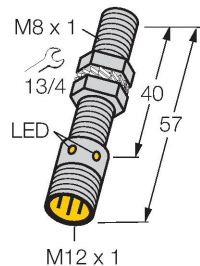


# BIM-EG08-AP6X-H1341

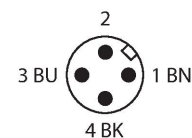
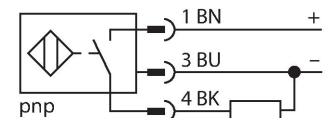
## Magnetic Field Sensor – Magnetic-inductive Proximity Sensor



### Features

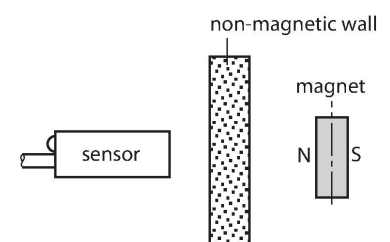
- M8 × 1 threaded barrel
- Stainless steel, 1.4427 SO
- Rated operating distance 78 mm with DMR31-15-5 magnet
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Male connector, M12 × 1

### 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-EG08-AP6X-H1341                   |
| ID                                     | 4621311                               |
| General data                           |                                       |
| Rated switching distance               | 78 mm                                 |
|                                        | In conjunction with magnet DMR31-15-5 |
| Repeat accuracy                        | ≤ 0.3 % of full scale                 |
| Temperature drift                      | ≤ ±10 %                               |
| Hysteresis                             | 1...10 %                              |
| Electrical data                        |                                       |
| Operating voltage $U_B$                | 10...30 VDC                           |
| Ripple $U_{ss}$                        | ≤ 10 % $U_{Bmax}$                     |
| DC rated operating current $I_o$       | ≤ 150 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 $I_o$                  | ≤ 1.8 V                               |
| Wire break/reverse polarity protection | yes/Complete                          |
| Output function                        | 3-wire, NO contact, PNP               |
| Switching frequency                    | 1 kHz                                 |
| Mechanical data                        |                                       |
| Design                                 | Threaded barrel, M8 x 1               |
| Dimensions                             | 57 mm                                 |
| Housing material                       | Stainless steel, 1.4427 SO            |
| Active area material                   | Plastic, PA12-GF30                    |
| Max. tightening torque of housing nut  | 5 Nm                                  |
| Electrical connection                  | Connector, M12 × 1                    |

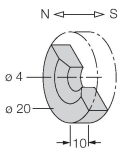
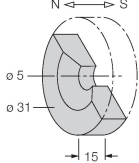
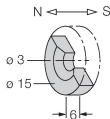
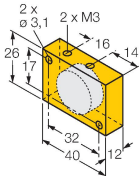
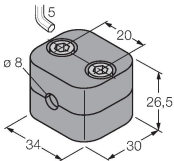
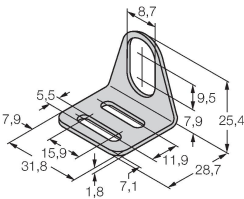
Technical data

| 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                                |

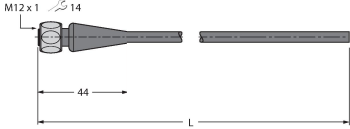
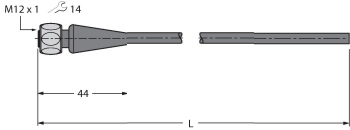
Mounting instructions

| Mounting instructions/Description | Diameter active area B |
|-----------------------------------|------------------------|
|                                   | Ø 8 mm                 |

Accessories

|                                                                                                          |                                                                                                                                                                                                                                                                                     |                                                                                                           |                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DMR20-10-4</b><br> | <b>6900214</b><br>Actuator 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 | <b>DMR31-15-5</b><br> | <b>6900215</b><br>Actuator 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 |
| <b>DMR15-6-3</b><br>  | <b>6900216</b><br>Actuator 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  | <b>DM-Q12</b><br>     | <b>6900367</b><br>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              |
| <b>BSS-08</b><br>     | <b>6901322</b><br>Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene                                                                                                                                                                                    | <b>MW08</b><br>       | <b>6945008</b><br>Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)                                                                                                                                                                      |

Accessories

| Dimension drawing                                                                 | Type       | ID      |                                                                                                                                                                        |
|-----------------------------------------------------------------------------------|------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | RKH4-2/TFE | 6935482 | Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, gray; temperature range: -25...+80 °C  |
|  | RKH4-2/TFG | 6934384 | Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: TPE, gray; temperature range: -40...+105 °C |