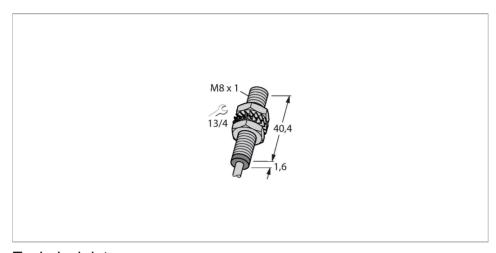


# BIM-EG08-RP6/S97 Magnetic Field Sensor - Proximity sensor with extended temperature range



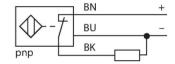
#### Technical data

Туре	BIM-EG08-RP6/S97
ID	4621315
General data	
Rated switching distance	78 mm
	In conjunction with magnet DMR31-15-5
Repeat accuracy	≤ 0.3 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 20 %, ≤ -25 °C
Hysteresis	110 %
Electrical data	
Operating voltage	1030 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 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 <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NC contact, PNP
Switching frequency	1 kHz
Mechanical data	
Design	Threaded barrel, M8 × 1

#### **Features**

- ■M8 × 1 threaded barrel
- Stainless steel, 1.4427 SO
- ■For temperatures up to -40 °C
- Rated operating distance 78mm with
- DMR31-15-5 magnet
- ■DC 3-wire, 10...30 VDC
- ■NC contact, PNP output
- Cable connection

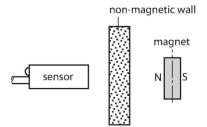
## Wiring diagram



## 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

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.



BIM-EG08-RP6/S97| 11/29/2022 09-10 | technical changes reserved

## Technical data

Dimensions	41.6 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF30
End cap	Plastic, PP
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 3 mm, Gray, Lif12Y33Y, TPE, 2 m
Core cross-section	3 x 0.14 mm²
Environmental conditions	
Ambient temperature	-40+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 instructions

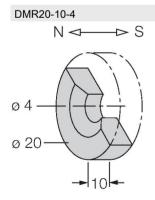
Mountina	instructions/Description

Diameter active area B

Ø8 mm

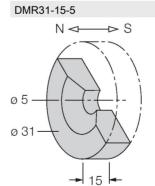
6900215

## Accessories

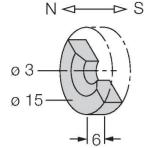


6900214

Actuation magnet; Ø 20 mm (Ø 4 mm), h: 10 mm; attainable switching distance 59 mm on BIM-(E)M12 magnetic field sensors or 50 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...4 mm



Actuation magnet, Ø 31 mm (Ø 5 mm), h: 15 mm; attainable switching distance 90 mm on BIM-(E)M12 magnetic field sensors or 78 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...5 mm



Actuation magnet, Ø 15 mm (Ø 3 mm), h: 6 mm; attainable switching distance 36 mm on BIM-(E)M12 magnetic field sensors or 32 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...4 mm

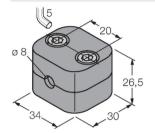
DM-Q12



2 x M3 Ø 3,1 2 x M3 26 17 16 14 32 40 12 Actuator, rectangular, plastic, attainable switching distance 58 mm on BIM-(E)M12 magnetic field sensors or 49 mm on BIM-EG08 magnetic field sensors; for Q25L linear position sensors: recommended distance between the sensor and magnet: 3...5 mm

BSS-08

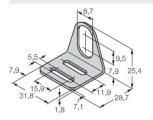
6901322



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

MW-08

6945008



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