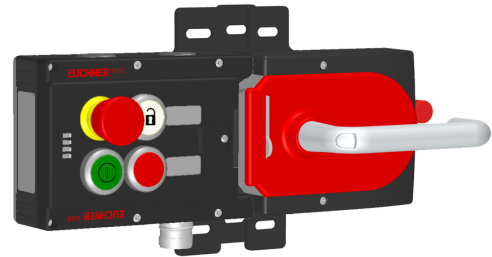


MGB-L1HE-APA-R-121813 (Order no. 121813)

Locking set MGB-L1HE-APA... (guard locking by spring force) with 3 pushbuttons, emergency stop, incl. label carrier, RC18

- ▶ Guard locking with guard lock monitoring
- ▶ Emergency stop according to ISO 13850
- ▶ 3 pushbuttons, illuminated (wh, rd, gn)
- ▶ incl. adhesive labels
- ▶ With plug connector RC18
- ▶ Mounted on mounting plates
- ▶ With escape release
- ▶ Unicode



Guard locking type

MGB- The locking arm is held in the locked position by spring force and is unlocked by solenoid force
L1... (closed-circuit current principle, mechanically locked).

Door hinge

A mechanical door stop is permanently integrated into the evaluation module of the MGB. A marking on the stop makes adjustment easier.

LED indicator

The LED indicator indicates all important system and status information.

Monitoring outputs

OT Bolt tongue inserted into the evaluation module

OI Diagnostics; there is a fault

Emergency stop device

S1 2 positively driven contacts, emergency stop with turn-to-reset, not illuminated

Pushbuttons

S2 1 NO contact, white, illuminated and printed

S3 1 NO contact, red, illuminated

S4 1 NO contact, green, illuminated and printed

Adhesive labels

Devices with adhesive labels have pre-formed recesses. The adhesive labels enclosed (standard size 12.5 x 27 mm) can be affixed in these recesses.

