Magnetic field sensors for pneumatic cylinders
Magnetic-inductive sensors

Typical applications for magnetic-inductive sensors include “pig” detection and gate monitoring. Since magnetic-inductive sensors are actuated by external magnetic fields, they achieve large switching distances despite their small size. In combination with the actuation magnet DMR31-15-5, the M12 sensors attain a rated switching distance of 90 mm.

**Features**
- Achieves very long ranges
- Permeates non-magnetizable materials
- ATEX and SIL approved versions
- Rugged threaded barrels
- Broad selection of actuators

**Properties**
- **Designs**
  - Threaded barrels M8 x 1 or M12 x 1
- **Switching distances**
  - M8 sensors up to 78 mm and M12 sensors up to 90 mm, depending on the actuating magnet
- **Materials**
  - Rugged threaded barrels, chrome-plated brass or stainless steel

**Electrical version**
- NAMUR, 2 or 3-wire DC

**Electrical connections**
- Connection cable, male M8 x 1 and M12 x 1, 2 m

**Internet link**
- Scan the QR code to access our products on the internet
Magnetic field sensors for pneumatic cylinders
Magnetic-inductive sensors

M8

For more details on magnetic actuators see chapter „Accessories“
Operating distance 78 mm, in conjunction with magnet DMR31-15-S

Types and data – selection table

<table>
<thead>
<tr>
<th>Type</th>
<th>Connection</th>
<th>Operating voltage</th>
<th>Output</th>
<th>Housing material</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIM-EG08-Y1X</td>
<td>2 m cable</td>
<td>8.2 VDC</td>
<td>NAMUR</td>
<td>Ø 8 x 41.6 mm</td>
<td>w080 d457</td>
</tr>
<tr>
<td>BIM-EG08-Y1X-H1341</td>
<td>male, M12 x 1</td>
<td>8.2 VDC</td>
<td>NAMUR</td>
<td>Ø 8 x 57 mm</td>
<td>w081 d458</td>
</tr>
<tr>
<td>BIM-EG08-AP6X</td>
<td>2 m cable</td>
<td>10…30 VDC</td>
<td>—, PNP</td>
<td>Ø 8 x 41.6 mm</td>
<td>w079 d457</td>
</tr>
<tr>
<td>BIM-EG08-AP6X-V1131</td>
<td>male, M8 x 1</td>
<td>10…30 VDC</td>
<td>—, PNP</td>
<td>Ø 8 x 49 mm</td>
<td>w064 d459</td>
</tr>
<tr>
<td>BIM-EG08-AP6X-H1341</td>
<td>male, M12 x 1</td>
<td>10…30 VDC</td>
<td>—, PNP</td>
<td>Ø 8 x 57 mm</td>
<td>w064 d458</td>
</tr>
</tbody>
</table>

Many different types available, also as NPN version, see type code

M12

For more details on magnetic actuators see chapter „Accessories“
Operating distance 90 mm, in conjunction with magnet DMR31-15-S

Types and data – selection table

<table>
<thead>
<tr>
<th>Type</th>
<th>Connection</th>
<th>Operating voltage</th>
<th>Output</th>
<th>Housing material</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIM-M12E-Y1X-H1141</td>
<td>male, M12 x 1</td>
<td>8.2 VDC</td>
<td>NAMUR</td>
<td>CuZn, chrome-plated</td>
<td>Ø 12 x 62 mm</td>
</tr>
<tr>
<td>BIM-EM12E-Y1X</td>
<td>2 m cable</td>
<td>8.2 VDC</td>
<td>NAMUR</td>
<td>V2A (1.4301)</td>
<td>Ø 12 x 64 mm</td>
</tr>
<tr>
<td>BIM-EM12E-AP4X-H1141</td>
<td>male, M12 x 1</td>
<td>10…65 VDC</td>
<td>—, PNP</td>
<td>V2A (1.4301)</td>
<td>Ø 12 x 62 mm</td>
</tr>
<tr>
<td>BIM-EM12E-AP4X</td>
<td>2 m cable</td>
<td>10…65 VDC</td>
<td>—, PNP</td>
<td>V2A (1.4301)</td>
<td>Ø 12 x 64 mm</td>
</tr>
</tbody>
</table>

Many different types available, also as NPN version, see type code

- Wiring diagrams on page 658
- Dimension drawing on page 670
- Accessories on page 560