



Safety interlock ZM

The small dimensions of the ZM design enable mounting even in confined installation conditions. Thanks to the simple external shape, the robust safety interlock is easy to mount.

Product characteristics

- 7 possible approach directions on each side of the actuator head
- Supporting release enables the unlocking of the guard locking function in the event of a fault
- Matching cable gland 354000 for simple installation
- Selection of ZB actuators suitable for any application

Accessories available as an option:

Insertion funnel, bolt, screw connection and deadbolt

Actuator for safety interlocks:

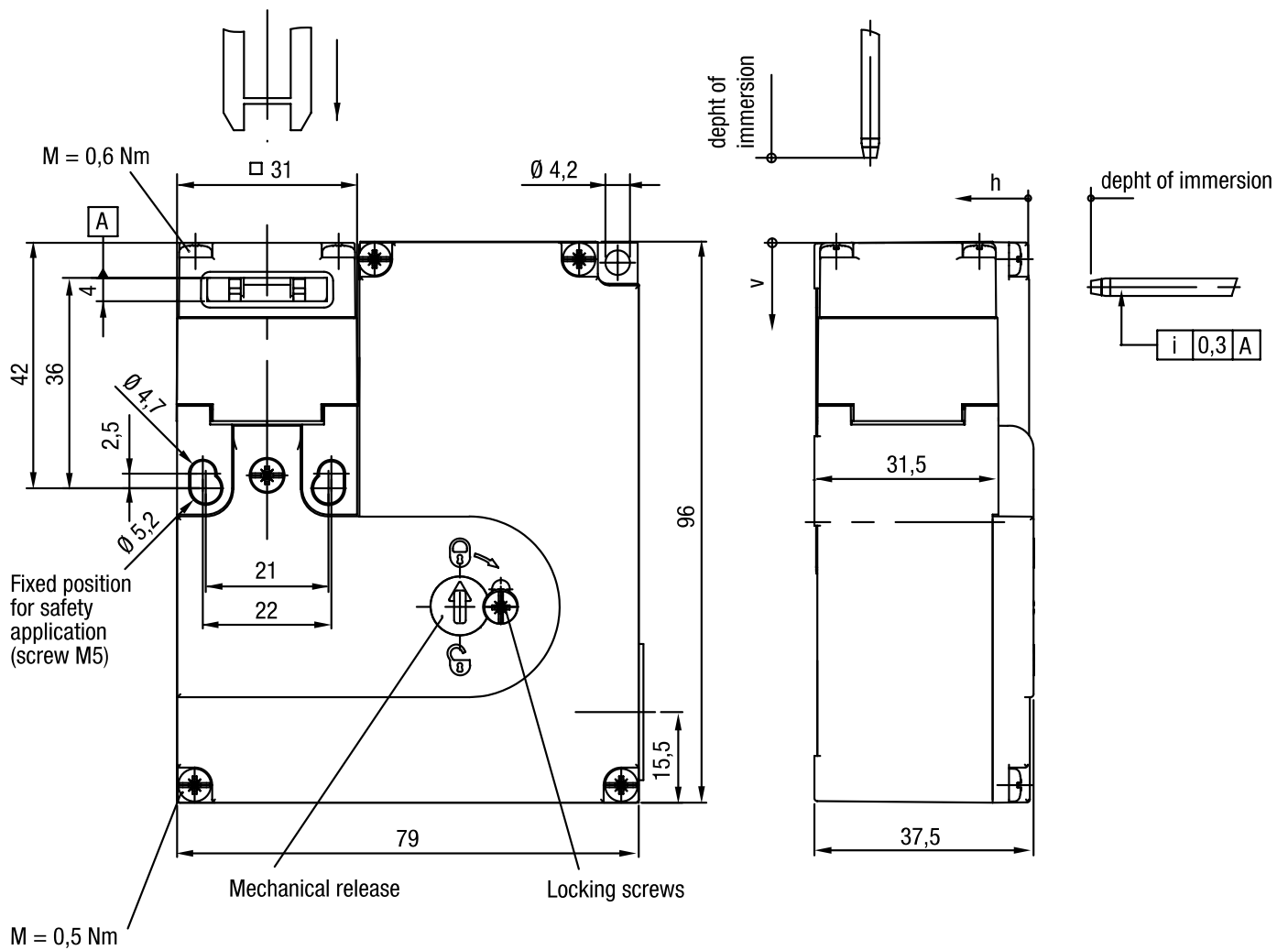
ZBG5M straight without rubber bushing ($R \geq 300\text{mm}$)
ZBG5G straight with rubber bushing ($R \geq 300\text{mm}$)
ZBA5G angled with rubber bushing ($R \geq 300\text{mm}$)
ZBG5GE straight with rubber bushing (with insertion funnel, overrun 5 mm)
ZBA5GE angled with rubber bushing (with insertion funnel, overrun 5 mm)

Hinged actuator for safety interlocks:

ZBU5M hinged actuator, approach direction top / bottom ($R \geq 200\text{mm}$)
ZBL5M hinged actuator, approach direction left / right ($R \geq 100\text{mm}$)
ZBU5ME hinged actuator, approach direction top / bottom (with insertion funnel, overrun 5 mm, $R \geq 200\text{mm}$)
ZBL5ME hinged actuator, approach direction left / right (with insertion funnel, overrun 5 mm, $R \geq 100\text{mm}$)