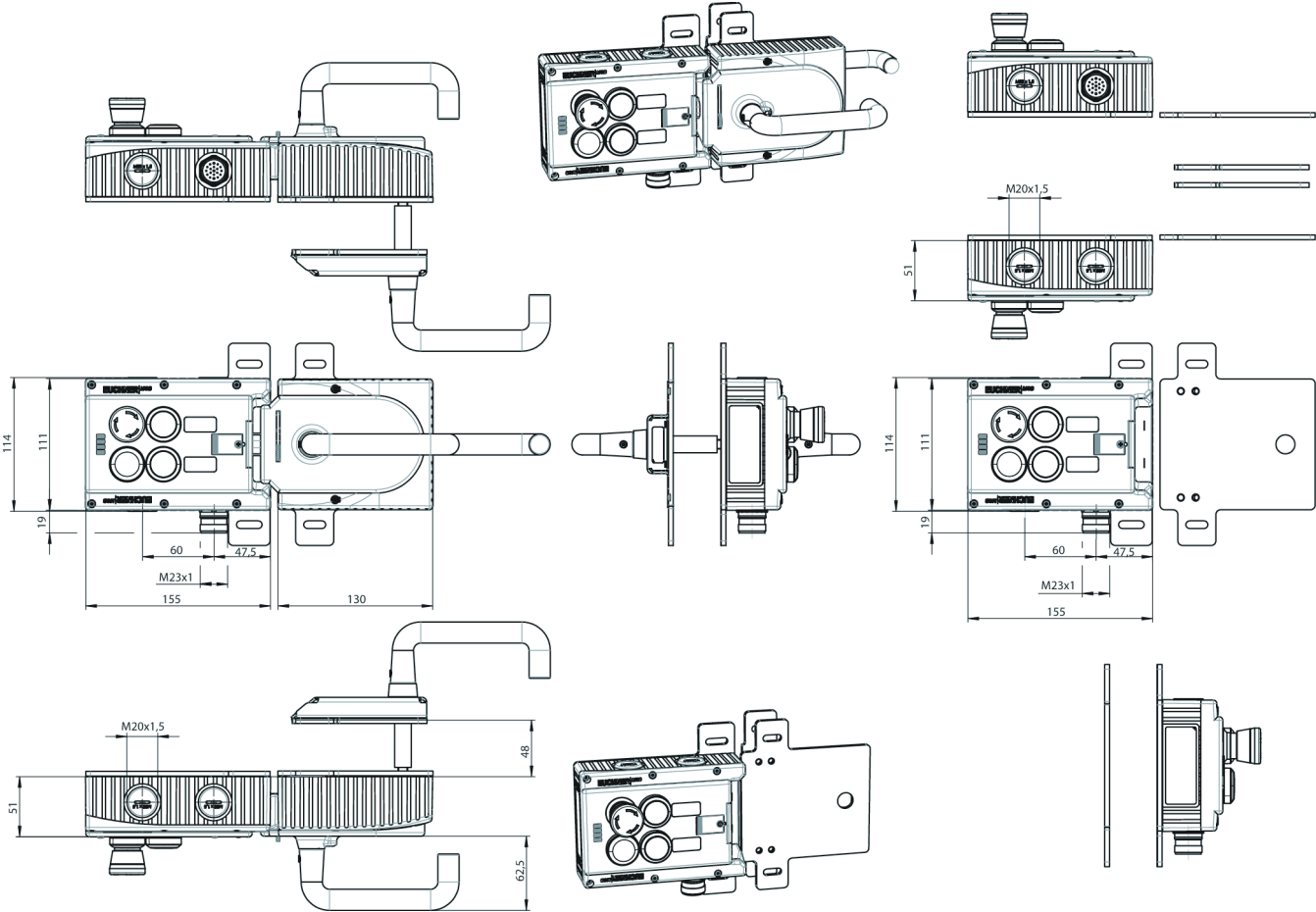
Escape release

The escape release enables people accidentally shut in to open the guard locked door from the danger zone.

