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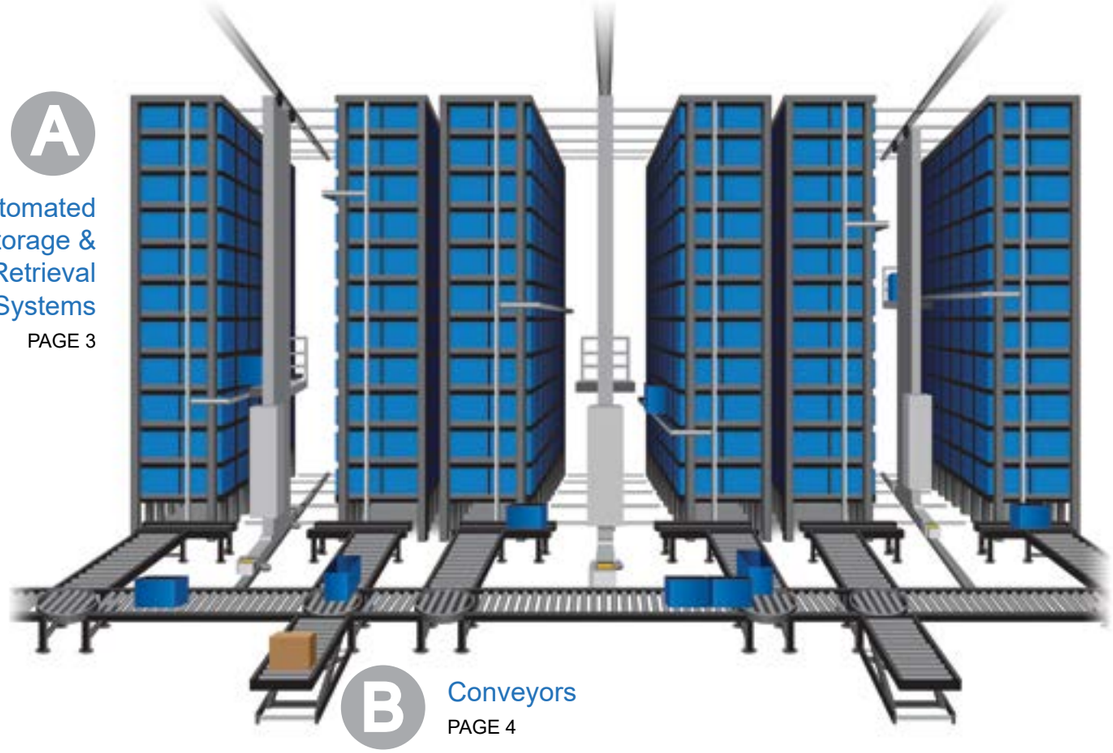
Detection & Safety solutions

Conveying and Material Handling Applications

YAGEO GROUP Brings you | Telemecanique Sensors

Material Handling in Warehouses



A

Automated Storage & Retrieval Systems

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Conveyors

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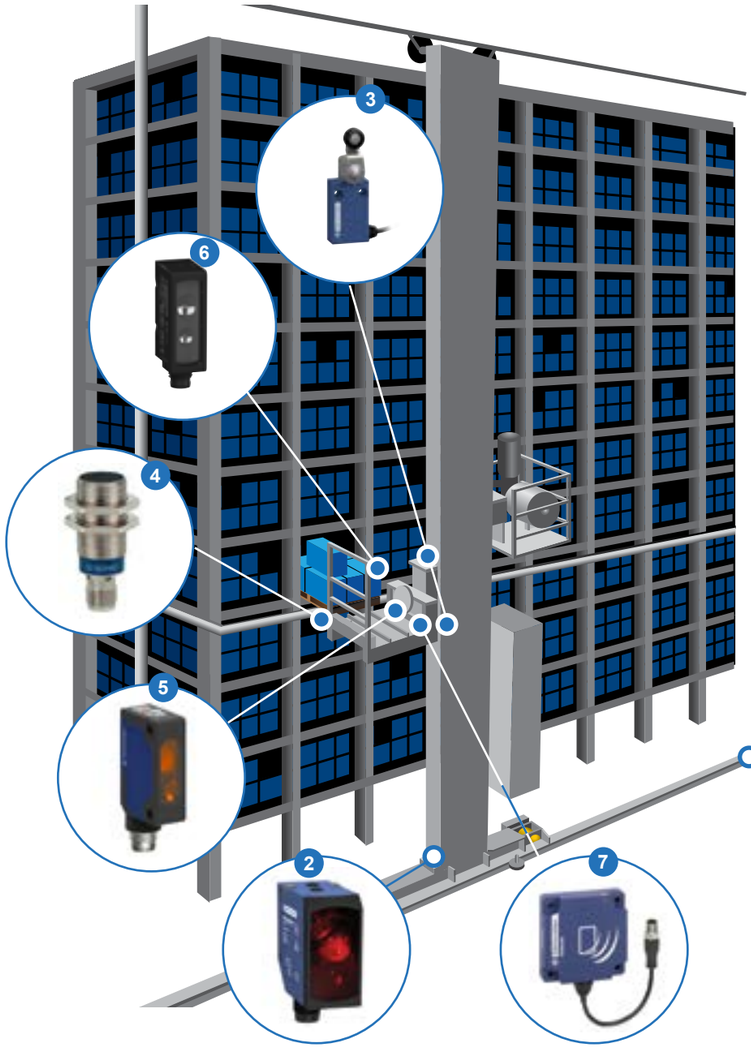
Telemecanique Sensors is a world-class global brand offering a comprehensive line of products to support your material handling applications. Whether you are specifying a detection solution for an automated storage and retrieval system, or a conveyor system, Telemecanique Sensors has a sensor solution for you!

