

# Sensor Solutions for Railway Applications



**Telemecanique**

**Sensors**

Simply easy!

# > Railway-ready sensors

The line of sensor products that make up the Telemecanique Sensors Railway Industry offer specifically address the necessary standards, constraints, and detection goals of railroad systems all over the world.

## Increased safety according to the industry's EN455 standard

The Telemecanique Sensors products for the railway industry meet the most stringent standards in regard to reaction and resistance to fire:

- Compliant with the new fire behavior of the materials and components regulations
- Compliant with the HL2/R26 severity level of the EN 45545 standard
- Integrated with cables that are certified EN 50306 and EN 50264



EN45545  
compliant

## Unparalleled, robust sensor functionality

Consistent with the reputation built by Telemecanique Sensors, the products they offer for the railway industry are benchmarks in regard to their performance, reliability, and efficiency.

This line of railway industry sensors will:

- Resist shocks and vibrations according to the EN 61373 standard
- Resist a wide temperature range from -13°F to 158°F (-25°C to 70°C)
- Endure up to several million mechanical and electrical operations

## Compact and easy-to-install solutions

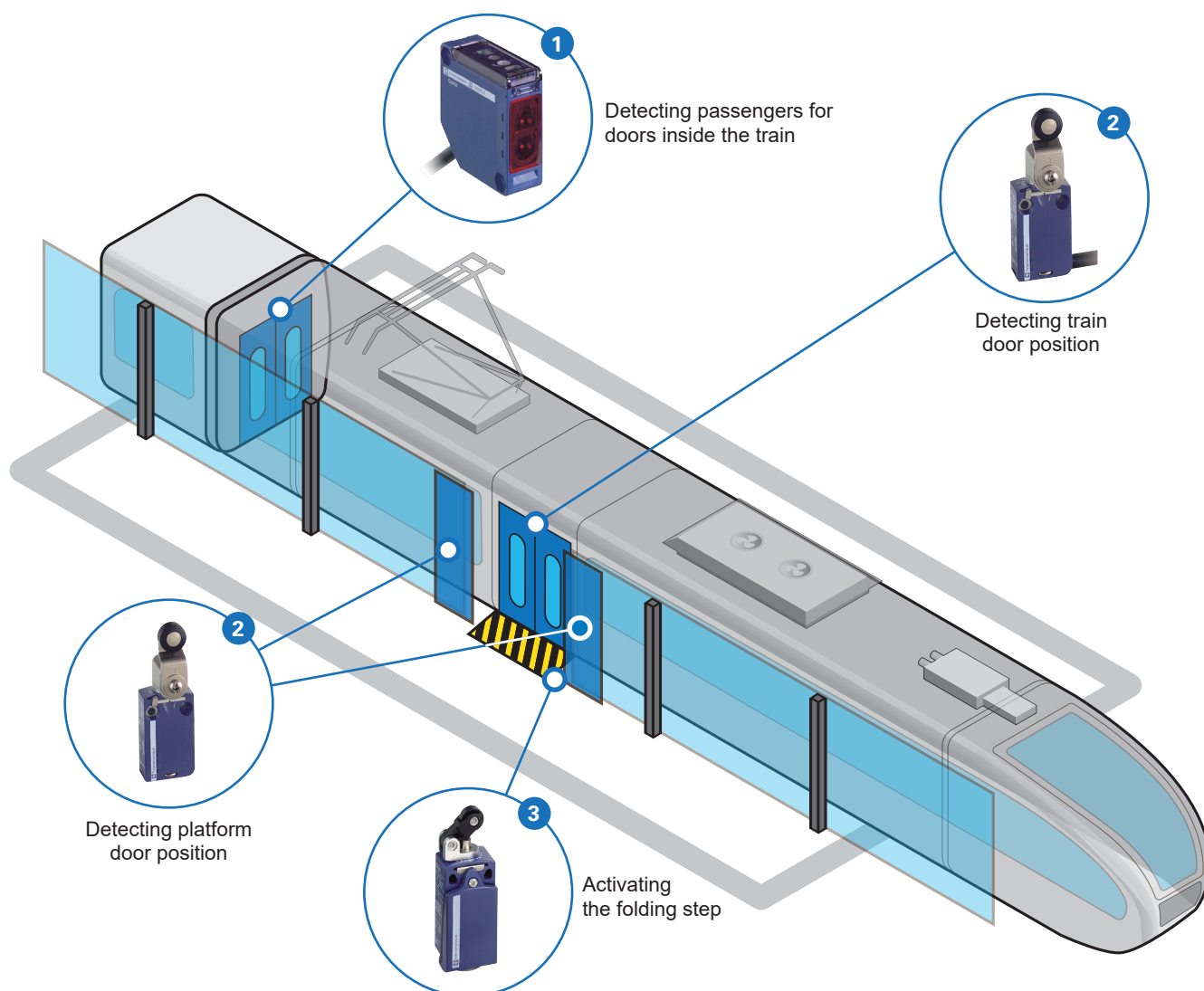
Space is at a premium in the railway industry, both on the trains themselves and in the stations that service them. The Telemecanique Sensors product offering reflects our innovative focus not only in regard to making our products compact and lighter to fit the majority of railway application designs, but in regard to making our sensors adaptable by offering a wide range of connectors.