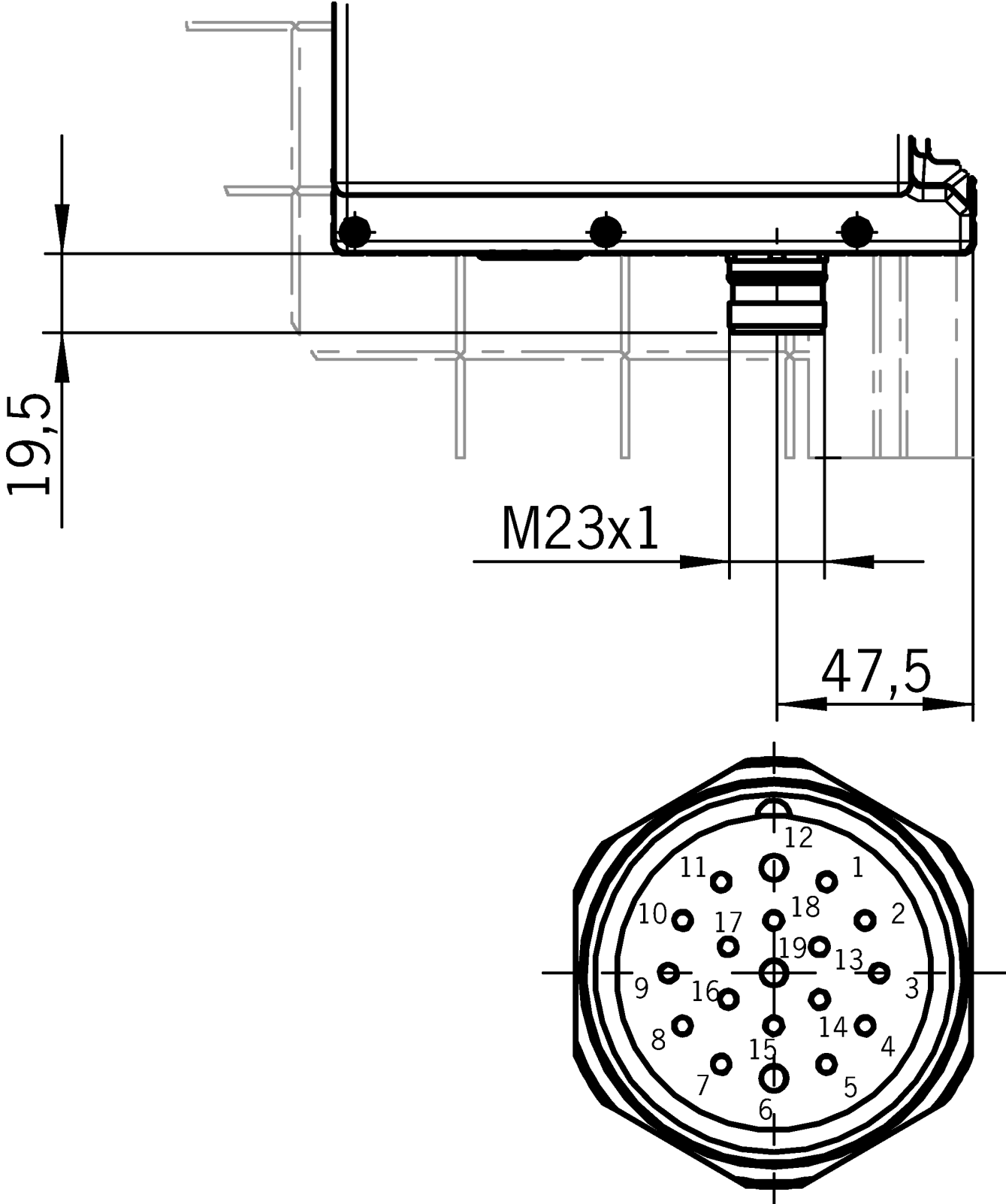
Notice

The interlocking module, handle module and the escape release are each pre-assembled on a mounting plate.

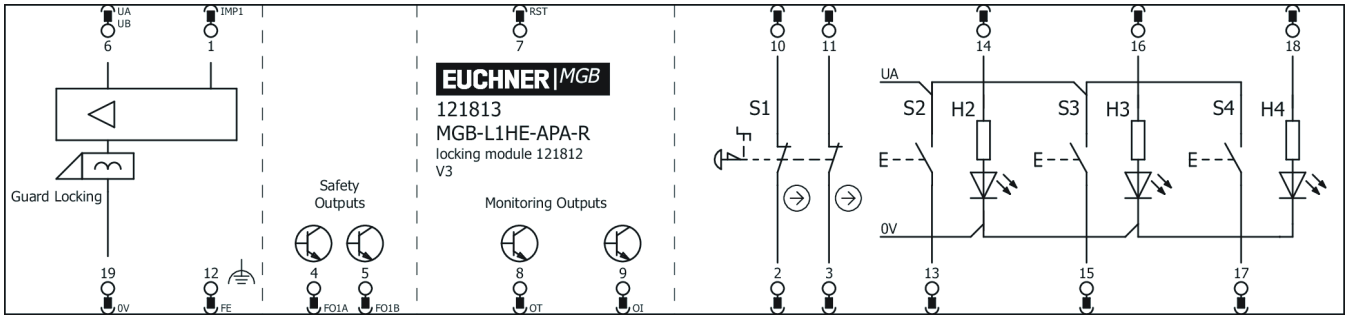
Dimensional drawings



Dimensional drawings



Connection examples



Components



106051

MGB-E-A2-106051

Escape release module MGB-E... pre-assembled on mounting plate

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



111838

MGB-H-AA1A6-R-111838

Handle module MGB-H... with automatically extending lockout mechanism

- ▶ Intelligent bolt tongue
- ▶ Fold-out lockout mechanism
- ▶ Second automatically extending lockout mechanism
- ▶ Door handle
- ▶ Mounting plate



121812

MGB-L1-APA-AJ3A2-S1-R-121812

Locking module MGB-L1-APA., (guard locking by spring force) with 3 pushbuttons, emergency stop, incl. label carrier, RC18

- ▶ Guard locking with guard lock monitoring
- ▶ Emergency stop according to ISO 13850
- ▶ 3 pushbuttons, illuminated (wh, rd, gn)
- ▶ With plug connector RC18
- ▶ Unicode
- ▶ Common monitoring output for diagnostics and emergency stop

Technical data

Approvals



Escape release MGB-E-A2-106051 (Order no. 106051)

Mechanical values and environment

Installation orientation	any
Mechanical life	1 x 10 ⁶
Ambient temperature	-30 ... +55 °C
Material	
Housing	Die-cast zinc/stainless steel, powder-coated

Miscellaneous

Product version number	V2.0.0
Additional feature	with mounting plate



Handle modules MGB-H-AA1A6-R-111838 (Order no. 111838)

Mechanical values and environment

Installation orientation	Door hinge DIN right
Degree of protection	IP65
Ambient temperature	-20 ... +55 °C
Material	
Housing	Fiber glass reinforced plastic, nickel-plated die-cast zinc, stainless steel

Miscellaneous

Product version number	V3.0.0
Additional feature	with mounting plate and automatic lockout mechanism



Locking modules MGB-L1-APA-AJ3A2-S1-R-121812 (Order no. 121812)

Operating and display elements

Occupancy diagram L1

Item	Color	Extras	Version	Slide-in label	Switching element	Note slide-in label	Number	Designation1	LED
1			Emergency stop		2 PD				
2	white	printed	Illuminated pushbutton		1NO				
3	Red		Illuminated pushbutton		1NO				
4	Green	printed	Illuminated pushbutton		1NO				

Electrical connection values

Rated insulation voltage U_i	30 V
Rated impulse withstand voltage U_{imp}	1.5 kV
Discrepancy time	
between FO1A and FO1B	max. 10 ms

Utilization category

DC-13 24 V 200 mA

(Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.)

