



**TURCK**

**PROCESS  
AUTOMATION**

**SOLUTIONS  
FOR THE  
PHARMACEUTICAL  
INDUSTRY**

[www.turck.com](http://www.turck.com)



# Solutions for the Pharmaceutical Industry

For over a decade, TURCK is your trusted partner for the pharmaceutical industry. Our customers around the globe benefit from industry-specific automation solutions in the areas of sensors, fieldbus, connection and I/O technology as well as RFID solutions – from pharmaceutical companies, architectural and engineering firms and super skid suppliers to system integrators and electrical contractors.

Whether it is new greenfield construction or expansion or modernization of existing production facilities, the TURCK pharmaceutical team will be happy to assist you with providing application specific solutions for your projects in many fields: Fermenter control, mixing & batching, water and clean steam production and distribution, filtration, and chromatology, the handling of solvents etc.

Our support ranges from worldwide project management to the application-specific advice on site. From planning to commissioning, we will guide you in all phases of the project.

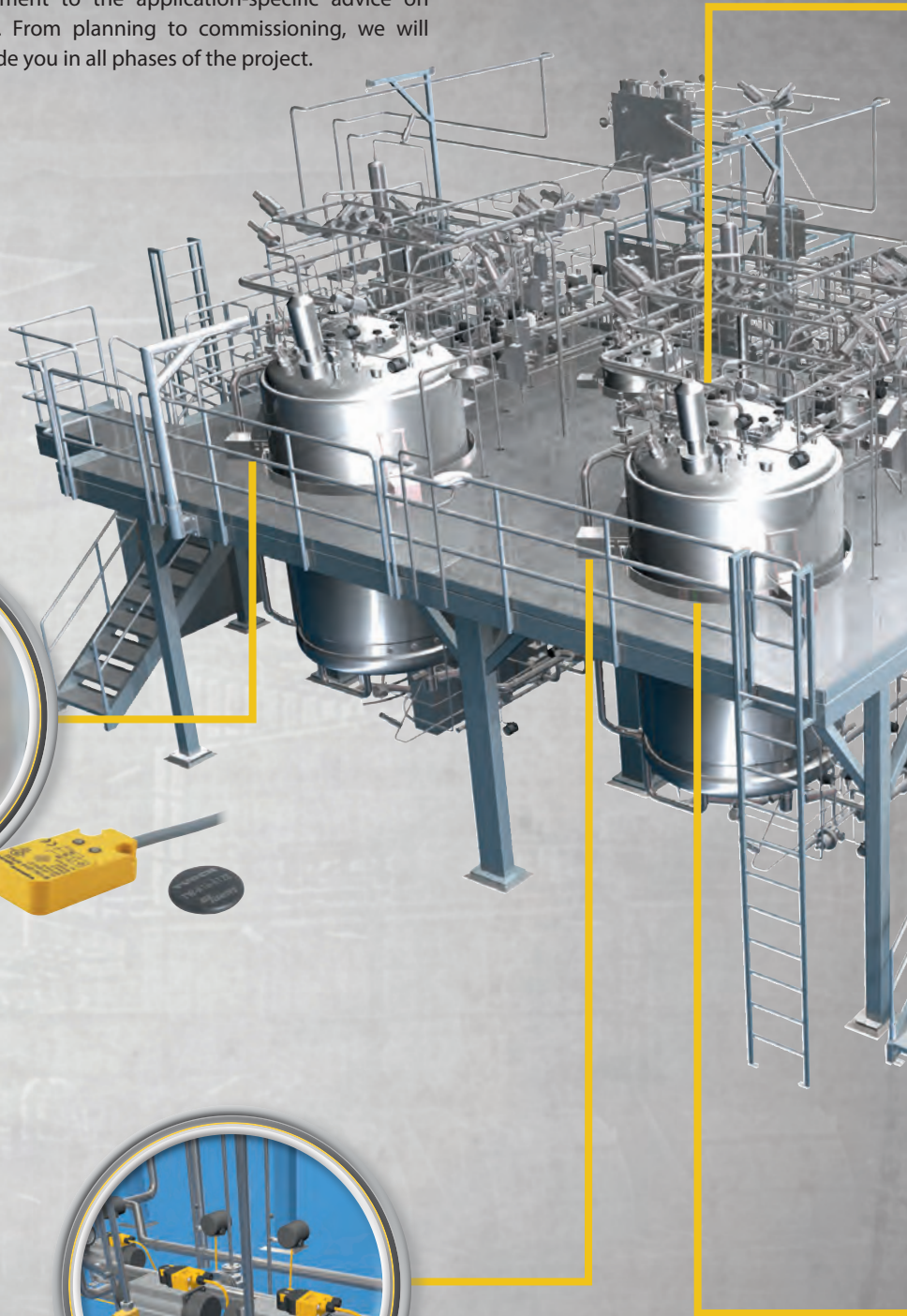
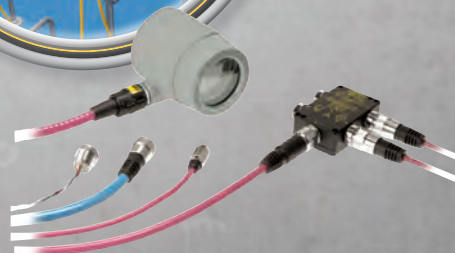
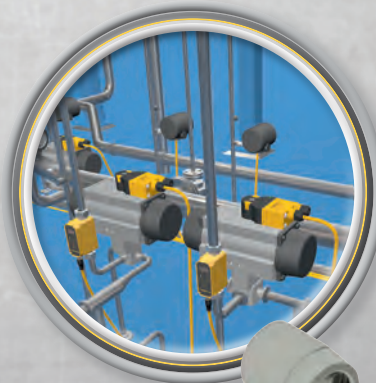


