

## Datasheet - TV7H 335-01/01z-2138

Position switch / 335 Metal enclosure - EN 50041 with Actuator / 335 Roller lever 7H-2138



- Metal enclosure
- Wide range of alternative actuators
- Good resistance to oil and petroleum spirit
- 40,5 mm x 76 mm x 38 mm
- Actuator heads can be repositioned by 4 x 90°
- 1 Cable entry M 20 x 1.5
- Design to EN 50041

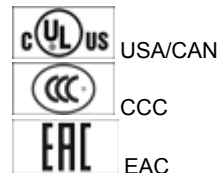
(Minor differences between the printed image and the original product may exist!)

### Ordering details

Product type description	TV7H 335-01/01Z-2138
Article number	101128520
EAN Code	4030661062686
eCl@ss	27-27-26-01

### Approval

Approval



### Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	20.000.000
Mission time	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{ap} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

### Global Properties

Permanent light	335 Rollenschwenkhebel 7H 2138
Standards	EN 60947-5-1, BG-GS-ET-15
Compliance with the Directives (Y/N) 	Yes
Suitable for safety functions (Y/N)	Yes
Materials	
- Material of the housings	Aluminium
- Lever material	Metal film
- Roller material	Plastic
- Material of the contacts	Silver
Housing coating	painted
Housing construction form	Norm construction design
Weight	265


## Mechanical data

Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	0,75
- Max. Cable section	2.5
Mechanical life	30.000.000 operations
Switching frequency	max. 5000 /h
notice	All indications about the cable section are including the conductor ferrules.
Design of actuating element	Roller lever
actuating torque	min. 31 Ncm
Bounce duration	< 2
Switchover time	in accordance with actuating speed
Actuating speed with actuating angle 30° to switch axis	
- Min. Actuating speed	
- Max. Actuating speed	2.5 m/s

## Ambient conditions

Ambient temperature	
- Min. environmental temperature	-30 °C
- Max. environmental temperature	+80 °C
Protection class	IP67

## Electrical data

Design of control element	Opener (NC)
Switching principle	Creep circuit element
- positive break NC contact 	
Number of auxiliary contacts	0
Number of safety contacts	2
1 Normally-closed contact right	
1 Normally-closed contact left	
Thermal test current I <sub>the</sub>	10 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 4 A
Required rated short-circuit current	1000 A
Max. fuse rating	6 A gG D-fuse

## ATEX

Explosion protection categories for gases None

Explosion protected category for dusts None

## Dimensions

Dimensions of the sensor

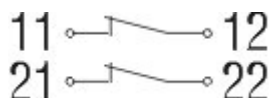
- Width of sensor	40.5 mm
- Height of sensor	173.5 mm
- Length of sensor	57.25 mm

## notice

On version TVH 335-01/01z positive break only to one side.

The positioning of the head must be carried out in factory.

## Diagram



Note Diagram

positive break NC contact

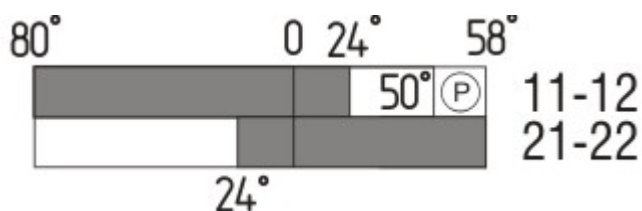
active

no active

Normally-open contact

Normally-closed contact

## Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

Break point

Positive opening sequence/- angle

**VS** adjustable range of NO contact

**VÖ** adjustable range of NC contact

**N** after travel

## Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.

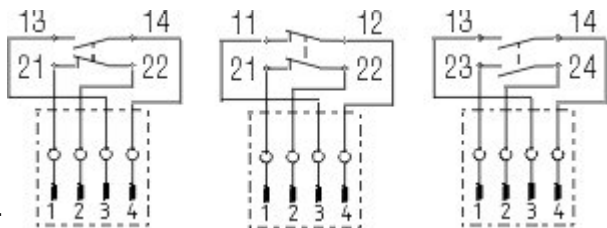
Order example: TV7H 335-01/01z-2138-**1637**

....-**1637**

0,3 µm gold-plated contacts

...NPT

Cable entry NPT 1/2"



...ST

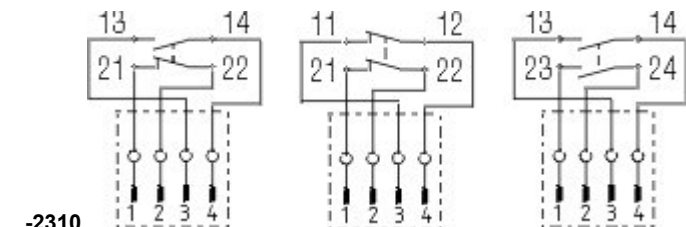
M12 connector with A-coding

Rated impulse withstand voltage  $U_{imp}$ : 0,8 kV

Rated insulation voltage  $U_i$ : 50 V

Operating current  $I_e$ : AC-15: 50 V / 4 A

Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.



