

Your Expert Partner for Human Machine Interfaces

## Actuator

31-151.022







https://newark.eao.com/p/31-151.022

### Your product:



# 31-151.022 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: | 250 VAC, 5 A (ohmic)<br>250 VAC, 3 A (Soldering terminal)<br>250 VAC, 2 A (inductive, cos(phi) = 0.7)<br>125 VAC, 3 A (inductive, cos(phi) = 0.7)<br>220 VDC, 0.1 A (inductive, L:R = 30 ms)<br>60 VDC, 0.7 A (inductive, L:R = 30 ms)<br>24 VDC, 2 A (inductive, L:R = 30 ms) |
|--|--|
| Contacts:                                | 1 NC / 1 NO  |

**Rated Operational Voltage Ue:** 

#### 250 VAC/VDC

| Switching rating:    | 250 V @ 5 A  |
|----------------------|--|
| Electrical lifetime: | 50 000 cycles of operation   |
| Electric strength:   | 2500 VAC, 50 Hz, 1 minute, as per IEC 60512-2-11 between all terminals and earth |
| Protection class:    | II   |
| Standards:           | According to EN/IEC 61058-1  |
| Thermal current Ith: | 5 A  |

#### **MECHANICAL CHARACTERISTICS**

| Terminal:   | Plug-in terminal, 2.8 x 0.5 mm   |
|---|--|
| Contact material:   | Gold   |
| Switching action:   | Momentary  |
| Switching system:   | Snap-action switching element  |
| Switching system:   | Self-cleaning, double-break snap action switching system (contact opening width 2 mm x 0.5 mm), 1 normally closed and 1 normally open contact per element.   |
| Mechanical lifetime:  | 2 Mil. cycles of operation   |
| Operating force:  | 2 N 5,5 N, depending on the number of switching elements   |
| Operating Travel:   | ca. 3 mm   |
| Tightening torque:  | Fixing nut max. 0.5 Nm   |
| Wire cross section:   | Max. wire cross-section 1 wire with 1.5 mm<br>Max. wire cross-section of stranded cable 2 of 0.75 mm <sup>2</sup> or 1 x 1.0 mm <sup>2</sup>   |
|   |  |
| Weight:   | 0.006 kg   |
| Weight:   | 0.006 kg   |
| Weight:<br>AMBIENT CONDITION  | 0.006 kg   |
| U U U U U U U U U U U U U U U U U U U   | 0.006 kg<br>IP40 front side, IP67 with front protective cap  |
| AMBIENT CONDITION   | -  |
| AMBIENT CONDITION<br>IP Protection:   | IP40 front side, IP67 with front protective cap  |
| AMBIENT CONDITION<br>IP Protection:<br>Operating temperature:                         | IP40 front side, IP67 with front protective cap<br>- 25 °C + 55 °C, mounted as a block, make sure the heat can escape freely   |
| AMBIENT CONDITION<br>IP Protection:<br>Operating temperature:<br>Storage temperature: | IP40 front side, IP67 with front protective cap<br>- 25 °C + 55 °C, mounted as a block, make sure the heat can escape freely<br>- 40 °C + 85 °C<br>15 g for 11 ms, as per IEC 60512-4-3, IEC 60068-2-27 (Single impacts, semi- |

#### CERTIFICATE

| Approbations: | CB (IEC 61058-1), CSA, DNV, ENEC (EN 61058-1), UL     |
|---------------|---|
| Conformities: | CE, UKCA, 2011 / 65 / EC (RoHS), 2014 / 35 / EU (LVD) |
| REACH:        | REACH compliant                                       |
| RoHS:         | RoHS compliant  |

#### OTHER

#### **Short Description:**

Internal size:

NO, Momentary, Plug-in terminal, 2.8 x 0.5 mm

Actuator, Ø 16 mm, 18 mm x 18 mm, Illuminated, Square, Black, Plastic, 1 NC / 1

15,3 mm x 15,3 mm

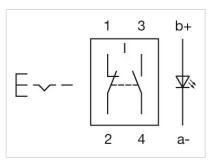
Housing colour:

Black

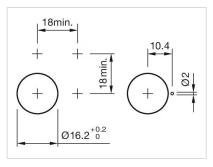
1

max. number of switching elements:

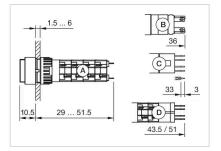
Wiring diagrams:



#### Mounting cut-outs:



#### Dimension drawings:



#### A = Solder terminal

- B = Plug-in terminal 2.8 mm x 0.5 mmC = Universal terminal 2.0 mm x 0.5 mm
- D = Universal-Solder terminal