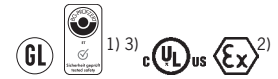


Selection table for safety switches NZ.VZ

Version												
SB	Protective plate, tamper protection on the switch head											
	Connection											
	M	SVM5	C16-1	SR6	MR8	MR9	MR10	SR11				
									Thread M20x1.5 for cable glands			
									M12 plug connector 5-pin			
									Plug connector 6-pin + PE			
									Plug connector 6-pin + PE			
									Plug connector 7-pin + PE			
									Plug connector 8-pin + PE			
									Plug connector 9-pin + PE			
									Plug connector 11-pin + PE			
									Switching element			
									Two contacts	1 NC ⊖ + 1 NO or 2 NC ⊖		
									Four contacts	2 NC ⊖ + 2 NO, 3 NC ⊖ + 1 NO or 4 NC ⊖		
SB	M	SVM5	C16-1	SR6	MR8	MR9	MR10	SR11	Switching element		With version	Page
	●								●	●	ATEX	48
		●		●					●	●		49
								●		●		49
					●	●	●			●		50
●	●								●		C1233	51
●			●	●					●		C1420/C1701/C1233	52
●								●		●	C1233	52

Safety switch NZ.VZ



- ▶ Housing according to EN 50041
- ▶ Various cable entries
- ▶ Plug connector optional
- ▶ LED optional



Approach direction

- ▶ Horizontal
- ▶ Can be adjusted in 90° steps.

LED function display (optional)

A function display is available for the following voltage ranges:

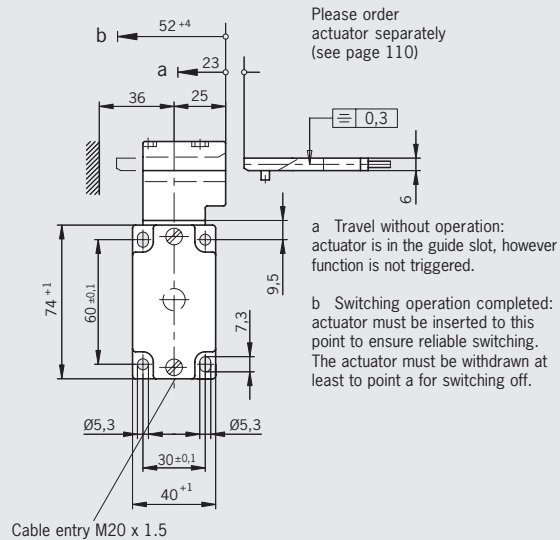
- ▶ AC/DC 12-60 V red
- ▶ AC 110 V ±15% red
- ▶ AC 230 V ±15% red

Switching elements (see also Page 13/14)

- ▶ **511** Snap-action switching element
1 NC ⊖ + 1 NO
- ▶ **528H** Slow-action switching element
1 NC ⊖ + 1 NO
- ▶ **538H** Slow-action switching element
2 NC ⊖
- ▶ **2121H** Slow-action switching element
4 NC ⊖
- ▶ **2131H** Slow-action switching element
3 NC ⊖ + 1 NO
- ▶ **3131H** Slow-action switching element
2 NC ⊖ + 2 NO

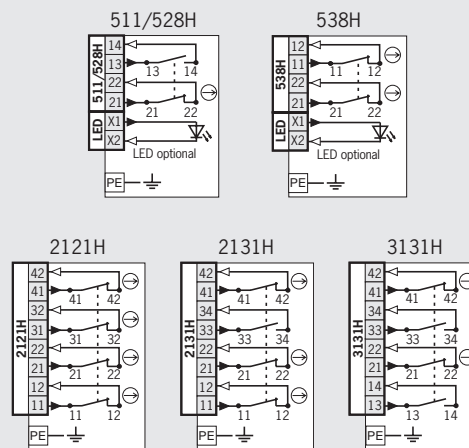
Cable entry M20 x 1.5

Dimension drawings



For cable glands see page 124

Wiring diagrams Actuator inserted



Ordering table

Series	Actuator	Connection	Switching element	Version	Function display			
					Without LED	12-60 V red LED	110 V red LED	230 V red LED
NZ	VZ Separate actuator	1 Cable entry M20 x 1.5	511 ¹⁾		089 479 ¹⁾	On request	On request	On request
			1 NC ⊖ + 1 NO	NZ1VZ-511E-M				
			528H		090 671	090 566 ³⁾	089 480 ³⁾	082 121 ³⁾
			1 NC ⊖ + 1 NO	NZ1VZ-528E-M	NZ1VZ-528EL060-M	NZ1VZ-528EL110-M	NZ1VZ-528EL220-M	
			538H		085 676	082 119 ³⁾	089 481 ³⁾	089 482 ³⁾
			2 NC ⊖	NZ1VZ-538E-M	NZ1VZ-538EL060-M	NZ1VZ-538EL110-M	NZ1VZ-538EL220-M	
			2121H		089 486	-	-	-
			4 NC ⊖	NZ1VZ-2121E-M				
2131H		082 123	-	-	-			
3 NC ⊖ + 1 NO	NZ1VZ-2131E-M							
2131H		093 660 ²⁾	-	-	-			
3 NC ⊖ + 1 NO	NZ1VZ-2131E-M-EX	ATEX incl. cable gland						
3131H		082 122	-	-	-			
2 NC ⊖ + 2 NO	NZ1VZ-3131E-M							

1) No BG approval for switching element 511

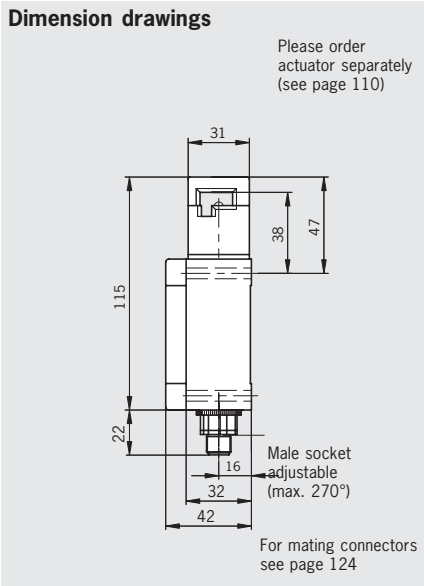
2) II 3 G EEx n IIC T5 X (reduced resistance to impact acc. to EN 61241-1; max. 4 J) / II 3 D Ex tD A22 T90°C X (reduced resistance to impact acc. to EN 61241-1; max. 4 J)

