

# Sensor Solutions for Escalator and Elevator Applications



**Telemecanique**

**Sensors**

Simply easy!

# > Escalator / Elevator-ready sensors

The line of sensor products making up the Telemecanique Sensors Escalator and Elevator Industry offer specifically address the necessary standards, constraints, and detection goals of Escalator and Elevator systems worldwide.

## Compact and easy-to-install solutions

Space is at a premium in the lift industry, both on escalators and elevators. The Telemecanique Sensors product offering reflects our innovative focus not only in regard to the compact and lightweight design of our sensors, but in regard to their availability in a wide range of connector options.

Take them out of the box. Quickly install them. **Simply easy!™**

## Proven, dependable support

Founded over 90 years ago, Telemecanique Sensors specializes in sensors and sensor-related technology. As a global leader in the sensors business, we help our customers select the right technology to get the best performance and reliability from their machines.

Focused on 3 core values - Simplicity, Proximity and Expertise - we have become experts in demanding applications, making our customers' lives **Simply easy!™**

## Easy to connect with the experts



The Telemecanique Sensors team is available for pre and post sales support. We become an extension of your team and share our expertise with you.

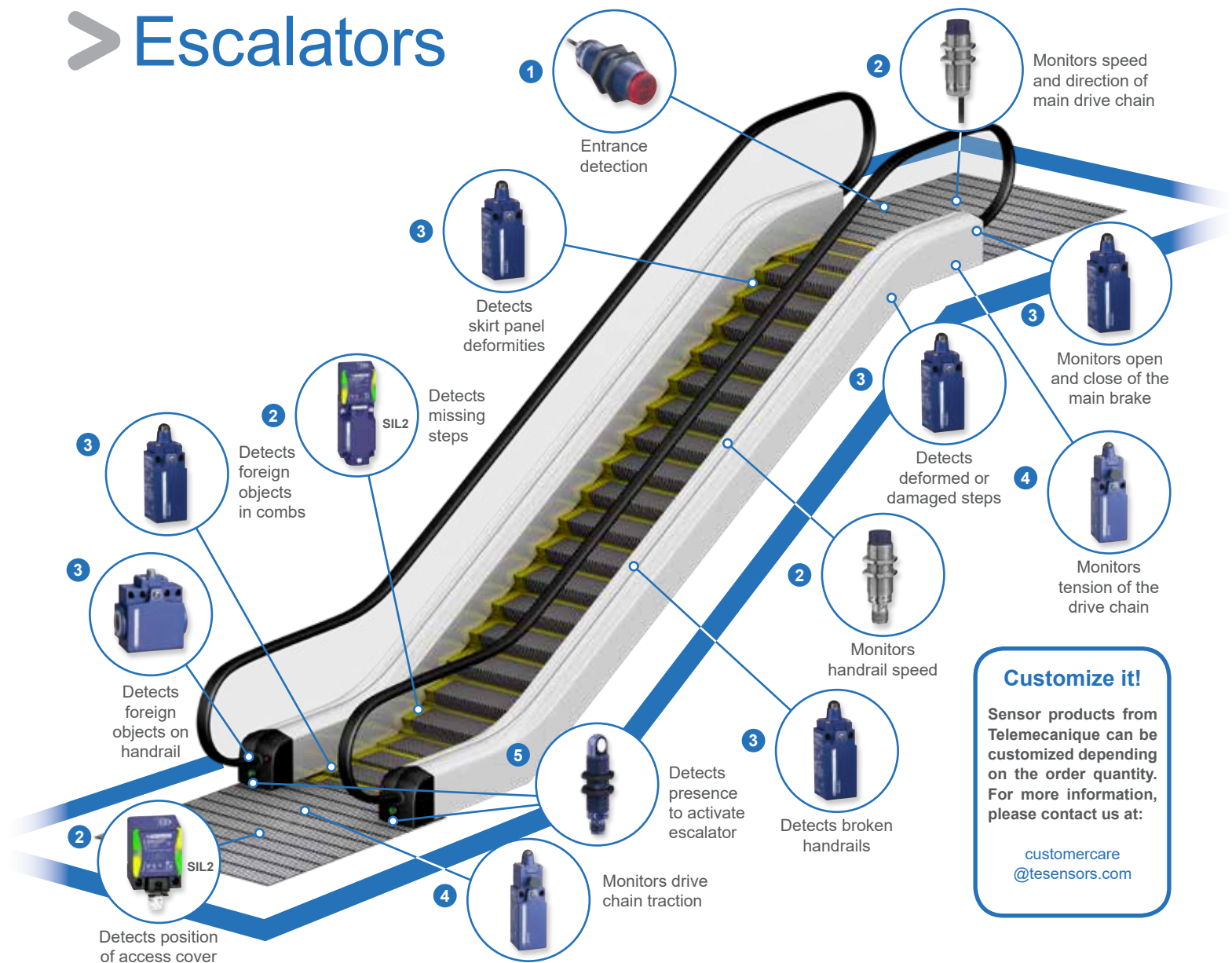
Use the “Service & Support” menu of our website to quickly connect to your local Telemecanique Sensors representative.

