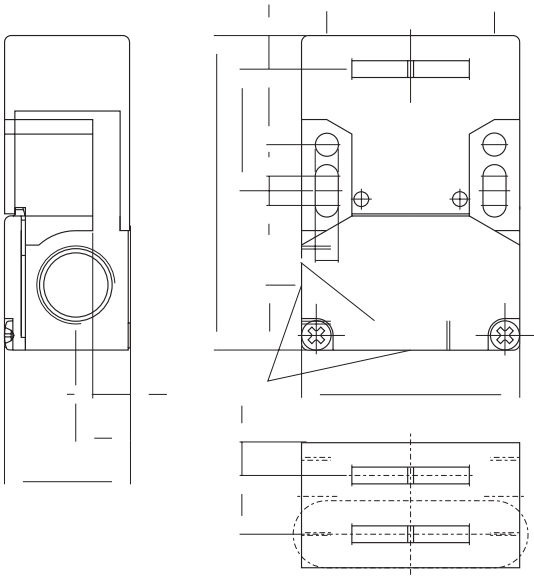




11-12

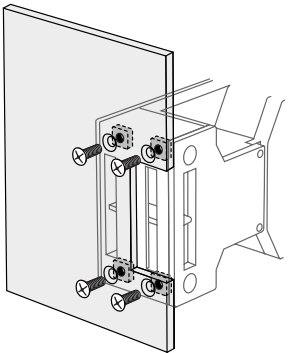
0 2,3 5,5 P 8 11-12

1. Safety switches with separate actuator / Class 2
1.1 AZ 15 range



Version with
M5 nuts

- For front fixing of safety switch, e.g. on sheet-steel covers
- Suitable for use with actuators AZ 15/16-B1, -B2, -B3 and -B6
- Nuts cannot be retrofitted
- Ordering suffix -1762



Ordering
details

To order, select the part number of the desired switch from the table “Contacts/Switch travel”, e.g. safety switch with latching force 30 N: AZ 15zvrk

Actuators and accessories are ordered separately, e.g. straight actuator with magnetic latch: AZ 15/16-B1-1747

The applicable ordering suffix is added at the end of the part number of the safety switch.
Further variants not shown here are available on enquiry.

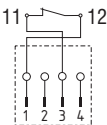
Plug-in
connection

- Available with connector M 12 x 1, ordering suffix -ST
- For suitable connector plugs, see 1.5

Info

- With cable entry M 16 x 1.5, ordering suffix -M16
- Available with 5 N latching force, ordering suffix -2254
- With gold-plated contacts (0.3 µm), ordering suffix -1637
- Alignment kit to simplify fitting, part number: Alignment kit AZ 15/16

Diagram



Approvals



D



S



DK



CH



USA



CAN



AUS

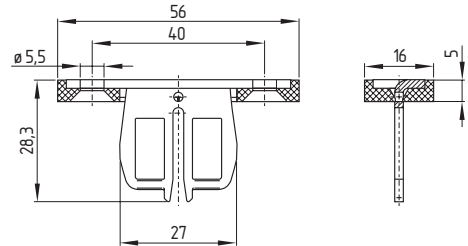


Straight actuator AZ 15/16-B1

- Particularly suitable for sliding doors
- Minimum actuating radius on hinged guards 150 mm

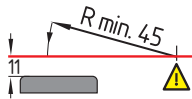


- The axis of the hinge should be 5 mm above the top edge of the safety switch and in the same plane

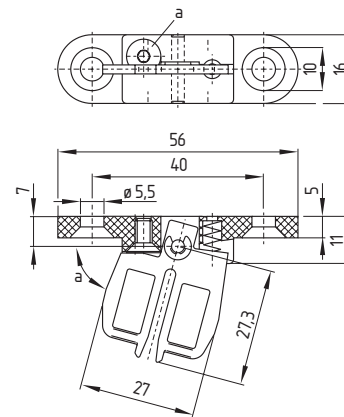


Adjustable actuator AZ 15/16-B2

- For very small actuating radii in line with the plane of the actuator
- Actuating radius adjustable, minimum 45 mm, using an hexagonal key wrench 2.5 mm A/F (a)



