BIM – Types and Features

- **T-Nut**
  - Dimensions: 32...446,4
  - Type: M3
  - ø 5,5
  - ø 7
  - 0,4 Nm
  - 1,5

- **C-Nut**
  - Dimensions: 32...446,4
  - Type: M3
  - ø 5,5
  - ø 7
  - 0,4 Nm
  - 1,5

BIM – Accessories

- **UNI adjustment**
  - Accessories for fine-tuning the switchpoint of BIM-UNT or BIM-UNTK, snap-lock into the sensor’s accessories groove, for multiple use

- **UNI stopper**
  - Accessories for setting the switchpoint of BIM-UNT or BIM-UNTK on T-groove cylinders, snap-lock into the sensor’s accessories groove

- **KLRC-UNT1**
  - Accessories for mounting BIM-UNT on round cylinders, Ø 8…25 mm

- **KLRC-UNT2**
  - Accessories for mounting BIM-UNT on round cylinders, Ø 25…63 mm

- **KLRC-UNT3**
  - Accessories for mounting BIM-UNT on round cylinders, Ø 63…130 mm

- **KLRC-UNT4**
  - Accessories for mounting BIM-UNT on round cylinders, Ø 130…250 mm

- **KLDT-UNT2**
  - Accessories for mounting BIM-UNT or BIM-UNTK on dovetail cylinders, groove width 7 mm

- **KLDT-UNT3,5**
  - Accessories for mounting BIM-UNT or BIM-UNTK on dovetail cylinders, groove width 9.5 mm

- **KLDT-UNT4**
  - Accessories for mounting BIM-UNT or BIM-UNTK on dovetail cylinders, groove width 11.5 mm

- **KLDT-UNT6**
  - Accessories for mounting BIM-UNT or BIM-UNTK on SMC cylinders type CP95

- **KLZ1-INT**
  - Accessories for mounting BIM-UNT or BIM-UNTK on tie-rod cylinders, Ø 32…40 mm

- **KLZ2-INT**
  - Accessories for mounting BIM-UNT or BIM-UNTK on tie-rod cylinders, Ø 50…63 mm

- **KLZ3-INT**
  - Accessories for mounting BIM-UNT or BIM-UNTK on tie-rod cylinders, Ø 80…100 mm

For more accessories go to www.turck.com

For more information go to www.turck.com
Universal Magnetic Field Sensors for Pneumatic Cylinders

High system availability
The universal magnetic field sensors offer enormous operational safety even in harsh production environments. This is owed to excellent EMI shielding properties, protection class IP67 as well as to the electronics that withstand the particularly harsh conditions of mechanical engineering. These advantages to optimize your production processes.

- Less downtimes: Robust mounting bolt of tool steel ensures stable fitting.
- Lower risk of damage: Optimized cable outlet, well-positioned screw avoid damage to the cable.
- Short downtimes: Spare parts are available at short notice and at the lowest cost.
- Highly immune to EMI thanks to excellent shielding properties.

Efficient standardization
The universal magnetic field sensors BIM-UNT, BIM-UNTK and BIM-UNR exceed the strict standard regulations. Turck not only support efficient standardization, they also offer universal magnetic field sensors BIM-UNT, BIM-UNTK and BIM-UNR by Turck not only support efficient standardization, they also offer universal magnetic field sensors BIM-UNT, BIM-UNTK and BIM-UNR query the specturm of these sensors and reduce your application costs.

Flexible cable concept
The portfolio of the universal magnetic field sensors offers three different cable types. With our chain capable, fixed-safe and weld-resistant cables you cover all industry demands.

Universal applicability
- There are two basic designs for all cylinders. The sensors can be mounted directly to the cylinder-grooves, for mounting on round, pin or dovetail cylinders, we offer matching accessories.
- Special types with fine adjustment or external adjustment of switching point are no longer necessary: these accessories can optionally be mounted at an affordable cost on the standard sensors.
- Low average prices thanks to the elimination of special devices.

Compact design
The 19.7 mm long BIM-UNTK is one of the most compact magnetic field sensors on the market. The active area is located at the sensor’s end. This allows you to query the piston in the end position, e.g., of small hydraulic cylinders and grippers.

Grable fitting
The sensor is inserted in the groove and then tightened by a quarter turn with the tip screw. The screw is made of rust-proof steel allowing easy stable fitting.

Single-handed mounting
To simplify installation in the field, the sensors are equipped with a pre-fixation lip and round visible LED, you can see the switching state from any position.