...2310

M12 connector with B-coding

Rated impulse withstand voltage  $U_{imp}$ : 0,8 kV

Rated insulation voltage  $U_i$ : 50 V

Operating current  $I_e$ : AC-15: 50 V / 4 A

Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.

## Ordering code

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

(1)

Z

T

Snap action

Slow action

(2)

S

R

H

10H

7H

1K

3K

Plunger S

Roller plunger R

Roller lever H

Rod lever 10H

Roller lever 7H

Offset roller lever 1K

Angle roller lever 3K

(3)

3

5

slim design

large design

(4)

11

02

20

01/01

12

03

1 Normally open contact (NO) / 1 Opener (NC)

2 Opener (NC)

2 Normally open contact (NO) (*Switch with 2 NO contacts are not for security tasks*)

1 Opener (NC) left / 1 Opener (NC) right

1 Normally open contact (NO) / 2 Opener (NC)

3 Opener (NC)

(5)

H

UE

Slow action with staggered contacts

Slow action with overlapping contacts

(6)

G24

with LED

(7)

without

NPT

Cable entry M20

cable entry NPT 1/2"

<b>ST</b>	M12 connector with A-coding ( <i>Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.</i> )
<b>ST-2310</b>	M12 connector with B-coding ( <i>Caution! The versions with connector may only be used in PELV circuits to EN 60204-1.</i> )
<b>(8)</b>	
<b>2138</b>	Roller lever 7H for Position switches with safety function
<b>(9)</b>	
<b>1637</b>	gold-plated contacts

## Documents

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**Operating instructions and Declaration of conformity (de)** 157 kB, 18.06.2018

Code: mrlk\_zt332-335-336-355\_de

**Operating instructions and Declaration of conformity (nl)** 162 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_nl

**Operating instructions and Declaration of conformity (it)** 162 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_it

**Operating instructions and Declaration of conformity (pt)** 163 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_pt

**Operating instructions and Declaration of conformity (pl)** 198 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_pl

**Operating instructions and Declaration of conformity (en)** 160 kB, 18.06.2018

Code: mrlk\_zt332-335-336-355\_en

**Operating instructions and Declaration of conformity (fr)** 164 kB, 27.06.2018

Code: mrlk\_zt332-335-336-355\_fr

**Declaration of conformity (es)** 91 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_es

**Declaration of conformity (pl)** 130 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_pl

**Declaration of conformity (it)** 89 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_it

**Declaration of conformity (pt)** 90 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_pt

**Declaration of conformity (fr)** 89 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_fr

**Declaration of conformity (de)** 581 kB, 07.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_de

**Declaration of conformity (en)** 579 kB, 07.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_en

**Declaration of conformity (nl)** 89 kB, 18.06.2018

Code: KAS\_konfi\_nsr\_zt2xx-3xx\_nl

**CCC certification** (en) 187 kB, 03.08.2015

Code: q\_347p02

**CCC certification** (cn) 166 kB, 03.08.2015

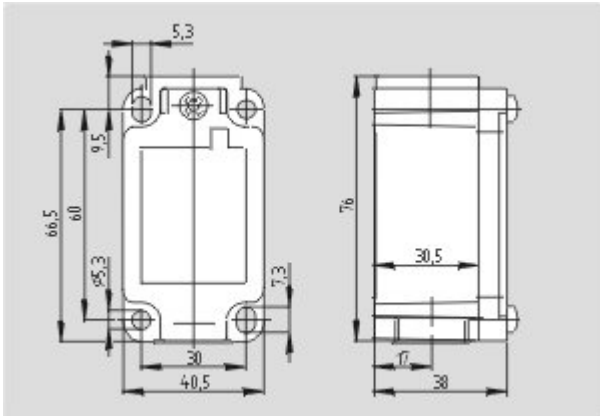
Code: q\_347p03

**EAC certification** (ru) 844 kB, 05.10.2015

Code: q\_6037p17\_ru

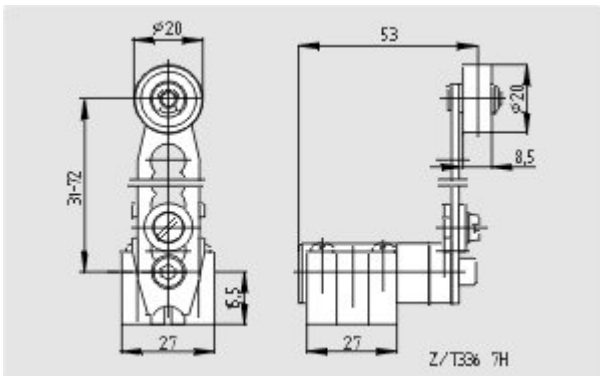
## Images

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Dimensional drawing (basic component)

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Dimensional drawing (actuator)

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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