

## Datasheet - UVH 431Y



Position switch / medium heavy Position switch / Universal range U - Metal enclosure / U 431 / U 431 Roller lever H



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

- Metal enclosure
- 1 Contact
- 62 mm x 58 mm x 50 mm ( basic component)
- Switching points and contact function adjustable
- 1 Cable entry M 20 x 1.5
- Actuator head can be repositioned in steps 4 x 90°
- Continuous adjustment of lever position 360°
- Lever can be transposed by 180°

### Ordering details

|                          |               |
|--------------------------|---------------|
| Product type description | UVH 431Y      |
| Article number           | 101164804     |
| EAN Code                 | 4030661206936 |
| eCl@ss                   | 27-27-06-01   |

### Approval

Approval



### Global Properties

|                                      |                            |
|--------------------------------------|----------------------------|
| Permanent light                      | U 431 Rollenschwenkhebel H |
| Standards                            | EN 60947-5-1               |
| Compliance with the Directives (Y/N) | Yes                        |
| Suitable for safety functions (Y/N)  | No                         |
| Standard housing (Y/N)               | No                         |
| Materials                            |                            |
| - Material of the housings           | light alloy die-casting    |
| - Roller material                    | Plastic                    |
| - Material of the contacts           | Silver                     |
| Housing coating                      | painted                    |
| Weight                               | 355                        |
| Slide form                           | Castor                     |

### Mechanical data

|  |   |
|--|---|
| Design of electrical connection                              | Screw connection  |
| Cable section  |   |
| - Min. Cable section   | 1.5   |
| - Max. Cable section   | 2.5   |
| AWG-Number   | 13  |
| Active principle   | mechanical  |
| Mechanical life  | 10.000.000 operations   |
| Contact life   | 2.000.000 operations, at 6 A / 400 V, $\cos \varphi = 0,4$                    |
| notice   | All indications about the cable section are including the conductor ferrules. |
| Design of actuating element                                  | Roller lever  |
| Contact opening  | 2 x 1.5   |
| Actuating speed with vertical actuating angle to switch axis |   |
| - Min. Actuating speed                                       | 1   |
| - Max. Actuating speed                                       | 3   |
| - Actuating angle from left of switch axis                   | 30  |
| - Actuating angle from right of switch axis                  | 30  |

## Ambient conditions

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|                                  |                      |
|----------------------------------|----------------------|
| Ambient temperature              |                      |
| - Min. environmental temperature | -20                  |
| - Max. environmental temperature | +60                  |
| Protection class                 | IP65 to IEC/EN 60529 |

## Electrical data

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|                                |                       |
|--------------------------------|-----------------------|
| Design of control element      | Opener (NC)           |
| Switching principle            | Creep circuit element |
| Number of shutters             | 0                     |
| Number of openers              | 1                     |
| Rated insulation voltage $U_i$ | 500 V                 |
| Thermal test current $I_{the}$ | 16 A                  |
| Max. fuse rating               | 16 A gG D-fuse        |

## Dimensions

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|                          |     |
|--------------------------|-----|
| Dimensions of the sensor |     |
| - Width of sensor        | 62  |
| - Height of sensor       | 116 |
| - Length of sensor       | 50  |
| Roller wide              | 8.5 |
| Roller diameter          | 20  |

## notice

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Type of contact and switching points can be factory set to order.

## Indication legend

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

see drawing: Operating principle

Contact function, i. e. NC or NO contact, and switching points can be adjusted using a screwdriver

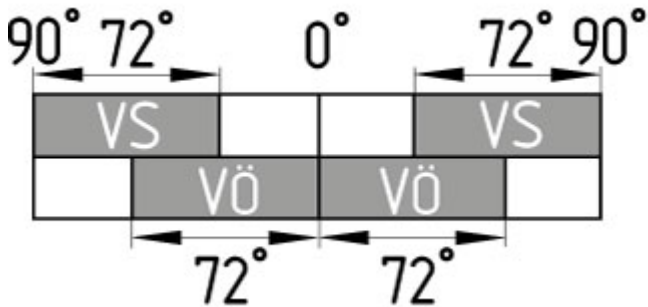
## Diagram








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: UVH 431Y- 1272

- ...- 1272 Version for low temperatures to -30°C
- ...-RMS Available with metal roller
- ...- 1164 Splined shaft and lever available with 10° tooting

### Ordering code

- U(1) 431Y-(2)-(3)
- (1)
- S Plunger S
- K Offset roller lever K
- 8H Roller lever 8H
- H Roller lever H

|                |                                       |
|----------------|---------------------------------------|
| <b>3H</b>      | Roller lever 3H                       |
| <b>7H</b>      | Roller lever 7H                       |
| <b>4H</b>      | Spring rod lever on shaft 4H          |
| <b>9H</b>      | Rod lever 9H                          |
| <b>10H</b>     | Rod lever 10H                         |
| <b>2H</b>      | Leaf-spring lever 2H                  |
| <b>6H</b>      | Leaf-spring lever 6H                  |
| <b>(2)</b>     |                                       |
| <i>without</i> | 1 Opener (NC)                         |
| <b>1S</b>      | 1 Normally open contact (NO)          |
| <b>(3)</b>     |                                       |
| <b>1272</b>    | Version for low temperatures to -30°C |

