# SAFEGATE

## Access Guarding Made Easy

Type 4 Muting Integrated Access Control Barrier

**ReeR**

# SAFEGATE ////

## Flexible configuration
Hardware or Software configuration
to cover all Muting applications

## Pre-configured Muting logics
Exit-only (parallel/crossed), Entry-Exit (parallel),
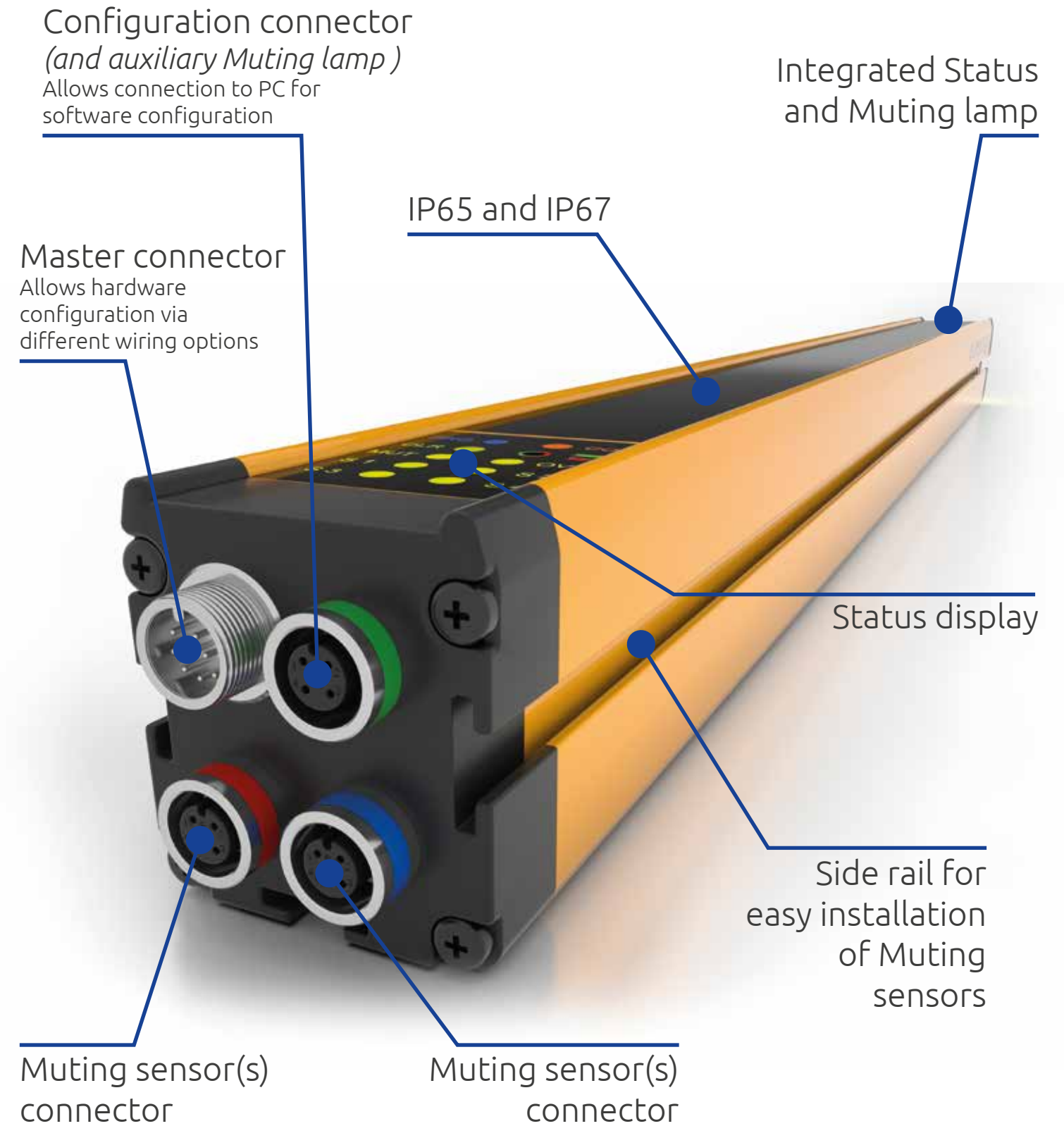Entry-Exit (crossed)