3) Approval pending

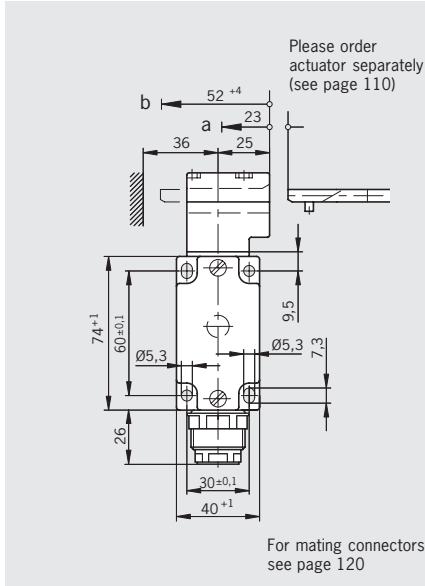
Safety Switches with Separate Actuator, Metal Housing **EUCHNER**



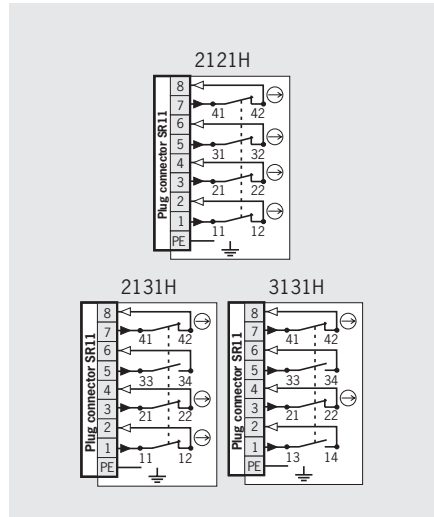
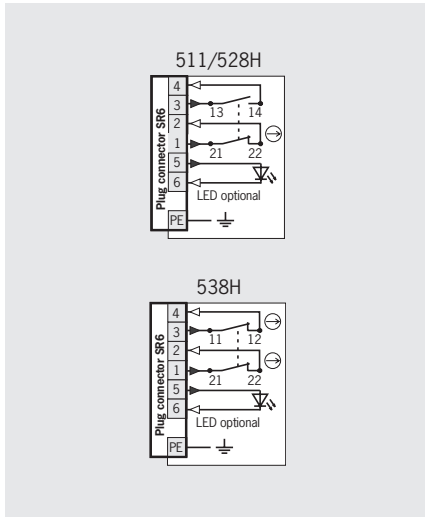
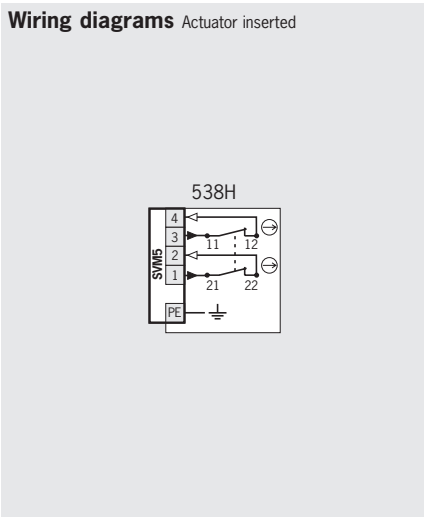
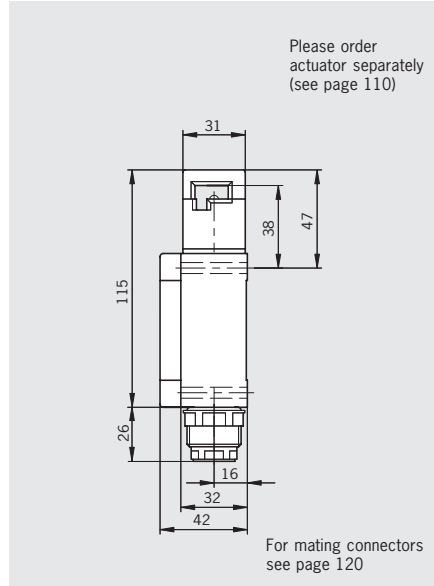
Plug connector SVM5
M12 plug, 5-pin



Plug connector SR6
6-pin + PE



Plug connector SR11
11-pin + PE



Please turn over

Ordering table

Series	Actuator	Connection	Switching element	Function display			
				Without LED	12-60 V red LED	110 V red LED	230 V red LED
NZ	VZ Separate actuator	2 Plug connector SVM5	538H 2 NC ⊖	084 905 NZ2VZ-538ESVM5	On request	-	-
			511 1 NC ⊖ + 1 NO	On request	045 551 NZ2VZ-511EL060	On request	On request
		2 Plug connector SR6	528H 1 NC ⊖ + 1 NO	084 885 NZ2VZ-528E	045 801 NZ2VZ-528EL060	059 467 NZ2VZ-528EL110	038 129 NZ2VZ-528EL220
			538H 2 NC ⊖	090 143 NZ2VZ-538E	052 108 NZ2VZ-538EL060	072 234 NZ2VZ-538EL110	059 004 NZ2VZ-538EL220
		2 Plug connector SR11	2121H 4 NC ⊖	088 852 NZ2VZ-2121E	-	-	-
			2131H 3 NC ⊖ + 1 NO	090 144 NZ2VZ-2131E	-	-	-
	3131H 2 NC ⊖ + 2 NO		090 145 NZ2VZ-3131E	-	-	-	

