

# Mtech Product Update



Product News

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

## Quick Disconnect Power Distribution—NFPA79 Compliant Products

TURCK introduces their new line of power distribution connectivity products PowerFast™. This new product line will easily adapt to your design requirements. The Powerfast™ products include cordsets, connectors, tees, splitters and receptacles rated for up to 30 Amps and 600 Volts. These connectivity products deliver an NFPA 79 compliant wiring method ideal for conveyor and material handling applications.

TURCK's entire selection of powerfast solutions, available in A-Size (7/8"), D-Size (1-3/8"), M16 and M23 sizes with tray rated, exposed run PVC cable.

### Why choose powerfast™ connectivity solutions?

#### COST SAVINGS

- Decrease labor costs by up to 40% over traditional conduit installations
- Reduce the time it takes to install and commission the system

#### QUALITY PRODUCTS AND SERVICE

- High quality design and materials
- UL approved products
- Robust and reliable environmentally protected connectors
- Superior customer service and product support

#### ANYONE CAN INSTALL THE SYSTEM

- Professional installations are not required
- Connectors are keyed to avoid installation errors
- Eliminate concerns for mis-wiring

#### EASY TO RETROFIT

- Modular cordset system
- Easy to maintain and modify on the plant floor
- Cordsets, receptacles and tees provide design flexibility
- Easy customization and expandability

### Where can you use powerfast™ CONNECTIVITY SOLUTIONS?

- Motor, heaters, lights and many other electrical devices
- Ideal for conveyor and material handling industries
- New system installations
- Retrofitting existing conduit installations



## Miniature Magnetic Incremental Series Fits into Tight Spaces

TURCK introduces new incremental magnetic encoders designed with a miniature 24 mm diameter housing. The Kübler by TURCK 2430 shaft and 2440 hollow shaft encoders deliver the small footprint required for space restricted installations, while their non-contact technology ensures exceptional ruggedness.

These Kübler by TURCK encoders offer a wide temperature range, -20 to 85°C, and a maximum speed rating of 12,000 RPM. Though incredibly compact, the 2430 and 2440 models are available with radial and axial cable outlets—extending their applicability in space restricted areas.

### Product Strengths

- Compact size, 24mm diameter
- Non-contact measurement system
- -4 to 185°F (-20 to 85°C)
- Radial or axial cable outlet
- IP50 rated flange side (IP67 rating optional), IP64 rated housing side (IP67 optional)

### Specifications

- Shaft or blind hollow shaft version maximum speed: 12,000 RPM
- Shaft load capacity: radial 18 N, axial 20 N
- Shock resistance: DIN-IEC 68-2-27 > 100 g (1000 m/s<sup>2</sup>), 6ms
- Vibration resistance: DIN-IEC 68-2-27 > 10 g(100 m/s<sup>2</sup>), 55-2000 Hz
- Available up to 256 ppr
- Weight: approx. 0.2 lbs with 2 meter cable



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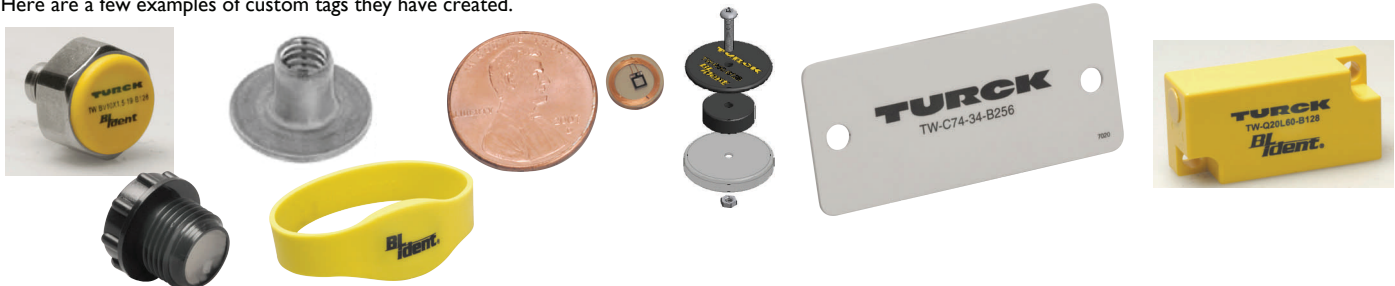


### Custom RFID Tags

TURCK's network division has the ability to create custom RFID tags to meet many application needs. Their customization services are basically offered around a few different categories:

1. Repackaging: Take what they have and reuse it to make something you need.
2. Supplying: This is the ability to take any RFID tag on the market and integrate it into a Turck housing or package system. This can be done because Turck created their RFID system to be on the open standards, which allows them to have as wide of a product line offering as we need generally by buying somebody else's.
3. Accessorizing: Providing accessories is also a feature Turck offers. This means providing spacers for the standard tags, or a Weld\_Nut tag.
4. Customizing: The last service Turck can provide is the complete custom tag, which is exactly what it sounds like. Sometimes the custom tag is a totally integrated solution such as the bolt tag, or a custom mounting solution like the Tube Tag, which is just a plastic mount that would hold a few different of our standard tags onto a metal tube. "

Here are a few examples of custom tags they have created.



### M12 Adapters Connect Incompatible Parts Saving Space and Money

TURCK introduces M12 adapters that may be used to connect incompatible round connectors quickly and easily. These space-saving connectors can be used instead of reordering cables or adding junction boxes.

The adapters may be used to connect two couplings, two plugs or a plug to a coupling. Available in straight and elbow tee versions, the adapters may be specified with A or B coding and custom configured pinouts.



#### Product Strengths

- Ease of interconnecting incompatible parts saving space, time and cost
- Available for networks: AS-interface ®, FOUNDATION fieldbus ®, DeviceNet™ and PROFIBUS ®
- Available in standard connectivity part numbers upon request

#### Specifications

- 4 Amps
- 250 Volts
- IEC IP69K; NEMA 6P
- -40°C to 80°C (-40°F to 176°F)

### WORLD-BEAM® QS30AFF400 & QS30AF600 Sensors

Banner has introduced two new sensors as high performance mid-range adjustable-field sensor complementing the QS18AF short-range and Q60LAF long-range series sensor. The QS30AFF400 is an adjustable-field sensor with foreground suppression and the QS30AF600 is an adjustable-field sensor with background suppression.

#### Product Strengths

- 128 element photo receiver for superior performance on varying colors and textures
- Sensing range in midsize QS30 housing - QS30AFF400 – 400 mm (6% Black Card) - QS30AF600 – 600 mm (90% White Card)
- Suppression:
  - QS30AFF400 - Foreground suppression for reliable detection with a fixed background is present and object color or shape varies
  - QS30AF600 – Background suppression models for reliable detection of objects when the background condition is not controlled or fixed
- Linear multi-turn screw adjustment for cutoff distance
- Enhanced immunity to fluorescent lights
- Crosstalk immunity allows two sensors to be used in close proximity
- Tough ABS housing is rated IEC IP67; NEMA 6
- Bipolar discrete outputs, PNP and NPN
- Models available with 2m or 9 m (6.5' or 30') cable or integral metal quick-disconnect; or 150mm (6") pigtail
- Mounting versatility via popular 30 mm threaded barrel or side mount
- Large, bright output indicator



## EZ-LIGHT™ CL50 Column Lights Single Segment Light for High Visibility Now available with Gray Housing

The CL50 column light provides a large and high-visibility indicator light for use in public areas, on machinery, and in factories. The CL50 column light is the largest illuminated light in Banner's indicator light product offering. The light is visible from 360 degrees around the light. Also, models with the audible tone generator can draw immediate attention to the indicator light for situations where the operator's back is normally to the light. Typical applications include packaging machinery, automotive work cells, operator stations, and semiconductor equipment. New markets and applications can be found in public locations such as retail cashier positions and information kiosks.

### Features

- No assembly required; the complete light is shipped from the factory ready to be installed in minutes.
- 30 mm threaded base for direct cabinet mounting with a single drilled hole; B
- An extensive variety of bracket and vertical standoff mounting accessories.
- The LED light sources provide low power consumption (only 2 watts) and long life (100,000 hours on average).
- The large single illuminated segment provides easy-to-see operator guidance and indication of equipment status at long distances.
- Models with 1, 2, or 3 colors are available.
- An audible tone with variable intensity can be added to any model.
- System is completely self-contained; no controller needed.
- Immune to EMI and RFI interference.
- General purpose models are rated IP67, Audible models are rated IP50.
- Pre-assembled connection options include:
  - 4 or 5-pin Eurostyle (M12) QD connector, 2 m (6.5') cable, or 150 mm (6") PVC pigtail.
- 18 to 30V dc operation.



