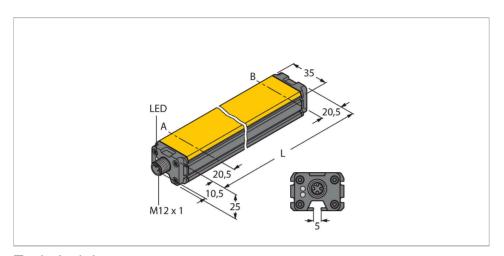


# WIM100-Q25L-LIU5X2-H1141 Magnetically Actuated Linear Position Sensor



#### Technical data

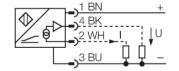
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Туре	WIM100-Q25L-LIU5X2-H1141
ID	1536630
Measuring principle	Magnetic
General data	
Measuring range	100 mm
Resolution	0.1 mm/10 bit
Repeatability	≤ 0.1% of measuring range IA - BI
	depending on positioning element
Linearity deviation	≤ 1 %
Temperature drift	≤ ± 0.006 %/K
Electrical data	
Operating voltage U <sub>B</sub>	1530 VDC
Ripple U <sub>ss</sub>	≤ 10 % U <sub>Bmax</sub>
Isolation test voltage	0.5 kV
Short-circuit protection	yes
Wire break/reverse polarity protection	yes/Complete
Output function	4-pin, Analog output
Voltage output	010 V
Current output	420 mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance current output	≤ 0.4 kΩ
Sample rate	200 Hz
Current consumption	< 50 mA



#### **Features**

- Rectangular, aluminium / plastic
- Many mounting possibilities
- Measuring range indication via LED
- ■Immune to external magnetic fields
- ■Extremely short blind zones
- ■4-wire, 15...30 VDC
- ■Analog output
- ■0...10 V and 4...20 mA
- Male connector, M12 x 1

#### Wiring diagram





#### Functional principle

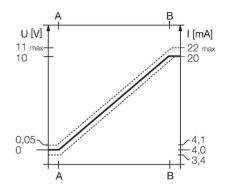
Linear position sensors operate on the Hall principle and accomplish simple control tasks. They provide an output signal proportional to the actuating magnet. The polarity of the magnet has no effect on the output signal. The outstanding features of these robust sensors are excellent repeatability, resolution and



## Technical data

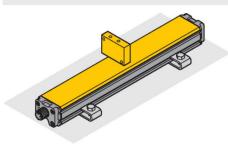
Mechanical data	
Design	Profile, Q25L
Dimensions	141 x 35 x 25 mm
Housing material	Aluminum/plastic, PA6-GF30
Active area material	Plastic, PA6-GF30
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-25+75 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	131 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Measuring range display	LED, yellow, positioning element in measuring range yellow flashing, no positioning element in measuring range after power reset
UL certificate	E210608

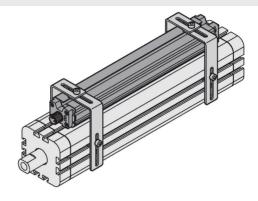
linearity, excellent electromagnetic capability and a broad temperature range.

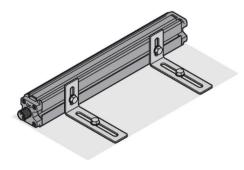


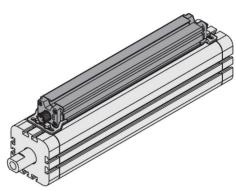
#### Mounting instructions

#### Mounting instructions/Description









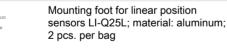
Numerous accessories allow the sensor to be mounted in various positions. Opposite to the active face, the sensor housing features a mounting groove for which sliding blocks are available. The lateral slot profiles can be used for mounting, too.

When used with an external positioning element, the sensor can either be mounted with the active face located opposite or laterally to the mounting surface. Drilling slots guarantee highest flexibility for fine adjustment. The mounting accessories for linear position sensors can be adjusted to the respective cylinder sizes. The stainless steel accessories guarantee safe and robust mounting as well as highest flexibility.

#### Accessories

#### M1-Q25L

#### 6901045



# M2-Q25L.

MB2.1-Q25(4PCS)

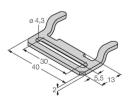
#### 6901046

Mounting foot for linear position sensors LI-Q25L; material: aluminum; 2 pcs. per bag

#### MB1-Q25

#### 6901026

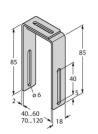
Mounting clip for linear position sensor Q25L; material Stainless steel; 2 pcs. per bag



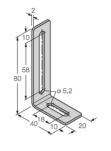
### 85 85 40 40 40 70,120

# 6901027 Mounting bracket for linear position sensors Q251 for mounting on

sensors Q25L for mounting on pneumatic cylinders (40...60 mm); material: Stainless steel; 4 pcs. per bag M4-Q25L 6901048



Mounting bracket for linear position sensors Q25L, for mounting on pneumatic cylinders (70...120 mm); material: Stainless steel; 4 pcs. per bag

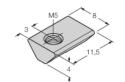


Mounting bracket and sliding block for linear position sensors LI-Q25L; material: Stainless steel; 2 pcs. per bag

MN-M4-Q25

6901025

Sliding block with M4 thread for the backside profile of the LI-Q25L; material: galvanized steel; 10 pcs. per bag.



Sliding block with M5 thread for the backside profile of the LI-Q25L; material Stainless steel; 10 pcs. per bag

DM-Q12

6900367

Actuator, rectangular, plastic, attainable switching distance 58 mm on BIM-(E)M12 magnetic field sensors or 49 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...5 mm



MN-M5-Q25

6900216

6901039



Actuation magnet, Ø 15 mm (Ø 3 mm), h: 6 mm; attainable switching distance 36 mm on BIM-(E)M12 magnetic field sensors or 32 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...4 mm

DMR20-10-4

6900214



Actuation magnet; Ø 20 mm (Ø 4 mm), h: 10 mm; attainable switching distance 59 mm on BIM-(E)M12 magnetic field sensors or 50 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...4 mm

DMR31-15-5

6900215

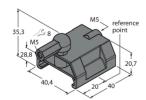
N → S 0 5 0 31

Actuation magnet, Ø 31 mm (Ø 5 mm), h: 15 mm; attainable switching distance 90 mm on BIM-(E)M12 magnetic field sensors or 78 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...5 mm

P1-WIM-Q25L

6901088

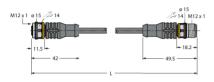
Guided positioning element for WIM-Q25L, inserted in the sensor groove.





connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

RKC4.301T-0.15-RSC4.334T/TXL 6631382



Extension cable, M12 female/male, straight, 4-pin, cable length: 0.15m, jacket material: PUR, black; cULus approval; Adapter cable for sensors with analog output on pin 2, for connection to analog inputs of fieldbus modules with 4-wire technology