

## MGBS-P-I-AP-U-R-ZZ-SA-162586 (Order no. 162586)

### MGBS-P-I-AP, M12

- ▶ Interlocking module without guard locking (order handle module separately)
- ▶ Adjustable door hinge; factory setting: right
- ▶ Short circuit monitoring
- ▶ 2 safety outputs (semiconductor outputs)
- ▶ Up to category 4 / PL e according to EN ISO 13849-1
- ▶ With plug connector M12
- ▶ Unicode
- ▶ Door position monitoring output



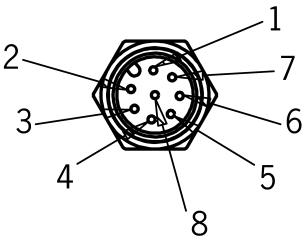
### Door hinge

The door hinge can be changed.

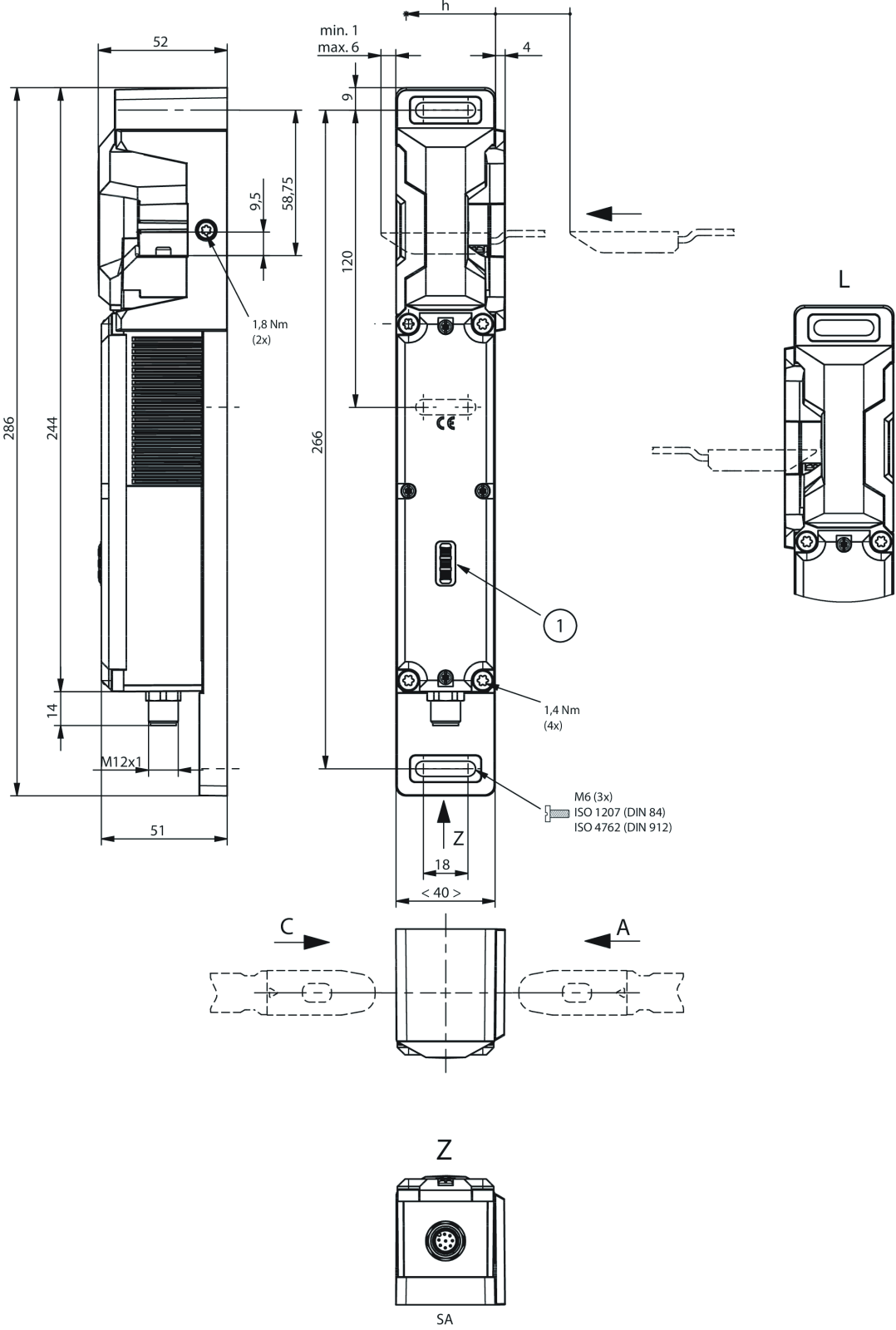
### Unicode evaluation

Each handle module is highly coded (unicode). The locking module detects only handle modules that have been taught-in. Additional handle modules can be taught-in. Only the last handle module taught-in is detected.