3) Approval pending

For safety precautions see page 179
For technical data see page 151

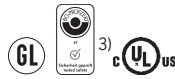
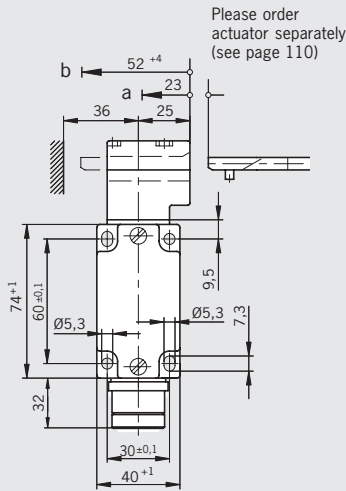


Safety Switches with Separate Actuator, Metal Housing **EUCHNER**



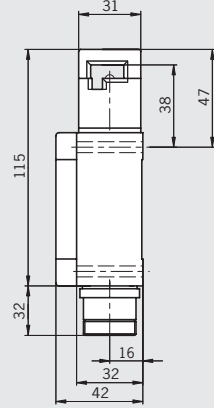
Plug connector MR8
7-pin + PE

Dimension drawings



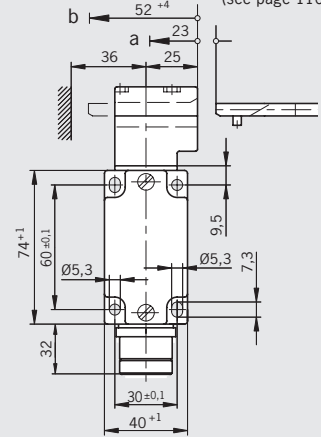
Plug connector MR9
8-pin + PE

Please order actuator separately (see page 110)

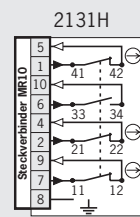
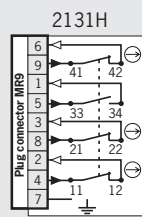
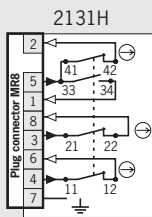


Plug connector MR10
9-pin + PE

Please order actuator separately (see page 110)



Wiring diagrams Actuator inserted



Ordering table

Series	Actuator	Connection	Switching element	Function display			
				Without LED	12-60 V red LED	110 V red LED	230 V red LED
NZ	VZ Separate actuator	1 Plug connector MR8	2131H 3 NC ⊖ + 1 NO	092 355 NZ1VZ-2131E-8C-GMMF	-	-	-
		1 Plug connector MR9	2131H 3 NC ⊖ + 1 NO	077 363 NZ1VZ-2131E-9C-GMMF	-	-	-
		1 Plug connector MR10	2131H 3 NC ⊖ + 1 NO	095 897 NZ1VZ-2131E-10C-FW	-	-	-

3) Approval pending



Safety switch NZ.VZ

- ▶ Housing according to EN 50041
- ▶ Protective plate for switch head
- ▶ Plug connector optional
- ▶ LED optional



Approach direction

Horizontal
Can be adjusted in 90° steps.

Protective plate for switch head

Makes it more difficult to tamper with the switch.

LED function display (optional)

A function display is available for the following voltage ranges:

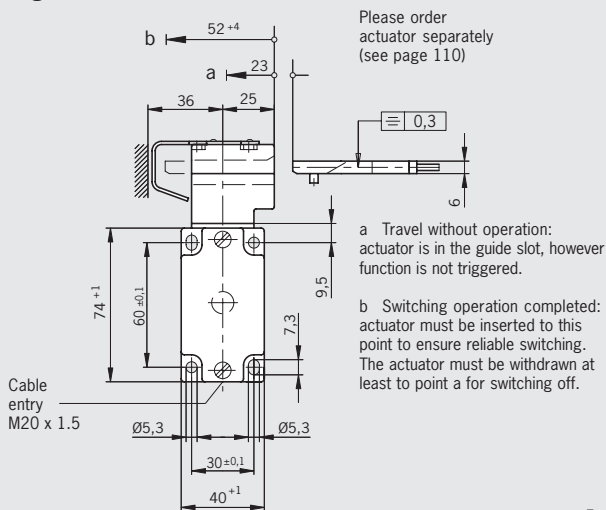
- ▶ AC/DC 12-60 V red
- ▶ AC 230 V ±15% red

Switching elements (see also Page 13/14)

- ▶ **528H** Slow-action switching element
1 NC ⊖ + 1 NO
- ▶ **538H** Slow-action switching element
2 NC ⊖
- ▶ **2121H** Slow-action switching element
4 NC ⊖
- ▶ **2131H** Slow-action switching element
3 NC ⊖ + 1 NO

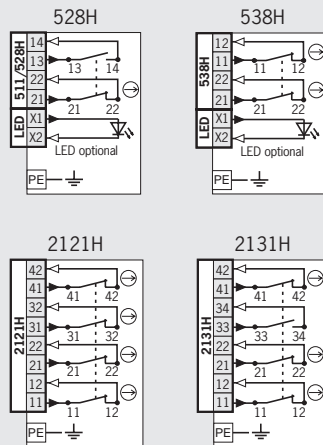
Cable entry M20 x 1.5

Dimension drawings



For cable glands see page 124

Wiring diagrams Actuator inserted



Ordering table

Series	Actuator	Connection	Switching element	Version	Function display		
					Without LED	12-60 V red LED	230 V red LED
NZ	VZ Separate actuator	1 Cable entry M20 x 1.5	528H 1 NC ⊖ + 1 NO	With protective plate	082 137 ³⁾ NZ1VZ-528E-MC1233	089 497 ³⁾ NZ1VZ-528EL060-MC1233	On request
			538H 2 NC ⊖	With protective plate	093 858 ³⁾ NZ1VZ-538E-MC1233	On request	089 496 ³⁾ NZ1VZ-538EL220-MC1233
			2121H 4 NC ⊖	With protective plate	089 914 ³⁾ NZ1VZ-2121E-MC1233	-	-
			2131H 3 NC ⊖ + 1 NO	With protective plate	093 859 ³⁾ NZ1VZ-2131E-MC1233	-	-

