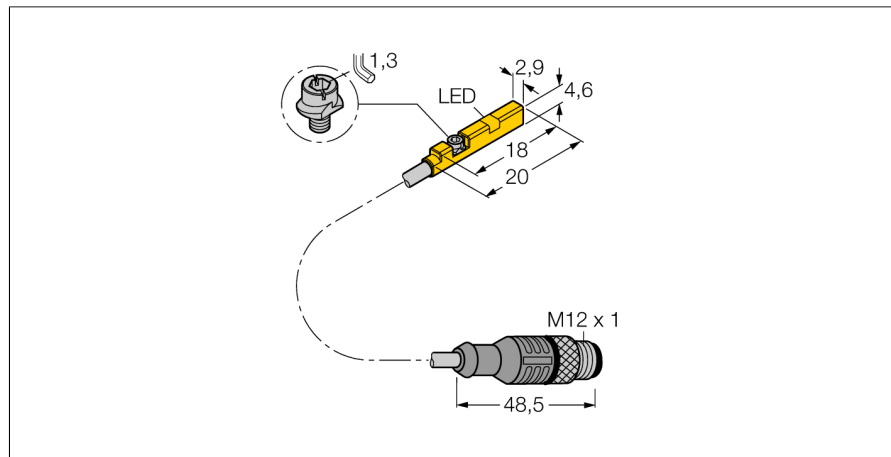
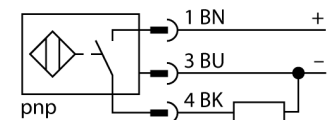


Magnetic Field Sensor For Pneumatic Cylinders BIM-UNR-AP6X-1-RS4T W/M



- For C-groove cylinders without mounting accessories
- Optional accessories for mounting on other cylindrical housings.
- One-hand mounting possible
- Stable mounting
- Magneto-resistive sensor
- DC 3-wire, 11...30 VDC
- NO contact, PNP output
- Pigtail with M12 × 1 male connector

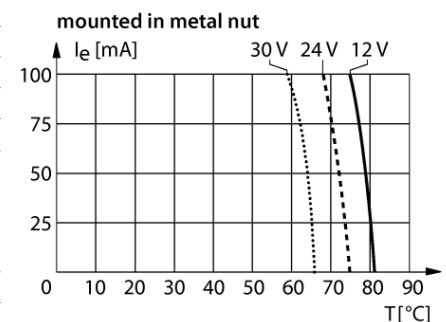
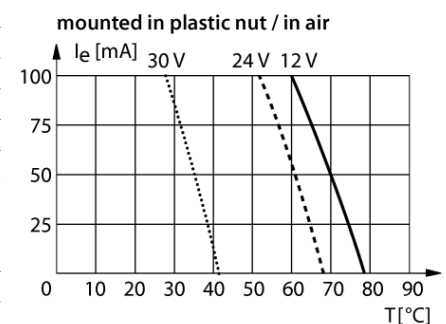
Wiring Diagram



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.

Derating Curve

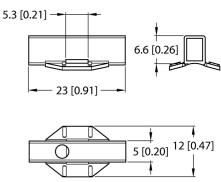


Type	BIM-UNR-AP6X-1-RS4T W/M
ID	46858432
General data	
Pass speed	≤ 3 m/s
Repeatability	≤ ± 0.1 mm
Temperature drift	≤ 0.3 mm
Hysteresis	≤ 1 mm
Electrical data	
Operating voltage U_s	11...30 VDC
Ripple $U_{s,r}$	≤ 10 % $U_{s,max}$
DC rated operating current I_s	≤ 100 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_s	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.3 kHz
Mechanical data	
Design	Rectangular, UNR
Dimensions	18 x 2.9 x 4.6 mm
Housing material	Plastic, PP
Active area material	Plastic, PP
Tightening torque fixing screw	0.2 Nm
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 2mm, Gray, Lif9Y-11Y, PUR, 1 m
Core cross-section	3 x 0.08 mm ²
Litz wire	40x0.05mm
Environmental conditions	
Ambient temperature	-25...+70 °C
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	
Switching state	LED, Yellow
Included in delivery	cable clip

Accessories

Type code	Ident-No.		Dimension drawing
KLR2-UNR	100000596	Mounting bracket for mounting magnetic field sensors on round cylinders	
ASB-4	6965104	Clip collar for mounting brackets for magnetic field sensors on round cylinders; cylinder diameter: 28...39 mm; other lengths are available under designations ASB-1 to ASB-9	