

# Actuator

31-281.022 Distribution by DigiKey







## Your product:



# 31-281.022 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 250 \

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) 60 VDC, 0.7 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)

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:

**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: Maintained

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:** 1 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

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

#### **AMBIENT CONDITION**

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

**Operating temperature:** -25 °C, mounted as a block, make sure the heat can escape freely

Storage temperature:  $-40 \, ^{\circ}\text{C} \dots + 85 \, ^{\circ}\text{C}$ 

**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

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

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

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

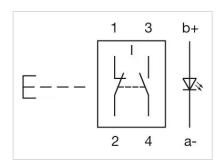
Housing colour: Black

max. number of switching

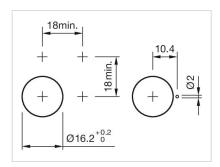
elements:

1

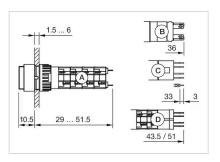
Wiring diagrams:



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