3) Approval pending

Please turn over

For safety precautions see page 179
For technical data see page 151



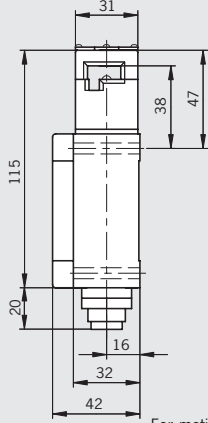
Safety Switches with Separate Actuator, Metal Housing **EUCHNER**



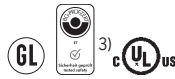
Plug connector C16-1
6-pin + PE

Dimension drawings

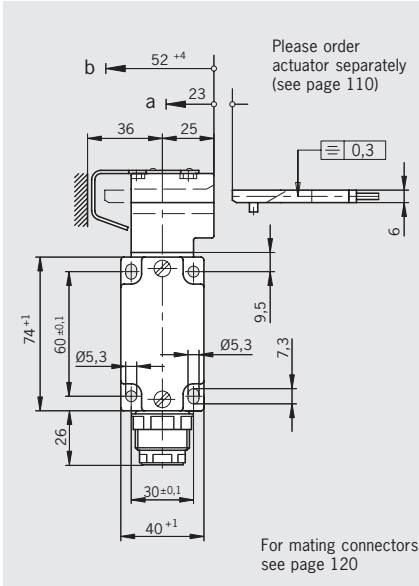
Please order actuator separately (see page 110)



For mating connectors see page 119



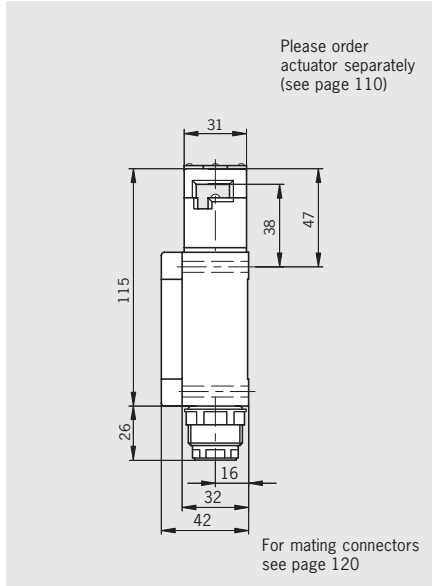
Plug connector SR6
6-pin + PE



For mating connectors see page 120

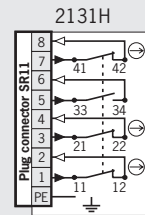
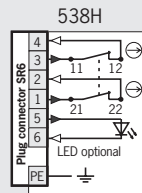
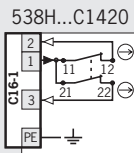
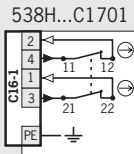


Plug connector SR11
11-pin + PE



For mating connectors see page 120

Wiring diagrams Actuator inserted



Ordering table

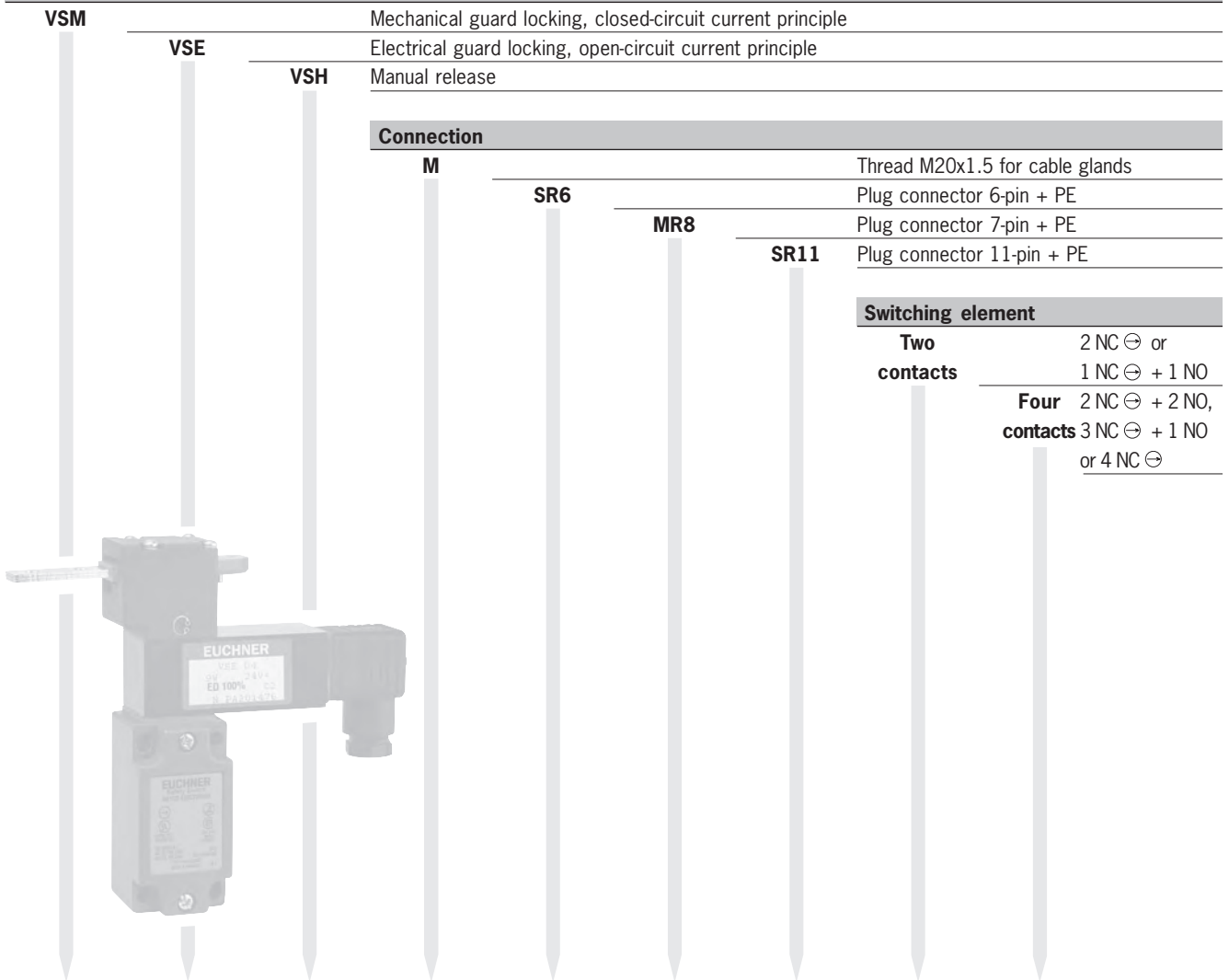
Series	Actuator	Connection	Switching element	Version	Function display
					Without LED
NZ	VZ Separate actuator	2 Plug connector C16-1 ⁴⁾	538H 2 NC ⊖	C1701 With protective plate	071 200 NZ2VZ-538EC1701
				C1420 With protective plate Alternative wiring	043 296 NZ2VZ-538EC1420
		2 Plug connectors SR6	538H 2 NC ⊖	With protective plate	077 229 NZ2VZ-538EC1233
		2 Plug connectors SR11	2131H 3 NC ⊖ + 1 NO	With protective plate	093 857 NZ2VZ-2131EC1233

