TV14H 235-20ZH

- **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°**

Data

Ordering data	
	TV14H 235-20ZH
	101145056
eCl@ss number, Version 9.0	27-27-06-01
General data	
Product name	T 235 roller lever 14H
	IEC 60947-5-1 ISO 13849-1 BG-GS-ET-15
Housing construction form	Norm construction design
Enclosure material	Zink
Enclosure coating material	painted
Material of the contacts, electrical	Silver
Lever material	Metal film
Roller material	Plastic
Gross weight	196 g
General data - Features	
Number of auxiliary contacts	2
Safety appraisal	
	ISO 13849-1
Mission Time	20 Year(s)

Mechanical data	
Actuating element	Roller lever
Mechanical life, minimum	20,000,000 Operations
Actuating speed, minimum	4,122 mm/min
Actuating speed, maximum	1 m/s
Note (Actuating speed)	Actuating speed with actuating angle 30° to switch axis
Note Bounce duration	Bounce duration in accordance with actuating speed
Note (Switchover time)	Switchover time in accordance with actuating speed
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	114 mm
Length of sensor	46 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	Normally open contact (NO)
Switching principle	Slow action with staggered contacts

Switching frequency	5,000 /h

Notes	
Note (General)	Switch with 2 NO contacts are not for security tasks

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

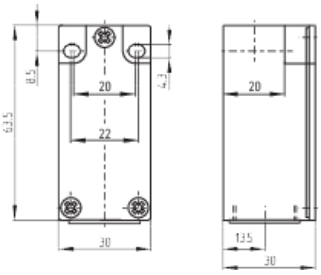
Pictures

Photo/Product/Catalogue

ID: k235hf05

| 331,6 kB | .jpg | 107.244 x 324.203 mm - 304 x 919 Pixel - 72 dpi
| 216,2 kB | .png | 74.083 x 223.661 mm - 210 x 634 Pixel - 72 dpi

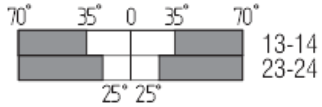
Dimension/Product/Basic



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

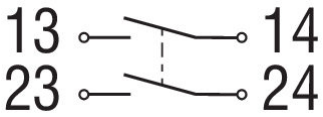
Diagramm/Product/Travel



ID: kh235s08

| 49,2 kB | .jpg | 352.778 x 114.653 mm - 1000 x 325 Pixel - 72 dpi
| 19,8 kB | .cdr |
| 1,7 kB | .png | 74.083 x 23.989 mm - 210 x 68 Pixel - 72 dpi

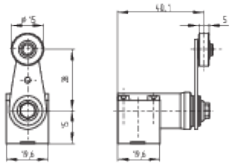
Graphic/Product/Contact



ID: k--2sk01

| 51,9 kB | .jpg | 352.778 x 135.819 mm - 1000 x 385 Pixel - 72 dpi

Dimension/Product/Actuator



ID: 1h236g05

| 25,9 kB | .cdr |
| 82,4 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 Pixel - 72 dpi
| 7,6 kB | .png | 74.083 x 51.506 mm - 210 x 146 Pixel - 72 dpi

K.A. Schmersal GmbH & Co. KG, Möddinghofe 3, D-42279 Wuppertal
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.
Generated on 222021-01-31T03:30:22+01:000301Europe/BerlinSun, 31 Jan 2021 03:30:22 +010022amSunday.31am31Europe/BerlinCET3001Europe/BerlinJanuary2021Sun, 31 Jan 2021 03:30:22 +010001am31