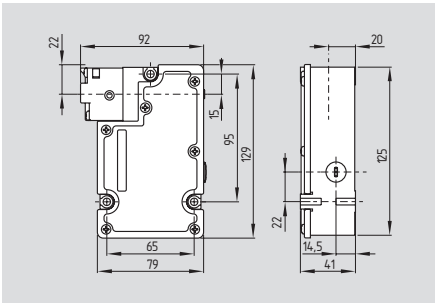


# Solenoid interlocks

## TZM/TZF



- Thermoplastic enclosure
- Manual release, emergency exit or emergency release
- Long life
- Double insulated □
- Holding force 1500 N
- Wiring compartment
- Power to unlock/power to lock principle
- 1 cable entry M20 x 1.5
- Actuating play 11 mm in direction of actuation
- With LED on request

## Technical data

Standards: IEC/EN 60947-5-1  
BG-GS-ET-19

Enclosure: glass-fibre reinforced thermoplastic, self-extinguishing

Actuator and locking bolt: zinc-plated steel / zinc diecast

Protection class: IP 67 to EN 60529

Contact material: silver

Contact type: change-over contact with double break, type Zb or 2 NC contacts, with galvanically separated contact bridges

Switching system: IEC 60947-5-1 slow action, NC contact with positive break

Connection: self-opening screw terminals

Cable section: max. 2.5 mm<sup>2</sup> (incl. conductor ferrules)

Cable entry: 1 x M20 x 1.5

$U_{imp}$ : 2.5 kV

$U_i$ : 250 V

$I_{the}$ : 10 A

Utilisation category: AC-15, DC-13

$I_e/U_e$ : 8 A / 230 VAC  
5 A / 24 VDC

Max. fuse rating: 10 A gG D-fuse

Positive break travel: 2 x 3.5 mm

Positive break force: 20 N

Magnet: 100% ED

$U_s$ : 24 VDC

110 VAC, 50/60 Hz

230 VAC, 50/60 Hz

max. 8.5 W

Power consumption: max. 8.5 W

Ambient temperature: 0 °C ... + 50 °C

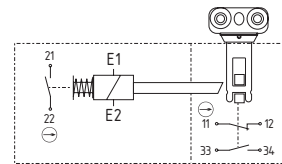
Mechanical life: 2 million operations

$F_{max}$ : 1500 N

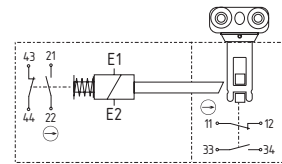
Latching force: 20 N

## Contact variants

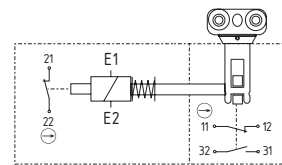
### Magnet-operated 1 NO / 2 NC



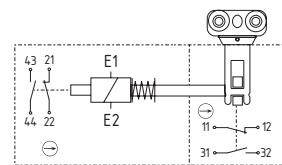
### 2 NO / 2 NC



### Spring-operated 1 NO / 2 NC



### 2 NO / 2 NC



## Approvals

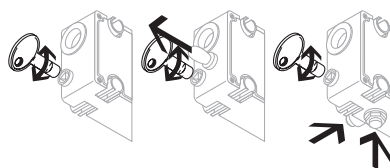


## Ordering details

TZ ① ② ③ ④

No.	Replace	Description
①	F	Spring-operated
	M	Magnet-operated
②	W	2 NC contacts in series
	CW	2NC/1NO
		2NC/2NO
		Other contacts variants on request
③	S	Manual release
	N	Emergency release
	NF	Emergency exit and manual release
④	24VDC	24 VDC
	110VAC	110 VAC
	230VAC	230 VAC

## Note



### Manual release (left)

- For manual unlocking using triangular key TZ-69 (included in delivery for S and N versions)
- For maintenance, setting-up, etc.

### Emergency release (middle)

- For cases of danger
- Mounting only outside the guarded area

### Emergency exit (right)

- For cases of danger
- Actuation from within the hazardous area

## Note

Contact 21-22 must be integrated in the safety circuit. Contact symbols shown for the closed condition of the guard device.

Interlocks with power to lock principle may only be used in special cases after a thorough evaluation of the accident risk, since the guarding device can immediately be opened on failure of the electrical power supply or when the main switch is opened.

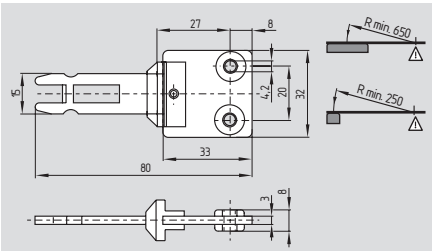
For the version with LED, the monitoring contacts are not potential-free

The actuator TZ/CO is included in delivery.