3) Approval pending

4) Switch can be replaced by an enabling switch with C16-1 plug connector

Selection table for safety switches NZ.VZ.VS with guard locking without guard lock monitoring

Guard locking									
Guard locking			Connection				Switching element		
VSM	VSE	VSH	M	SR6	MR8	SR11	Two contacts	Four contacts	Page
•			•				•	•	54
•				•			•		55
•						•		•	55
	•		•				•	•	56
	•			•			•		57
	•					•		•	57
		•	•					•	58
		•			•			•	59



Safety switch NZ.VZ.VSM with guard locking without guard lock monitoring



- ▶ Housing according to EN 50041
- ▶ Plug connector optional
- ▶ LED optional



Approach direction

- Horizontal
- Can be adjusted in 90° steps.

Solenoid operating voltage and optional LED-function display

A function display is available for the following voltage ranges:

Solenoid	LED
▶ DC 24 V ±10%	AC/DC 12-60 V red
▶ AC 110 V ±15%	AC 110 V ±15% red ¹⁾
▶ AC 230 V ±15%	AC 230 V ±15% red ¹⁾

Guard locking type

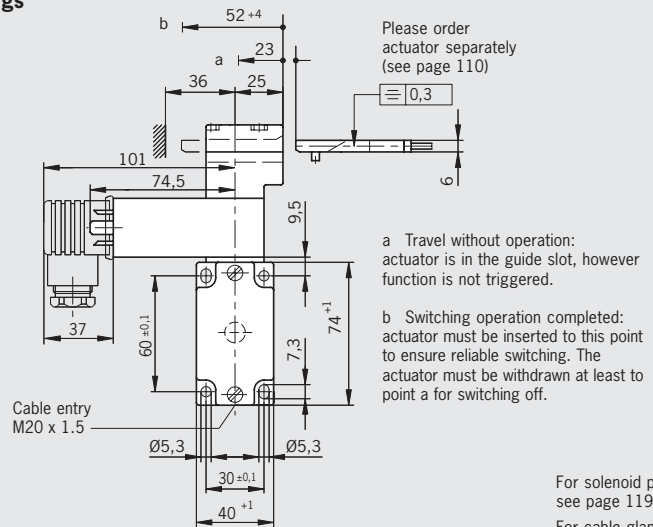
VSM Closed-circuit current principle, guard locking by spring force. Release by applying voltage to the solenoid.

Switching elements (see also page 13/14)

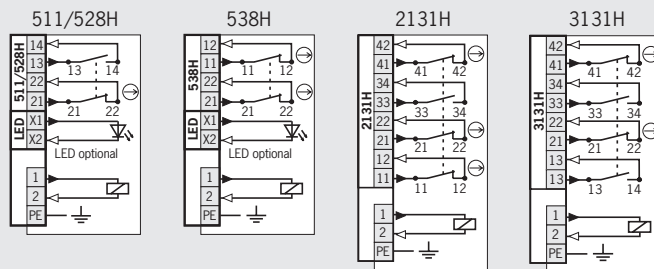
- ▶ **511** Snap-action switching element
1 NC ⊖ + 1 NO
- ▶ **528H** Slow-action switching element
1 NC ⊖ + 1 NO
- ▶ **538H** Slow-action switching element
2 NC ⊖
- ▶ **2131H** Slow-action switching element
3 NC ⊖ + 1 NO
- ▶ **3131H** Slow-action switching element
2 NC ⊖ + 2 NO

