TURCK

CHARTWELL

Fall 2015 Edition 1 (877) 513 7769 (PROX), Markham Ontario

WHAT'S NEW?

Business News

Temperature Measuring

We have expanded our TTM (temperature) sensor line to include dynamic programmability and special features via IO-Link. These fully programmable sensors allow a user to program the temperature range required, rather than being limited to specific ranges, for more specific temperature control. This new functionality also allows the sensor to be programmed and used as a temperature switch.

The TTM sensor line includes several models, including remote-mount transmitters, transmitters with integral Class A RTDs (resistance temperature detector), as well as all-stainless steel configurations to meet different measurement, space and material needs of applications. To eliminate problems associated with conventional transmitter assemblies, all of TURCK's compact temperature transmitters are factory assembled with an overmolded or welded housing, and come ready for installation.

- **feature a 4-20 mA temperature transmitter**
- **sensors are pre-scaled 0 to 150 degrees Celsius**
- **easily be programmed to specific temperatures using IO-Link.**

Featured inside:

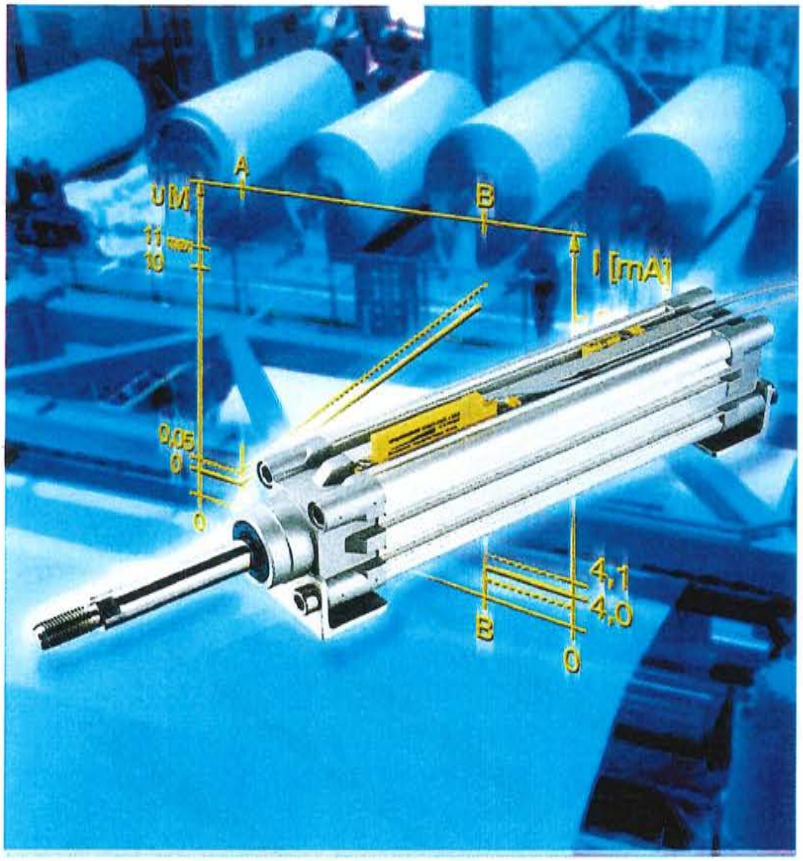
PNEUMATIC CYLINDERS

CYLINDER SENSOR

INDUSTRIAL IO-LINK

M8 CABLING

IO-LINK AND COUPLER



Analogue Cylinder Sensing for Pneumatic Cylinders

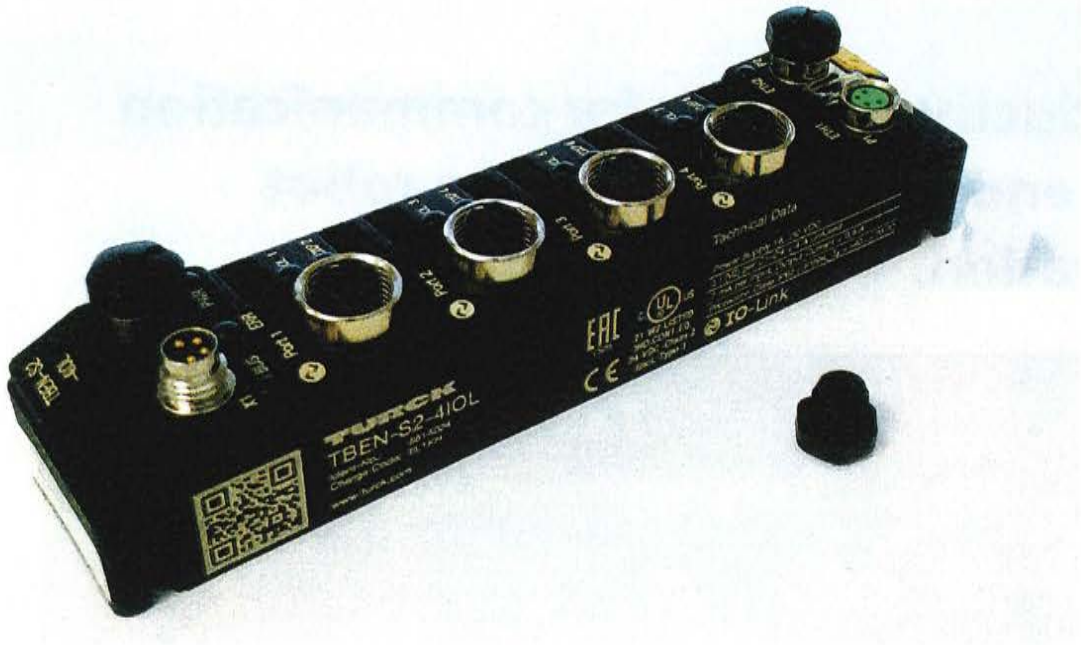
