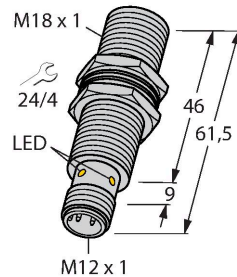


# BIM-EM18M-AP4X-H1141

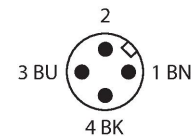
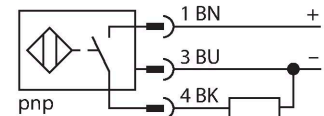
## Magnetic Field Sensor – Magnetic-inductive Proximity Sensor



### Features

- Threaded barrel, M18 x 1
- Stainless steel, 1.4301
- Rated operating distance 90 mm with DMR31-15-5 magnet
- DC 3-wire, 10...65 VDC
- NO contact, PNP output
- Male connector, M12 x 1

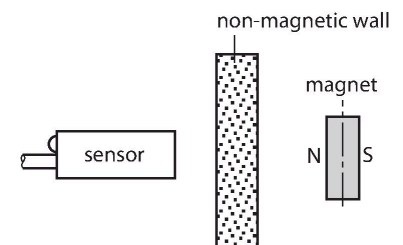
### Wiring diagram



### Functional principle

Magnetic inductive proximity sensors are actuated by magnetic fields and are thus capable of detecting permanent magnets through non-ferromagnetic materials (e.g. wood, plastic, non-ferrous metals, aluminium, stainless steel).

Thus it is possible to achieve large switching distances even with smaller housing styles. In combination with the actuation magnet DMR31-15-5 TURCK sensors feature a relatively high switching distance. Thus there are multiple detection possibilities, particularly if the mounting space is limited or other difficult sensing conditions prevail.



### Technical data

Type	BIM-EM18M-AP4X-H1141
ID	1579933
<b>General data</b>	
Rated switching distance	90 mm
	In conjunction with magnet DMR31-15-5
Repeat accuracy	≤ 0.3 % of full scale
Temperature drift	≤ ±15 %
Hysteresis	1...10 %
<b>Electrical data</b>	
Operating voltage $U_B$	10...65 VDC
Ripple $U_{ss}$	≤ 10 % $U_{Bmax}$
DC rated operating current $I_B$	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at $I_B$	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz
<b>Mechanical data</b>	
Design	Threaded barrel, M18 x 1
Dimensions	61.5 mm
Housing material	Metal, 1.4301 (AISI 304)

Technical data

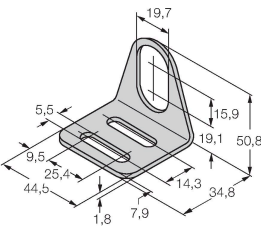
Active area material	Plastic, PBT
Max. tightening torque of housing nut	25 Nm
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description	Diameter active area B	Ø 18 mm
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Accessories

MW18	6945004
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Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)