Cable entry M20 x 1.5

Dimension drawings



Wiring diagrams



Ordering table

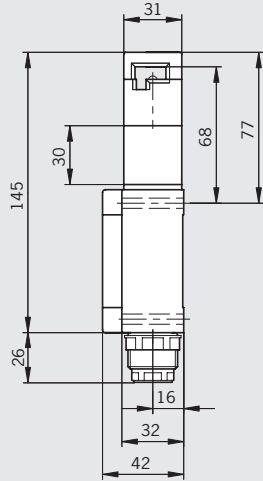
Series	Actuator	Connection	Guard locking	Solenoid voltage	Switching element	Function display			
						Without LED	12-60V red LED	110 V red LED	230 V red LED
NZ	VZ Separate actuator	1 Cable entry M20 x 1.5	VSM Mech. guard locking closed-circuit principle	04 24 V DC	1 NC ⊖ + 1 NO	090 339 NZ1VZ-511E3VSM04-M	090 344 NZ1VZ-511E3VSM04L060-M	On request	On request
					528H 1 NC ⊖ + 1 NO	082 125 NZ1VZ-528E3VSM04-M	082 126 NZ1VZ-528E3VSM04L060-M	On request	089 488 NZ1VZ-528E3VSM04L220-M
					538H 2 NC ⊖	082 131 NZ1VZ-538E3VSM04-M	082 132 NZ1VZ-538E3VSM04L060-M	On request	090 345 NZ1VZ-538E3VSM04L220-M
					2131H 3 NC ⊖ + 1 NO	088 049 NZ1VZ-2131E3VSM04-M	-	-	-
					3131H 2 NC ⊖ + 2 NO	088 050 NZ1VZ-3131E3VSM04-M	-	-	-
					528H 1 NC ⊖ + 1 NO	082 129 NZ1VZ-528E3VSM07-M	On request	089 485 NZ1VZ-528E3VSM07L110-M	090 341 NZ1VZ-528E3VSM07L220-M
				538H 2 NC ⊖	088 046 NZ1VZ-538E3VSM07-M	On request	090 340 NZ1VZ-538E3VSM07L110-M	On request	
				2131H 3 NC ⊖ + 1 NO	088 038 NZ1VZ-2131E3VSM07-M	-	-	-	
				3131H 2 NC ⊖ + 2 NO	088 040 NZ1VZ-3131E3VSM07-M	-	-	-	
				528H 1 NC ⊖ + 1 NO	088 045 NZ1VZ-528E3VSM09-M	090 349 NZ1VZ-528E3VSM09L060-M	On request	090 342 NZ1VZ-528E3VSM09L220-M	
				538H 2 NC ⊖	088 044 NZ1VZ-538E3VSM09-M	On request	On request	On request	
				2131H 3 NC ⊖ + 1 NO	088 039 NZ1VZ-2131E3VSM09-M	-	-	-	
				3131H 2 NC ⊖ + 2 NO	088 041 NZ1VZ-3131E3VSM09-M	-	-	-	

1) Use only solenoid plug with integrated rectifier (see page 119)



Plug connector SR6 6-pin + PE

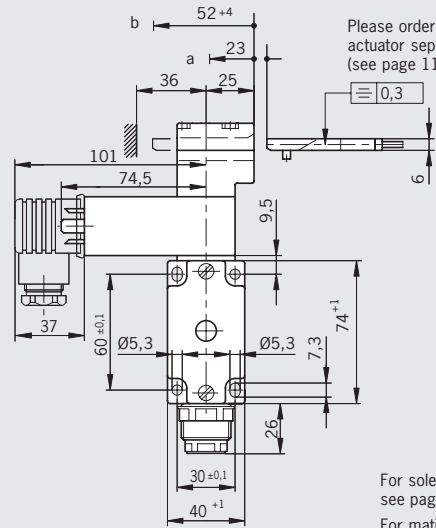
Dimension drawings



Please order actuator separately (see page 110)

For solenoid plug see page 119
For mating connectors see page 120

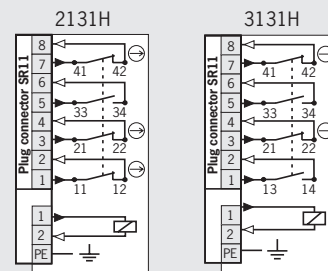
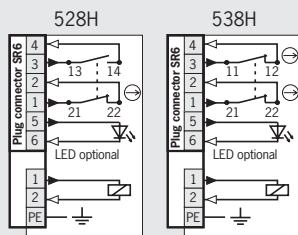
Plug connector SR11 11-pin + PE



Please order actuator separately (see page 110)

For solenoid plug see page 119
For mating connectors see page 120

Wiring diagrams



Ordering table

Series	Actuator	Connection	Guard locking	Solenoid voltage	Switching element	Function display		
						Without LED	12-60V red LED	230 V red LED
NZ	VZ Separate Actuator	2 Plug connector SR6	VSM Mech. guard locking closed-circuit principle 230 V AC	04 24 V DC	528H 1 NC + 1 NO	037 299 NZ2VZ-528E3VSM04	045 856 NZ2VZ-528E3VSM04L060	070 039 NZ2VZ-528E3VSM04L220
					538H 2 NC	050 428 NZ2VZ-538E3VSM04	059 427 NZ2VZ-538E3VSM04L060	On request
				09 ¹⁾	528H 1 NC + 1 NO	055 718 NZ2VZ-528E3VSM09	On request	On request
					538H 2 NC	076 502 NZ2VZ-538E3VSM09	On request	On request
		04 24 V DC	2 Plug connector SR11	VSM mech. guard locking closed-circuit principle	2131H 3 NC + 1 NO	074 471 NZ2VZ-2131E3VSM04	-	-
					3131H 2 NC + 2 NO	074 472 NZ2VZ-3131E3VSM04	-	-

1) Use only solenoid plug with integrated rectifier (see page 119)

For safety precautions see page 179
For technical data see page 151



Safety switch NZ.VZ.VSE with guard locking without guard lock monitoring



- ▶ Housing according to EN 50041
- ▶ Plug connector optional
- ▶ LED optional



Approach direction

- Horizontal
- Can be adjusted in 90° steps.

Solenoid operating voltage and optional LED-function display

A function display is available for the following voltage ranges:

- | | |
|-----------------|---------------------------------|
| Solenoid | LED |
| ▶ DC 24 V ±10% | AC/DC 12-60 V red |
| ▶ AC 110 V ±15% | AC 110 V ±15% red ¹⁾ |
| ▶ AC 230 V ±15% | AC 230 V ±15% red ¹⁾ |

Guard locking type

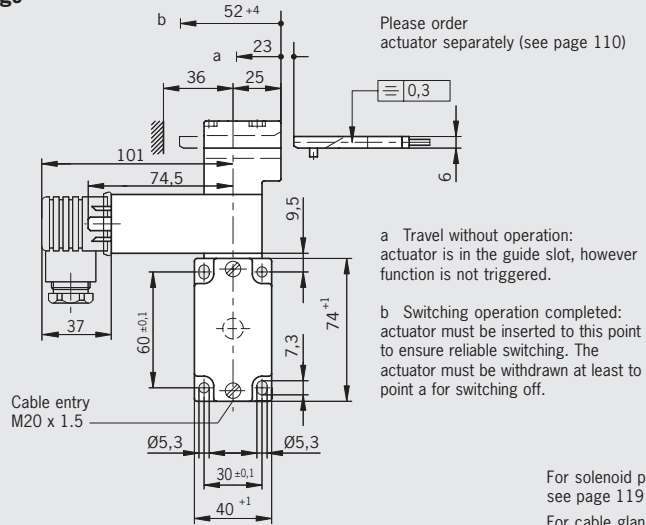
VSE Open-circuit current principle, guard locking by applying voltage to the solenoid. Release by spring force.

