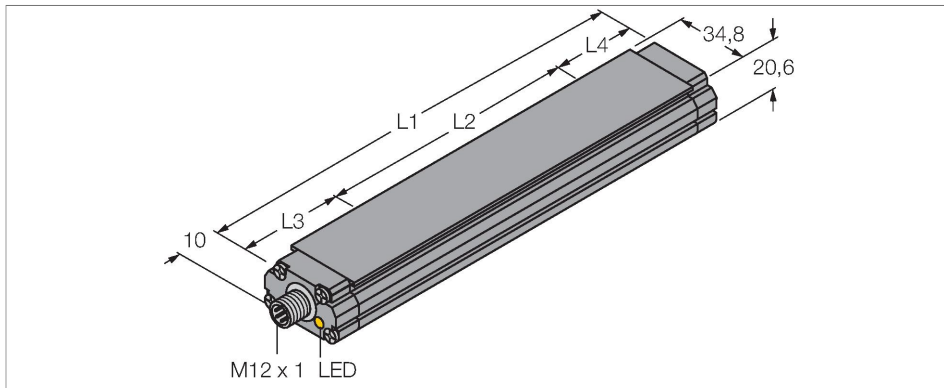


# LT10E-Q21R-LU0X3-H1151

## Magnetically actuated linear position sensor



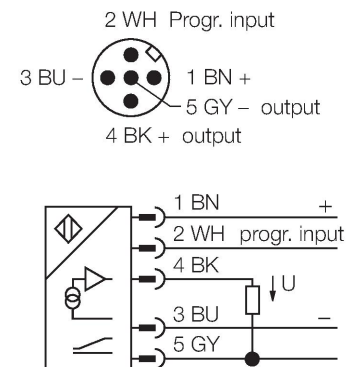
### Features

- Rectangular, height 20.6 mm
- Metal, aluminium
- 16 bit resolution
- 5-wire, 13.5...30 VDC
- 16 bit resolution
- High repeatability
- Extremely high linearity
- Programmable measuring range
- Invertible output signal
- Analog output 0...10 VDC
- Male connector M12 x 1

### Technical data

|                                        |                                  |
|----------------------------------------|----------------------------------|
| Type                                   | LT10E-Q21R-LU0X3-H1151           |
| ID                                     | LT0523                           |
| Measuring principle                    | Magnetostrictive                 |
| <b>General data</b>                    |                                  |
| Measuring range                        | 254 mm                           |
| Resolution                             | 0.1 % *                          |
| Resolution                             | 16 bit                           |
| Blind zone connector end L3            | 76.2 mm                          |
| Blind zone non-connector end L4        | 38.1 mm                          |
| Repeat accuracy                        | ≤ 0.006 % of full scale          |
| <b>Electrical data</b>                 |                                  |
| Operating voltage $U_s$                | 13.5...30 VDC                    |
| No-load current                        | ≤ 80 mA                          |
| Short-circuit protection               | yes/Cyclic                       |
| Wire break/reverse polarity protection | yes (voltage supply)             |
| Output function                        | 5-wire, Analog output            |
| Voltage output                         | 0...10 V                         |
| Current consumption                    | 35 mA at 30 VDC, 80 mA at 10 VDC |
| <b>Mechanical data</b>                 |                                  |
| Design                                 | Profile, Q21                     |
| Dimensions                             | 381 x 34.8 mm                    |
| Housing material                       | Metal, AL, Anodized              |
| Electrical connection                  | Connector, M12 x 1               |
| <b>Environmental conditions</b>        |                                  |
| Ambient temperature                    | -40...+70 °C                     |
| Vibration resistance                   | 20 Hz (1 mm)                     |

### Wiring diagram

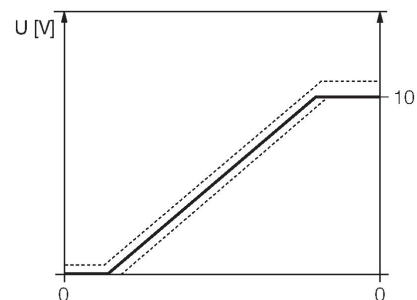


### Functional principle

Magnetostrictive linear position sensors with analog output provide a signal that is proportional to the travel distance. Simple control tasks can thus be accomplished. These sensors feature an excellent repeat accuracy, resolution and linearity. Due to their extremely robust design, they are especially suited for industrial applications. They also excel in their high electromagnetic compatibility and stability over a wide temperature range. The sensors operate on the non-contact function principle and are thus wear and maintenance free.

## Technical data

|                  |                               |
|------------------|-------------------------------|
| Shock resistance | 40 g (11 ms)                  |
| Protection class | IP67                          |
| Switching state  | 3-color LED, Green/yellow/red |



## Accessories

MB-Q21

6900279

Mounting bracket for side mounting of Q25L and Q21 linear position sensors; material: Stainless steel