The new analogue magnetic sensor is a great alternative to standard point sensing on cylinders. Easily mounted and with 0-10V or 4-20mA outputs positioning is a snap. Measuring range is 45mm rated 15-30VDC. The unit has 2 LEDs to aid in setup and has three connection methods M8, M12 and pigtail.

High Pressure Cylinder Sensor

With Industries need for sensors that can withstand high pressure applications, we are introducing an extension to our CRS series with a new offering of high pressure inductive cylinder sensors. This new sensor is great for applications involving cylinders with operating pressure rating of up to 3000 psi, Our previous offering allowed for max 1500 psi. The new high operating pressure CRS series come with embedded LED's, providing a easily visible indication of the sensor.

The high operating pressure CRS comes equipped with a industry standard 7/8" male connector, measures 12.7 mm in diameter and comes in a stainless steel smooth barrel housing with a special high pressure sealing ceramic active face; this allows it to withstand high pressure and demanding applications. The new sensor comes in 6 probe lengths varying from 23.2 mm to 95.9 mm with other lengths available upon request to provide the best fit for the application.

Industrial IO-Link



The 32 mm slim TBEN-S family of Industrial IO now has a new IO-Link Master module. Our new module can be operated automatically in Profinet, Modbus TCP or EtherNet/IP thanks to our unique Multiprotocol communication. Power and communication is connected via M8 4 pin Power and M8 4 pin Ethernet connections. The body is fully encapsulated and is IP69K rated. The 4 onboard IO - Link Master connections, support IO-Link 1.1.