Switching elements (see also page 13/14)

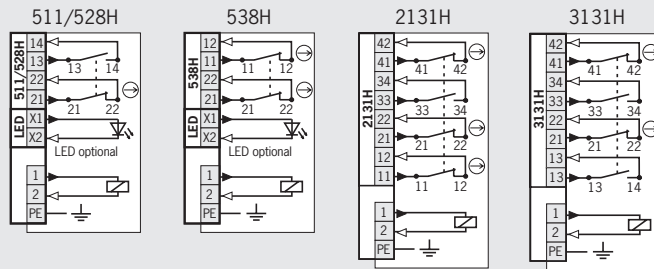
- ▶ **511** Snap-action switching element
1 NC ⊖ + 1 NO
- ▶ **528H** Slow-action switching element
1 NC ⊖ + 1 NO
- ▶ **538H** Slow-action switching element
2 NC ⊖
- ▶ **2131H** Slow-action switching element
3 NC ⊖ + 1 NO
- ▶ **3131H** Slow-action switching element
2 NC ⊖ + 2 NO

Cable entry M20 x 1.5

Dimension drawings



Wiring diagrams



Ordering table

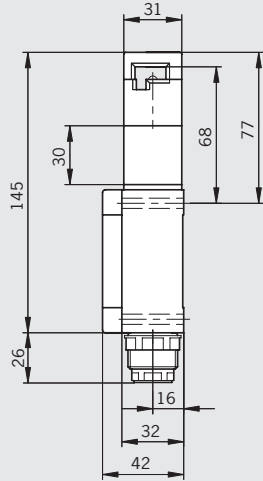
Series	Actuator	Connection	Guard locking	Solenoid voltage	Switching element	Function display			
						Without LED	12-60V red LED	110 V red LED	230 V red LED
NZ	VZ Separate actuator	1 Cable entry M20 x 1.5	VSE Electr. guard locking open-circuit current principle	04 24 V DC	511 1 NC ⊖ + 1 NO	090 343 NZ1VZ-511E3VSE04-M	On request	On request	On request
					528H 1 NC ⊖ + 1 NO	079 300 NZ1VZ-528E3VSE04-M	082 130 NZ1VZ-528E3VSE04IO60-M	On request	091 738 NZ1VZ-528E3VSE04L220-M
					538H 2 NC ⊖	089 905 NZ1VZ-538E3VSE04-M	082 128 NZ1VZ-538E3VSE04LO60-M	On request	On request
					2131H 3 NC ⊖ + 1 NO	082 134 NZ1VZ-2131E3VSE04-M	-	-	-
					3131H 2 NC ⊖ + 2 NO	088 051 NZ1VZ-3131E3VSE04-M	-	-	-
					528H 1 NC ⊖ + 1 NO	082 133 NZ1VZ-528E3VSE07-M	090 337 NZ1VZ-528E3VSE07LO60-M	089 484 NZ1VZ-528E3VSE07L110-M	090 336 NZ1VZ-528E3VSE07L220-M
				07 ¹⁾ 110 V AC	538H 2 NC ⊖	088 048 NZ1VZ-538E3VSE07-M	On request	090 348 NZ1VZ-538E3VSE07L110-M	On request
				2131H 3 NC ⊖ + 1 NO	088 036 NZ1VZ-2131E3VSE07-M	-	-	-	
				3131H 2 NC ⊖ + 2 NO	088 042 NZ1VZ-3131E3VSE07-M	-	-	-	
				09 ¹⁾ 230 V AC	528H 1 NC ⊖ + 1 NO	088 047 NZ1VZ-528E3VSE09-M	090 346 NZ1VZ-528E3VSE09LO60-M	On request	090 335 NZ1VZ-528E3VSE09L220-M
				538H 2 NC ⊖	088 035 NZ1VZ-538E3VSE09-M	On request	On request	090 334 NZ1VZ-538E3VSE09L220-M	
				2131H 3 NC ⊖ + 1 NO	088 037 NZ1VZ-2131E3VSE09-M	-	-	-	
				3131H 2 NC ⊖ + 2 NO	088 043 NZ1VZ-3131E3VSE09-M	-	-	-	

¹⁾ Use only solenoid plug with integrated rectifier (see page 119)



Plug connector SR6 6-pin + PE

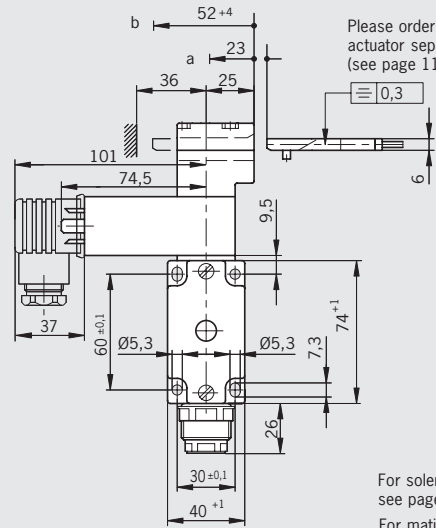
Dimension drawings



Please order actuator separately (see page 110)

For solenoid plug see page 119
For mating connectors see page 120

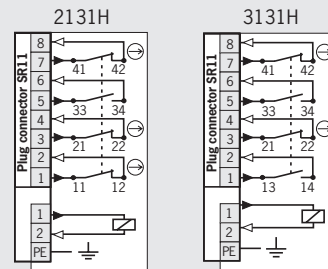
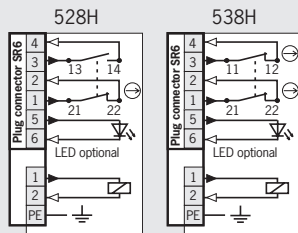
Plug connector SR11 11-pin + PE