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





## > Escalators



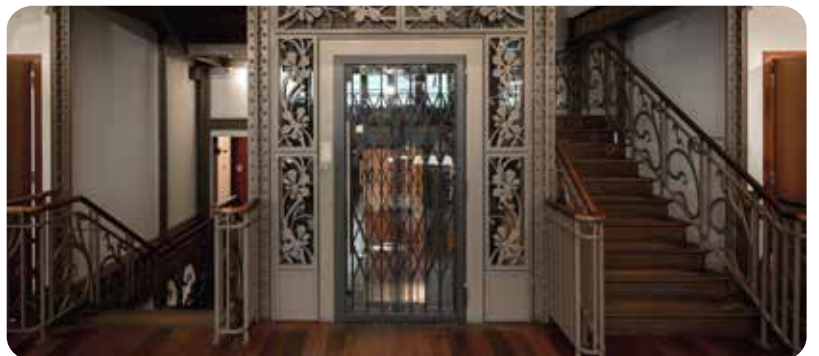
- |   |                         |  |
|---|-------------------------|--|
| 1 | XU Photoelectric Sensor | A full range of Photoelectric sensors in the main form factors from cylindrical to rectangular.                                  |
| 2 | XS Inductive Sensor     | Inductive proximity sensors range for non-contact sensing of metal objects including a SIL2 certified version.                   |
| 3 | XCKN/XCNT Limit Switch  | Standard version of our market leading range of positive opening IEC Limit Switches. Many available heads. 1 or 2 cable entries. |
| 4 | XCNR IEC Limit Switch   | Manual reset version of our market leading range of positive IEC Limit Switches with many available heads.                       |
| 5 | XX Ultrasonic Sensor    | A full range of Ultrasonic sensors for standard or wide area detection.  |



# > Elevators



- |   |                         |  |
|---|-------------------------|--|
| 1 | XCC Encoder             | A range of innovative rotary encoders opened to field BUS communication.                                       |
| 2 | XS Inductive Sensor     | Inductive proximity sensors range for non-contact sensing of metal objects including a SIL2 certified version. |
| 3 | XCS Safety Switch       | Safety switches for controlling the safe opening and interlocking of guards and covers.                        |
| 4 | XU Photoelectric Sensor | A full range of Photoelectric sensors in the main form factors from cylindrical to rectangular.                |
| 5 | XCK IEC Limit Switch    | Standard version of our market leading range of IEC Limit Switches with plastic roller plungers.               |
| 6 | XCNR IEC Limit Switch   | Manual reset version of our market leading range of positive IEC Limit Switches with many available heads.     |
| 7 | XG Compact RFID Sensor  | Easily integrated panel mounting smart antenna for access control compatible with most RFID electronic tags.   |



