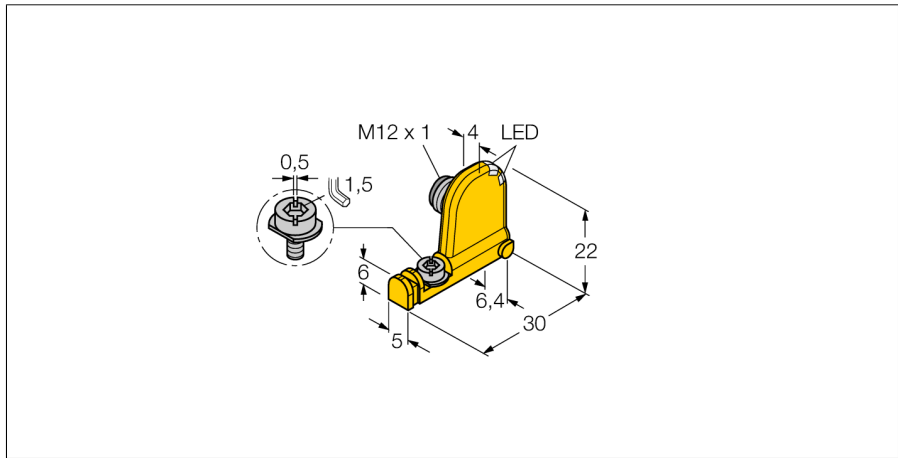


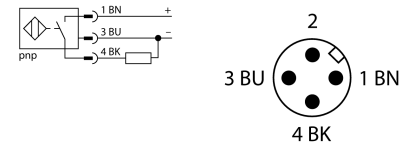
**Magnetic field sensor
for pneumatic cylinders
BIM-UNT-AP6X2-H1141**



- For T-groove cylinders without mounting accessories
- Optional accessories for mounting on other cylindrical housings.
- One-hand mounting possible
- Fine adjustment tool and stopper directly mountable on the sensor
- Stable mounting
- Magneto-resistive sensor
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Male connector, M12 x 1

Type designation	BIM-UNT-AP6X2-H1141
Ident no.	4685726
Pass speed	≤ 10 m/s
Repeatability	≥ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 150 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Reverse polarity protection	Complete
Switching frequency	1 kHz
Design	Rectangular, UNT
Dimensions	30 x 5 x 22 mm
Housing material	Plastic, PP
Active area material	Plastic, PP
Tightening torque fixing screw	0.4 Nm
Electrical connection	Connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Mounting on the following profiles	.
Cylindrical design	
Power-on indication	LED green
Switching state	LED yellow

Wiring Diagram



Functional principle

Magnetic field sensors are activated by magnetic fields and are used, in particular, for the detection of the piston position in pneumatic cylinders. As magnetic fields can permeate non-magnetizable metals, they detect a permanent magnet attached to the piston through the aluminium cylinder wall.

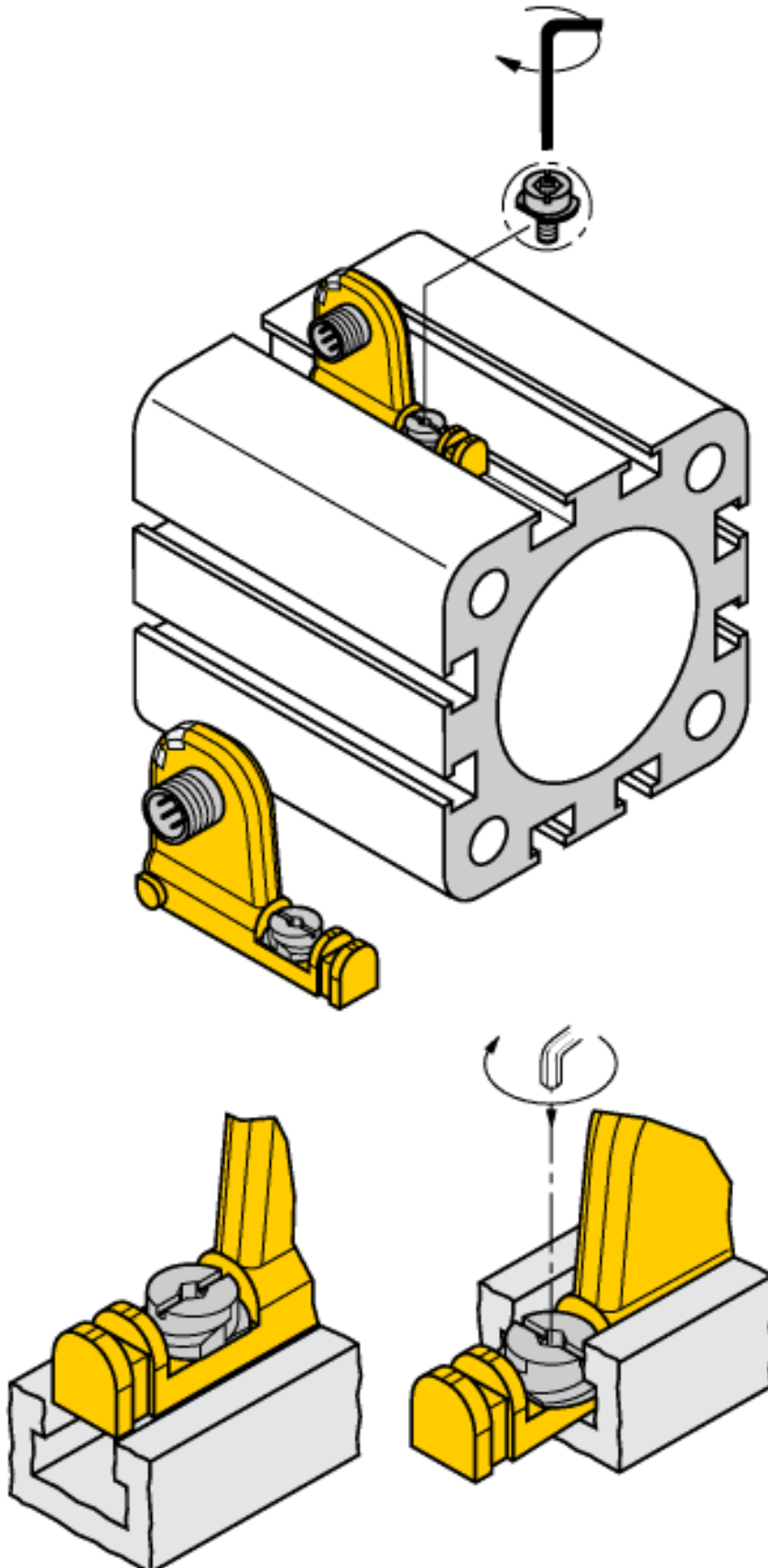
**Magnetic field sensor
for pneumatic cylinders
BIM-UNT-AP6X2-H1141**

