



## Chave de segurança com travamento ZM

A chave de segurança com travamento elobau modelo ZM é ideal para montagem em áreas com espaço restrito devido à seu design compacto.

### Especificação Técnica

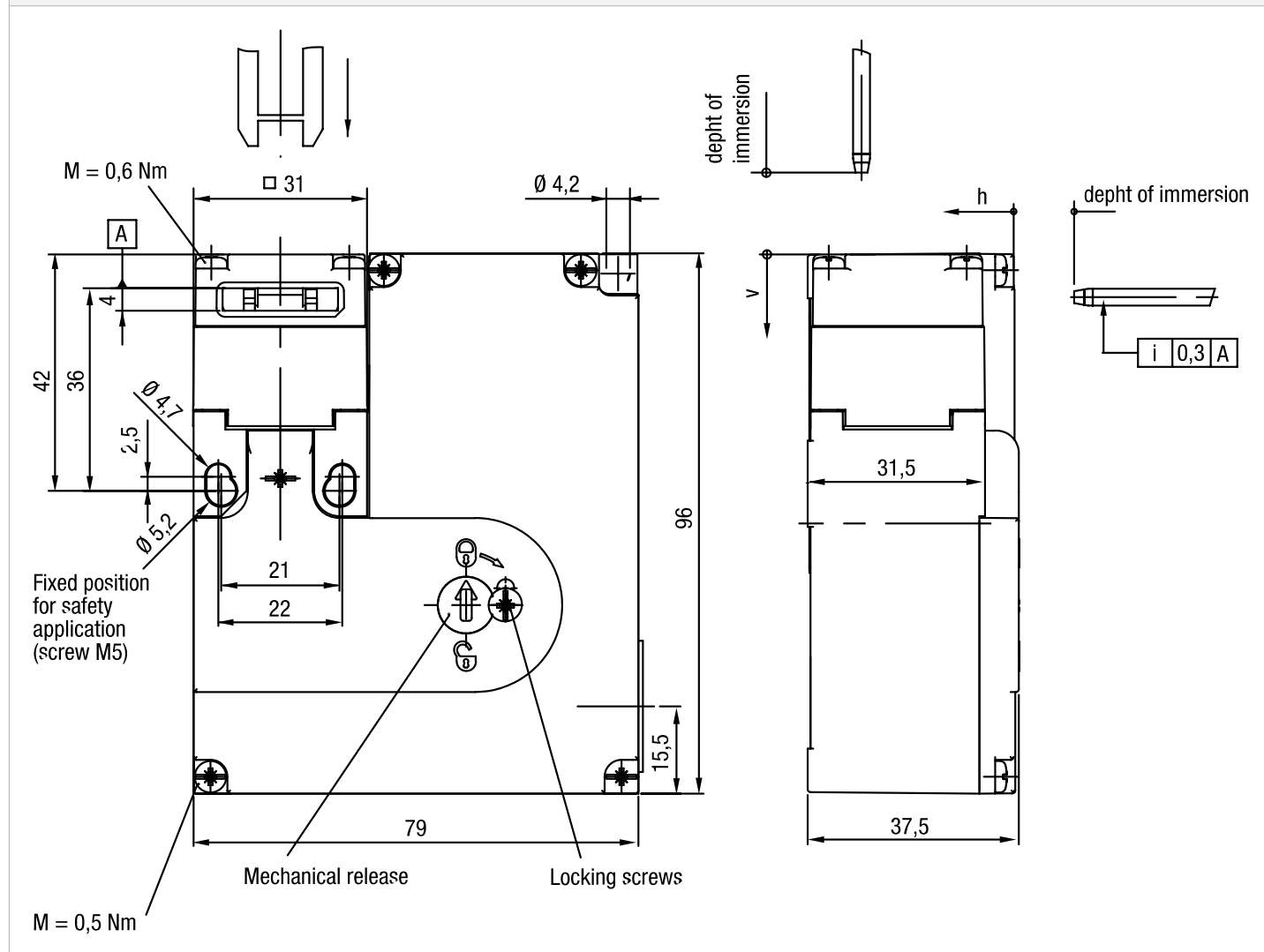
- 7 direções de acionamento
- Fácil montagem – 3 opções de entrada de cabos
- Diversas opções de travas mecânicas modelo ZB

### Modelos de travas compatíveis:

ZBG5M  
ZBG5G  
ZBA5G  
ZBG5GE  
ZBA5GE ZBU5M  
ZBL5M  
ZBU5ME  
ZBL5ME

Desenho técnico

IMAGE 1/3



Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and assembly details.

**Dimensions:**

- Overall width: 20,5
- Overall height: 16
- Distance from top edge to center of hole: 9
- Distance from center of hole to bottom edge: 4
- Distance from center of hole to right edge: 10,5
- Distance from center of hole to bottom edge: 15,5

**Assembly Details:**

- Four screws (M4) are shown securing the part to a base.
- A screw (M 20 x 1,5) is shown passing through the part, with a note: "Protection against twisting for screw M4".
- A dimension of 0,3 B is indicated for a specific feature.

The diagram illustrates a three-phase motor control system with the following components and connections:

- SK (Schütz):** A three-phase switch unit with terminals 22, 21, 12, and 11. It is controlled by a stop button (red circle with a diagonal line) and a start button (green circle with a diagonal line).
- ÜK (Überstromschutz):** A three-phase switch unit with terminals 12 and 11. It is controlled by a stop button (red circle with a diagonal line) and a start button (green circle with a diagonal line).
- E1, E2 (Thermal Relay):** A thermal relay with terminals E1 and E2. It is controlled by a stop button (red circle with a diagonal line) and a start button (green circle with a diagonal line).
- Interlocking:** The diagram shows interlocking mechanisms to prevent short circuits. For example, the stop button for SK is connected to the start button for ÜK, and the stop button for ÜK is connected to the start button for E1.

## 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

## Características do artigo

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			