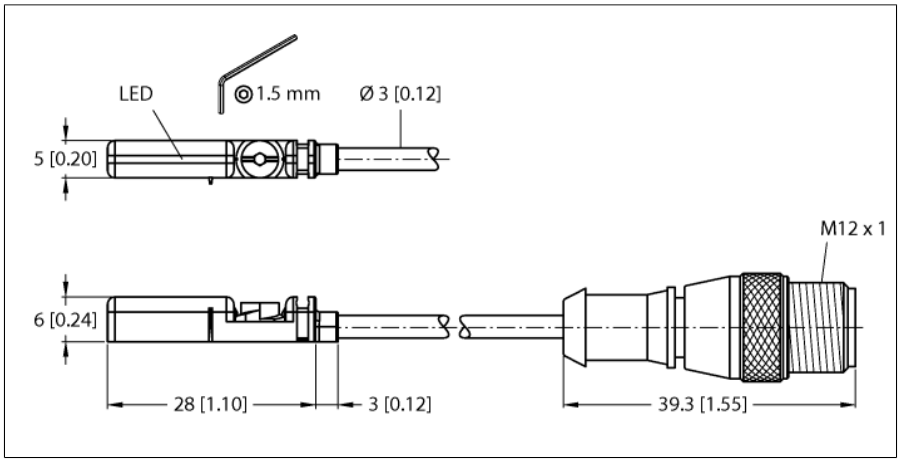
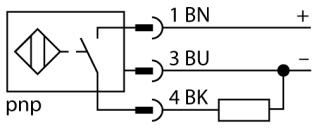
Magnetic Field Sensor
For Pneumatic Cylinders
BIM-UNT-AP6X-0.3-RS4/S1199



- For T-groove cylinders without mounting accessories
- Optional accessories for mounting on other cylinder designs
- One-hand mounting possible
- Stable mounting
- Magneto-resistive sensor
- Long overtravel
- For large cylinders
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- Pigtail with male end, M12 x 1

Wiring Diagram



Type	BIM-UNT-AP6X-0.3-RS4/S1199
ID	4685823
Special version	S1199 Corresponds to:Sensor incl. UNT stopper in packing unit
General data	
Pass speed	≤ 10 m/s
Repeatability	≤ ± 0.1 mm
Temperature drift	≤ 0.1 mm
Hysteresis	≤ 1 mm
Electrical data	
Operating voltage U_B	10…30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_e	≤ 150 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_e	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz
Mechanical data	
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, M12 × 1
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 0.3 m
	Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Core cross-section	3 x 0.14 mm²

Functional principle

Magnetic field sensors are activated by magnetic fields and are especially suited for piston position detection in pneumatic cylinders. Based on the fact that magnetic fields can permeate non-magnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminium wall of the cylinder.

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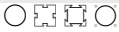
Environmental conditions	
Ambient temperature	-25…+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C

Mounting on the following profiles	
Cylindrical design	
Switching state	LED, Yellow
Included in delivery	cable clip, UNT stopper

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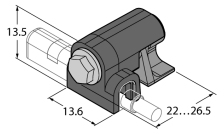
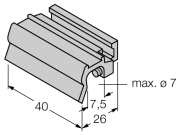
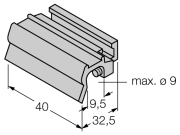
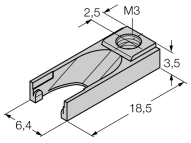
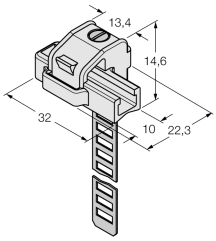
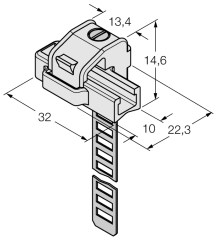
Accessories

Type code	Ident no.		Dimension drawing
KLZCD2-UNT	6970418	Mounting bracket for mounting magnetic field sensors for T-grooves on a CleanDesign cylinder with mounting rail	
KLZ1-INT	6970410	Accessories for mounting the sensors BIM-INT and BIM-UNT on tie-rod cylinders; cylinder diameter: 32…40 mm; material: Aluminum; 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	
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	
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	

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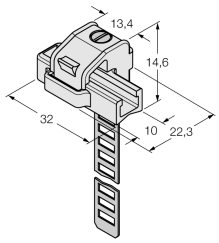
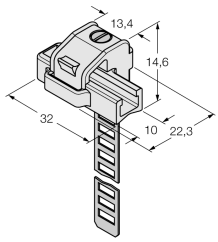
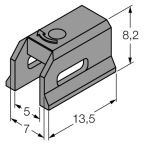
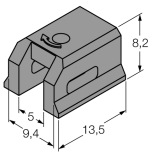
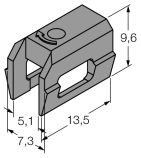
Accessories

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

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