Identification Solutions for the Pharmaceutical Industry

Turck offers products for pharmaceutical applications:

- **Safe use of field devices by ensuring the correct device operation and monitoring of maintenance intervals**
- **Serialization through complete traceability of medicines from production to transportation**
- **Increased product quality through reliable identification and documentation of precursors and intermediates**
- **Higher personal protection by avoiding media contact with tube connections**
- **Improved plant safety through the automatic and tamper-proof monitoring of the correct device assignment and the correct use of equipment**
- **Solutions for use in hazardous areas**
- **Tailor-made products for pharmaceutical applications**

For different identification tasks in the pharmaceutical industry, Turck offers the optimal solution.

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<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Read/Write Heads</strong></td>
<td></td>
</tr>
<tr>
<td>TW-R30-M-B128</td>
<td>Ø 29.9 mm × 10 mm HF standard tag for flush installation in metal</td>
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<tr>
<td>TW-R30-B128</td>
<td>Ø 30 mm HF standard tag for medium ranges</td>
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<tr>
<td>TW-R50-B128</td>
<td>Ø 50 mm HF standard tag for long ranges</td>
</tr>
<tr>
<td><strong>Tags</strong></td>
<td></td>
</tr>
<tr>
<td>TW-L86-54-C-B128</td>
<td>86 × 54 × 0.8 mm HF tag in credit card format</td>
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<tr>
<td><strong>Other Devices</strong></td>
<td></td>
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<tr>
<td>PD-IDENT-HF-S2D-RWBTA</td>
<td>260 × 190 × 100 mm HF technology, handheld for location-independent reading</td>
</tr>
<tr>
<td>HT-IDENT-H1147</td>
<td>190 × 85 × 70 mm HF technology, read/write head for manual operation</td>
</tr>
<tr>
<td>TN865-Q175L200-H1147</td>
<td>200 × 175 × 60 mm UHF technology for extremely long ranges</td>
</tr>
<tr>
<td>TNLR-Q80L400-H1147</td>
<td>102 × 83 × 40 mm HF technology, protection class IP67, for very long ranges</td>
</tr>
<tr>
<td>TNSLR-Q42TWD-H1147</td>
<td>67.7 × 42.5 × 42.5 mm HF technology, protection class IP69K, for very long ranges,</td>
</tr>
<tr>
<td>TN-Q14-0.15-RS4.47T</td>
<td>52 × 30 × 14 mm HF technology, compact</td>
</tr>
<tr>
<td>TB-EM18WD-H1147-Ex</td>
<td>18 mm threaded barrel HF technology, compact threaded barrel, for Ex zone 2/22</td>
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</tbody>
</table>

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You find these products in the application examples on the back side.
Solutions for Reliable Identification of

- **Pallets on conveyor belts**
  - Product tracking through RFID
  - Reliable identification even over great distances through long-range UHF technology

- **Cryovessels**
  - Avoidance of assignment errors through non-interchangeable identification with RFID
  - Secure identification even of inaccurately positioned vessels with large HF read/write heads

- **Tube connections in the sterile area**
  - Increased plant safety and personnel protection with large tube connections
  - HF-RFID tag, freely rotatable, integrated in process connection

- **Data Matrix on medication boxes**
  - Transparent production and traceability
  - Reading and visualizing Data Matrix codes on medication boxes

- **Data Matrix on medication boxes**
  - Standardized interface to the database

- **Mobile vessels controlled with barcodes**
  - Controlling the identity and the time stamp of vessels to be sterilized with RFID technology
  - High flexibility when using different components

- **Tube connections in the sterile area**
  - Increased plant safety and personnel protection in the explosion hazardous area
  - Intrinsically safe inductive identification through coded cap

- **Mobile vessels**
  - Ensuring a high quality and process reliability
  - Automatic assignment of tube connections during production on single-use systems

- **Accessories for single-use applications**
  - Increased plant safety and personnel reliability
  - Intrinsically safe inductive identification through coded cap

- **Temperature of transport boxes**
  - Monitoring of cooling temperatures during transport
  - Identification of the transport unit and correct assignment of the temperature profile in the HF-RFID tag

- **Machine operators**
  - Individual operator access control
  - Three access levels: RN, RNH, and RNHA
  - HF-RFID tag, reading and visualizing codes with HF-RFID technology

- **Temperatures of transport boxes**
  - Efficient management and documentation of change record entries
  - Various mounting options of the HF-RFID tags on field devices

- **Field devices**
  - Enhancing safety and process reliability
  - Integration of the transport unit and component information in the description parameter profile of the HF-RFID tag

- **Evaporators**
  - Increased plant safety and personnel protection
  - HF-RFID tag, freely rotatable, integrated in process connection

- **Features on switches**
  - Increased plant safety and personnel protection
  - HF-RFID tag, reading and visualizing codes with HF-RFID technology

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  - Increased plant safety and personnel protection with large and robust tube elements
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