Risk time according to EN 60947-5-3	max. 350 ms
Safety class	III
Transponder coding	Unicode
Degree of contamination (external, according to EN 60947-1)	3

Solenoid control input IMP1, IMP2, IMM

Test pulse duration max. 5 ms

Test pulse interval min. 100 ms

Controls and indicators

Breaking capacity max. 0.25 W

Switching voltage U_A V

Switching current 1 ... 10 mA

LED power supply 24 V DC

Emergency stop

Breaking capacity max. 0.25 W

Switching voltage 5 ... 24 V

Switching current 1 ... 100 mA

LED power supply 24 V DC

Monitoring outputs OD, OT, OL, OI

Output type Semiconductor outputs, p-switching, short circuit-proof

Output voltage $U_A - 2V \dots U_A$ V DC
(Value at a switching current of 50mA without taking into account the cable lengths)

Output current max. 50 mA

Safety outputs FO1A, FO1B

Output type Semiconductor outputs, p-switching, short circuit-proof

Output voltage

U_{FO1A} / U_{FO1B} LOW 0 ... 1 V DC

U_{FO1A} / U_{FO1B} HIGH $U_B - 2V \dots U_B$ V DC

(Value at a switching current of 50mA without taking into account the cable lengths)

Output current

per safety output FO1A / FO1B 1 ... 200 mA

Test pulse duration max. 0.3 ms

Test pulse interval min. 100 ms

Power supply U_A

Operating voltage DC

U_A 24 V DC -15% ... +10%
(reverse polarity protected, regulated, residual ripple < 5%, PELV)

Current consumption

I_{UA} max. 375 mA
 ((with energized guard locking solenoid and unloaded outputs OD, OT, OL, OI, +20 °C, 24V))

Power supply U_B

Operating voltage DC

U_B 24 V DC -15% ... +10%
 ((reverse polarity protected, regulated, residual ripple<5%, PELV))

Current consumption

I_{UB} max. 80 mA
 ((no load on outputs))

Mechanical values and environment

Connection type Plug connector RC18
 (X6)

Installation orientation Door hinge DIN right

Switching frequency 0.25 Hz

Mechanical life

in case of use as door stop, and 1 Joule
 impact energy 0.1 x 10⁶
 1 x 10⁶

Degree of protection IP65

Ambient temperature

at $U_B = 24$ V DC -20 ... +55 °C

Material

Housing Fiber glass reinforced plastic; nickel-plated die-cast zinc;
 stainless steel

Locking force F_{Zh} 2000 N

Guard locking principle Closed-circuit current principle

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

Mission time 20 y

Control of guard locking

Category 4

Performance Level	PL e
PFH _D	2.8 x 10 ⁻⁹
Emergency stop	
B _{10D}	
Emergency stop	0.13 x 10 ⁶
Monitoring of guard locking and the guard position	
Category	4
Performance Level	PL e
PFH _D	3.7 x 10 ⁻⁹

Miscellaneous

Slide-in label

Number Labeling	Note
2	without marking

Unlock

Fault Reset

Product version number V4.0.0

Additional feature	Mounting plate
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Downloads

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

<https://www.euchner.de/en-us/a/121813/?#downloads-tab>

Ordering data

Ordernumber	121813
Item designation	MGB-L1HE-APA-R-121813
Gross weight	5,171kg
Customs tariff number	85371098
ECLASS	27-27-24-05 Safety-related transponder switch with guardlocking

Accessories

Connection material

Connecting cable with plug connector M23 with option C1825, 1.5 m, straight



092761

C-M23F19-19XDIFPU01,5-MA-092761

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 1.5 m
- ▶ With flying lead
- ▶ Cores color-coded

Connecting cable with plug connector M23 with option C1825, 10 m, straight



092898

C-M23F19-19XDIFPU10,0-MA-092898

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 10 m
- ▶ With flying lead
- ▶ Cores color-coded

Connecting cable with plug connector M23 with option C1825, 15 m, straight



077016

C-M23F19-19XDIFPU15,0-MA-077016

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 15 m
- ▶ With flying lead
- ▶ Cores color-coded

Connecting cable with plug connector M23 with option C1825, 20 m, straight



092726

C-M23F19-19XDIFPU20,0-MA-092726

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 20 m
- ▶ With flying lead
- ▶ Cores color-coded

Connecting cable with plug connector M23 with option C1825, 25 m, straight



092727

C-M23F19-19XDIFPU25,0-MA-092727

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 25 m
- ▶ With flying lead
- ▶ Cores color-coded