## Integrated Status and Muting lamp

## Fully scalable
Change configuration at any time

## Pre-configured and pre-wired
## Muting arms and Muting brackets

## New M5 multi-beam Muting photocell
Ideal for sensing unconventional objects

## Vast range of accessories
Including special mounting brackets
and floor mounting columns

**Configuration connector**
*(and auxiliary Muting lamp )*
Allows connection to PC for
software configuration

**Integrated Status and Muting lamp**

**IP65 and IP67**

**Master connector**
Allows hardware
configuration via
different wiring options

**Status display**

**Side rail for easy installation of Muting sensors**

**Muting sensor(s) connector**

**Muting sensor(s) connector**

# access control barriers with
# integrated Muting functions

RoHS Compliant    CE    TÜV SÜD    c UL us LISTED PENDING

SAFETY LEVEL
TYPE 4
SIL 3 - SILCL 3
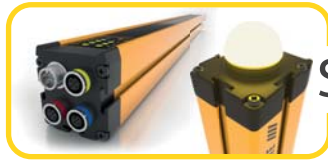PL e - Cat. 4

# A unique range

## Covering all Muting applications
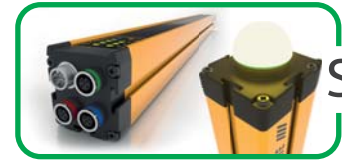
### 1 Choose the barrier model

 **SM**

Hardware configuration

 **SMO**

Hardware configuration
*With integrated Status and Muting lamp*

 **SMPO**

Hardware or Software configuration
*With integrated Status and Muting lamp*

### 2 Configure the Muting logic

**Hardware** configuration
via Master connector wiring

**L2XP configurations**
"Exit-only"
*2 crossed or
parallel beams*

**T2X configurations**
"Entry-Exit"
*2 crossed beams*

**T4P configurations**
"Entry-Exit"
*4 parallel beams*

🟡 🟢 **SM**, **SMO** and **SMPO** models

**Software** configuration
via Safegate Configurator Software
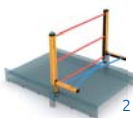
**L2X   L2P
T2X   T4P
configurations**   **SCS**

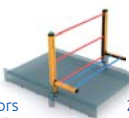🟢 **SMPO** models

### 3 Choose the Muting sensors

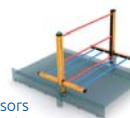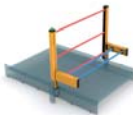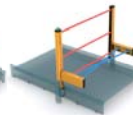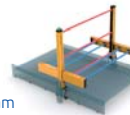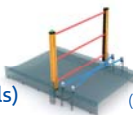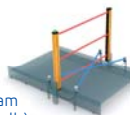|  | One-way / Exit-only | | Two-way / Entry-Exit | |
|---|---|---|---|---|
| **MA Muting arms with integrated sensors** | Crossed beams One-way Exit-only **MA L2X** 2 integrated sensors (Emitter-Receiver) | Parallel beams One-way Exit-only **MA L2P TRX** 2 integrated sensors (Transceiver) | Crossed beams Two-way Entry-Exit **MA T2X** 2 integrated sensors (Emitter-Receiver) | Parallel beams Two-way Entry-Exit **MA T4P TRX** 4 integrated sensors (Transceiver) | **MA** |
| **MZ Muting brackets with M⁵ photocells** | Crossed or Parallel beams One-way Exit-only **MZ L2XP** 2 M⁵ multi-beam sensors | | Crossed beams Two-way Entry-Exit **MZ T2X** 2 M⁵ multi-beam sensors | Parallel beams Two-way Entry-Exit **MZ T4P** 4 M⁵ multi-beam sensors | **MZ** |
| **External M⁵ sensors (or photocells)** | Crossed beams One-way Exit-only 2 sensors (i.e. M⁵ multi-beam sensors or photocells) | Parallel beams One-way Exit-only 2 sensors (i.e. M⁵ multi-beam sensors or photocells) | Crossed beams Two-way Entry-Exit 2 sensors (i.e. M⁵ multi-beam sensors or photocells) | Parallel beams Two-way Entry-Exit 4 sensors (i.e. M⁵ multi-beam sensors or photocells) | **M⁵** |

## access control barriers with integra

## www.reersafety.com

# An integrated solution

## One single barrier for all your access control needs

## SAFEGATE ////

### The most flexible Muting integrated barrier on the market today

Each barrier can be configured as Exit-only (L-Muting) or Entry-Exit (T-Muting) with crossed (X) or pallalel (P) beams.

Configuration can be changed at any time.

Hardware configurable models (SM/SMO/SMPO) allow configuration of Muting logics and functional parameters via the Master connector wiring.

Software configurable models (SMPO) allow configuration of Muting logics and additional functional parameters (i.e. Partial Muting) via Safegate Configuration Software (SCS).

Programmable models (SMPO) allow further configuration parameters, ideal to address particular issues in more complicated application scenarios.

Safegate can be used with MA Muting arms (with pre-aligned and pre-configured integrated Muting sensors), with MZ Muting brackets (with M5 multi-beam sensors) or with any other Muting sensor.

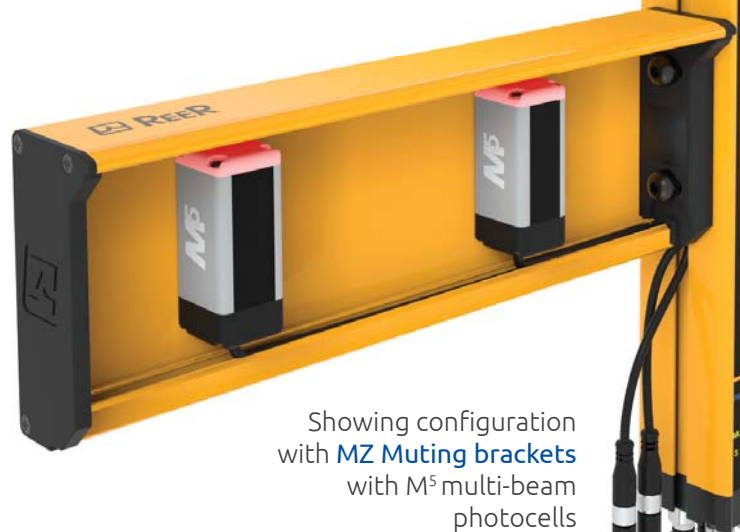Sensors can be upgraded, added or removed at any time.

Models with integrated status lamp allow to easily recognise the status of the barrier.

### Access control barrier with integrated Muting functions

The new Safegate Type 4 range of access control barriers is the ideal solution for the protection of a vast number of high-risk industrial applications, in particular those requiring a high level of integration of the Muting functions.

Safegate guarantees the perfect integration of all Muting sensors that can be directly connected to the access control barrier.

SMPO models can be configured via the SCS software

Showing configuration with MZ Muting brackets with M5 multi-beam photocells

# ted Muting functions

# Main features

## Outstanding characteristics

Showing configuration with **MA Muting arms** with integrated sensors

### SM models
Three hardware configuration options, selectable via different Master connector wiring.

**L2X/P** (one-way Muting with 2 crossed/parallel beams sensors).

**T2X** (two-way Muting with 2 crossed beams sensors).

**T4P** (two-way Muting with 4 parallel beams sensors).

### SMO models
Same as SM models, with integrated Status and Muting lamp.

### SMPO models
Allows hardware or software configuration of all Muting logics.
Hardware configuration via different main connector wiring (as per SMO models).
Software configuration via the provided SCS software; software configuration allows additional functional parameters options particularly useful in complicated or unordinary applications. With integrated Status and Muting lamp.

### Muting sensors
MA Muting arms with pre-wired and pre-aligned sensors for all Muting logics configurations.

MZ Muting brackets with multi-beam M⁵ photocells for all Muting logics configurations.

Special versions for transparent-object detection, i.e. glass (MA TRX G) and extended-lenght versions for high-speed conveyors (MA TRX V).

*Safegate is equipped with two integrated Muting connectors with four Muting inputs, in 4-sensors configurations, the use of a Y-splitter is mandatory.*

### Partial Muting
Programmable model, allows the configuration of all Muting logics and additional functional parameters via the SCS software provided.

### Muting logics
Muting logics are set according to the final application and can be summarised as it follows:

**L2X Logic** Crossed beams (One-way, Exit-only)
Suitable solution for any applications with pallet exit.

**L2P Logic** Parallel beams (One-way, Exit-only)
Suitable solution for applications with transparent material: i.e. bottling industry with pallet exit.

