

## Datasheet - US 433Y-3S



Position switch / medium heavy Position switch / Universal range U - Metal enclosure / U 433 / U 433 Plunger S



- Metal enclosure
- 3 Contacts
- 62 mm x 105 mm x 50 mm ( basic component)
- Switching points and contact function adjustable
- 3 cable entries M 20 x 1.5

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

### Ordering details


Product type description	US 433Y-3S
Article number	101084450
EAN Code	
eCl@ss	27-27-06-01

### Approval

Approval



### Global Properties

Permanent light	U 433 Druckbolzen S
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
- Material of the contacts	Silver
Housing coating	painted
Weight	378
Slide form	Sphere

## Mechanical data

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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	Plunger
Contact opening	2 x 1.5
Actuating speed with vertical actuating angle to switch axis	
- Min. Actuating speed	1
- Max. Actuating speed	1
- Actuating angle	20

## 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	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of shutters	3
Number of openers	0
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
Slide diameter	6

## notice

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

notice

**Actuation from the side of the plunger should be avoided, since this reduces the mechanical life of the position switch.**

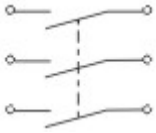
## Indication legend

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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

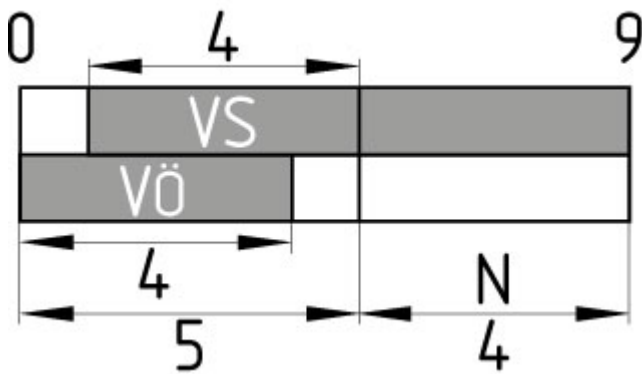
## Diagram



### 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: US 433Y-3S- 1272

...- 1272

Version for low temperatures to -30°C

## Ordering code

U(1) 433Y-(2)-(3)

(1)

S Plunger S  
K Offset roller lever K  
8H Roller lever 8H

H	Roller lever H
3H	Roller lever 3H
7H	Roller lever 7H
4H	Spring rod lever on shaft 4H
9H	Rod lever 9H
10H	Rod lever 10H
2H	Leaf-spring lever 2H
6H	Leaf-spring lever 6H
(2)	
<i>without</i>	3 Opener (NC)
1S/2OE	1 Normally open contact (NO) / 2 Opener (NC)
2S/1OE	2 Normally open contact (NO) / 1 Opener (NC)
(3)	
1272	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

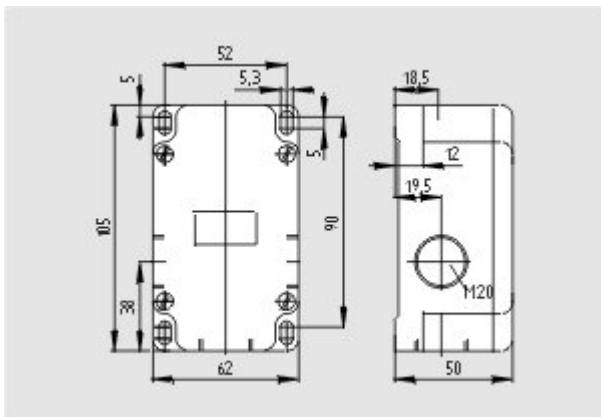
Code: konfi\_mrl\_u43\_de

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

Code: q\_1527p17\_ru

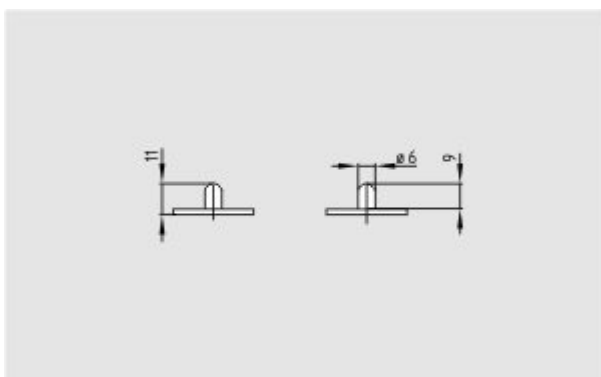
## Images

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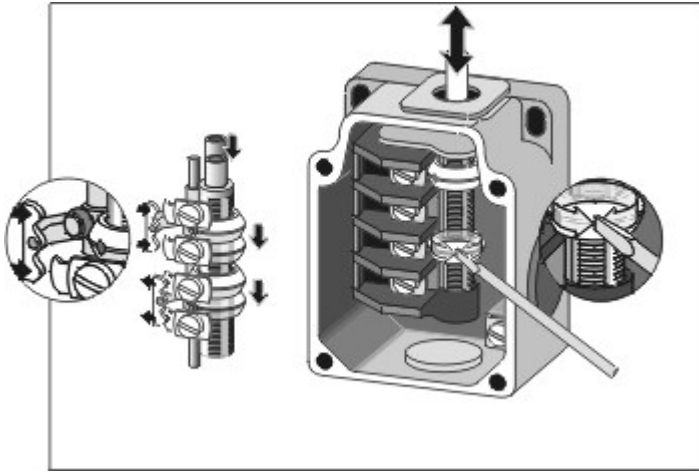
Dimensional drawing (basic component)

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Dimensional drawing (miscellaneous)

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Operating principle

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Operating principle

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

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