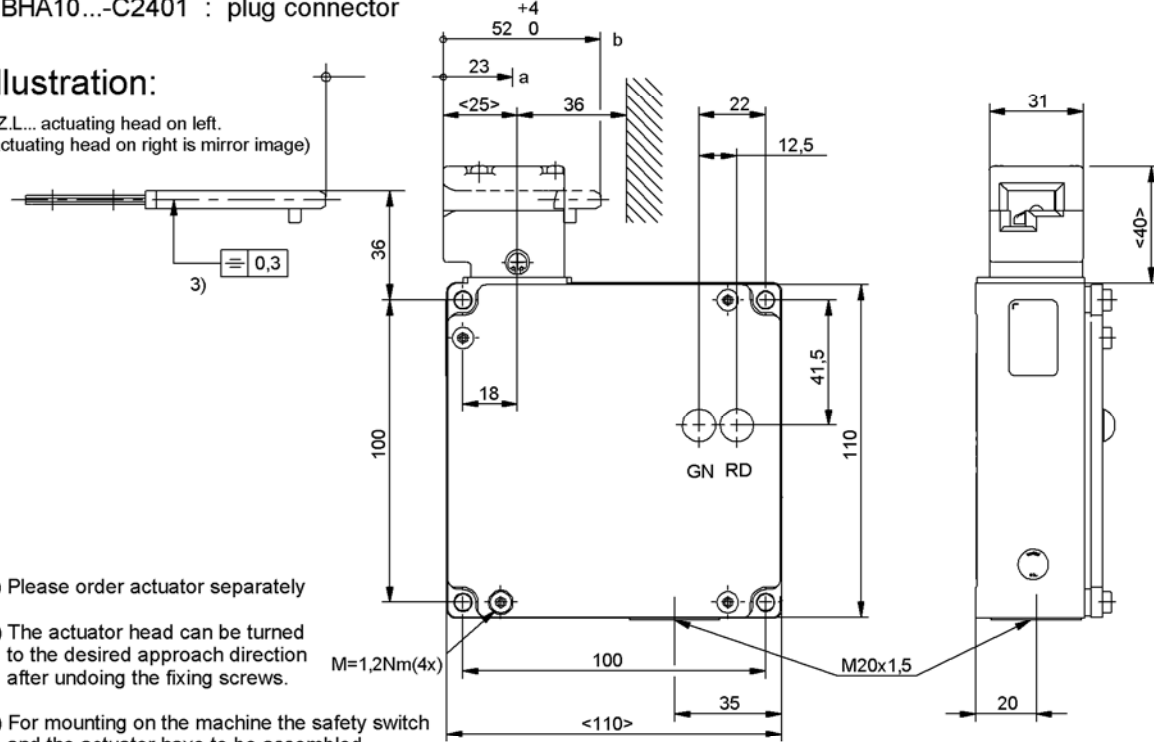


...-F : cable entry  
 ...BHA10...-C2401 : plug connector

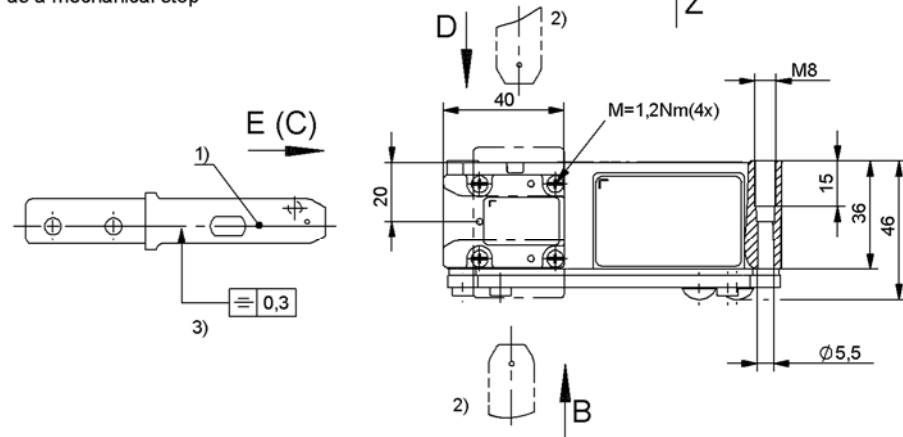
**Illustration:**

TZ.L... actuating head on left.  
 (actuating head on right is mirror image)

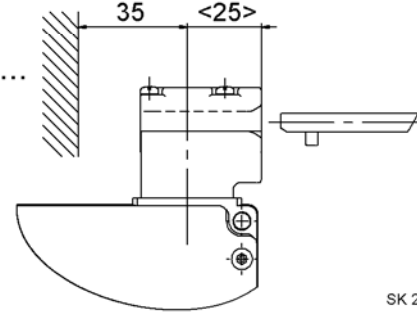


- 1) Please order actuator separately
- 2) The actuator head can be turned to the desired approach direction after undoing the fixing screws.
- 3) For mounting on the machine the safety switch and the actuator have to be assembled