## Documents

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### **Operating instructions and Declaration of conformity (nl) 95 kB, 20.07.2018**

Code: mrlk\_posi-allgemein\_nl

### **Operating instructions and Declaration of conformity (ru) 133 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_ru

### **Operating instructions and Declaration of conformity (es) 88 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_es

### **Operating instructions and Declaration of conformity (en) 86 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_en

### **Operating instructions and Declaration of conformity (cn) 138 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_cn

### **Operating instructions and Declaration of conformity (it) 86 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_it

### **Operating instructions and Declaration of conformity (jp) 285 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_jp

### **Operating instructions and Declaration of conformity (pl) 118 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_pl

### **Operating instructions and Declaration of conformity (fr) 85 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_fr

### **Operating instructions and Declaration of conformity (pt) 86 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_pt

### **Operating instructions and Declaration of conformity (de) 88 kB, 09.07.2018**

Code: mrlk\_posi-allgemein\_de

### **Operating instructions (pl) 369 kB, 30.11.2018**

Code: mrlk\_u431-u434\_pl

### **Operating instructions (en) 352 kB, 06.08.2018**

Code: mrlk\_u431-u434\_en

### **Operating instructions (es) 350 kB, 08.08.2018**

Code: mrlk\_u431-u434\_es

**Operating instructions** (nl) 365 kB, 12.11.2018

Code: mrlk\_u431-u434\_nl

**Mounting and wiring instructions** (de, en, fr) 209 kB, 17.03.2008

Code: m\_43sp01

**Operating instructions** (de) 348 kB, 06.08.2018

Code: mrlk\_u431-u434\_de

**Operating instructions** (pt) 350 kB, 23.08.2018

Code: mrlk\_u431-u434\_pt

**Declaration of conformity** (en) 158 kB, 07.11.2017

Code: konfi\_mrl\_u43\_en

**Declaration of conformity** (de) 128 kB, 07.11.2017

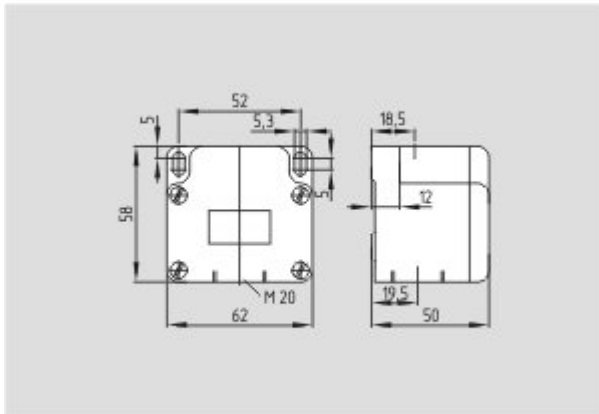
Code: konfi\_mrl\_u43\_de

**EAC certification** (ru) 388 kB, 20.01.2016

Code: q\_1527p17\_ru

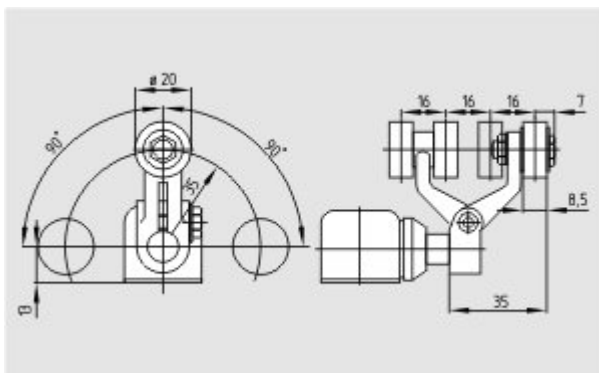
## Images

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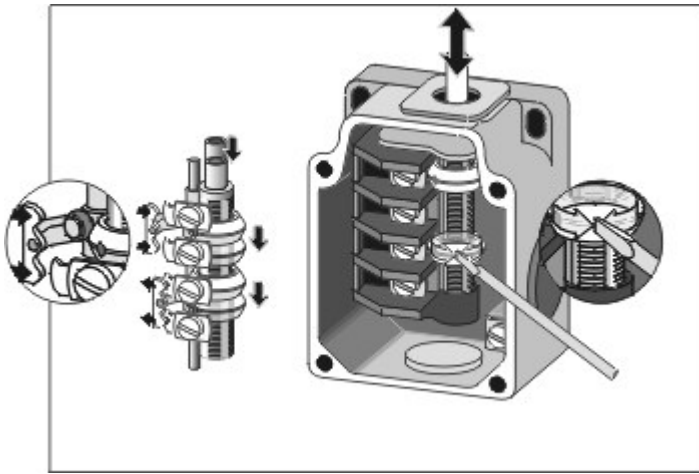
Dimensional drawing (basic component)

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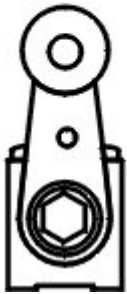


Dimensional drawing (miscellaneous)

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Operating principle



Operating principle

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

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