

# Mtech Product Update

## **TURCK** *works* Product News

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

### Solutions For Mobile Equipment

TURCK's broad line of solutions specially designed for industrial vehicle and mobile equipment manufacturers has led to product innovations and ease of operations for customers worldwide. They strive to provide products of exceptional quality that may be used in harsh applications – and are able to customize solutions based on your specifications.

Turck's extensive line of solutions includes advanced sensors and encoders for position detection of booms, outriggers, seats, doors and gates. Level indication may be determined with Turck's line of inclinometers, cordsets and junction boxes help you streamline wiring and connect your components with ease.



#### Sensing Solutions

- Inductive Position Sensors
- Rotary Position Sensors
- Pressure Monitoring Sensors
- Angular Position Sensors

#### Features:

- Non-contact technology
- Able to withstand heavy
- Superior noise immunity
- provides longer service life
- Extended temperature ranges
- Low operating voltage
- shock and vibration
- Ease of installation
- Exceptional sealing

#### Connectivity Solutions

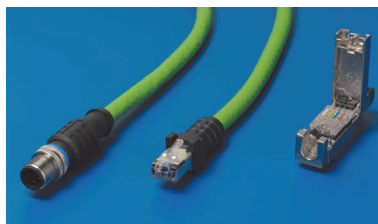
- Cordsets
- Junction Boxes

#### Features:

- Rugged junction box housing
- resistant PUR jacketed cordsets
- Quick disconnect connectors
- Excellent abrasion and cut-through
- Vibration immune connectors
- IECIP 67 & NEMA6P protection

### New PROFINET Cordset Line from TURCK

TURCK introduces its new 4-wire PROFINET cordset line, developed to provide plug-and-play connectivity for applications using PROFINET protocols. PROFINET, the fastest industrial Ethernet I/O network, is compatible with existing fieldbus systems and the only network that can accomplish a line topology – especially ideal for long conveyor systems. These cordsets connect to TURCK's BL67 Ethernet gateways for PROFINET – which can be connected to up to 32 I/O modules per gateway – to allow smooth integration into current fieldbus structures.



The PROFINET cordset line offers both M12 Ethernet D-coded and RJ45 connector options, allowing users the option to mix-and-match any connector combination to meet unique application needs. Cordsets are also available with color-coded field wireables to convert hard wiring to quick disconnect.

TURCK's PROFINET cordset includes cable that meets IEC 11801:2002 Cat 5 and TIA 568B: 2001 Cat 5e requirements. Like most TURCK cordsets, the PROFINET line offers standard and custom lengths, as well as pigtail or extension cordset options.

#### Target Markets

- Automotive
- Transport and handling
- Machine building

#### Features

- PROFINET can accept any existing fieldbus - not just PROFIBUS ©
- ensuring easy migration and investment protection.

#### Product Specifications

- 4 X 22 AWG conductors
- Foil and braided shielding
- 42 V, 1.5 A for RJ45 connectors
- DCR (/1000 feet) Insulation: 420 – 13.8 Ohms, 421 – 16.2 Ohms
- 250 V, 4 A for M12 connectors
- Protection: IP 20 for RJ45 connector; NEMA 1, 3, 4, 6P and IEC IP 68 for M12 connector
- PVC green-yellow outer jacket



Inside this Issue:

> Turck Product News

- Solutions For Mobile Equipment
- New PROFINET Cordset Line
- Sensor Test Box with SI2 Quick-Connect
- DeviceNet™ Terminating Resistor with Voltage Monitoring

> Banner Product News

- Intrinsically Safe Wireless Transceiver
- M25U Robust Stainless Steel Opposed Mode Ultrasonic Sensor
- 24 Volt DC Power Supply

> ISA Twin Cities 2009 Tech Fair and Seminars



Come visit us and see the latest automation products at the Mtech booths on:

Thursday April 2nd, 2009  
9:00am – 4:00pm  
Ramada Mall of America





### Sensor Test Box with S12 Quick-Connect

TURCK's new TB3-CP80 test box is designed to test the functionality of inductive, magnetic field and capacitive sensors anywhere in the field. The compact test box indicates the switching status with an acoustic signal (if connected to pin 4), and is a must-have when demonstrating or troubleshooting TURCK sensors.

The CP80 housing makes it an easily recognizable TURCK product and features the new S12 Quick-Connect female cordset and integrated target. The test box contains LEDs that provide a clearly visible illuminated display of corresponding switching status.