- The axis of the hinge should be 11 mm above the top edge of the safety switch and in the same plane

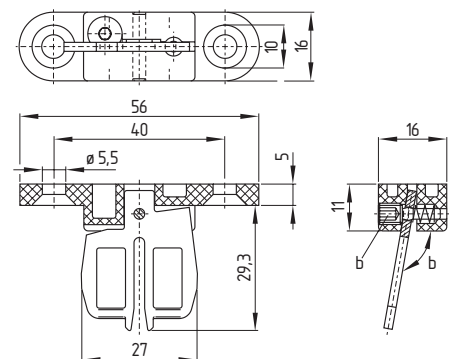


Adjustable actuator AZ 15/16-B3

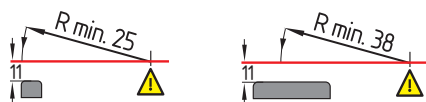
- For very small actuating radii at 90° to the plane of the actuator
- Actuating radius adjustable, minimum 32 mm, using an hexagonal key wrench 2.5 mm A/F (b)



- The axis of the hinge should be 11 mm above the top edge of the safety switch and in the same plane

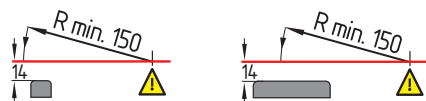


- For very small actuating radii in line with or at 90° to the plane of the actuator
- Actuating radius adjustable using an hexagonal key wrench 2.5 mm A/F (a and b), minimum 25 mm at 90° to the plane of the actuator and minimum 38 mm in line with the plane of the actuator



-
- Technical drawing of a mechanical part, showing three views: top, front, and side. The dimensions are given in mm.
- Top View:** Shows a rectangular part with a central slot. The overall width is 16 mm. The central slot has a width of 10 mm. The distance from the center of the slot to the center of the circular features is 56 mm. The distance from the center of the slot to the center of the circular features is 40 mm. The distance from the center of the slot to the center of the circular features is 10 mm.
 - Front View:** Shows the part with a central slot. The overall width is 16 mm. The central slot has a width of 10 mm. The distance from the center of the slot to the center of the circular features is 56 mm. The distance from the center of the slot to the center of the circular features is 40 mm. The distance from the center of the slot to the center of the circular features is 10 mm.
 - Side View:** Shows the part with a central slot. The overall width is 16 mm. The central slot has a width of 10 mm. The distance from the center of the slot to the center of the circular features is 56 mm. The distance from the center of the slot to the center of the circular features is 40 mm. The distance from the center of the slot to the center of the circular features is 10 mm.

- Particularly suitable for sliding doors
- Minimum actuating radius on hinged guards 150 mm
- Damps vibration on guard devices

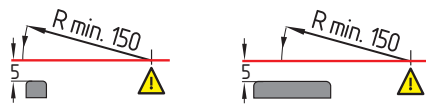


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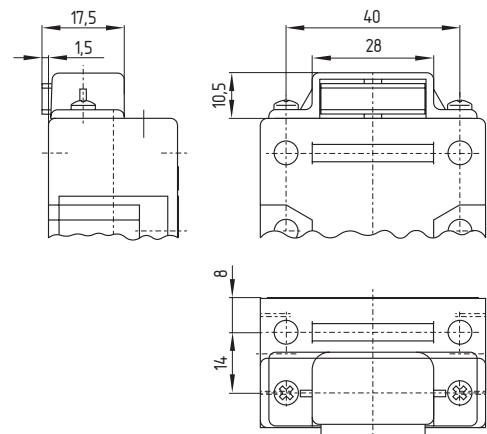
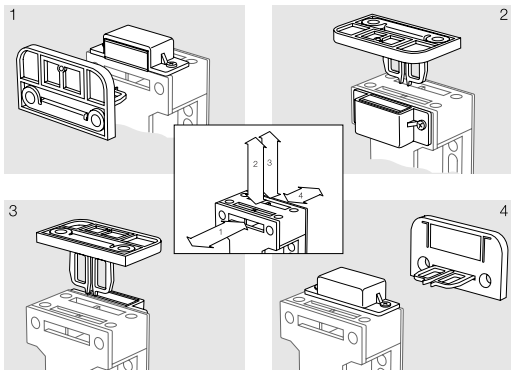
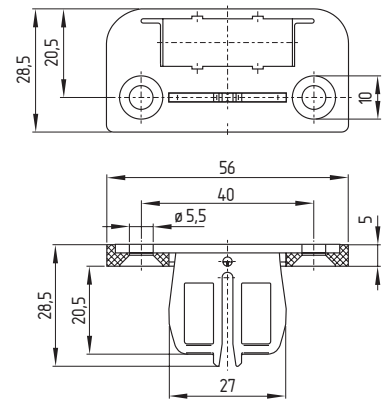