Connecting cable with plug connector M23 with option C1825, 3 m, straight



092816

C-M23F19-19XDIFPU03,0-MA-092816

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 3 m
- ▶ With flying lead
- ▶ Cores color-coded

Connecting cable with plug connector M23 with option C1825, 30 m, straight



095993

C-M23F19-19XDIFPU30,0-MA-095993

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 30 m
- ▶ With flying lead
- ▶ Cores color-coded

Connecting cable with plug connector M23 with option C1825, 40 m, straight



102490

C-M23F19-19XDIFPU40,0-MA-102490

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 40 m
- ▶ With flying lead
- ▶ Cores color-coded

Connecting cable with plug connector M23 with option C1825, 6 m, straight



077014

C-M23F19-19XDIFPU06,0-MA-077014

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 6 m
- ▶ With flying lead
- ▶ Cores color-coded

Connecting cable with plug connector M23 with option C1825, 8 m, straight



077015

C-M23F19-19XDIFPU08,0-MA-077015

- ▶ M23 plug connector, 18-pin + PE
- ▶ Straight plug connector
- ▶ PUR cable
- ▶ Cable length 8 m
- ▶ With flying lead
- ▶ Cores color-coded

Plug connector M23 with option C1825, straight



167838

AC-PC-M23F19G-C1825-167838

- ▶ Female plug M23, with union nut, straight
- ▶ Number of pins: 18-pin + PE (with shield spring)
- ▶ Conductor cross-section: 16 x 0.14...0.56 mm² + 3 x 0.5...1.0 mm²
- ▶ Cable diameter: 9...15 mm
- ▶ for self-assembly
- ▶ Crimp contacts included

Function expansion

Door handle for MGB-H...



123926

MGB-A-DOORHANDLE-S2-123926

- ▶ Aluminum, silver anodized
- ▶ for mounting on all MGB handle modules MGB-H from V3.0.0

Door knob for MGB-H...



124030

MGB-A-DOORKNOB-S2-124030

- ▶ Aluminum, silver anodized
- ▶ for mounting on all MGB handle modules MGB-H... from V3.0.0
- ▶ e.g. on sliding doors

Emergency release for safety system MGB



112989
MGB-A-EMERGENCYRELEASE-112989

- ▶ Quick emergency release
- ▶ sealable

Escape release module MGB-E... pre-assembled on mounting plate



106051
MGB-E-A2-106051

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

Extended actuation axis for MGB-E...



106761
AY-ERS-250-106761

Miscellaneous

Lens set labeled



120377
AY-SET-LNS-SY01-120377



126158
AY-SET-LNS-SY03-126158



125359
AY-SET-LNS-SY02-125359



158307
AY-SET-LNS-SY04-158307



160049
AY-SET-LNS-SY05-160049

Lens set, 5 colors



120344
AY-SET-LNS-0001-120344



163284
AY-SET-LNS-0003-163284

Lens set, 6 colors



120378
AY-SET-LNS-0002-120378

Mounting accessories

Mounting plate for all MGB handle modules



109491
MGB-A-MOUNTINGPLATE-H-109491

- ▶ Easy and quick mounting (only two screws required)
- ▶ Quick module replacement
- ▶ Steel, powder coated
- ▶ Suitable for doors hinged on the right and left

Mounting plate for escape release



109492
MGB-A-MOUNTINGPLATE-E-109492

- ▶ Easy and quick mounting (only two screws required)
- ▶ Quick module replacement
- ▶ Steel, powder coated
- ▶ Suitable for doors hinged on the right and left

Mounting plate for evaluation modules MGB-L.-AR.-... and MGB-L.-AP.-...



109490
MGB-A-MOUNTINGPLATE-L-109490

- ▶ Easy and quick mounting (only two screws required)
- ▶ Quick module replacement
- ▶ Steel, powder coated
- ▶ Suitable for doors hinged on the right and left

Spare parts

Handle module MGB-H... with automatically extending lockout mechanism



111838
MGB-H-AA1A6-R-111838

- ▶ Intelligent bolt tongue
- ▶ Fold-out lockout mechanism
- ▶ Second automatically extending lockout mechanism
- ▶ Door handle
- ▶ Mounting plate

Locking module MGB-L1-APA... (guard locking by spring force) without controls or indicators, RC18, on mounting plates



112597
MGB-L1-APA-AA1A2-S1-R-112597

- ▶ Guard locking with guard lock monitoring
- ▶ With plug connector RC18
- ▶ Mounted on mounting plate
- ▶ Unicode