# > Choose the best product for your application

## Inductive sensors



XS	Sensing distance	5 mm	8 mm	15-20 mm flush / 40 mm non flush	20 mm flush / 40 mm non flush
DC 3 wires NO	PNP	cable	XS118BLPAL2	XS218BLPAL2	XS118BHPAL2
		connector	XS118BLPAM12	XS218BLPAM12	XS118BHPAM12
	NPN	cable	XS118BLNAL2	XS218BLNAL2	XS118BHNAL2
		connector	XS118BLNAM12	XS218BLNAM12	XS118BHNAM12
DC 4 wires NO+NC	PNP	connector	XS8C2A1PCM12 / XS8C2A4PCM12		
			XS8C4A1PCP20 / XS8C4A4PCP20		

## Photoelectric sensors



XU			XUB		XUM		XUVR
			Reflex	Thru Beam	Multimode	Thru Beam	Fork
DC 3 wires NO	PNP	cable	XUB9APANL2	XUB2APANL2R	XUM0APSAL2		XUVR0303PANL2
		connector	XUB9APANM12	XUB2APANM12R	XUM0APSAM8		XUVR0303PANM8
	NPN	cable	XUB9ANANL2	XUB2ANANL2R	XUM0ANSAL2		
		connector	XUB9ANANM12	XUB2ANANM12R	XUM0ANSAM8		
Transmitter		cable	XUB2AKSNL2T		XUM0AKSAL2T		
		connector	XUB2AKSNM12T		XUM0AKSAM8T		

## Ultrasonic sensors



XX
Straight
90° angled head
XXS18P1PM12
XXA18P1PM12

## Limit switches

XC										
	XCKN	M20	XCKN2510P20	XCKN2502P20	XCKN2521P20	XCKN2506P20	XCKN2518P20	XCKN2545P20	XCKN2549P20	XCKN2539P20
	Pg11		XCKN2510G11	XCKN2502G11	XCKN2521G11	XCKN2506G11	XCKN2518G11	XCKN2545G11	XCKN2549G11	XCKN2539G11
	XCNR	M20	XCNR2510P20	XCNR2502P20	XCNR2521P20		XCNR2518P20			
	Pg11		XCNR2510G11	XCNR2502G11	XCNR2521G11		XCNR2518G11			
	XCKS	M20		XCKS502H29			XCKS531H29			XCKS539H29
	Pg13			XCKS502			XCKS531			XCKS531
	1/2NPT			XCKS502H7			XCKS531H7			
	XCNT	M16	XCNT2510P16	XCNT2502P16	XCNT2521P16	XCNT2506P16	XCNT2518P16	XCNT2545P16	XCNT2549P16	XCNT2539P16
	Pg11		XCNT2510G11	XCNT2502G11	XCNT2521G11	XCNT2506G11	XCNT2518G11	XCNT2545G11	XCNT2549G11	XCNT2539G11



All switches above are NO+NC Slow

## Encoders

		ø 58 mm	ø 90 mm
XCC	Resolution	Solid shaft	Through shaft
Incremental	500 pts	XCC1510PS05Y	
	1024 pts	XCC1510PS11Y	XCC1514TS11Y
	10,000 pts		XCC1912PS00KN
			XCC1930TS00KN
Absolute multiturn	8192 pts/4096 turns	XCC3510PS84SGN	XCC3514TS84SB
		XCC3912PS84SGN	XCC3912TS84SGN



## Safety Switches

XCSDMP		Operating zone (1) Sao: 8mm / Sar: 20mm			
	Safety Contacts (2)	NC + NO	2NC	NC + 2NO	2NC + NO
	Without LED				
	Cable 2m (3)	XCSDMP5902	XCSDMP7902	XCSDMP5002	XCSDMP7002
	M12 4P or 8P (4)	XCSDMP590L01M12	XCSDMP790L01M12	XCSDMP500L01M12	XCSDMP700L01M12
	With LED				
	Cable 2m (3)	XCSDMP5912		XCSDMP5012	XCSDMP7012
	M12 4P or 8P (4)	XCSDMP591L01M12	XCSDMP791L01M12	XCSDMP501L01M12	XCSDMP701L01M12

