



## TV12H236-02Z

- Double-insulated
- Thermoplastic enclosure
- 30 mm x 58,5 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

|                               |               |
|-------------------------------|---------------|
|                               | TV12H 236-02Z |
|                               | 101136908     |
| EAN (European Article Number) | 4030661280806 |
| eCl@ss number, Version 9.0    | 27-27-26-01   |

### Approval - Standards

cULus  
cCSAus  
CCC  
EAC

### General data

|                                      |                                                                        |
|--------------------------------------|------------------------------------------------------------------------|
| Product name                         | T 236 roller lever 12 H<br>IEC 60947-5-1<br>ISO 13849-1<br>BG-GS-ET-15 |
| Housing construction form            | Norm construction design                                               |
| Actuator type to DIN EN 50047        | A                                                                      |
| Enclosure material                   | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing      |
| Material of the contacts, electrical | Silver                                                                 |
| Lever material                       | Metal film                                                             |
| Roller material                      | Plastic                                                                |
| Gross weight                         | 85 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  | 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 mm <sup>2</sup>                                                          |
|                      | 2.5 mm <sup>2</sup>                                                           |
| Note (Cable section) | All indications about the cable section are including the conductor ferrules. |

## Mechanical data - Dimensions

|                  |          |
|------------------|----------|
| Height of sensor | 108.5 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 Opener (NC)  
Switching principle Creep circuit element  
Switching frequency 5,000 /h

## Ordering code

Product type description:

(1)(2) 2(3)6-(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** slim design  
**5** large design

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

**UE** Slow action with overlapping contacts

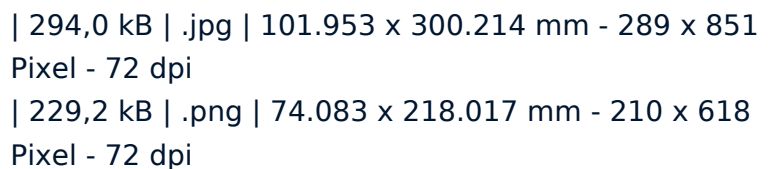
### ST-2310 M12 connector with B-coding

### 1297 Enclosure with transverse slotted holes

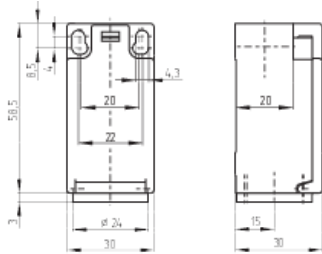
### 2138 Roller lever 7H for position switches with safety function

### 1637 Gold-plated contacts

## Photo/Product/Catalogue



### Dimension/Product/Basic

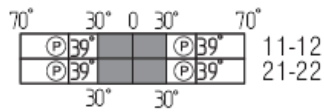


ID: 1-236g01

| 4,0 kB | .png | 74.083 x 73.378 mm - 210 x 208 Pixel  
- 72 dpi  
| 115,0 kB | .jpg | 352.778 x 349.956 mm - 1000 x 992  
Pixel - 72 dpi

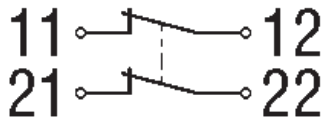
## Diagramm/Product/Travel

ID: kh235s01



| 26,1 kB | .cdr |  
| 73,9 kB | .jpg | 352.778 x 114.653 mm - 1000 x 325  
Pixel - 72 dpi  
| 2,4 kB | .png | 74.083 x 23.989 mm - 210 x 68 Pixel -  
72 dpi

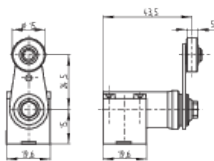
## Graphic/Product/Contact



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: 1h236g04

| 81,3 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697  
Pixel - 72 dpi  
| 79,1 kB | .cdr |  
| 7,7 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 232021-01-31T03:50:23+01:000301Europe/BerlinSun, 31 Jan 2021 03:50:23

+010023amSunday.31am31Europe/BerlinCET5001Europe/BerlinJanuary2021Sun, 31 Jan 2021 03:50:23

+010001am31