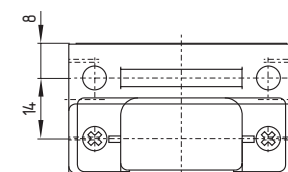
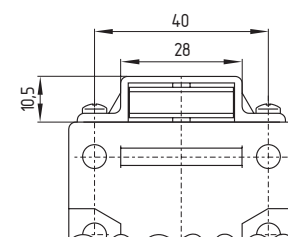
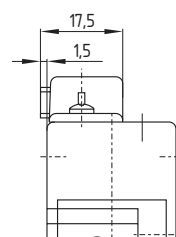
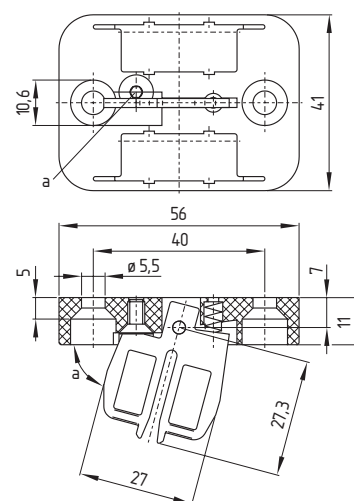
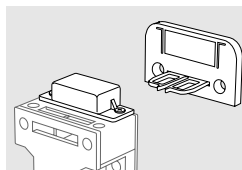
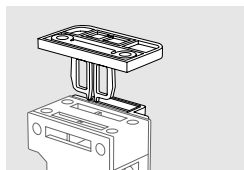
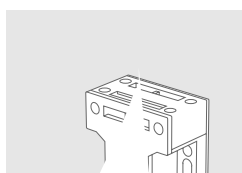
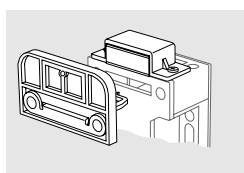
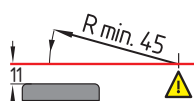
Straight actuator with magnetic latch AZ 15/16-B1-1747

- For play-free interlocking of light guards
- Latching force 30 N
- The magnetic latch can be easily fitted in any actuating plane
- Suitable for retrofitting
- Particularly suitable for sliding doors
- Minimum actuating radius on hinged guards 150 mm



- The axis of the hinge should be 5 mm above the top edge of the safety switch and in the same plane