(1) Sao: Assured operating distance; Sar: Assured tripping distance  
 (2) Schematic diagram shown represents the contact states while the magnet is in front of the switch  
 (3) For switches with other cable lengths, replace the last number in the reference by 5 for 5 meters or 10 for 10 meters.  
 Ex. XCSDMC5905  
 (4) M12 4P for XCSDMP59/79 (2 contacts), M12 8P for XCSDMP50/70 (3 contacts)

### XCSRC




**XCSRC10M12:** SINGLE Safety RFID contactless switch (reader + factory paired transponder) • Unique pairing • M12

**XCSRC11AM12:** STANDALONE Safety RFID contactless switch (reader + factory paired transponder) • EDM +  
 Auto start • Unique pairing • M12


**XCSRC12M12:** SERIES Safety RFID contactless switch (reader + factory paired transponder) • Unique pairing • M12

## Pressure Transmitters (for Hydraulic drive Elevator systems)


XMLP		Pressure range (bar) (1)	0...10	0...16	0...25	0...60	0...100	0...250
	Fluids controlled	Hydraulic oils						
	Voltage limits (V)	7...33 V DC for 4...20mA, 12...33 V DC for 0...10 V						
	Dimensions (mm) Ø x L	26 x 38 (M12), 26 x 60.5 (EN175301-803-A)						
	Fluid connections (2)	G 1/4 A (male)						
	Electrical connections (3)	connector M12 4-pins, EN 175301-803-A						
	Output type (4)	4...20mA, technique 2-wires, 0...10V, technique 3-wires						
	Analogue output	M12 4-pins	XMLP010BD21F	XMLP016BD21F	XMLP025BD21F	XMLP060BD21F	XMLP100BD21F	XMLP250BD21F
	4...20mA	EN175301-803-A	XMLP010BC21F	XMLP016BC21F	XMLP025BC21F	XMLP060BC21F	XMLP100BC21F	XMLP250BC21F

(1) Also available with psi range (2) Also available with 1/4"-18NPT male or 7/16-20UNF female (3) Also available with 3-pins packard connector (4) Also available with 0.5...4.5 V and 0...10 V ratiometric output. Available in bulk packs for selling in lots of 25 pcs. Add Q suffix to the reference. Ex: XMLP001GD21F becomes XMLP001GD21FQ

## Pressure Switches (for Hydraulic drive Elevator systems)

XMLD-Fixed differential, dual stage, detection at each threshold		10	20	35	70	160	300
	Setting range (bar)						
	2nd stage switching point (PB2)	1.2...10	2.14...20	4.4...35	9.4...70	16.5...160	36...300
	1st stage switching point (PB1)	0.52...9.32	0.9...18.76	1.9...32.5	6.6...67.2	10.5...154	25...289
	Spread between 2 stages (PB2-PB1)	0.68...5.8	1.24...9.55	2.5...20.4	2.8...46	6...83	11...189
	Without setting scale 2 C/O single-pole pole, snap action contacts (1 per stage)	XMLD010B1S12	XMLD020B1S12	XMLD035B1S12	XMLD070D1S12	XMLD160D1S12	XMLD300D1S12

# Compact RFID Sensors

XG RFID Stations 13.56 MHz, Fixing Ø 22		Compact station for panel fixing (1)	Compact station for panel fixing with indicator light (1)
	Type of associated tag	ISO 15693 to ISO 14443 standard tags. Automatic detection of the type tag.	
	Display	For informing the operator	2 multicolor LEDs (7 selectable colors) driven by Modbus requests
		For the communication	1 dual color LED (Dialog station/tag) 1 dual color LED (Modbus network activity)
Item numbers		XGCS490B201	XGCS49LB201

# > Telemecanique Sensors

## Simply easy!

Simplicity



Expertise



Proximity



**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 and proximity sensors. In addition, we provide industrial encoders and state-of-the-art RFID systems compatible with most PLC manufacturers.

**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!”

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