

# Actuator

31-  
453.036

Distribution by  
Newark



<https://newark.eao.com/p/31-453.036>

Your product:

---



## 31-453.036 Actuator

### PRODUCT RANGE

**Product Status:** Not Recommended for new design

### FRONT

**Front dimension:** 18 mm x 18 mm

**Front form:** Square

**Front bezel colour:** Black

**Front bezel material:** Plastic

### MOUNTING

**Design:** Raised

**Mounting cut-out:** Ø 16 mm

**Mounting type:** Panel mounting

### OPERATING-/INDICATION PART

**Lens illumination:** Illuminated

### ELECTRICAL CHARACTERISTICS

**Switching voltage and switching current:** 100 mA at 42 VAC/VDC

**Contacts:** 1 NC / 1 NO

**Switching rating:** 42 V @ 0,1 A

**Electric strength:** 2500 VAC, 50 Hz, 1 minute, as per IEC 60512-2-11 between all terminals and earth

**Protection class:**

**Standards:** According to EN/IEC 61058-1

## MECHANICAL CHARACTERISTICS

<b>Terminal:</b>	Universal terminal, 2 x 0.5 mm
<b>Contact material:</b>	Gold
<b>Switching action:</b>	Momentary
<b>Switching system:</b>	Low-level element
<b>Switching system:</b>	<p>This low-level switching element was designed for switching low powers in electronic circuits. The mechanism assures reliable switching of loads ranging from a few <math>\mu\text{A}/\mu\text{V}</math> up to 100 mA/ 42 VAC/DC.</p> <p>Single-break momentary contact, as normally open or normally closed with 4 independent points of contact. 2 momentary contacts per switching element; combination of normally open and normally closed is possible.</p> <p>Special features are the long life, extremely short rebound time and stable contact resistance.</p>
<b>Mechanical lifetime:</b>	5 Mil. cycles of operation
<b>Operating force:</b>	3 N ... 3.5 N
<b>Operating Travel:</b>	ca. 3 mm
<b>Tightening torque:</b>	Fixing nut max. 0.5 Nm
<b>Wire cross section:</b>	<p>Max. wire diameter 2 wires à 0.8 mm</p> <p>Max. wire cross-section of stranded cable 1 x 0.75 mm<sup>2</sup></p>
<b>Weight:</b>	0.007 kg

## AMBIENT CONDITION

<b>IP Protection:</b>	IP40 front side, IP67 with front protective cap
<b>Operating temperature:</b>	– 25 °C ... + 55 °C, mounted as a block, make sure the heat can escape freely
<b>Storage temperature:</b>	– 40 °C ... + 85 °C
<b>Shock resistance:</b>	15 g for 11 ms, as per IEC 60512-4-3, IEC 60068-2-27 (Single impacts, semi-sinusoidal)
<b>Vibration resistance:</b>	10 g at 10 Hz...2000 Hz, amplitude 1.5 mm (Sinusoidal), according to DIN EN 60512-4-4, DIN EN 60068-2-6
<b>Climate resistance:</b>	<p>Standard condition according to IEC 60068-2-3</p> <p>Changing condition according to IEC 60068-2-14</p>

## CERTIFICATE

<b>Conformities:</b>	CE, UKCA, 2011 / 65 / EC (RoHS), 2014 / 35 / EU (LVD)
<b>REACH:</b>	REACH compliant

RoHS:

RoHS compliant

## OTHER

### Short Description:

Actuator, Ø 16 mm, 18 mm x 18 mm, Illuminated, Square, Black, Plastic, 1 NC / 1 NO, Momentary, Universal terminal, 2 x 0.5 mm

### Internal size:

15,3 mm x 15,3 mm

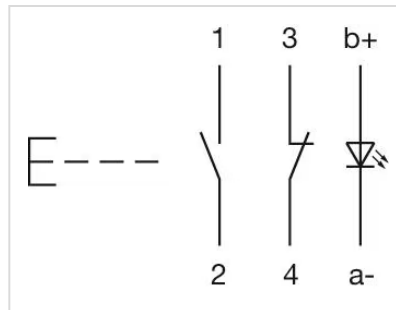
### Housing colour:

Black

### max. number of switching elements:

1

### Wiring diagrams:

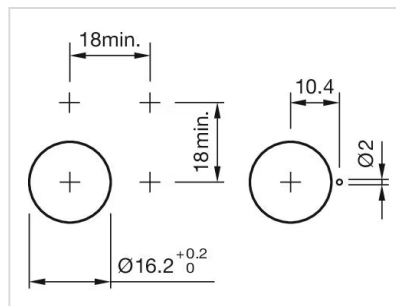


### Component layouts:

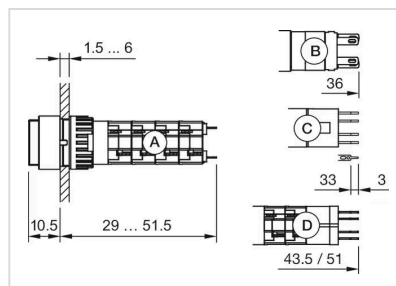


A = Terminals (rear side)  
B = Diode block  
C = Anti twist device only 18 mm x 24 mm  
D = Drilling plan (component side)

### Mounting cut-outs:



### 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  
D = Universal-Solder terminal