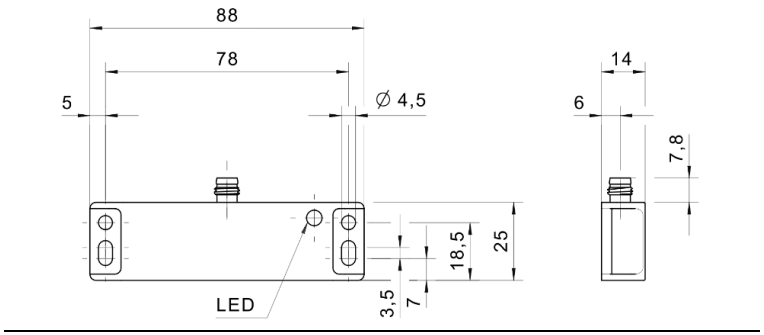
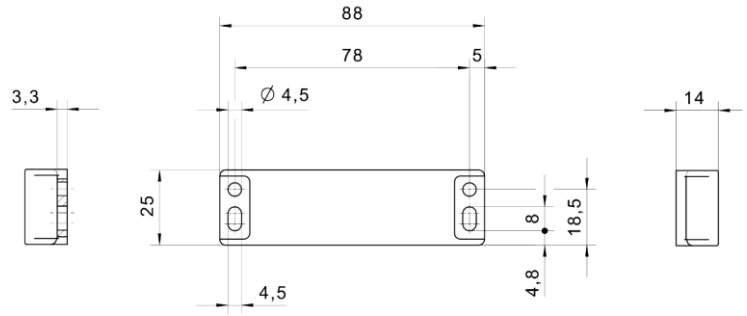




(I) CONTENUTO IMBALLO
Sensore | Attuatore | Sensore+Attuatore.
Guida di installazione.

(EN) PACKAGE CONTENTS
MG B Sensor | Actuator | Sensor+Actuator.
Quick installation guide.

(FR) CONTENUE DE L'EMBALLAGE
Capteur | Actuateur | Capteur+Actuateur.
Guide d'installation.

(D) PACKUNGSINHALT
MG B-Sensor | Aktuator | Sensor+Aktuator.
Installationsanleitung.

(E) CONTENIDO DEL L'EMBALAJE
Sensor | Actuador | Sensor+Actuador MG B.
Guida de instalación.

(I)	Per installare e utilizzare in modo corretto e sicuro il sensore MG B 20, è NECESSARIO consultare il manuale contenuto all'URL:
(EN)	To guarantee a correct and safe installation and operation of the MG B 20 sensor, it is MANDATORY to consult the user manual contained at URL:
(FR)	Pour installer et utiliser correctement et en sécurité le capteur MG B 20, il est NECESSAIRE de consulter le manuel d'instruction, contenu à l'URL:
(D)	Um den MG B 20-Sensor korrekt und sicher zu installieren und zu verwenden, MÜSSEN Sie das Handbuch unter der URL konsultieren:
(E)	Para instalar y utilizar el sensor MG B 20 de forma correcta y segura, DEBE consultar el manual que se encuentra en la URL:

www.reersafety.com/QR/8540833

Precautions | ➔ Important

A) SICUREZZA - SAFETY - WARNUNG VOR FEHLANWENDUNG - CONSIGNES DE SÉCURITÉ - INDICACIONES DE SEGURIDAD

- Ensure that the safety sensors are only mounted and put into operation by specially-trained and authorised personnel.
- Only install and put the device into operation once you have read and understood the operating manual and are familiar with the applicable regulations on occupational safety and accident prevention.
- Only activate the safety sensor using an actuator correctly mounted on the safety device. Actuation by a spare switching magnet that is not mounted to the safety device is prohibited.
- Only operate the safety sensors if they are undamaged.
- Ensure that the safety sensors are exclusively used to pro-tect against risks.
- Ensure that all of the valid safety regulations for the respective machine are complied with.
- Ensure that all of the valid laws and directives are complied with.
- If connecting safety sensors in series, there is the risk of fault masking (fault masking, as per EN ISO 14119). This can lead to a reduction in the achievable safety level (PL/SIL).
- There are no known residual risks, if all of the information contained in this operating manual is complied with.

