

## TV7H256-02Z-2138

- Double-insulated
- Thermoplastic enclosure
- 58 mm x 50,5 mm x 31 mm
- 2 cable entries 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

|                               |                   |
|-------------------------------|-------------------|
|                               | TV7H 256-02Z-2138 |
|                               | 101189111         |
| EAN (European Article Number) | 4030661346151     |
| eCl@ss number, Version 9.0    | 27-27-26-01       |

### Approval - Standards

cULus  
CCC  
EAC

### General data

|                                      |                                                                   |
|--------------------------------------|-------------------------------------------------------------------|
| Product name                         | T 256 roller lever 7H-2138                                        |
|                                      | IEC 60947-5-1                                                     |
|                                      | ISO 13849-1                                                       |
|                                      | BG-GS-ET-15                                                       |
| Housing construction form            | Norm construction design                                          |
| Enclosure material                   | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| Material of the contacts, electrical | Silver                                                            |
| Lever material                       | Metal film                                                        |
| Roller material                      | Plastic                                                           |
| Gross weight                         | 119 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  | 1,440 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 | 147.5 mm |
| Length of sensor | 49.1 mm  |
| Width of sensor  | 58 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)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: k256hf02

| 533,0 kB | .jpg | 189.089 x 366.183 mm - 536 x 1038

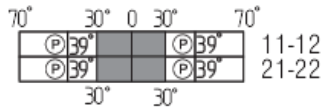
Pixel - 72 dpi

| 99,0 kB | .png | 74.083 x 143.228 mm - 210 x 406

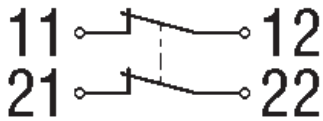
Pixel - 72 dpi

### Diagramm/Product/Travel

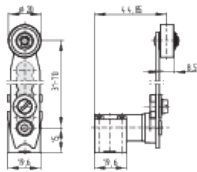
| 26,1 kB | .cdr |  
| 73,9 kB | .jpg | 352.778 x 114.653 mm - 1000 x 325  
Pixel - 72 dpi  
| 2,4 kB | .png | 74.083 x 23.989 mm - 210 x 68 Pixel -  
72 dpi



| 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



| 31,7 kB | .cdr |  
| 9,1 kB | .png | 74.083 x 51.506 mm - 210 x 146 Pixel  
- 72 dpi  
| 89,0 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695  
Pixel - 72 dpi



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