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





# > Automatic doors



1 XUK9 Photoelectric Sensor

Compact photoelectric sensor

2 XCMD or XCMN Limit Switch

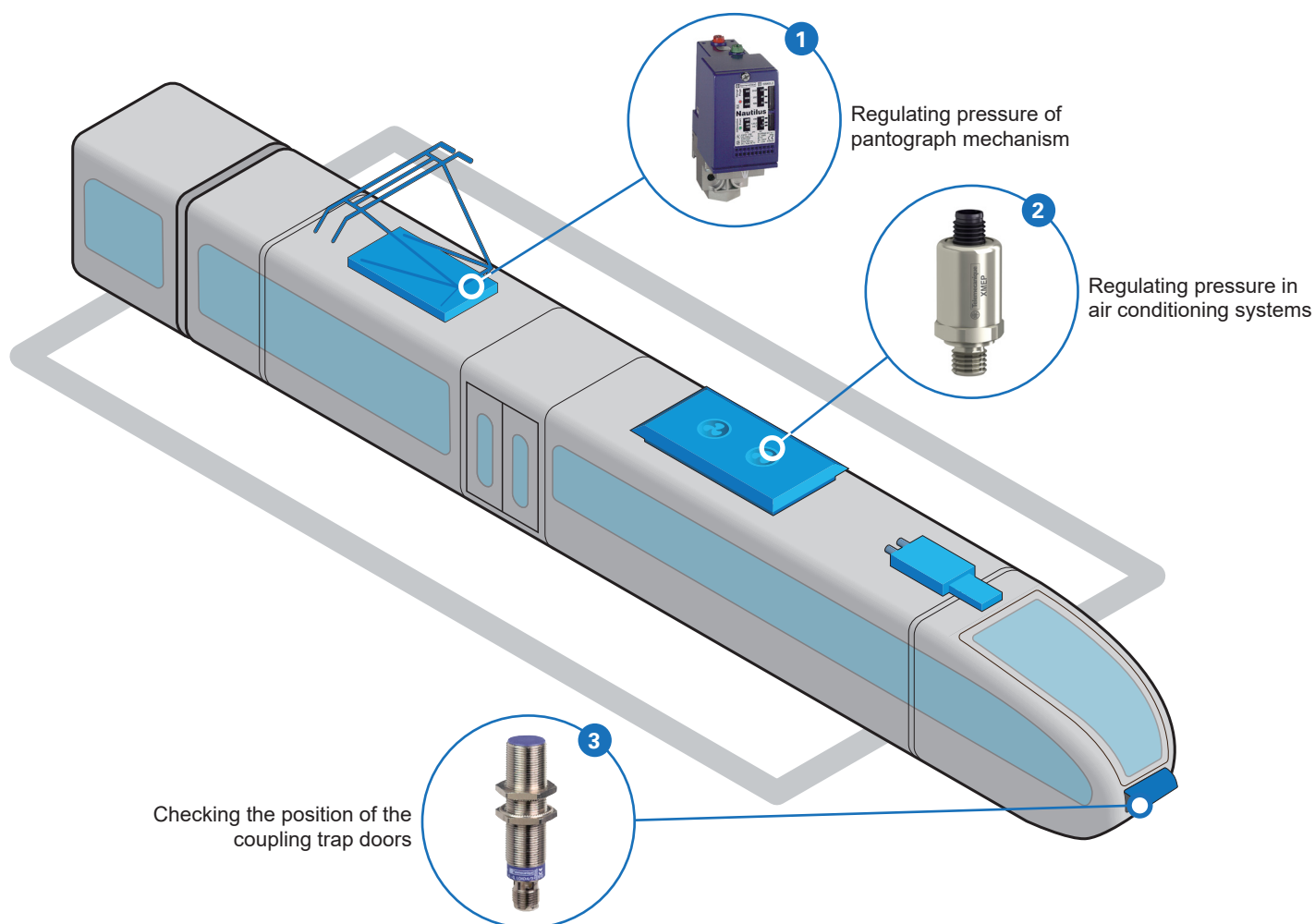
Miniature limit switch

3 XCKD Limit Switch

Universal limit switch with roller lever plunger



# > Pantograph, air conditioning and coupling systems



1 XMLC Pressure Sensor

Electromechanical pressure sensor with pre-adjusted pressure threshold

2 XMLP Pressure Sensor

Compact electronic pressure sensor for HVAC

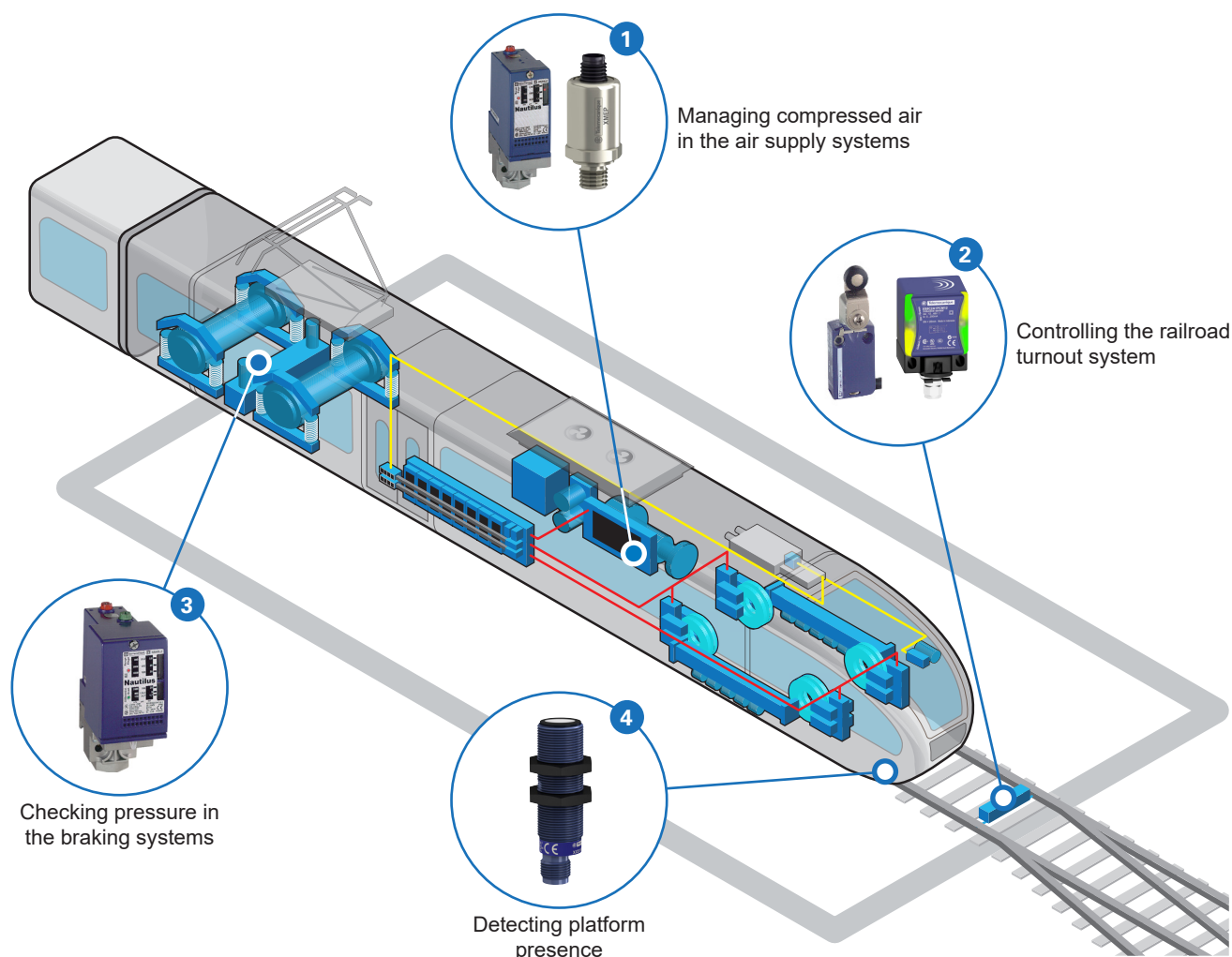
3 XS618 Inductive Sensor

Inductive proximity sensor





# > Air supply and braking system



1 XMLA/B or XMLP Pressure Sensor

Electromechanical or electronic pressure sensor

2 XCMD Limit Switch or XS Inductive

Limit switch or inductive proximity sensor

3 XMLA/B or C Pressure Sensor

Electromechanical pressure sensor with pre-adjusted pressure threshold

4 XX Ultrasonic Sensor

Software configurable and resistant to electromagnetic interference



# > Choose the product best-suited for your application

The following tables present a small part of our offer for railway applications.  