## Connector assignment

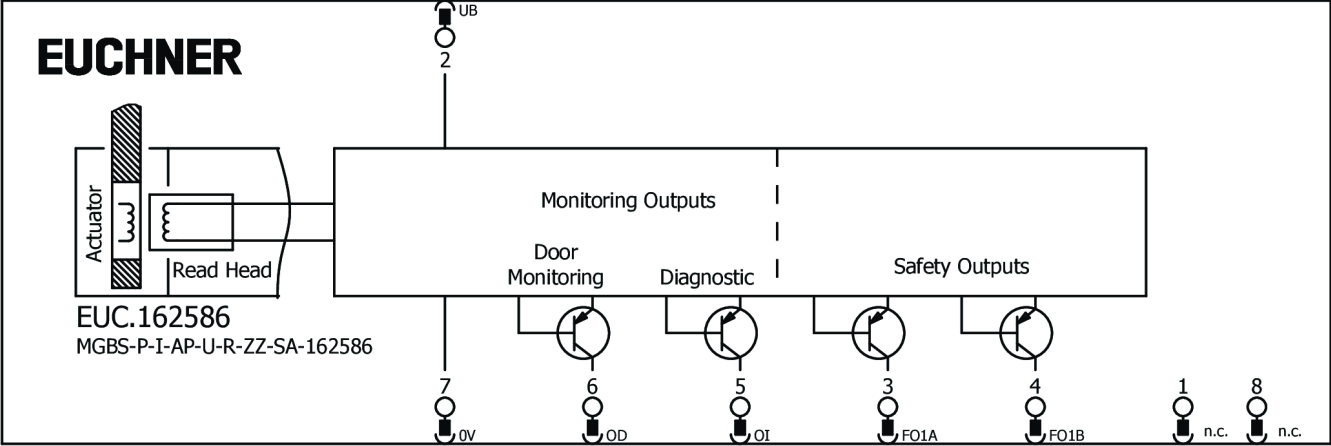
Plug connector (view of connection side)	Pin	Designation	Function	Connecting cable conductor coloring
	1	--	n.c.	WH
	2	UB	Electronics operating voltage, 24 V DC	BN
	3	FO1A	Safety output, channel A	GN
	4	FO1B	Safety output, channel B	YE
	5	OI	Diagnostic monitoring output	GY
	6	OD	Door position monitoring output	PK
	7	0VUB	Electronics operating voltage, 0 V DC	BU
	8	-	n.c.	RD

**Dimensional drawings**



1 LEDs

Connection examples



## Technical data

### Approvals



### Workspace

Repeat accuracy R	
	according to EN 60947-5-2 10 %

### Electrical connection values

Fuse	
external (operating voltage $U_B$ )	0.25 ... 8 A
Power consumption	1 W
Rated insulation voltage $U_i$	50 V
Rated impulse withstand voltage $U_{imp}$	0.5 kV
Operating voltage DC	
	$U_{UB}$ 24 V DC -15% ... +15% reverse polarity protected, regulated, residual ripple < 5%, PELV
EMC protection requirements	Acc. to EN IEC 60947-5-3
Utilization category	
	DC-13 24 V 150 mA (Caution: outputs must be protected with a free-wheeling diode in case of inductive loads)
Switching load	
	according to UL 24V DC, Class 2 (alternatively, see operating instructions)
Safety class	
	EN IEC 61140 III
Current consumption	
	$I_{UB}$ 40 mA
Test pulse duration	max. 0.3 ms (Applies to a load with $C \leq 30$ nF and $R \leq 20$ kohm)

Test pulse interval min. 100 ms

Degree of contamination (external, according to EN 60947-1) 3

### Monitoring output OD, OI

Output type p-switching, short circuit-proof

Output voltage  $0.8 \times U_B \dots U_B \text{ V DC}$

Switching current 1 ... 50 mA

### Safety outputs FO1A / FO1B

Output type 2 semiconductor outputs, p-switching, short circuit-proof

Output voltage

HIGH  $U(\text{FO1A}) / U(\text{FO1B})$   $U_B - 1.5 \dots U_B \text{ V DC}$

LOW  $U(\text{FO1A}) / U(\text{FO1B})$  0 ... 1 V DC

Discrepancy time

both safety outputs max. 10 ms Acc. to EN IEC 60947-5-3

Turn-on time max. 400 ms

Off-state current  $I_r$  max. 0.25 mA

Switching current

per safety output FO1A / FO1B 1 ... 150 mA

## Mechanical values and environment

Approach speed max. 20 m/min

Connection type 1 plug connectors M12, 8-pin

Extraction force 20 N

Ready delay max. 1 s

Actuating force 10 N

Installation orientation Door hinge DIN right

Switching frequency max. 0.5 Hz

Mechanical life  $1 \times 10^6$

Overtravel 5 mm

Shock and vibration resistance Acc. to EN IEC 60947-5-3

Degree of protection IP67/IP69/IP69K  
(screwed tight plug connector/mating component)

