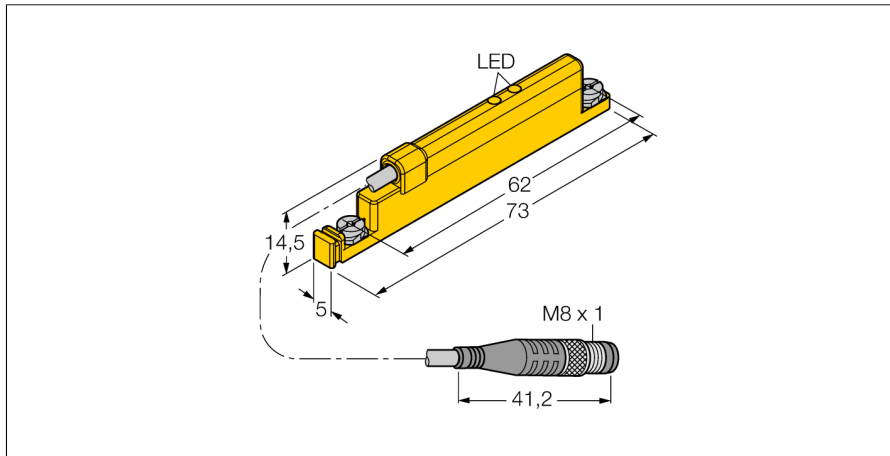
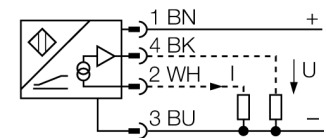


**Linear position sensor
for analog pneumatic cylinder monitoring
WIM45-UNTL-LIU5X2-0,3-PSG4M**



- Plastic, PA12-GF30
- For direct mounting on pneumatic T-groove cylinders
- Magnetic field status displayed via two LEDs
- Measured value memory
- Hardly affected by external magnetic fields
- 4-wire, 15...30 VDC
- 0...10 V and 4...20 mA
- Pigtail with male end, M8 x 1

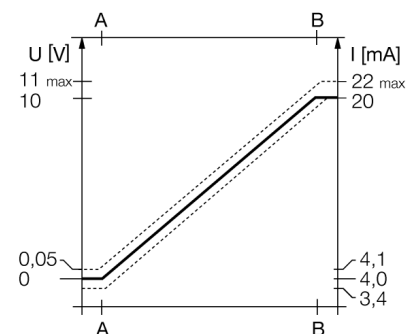
Wiring diagram



Functional principle

Magnetic inductive linear position sensors with analog output accomplish control tasks by providing a signal proportional to the position of the piston rod. The polarity of the magnet has no effect on the output signal. The outstanding features of these robust sensors are excellent repeatability, resolution and linearity, excellent electromagnetic capability and a broad temperature range.

Characteristic



Type code	WIM45-UNTL-LIU5X2-0,3-PSG4M
Ident no.	1536620
Measuring range [A...B]	45mm
Resolution	10 bit
Repeatability	≤ 0.1% of measuring range IA - BI ≤ with non-rotatable piston rod
Reproducibility	≤ 45 µm
Linearity deviation	≤ 1 %
Temperature drift	≤ ± 0.006 % / K
Ambient temperature	-25...+70 °C
Operating voltage	15...30VDC
Residual ripple	≤ 10 % U _{ss}
No-load current I ₀	≤ 15 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, analog output
Voltage output	0...10V
Current output	4...20mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance current output	≤ 0.4 kΩ
Design	rectangular, UNTL
Dimensions	73 x 5 x 14.5 mm
Housing material	plastic, PA
Tightening torque fixing screw	0.4 Nm
Connection	cabl with connector, M8 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Display magnetic-field status	2x LED, yellow

