



ML 441-11Y-T-M20

- 2 cable entries M 20 x 1.5
- 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 12.0	27-27-06-01
eCl@ss number, version 11.0	27-27-06-01
eCl@ss number, version 9.0	27-27-06-01
ETIM number, version 7.0	EC000030
ETIM number, version 6.0	EC000030

Approvals - Standards

Certificates	INMETRO CCC
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General data

Standards	EN IEC 60947-5-1
Working principle	mechanical
Slide form	Castor
Housing material	Grey cast iron, galvanised
Housing coating material	painted
Gross weight	1,836 g

General data - Features

Number of normally closed (NC)	1
Number of normally open (NO)	1

Safety classification - Safety outputs

B _{10D} Normally-closed contact (NC)	2,000,000 Operations
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Mechanical data

Actuating element	Roller lever
Roller material	Brass
Mechanical lifetime, minimum	10,000,000 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

Termination	Screw terminals M20 x 1.5
Cable section, minimum	1.5 mm ²
Cable section, maximum	2.5 mm ²
Note	All indications 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
Ambient temperature	-40 ... +200 °C

Ambient conditions - Insulation values

Rated insulation voltage U_i	250 VAC
Rated impulse withstand voltage U_{imp}	6 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 action
Bounce duration, maximum	5 ms
Material of the contacts, electrical	Silver

Ordering code

Product type description:
(1)(2) 441-11Y(3)-(4)-(5)

(1)

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

(2)

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

(3)

UE	Slow action with overlapping contacts
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(4)

without	Cast iron enclosure
A	Aluminium enclosure

(5)

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

Pictures

Product picture (catalogue individual photo)



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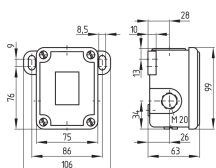
| 687.0 kB | .jpg | 352.778 x 564.092 mm - 1000 x 1599 px - 72 dpi

| 88.9 kB | .png | 74.083 x 118.181 mm - 210 x 335 px - 72 dpi

| 88.9 kB | .png | 74.083 x 118.181 mm - 210 x 335 px - 72 dpi

| 39.3 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

Dimensional drawing basic component



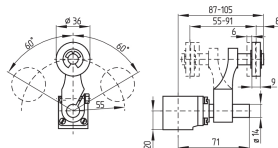
ID: 1t441g01

| 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

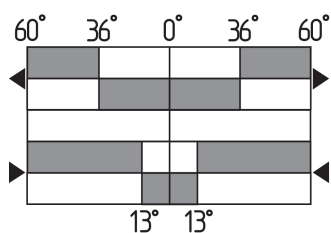


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| 9.8 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 113.5 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

Switch travel diagram



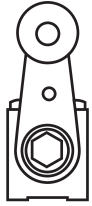
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| 57.7 kB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi

| 1.3 kB | .png | 74.083 x 52.564 mm - 210 x 149 px - 72 dpi

| 78.0 kB | .jpg | 352.778 x 260.703 mm - 1000 x 739 px - 72 dpi

Operating principle



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| 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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