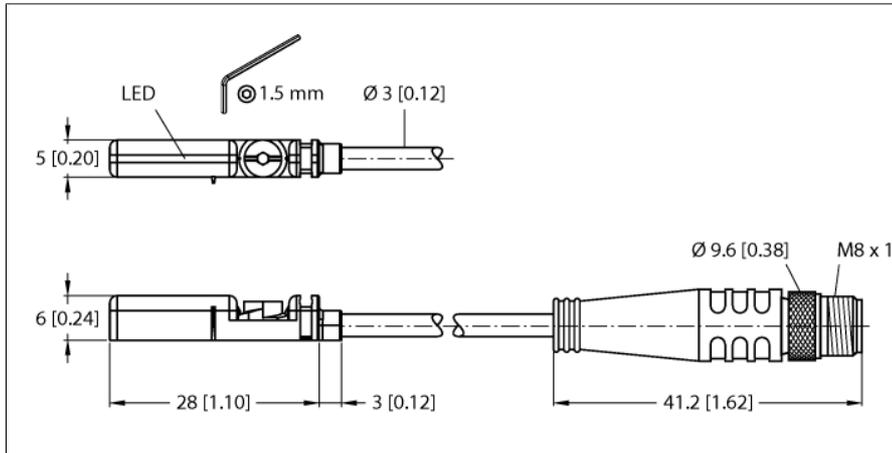
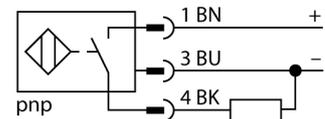


**Magnetic Field Sensor
For Pneumatic Cylinders
BIM-UNT-AP6X-0.6-PSG3M**



- 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
- Pigtail with male end, M8 x 1

Wiring Diagram



Functional principle

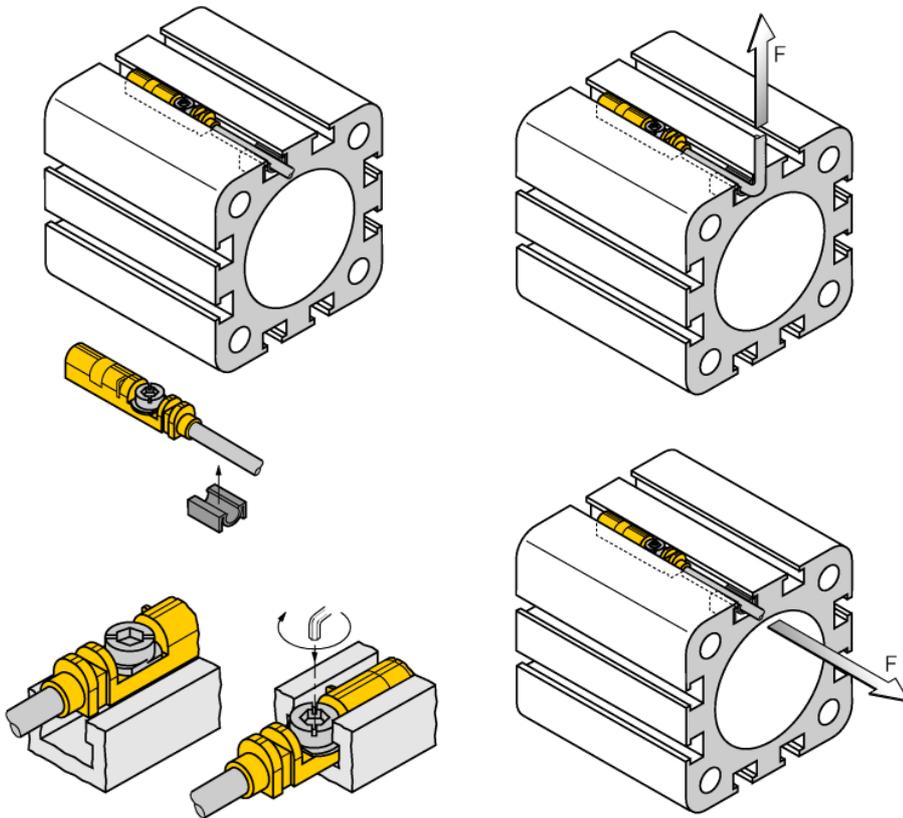
Magnetic field sensors are activated by magnetic fields and are used, in particular, for the detection of the piston position in pneumatic cylinders. As magnetic fields can permeate non-magnetizable metals, they detect a permanent magnet attached to the piston through the aluminium cylinder wall.

Type designation	BIM-UNT-AP6X-0.6-PSG3M
Ident no.	4685724
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 _s
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
Switching frequency	1 kHz
Design	Rectangular, UNT
Dimensions	28 x 5 x 6 mm
Housing material	Plastic, PP
Active area material	Plastic, PP
Tightening torque fixing screw	0.4 Nm
Electrical connection	Cable with connector, M8 x 1
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 0.6 m Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Core cross-section	3 x 0.14 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Mounting on the following profiles	
Cylindrical design	
Switching state	LED, Yellow
Included in delivery	cable clip

**Magnetic Field Sensor
For Pneumatic Cylinders
BIM-UNT-AP6X-0.6-PSG3M**

Mounting instructions/Description

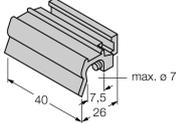
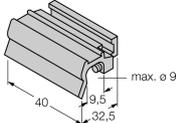
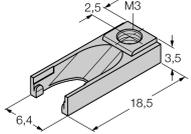
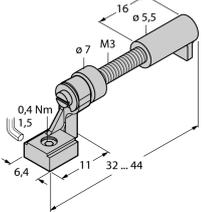
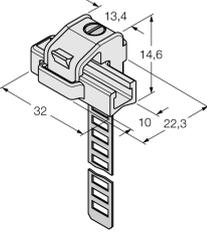
Mounting instructions



