



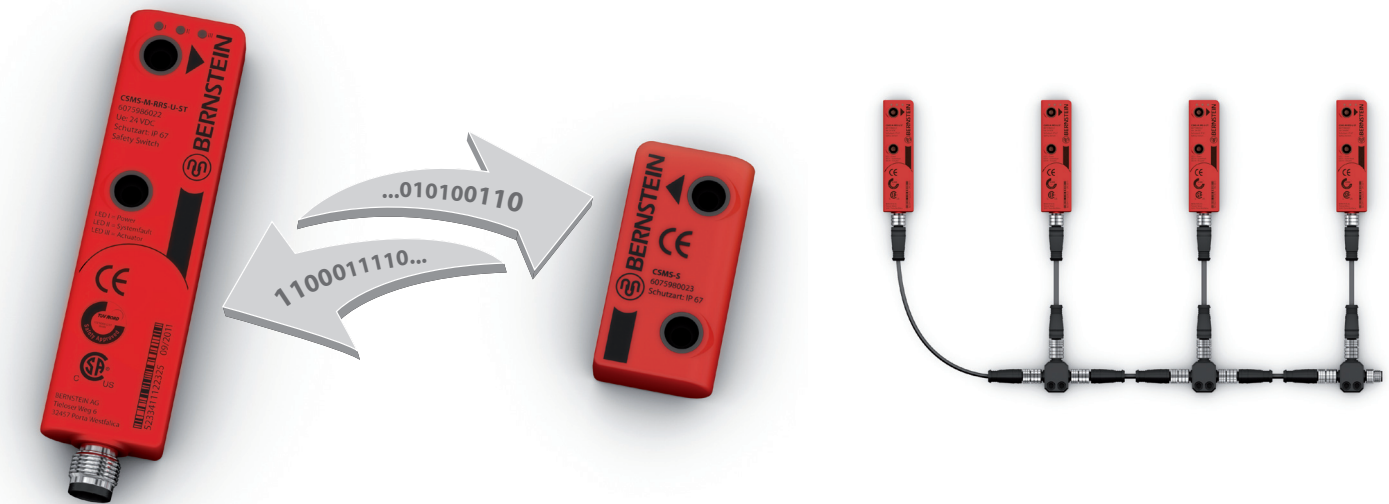
## BERNSTEIN CSMS

The most versatile contactless safety monitoring sensor throughout the market

# The CSMS

## Contactless Safety Monitoring Sensor

The **CSMS** is a **contactless safety sensor** which ensures that safety doors and protective guards remain closed. The contactless sensor uses **RFID technology** and can be used individually or in series.



The **CSMS** is a future-proof safety product which already **meets one of the requirements of draft DIN EN ISO 14119** regarding manipulation protection.

The CSMS offers **excellent diagnostics** enabling open safety guards and system errors to be located quickly.

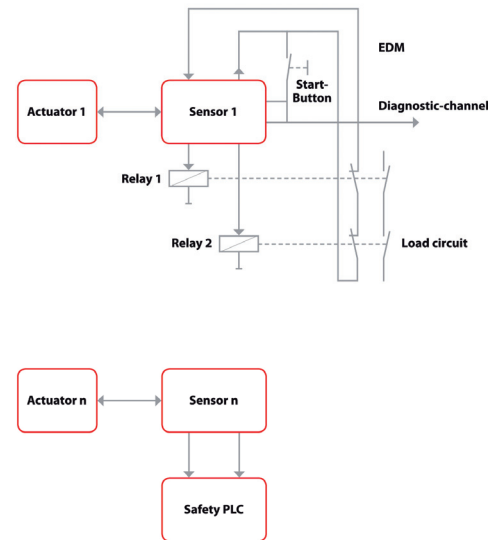
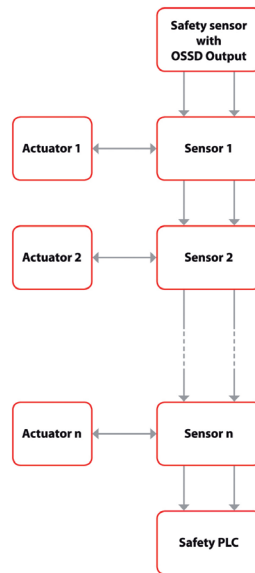
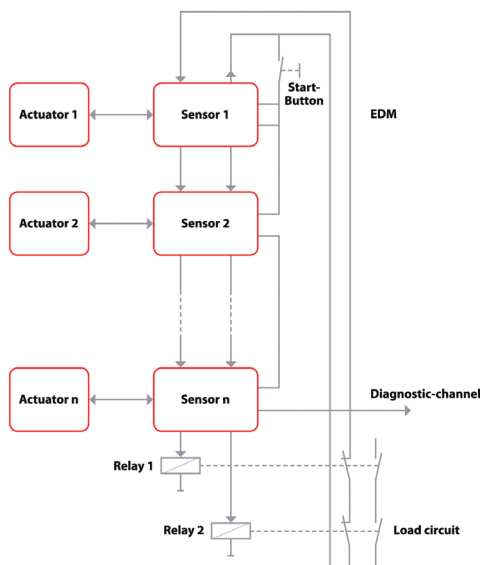
### The diagnostics consists of:

- 3 LEDs integrated in the CSMS
- Status indicator and choice of system status by means of basis diagnostics device
- Status indicator of actuated CSMS by means of digital outputs
- Complete system status by means of optional bus gateway, for ex. Profibus (in preparation)

## CSMS Series circuits without additional evaluation

## CSMS Series circuits with evaluation device

## Individual CSMS With or without additional evaluation



- Series circuits with up to 32 sensors up to PL e
- Integrated return circuit evaluation
- Manual and automatic start
- Direct connection to contactors
- Highly configurable system for ex. CSMS-SET-RRS-U-ST 6075988027

- Series circuits with up to 32 sensors up to PL e
- Connection to an evaluation for ex. safety controller
- Optional connection to a safety sensor for ex. to safety light curtain, with OSSD output to the first CSMS possible
- Highly configurable system for ex. CSMS-SET-R-U-ST 6075988028

- Individual CSMS up to PL e
- Integrated evaluation of a return circuit and start button with direct connection possible to contactors for ex. CSMS-SET-RRS-U-ST 6075988027

or

- Connection to an evaluation for ex. safety controller with or without connection of an additional safety sensor to the first CSMS for ex. CSMS-SET-R-U-ST 6075988028

## CSMS product features

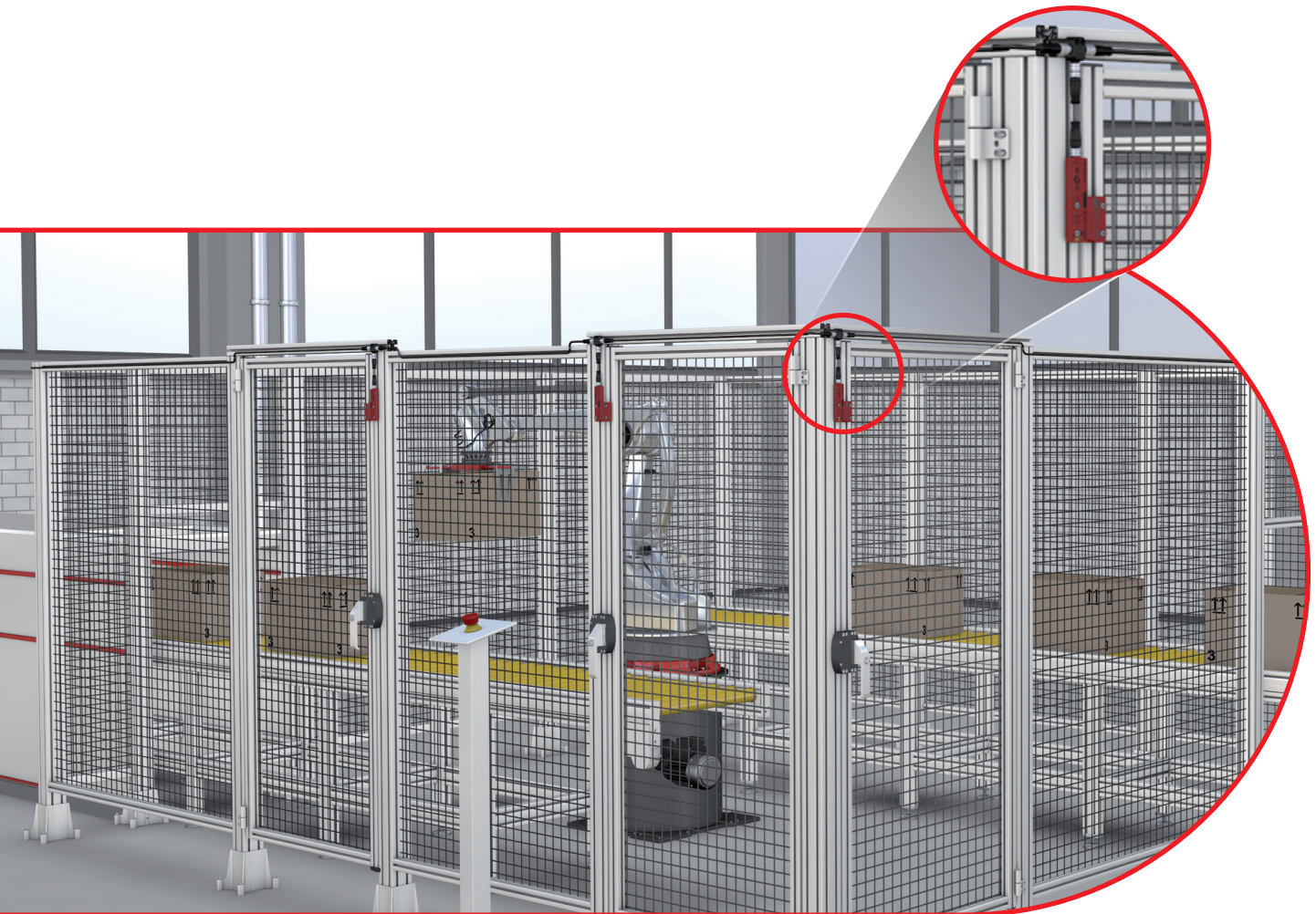


- Performance Level e
- Up to 32 series circuits without leaving the PL e
- High coding level according to draft DIN EN ISO 14119
- An external monitoring device is not necessary
- Connection of a return circuit and start button is possible
- Output current up to 250 mA per safety output
- Large diagnostic possibility
- 3 LEDs for status information of the CSMS
- Switching distance: 13 mm
- Dimensions: 110 mm x 30 mm x 15 mm
- IP 67

Article number	Designation	Description
6075988029	CSMS-SET-RRS-U-KA	Can be switched in series, with EDM and start button monitoring, cable version
6075988027	CSMS-SET-RRS-U-ST	Can be switched in series, with EDM and start button monitoring, M12 connector
6075988030	CSMS-SET-R-U-KA	Can be switched in series, be connected to a monitoring device, cable version
6075988028	CSMS-SET-R-U-ST	Can be switched in series, be connected to a monitoring device, M12 connector
6075989036	T-PIECE AS	T-pieces connections for series circuits, standard/automatic start
6075989037	T-PIECE MS	T-pieces connections for series circuits, manual start
6075989031	CSMS BASIS DIAGNOSTICS DEVICE	Diagnostic indicator device
6075989032	CSMS DIAGNOSTIC 8 OUT	Additional unit of 8 binary diagnostic outputs
6075989035	CSMS BASIS CONNECTION DEVICE	Connection device for easy and fast installation of the CSMS system
6075989047	CSMS SLAVE TEACH ADAPTER	Tool for teaching in a replacement actuator
6073900070	CSMS SPACER 8MM	Insertion spacer for actuator
6075989044	CSMS SPACER LG 8MM	Insertion spacer for sensor



## CSMS product advantages



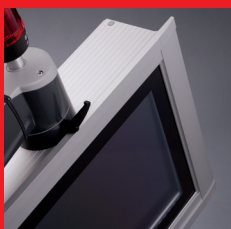
- **Safety series circuits** of up to 32 CSMS up to PL e / SIL 3 (category 4)
- **Cost reduction** as there is no need of any additional external monitoring
- **Easy to use** as manual or automatic start is possible with the same CSMS
- **Future Safety** included as the CSMS correspond to the draft of DIN EN ISO 14119 (which supersedes the EN 1088) concerning individual coding (high coding level)
- **Economic system installation** as M12 Connectivity **reduces installation time** and therefore **reduces cost**
- **Time-saving** as **no wiring errors** are possible
- **Time-saving** because of system status indication via the diagnostic interface
- CSMS is tolerant to misalignment **reducing cost of guarding**



**Switch systems –  
Economy meets safety**



**Sensor systems –  
Compact intelligence**



**Enclosure systems –  
Function and design**

**[www.bernstein.eu](http://www.bernstein.eu)**

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