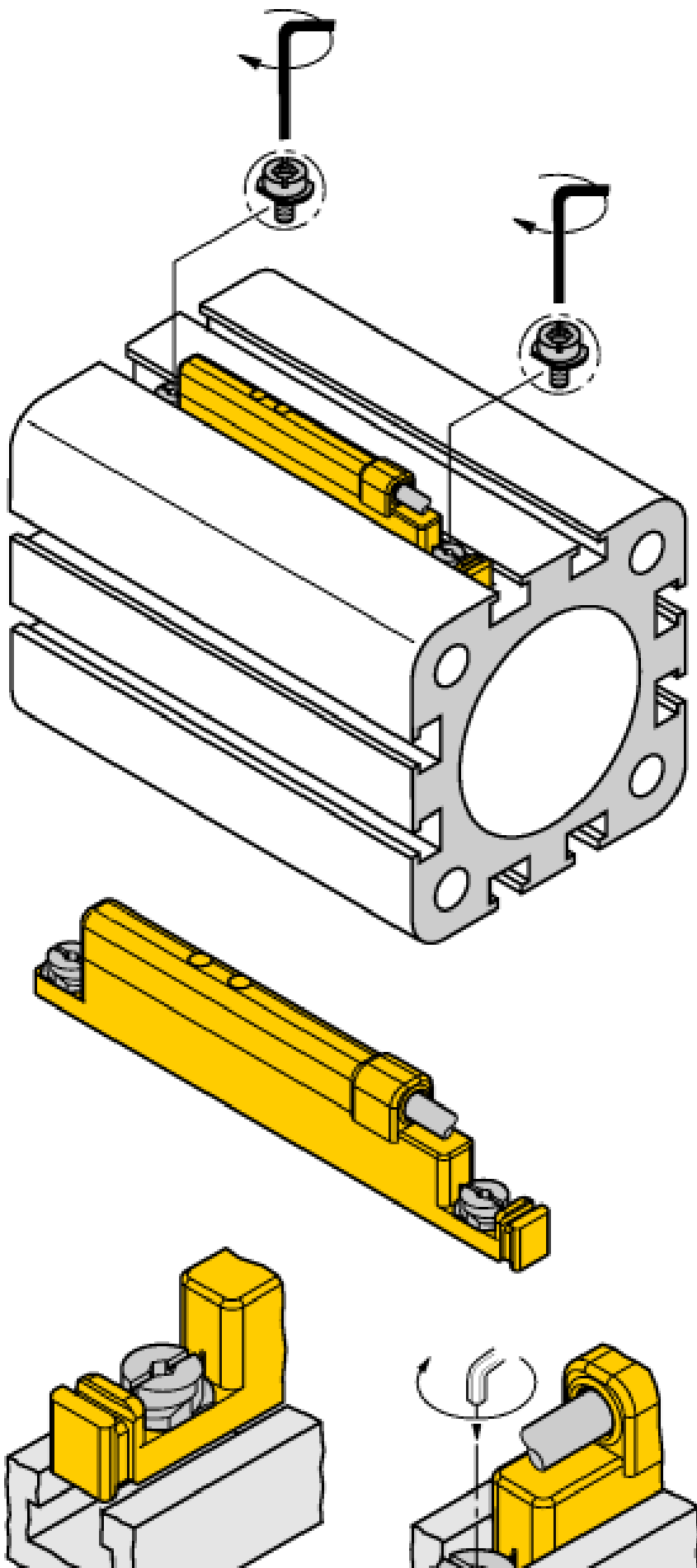
**Linear position sensor
for analog pneumatic cylinder monitoring
WIM45-UNTL-LIU5X2-0,3-PSG4M**

TURCK

Industrial
Automation

Mounting instructions / Description

**Linear position sensor
for analog pneumatic cylinder monitoring
WIM45-UNTL-LIU5X2-0,3-PSG4M**



The sensor is easily inserted in the groove from above thanks to the pre-fixation lip. The sensor is mounted as follows: Turn the screw clockwise. The sensor is pressed down and thus locked. A quarter turn of the screw with a standard screw driver or a 1.5 mm Allen key is enough for vibration resistant mounting. The allowed fixing torque of 0.4 Nm is sufficient for safe mounting without damaging the cylinder. Cable clips included in the scope of delivery enable smooth cable routing in the groove. Mounting accessories for other cylinder sizes have to be ordered separately.

LEDs:

If both LEDs are on, the magnet is in the measuring range of the sensor and the magnetic field has optional magnetizing force; accuracy and linearity of the output curve are within the specified range.

If only one LED is on, the magnet is in the measuring range but the magnetizing force is not ideal; the output characteristic may be outside the specified range.

If both LEDs are off, no magnet is in the measuring range of the sensor.

**Linear position sensor
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Accessories

Type code	Ident no.	Description	Dimension drawing
IM43-13-SR	7540041	Limit value monitor; 1-channel; input 0/4...20 mA or 0/2...10 V; supply of 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one NO contact each; removable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further limit value monitors are described in our "Interface Technology" catalog.	