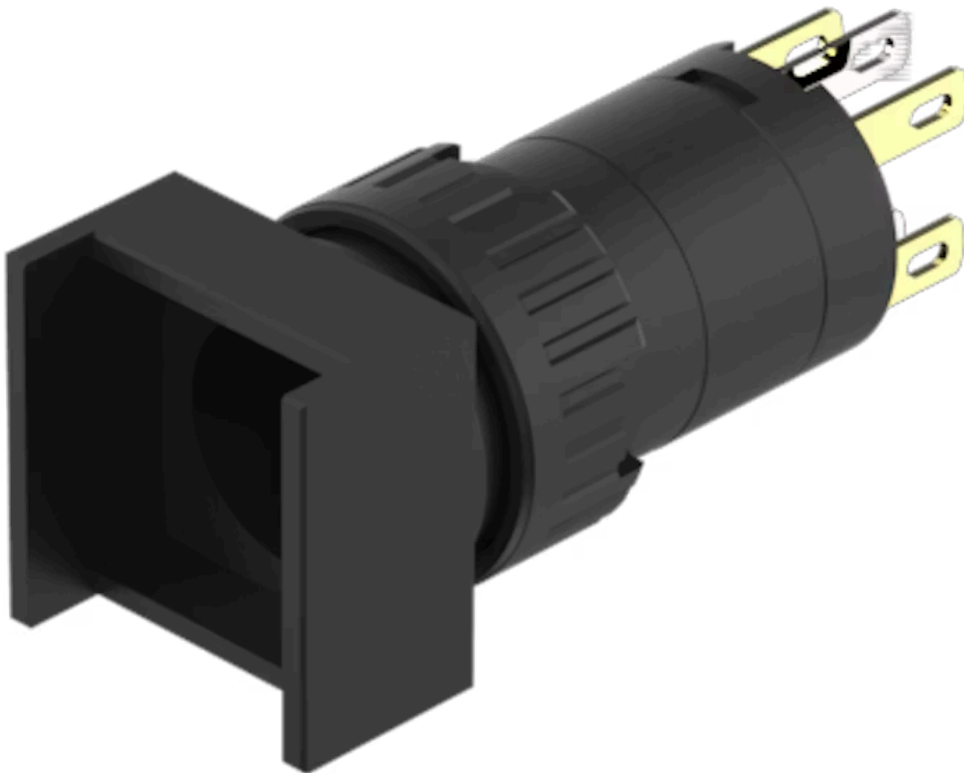


# Actuator

51-  
281.022

Distribution by  
DigiKey

**DigiKey**



<https://digikey.eao.com/component/51-281.022/...>

Your product:

---



## 51-281.022 Actuator

### FRONT

<b>Front dimension:</b>	18 mm x 18 mm
<b>Front form:</b>	Square
<b>Front bezel colour:</b>	Black
<b>Front bezel material:</b>	Plastic

### MOUNTING

<b>Design:</b>	Raised
<b>Mounting type:</b>	Panel mounting

### OPERATING-/INDICATION PART

<b>Lens illumination:</b>	Illuminated
---------------------------	-------------

### ELECTRICAL CHARACTERISTICS

<b>Switching voltage and switching current:</b>	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)
<b>Contacts:</b>	1 NC / 1 NO
<b>Rated Operational Voltage <math>U_e</math>:</b>	250 VAC/DC according to EN IEC 60947-1
<b>Switching rating:</b>	250 V @ 5 A
<b>Electrical lifetime:</b>	50 000 cycles of operation
<b>Electric strength:</b>	2500 VAC, 50 Hz, 1 min. between all terminals and earth, according to IEC 61058-1, part 15

<b>Protection class:</b>	II
<b>Standards:</b>	According to EN/IEC 61058-1
<b>Thermal current I<sub>th</sub>:</b>	5 A, according to EN / IEC 60947-5-1 The maximum current in continuous operation and at ambient temperature not exceeding the quoted maximum values.

## MECHANICAL CHARACTERISTICS

<b>Terminal:</b>	Plug-in terminal, 2.8 x 0.5 mm
<b>Contact material:</b>	Gold
<b>Switching action:</b>	Maintained
<b>Switching system:</b>	Snap-action switching element
<b>Switching system:</b>	Self-cleaning, double-break snap action switching system, 1 normally closed and 1 normally open contact per element.
<b>Mechanical lifetime:</b>	1 Mil. cycles of operation (RCC/RPB)
<b>Operating force:</b>	1,8 ... 6 N, depending on the number of switching elements
<b>Operating Travel:</b>	3 mm
<b>Tightening torque:</b>	Fixing nut max. 0.5 Nm
<b>Wire cross section:</b>	Snap-action switching element with axial soldering terminals, which can also be used as plug-in terminals 2.8 x 0.5mm Max. wire diameter 2 wires of 1 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>
<b>Weight:</b>	0.008 kg

## AMBIENT CONDITION

<b>IP front protection:</b>	IP65, according to DIN EN 60529
<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 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>Climate resistance:</b>	Standard condition, as per DIN EN 60068-2-30 Changing condition, as per DIN EN 60068-2-14

## CERTIFICATE

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

**REACH:** REACH compliant

**RoHS:** RoHS compliant

**OTHER**

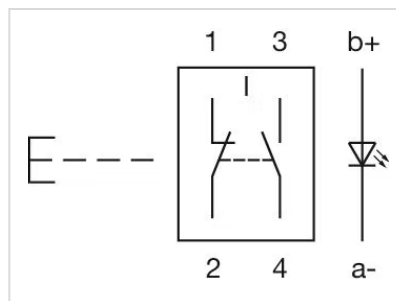
**Short Description:** Actuator, 18 mm x 18 mm, Illuminated, Square, Black, Plastic, 1 NC / 1 NO, Maintained, Plug-in terminal, 2.8 x 0.5 mm, IP65, according to DIN EN 60529

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

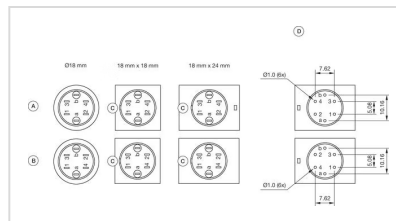
**Housing colour:** Black

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

**Wiring diagrams:**

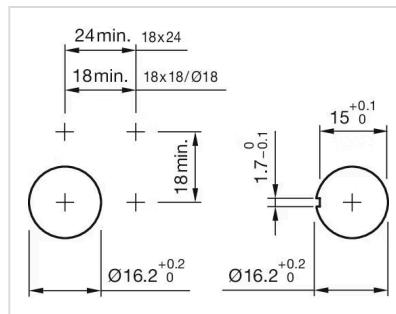


**Component layouts:**

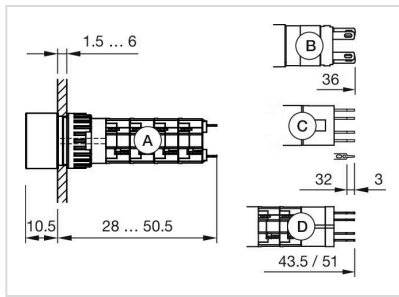


- A = Universal terminal (rear side)
- B = Plug-in terminal (rear side)
- C = Anti twist device
- D = Drilling plan

**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