



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.

Technical specifications

- 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 300mm)
 ZBG5G straight with rubber bushing (R 300mm)
 ZBA5G angled with rubber bushing (R 300mm)
 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 200mm)
 ZBL5M hinged actuator, approach direction left / right (R 100mm)
 ZBU5ME hinged actuator, approach direction top / bottom (with insertion funnel, overrun 5 mm, R 200mm)
 ZBL5ME hinged actuator, approach direction left / right (with insertion funnel, overrun 5 mm, R 100mm)

Technical drawing

IMAGE 1/4

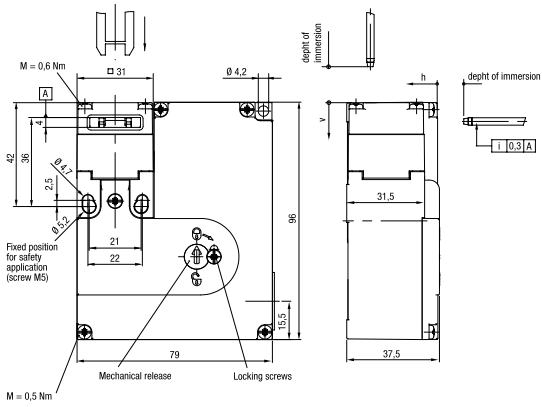


IMAGE 2/4

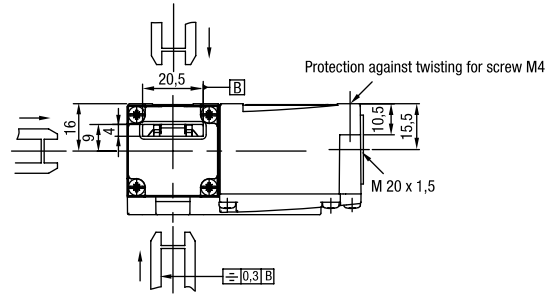


IMAGE 3/4: ZMR 1030 V, ZMA 1030 V

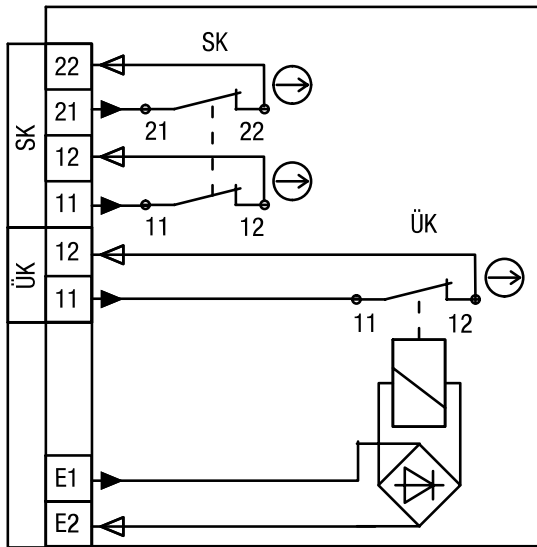
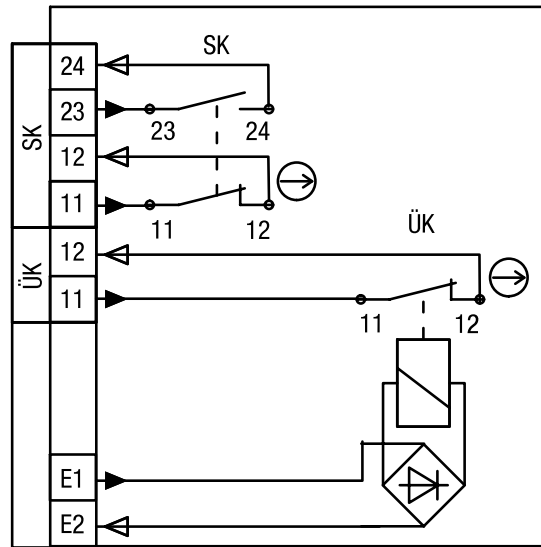


IMAGE 4/4: ZMR 1120 V, ZMA 1120 V



Electrical data

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 I _{th}	4 A			
Utilization category	AC-15 4A 230V / DC-13 4A 24V			
Rated insulation voltage (U _i)	250 V			
Rated impulse withstand voltage (U _{imp})	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			

Safety-related characteristics

Attribute	ZMA1030V	ZMA1120V	ZMR1030V	ZMR1120V
B10d acc. to EN ISO 13849-1	2000000			
Type acc. to EN ISO 14119	2			
Mission time in years	20 a			

Mechanical data

Attribute	ZMA1030V	ZMA1120V	ZMR1030V	ZMR1120V
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			
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			

Material information

Attribute	ZMA1030V	ZMA1120V	ZMR1030V	ZMR1120V
Housing material	Glasfaserverstaerkter Thermoplast			
Housing colour	Gehaeuse schwarz / Deckel gelb			
Contact material	Silberlegierung hauchvergoldet			

Environmental conditions

Attribute	ZMA1030V	ZMA1120V	ZMR1030V	ZMR1120V
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			

Installation

Attribute	ZMA1030V	ZMA1120V	ZMR1030V	ZMR1120V
Mounting type	screwed			
Weight	500 g			
Installation	arbitrary			

Connection

Attribute	ZMA1030V	ZMA1120V	ZMR1030V	ZMR1120V
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			

Approvals

Attribute	ZMA1030V	ZMA1120V	ZMR1030V	ZMR1120V
Certified in accordance with	EN ISO 60947-5-1 GS-ET-19 UL 508 / CSA 22.2			
CE label	yes			