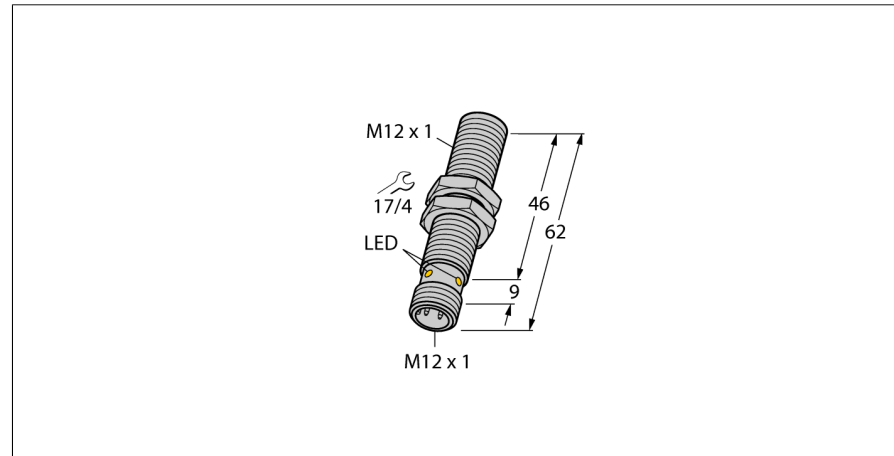
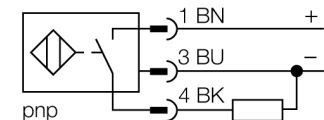


**Magnetic field sensor
magnet-inductive proximity sensor
BIM-EM12E-AP4X-H1141**



- Threaded barrel, M12 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

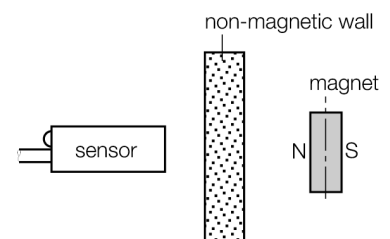
Wiring diagram



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.



Type code	BIM-EM12E-AP4X-H1141
Ident no.	1579915
Rated operating distance Sn	90 mm
Repeatability	in conjunction with magnet DMR31-15-5 ≤ 0.3 % of full scale
Temperature drift	15 %
Hysteresis	1...10 %
Ambient temperature	-25...+70 °C
Operating voltage	10...65VDC
Residual ripple	≤ 10 % U _{in}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation 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	threaded barrel, M12 x 1
Dimensions	62 mm
Housing material	metal, V2A (1.4301)
Material active area	Plastic, POM
Max. tightening torque housing nut	10 Nm
Connection	male, M12 x 1
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
Diameter of the active area B	Ø 12 mm

**Magnetic field sensor
magnet-inductive proximity sensor
BIM-EM12E-AP4X-H1141**

TURCK

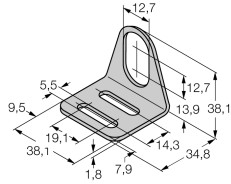
Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
DMR20-10-4	6900214	Actuation magnet; \varnothing 20 mm (\varnothing 4 mm), h: 10 mm; sensing range 59 mm on BIM-(E)M12 sensors resp. 50 mm on BIM-EG08 sensors; in combination with Q25L: Recommended distance between sensor and magnet: 3 ... 4 mm	
DMR31-15-5	6900215	Actuation magnet, \varnothing 31 mm (\varnothing 5 mm), h: 15 mm; sensing range 90 mm on BIM-(E)M12 sensors resp. 78 mm on BIM-EG08 sensors; in combination with Q25L: Recommended distance between sensor and magnet: 3 ... 5 mm	
DMR15-6-3	6900216	Actuation magnet, \varnothing 15 mm (\varnothing 3 mm), h: 6 mm; sensing range 36 mm on BIM-(E)M12 sensors resp. 32 mm on BIM-EG08 sensors; in combination with Q25L: Recommended distance between sensor and magnet: 3 ... 4 mm	
DM-Q12	6900367		Kein Maßbild vorhanden/ No dimension drawing available
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	

**Magnetic field sensor
magnet-inductive proximity sensor
BIM-EM12E-AP4X-H1141**

Accessories

Type code	Ident no.	Description	Dimension drawing
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	

Wiring accessories

Type code	Ident no.	Description	Dimension drawing
RKCV4T-2/TEL	6626900		