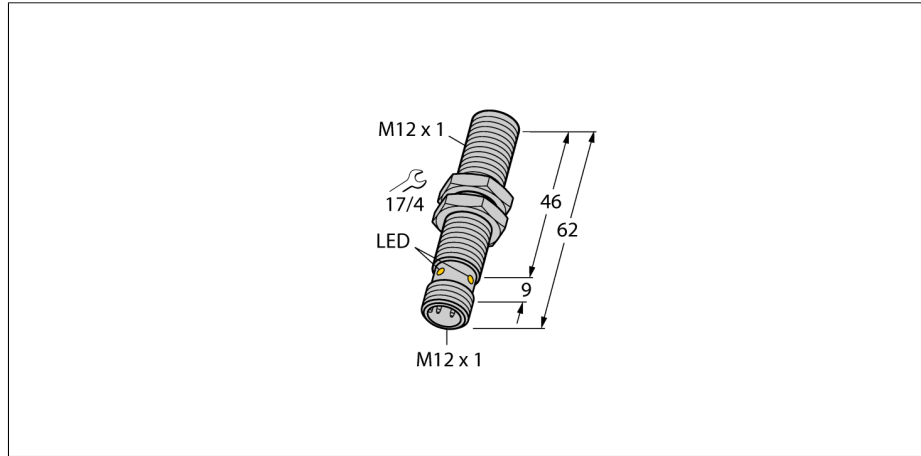
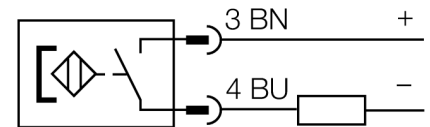


**Magnetic field sensor  
magnet-inductive proximity sensor  
BIM-M12E-AG4X-H1144**



- Threaded barrel, M12 x 1
- Chrome-plated brass
- Rated operating distance 90 mm with DMR31-15-5 magnet
- DC 2-wire, 10...65 VDC
- Polarized version
- NO contact
- Male connector M12 x 1

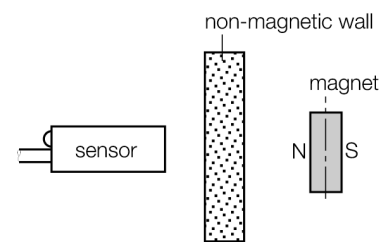
**Wiring diagram**



**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).

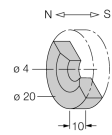
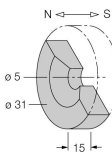
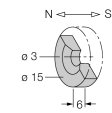
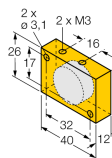
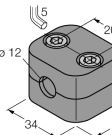
Thus it is possible to achieve large switching distances even with smaller housing styles. In combination with the actuation magnet DMR31-15-5 TURCK sensors feature a relatively high switching distance. Thus there are multiple detection possibilities, particularly if the mounting space is limited or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



<b>Type code</b>	BIM-M12E-AG4X-H1144
Ident no.	1579910
<b>Rated operating distance Sn</b>	90 mm
Repeatability	in conjunction with magnet DMR31-15-5
Temperaturdrift	≤ 0.3 % of full scale
Hysteresis	15 %
Ambient temperature	1...10 %
	-25...+70 °C
<b>Operating voltage</b>	10...65VDC
DC rated operational current	≤ 200 mA
Residual current	≤ 0.8 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>n</sub>	≤ 4.2 V
Wire breakage / Reverse polarity protection	no/ polarized
Output function	2-wire, NO contact, 2-wire
Smallest operating current I <sub>o</sub>	≤ 3 mA
Switching frequency	0.3 kHz
<b>Design</b>	threaded barrel, M12 x 1
Dimensions	62 mm
Housing material	Metal, CuZn, chrome-plated
Material active face	Plastic, PA
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
<b>Switching state</b>	• yellow
<b>Diameter of the active area B</b>	∅ 12 mm

**Magnetic field sensor  
magnet-inductive proximity sensor  
BIM-M12E-AG4X-H1144**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
DMR20-10-4	6900214	Actuation magnet; Ø 20 mm (Ø 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, Ø 31 mm (Ø 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, Ø 15 mm (Ø 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	Actuation magnet; cuboid-shaped plastic; sensing range 58 mm on BIM-(E)M12 sensors resp. 49 mm on BIM-EG08 sensors; in combination with Q25: Recommended distance between sensor and magnet: 3 ... 5 mm	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	

**Magnetic field sensor**  
**magnet-inductive proximity sensor**  
**BIM-M12E-AG4X-H1144**

**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)	