On the following pages, the sensors used to operate these three primary material handling machine systems are identified by the function they perform. Locate the sensor performing the specific task you are addressing and then find the specification details for that sensor in the product index section beginning on page 5.

We make the process of choosing a sensor Simply easy!

A Automated Storage & Retrieval Systems

Example of a unit load Automated Storage & Retrieval System



1 XS Rectangular Inductive
Detects overtravels on horizontal motion

2 XUK Photoelectric Laser
Measures distance for positionning the fixed-aisle crane

3 XCMH Limit Switch
Monitors handling platform vertical overtravels

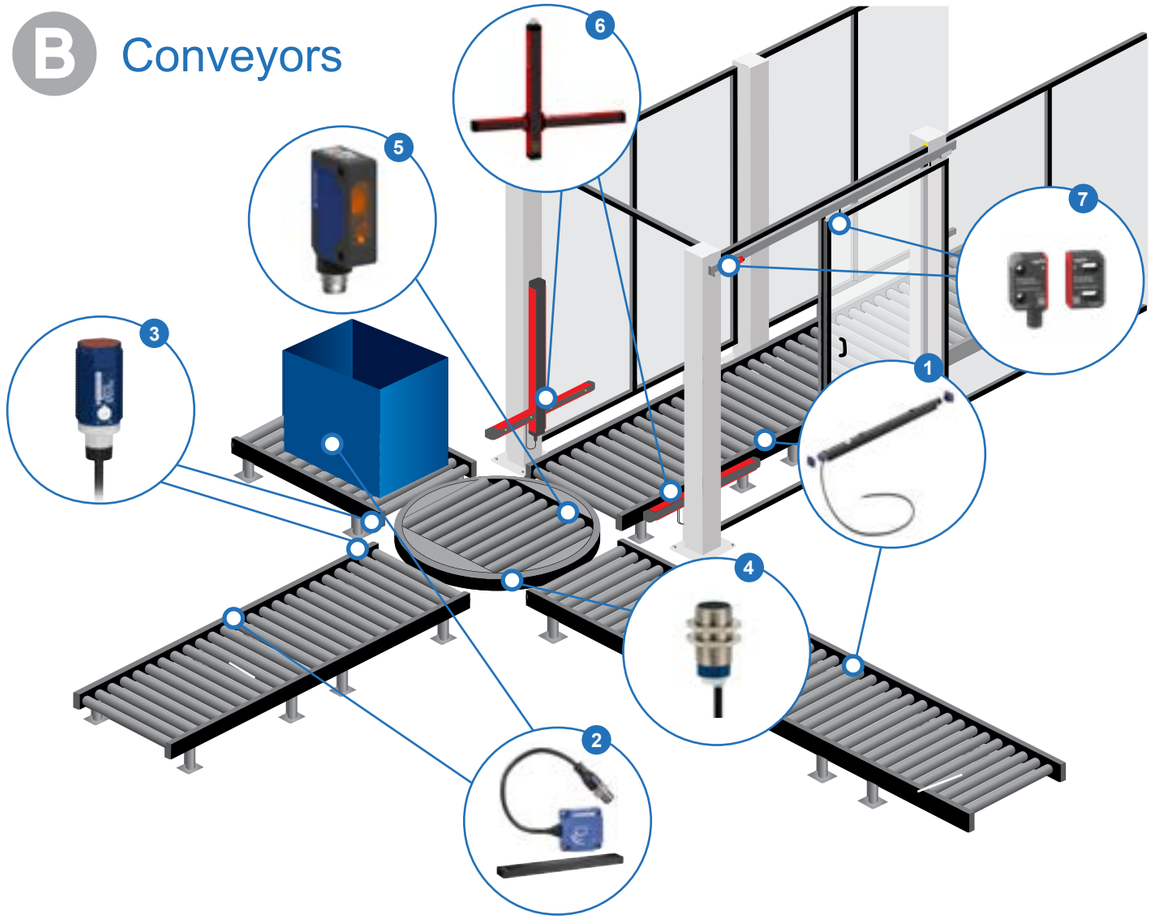
4 XS Cylindrical Inductive
Detects when the handling platform either picks up or deposits the load