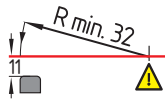




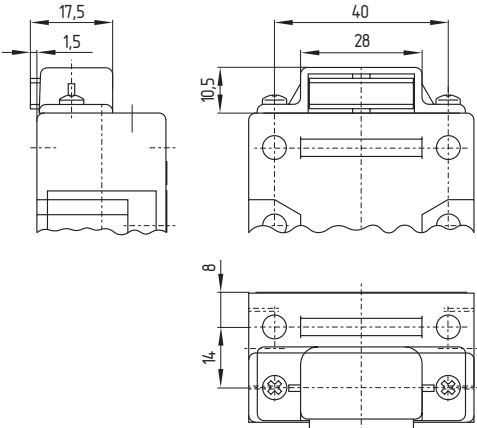
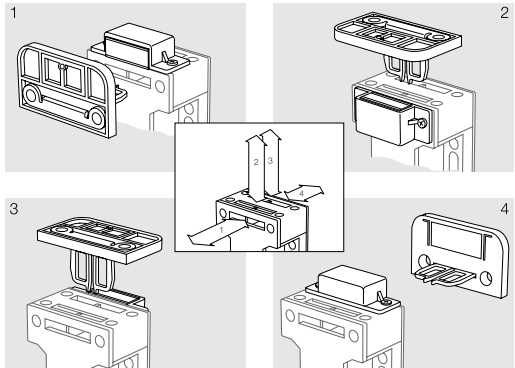
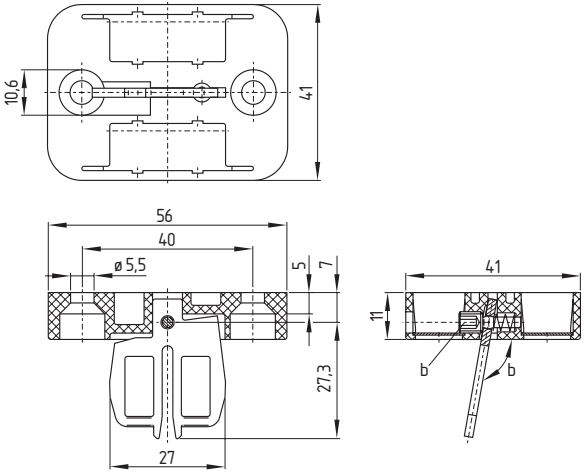


Adjustable actuator with magnetic latch AZ 15/16-B3-1747

- For play-free interlocking of light guards
- Latching force 30 N
- The magnetic latch can be easily fitted in any actuating plane
- Suitable for retrofitting
- For very small actuating radii at 90° to the plane of the actuator
- Actuating radius adjustable, minimum 32 mm, using an hexagonal key wrench 2.5 mm A/F (b)



- The axis of the hinge should be 11 mm above the top edge of the safety switch and in the same plane



1.
1.4

Safety switches with separate actuator / Class 2
Actuators

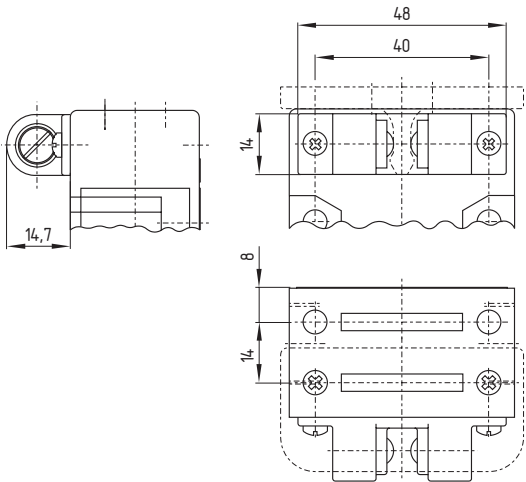
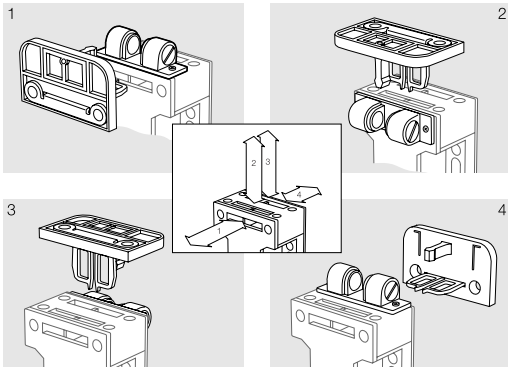
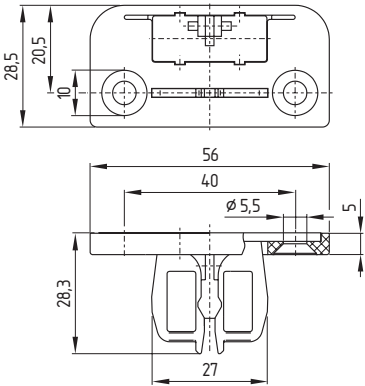