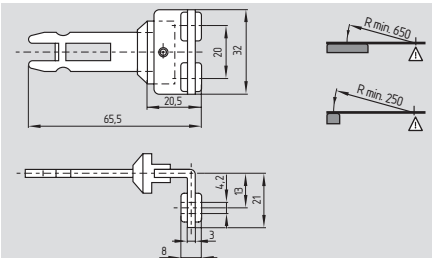
Other contacts variants on request

# Solenoid interlocks

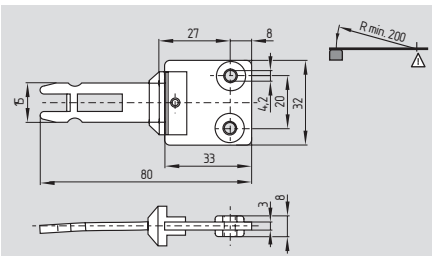
## System components



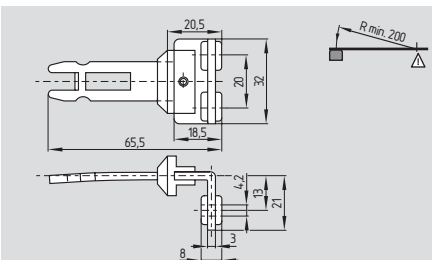
**Straight actuator TZ/CO**



**Angled actuator TZ/CW**

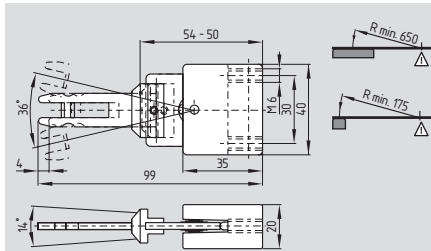


**Straight radius actuator TZ/COR**

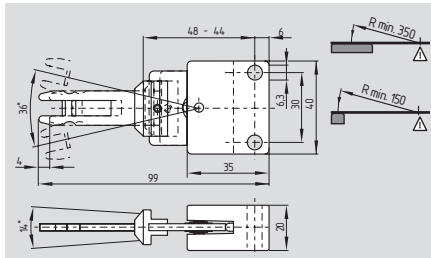


**Angled radius actuator TZ/CWR**

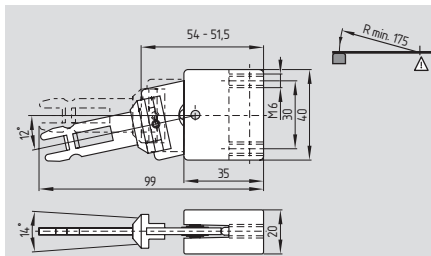
## System components



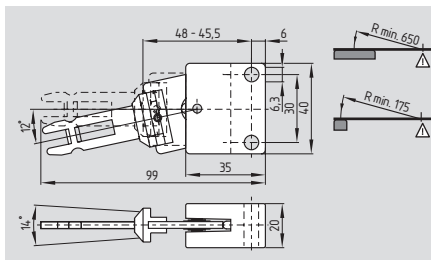
**Flexible actuator TZ/COF/HIS.1**



**Flexible actuator TZ/COF/HIS.2**

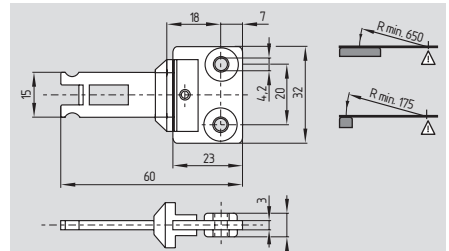


**Flexible actuator TZ/CORF/HIS.1**

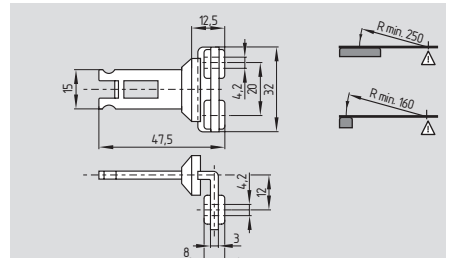


**Flexible actuator TZ/CORF/HIS.2**

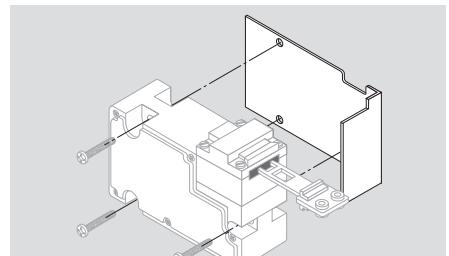
## System components



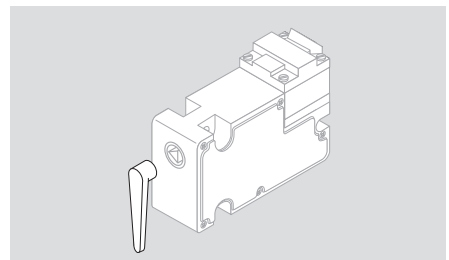
**Shortened straight actuator TZ/CK**



**Shortened angled actuator TZ/CWK**



**Mounting plate TZ-44**



**Angled triangular key TZ-75**

## Ordering details

Straight actuator **TZ/CO**  
 Angled actuator **TZ/CW**  
 Straight radius actuator **TZ/COR**  
 Angled radius actuator **TZ/CWR**

## Ordering details

Flexible actuator **TZ/COF/HIS.1**  
 Flexible actuator **TZ/COF/HIS.2**  
 Flexible actuator **TZ/CORF/HIS.1**  
 Flexible actuator **TZ/CORF/HIS.2**

## Ordering details

Shortened straight actuator **TZ/CK**  
 Shortened angled actuator **TZ/CWK**  
 Mounting plate **TZ-44**  
 Triangular key **TZ-75**  
 (TZ-69 triangular key is included in delivery for S and N executions)