Thanks to the mounting lip, the sensor can be inserted into the groove from above with one hand. Mount the sensors as follows using the patented wing screw: The wing screw and the female thread feature a left-hand 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 in position. A few degrees up to approximately 1.5 turns of the screw with a slotted screwdriver (blade width 0.5 mm) or a 1.5 mm Allen key are sufficient to ensure vibration-proof fastening, depending on the shape of the slot. A tightening torque of 0.4 Nm is sufficient for safe mounting without damaging the cylinder. The sensor can now withstand an axial and radial tensile load of $F=100N$ applied on the cable. A cable clip is included in the scope of delivery. It enables smooth cable routing in the groove and ensures that the cable is fastened as securely as possible. The corresponding accessories for mounting on other cylindrical housings must be ordered separately.

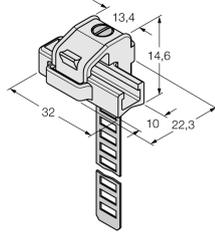
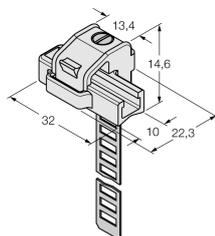
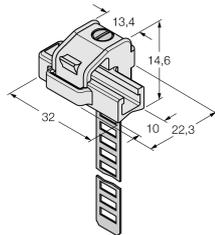
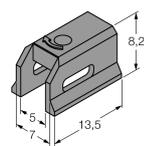
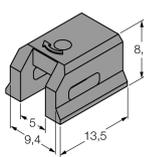
**Magnetic Field Sensor
For Pneumatic Cylinders
BIM-UNT-AP6X-0.6-PSG3M**

Accessories

Type code	Ident no.	Description	Dimension drawing
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	 <p>Technical drawing of the KLZ1-INT mounting accessory. It is a long, narrow aluminum profile with a T-shaped cross-section. Dimensions shown: total length 40 mm, width 26 mm, and a small offset of 7.5 mm. A maximum diameter of 7 mm is indicated.</p>
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	 <p>Technical drawing of the KLZ2-INT mounting accessory. It is a long, narrow aluminum profile with a T-shaped cross-section. Dimensions shown: total length 40 mm, width 32.5 mm, and a small offset of 9.5 mm. A maximum diameter of 9 mm is indicated.</p>
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	 <p>Technical drawing of the UNT-STOPPER. It is a small plastic component with a T-shaped notch. Dimensions shown: total length 18.5 mm, width 6.4 mm, and a height of 3.5 mm. A hole with a diameter of 2.5 mm and an M3 thread is located at the top.</p>
UNT-JUSTAGE	4685750	Accessories for fine-tuning of the switching point on  T-groove cylinders; snap-lock mounting in the BIM-UNT sensor fixture; suited for multiple use; material: Metal/plastic	 <p>Technical drawing of the UNT-JUSTAGE. It is a small metal/plastic component with a T-shaped notch. Dimensions shown: total length 32...44 mm, width 6.4 mm, and a height of 1.5 mm. A hole with a diameter of 7 mm and an M3 thread is located at the top. A torque specification of 0.4 Nm is indicated.</p>
KLRC-UNT1	6970626	Mounting bracket for mounting magnetic field sensors on round cylinders; cylinder diameter: 8...25 mm; material: PA 6I/6T / nickel silver; fire-hazard classification acc. to UL94 - V2	 <p>Technical drawing of the KLRC-UNT1 mounting bracket. It is a plastic bracket with a long, narrow tail. Dimensions shown: total length 32 mm, width 13.4 mm, and a tail length of 22.3 mm. A hole with a diameter of 10 mm is located at the top.</p>

Magnetic Field Sensor For Pneumatic Cylinders BIM-UNT-AP6X-0.6-PSG3M

Accessories

Type code	Ident no.	Description	Dimension drawing
KLRC-UNT2	6970627	Mounting bracket for mounting magnetic field sensors on round cylinders; cylinder diameter: 25...63 mm; material: PA 6I/6T / nickel silver; fire-hazard classification acc. to UL94 - V2	
KLRC-UNT3	6970628	Mounting bracket for mounting magnetic field sensors on round cylinders; cylinder diameter: 63...130 mm; material: PA 6I/6T / nickel silver; fire-hazard classification acc. to UL94 - V2	
KLRC-UNT4	6970629	Mounting bracket for mounting magnetic field sensors on round cylinders; cylinder diameter: 130...250 mm; material: PA 6I/6T / nickel silver; fire-hazard classification acc. to UL94 - V2	
KLDT-UNT2	6913351	Mounting bracket for mounting magnetic field sensors on dovetail groove cylinders; groove width: 7 mm; material: PPS	
KLDT-UNT3	6913352	Mounting bracket for mounting magnetic field sensors on dovetail groove cylinders; groove width: 9.4 mm; material: PPS	

**Magnetic Field Sensor
For Pneumatic Cylinders
BIM-UNT-AP6X-0.6-PSG3M**

Accessories

Type code	Ident no.	Description	Dimension drawing
KLDT-UNT6	6913355	Mounting bracket for mounting magnetic field sensors on dovetail groove cylinders; groove width: 7.35 mm; material: PPS	