



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:

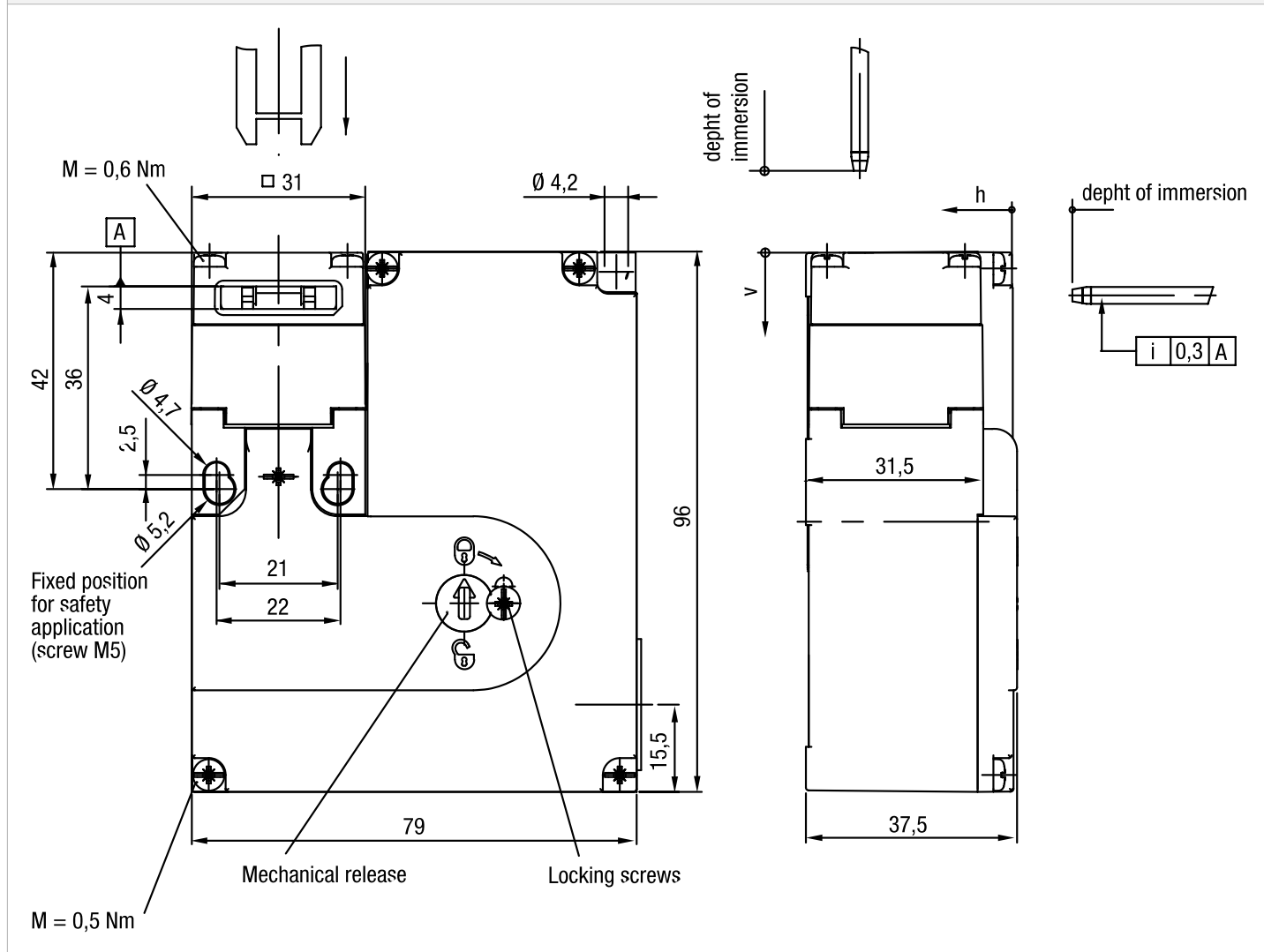
ZBG5M straight without rubber bushing ($R \geq 300\text{mm}$)
ZBG5G straight with rubber bushing ($R \geq 300\text{mm}$)
ZBA5G angled with rubber bushing ($R \geq 300\text{mm}$)
ZBG5GE straight with rubber bushing (with insertion funnel, overrun 5 mm)
ZBA5GE angled with rubber bushing (with insertion 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 assembly showing a cross-section of a housing with a central shaft and a screw. Dimensions include 16, 9, 4, 20,5, 10,5, 15,5, and 0,3. A note indicates "Protection against twisting for screw M4".

The diagram shows a 24-pin connector with three distinct sections: SK (top), UK (middle), and E1/E2 (bottom). The SK section has pins 24, 23, 12, and 11. The UK section has pins 12 and 11. The E1/E2 section has pins E1 and E2. The SK section contains two switches: one for pins 23 and 24, and another for pins 11 and 12. The UK section contains a switch for pins 11 and 12. The E1/E2 section contains a diode bridge circuit. The diagram also shows a ground symbol and a power source symbol.

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			

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 mm²			
Max. connection cross section	1.5 mm²			
Certified in accordance with	EN ISO 60947-5-1 GS-ET-19 UL 508 / CSA 22.2			
CE label	yes			