5 XUM Photoelectric Reflex Mode
Verifies the presence of load on the handling platform

6 XUM Photoelectric BGS Mode
Positions the load handling platform in front of a storage location

7 XG Radio Frequency Identification
Identifies and traces trays

B Conveyors



1	XUY Roller Photoelectric Sensor	Integrated, between-the-rollers detection of the passage and presence of any object
2	XG Radio Frequency Identification	Traceability of packages in the warehouse
3	XUN Photoelectric Reflex Mode	Detecting the presence of packages for turntable position synchronization
4	XS Cylindrical Inductive	Positioning turntable for transferring products from conveyor to conveyor
5	XUM Photoelectric Reflex Mode	Acknowledging the product at the right position before rotating the turntable
6	XUSL4M Safety Light Curtains with Muting	Efficient detection of machine operators with uninterrupted automation processes
7	XCSRM RFID Safety Sensor	Shuts down the machine if the door opens

> XU Photoelectric Sensors

XUB Cylindrical

Sensing Mode	Sensing Distance	Output	Catalog Part Number	
			Pre-Cabled	M12 Connector
Reflex polarized	7 m	DC4 NO/NC PNP	XUB9APXNL2	XUB9APXNM12
Background suppression	0.3 m	AC/DC NO	XUB8APXNL2	XUB8APXNM12

XUM Miniature

Sensing Mode	Sensing Distance	Output	Catalog Part Number	
			Pre-Cabled	M8 Connector
Reflex polarized	8 m	DC3 NO/NC PNP	XUM9APXBL2	XUM9APXBM8
Background suppression	0.3 m	DC3 NO/NC PNP	XUM8APXBL2	XUM8APXBM8

XUK Laser

Sensing Mode	Sensing Distance	Output	Catalog Part Number
			M12 Connector
Reflex polarized for distance measurement	70 m	4-20 mA + NO/NC	XUK9TAH2MM12
Background suppression for distance measurement	5 m	4-20 mA + NO/NC	XUK8TAE2MM12

XUY Roller

Sensor designed for roller conveyor from 200 to 1200 mm wide, using photoelectric infrared diffuse mode technology. The sensor detects package down to 55 mm wide.

Sensor design, output signals and accessories selection according to your conveyor configuration to be set up through our roller sensor configurator: https://roller-configurator.telemecaniquesensors.com/

> XC Limit Switches

XCMD & XCMH Miniature

Body Size	Contact	Connection	Catalog Part Number			
Miniature Metal	NO+NC Snap action	1 m cable	XCMD2110L1	XCMD2102L1	XCMD2121L1	XCMD2115L1
		M12 4 Pins	XCMD2110M12	XCMD2102M12	XCMD2121M12	XCMD2115M12
Miniature Plastic	NO+NC Snap action	1 m cable	XCMH2110L1	XCMH2102L1	XCMH2121L1	XCMH2115L1

XS Inductive Sensors

XS Cylindrical

Body Size	Sensing Distance	Output	Catalog Part Number	
			Pre-Cabled	M12 Connector
Short M18	5 mm	DC3 NO PNP	XS518B1PAL2	XS518B1PAM12
	8 mm	DC3 NO PNP	XS118B3PAL2	XS118B3PAM12
	5 mm	DC2 NO	XS518BSDAL2	XS518BSDAM12
	8 mm	DC2 NO	XS618B3DAL2	XS618B3DAM12
Long M18	5 mm	DC3 NO PNP	XS518BLPAL2	XS518BLPAM12
	8 mm	DC3 NO PNP	XS618B1PAL2	XS618B1PAM12
	5 mm	DC2 NO	XS518B1DAL2	XS518B1DAM12
	8 mm	DC2 NO	XS618B1DAL2	XS618B1DAM12

XS Rectangular

Body Size	Sensing Distance	Output	Catalog Part Number
			M12 Connector
40 x 40 x 70 mm	15 mm	DC4 NO/NC PNP	XS7C2A1PCM12
	15 mm	DC2 NO	XS7C2A1DAM12
	20 mm	DC4 NO/NC PNP	XS8C2A1PCM12
	20 mm	DC2 NO	XS8C2A1DAM12

XG Radio Frequency Identification

Smart Antenna 13.56 MHz	Sensing Distance	Protocol	Speed	Catalog Part Number
Flat form 40 x 40 x 15 mm	18 to 70 mm	Modbus & Uni-Telway	9600 to 115,200 Bauds	XGCS4901201
Flat form 80 x 80 x 26 mm	18 to 70 mm	Modbus & Uni-Telway	9600 to 115,200 Bauds	XGCS8901201
	20 to 100 mm	Modbus TCP/IP & EtherNet/IP	10/100 MB	XGCS850C201

