

# Actuator

31-  
451.036

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## 31-451.036 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:** 2 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

**Terminal:** Universal terminal, 2 x 0.5 mm

**Contact material:** Gold

**Switching action:** Momentary

**Switching system:** Low-level element

**Switching system:** 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  $\mu\text{A}/\mu\text{V}$  up to 100 mA/ 42 VAC/DC. 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. Special features are the long life, extremely short rebound time and stable contact resistance.

**Mechanical lifetime:** 5 Mil. cycles of operation

**Operating force:** 3 N ... 3.5 N

**Operating Travel:** ca. 3 mm

**Tightening torque:** Fixing nut max. 0.5 Nm

**Wire cross section:** Max. wire diameter 2 wires à 0.8 mm  
Max. wire cross-section of stranded cable 1 x 0.75 mm<sup>2</sup>

**Weight:** 0.007 kg

### AMBIENT CONDITION

**IP Protection:** IP40 front side, IP67 with front protective cap

**Operating temperature:** – 25 °C ... + 55 °C, mounted as a block, make sure the heat can escape freely

**Storage temperature:** – 40 °C ... + 85 °C

**Shock resistance:** 15 g for 11 ms, as per IEC 60512-4-3, IEC 60068-2-27 (Single impacts, semi-sinusoidal)

**Vibration resistance:** 10 g at 10 Hz...2000 Hz, amplitude 1.5 mm (Sinusoidal), according to DIN EN 60512-4-4, DIN EN 60068-2-6

**Climate resistance:** Standard condition according to IEC 60068-2-3  
Changing condition according to IEC 60068-2-14

### CERTIFICATE

**Conformities:** CE, UKCA, 2011 / 65 / EC (RoHS), 2014 / 35 / EU (LVD)

**REACH:** REACH compliant

**RoHS:** RoHS compliant

**OTHER**

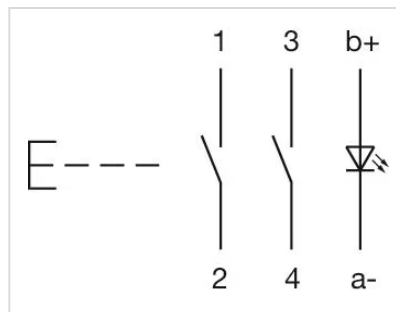
**Short Description:** Actuator, Ø 16 mm, 18 mm x 18 mm, Illuminated, Square, Black, Plastic, 2 NO, Momentary, Universal terminal, 2 x 0.5 mm

**Internal size:** 15,3 mm x 15,3 mm

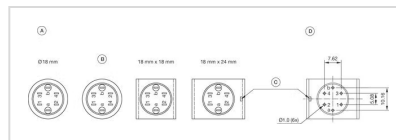
**Housing colour:** Black

**max. number of switching elements:** 1

**Wiring diagrams:**

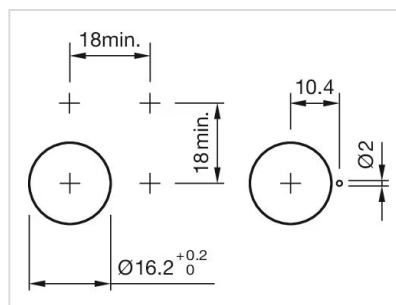


**Component layouts:**



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