## Application Example

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

## Exlar Actuators Provide Linear Actuation for US Navy Advanced Gun System

Chanhassen, MN—Exlar Corporation announces its award to provide linear actuators for the U.S. Navy's Advanced Gun System (AGS) Program.

BAE Systems, along with partner General Dynamics Armament and Technical Products, delivered to the U.S. Navy the first automated magazine for the 155-mm Advanced Gun System (AGS) being developed for the DDG 1000 (Zumwalt) Destroyer Program. The magazine is the first major production component to be delivered under the AGS program. It is one of a total of four magazines that will be built under a Navy contract to produce four AGS weapon systems for the Navy's first two Zumwalt class destroyers.

More than 40 Exlar GSX20 and GSX30 linear actuators are used for each gun and magazine as part of the Advanced Gun System. Exlar's inverted roller screw actuators with integrated brushless servo motors provide linear actuation as part of the world's largest fully automated ammunition supply magazine.

Exlar's GSX series actuator combines a brushless servo motor, an inverted roller screw and an encoder/resolver feedback source into a single compact assembly, which eliminates the cost and complexity of a systems engineering approach, as all elements for producing linear motion have been properly matched and designed into the actuator.

The brushless servo design of the GSX series linear actuators allows them to be used in state-of-the-art closed loop servo systems where electronic control of positioning and velocity is required. In these systems, position feedback can be provided in a number of different forms to match customer specifications, including resolvers, encoders or internally mounted linear position feedback sensors.

The GSX series actuators employ an inverted roller screw mechanism to convert the rotary motion of the brushless motor into high speed, high thrust linear motion. This mechanism has a lead accuracy of 25mm/300mm for high precision operation and can also be supplied with zero backlash.

GSX actuators are suitable for use in many other demanding applications, including: automatic tool changers, dispensing, wire guiding, chip and wafer handling, robot manipulation, testing, web guidance, indexing material cutting, tension control, volumetric pumps, simulation testing, automated assembly, injection molding and riveting, joining and fastening.



[Design World August 23rd 2010](#)

## RCX Compact Controller

Horner APG has introduced their latest controller to the market the RCX. The new RCX Compact controller offers all the latest capabilities of the OCS product family, without a user interface. First and foremost, the RCX is a powerful controller. It features a fast logic engine, with a scan rate of 0.2mS/K and a capacity up to 256K for logic memory. It is configured using the Cscape application development environment - and supports floating point math and multiple auto-tuning PID loops.

The RCX is encased in an all-plastic chassis, and can support up to 4 SmartStack I/O modules for local I/O. For remote I/O in the panel or up to 500m away, the RCX includes a CsCAN port for SmartStix & SmartBlock support. SmartRail Ethernet I/O can be controlled from the RCX 10/100 Ethernet port. The RCX 10/100 Ethernet port is not just for I/O - it provides a host of other capabilities as well. A variety of Industrial Ethernet protocols are supported, including Modbus/TCP Master & Slave. The RCX can be programmed over Ethernet, and supports customizable HTML based web pages, and FTP file transfer. The built-in MicroSD® memory slot allows users to easily store and retrieve machine or process data (up to 2GB) - and access the information and file data remotely over the web. Programs can be updated and loaded through MicroSD...a real advantage for OEMs or those supporting distant sites. Independent RS-232 & RS-485 ports provide connectivity to a variety of serial devices.

### Features

- Fast Logic Scan
- Built-in Ethernet
- Snap-on I/O with up to four SmartStack
- Embedded Ethernet and Web-enabled
- Free Software
- Compact, DIN-Rail Mountable Size
- Plastic Chassis
- MicroSD storage®
- CsCAN, RS-232/RS-485 ports



Specification	HE-CX116	HE-CX251
SmartStack I/O Support	4 Modules*	4 Modules*
CsCAN Network Support	Yes	Yes
Ladder Logic Memory	16KB	256KB
Embedded 10/100 Ethernet	No	Yes
Availability	Late 2010	mid-2010



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**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 combined years of experience with state of the art products to fill our customer requirements.

**REGIONS SERVED**

**TURCK, BANNER, & AMC**  
Minnesota, Western Wisconsin, North Dakota, & South Dakota

**EXLAR, HORNER & PULS**  
Minnesota, Western Wisconsin, North Dakota, South Dakota, Iowa, & Nebraska

Premium, world class products and high caliber support result in successful projects for Factory and Process Automation

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