Electronic Tags	Sensing Distance	Memory Capacity	Memory Type	Catalog Part Number
Disc Ø 30 x 3 mm	45 to 80 mm	2000 bytes	FeRAM	XGHB320246
Disc Ø 50 x 3 mm	70 to 150 mm	2000 bytes	FeRAM	XGHB520246
Flat form 40 x 40 x 15 mm	25 to 39 mm	32000 bytes	FeRAM	XGHB443245

Field Expander	Catalog Part Number
50 x 400 mm	XGFEC540
50 x 200 mm	XGFEC520

XUSL Light Curtains

Safety Level	Height Protected	Sensing Distance	Catalog Part Number	
			Hand detection	Body detection
Type 2 PLd/cat2	910 mm	0…4 m or 0…12 m		XUSL2E4BB091N
	1060 mm		XUSL2E30H106N	
	1210 mm		XUSL2E30H121N	
	1360 mm		XUSL2E30H136N	
	1510 mm		XUSL2E30H151N	
	1660 mm		XUSL2E30H166N	
	1810 mm		XUSL2E30H181N	
Type 4 PLe/cat4	910 mm	0…4 m or 0…12 m		XUSL4E4BB091N
	1060 mm		XUSL4E30H106N	
	1210 mm		XUSL4E30H121N	
	1360 mm		XUSL4E30H136N	
	1510 mm		XUSL4E30H151N	
	1660 mm		XUSL4E30H166N	
	1810 mm		XUSL4E30H181N	
Type 4 PLe/cat4	910 mm	0…10 m or 3…20 m		XUSL4E4BB091L
	1060 mm		XUSL4E30H106L	
	1210 mm		XUSL4E30H121L	
	1360 mm		XUSL4E30H136L	
	1510 mm		XUSL4E30H151L	
	1660 mm		XUSL4E30H166L	
	1810 mm		XUSL4E30H181L	
				Integrated muting (1) (4)
Type 4 PLe/cat4	510 mm			XUSL4MA2BB051N (2)
				XUSL4MB2BB051N (3)
	810 mm			XUSL4MA3BB081N (2)
				XUSL4MB2BB081N (3)
	910 mm			XUSL4MA4BB091N (2)
				XUSL4MB4BB091N (3)

(1) - Possible association with pre-built/pre-adjusted muting arms XUSZAS* (single beam muting sensors) and XUSZAM* (multi-beam muting sensors).
(2) - Hardware and software configuration (with SoMute free software), partial muting and integrated muting lamp.
(3) - Hardware configuration only
(4) - For hand detection, some models are available in 30mm and 40mm resolutions, in different protected heights.

XCSRM RFID Safety

Type	Functions	Pairing	Connection	Catalog Part Number
SINGLE	Manual/Auto*	Unique	M12	XCSRM10M12
SINGLE	Manual/Auto*	3 times pairing	M12	XCSRM30M12
STANDALONE	EDM+Manual/Auto*+Daisy Chain	Unique	M12	XCSRM13M12
STANDALONE	EDM+Manual/Auto*+Daisy Chain	Unlimited	M12	XCSRMU3M12
STANDALONE	EDM+Manual/Auto*+Daisy Chain	Unique	100mm cable+M12	XCSRM13L01M12
STANDALONE	EDM+Manual/Auto*+Daisy Chain	Unlimited	100mm cable+M12	XCSRMU3L01M12

(*) - Manual/Auto: Manual/Auto start.

> Telemecanique Sensors

Simply easy!

Simplicity

+

Proximity

+

Expertise

Telemecanique Sensors is a world-class global brand offering a comprehensive line of over 25,000 types of sensors, including limit switches, pressure sensors, photoelectric sensors and proximity sensors. In addition, we provide state-of-the-art RFID systems compatible with most PLC manufacturers.

Telemecanique Sensors products follow international design standards IEC, EN, UL, GT/B. They are delivered with the relevant markings CE, UKCA,UL, cULus, CCC, ATEX. Environmental compliance declarations Reach, RoHS, POP, TSCA are available.

Telemecanique Sensors is focused on 3 core values - Simplicity, Expertise, and Proximity. Our focus on ***Simplicity*** is reflected in the ease with which our products can be specified, installed, and used. Our focus on ***Expertise*** is reflected in our 70+ years of securing all the necessary and applicable certifications and our long history of addressing some of the most demanding machine applications in the industry. Our focus on ***Proximity*** can be seen in the worldwide availability of our products and technical support.

In short, we make sensing technology simple. We have the experience to address the most challenging applications. And we are there to help.

We make detection solutions ‘‘Simply easy!’’