# Telemecanique Sensors A Trusted Specialist Providing

# Reliable Sensing Solutions





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## XUY Photoelectric Roller Conveyor Sensors

# You need a fast, simple, and reliable solution for sensors' integration into your roller conveyors?

#### **Optimized installation and maintenance**

Simple, fast with no settings, no alignment, no environment teaching, and optimized mounting with no additional brackets or reflectors required.

#### 100% detection

No background or foreground limitations (ideal especially with presence of high-visibility jackets) while detection is effective on the full width of the conveyor.

#### Shockproof to improve operation costs

Benefit of the mechanical installation, embedded within the conveyor frame unlike solution with reflectors and brackets, it prevents product damage and extends lifetime.



## New XUM Miniature Photoelectric Sensors





# Regardless of the detection target or the production line speed, XUM is the solution!

Telemecanique Sensors launches a new XUM offer on the market. It's here; the first step of a complete renewal of our optical photocell offer!

#### Increase your production rates

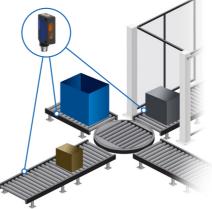
Even in strongly lit environments and at high speed, the XUM will detect targets as fast as every half millisecond. Coupled with an unmatched sensing distance, the XUM's antiinterference mode allows side-by-side installations for complete, rapid detection coverage over wide areas!

#### Simplify your machine integration

The XUM's miniature size and anti-corrosive housing enable fast installation in tight industrial and EMC environments. Easily adjust sensing distance and output settings in all modes using the sensitive potentiometer.

#### "Simply easy!" product selection

Reduce inventory and cut stock management cost with a simpler, concentrated 6-version range that addresses virtually any photoelectric sensing application.





## XCMW Wireless Switches for Cable-Less and Energy-Saving Detection



## Wireless and battery-less Limit Switches in miniature format!

#### Wireless

The revolutionary wireless technology from Telemecanique Sensors simplifies machine communication where cabling is difficult, expensive, or unwanted. It is the perfect way to give mobile machines more freedom of movement. The wireless and battery-less technology also drastically reduces maintenance.

#### Easy to install

The bodies of the wireless and battery-less limit switches from Telemecanique Sensors have been designed to fit in extremely compact areas. They come in a plug-and-play kit and are offered in out-of- the-box compatible packs comprising the transmitter and a receiver.

#### Green and energy saving

The self-powered technology of XC Wireless and battery-less Limit Switches from Telemecanique Sensors eliminates battery replacement, battery recycling, and reduces raw materials. The wireless technology of XC Wireless and battery-less Limit Switches also eliminates cables and other materials necessary to connect power to the switch.

## XX Software-Configurable Wide Beam Ultrasonic Sensors



# Wide angle ultrasonic sensor detection for logistic applications

Innovative XX Wide Beam Ultrasonic Sensors make efficient detection for logistic system "Simply easy!"

#### Detection over a large area detection

Enhance detection with XX Ultrasonic Sensor's new PCB design. The wider beam covers more area with fewer sensors. 'Synchronization' feature ensures reliable detection with minimal cross-talk, even with multiple sensors. Trust XX Ultrasonic Sensor for efficient and precise results.

#### **Reliable detection in variant environments**

**Machine integration** 

XX Wide Beam ultrasonic with high repeat accuracy & high EMC immunity can operate from -40°C to +70°C to make detection more reliable in different environments. The high tilt angle helps detects objects in any position without losing reflected echo.

# Dual outputs design ensures both the real-time distance measurement via analog output and alarm set-up for limit position through PNP output. The sensors come with configuration & troubleshooting by software and with an integrated M12 5-pin connector. Take them out of the box, plug them in!

## Telemecanique Sensors Offer Overview











FOOD & BEVERAGE

## LIMIT SWITCHES

- A leading supplier of top quality limit switches for over 90 years
  - Broad range of options and accessories
- Offering heavy duty, compact, miniature and applicationspecific limit switches
- New wireless and battery-less
- Reference: XC range

Limit Switches

**IEC Limit Switches** 



NEMA Limit Switches

- · Meet IEC standards and are accepted globally
- Meet domestic and other international standards including NEMA, UL, CSA, VDE and more
- Miniature, compact, and industrial switches for general, medium, and heavy-duty apps
- Variety of operating heads, contact configurations, and lever arms. Versions for automated applications, safety, and environments with shock and vibration
- Reference: XC range
- · Proven line of limit switches that can withstand heavy-
- industry demands (formerly known as the Square D brand)Rugged and Dependable, our switches are built with
- unparalleled quality
- Available in Standard Industrial
- Heavy Duty, Miniature potted, and Severe Duty Enclosures
- With a broad range of options and accessories our NEMA line provides virtually unparalleled flexibility
- Reference: 9007 range



## **INDUCTIVE & CAPACITIVE SENSORS**



Inductive Sensors



**Capacitive Sensors** 

- · One of the most comprehensive product lines on the market
- Standard cylindrical forms: M8, 12, 18, 30
- Standard rectangular and flat forms
- Top quality enclosures up to IP69K rating
- Available in standard and increased sensing range
- Constructed for durability in harsh environments
- New one-piece 303/316L stainless steel and WFI proximity sensors
- Reference: XS range
- · Detection of objects irrespective of material or conductivity
- Ideal for sensing non-metal objects for level control of fluids and granular material
- Sensitivity can be adjusted to detect bulk materials or a liquid level "through" another object.
- Standard cylindrical forms: M12, 18, 30
- Reference: XT range