B) USO ERRATO - WARNING AGAINST MISUSE – SICHERHEITSHINWEISE - LIÉ À UNE MAUVAISE UTILISATION - USO INCORRECTO

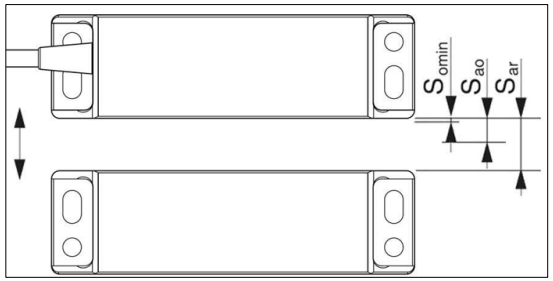
- In case of incorrect or unintended use or manipulation, the use of the safety sensors does not exclude risks to persons or damage to machine or system components. Please also observe the relevant information stipulated in EN ISO 14119.
- Please ensure that when using safety control units that have not been supplied by ReeR, no current or voltage peaks which are higher than the specified electrical data of the safety sensor are generated by these devices. Current or voltage peaks are produced, for example, by capacitive or inductive loads.
- The safety sensor is not short-circuit proof.
- Exceeding of the electrical data of the safety sensor (e.g. in the event of incorrect wiring or short-circuits) may cause irreparable damage to the sensor.
- The safety sensor may only be activated in the approved actuator operating directions (see Installation Manual).
- Activation outside of the approved actuator operating directions reduces the service life of the safety sensor.

C) MONTAGGIO MECCANICO - MECHANICAL ASSEMBLY - MONTAGE MECANIQUE - BEFESTIGUNG - MONTAJE MECÁNICO

- Changing the IP protection class can result in the safety sensor malfunctioning.
  IP protection class guaranteed by:
  - Fit connection cable with strain relief.
  - Observe the tightening torque as per cable manufacturer.
  - Check the screw connection and stain relief after final assembly.

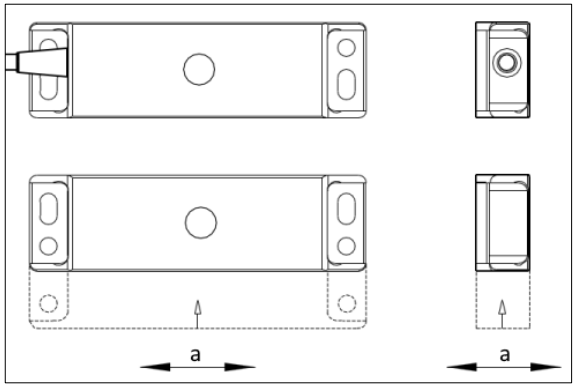
- ➔ Safety sensor and actuator
- ➔ do not use as a limit stop,
- ➔ do not install in strong magnetic fields,
- ➔ do not expose to any strong shocks or vibrations (see Technical data page 14),
- ➔ keep away from iron filings
- ➔ The safety sensor and the accompanying actuators may only be mounted in a voltage-free state.
- ➔ Ensure that the safety sensor and actuator labels are congruently opposed to one another.
- ➔ The installation position is arbitrary. The safety sensor and actuator must however be mounted in parallel, facing each other.
- ➔ Please note the specified installation tolerances and the approved actuator operating directions.
- ➔ The safety sensor is a non-flush mountable proximity sensor (as per
- ➔ EN 60947-5-2). The safety sensor and actuator should not be mounted on ferromagnetic material. Changes to the switching distances are to be expected. However, if it should be necessary, a non-magnetic spacer with a thickness of at least 8 mm must be used.
- ➔ In addition, a free zone of 25 mm around the safety sensor and actuator is required.
- ➔ The mounting distance between two safety sensor and actuator systems must be at least 50 mm.
- ➔ Tightly fasten the safety sensor and actuator to the safety device.
- ➔ Only M4 flat head screws (e.g., M4 cylinder head screws ISO 4762) may be used for mounting the safety sensor and actuator. Tightening torque plastic types max. 1 Nm. Screws made from non-ferromagnetic material (e.g. brass) must be used.
- ➔ The safety sensor may only be mounted on an even surface as failure to do so may lead to tension which could damage the safety sensor or alter the switching distances.
- ➔ The connection cable of the safety sensor must be protected against mechanical damage.
- ➔ While assembling the safety sensor, observe the requirements according to EN ISO 14119 regarding the incentive to bypass the locking device.
- ➔ Additional measures may be required depending on the type and encoding level.
- ➔ Consider the requirements of EN 60204-1 when mounting, in particular with regard to appropriate laying. We recommended concealing the safety sensor lead.

D) DIREZIONE DI COMANDO A / CONTROL DIRECTION A / ANSTEUERUNGSRICHTUNG A / SENS D'ACTIONNEMENT A / DIRECCIÓN DE CONEXIÓN A



Attuatore Plastico / Actuator Plastic / Betätiger Kunststoff / Actionneur Plastique / Actuador Plástico				
	Direzione di comando / Control direction / Ansteuerungsrichtung / Sens d'actionnement / Dirección de conexión	MG B 20		
		S_{0min}	S_{ao}	S_{ar}
MG B M	Frontale (A) / End Face (A) / Stirnseitig (A) / À L'avant (A) / Frontal (A)	0,5	3	16
MG B M+		3	5	18