**Product Strengths**

- Function testing without having to disassemble the sensor
- User-friendly operation and display elements

**Product Specifications**

- 2-wire DC sensors
- 3/4-wire DC sensors (NPN/PNP)
- NAMUR sensors according to EN 60947-5-6
- Powered by 2 batteries 9V (replaceable)



| Part Number | ID Number | List Price | Description |
|-------------|-----------|------------|-------------|
| TB3-CP80    | M6967112  | \$135.00   | Test box    |

### DeviceNet™ Terminating Resistor with Voltage Monitoring

TURCK announces the new M12 **euromast**® terminating resistor with LEDs for voltage monitoring. The DeviceNet terminating resistor stabilizes and minimizes reflections on the bus line by matching impedance. The LED indicators emit red for incorrect polarity and green for correct polarity.

These connectors are rated for 250 Volts and 4 Amps and available in nickel plated brass or stainless steel. All connectors provide NEMA 1, 3, 4, 6P and IEC IP 67 protection.

**Target Markets**

- Factory automation
- System integration

**Strengths**

- Confirms correct polarity on a DeviceNet network
- Green LED = correct polarity
- Red LED = incorrect polarity

**Product Specifications**

- M12 euromast connector, male
- 250 V, 4 A
- Nickel-plated brass or stainless steel housing
- NEMA 1, 3, 4, 6P and IEC IP67
- LED indication
- 120 Ohms, ¼ W internal resistance
- 7/8" minifast® version also available; RSM 57-TR2/VM



| Part Number   | ID Number | List Price (\$) | Description |
|---------------|-----------|-----------------|-------------|
| RSE 57-TR2/VM | U2251-115 | \$26.00         | Male, 5-pin |



## Intrinsically Safe Wireless Transceiver - Revolutionary DX99 battery-powered node

An entirely new way to collect analog, digital and temperature information in hazardous areas. State-of-the-art combination of wireless communication, battery technology and intrinsically safe electronics. Add to existing equipment with simple peel-and-stick installation. No need to run new conduit or pull new wires. Ideal for hazardous area instrumentation.

The DX99 product line is certified for operation in Class I, Division 1 locations. These FlexPower Nodes are available in either a polycarbonate housing or a metal housing.

The metal housing devices are powered from a 3.6V D cell lithium battery integrated into the housing. The polycarbonate housing devices must be powered using the DX81H Battery Supply Module.



### Certifications:

- CSA C/US Class I, Division 1, Groups A, B, C, D Class I, Zone 0, Group IIC Class II, Division 1, Groups E, F, G Class III, Division 1
- LCIE/ATEX Group IIC, Zone 0 Dust, Zone 20

Call your Mtech representative to see a demo and have a site survey with this new product.

## M25U Robust Stainless Steel Opposed Mode Ultrasonic Sensor

The U-GAGE® M25U Sensor is purpose-built to deliver flawless operation in the harsh environment of food processing and other sanitary industries—withstanding high-pressure washdown and severe temperatures that cause ordinary ultrasonic sensors to fail after just a few weeks. A rugged stainless steel housing makes the M25U an ideal solution for clean-in-place (CIP) procedures routinely found in food and beverage applications.

This sensors was designed to withstand the demands of sanitary applications.

- Survives high-temperature, high-pressure washdown and harsh cleaning agents
- Presence detection of clear or colored containers during sanitizing
- Food process monitoring
- Position monitoring
- Aseptic bottling in contained environments

### Features

- 25 mm smooth barrel made with 316 series stainless steel construction to withstand the toughest sanitary application challenges
- Cleans easily with no threads, gaps or seams to trap debris, disinfects and cleans up with minimal effort
- Wide operating temperature range of -20° to 70° C
- Withstands high-temperature sprays of up to 80° C and 1500 psi occurring every few hours
- Constructed of FDA approved materials
- Rated IP69K with fully encapsulated electronics
- Offers user-selectable dual range, depending on response time
- Features high immunity to ambient electrical and sonic noise
- High speed with 250 mm range and 3 millisecond response time
- Euro-style integral quick-disconnect
- 10 to 30V dc operation with a choice of two ranges, depending on wiring
- 10 to 30V dc operation with bipolar, NPN (sinking) and PNP (sourcing) output
- Normal speed with 500 mm range and 4 millisecond response time for longer-range applications
- Indicates status using bright highly visible LEDs for power and output status, protected by a sealed, transparent cover



| Models   | Range and Frequency*          | Cable         | Output | Response Time | Data Sheet |
|----------|-------------------------------|---------------|--------|---------------|------------|
| M25UEQ8  | Normal Speed: 500 mm          | 4-pin Euro QD | —      | —             | 137794     |
| M25URBQ8 | High Speed: 250 mm<br>140 kHz |               |        |               |            |

