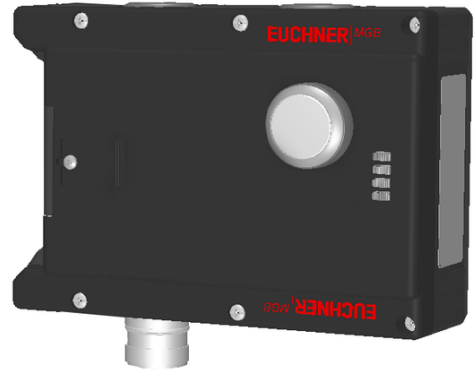


## MGB-L1-ARA-AK1A1-S1-L-121039 (Order no. 121039)

### Locking module MGB-L1-ARA..., (guard locking by spring force) with 1 pushbutton, RC18

- ▶ Guard locking with guard lock monitoring
- ▶ Can be connected in series with other AR devices (e.g. CES-AR and CET-AR)
- ▶ 1 pushbuttons (illuminated)
- ▶ With lens set, 6 pcs.
- ▶ With plug connector RC18
- ▶ 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
- OL Guard locking solenoid in locked position
- OI Diagnostics; there is a fault

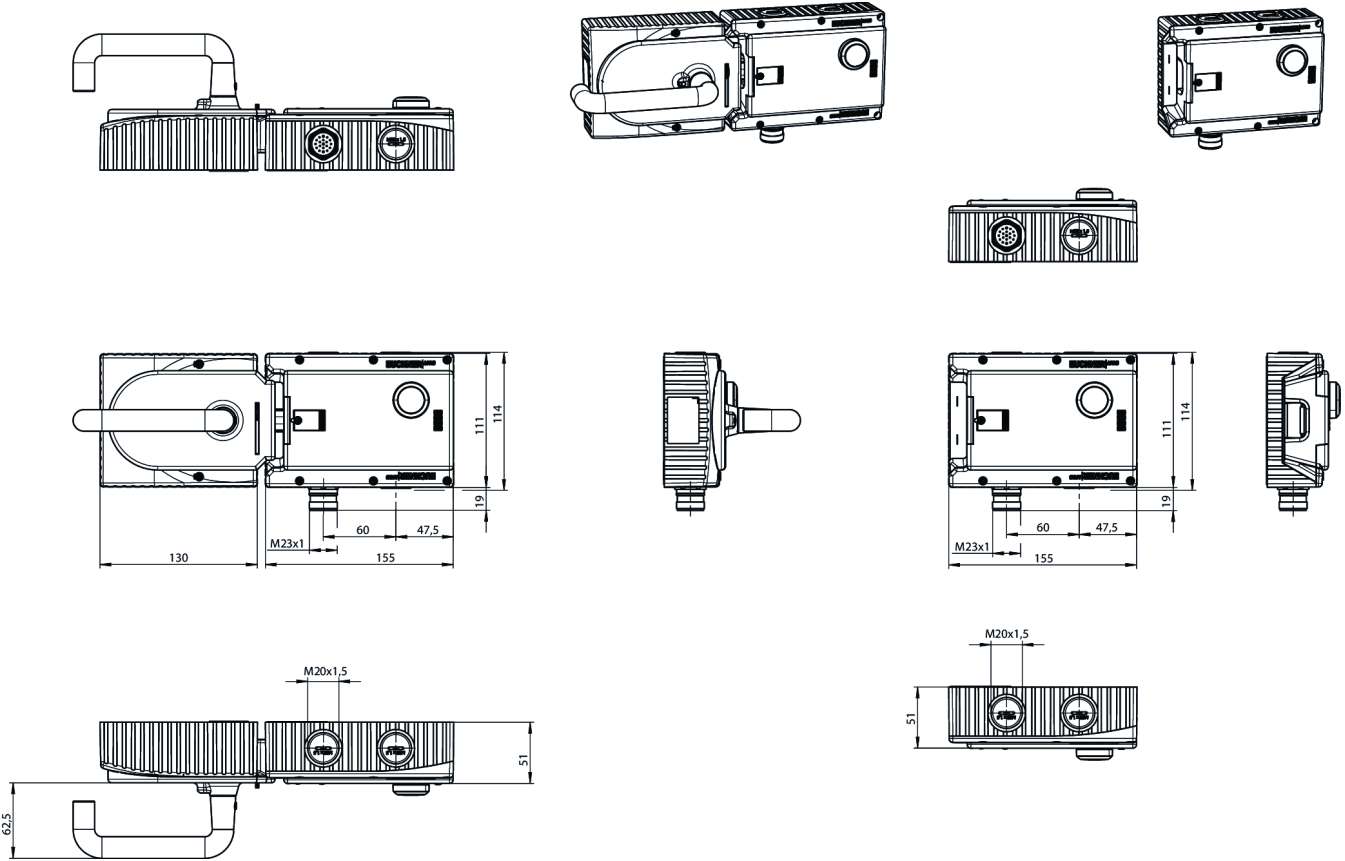
### Pushbuttons

S1 1 NO contact, illuminated

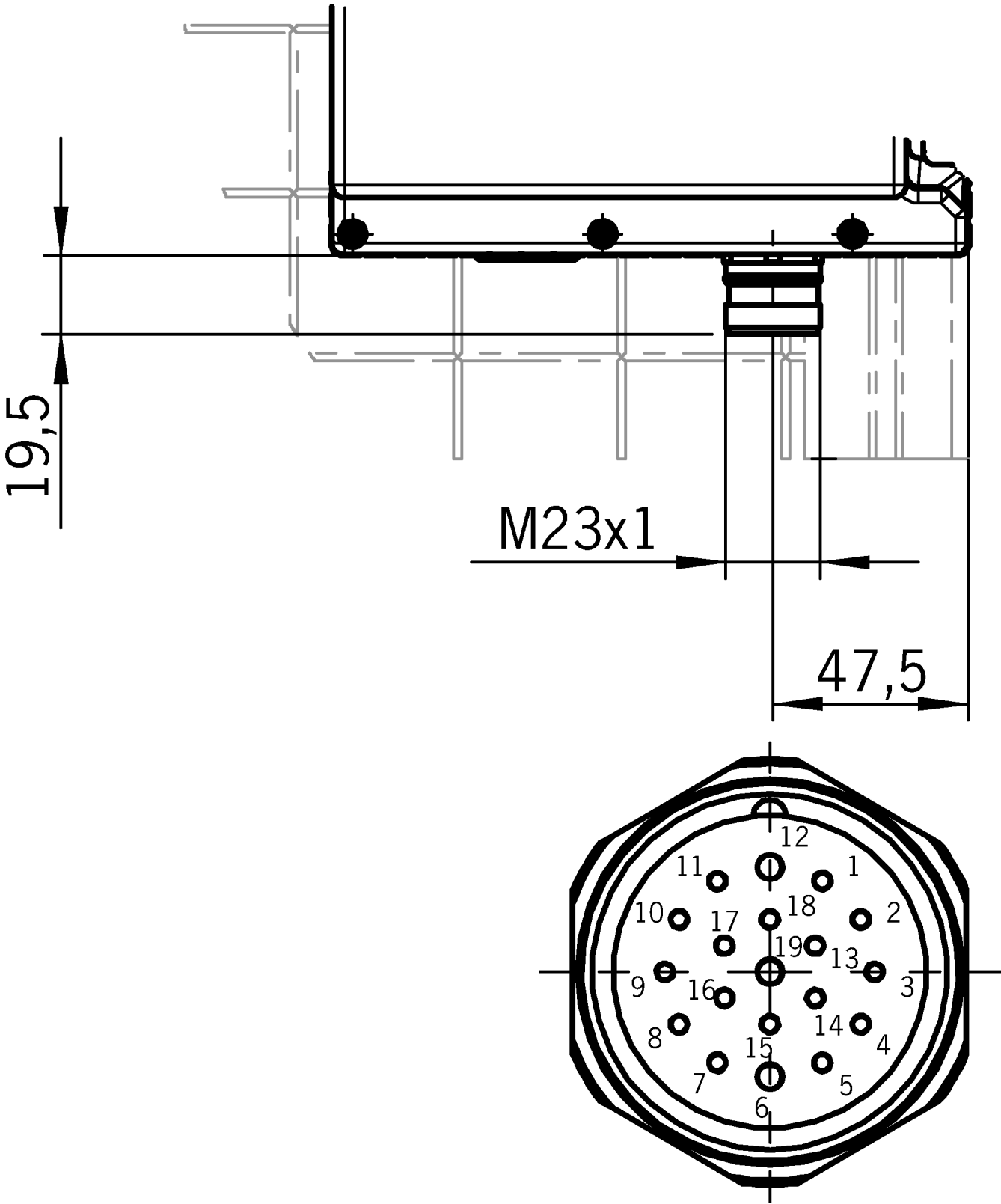
### Lens set

The color of the pushbuttons can be selected using the color cover set included (5 colors). Item no.: 120344 (see Accessories)