It is not allowed to use safety switch as a mechanical stop



**TZ.R...**



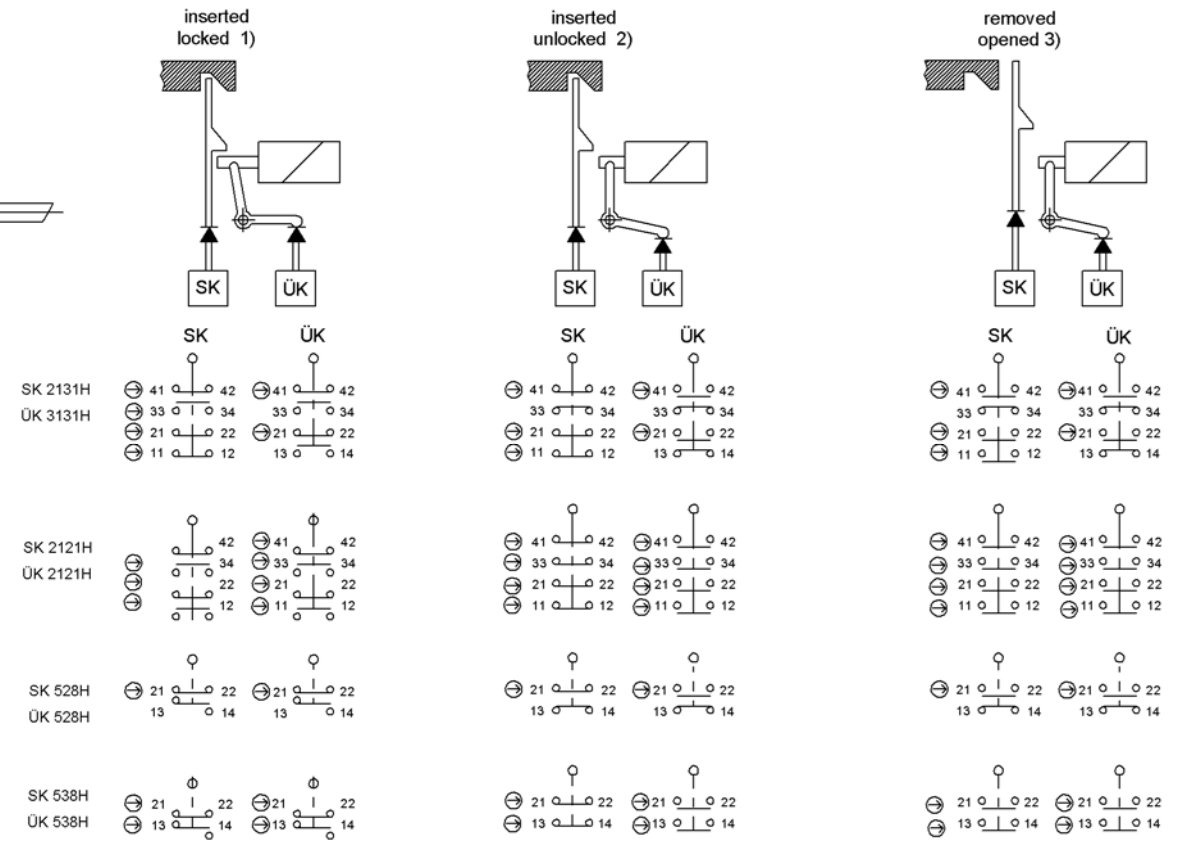
ÜK = control circuit  
 SK = safety circuit

TZ1: Unlocking by applying voltage  
 TZ2: Locking by applying voltage

- Pre-travel: the actuator is in the guide, but does not initiate switching operation.
- Switching operation complete: The actuator must be inserted up to this point to ensure reliable switching. The actuator must be withdrawn at least to point a) for switching off.

095904	TZ1LE024MVAB-F	24V
095905	TZ1RE024MVAB-F	24V
095902	TZ1LE024BHA10VAB-C2401	24V
095903	TZ1RE024BHA10VAB-C2401	24V
ID.-No.	Type	Operating Voltage

**Switching principle**



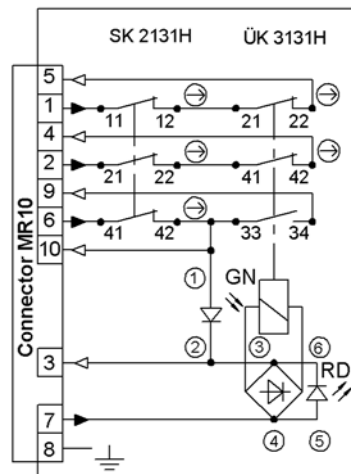
Technical Data Please observe the operating instructions (in case of disagreement between data sheet and operating instructions, the information of the data sheet are to be considered)

Parameter	Value	Unit
Housing material	Anodized die-cast alloy	
Environmental protection to IEC 60529	IP67	
Mechanical operations	1 x 10 <sup>6</sup>	
Ambient temperature	-25 bis +80	°C
Mounting position	optional	
Approach speed max.	20	m/min
Actuating-, Extraction-, Retaining force (20°)	35 / 30 / 10	N
Locking force max.	2000	N
Locking force according to test principle GS-ET-19 (Fzh = Fmax/1,3)	1500	N

**SWITCH ELEMENT**

Switching principle	Value	Unit
Type	SK2131H ÜK3131H	
Switching contacts	Slow action	
Contact material	3 NC + 1 NO 2 NC + 2 NO	
Terminals	see diagram	
Plug connector (No. of contacts) TZ...BHA10...-C2401	Silver alloy, gold-flashed	
Cable entry TZ...F	BHA10 (10-pin)	
Cable cross section	M20x1,5	
Rated insulation voltage Ui	0,34 -1,5	mm <sup>2</sup>
Rated impulse withstand voltage Uimp	250	V
Utilization category to IEC / EN 60 947-5-1	2,5	kV
Switching voltage min. at 10mA	AC-15 le 4A Ue 230V DC-13 le 4A Ue 24V	
Switching current min. at 24V	12	V
Short-circuit protection according to IEC 60269-1	1	mA
SOLENOID	4A gG (>70°: 2AgG)	
Operating voltage, see type	AC/DC 24	V
ON time	100	%
Connected load	7	W
Status LEDs	The operating voltage of the LEDs correspond to the supply voltage of the solenoid.	

**TZ...BHA10...-C2401 Circuit diagramm**



**Pin assignment Z 1:1**