High visibility
Due to a new MR sensor element, the universal field sensor for pneumatics ensures maximum design freedom through minimal installation effort.

Maximum freedom
Thanks to the many connection options, easy installation and flexible accessories, the new sensor element ensures maximum design freedom through minimal installation effort.

Your advantages at a glance
- A wide variety of solutions realized with only a few device types.
- Maximum freedom in design and construction.
- Reduced installation costs through flexible mounting accessories.
- Easily connected thanks to a weld-resistant, connectivity concept.
- Quick installation via a pre-fixation lip and a quarter turn of the screw.

Universal applicability
- The universal magnetic field sensors fit almost anywhere and are easy to handle.
- This brings also significant benefits to the plant equipment.

High ease of installation
- Easiest installation for optimal fitting and fine tuning.
- Quick replacement through easy recovery of workpiece.
- Minimal maintenance due to a reduced variety of types.

High system availability
The universal magnetic field sensors offer enormous operational safety even in harsh production environments. This is owed to excellent EMI shielding properties, protection class IP67 as well as to the electronics that withstand the particularly harsh conditions of mechanical engineering. These advantages to optimize your production processes.

- Less downtimes: Robust mounting bolt of tool steel ensures stable fitting.
- Lower risk of damage: Optimized cable outlet, well-positioned screw avoid damage to the cable.
- Short downtimes: Spare parts are available at short notice and at the lowest cost.
- Highly immune to EMI thanks to excellent shielding properties.

Efficient standardization
The universal magnetic field sensors BIM-UNT, BIM-UNTK and BIM-UNR exceed the strict standard regulations. Turck not only support efficient standardization, they also offer universal magnetic field sensors BIM-UNT, BIM-UNTK and BIM-UNR query the specturm of these sensors and reduce your application costs.

Flexible cable concept
The portfolio of the universal magnetic field sensors offers three different cable types. With our chain capable, fixed-safe and weld-resistant cables you cover all industry demands.

Universal applicability
- There are two basic designs for all cylinders. The sensors can be mounted directly to the cylinder-grooves, for mounting on round, pin or dovetail cylinders, we offer matching accessories.
- Special types with fine adjustment or external adjustment of switching point are no longer necessary: these accessories can optionally be mounted at an affordable cost on the standard sensors.
- Low average prices thanks to the elimination of special devices.

Compact design
The 19.7 mm long BIM-UNTK is one of the most compact magnetic field sensors on the market. The active area is located at the sensor’s end. This allows you to query the piston in the end position, e.g., of small hydraulic cylinders and grippers.

Grable fitting
The sensor is inserted in the groove and then tightened by a quarter turn with the tip screw. The screw is made of rust-proof steel allowing easy stable fitting.

Single-handed mounting
To simplify installation in the field, the sensors are equipped with a pre-fixation lip and round visible LED, you can see the switching state from any position.

High visibility
Due to a new MR sensor element, the universal field sensor for pneumatics ensures maximum design freedom through minimal installation effort.

Maximum freedom
Thanks to the many connection options, easy installation and flexible accessories, the new sensor element ensures maximum design freedom through minimal installation effort.

Your advantages at a glance
- A wide variety of solutions realized with only a few device types.
- Maximum freedom in design and construction.
- Reduced installation costs through flexible mounting accessories.
- Easily connected thanks to a weld-resistant, connectivity concept.
- Quick installation via a pre-fixation lip and a quarter turn of the screw.

Universal applicability
- The universal magnetic field sensors fit almost anywhere and are easy to handle.
- This brings also significant benefits to the plant equipment.

High ease of installation
- Easiest installation for optimal fitting and fine tuning.
- Quick replacement through easy recovery of workpiece.
- Minimal maintenance due to a reduced variety of types.

High system availability
The universal magnetic field sensors offer enormous operational safety even in harsh production environments. This is owed to excellent EMI shielding properties, protection class IP67 as well as to the electronics that withstand the particularly harsh conditions of mechanical engineering. These advantages to optimize your production processes.

- Less downtimes: Robust mounting bolt of tool steel ensures stable fitting.
- Lower risk of damage: Optimized cable outlet, well-positioned screw avoid damage to the cable.
- Short downtimes: Spare parts are available at short notice and at the lowest cost.
- Highly immune to EMI thanks to excellent shielding properties.

