



## ML 441-11Y-T-M20

- Actuator head can be repositioned in steps 4 x 90°
- Metal enclosure
- Continuous adjustment of lever position 360°
- 2 Contacts
- Lever can be transposed by 180°
- In temperature-resistant version, the roller can be mounted in two different positions on the shaft
- 106 mm x 99 mm x 63 mm (basic component)
- Protection class IP65

## Data

### Ordering data

Product type description	ML 441-11Y-T-M20
Article number (order number)	101170498
EAN (European Article Number)	4030661297798
eCl@ss number, Version 9.0	27-27-06-01
eCl@ss number, Version 11.0	27-27-06-01
ETIM number, version 7.0	EC000030
ETIM number, version 6.0	EC000030

### Approval - Standards

Certificates	CCC EAC
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### General data

Standards	EN 60947-5-1
Active principle	mechanical
Slide form	Castor

Enclosure material	Grey cast iron, galvanised
Enclosure coating material	painted
Material of the contacts, electrical	Silver
Roller material	Plastic
Gross weight	1,800 g

### General data - Features

Number of openers	1
Number of shutters	1

### Safety appraisal - Safety outputs

B10d Normally-closed contact (NC)	2,000,000 Operations
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### Mechanical data

Actuating element	Roller lever
Mechanical life, minimum	5,000,000 Operations
Actuating angle, from left of switch axis	30 °
Actuating angle, from right of switch axis	30 °
Contact opening	2 x 2.5 mm
Actuating speed, minimum	1 mm/min
Actuating speed, maximum	3 m/s
Note (Actuating speed)	Actuating speed with vertical actuating angle to switch axis

### Mechanical data - Connection technique

Terminal Connector	Screw terminals M20 x 1.5
Cable section, minimum	1.5 mm <sup>2</sup>
Cable section, maximum	2.5 mm <sup>2</sup>
Note (Cable section)	All indications about the cable section are including the conductor ferrules.
Wire cross-section	13 AWG

## Mechanical data - Dimensions

Length of sensor	63 mm
Width of sensor	106 mm
Height of sensor	192 mm
Width of Castor	9 mm
Diameter of Castor	36 mm

## Ambient conditions

Degree of protection	IP65 to EN 60529
Ambient temperature, minimum	-40 °C
Ambient temperature, maximum	+200 °C

## Ambient conditions - Insulation value

Rated insulation voltage $U_i$	250 V
Rated impulse withstand voltage $U_{imp}$	4 kV

## Electrical data

Thermal test current	16 A
Utilisation category AC-15	250 VAC
Utilisation category AC-15	4 A
Switching element	NO contact, NC contact
Note (Switching element)	galvanically separated contact bridges
Switching principle	Snap switch element
Bounce duration, maximum	5 ms
Switchover time, maximum	35 ms

## Ordering code

Product type description:

(1)(2) 441-11Y(3)-(4)-(5)

(1)

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<b>T</b>	Slow action (not for AF/S)
<b>M</b>	Snap action

(2)

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<b>S</b>	Plunger S
<b>2S</b>	Telescopic plunger 2S
<b>R</b>	Roller plunger R
<b>K</b>	Offset roller lever K
<b>J</b>	Offset roller lever J
<b>2C</b>	Fork lever 2C
<b>L</b>	Roller lever L
<b>D</b>	Roller lever D
<b>MAF/S</b>	Level switch AF/S

(3)

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<b>UE</b>	Slow action with overlapping contacts
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(4)

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<b>without</b>	Cast iron enclosure
<b>A</b>	Aluminium enclosure

(5)

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<b>T</b>	temperature-resistant and tropical version with ceramic insulation for -40 °C ... +200 °C
<b>1276-2</b>	Gold-plated contacts

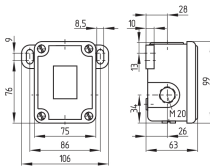
## Pictures

**Product picture (catalogue individual photo)**



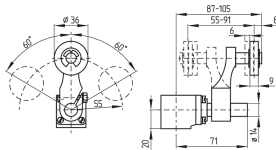
ID: kt441f08  
| 530.6 kB | .jpg | 215.547 x 344.664 mm - 611 x 977 px - 72 dpi  
| 77.2 kB | .png | 74.083 x 118.181 mm - 210 x 335 px - 72 dpi

## Dimensional drawing basic component



ID: 1t441g01  
| 29.6 kB | .cdr |  
| 3.9 kB | .png | 74.083 x 51.858 mm - 210 x 147 px - 72 dpi  
| 86.4 kB | .jpg | 352.778 x 247.297 mm - 1000 x 701 px - 72 dpi

## Dimensional drawing actuator



ID: 1t422b07  
| 9.8 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi  
| 113.5 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

## Operating principle



ID: 235hz05  
| 15.2 kB | .cdr |  
| 180.5 kB | .jpg | 352.778 x 749.3 mm - 1000 x 2124 px - 72 dpi  
| 3.4 kB | .png | 74.083 x 157.339 mm - 210 x 446 px - 72 dpi

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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.

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