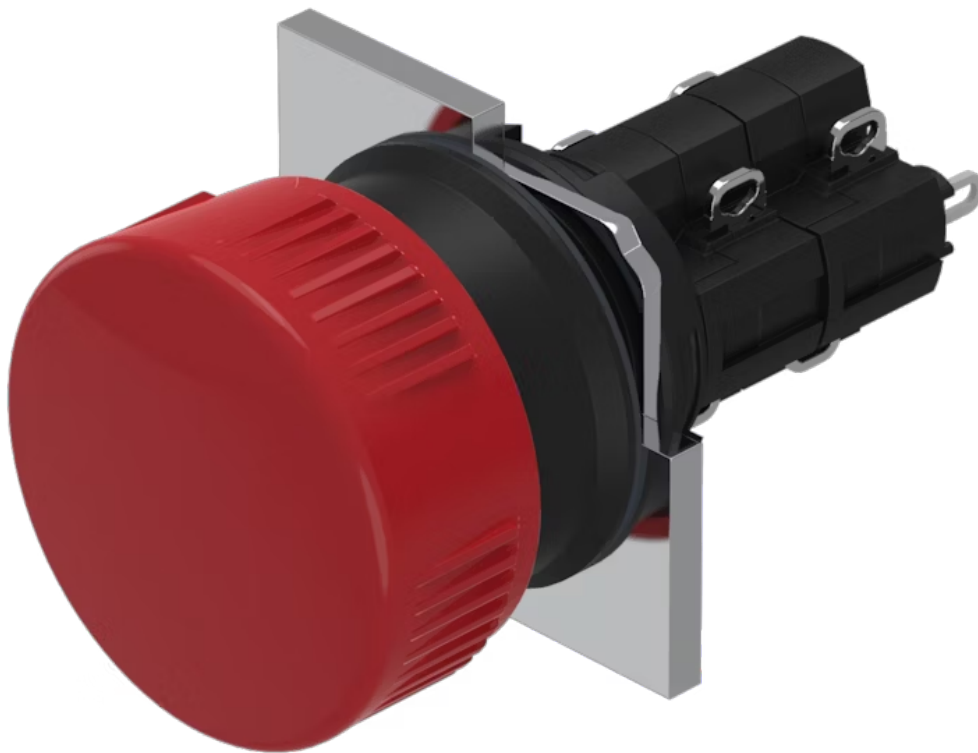


# Actuator

51-  
159.0252

Distribution by  
DigiKey

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Your product:

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## 51-159.0252 Actuator

*Loading ..*

### FRONT

|                       |           |
|-----------------------|-----------|
| Front bezel material: | Plastic   |
| Front bezel colour:   | Black     |
| Front dimension:      | Ø 24,5 mm |

### MOUNTING

|         |        |
|---------|--------|
| Design: | raised |
|---------|--------|

### OPERATING-/INDICATION PART

|                    |                  |
|--------------------|------------------|
| Lens colour:       | Red              |
| Lens optics:       | opaque           |
| Lens illumination: | non illuminative |
| Lens shape:        | mushroom-head    |
| Lens material:     | Plastic          |

### ELECTRICAL CHARACTERISTICS

|                                            |                                                                                                                        |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Rated Operational Voltage U <sub>e</sub> : | 250 VAC/DC according to EN IEC 60947-1                                                                                 |
| Thermal current I <sub>th</sub> :          | The maximum current in continuous operation and at ambient temperature not exceeding the quoted maximum values.<br>3 A |
| Contacts:                                  | 2 NC / 2 NO                                                                                                            |
| Standards:                                 | According to EN/IEC 61058-1                                                                                            |
| Electrical lifetime:                       | 50 000 cycles of operation                                                                                             |
| Protection class:                          | II                                                                                                                     |
| Electric strength:                         |                                                                                                                        |

2500 VAC, 50 Hz, 1 min. between all terminals and earth, according to IEC 61058-1, part 15

**Switching voltage and switching current:**

250 VAC, 5 A (ohmic)  
250 VAC, 3 A (Soldering terminal)  
250 VAC, 2 A (inductive,  $\cos(\phi) = 0.7$ )  
125 VAC, 3 A (inductive,  $\cos(\phi) = 0.7$ )  
220 VDC, 0.1 A (inductive, L:R = 30 ms)  
110 VDC, 0.2 A (inductive, L:R = 30 ms)  
60 VDC, 0.7 A (inductive, L:R = 30 ms)  
24 VDC, 2 A (inductive, L:R = 30 ms)