E) TOLLERANZE DI MONTAGGIO / INSTALLATION TOLERANCES / EINBAUTOLERANZEN / ÉCARTS DE POSITION / TOLERANCIAS DE MONTAJE

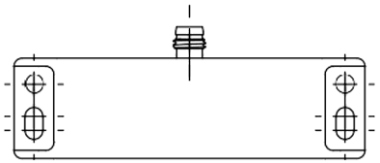
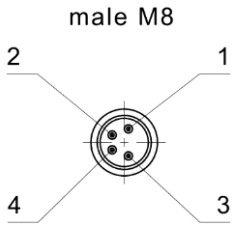
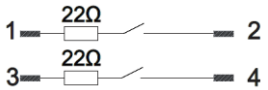


Attuatore / Actuator / Betätiger / Actionneurs / Actuador	Versatz "a" / Offset "a" / Décalage "a" / Spostamento "a" / Desplazamiento "a"
MG B M	± 2 mm
MG B M+	± 3 mm

F) COLLEGAMENTI – CONNECTIONS – BRANCHEMENTS – ANSCHLÜSSE – CONEXIONES

- ➔ Electrical connection is only permitted in a voltage-free state.
- ➔ Connect the safety sensor according to the specified wire colours or pin assignment.

- The control contact is not a safety contact. It must not be incorporated into a safety circuit.
- Do not use the control contact for safety-relevant signal and control functions.
- If connecting safety sensors in series, there is the risk of fault masking (fault masking, as per EN ISO 14119). This can lead to a reduction in the achievable safety level (PL/SIL).

M8 plug off-centre PBT sensors	Plug diagram M8 4-pin	Contact type
		

(I)	Tutti i contatti del sensore di sicurezza sono rappresentati in stato non azionato (cancello di sicurezza aperto).
(EN)	All safety sensor contacts are presented in a deactivated state (protective door opened).
(D)	Alle Sicherheitssensorkontakte sind in unbetätigtem Zustand dargestellt. (Schutztür offen).
(FR)	Tous les contacts des detecteurs de securite sont representes a l'etat non actionne (porte de securite ouverte).
(E)	Todos los contactos de sensores de seguridad estan representados sin activar (puerta de proteccion abierta).

G) DICHIARAZIONE CE DI CONFORMITÀ / EC DECLARATION OF CONFORMITY / EG-KONFORMITÄTSERKLÄRUNG / DÉCLARATION CE DE CONFORMITÉ / DECLARACIÓN CE DE CONFORMIDAD

CE

Dichiarazione CE di conformità
EC declaration of conformity

Torino, 29/09/2025

REER SpA
via Carcano 32
10153 - Torino - Italy

dichiara che i **sensori magnetici di sicurezza della serie MAGNUS MG**, combinati con le unità di controllo di sicurezza MOSAIC M1, MOSAIC M1S e MOSAIC M1S COM, sono conformi alle seguenti norme:

NORME ARMONIZZATE	NORME NON ARMONIZZATE
• EN ISO 13849-1:2023 • EN ISO 13849-2:2012 • EN 60947-5-3:2013 • EN ISO 14119:2013 (in parti)	• EN 60529:1991+A1:2000+A2:2013/AC:2019-02 • DIN EN 61326-3-1:2018 (collegato a un controllore di sicurezza)

*states that the **MAGNUS MG series safety magnetic sensors** combined with MOSAIC M1, MOSAIC M1S, MOSAIC M1S COM safety control units, comply with the following standards:*

HARMONIZED STANDARDS	*NOT HARMONIZED STANDARDS*
• EN ISO 13849-1:2023 • EN ISO 13849-2:2012 • EN 60947-5-3:2013 • EN ISO 14119:2013 (in parts)	• EN 60529:1991+A1:2000+A2:2013/AC:2019-02 • DIN EN 61326-3-1:2018 (connected to a safety controller)

e sono realizzati in conformità alle seguenti Direttive Europee:
and are manufactured in accordance with the following European Directives:

- **2006/42/CE** "Direttiva Macchine" *"Machine Directive"*
- **2014/30/EU** "Direttiva Compatibilità Elettromagnetica" *"Electromagnetic Compatibility Directive"*

Carlo Pautasso
Direttore Tecnico
Technical Director

Simone Scaravelli
Amministratore Delegato
Managing Director

(I)	I valori di sicurezza, i dati tecnici, le condizioni di garanzia e la Dichiarazione di Conformità sono contenute integralmente nel manuale.
(EN)	The safety values, technical data, warranty conditions and Declaration of Conformity are fully contained in the manual.
(D)	Les valeurs de sécurité, caractéristiques techniques les conditions de garantie et la Déclaration de Conformité sont contenues dans le manuel dans leur intégralité.
(FR)	Die Sicherheitswerte, Technische Daten, Garantiebedingungen und Konformitätserklärung sind vollständig im Handbuch enthalten.
(E)	Los valores de seguridad, datos técnicos, las condiciones de garantía y la Declaración de Conformidad se encuentran en el manual en su totalidad.