To learn more, visit our website [www.tesensors.com](http://www.tesensors.com) or contact your local sales agency for adapted products.

## Limit switches

Contacts composition



Miniature metal body with 1m cable halogen free

NO+NC snap action

Roller plunger



XCMD2102T1

Roller lever



XCMD2115T1

Vertical or horizontal action roller lever plunger



XCMD2128T1

Miniature metal body with 1m cable halogen free

NO+NO+NC+NC snap contacts

XCMD4102T1

XCMD4115T1

XCMD4128T1

Miniature plastic body with 1m cable halogen free

NO+NC snap action

XCMN2102T1

XCMN2115T1

XCMN2121T1

Classic metal body, EN50047 format, ISO M16x1.5 output

NO+NC snap action



XCKD2102P16



XCKD211816



XCKD2121P16

Pg11 x 3 entries, metal body

NO+NC snap action



XCKM102



XCKM115



XCKM121

## Pressure sensors

Electromechanical pressure switches, 2 thresholds and 1 contact 145psi (10 bar), (with special eyelet terminal lug and dedicated factory setting on request)



XMLB010A2S11

Electromechanical pressure switches, 2 thresholds and 2 separate contacts 145psi (10 bar), (with special eyelet terminal lug and dedicated factory setting on request)



XMLC010B2S11

Electronic pressure transmitters 10 ... 60 bar fluid entry 7/16 - 20 UNF



XMEP060BD71F

## Inductive sensors

Cylindrical M18 inductive proximity sensor, 24 ... 240 VAC/DC



XS618B1MBL20

Cubic inductive proximity sensor with M12 connector, 12 ... 48 VDC



XS8C2A1PCM12

## Photoelectric sensors

8m Reflex polarized photoelectric sensor, 24 ... 240 VAC/DC, with a reflector



XUK9ARCNT



XUZC50

## Ultrasonic sensors

Ø18 Ultrasonic sensor, 1m sensing distance, Analog 4...20 mA output



XXS18P1AM12

# > Telemecanique Sensors

Simply easy!

Simplicity



Expertise



Proximity



Telemecanique Sensors is a world-class global brand offering a comprehensive line of products with 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 that are compatible with many PLC manufacturers.

Telemecanique Sensors has all the right agency approvals, such as UL, IEC, NEMA, CE, CCC, UL, CSA, and EAC.

Telemecanique Sensors is focused on three core values — Simplicity, Proximity, and Expertise. We have become experts in factory automation sensors as well as specialists in demanding applications, making our customers' lives "Simply easy!"

Discover our complete offer: [www.tesensors.com](http://www.tesensors.com) or contact your local sales agency

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