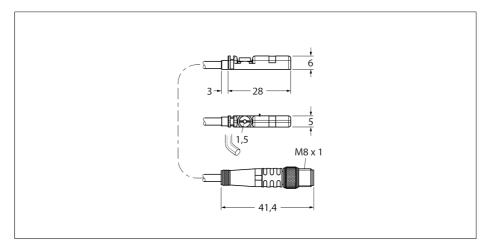
## magnetic field sensor for pneumatic cylinders BIM-UNT-AP6X-0,3-PSG3M





Туре	BIM-UNT-AP6X-0,3-PSG3M 4685723	
Ident-No.		
Pass speed	≤ 10 m/s	
Repeatability	≥ ± 0.1 mm	
Temperature drift	≤ 0.1 mm	
Hysteresis	≤ 1 mm	
Ambient temperature	-25+70 °C	
Operating voltage	1030 VDC	
Residual ripple	≤ 10 % U <sub>SS</sub>	
DC rated operational current	≤ 150 mA	
No-load currentl <sub>0</sub>	≤ 15 mA	
Residual current	≤ 0.1 mA	
Rated insulation voltage	≤ 0.5 kV	
Short-circuit protection	•	
Voltage drop atle	≤ 1.8 V	
Wire breakage / Reverse polarity protection	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	
Material active face	Plastic, PP	
Tightening torque fixing screw	0.4 Nm	
Connection	connector, rotatable thread, M8 x 1	
Cable quality	3 mm, grey, Lif9Y-11Y, PUR, 0.3 m	
	Suited for E-ChainSystems® acc. to manufacturers	
	declaration H1063M	
Cable cross section	3 x 0.14 mm <sup>2</sup>	
Vibration resistance	55 Hz (1 mm)	
Shock resistance	30 g (11 ms)	
Protection class	IP67	
Mounting on the following profiles	•	
Switching state	LED yellow	
Included in scope of supply	cable clip	

- 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
- Plug connection, Ø 8 mm

### Wiring diagram





#### **Functional principle**

Magnetic field sensors are activated by magnetic fields. They are applied to detect the position of pneumatic cylinders. Magnetic fields can permeate non-magnetizable metals. A permanent magnet attached to the piston is thus detected through the aluminium wall of the cylinder.

## TURCK

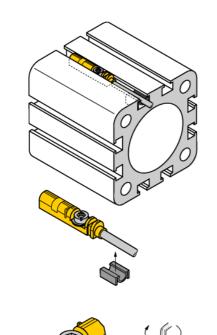
## magnetic field sensor for pneumatic cylinders BIM-UNT-AP6X-0,3-PSG3M

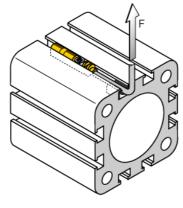


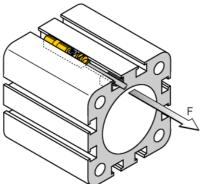
Insert the sensor in the groove from above. Mount the sensors as follows using the patented wing screw: The wing screw features a left-hand female thread. Two small plastic lips keep the screw in position, ready-toinstall. Turn the screw clockwise. The screw moves out of the thread and hits the upper grooves with the wings. The sensor is thus pressed down and locked. Use a standard screw driver or a 2.5 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. The sensor now withstands axial and radial tensile load of F=100N applied on the cable. Cable clips are included in the scope of delivery. They enable smooth cable routing in the groove. Mounting accessories for other cylinder sizes have to be ordered sepa-

Mounting instructions

mounting instructions







rately.



# Industri<mark>al</mark> Au<mark>tomation</mark>

## magnetic field sensor for pneumatic cylinders BIM-UNT-AP6X-0,3-PSG3M

### Accessories

Type code	Ident-No.	Short text	Dimension drawing
KLZ1-INT	6970410	Accessories for mounting the BIM-UNT sensor on  tie-rod cylinders; diameter: 3240 mm; material: Aluminium; further mounting accessories for other cylinder diameters on request	7,5 26 max. 0 7
KLZ2-INT	6970411	Accessories for mounting the BIM-UNT sensor on O tie-rod cylinders; diameter: 5063 mm; material: Aluminium; further mounting accessories for other cylinder diameters on request	40 9,5 max. o 9
UNT-Stopper	4685751	Accessories to secure the switchpoint on T-groove cylinders; snap-lock mounting in the BIM-UNT sensor fixture; material: Plastic	2,5 M3 3,5 18,5
UNT-Justage	4685750	Accessories for fine-tuning of the switch-point on T-groove cylinders; snap-lock mounting in the sensor fixture; suited for multiple use; material: Metal/plastic	0 7 M3 0 7 M3 0 7 M3
KLRC-UNT1	6970626	Accessories for mounting on $\bigcirc$ cylinders; diameter: 825 mm; material: PA 6I/6T / nickel silver; Fire-hazard classification acc. to UL94 - V2	13,4
KLRC-UNT2	6970627	Accessories for mounting on $\bigcirc$ cylinders; diameter: 2563 mm; material: PA 6I/6T / nickel silver; Fire-hazard classification acc. to UL94 - V2	13,4



## magnetic field sensor for pneumatic cylinders BIM-UNT-AP6X-0,3-PSG3M



### **Accessories**

Type code	Ident-No.	Short text	Dimension drawing
KLRC-UNT3	6970628	Accessories for mounting the BIM-UNT sensor on Oround cylinders; diameter: 63130 mm; material: PA 6I/6T / nickel silver; Fire-hazard classification acc. to UL94 - V2	13,4 14,6 10 22,3
KLRC-UNT4	6970629	Accessories for mounting the BIM-UNT sensor on O round cylinders; diameter: 130250 mm; material: PA 6I/6T / nickel silver; Fire-hazard classification acc. to UL94 - V2	13,4
KLDT-UNT2	6913351	Accessories for mounting the BIM-UNT sensor on  dove-tail groove cylinders; groove width: 7 mm; material: PPS	8.2
KLDT-UNT3	6913352	Accessories for mounting the BIM-UNT sensor on  dovetail groove cylinders; groove width: 9.4 mm; material: PPS	7 8,2 9,4 13,5
KLDT-UNT6	6913355	Accessories for mounting on [ ] dovetail groove cylinders; groove width: 7.35 mm; material: PPS	5,1 13,5 7,3