## Identification of portable tanks

- The **RFID system BL ident**® ensures increased plant efficiency and traceability of the production processes through the reliable detection of mobile containers
- Application-optimized data carriers, even for direct mounting on stainless steel, and for use in the pharmaceutical production

## Easy connection of field devices

- Efficient and failsafe connection of field devices thanks to the process wiring connection technology realized with our quick disconnect connectors
- Comprehensive portfolio with connectors, cables and splitter boxes reduces cabling
- Flexible and highly chemical-resistant PVC cables
- Shielded twisted pair cables for analog and HART® signals





## Planning and construction of super skids

Comprehensive know-how on fieldbus technology for pharmaceutical applications with solutions for **Foundation Fieldbus, PROFIBUS, PROFIBUS-PA, Ethernet, DeviceNet™ and AS-i**

- Comprehensive portfolio of fieldbus solutions for systems and control cabinets
- Application and customer-optimized device selection for super skid suppliers

## Remote signal I/O

- The modular I/O systems **excom®** and **BL20** support application-optimized signal processing
- Use in the non-Ex and Ex areas in zones 1 and 2, as well as 21 and 22
- High system availability through redundant communication and power supply
- Support of all standard fieldbus protocols

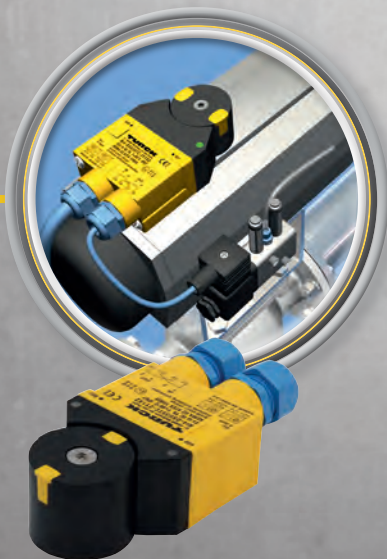
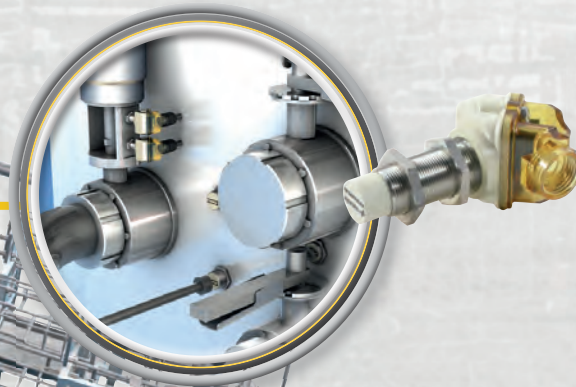
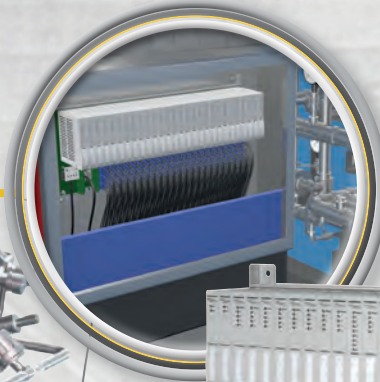
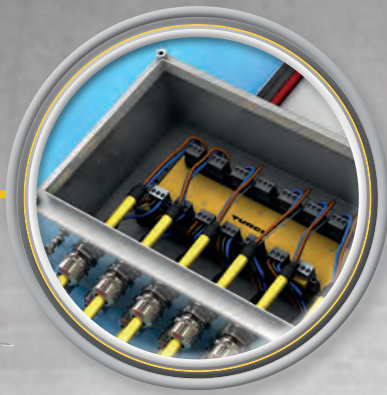