**T2X Logic** Crossed beams (Two-way, Entry-Exit)
Suitable solution for the most common pallet infeed/outfeed applications. Ideal solution in case of a continuous flow of pallets even without separation between the pallets.

**T4P Logic** Parallel beams (Two-way, Entry-Exit)
Suitable solution for applications with transparent material and application with presence of a pallet with reduced width or not systematically centered on the conveyor.

# SAFEGATE

# Technical characteristics

## Enhancing users' experience

### Main features

Resolutions: 30, 40 mm - 2, 3 and 4 beams.

Emitter / Receiver and Transceiver (passive retro-reflector elements) versions .

Integration of the main safety functions, including self-testing of solid state outputs, external device monitoring (EDM) and Start/Restart interlock function.

Cross-section: 55 x 50 mm.

Protected height: 300 ... 2200 mm.

Protection rating: IP65 and IP67.

Operating temperature: -30 ... +55 °C (without condensing).

Integrated Status and Muting lamp (SMO/SMPO models).

### Integrated status lamp

**GUARD**
Light curtain in Normal status

**MUTING**
Light curtain in Muting condition

*Flashing* **OVERRIDE**
Light curtain in Override condition

**BREAK**
Light curtain beam interrupted

*Flashing* **FAIL**
Light curtain in error condition

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## Muting arms kits, Muting brackets kits and M⁵ multi-beam photocells

### Muting arms kits (MA)

MA L2X arms
(2 through-beam sensors)

MA L2P TRX arms
(2 retro-reflective sensors)

MA T2X arms
(2 through-beam sensors)

MA T4P TRX arms
(4 retro-reflective sensors)

### Muting brackets kits (MZ)

MZ L2XP brackets
(with 2 M⁵ multi-beam sensors)

MZ T2X brackets
(with 2 M⁵ multi-beam sensors)

MZ T4P brackets
(with 4 M⁵ multi-beam sensors)

*Special Muting arms and brackets for transparent-objects applications (i.e. glass) and high-speed conveyors available.*

### M⁵ multi-beam photocell

**Through-beam barrier type photocell with 5 beams.**

Ideal for installation as Muting sensor, allows to detect also the most difficoult objects like, for example, piles of pallets.

With a compact metal housing and a polycarbonate protective front window, it offers the right degree of robustness ideal also in the most demanding environments.

Provided with pigtail cable with M12 5-pole connector for easy installation.

The integrated status signaling lamp allows to easily verify the status of the system.

**M⁵**

# Safety. Detection. Control.

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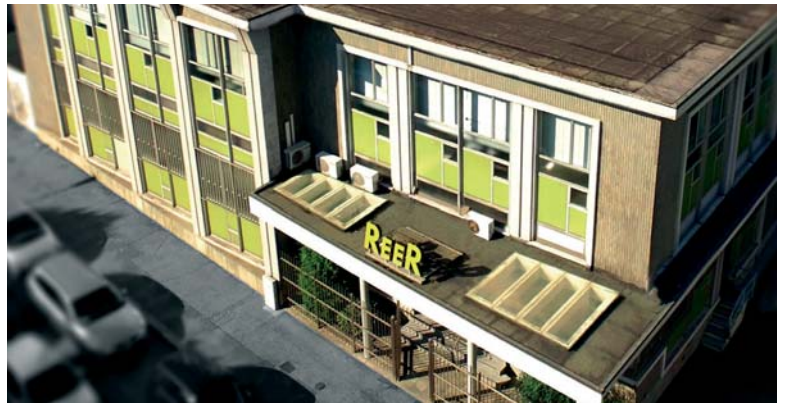www.reersafety.com | info@reer.it

## More than 50 years of quality and innovation

Founded in Turin, Italy in 1959, ReeR distinguished itself for its strong commitment to innovation and technology.

A steady growth throughout the years allowed ReeR to become a point of reference in the safety automation industry at a worldwide level.

The Safety Division is in fact today a world leader in the development and manufacturing of safety optoelectronic sensors and controllers.

**ReeR is ISO 9001, ISO 14001 and BS OHSAS 18001 certified.**

Made in Italy
since 1959

**ReeR**