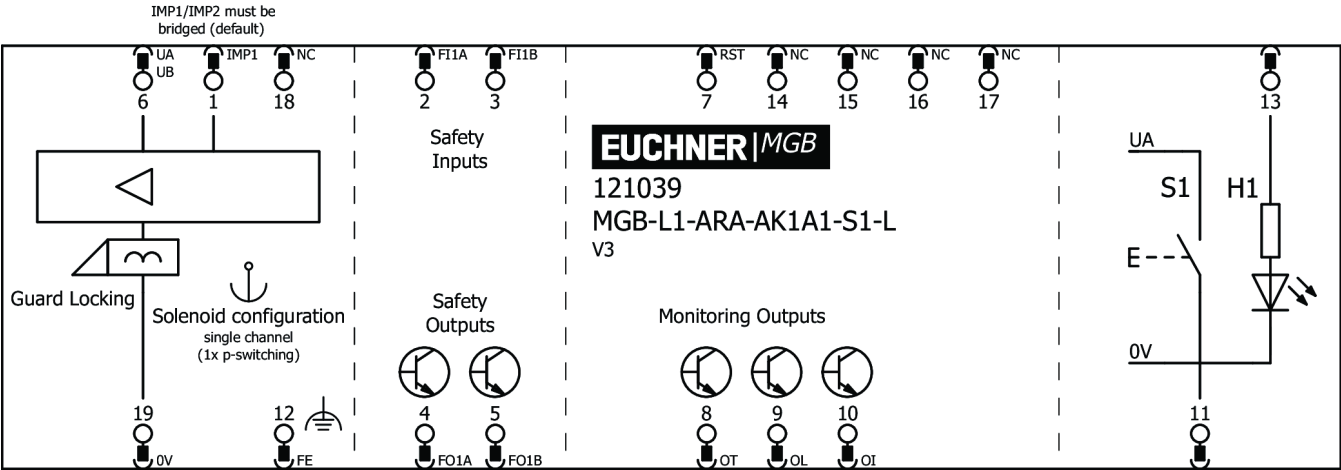
**Dimensional drawings**



Dimensional drawings



Connection examples



## Technical data

### Approvals



### Operating and display elements

Occupancy diagram L1

Item	Color	Extras	Version	Slide-in label	Switching element	Note slide-in label	Number	Designation1	LED
1			Illuminated pushbutton		1 NO				

### Electrical connection values

Rated insulation voltage $U_i$	30 V
Rated impulse 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
Risk time according to EN 60947-5-3, extension for each additional device	max. 5 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

## 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. 1 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))
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## 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 left

Switching frequency 0.25 Hz

### Mechanical life

$1 \times 10^6$

in case of use as door stop, and 1 Joule  
impact energy  $0.1 \times 10^6$

Degree of protection IP65

### Ambient temperature

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

### 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

	PL	Maximum SIL	$PFH_D$	Category	Mission time
Control of guard locking	PL e	–	$2.8 \times 10^{-9}$	4	20 y
Monitoring of the guard position	PL e	–	$3.7 \times 10^{-9}$	4	20 y
Monitoring of guard locking	PL e	–	$3.7 \times 10^{-9}$	4	20 y