## Telemecanique Sensors Offer Overview













## PHOTOELECTRIC SENSORS



Photoelectric Sensors

- Available in thru-beam, polarized retro reflective, proximity diffuse and diffuse with background suppression
- Multi-mode sensors that can switch between modes
- Application specific sensors for transparent material detection, label sensing, color detection, color mark reading, distance measurement & much more
- Cost-effective and easy to install fork sensors
- Roller conveyor sensors for between-the-rollers detection
  - Reference: XU range





**Ultrasonic Sensors** 

## **ULTRASONIC SENSORS**

- Industry-leading technology uses sound waves for object detection, distance measurement, and level control and provides analogue output for continuous monitoring
- Non-contact detection of any material in spite of lighting conditions, colors, dusts, splashing materials and liquids
- · Detects up to an 8 m distance with wide angle detection
- Available in multiple form factors and in top quality plastic, brass and stainless-steel enclosures to fit in even the most challenging environments
- Intuitive software enables programming for any application
- Reference: XX range



## **RADIO FREQUENCY IDENTIFICATION (RFID)**



Radio Frequency Identification (RFID)

- Enables object traceability, identification (tracking) and access controls
- Compatible with other manufacturer RFID components using 13.56 Mhz frequency components, including tags
- Automatic setting of speed,format, parity, & protocol communication parameters.
- Network connection boxes that support Modbus TCP/IP, Ethernet IP and Profibus-DP PLC
- Reference: XG range



## **CLOUD-CONNECTED SENSORS**



Sensors

- Enables real-time remote monitoring from anywhere you can receive a signal
- Data and alerts are sent to the internet cloud
- Information is received on the phones of all designated contacts
- Enables more efficient production and provides higher security
- · Records event history
- · Increases system reliability
- Reference: XIOT range



## Telemecanique Sensors solutions for enhanced machine safety









FOOD & BEVERAGE

## SAFETY SENSORS AND SWITCHES





Safety Interlock Switches



Coded Magnetic Switches



Rope Pull Switches



- Protects personnel in guarding applications where contact with guard is required
- · Features positive opening contact operation and tamper-resistant mounting
- Interrupts machine or control processes when switch plunger or lever is deflected
- Available in miniature or compact size with plastic or metal bodies.
- Reference: XCSD / P / M range
- · Verifies closure of doors, gates, and guards before starting a process
- Minimizes accidents by removing actuating key and sending stop signal when guard or gate is open
- Simple installation and configuration
- Metal or plastic bodies available
- Compatible with assortment of actuating keys meeting domestic and international standards.
- Reference: XCSLE / F, XCSA / B / C / E range
- · Ideal when no contact desired between switch and actuating key
- . Tamper-resistant and suitable for all safety circuits
- · Tolerates misalignment without placing operating forces on gates or doors
- Multiple mounting options for maximum flexibility
- Small and sealed, perfect for confined spaces or washdown
- Achieves higher safety rating of PLe Cat4 with Safety RFID XCSR
- XCSR Daisy chain architecture with diagnostic module for smarter safety systems
- Reference: XCSR, XCSDMR / C / P range
- Enables an emergency stop to be signaled at any point along cables extending up to 650 ft.
- Simple operation and installation
- · Supports emergency stop and normal stop operations
- Meets ISO 13850 standard
- Emergency stop function locks contacts in the open position and requires manual reset
- Reference: XY2CJ / H / E / D range
- Provides point of operation protection around industrial machinery or guarding of large areas without gates or guards
- Ideal for safeguarding larger areas while maintaining visibility and easy access
- Light curtains with slim design for limited space
- XUSL4M range features integrated muting arms for simplified mounting and reliable muting function with pre-defined distance.
- Reference: XUSL4E / 2E range



## Telemecanique Sensors Offer Overview











## PRESSURE SENSORS AND SWITCHES



Pressure Sensors and Switches



IEC Pressure Sensors and Switches



NEMA Classic Pressure, Vacuum and Float Switches

- Wide variety of pressure and float switches and sensors give you the right choices for both simple and complex fluid control applications with time proven performance and reliability
- The innovative, compact construction simplifies installation while providing a long service life
- Rugged design provides solutions suitable for even the most demanding applications and environments
- Reference: XM range
- Comprehensive range provides versatile solutions
- for a wide variety of fluid control applications
- Conforms to IEC standards, and are globally recognized and accepted
- User-friendly electronic transmitters and switches offer robust, accurate,
- reliable and cost effective pressure measurement
- Compact design provides easy installation & reduces mounting space
- Reference: XM range
- The trusted, reliable, rugged and time-proven performance (formerly known as the Square D brand)
- Pressure, vacuum, and float switches meet most domestic and international standards, including NEMA, UL, CSA, CE
- Simple installation and rugged design suitable for demanding applications and environments
- Wide range of options and accessories
- Reference: 90\*\*, F\*G range



## ACCESSORIES



- Pre-wired connectors: for easy connection of sensors with connectors to terminal blocks or PLC inputs
- Connectors: for connecting a cable of usable length to a sensor with connectors
- Jumper cables: for connecting sensors with connectors to splitter blocks
- Connector adaptors: transform a sensor with terminals into a sensor with connectors
- Mainly available connectors M8, M12, M18, M23, 1/2", 7/8"