\*M25U receivers may be wired for either of two speed modes: Normal or High, depending on hookup. The Normal-Speed mode offers a sensing range of 500 mm. The Normal-Speed mode maximizes sensing energy, as is required in demanding environments. The High-Speed mode offers a sensing range of 250 mm. The High-Speed mode maximizes sensing response, as is needed in high-speed counting applications.

## 24 Volt DC Power Supply

Designed to provide low noise DC power, the PSDINA-24-4 Power Supply is a DIN-rail mountable power supply for use with 24 Vdc-powered devices. Ultrasonic and photoelectric sensors always benefit from the use of a high quality and low noise power supply, and the model PSDIN-24-4 power supply meets the need perfectly. Vision cameras and lighting systems also place high demands on power supplies, and the PSDINA-24-4 power supply will provide reliable and consistent power for these devices as well.

The power supply is UL listed and CE approved and has an efficiency of > 80% under load and is offered for sale at a competitive list price of \$175.

### Features:

- Very low common-mode noise characteristic which provides “clean” power for sensors - even in noisy electrical environments.
- Accepts a world-wide range of AC input voltage: - (85 to 264V ac, 50 or 60Hz)
- Provides 24 V dc output voltage adjustable ±10%: - (21.6 to 26.4 V dc adj. 4 A max)
- 96 Watt maximum output power
- Supply is protected against output over-voltage and over-current
- LED indication of over and under-voltage, short circuit, and over current conditions





## ISA Twin Cities 2009 Tech Fair and Seminars

Bringing the latest in automation technology to you

Join us along with over 40 of the industries leading manufactures and solution providers for this years ISA Twin Cities Tech Fair

Thursday April 2nd, 2009  
9:00am – 4:00pm  
Ramada Mall of America

For more details and to register visit:

[www.isatc2009.com](http://www.isatc2009.com)

### Automation Technology Seminars

Professional Development Certificates Available

To Register visit our website at: [www.isatc2009.com](http://www.isatc2009.com)

Fee for each seminar is \$10.00

#### 8:30am - 10:00am: Safety Standard Compliance and Returning Investment with Safety

Instructor: Ray Butler

Instructor Bio: Mr. Butler has more than 20 years in machine and factory automation safety. He has served on national and world wide standards development committee a presentation that demonstrates how to return the investment on machine safety. Mr. Butler can also address questions regarding safety audits, best practices and other safety related issues.

#### 11:00am - 12:30pm: Intrinsic Safety and other Explosion Protection Techniques in Classified (Potentially Explosive) Areas

Instructor: Jim Peterson

Instructor Bio: Jim is currently with Turck USA in the position of a Business Development Manager for Intrinsically Safe and Foundation Fieldbus Products. Jim has previously served as a Product Marketing Manger at Turck for these products before taking on his current role.

Jim been involved with Intrinsic Safety and explosion preventive techniques for many years and has extensive experience in this field.

Jim has conducted numerous seminars and training sessions and has presented in many ISA events in the US, Mexico, and Canada on the subject of Intrinsic Safety.

#### 1:00pm - 2:30pm: Advantages of Servo Actuation of Control Valves

Instructor: Barb Boynton of the Exlar Corp

Instructor Bio: Barb has over 20 years experience in the process control industry

*Mtech Represents  
the following fine manufacturers*



### OUR OBJECTIVE

Mtech is a manufacturer's representative dedicated to providing O.E.M.'s and users with solutions to their factory automation applications. This objective is accomplished by integrating over 70 years of experience with state of the art products to fill our customer requirements.

### REGIONS SERVED

**TURCK, BANNER, Horner & AMC**  
Minnesota, Western Wisconsin, North Dakota, & South Dakota  
**EXLAR**  
Minnesota, Western WI, North Dakota, South Dakota, Iowa, & Nebraska

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result in successful projects for  
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