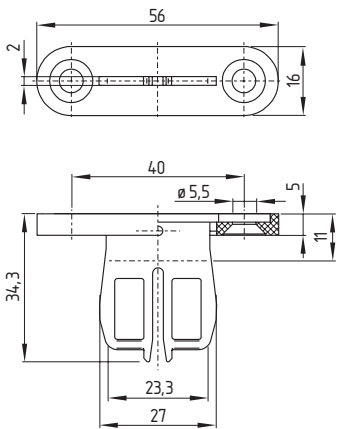
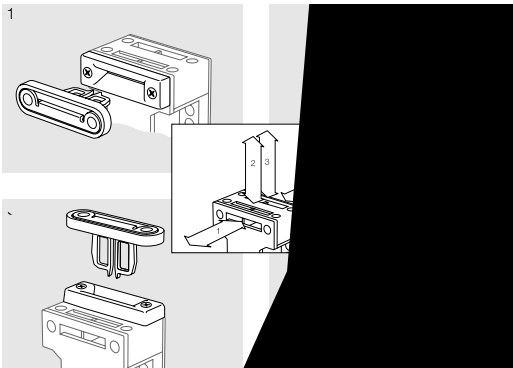
Straight actuator with ball latch AZ 15/16-B1-2053

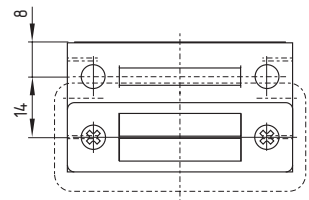
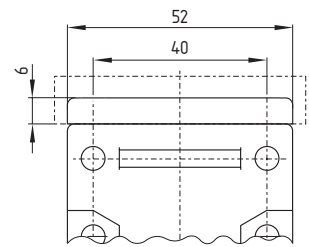
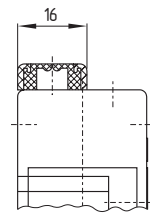
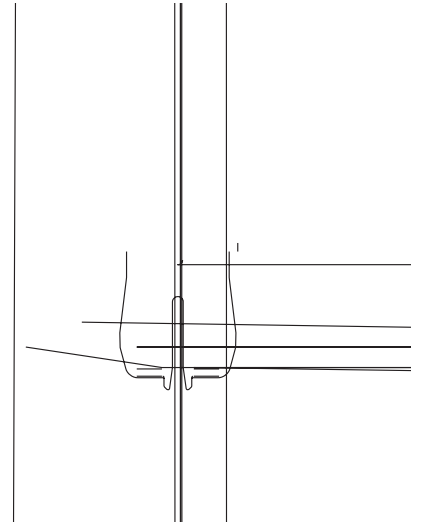
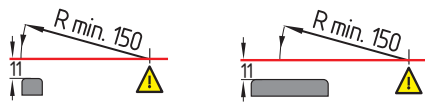
- For interlocking of light to medium-weight guards
- Latching force adjustable up to 100 N
- Particularly suitable for sliding doors
- Minimum actuating radius on hinged guards 150 mm



- The axis of the hinge should be 11 mm above the top edge of the safety switch and in the same plane



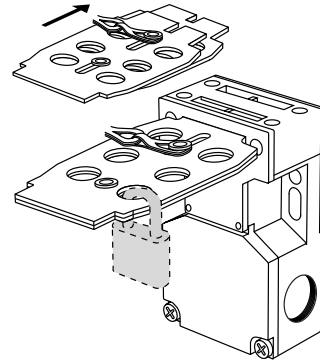






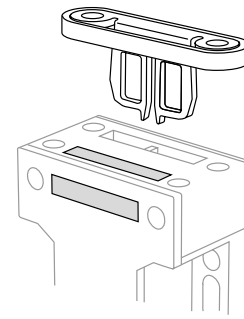
Lockout tag SZ 16/335

- To prevent inadvertent closing, e.g. during maintenance
- For complex plant
- Prevents actuation of the switch
- Up to 6 padlocks can be fitted
- The lockout tag can be fixed on a chain near to the safety switch