M8 Industrial Ethernet Cabling

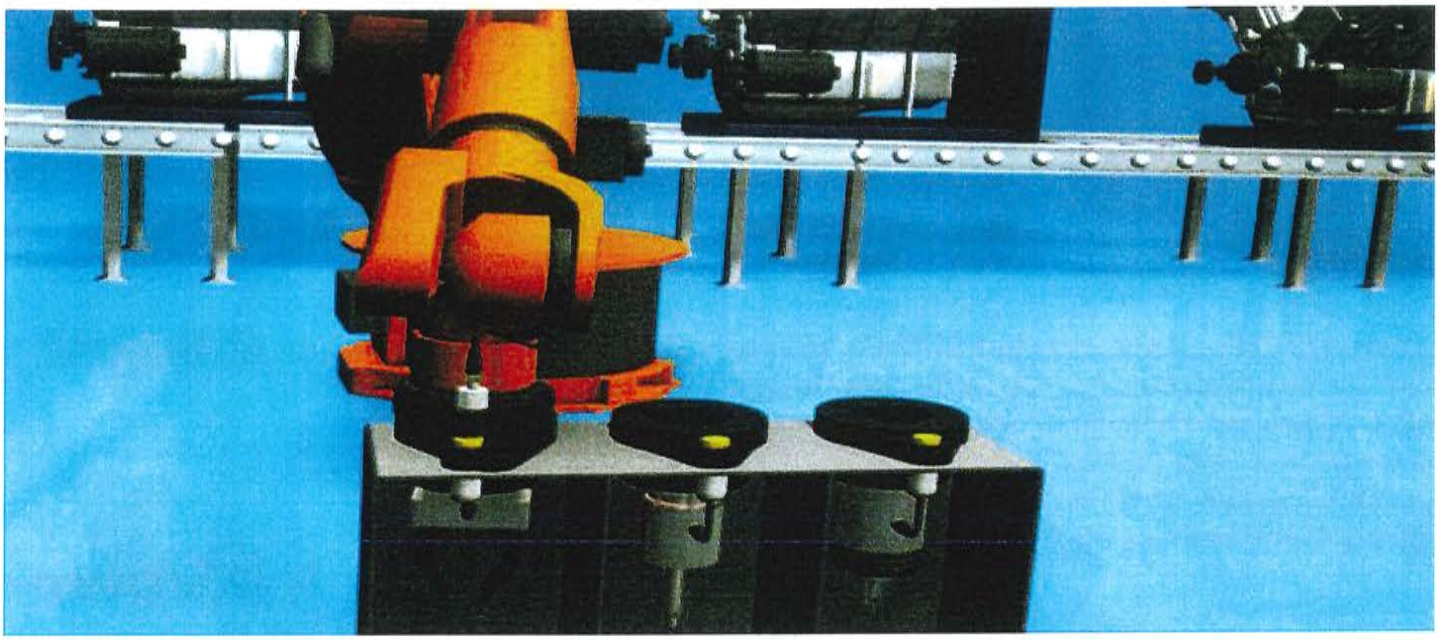
To keep up with the demand for smaller control devices, TURCK announces its first M8 Industrial Ethernet connectivity solution, the smallest available to date. Our new M8 Ethernet offers all of the benefits customers are accustomed to from TURCK Ethernet connectivity, but in a smaller package for applications with limited space. With the ability to transfer up to100Mbps of data, TURCK's new M8 connector for Ethernet is suitable for various Industrial Ethernet protocols, including EtherCAT. It utilizes a shielded CAT 5e cable, with the 360-degree shielding carried through to the coupling nut. In addition, the cable offers a high flex rating.

Suppliers

- TURCK
- hilscher COMPETENCE IN COMMUNICATION
- GRACE ENGINEERED PRODUCTS, INC
- Kübler
- DATALOGIC
- comat RELECO WORLD OF RELAYS
- Curtis Industries A Div. of Powers Holdings, Inc.

App Note

IO Link and Inductive Coupler for communication and control of end of arm tooling on a robot transfer application.



A client wanted to upgrade existing tooling. The project required an identification system and non-contact method of communicating to end of arm tooling for a robotic tool changer.

With Three different end of arm tools the application required the ability to "Holster the tools with communication being possible to the new tool immediately. A Rockwell PLC was located Upstream from the robot and was to control the IO monitored at the end of arm tool so Ethernet connectivity was critical.

The solution incorporated Turcks IO-Link, BL20 in-panel IO and our high powered inductive coupler.
As a standard, all IO-Link devices must have a Unique Identification code (UID) and description. A side benefit, this was used and transmitted via the TURCK Inductive Coupler to the PLC to identify the digital input modules located on all three end effectors, functioning as both tool ID and control.
Data exchange for up to 16 sensors is carried across the air gap between the primary and secondary inductive coupler. This plus the UID eliminated the need for costly RFID systems and high maintenance slip rings.