Please order actuator separately (see page 110)

For solenoid plug see page 119
For mating connectors see page 120

Wiring diagrams



Ordering table

Series	Actuator	Connection	Guard locking	Solenoid voltage	Switching element	Function display		
						Without LED	12-60V red LED	110 V red LED
NZ	VZ Separate actuator	2 Plug connector SR6	VSE Electr. guard locking open-circuit current principle	04 24 V DC	528H 1 NC ⊖ + 1 NO	044 894 NZ2VZ-528E3VSE04	046 742 NZ2VZ-528E3VSE04L060	On request
					538H 2 NC ⊖	047 837 NZ2VZ-538E3VSE04	057 921 NZ2VZ-538E3VSE04L060	On request
				07 ¹⁾ 110 V AC	528H 1 NC ⊖ + 1 NO	On request	On request	070 290 NZ2VZ-528E3VSE07L110
					2131H 3 NC ⊖ + 1 NO	074 473 NZ2VZ-2131E3VSE04	-	-
		04 24 V DC	3131H 2 NC ⊖ + 2 NO	074 474 NZ2VZ-3131E3VSE04	-	-		

1) Use only solenoid plug with integrated rectifier (see page 119)

For safety precautions see page 179
For technical data see page 151



Safety switch NZ.VZ.VSH with guard locking without guard lock monitoring



- ▶ Housing according to EN 50041
- ▶ Manual release
- ▶ Plug connector optional



Approach direction

Horizontal
Can be adjusted in 90° steps.

Guard locking type

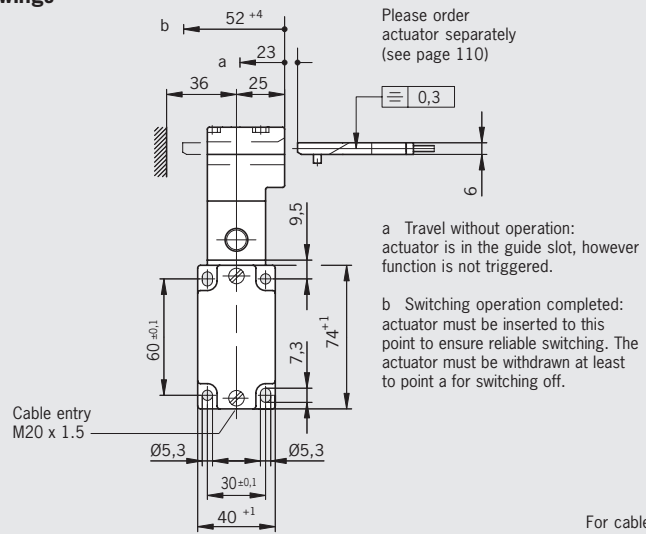
VSH Mechanical locking by spring force. Manual release.

Switching elements (see also Page 13/14)

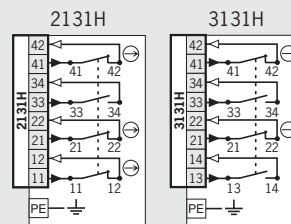
- ▶ **2131H** Slow-action switching element
3 NC ⊖ + 1 NO
- ▶ **3131H** Slow-action switching element
2 NC ⊖ + 2 NO

Cable entry M20 x 1.5

Dimension drawings



Wiring diagrams



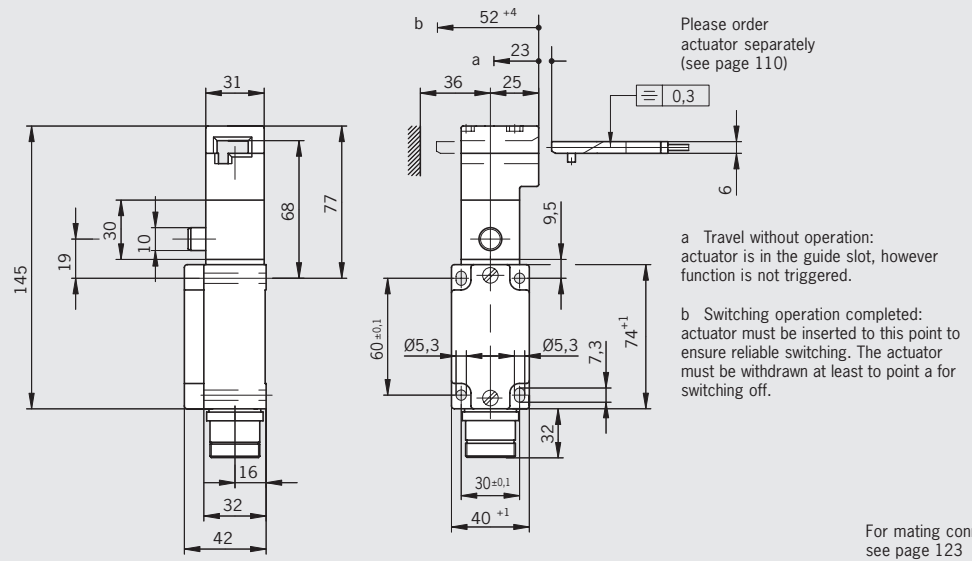
Ordering table

Series	Actuator	Connection	Guard locking	Switching element	Function display
					Without LED
NZ	VZ Separate actuator	1 Cable entry M20 x 1.5	VSH Manual guard locking not powered	2131H 3 NC ⊖ + 1 NO	089 483 NZ1VZ-2131E3VSH-M
				3131H 2 NC ⊖ + 2 NO	089 915 NZ1VZ-3131E3VSH-M

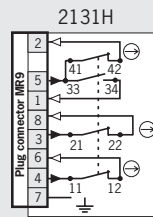


Plug connector MR8 7-pin + PE

Dimension drawings



Wiring diagrams



Ordering table

Series	Actuator	Connection	Guard locking	Switching element	Function display
					Without LED
NZ	VZ Separate actuator	1...8C Plug connector MR8	VSH Manual guard locking not powered	2131H 3 NC \ominus + 1 NO	093 611 NZ1VZ-2131E3VSH-8C-GMMF

