



Safety interlock ZS

The slim design of the ZS safety interlock offers numerous mounting options.

Technical specifications

- 8 possible approach directions
- Supporting release enables the unlocking of the guard locking function in the event of a fault
- Three cable entries for flexible connection options
- Matching cable gland 354000 for simple installation
- Selection of ZB actuators suitable for any application

Accessories available as an option:

Override key lock, 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

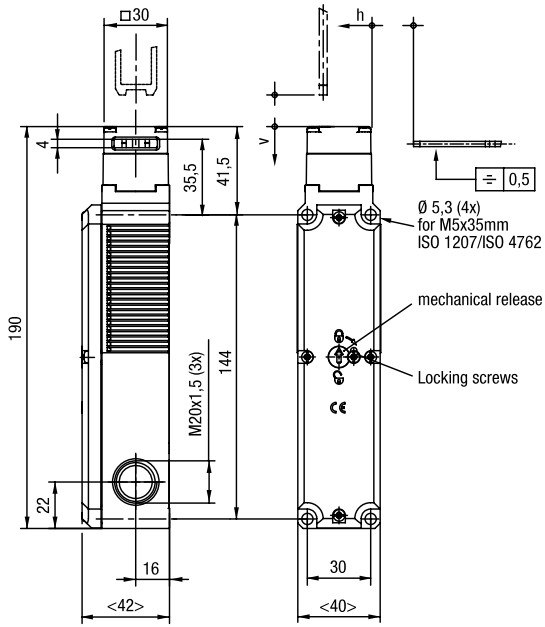


IMAGE 2/4

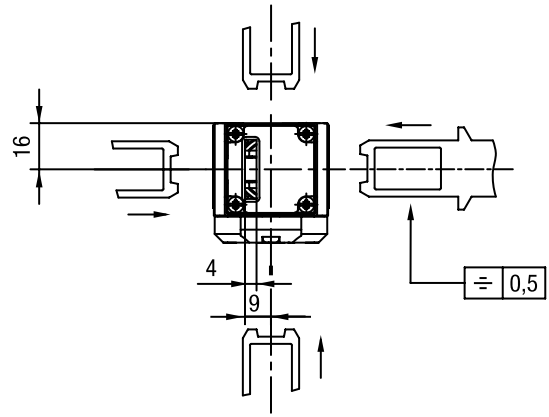


IMAGE 3/4: ZSR 1121 R, ZSA 1121 R

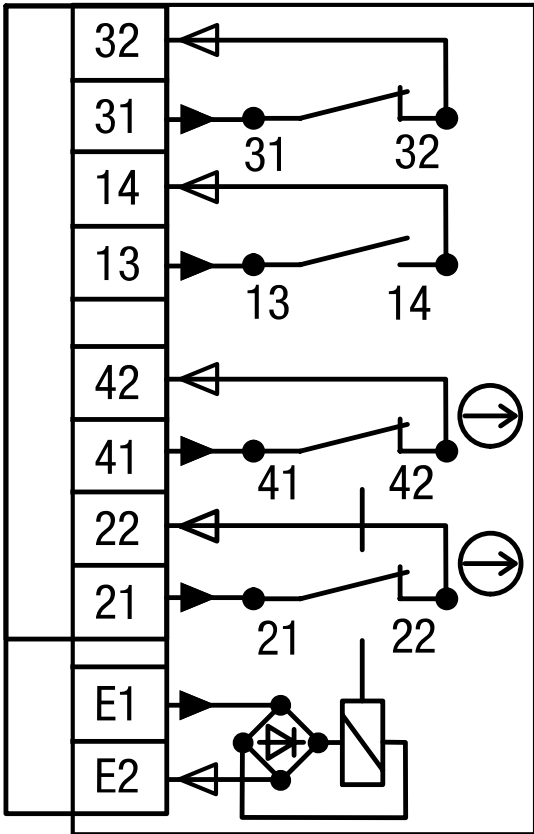
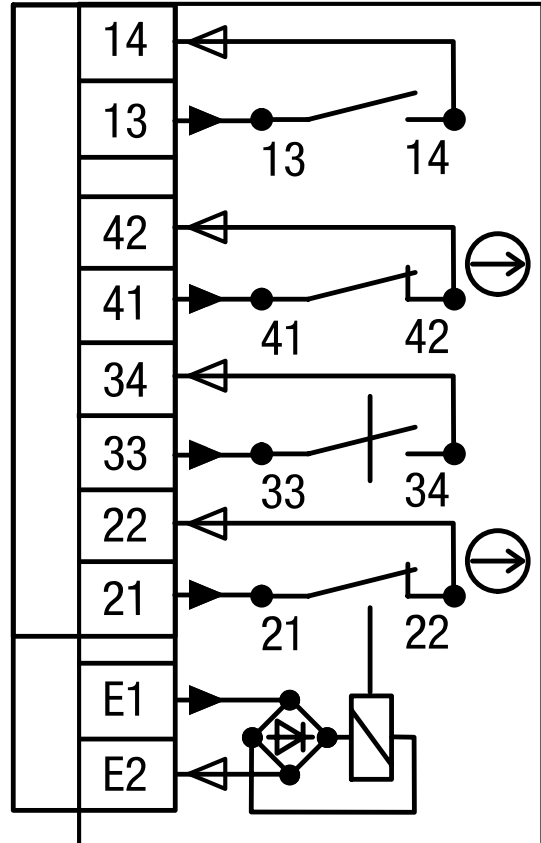


IMAGE 4/4: ZSR 1220 R, ZSA 1220 R



Electrical data

Attribute	ZSA1121R	ZSA1220R	ZSR1121R	ZSR1220R
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	8 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	ZSA1121R	ZSA1220R	ZSR1121R	ZSR1220R
B10d acc. to EN ISO 13849-1	5000000			
Type acc. to EN ISO 14119	2			
Mission time in years	20 a			

Mechanical data

Attribute	ZSA1121R	ZSA1220R	ZSR1121R	ZSR1220R
Service life, mechanical (Cycles)	1 x 10 ⁶			
Dimensions	42 x 40 x 190 mm (H/B/T)			
Emergency release present	no			
Auxiliary unlocking device present	yes			
Emergency unblocking present	no			
Locking force Fmax	2500 N			
Locking force FzH	2000 N			
Immersion depth	24.5 mm			
Overrun max.	5 mm			
Number of N.C. door position	1	0	1	0
Number of N.O. door position	1			
Number of interlocks guard locking	2			
Number of N.O. guard locking	0	1	0	1
Number of interlocks door position	0			
Operating speed max.	20 m/min			
Actuation frequency	1200 1/h			
Actuation force/attraction force/retention force	35 / 30 / 20 N			

Material information

Attribute	ZSA1121R	ZSA1220R	ZSR1121R	ZSR1220R
Housing material	Glasfaserverstaerkter Thermoplast			
Housing colour	Gehaeuse schwarz / Deckel gelb			
Contact material	Silberlegierung hauchvergoldet			

Environmental conditions

Attribute	ZSA1121R	ZSA1220R	ZSR1121R	ZSR1220R
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	ZSA1121R	ZSA1220R	ZSR1121R	ZSR1220R
Mounting type	screwed			
Weight	500 g			
Installation	arbitrary			

Connection

Attribute	ZSA1121R	ZSA1220R	ZSR1121R	ZSR1220R
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	ZSA1121R	ZSA1220R	ZSR1121R	ZSR1220R
Certified in accordance with	EN ISO 60947-5-1 GS-ET-19 UL 508 / CSA 22.2			
CE label	yes			