Efficient standardization
The universal magnetic field sensors BIM-UNT, BIM-UNTK and BIM-UNR query the specturm of these sensors and reduce your application costs.

Flexible cable concept
The portfolio of the universal magnetic field sensors offers three different cable types. With our chain capable, fixed-safe and weld-resistant cables you cover all industry demands.

Universal applicability
- There are two basic designs for all cylinders. The sensors can be mounted directly to the cylinder-grooves, for mounting on round, pin or dovetail cylinders, we offer matching accessories.
- Special types with fine adjustment or external adjustment of switching point are no longer necessary: these accessories can optionally be mounted at an affordable cost on the standard sensors.
- Low average prices thanks to the elimination of special devices.

Compact design
The 19.7 mm long BIM-UNTK is one of the most compact magnetic field sensors on the market. The active area is located at the sensor’s end. This allows you to query the piston in the end position, e.g., of small hydraulic cylinders and grippers.

Grable fitting
The sensor is inserted in the groove and then tightened by a quarter turn with the tip screw. The screw is made of rust-proof steel allowing easy stable fitting.

Single-handed mounting
To simplify installation in the field, the sensors are equipped with a pre-fixation lip and round visible LED, you can see the switching state from any position.

High visibility
Due to a new MR sensor element, the universal field sensor for pneumatics ensures maximum design freedom through minimal installation effort.

Maximum freedom
Thanks to the many connection options, easy installation and flexible accessories, the new sensor element ensures maximum design freedom through minimal installation effort.

Your advantages at a glance
- A wide variety of solutions realized with only a few device types.
- Maximum freedom in design and construction.
- Reduced installation costs through flexible mounting accessories.
- Easily connected thanks to a weld-resistant, connectivity concept.
- Quick installation via a pre-fixation lip and a quarter turn of the screw.

Universal applicability
- The universal magnetic field sensors fit almost anywhere and are easy to handle.
- This brings also significant benefits to the plant equipment.

High ease of installation
- Easiest installation for optimal fitting and fine tuning.
- Quick replacement through easy recovery of workpiece.
- Minimal maintenance due to a reduced variety of types.

Technical data

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient temperature</td>
<td>≤ 70 °C (≤ 158 °F)</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>≤ 24 V</td>
</tr>
<tr>
<td>Rated input voltage</td>
<td>≤ 15 mA</td>
</tr>
<tr>
<td>Overload voltage</td>
<td>≤ 100 mA</td>
</tr>
<tr>
<td>Switching frequency</td>
<td>≤ 1 kHz</td>
</tr>
<tr>
<td>Shock / vibration sensitivity</td>
<td>≤ 35 g (11 ms)</td>
</tr>
<tr>
<td>Vibration resistance</td>
<td>≤ 55 Hz (1 mm)</td>
</tr>
<tr>
<td>Temperature resistance</td>
<td>≤ 55 °C (131 °F)</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>≤ 70 °C (≤ 158 °F)</td>
</tr>
<tr>
<td>Easiest installation</td>
<td>Quick replacement through easy recovery of workpiece.</td>
</tr>
<tr>
<td>Minimal maintenance</td>
<td>Due to a new MR sensor element, the universal field sensor for pneumatics ensures maximum design freedom through minimal installation effort.</td>
</tr>
</tbody>
</table>

Optional accessories
A diverse selection of accesso-
ries makes the range of services for the universal magnetic field sensors complete. This includes, for example, the accessories for installation and fitting on all commercial cylinders, as well as tips to ensure secure cable routing.

You can now query the piston position on standard pneumatic cylinders very comfortably with a single sensor type. The new magnetic field sensors BIM-UNT, BIM-UNTK and BIM-UNR by Turck not only support efficient standardization, they also offer more leeway for optimization in terms of construction, purchase, production, operation and service. Use these advantages to optimize your production processes:

- Less downtimes: Robust mounting bolt of tool steel ensures stable fitting.
- Lower risk of damage: Optimized cable outlet, well-positioned screw avoid damage to the cable.
- Short downtimes: Spare parts are available at short notice and at the lowest cost.
- Highly immune to EMI thanks to excellent shielding properties.

Efficient standardization
The universal magnetic field sensors BIM-UNT, BIM-UNTK and BIM-UNR exceed the strict standard regulations. Turck not only support efficient standardization, they also offer universal magnetic field sensors BIM-UNT, BIM-UNTK and BIM-UNR query the specturm of these sensors and reduce your application costs.