Technical drawing

IMAGE 1/3



Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and features:

- Dimensions:**
 - Overall width: 20,5
 - Overall height: 16
 - Distance from top edge to center of mounting holes: 9
 - Distance between mounting holes: 4
 - Distance from right edge to center of mounting holes: 10,5
 - Distance from right edge to center of mounting holes: 15,5
- Features:**
 - Four mounting holes (two on the top flange, two on the bottom flange).
 - A central vertical slot.
 - A horizontal slot on the right side.
 - A feature labeled "Protection against twisting for screw M4" with a dimension of 10,5.
 - A feature labeled "M 20 x 1,5" (likely a thread or hole).
- Annotations:**
 - A dimension of 0,3 B is shown at the bottom right.
 - A dimension of 20,5 is shown at the top.

The diagram shows a three-phase power supply system. On the left, a vertical bar represents the power source with terminals labeled SK (top) and ÜK (middle). Below these are terminals E1 and E2. The SK terminals are 22, 21, 12, and 11. The ÜK terminals are 12 and 11. A three-phase switch (SK) is connected to the SK terminals. It has two positions: a closed position (indicated by a circle with a dot) and an open position (indicated by a circle with a cross). The switch is connected to a three-phase motor (represented by a circle with a dot) and a three-phase transformer (represented by a circle with a cross). The transformer has terminals 11 and 12. The motor has terminals 11 and 12. The transformer is connected to a three-phase switch (ÜK) which is also in two positions (closed and open). The switch is connected to a three-phase motor (represented by a circle with a dot) and a three-phase transformer (represented by a circle with a cross). The transformer has terminals 11 and 12. The motor has terminals 11 and 12. The transformer is connected to a three-phase switch (ÜK) which is also in two positions (closed and open). The switch is connected to a three-phase motor (represented by a circle with a dot) and a three-phase transformer (represented by a circle with a cross). The transformer has terminals 11 and 12. The motor has terminals 11 and 12.

Product options

IMAGE 1/1

ORDERING KEY

ZM				Safety interlock
	R			Spring force locked / closed-circuit principle
	A			Magnetically locked / open-circuit principle
		1030		24 V AC/DC operating voltage for magnet / 3 force-guided N.C.
		1120		24 V AC/DC operating voltage for magnet / 1 N.O. / 2 force-guided N.C.
			V	Approach direction front

Article characteristics

Attribute	ZMA1030V	ZMA1120V	ZMR1030V	ZMR1120V
Min. switching voltage	24 V DC			
Min. switching voltage	24 V AC			
Min. switching current	1 A			
Conv. thermal continuous current Ith	4 A			
Utilization category	AC-15 4A 230V / DC-13 4A 24V			
Rated insulation voltage (Ui)	250 V			
Rated impulse withstand voltage (Uimp)	2500 V			
Magnet operating voltage +10%/-15%	24 V AC/DC			
Power consumption	6 W			
Power-on time ED	100 %			
Open-circuit principle	yes		-	
Closed-circuit principle	-		yes	
Switching principle	Slow-action switch			
Short-circuit protection in accordance with IEC 60269-1 (fuse)	4 A gG			
Conditional short circuit current	100 A			
Pollution degree	3			
B10d acc. to EN ISO 13849-1	2000000			
Type acc. to EN ISO 14119	2			
Mission time in years	20 a			
Service life, mechanical (Cycles)	1 x 10^6			
Dimensions	37,5 x 79 x 96 mm (H/B/T)			
Emergency release present	no			
Auxiliary unlocking device present	yes			
Emergency unblocking present	no			
Locking force Fmax	2000 N			
Locking force FzH	1500 N			
Immersion depth	24.5 mm			
Overrun max.	5 mm			

Article characteristics

Attribute	ZMA1030V	ZMA1120V	ZMR1030V	ZMR1120V
Number of N.C. door position	0			
Number of N.O. door position	0	1	0	1
Number of interlocks guard locking	1			
Number of N.O. guard locking	0			
Number of interlocks door position	2	1	2	1
Operating speed max.	20 m/min			
Actuation frequency	1200 1/h			
Actuation force/attraction force/retention force	35 / 30 / 20 N			
Housing material	Glasfaserverstaerkter Thermoplast			
Housing colour	Gehaeuse schwarz / Deckel gelb			
Contact material	Silberlegierung hauchvergoldet			
Protection class	IP67 DIN EN 60529			
Operating temperature min.	-20 °C			
Max. operating temperature	50 °C			
Min. storage temperature	-20 °C			
Max. storage temperature	50 °C			
Mounting type	screwed			
Weight	500 g			
Installation	arbitrary			
Connection type	3 x M20 x 1,5 Kabelverschraubung			
Min. connection cross section	0.34 mm ²			
Max. connection cross section	1.5 mm ²			
Certified in accordance with	EN ISO 60947-5-1 GS-ET-19 UL 508 / CSA 22.2			
CE label	yes			