## Miscellaneous

Product version number V4.0.0

Additional feature incl. lens set, ID no. 120344

## Downloads

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

<https://www.euchner.de/en-us/a/121039/?#downloads-tab>

**Ordering data**

Ordernumber	121039
Item designation	MGB-L1-ARA-AK1A1-S1-L-121039
Gross weight	1,005kg
Customs tariff number	85365019000
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, angled



**092906**

C-M23F19-19XDIFPU01,5-MA-092906

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit C (left)
- ▶ PUR cable
- ▶ Cable length 1.5 m
- ▶ With flying lead
- ▶ Cores color-coded



**092907**

C-M23F19-19XDIFPU01,5-MA-092907

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit A (right)
- ▶ PUR cable
- ▶ Cable length 1.5 m
- ▶ With flying lead
- ▶ Cores color-coded

#### 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, angled



**092901**

C-M23F19-19XDIFPU10,0-MA-092901

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit C (left)
- ▶ PUR cable
- ▶ Cable length 10 m
- ▶ With flying lead
- ▶ Cores color-coded



**092902**

C-M23F19-19XDIFPU10,0-MA-092902

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit A (right)
- ▶ PUR cable
- ▶ Cable length 10 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, angled



**077020**

C-M23F19-19XDIFPU15,0-MA-077020

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit C (left)
- ▶ PUR cable
- ▶ Cable length 15 m
- ▶ With flying lead
- ▶ Cores color-coded



**085196**

C-M23F19-19XDIFPU15,0-MA-085196

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit A (right)
- ▶ PUR cable
- ▶ Cable length 15 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, angled



**092910**

C-M23F19-19XDIFPU20,0-MA-092910

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit C (left)
- ▶ PUR cable
- ▶ Cable length 20 m
- ▶ With flying lead
- ▶ Cores color-coded



**092911**

C-M23F19-19XDIFPU20,0-MA-092911

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit A (right)
- ▶ PUR cable
- ▶ Cable length 20 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, angled



**092912**

C-M23F19-19XDIFPU25,0-MA-092912

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit C (left)
- ▶ PUR cable
- ▶ Cable length 25 m
- ▶ With flying lead
- ▶ Cores color-coded



**092913**

C-M23F19-19XDIFPU25,0-MA-092913

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit A (right)
- ▶ PUR cable
- ▶ Cable length 25 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, angled



**092908**

C-M23F19-19XDIFPU03,0-MA-092908

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit C (left)
- ▶ PUR cable
- ▶ Cable length 3 m
- ▶ With flying lead
- ▶ Cores color-coded



**092909**

C-M23F19-19XDIFPU03,0-MA-092909

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit A (right)
- ▶ PUR cable
- ▶ Cable length 3 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, angled



**077018**

C-M23F19-19XDIFPU06,0-MA-077018

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit C (left)
- ▶ PUR cable
- ▶ Cable length 6 m
- ▶ With flying lead
- ▶ Cores color-coded



**085194**

C-M23F19-19XDIFPU06,0-MA-085194

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit A (right)
- ▶ PUR cable
- ▶ Cable length 6 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, angled



**077019**

C-M23F19-19XDIFPU08,0-MA-077019

- ▶ RC18 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit C (left)
- ▶ PUR cable
- ▶ Cable length 8 m
- ▶ With flying lead
- ▶ Cores color-coded



**085195**

C-M23F19-19XDIFPU08,0-MA-085195

- ▶ M23 plug connector, 18-pin + PE
- ▶ Angled plug connector
- ▶ Cable exit A (right)
- ▶ PUR cable
- ▶ Cable length 8 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 mm<sup>2</sup> + 3 x 0.5...1.0 mm<sup>2</sup>
- ▶ Cable diameter: 9...15 mm
- ▶ for self-assembly
- ▶ Crimp contacts included

## Function expansion

### Emergency release for safety system MGB



**112989**

MGB-A-EMERGENCYRELEASE-112989

- ▶ Quick emergency release
- ▶ sealable

## 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