## Transfer Panels/Hose connections

- Beside **RFID TURCK** offers two major solutions for transfer panels and hose connections, with magnet as target and with metal target
- The magnet-inductive **BIM M12** is a very robust solution
  - The magnet ensures a safe and error-free detection
  - ATEX approval for zones 1 G and D
- The inductive **uprox®+ WD sensors** with terminal chamber are easily commissioned and maintained
  - Tightly sealed housings that are resistant to chemicals
  - Same increased switching distance on all metals
  - ATEX approval for zones 2 and 22

## Monitoring of quarter turn actuators

- The inductive **DSU35 dual sensors** capture the valve position of quarter turn actuators
- Easiest assembly and adjustment
- Detergent-resistant plastic housing
- Analogue output option
- Various electrical output signals: Intrinsically safe, AC/DC 2-wire, DC 3-wire, NAMUR, AS-i, DeviceNet™
- SIL 2





# Sense it!

## Linear Position Sensors and Encoders

- Contactless measuring system
- Easiest assembly and adjustment
- i. a. ATEX approval for zones 1 and 21



## Flow Sensors

- Measurement and monitoring of flow rates
- Different compact designs
- Many different process connections



## Dual Sensors

- Position feedback of fittings
- Optimum connection possibilities thanks to the compact design and comprehensive range of accessories
- Easily mounted on all standard rotary actuators
- SIL 2
- Analog



## Pressure and Temperature Sensors

- Many different process connections
- Parametrizable via standard interfaces
- Simple operation
- Robust design



## Proximity Sensors

- Available in many different designs, sizes and housing materials
- Inductive, capacitive ultrasonic and magnetic field sensors
- Ex approvals and SIL certification
- Wash down

Collect Precisely



# Connect it!

## Cable and Connectors

- Connectors – different types and designs
- Ready-made or customizable
- Different cable materials for every application



## FOUNDATION™ fieldbus/PROFIBUS-PA

- Multibarriers, junction boxes in IP67 and IP20, ready-made cables and many more...
- Rugged and space-saving designs for harsh environments
- Suitable for FISCO applications



## Interface Devices

- For separation, supply, conversion and protection tasks
- Available in modular housing for DIN rail mounting, as back-plane solution or as cartridge in IP67 housing
- Many different input and output signals



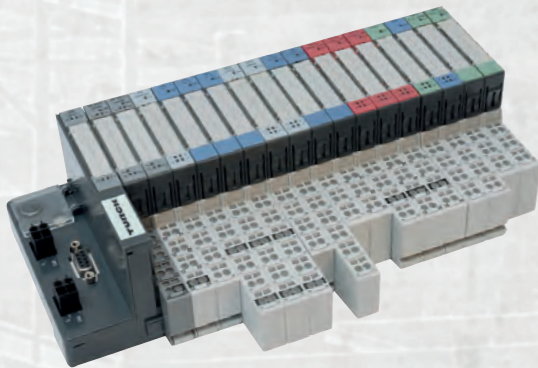
Connect Reliably



# Bus it!

## Remote I/O excom® for Zones 1, 2 and Non-Ex Area

- HART® and NAMUR signals
- High availability through redundant communication and power supply
- Integration in conventional control systems
- FDT technology for easy operation



## BL20 I/O System:

- HART® and NAMUR signals
- Connection to different control systems
- ATEX approval for zone 2
- Redundant power supply, optional

## Diagnostic Power Conditioner DPC

- FOUNDATION™ fieldbus power supply for simple and redundant applications
- Excellent efficiency and high output power (28 V at 800 mA)
- Commissioning support and long-term diagnostics via FF-HSE, DTM and web interface



Communicate Effectively



# Solve it!

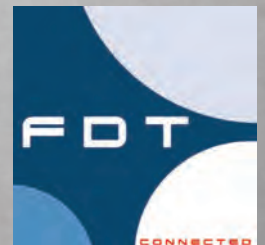
## RFID System BL ident®

- Compact IP67 solution for different fieldbuses
- HF/UHF mixed operation possible, UHF read/write heads acc. to ISO 18000 6C
- Application-optimized data carriers and read/write heads for Ex and dust-Ex areas
- Connection to different control systems



## Visual PLC Solution VT

- PLC, HMI and fieldbus master
- CODESYS programmable, Visualization with QVIS
- PROFIBUS-DP master, Modbus RTU master/slave



Automate Efficiently



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.....**Sense It!**.....**Connect It!**.....**Bus It!**.....**Solve It!**™