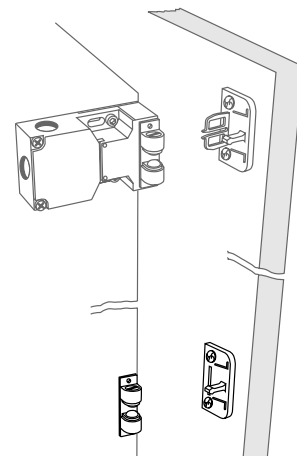
Slot sealing plug AZ 15/16-1476

- For protection against the ingress of coarse dirt
- To cover unused actuator slots
- Simple clip-in fitting
- Quantity required: 3 per switch



Ball latch 2053-2

- Additional ball latch for stable latching of light to medium-weight guards
- For separate mounting on the guard
- Latching force adjustable up to 100 N





Tamperproof screws



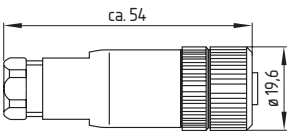
**Screw
lengths**

Countersunk-head screws
M 5 x 12, Id. No.: 402 530 3000
M 5 x 16, Id. No.: 402 530 3001
M 5 x 20, Id. No.: 402 530 3002

Supplied in sets of 2 screws

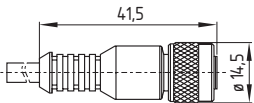
- To mount the actuator
- Higher protection against tampering with interlock
- Protects against unauthorised removal of actuator
- Available in various lengths

Connector plug M 12 x 1 for AZ 16-ST with connector



- Straight connector plug
- Unwired
- A-coding: part number Series 713

Connector plug M 12 x 1 for AZ 16-ST with connector



- Straight connector plug with pre-wired cable
- Cable 5 m long
- Conductors: 4 x 0.75 mm²
- A-coding: part number Series 763



Mounting set MS AZ 15/16

- For simple mounting on profile systems
- Mounting of the safety switch parallel or right-angled to the safety guard

Hinweis

- The mounting sets can only be used in conjunction with actuator AZ 15/16-B6.
- Safety switch and actuator are **not included** in delivery.

Legend

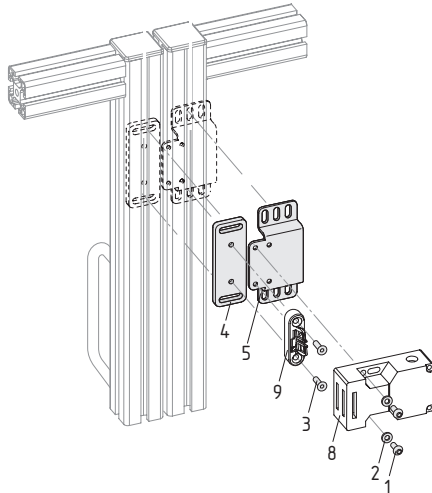
- 1 Roundhead screw M5 x 16 per ISO 7380
- 2 Washer per DIN 125-5,3
- 3 Counter sunk screw M5 x 16 per DIN 7991
- 4 Mounting plate AZ 16/AZM 161
- 5 U-profile AZ 16
- 6 Mounting angle AZ 16
- 7 Roundhead screw M5 x 10 per ISO 7380

Not provided:

- 8 Safety switch AZ 15/16
- 9 Actuator AZ 15/16-B6

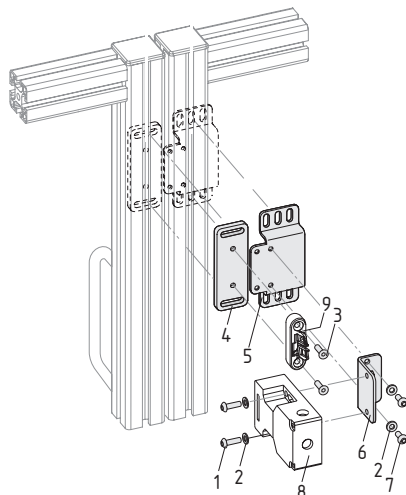
MS AZ 15/16 P

Mounting parallel to safety guard

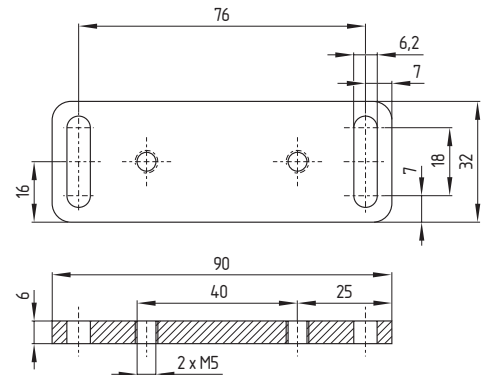


MS AZ 15/16 R/P

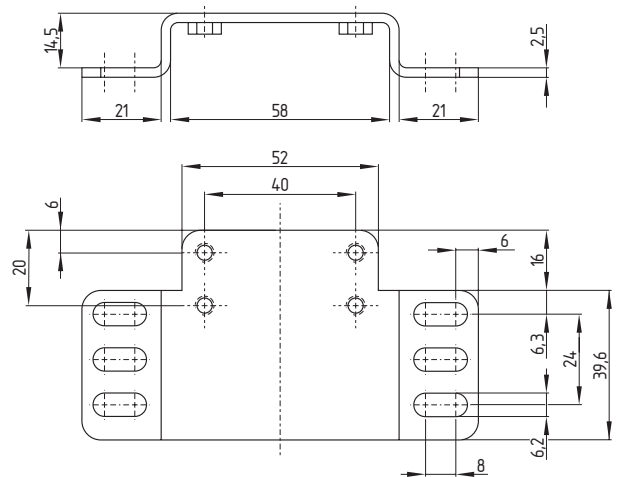
Mounting right-angled to safety guard



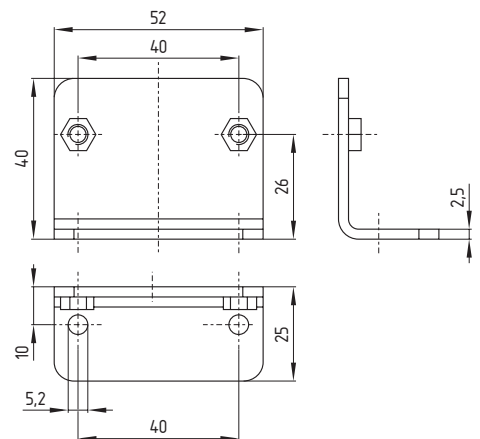
Mounting plate AZ 16/AZM 161



U-profile AZ 16



Mounting angle AZ 16



1. Safety switches with separate actuator / Class 2
1.29 Technical data



	AZ 15 / AZ 16 AZ 16zi	AZ 16-ST AZ 16zi-ST	AZ 17 AZ 17zi
Standards:	IEC/EN 60947-5-1; EN 1088; BG-GS-ET-15		
Enclosure material:	Glass-fibre reinforced thermoplastic, self-extinguishing		
Actuator:	Stainless steel 1.4301		
Protection class:	IP 67 to IEC/EN 60529		
Contact material:	Silver		
Contact type:	Change-over with double break Zb or 2 NC or 3 NC contacts, with galvanically separated contact bridges		Change-over with double break Zb or 2 NC contacts, with galvanically separated contact bridges
Switching system:	⊖ IEC 60947-5-1; ⊕ BG-GS-ET-15; slow action, NC contact with positive break		
Termination:	Screw terminals for max. 2.5 mm ² cables (including conductor ferrules)	Connector M 12 x 1, four pole	Cut clamp (IDC) method 0.75 to 1.0 mm ² , flexible
Rated impulse withstand voltage U _{imp} :	6 kV		4 kV
Rated insulation voltage U _i :	500 V		250 V
Thermal test current I _{th} :	10 A		
Utilisation category:	AC-15; DC-13		AC-15
Rated operating current/voltage I _e /U _e :	4 A/230 VAC; 4 A/24 VDC		4 A/230 V
Max. fuse rating:	6 A gL/gG D-fuse		4 A (slow blow)
Positive break travel:	8 mm		11 mm
Positive break force:	10 N for each NC contact fitted		17 N for each NC contact fitted
Ambient temperature:	– 30 °C ... + 80 °C		
Mechanical life:	> 1 million operations		