Ambient temperature

at  $U_B = 24 \text{ V DC}$   $-20 \dots +55 \text{ }^\circ\text{C}$

Material	
Switch bracket	Die-cast zinc
Safety switch housing	Reinforced thermoplastic

## Characteristic values according to EN ISO 13849-1 and EN IEC 62061

Mission time	20 y
Category	4
Performance Level	PL e
$\text{PFH}_D$	$4.1 \times 10^{-9}$

## Miscellaneous

The following applies to the approval according to UL	Operation only with UL Class 2 power supply or equivalent measures; see operating instructions
Detent mechanism	Snap-in bolt

## Downloads

All documentation for this material can be found on our website:

<https://www.euchner.de/en-us/a/162586/?#downloads-tab>



**Ordering data**

Ordernumber	162586
Item designation	MGBS-P-I-AP-U-R-ZZ-SA-162586
Gross weight	1,7kg
Customs tariff number	85365019000
ECLASS	27-27-24-03 Safety-related transponder switch

## Accessories

### Connection accessories

#### Connecting cable with angled plug connector M12, 8-pin, 10 m



**113188**

C-M12F08-08X025PU10,0-MA-113188

- ▶ M12 female plug, 8-pin
- ▶ Angled plug connector
- ▶ Cable outlet A (right)
- ▶ PUR cable
- ▶ Cable length 10 m
- ▶ With flying lead



**113189**

C-M12F08-08X025PU10,0-MA-113189

- ▶ M12 female plug, 8-pin
- ▶ Angled plug connector
- ▶ Cable outlet C (left)
- ▶ PUR cable
- ▶ Cable length 10 m
- ▶ With flying lead

#### Connecting cable with angled plug connector M12, 8-pin, 20 m



**120998**

C-M12F08-08X025PU20,0-MA-120998

- ▶ M12 female plug, 8-pin
- ▶ Angled plug connector
- ▶ Cable outlet A (right)
- ▶ PUR cable
- ▶ Cable length 20 m
- ▶ With flying lead



**120999**

C-M12F08-08X025PU20,0-MA-120999

- ▶ M12 female plug, 8-pin
- ▶ Angled plug connector
- ▶ Cable outlet C (left)
- ▶ PUR cable
- ▶ Cable length 20 m
- ▶ With flying lead

#### Connecting cable with plug connector M12, 8-pin, 10 m



**100178**

C-M12F08-08X025PV10,0-MA-100178

- ▶ M12 female plug, 8-pin
- ▶ Straight plug connector
- ▶ PVC cable
- ▶ Cable length 10 m
- ▶ With flying lead



**115113**

C-M12F08-08X025PU10,0-MA-115113

- ▶ M12 female plug, 8-pin
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 10 m
- ▶ With flying lead

#### Connecting cable with plug connector M12, 8-pin, 20 m



**115114**

C-M12F08-08X025PU20,0-MA-115114

- ▶ M12 female plug, 8-pin
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 20 m
- ▶ With flying lead



**100179**

C-M12F08-08X025PV20,0-MA-100179

- ▶ M12 female plug, 8-pin
- ▶ Straight plug connector
- ▶ PVC cable
- ▶ Cable length 20 m
- ▶ With flying lead

## Connecting cable with plug connector M12, 8-pin, 30 m



**115116**

C-M12F08-08X025PV30,0-MA-115116

- ▶ M12 female plug, 8-pin
- ▶ Straight plug connector
- ▶ PVC cable
- ▶ Cable length 30 m
- ▶ With flying lead



**115257**

C-M12F08-08X025PU30,0-MA-115257

- ▶ M12 female plug, 8-pin
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 30 m
- ▶ With flying lead

## Connecting cable with plug connector M12, 8-pin, 5 m



**100177**

C-M12F08-08X025PV05,0-MA-100177

- ▶ M12 female plug, 8-pin
- ▶ Straight plug connector
- ▶ PVC cable
- ▶ Cable length 5 m
- ▶ With flying lead



**115112**

C-M12F08-08X025PU05,0-MA-115112

- ▶ M12 female plug, 8-pin
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 5 m
- ▶ With flying lead

## Function expansion

### Escape release MGB-E-A...



**100465**

MGB-E-A-100465

- ▶ Escape release from the danger zone
- ▶ Signal red door handle
- ▶ Designed for door profiles up to 40 mm
- ▶ Extended actuation axis for thicker doors (available optionally)

## Modules

### Handle module MGBS-H-BA1A3-L



**157544**

MGBS-H-BA1A3-L-157544

- ▶ Intelligent bolt tongue
- ▶ Door hinge on left (not adjustable)
- ▶ Automatically extending lockout mechanism
- ▶ Door handle

## Handle module MGBS-H-BA1A3-R



**157543**

MGBS-H-BA1A3-R-157543

- ▶ Intelligent bolt tongue
- ▶ Door hinge on right (not adjustable)
- ▶ Automatically extending lockout mechanism
- ▶ Door handle