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Mounting instructions/Description

Mounting instructions



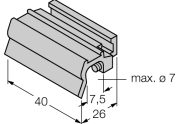
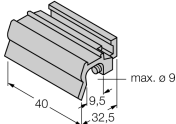
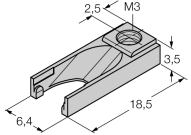
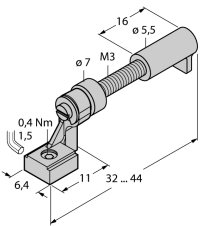
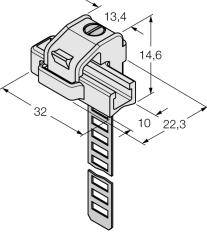
Insert the sensor laterally in the groove with the tip first. Once the correct position is attained click the sensor in the groove. Finally, screw the sensor tight. Mount the sensors as follows using the patented wing screw: The wing screw features a left-hand female thread. Two small plastic lips keep the screw in position, ready-to-install. Turn the screw clockwise. The screw moves out of the thread and hits the upper grooves with the wings. The sensor is thus pressed down and locked. Use a standard screw driver or a 1.5 mm Allen key to fasten the screw with a quarter turn. A fixing torque of 0.4 Nm is sufficient for safe mounting without damaging the cylinder. Mounting accessories for other cylinder sizes have to be ordered separately.

**Magnetic field sensor
for pneumatic cylinders
BIM-UNT-AP6X2-H1141**

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Accessories

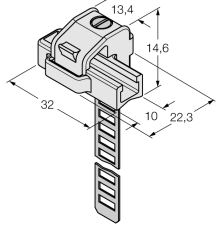
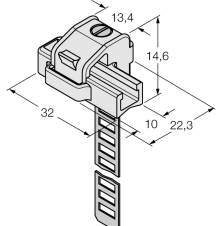
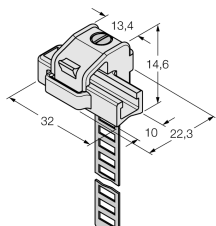
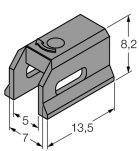
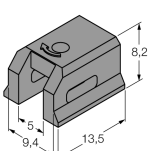
Type code	Ident no.	Description	
KLZ1-INT	6970410	Accessories for mounting the sensors BIM-INT and BIM-UNT on tie-rod cylinders; Cylinder diameter: 32...40 mm; material: Aluminium; Further mounting accessories for other cylinder diameters on request	
KLZ2-INT	6970411	Accessories for mounting the sensors BIM-INT and BIM-UNT on tie-rod cylinders; Cylinder diameter: 50...63 mm; material: Aluminium; Further mounting accessories for other cylinder diameters on request	
UNT-STOPPER	4685751	Accessories for finetuning the switchpoint on T-groove cylinders; snap-locked in the BIM-UNT fixture; suited for multiple use; material: plastic	
UNT-JUSTAGE	4685750	Accessories for finetuning the switchpoint on T-groove cylinders; snap-locked in the BIM-UNT fixture; suited for multiple use; material: metal/plastic	
KLRC-UNT1	6970626	Accessories for mounting on cylinders; diameter: 8...25 mm; material: PA 6I/6T / nickel silver; Fire-hazard classification acc. to UL94 - V2	

**Magnetic field sensor
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Accessories


Type code	Ident no.	Description	
KLRC-UNT2	6970627	Accessories for mounting on \bigcirc cylinders; diameter: 25...63 mm; material: PA 6I/6T / nickel silver; Fire-hazard classification acc. to UL94 - V2	
KLRC-UNT3	6970628	Accessories for mounting the BIM-UNT sensor on \bigcirc round cylinders; diameter: 63...130 mm; material: PA 6I/6T / nickel silver; Fire-hazard classification acc. to UL94 - V2	
KLRC-UNT4	6970629	Accessories for mounting the BIM-UNT sensor on \bigcirc round cylinders; diameter: 130...250 mm; material: PA 6I/6T / nickel silver; Fire-hazard classification acc. to UL94 - V2	
KLDT-UNT2	6913351	Accessories for mounting the BIM-UNT sensor on dovetail cylinders; groove width: 7 mm; material: PPS	
KLDT-UNT3	6913352	Accessories for mounting the BIM-UNT sensor on \square dovetail groove cylinders; groove width: 9.4 mm; material: PPS	

**Magnetic field sensor
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Automation

Accessories

Type code	Ident no.	Description	
KLDT-UNT6	6913355	Accessories for mounting on  dovetail groove cylinders; groove width: 7.35 mm; material: PPS	