ZV1H 235-02Z



- **Metal enclosure**
- **30 mm x 63,5 mm x 30 mm**
- **1 Cable entry M 20 x 1.5**
- **Mounting details to EN 50047**
- **Wide range of alternative actuators**
- **Lever angle adjustable in 10° steps**
- **Good resistance to oil and petroleum spirit**
- **Actuator heads can be repositioned by 4 x 90°**
- **Snap action with constant contact pressure up to switching point**

Data

Ordering data	
	ZV1H 235-02Z
	101145025
EAN (European Article Number)	4030661135427
eCl@ss number, Version 9.0	27-27-26-01
Approval - Standards	
	cULus cCSAus CCC EAC
General data	
Product name	Z 235 roller lever 1H
	IEC 60947-5-1 ISO 13849-1 BG-GS-ET-15
Housing construction form	Norm construction design
Actuator type to DIN EN 50047	A
Enclosure material	Zink
Enclosure coating material	painted
Material of the contacts, electrical	Silver

Lever material	Plastic
Roller material	Plastic
Gross weight	200 g
General data - Features	
Safety functions	Yes
Number of safety contacts	2
Safety appraisal	
	ISO 13849-1
Mission Time	20 Year(s)
Safety appraisal - Safety outputs	
B10d Normally-closed contact (NC)	20,000,000 Operations
Mechanical data	
Actuating element	Roller lever
Mechanical life, minimum	20,000,000 Operations
Actuating speed, minimum	92 mm/min
Actuating speed, maximum	1 m/s
Note (Actuating speed)	Actuating speed with actuating angle 30° to switch axis
Actuating torque, minimum	0.2 Nm
Positive break torque	0.2 Nm
Mechanical data - Connection technique	
Terminal Connector	Screw connection
	0.75 mm²
	2.5 mm²
Note (Cable section)	All indications about the cable section are including the conductor ferrules.
Mechanical data - Dimensions	
Height of sensor	111 mm
Length of sensor	42.5 mm
Width of sensor	30 mm
Ambient conditions	
	IP67
Ambient temperature, minimum	-30 °C
Ambient temperature, maximum	+80 °C

Ambient conditions - Insulation value	
Rated impulse withstand voltage	6 kV
Electrical data	
Thermal test current	10 A
Required rated short-circuit current to EN 60947-5-1	1,000 A
Utilisation category AC-15	230 VAC
Utilisation category AC-15	4 A
Utilisation category DC-13	24 VDC
Utilisation category DC-13	1 A
Switching element	Opener (NC)
Switching principle	Snap switch element
Bounce duration, maximum	3 ms
Switching frequency	5,000 /h
Switchover time, maximum	5.5 ms

Ordering code

Product type description:

(1)(2) 2(3)5-(4)Z(5)-(6)-(7)-(8)-(9)

(1)

Z Snap action

T Slow action (not available for AF/S)

(2)

S Plunger S

R Roller plunger R

4S Plunger 4S

4R Roller plunger 4R

1R Offset roller lever 1R

K Offset roller lever K

3K Angle roller lever 3K

4K Angle roller lever 4K

K4 Angle roller lever K4

1H Roller lever 1H

7H Roller lever 7H

10H Rod lever 10H

12H Roller lever 12H

14H Roller lever 14H

AF Spring rod lever AF

RMS Brass roller

(3)

3 slim design

5 large design

(4)

02 2 NC contact

11 1 NO contacts/1 NC contact

20 2 NO contacts, (switches with 2 NO contacts are not suitable for safety applications)

(5)

H Slow action with staggered contacts

UE Slow action with overlapping contacts

(6)

without	Cable entry M20
ID	IDC method of termination
NPT	Cable entry NPT 1/2"
ST	M12 connector with A-coding (Caution! According to EN 60204-1, the versions with connector must only be used in PELV circuits.)
ST-2310	M12 connector with B-coding (Caution! According to EN 60204-1, the versions with connector must only be used in PELV circuits.)

(7)

2574 Enclosure with L-shaped mounting holes (horizontally or vertically adjustable)

(8)

2138 Roller lever 7H for position switches with safety function

(9)

1637 Gold-plated contacts

Pictures

Photo/Product/Catalogue

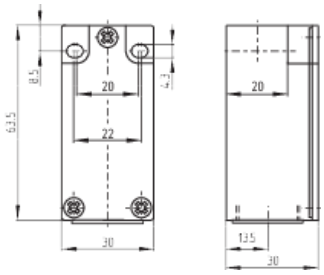


ID: k235hf01

| 218,9 kB | .jpg | 107.95 x 272.697 mm - 306 x 773 Pixel - 72 dpi

| 132,9 kB | .png | 74.083 x 186.972 mm - 210 x 530 Pixel - 72 dpi

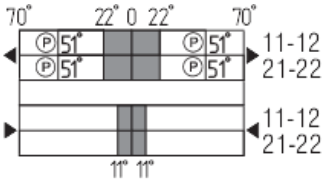
Dimension/Product/Basic



ID: 1-235g01

| 114,7 kB | .jpg | 352.778 x 293.158 mm - 1000 x 831 Pixel - 72 dpi
| 4,0 kB | .png | 74.083 x 61.383 mm - 210 x 174 Pixel - 72 dpi

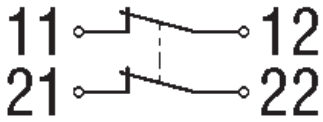
Diagramm/Product/Travel



ID: kh235s05

| 27,5 kB | .cdr |
| 104,1 kB | .jpg | 352.778 x 193.322 mm - 1000 x 548 Pixel - 72 dpi
| 3,1 kB | .png | 74.083 x 40.569 mm - 210 x 115 Pixel - 72 dpi

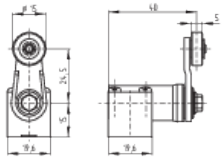
Graphic/Product/Contact



ID: k2o--k01

| 48,8 kB | .jpg | 352.778 x 125.236 mm - 1000 x 355 Pixel - 72 dpi
| 1,4 kB | .png | 74.083 x 26.458 mm - 210 x 75 Pixel - 72 dpi

Dimension/Product/Actuator



ID: 1h236g01

| 87,7 kB | .cdr |
| 7,8 kB | .png | 74.083 x 51.153 mm - 210 x 145 Pixel - 72 dpi
| 85,2 kB | .jpg | 352.778 x 244.475 mm - 1000 x 693 Pixel - 72 dpi

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.
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