**MECHANICAL CHARACTERISTIC**

|                             |                                                                                                                                                                                      |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Terminal:</b>            | Soldering terminal                                                                                                                                                                   |
| <b>Operating Travel:</b>    | 3 mm                                                                                                                                                                                 |
| <b>Weight:</b>              | 0.011 kg                                                                                                                                                                             |
| <b>Switching system:</b>    | Self-cleaning, double-break snap action switching system, 1 normally closed and 1 normally open contact per element.                                                                 |
| <b>Switching action:</b>    | Momentary                                                                                                                                                                            |
| <b>Wire cross section:</b>  | Snap-action switching element with tinned soldering terminals at the sides<br>Max. wire diameter 2 wires à 1.2 mm<br>Max. wire cross-section of stranded cable 1 x 1 mm <sup>2</sup> |
| <b>Operating force:</b>     | 1,8 ... 6 N, depending on the number of switching elements                                                                                                                           |
| <b>Mechanical lifetime:</b> | 2 Mio. cycles of operation                                                                                                                                                           |
| <b>Tightening torque:</b>   | Fixing nut max. 0.5 Nm                                                                                                                                                               |
| <b>Switching system:</b>    | Snap-action switching element                                                                                                                                                        |
| <b>Contact material:</b>    | Gold                                                                                                                                                                                 |

**AMBIENT CONDITION**

|                               |                                                                                                          |
|-------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Operating temperature:</b> | – 25 °C ... + 55 °C                                                                                      |
| <b>Climate resistance:</b>    | Standard condition, as per DIN EN 60068-2-30<br>Changing condition, as per DIN EN 60068-2-14             |
| <b>Shock resistance:</b>      | 15 g for 11 ms, as per DIN / EN 60512-4-3, DIN / EN 60068-2-27 (Single impacts, semi-sinusoidal)         |
| <b>Vibration resistance:</b>  | 10 g at 10 Hz...1500 Hz, amplitude 0.75 mm (Sinusoidal), according to DIN EN 60512-4-4, DIN EN 60068-2-6 |
| <b>IP front protection:</b>   | IP65, according to DIN EN 60529                                                                          |
| <b>Storage temperature:</b>   | – 40 °C ... + 85 °C                                                                                      |

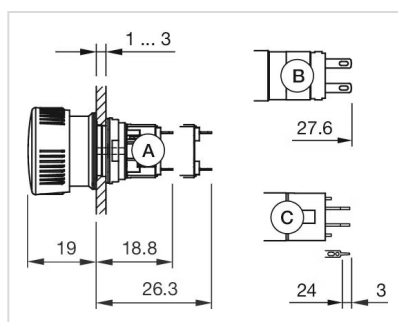
**CERTIFICATE**

|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
| <b>Conformities:</b> | CE, UKCA, 2011 / 65 / EC (RoHS), 2014 / 30 / EU (EMC), 2014 / 35 / EU (LVD) |
| <b>Approbations:</b> | CB (IEC 61058-1), CQC, CSA, DNV, EAC, ENEC (EN 61058-1), UL, VDE            |

## OTHER

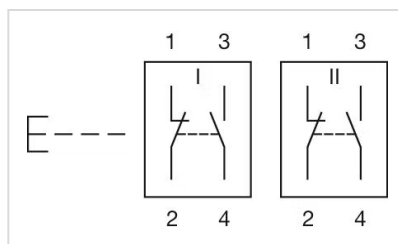
|                                           |                                                                                                                                                                         |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>max. number of switching elements:</b> | 2                                                                                                                                                                       |
| <b>Housing colour:</b>                    | Black                                                                                                                                                                   |
| <b>Short Description:</b>                 | Actuator, Ø 24,5 mm, mushroom-head, non illuminative, Red, Plastic, opaque, Black, Plastic, 2 NC / 2 NO, Momentary, Soldering terminal, IP65, according to DIN EN 60529 |
| <b>Hints:</b>                             | If the anti-twist ring is not used the panel thickness increases to 4 mm                                                                                                |

### Dimension drawings:



A = Solder terminal  
 B = Plug-in terminal 2.8 mm x 0.5 mm  
 C = Universal terminal 2.0 mm x 0.5 mm

### Wiring diagrams:



### Mounting cut-outs:

