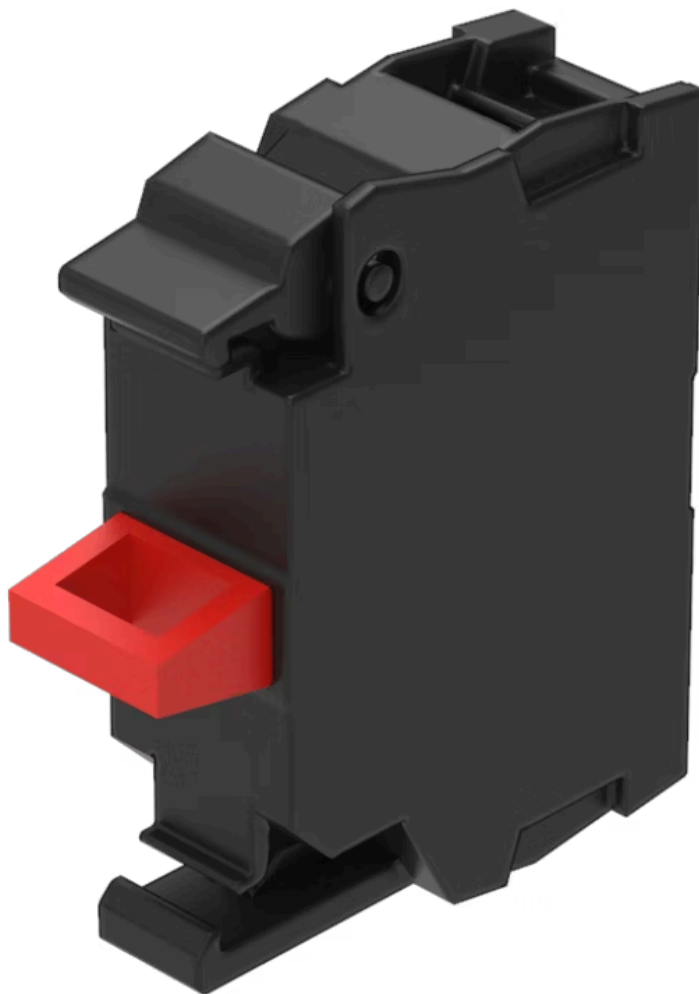


# Switching element

45-312.1X10



<https://eao.com/p/45-312.1X10>

Your product:



## 45-312.1X10 Switching element

### MOUNTING

**Component mounting type:** Front mounting

### ELECTRICAL CHARACTERISTICS

**Contact reliability:** One contact failure per 10 million switching operations (5 V, 1 mA)  
One contact failure per 100 million switching operations (17 V, 5 mA)

**Insulation voltage:** Rated value 500 V

**Standards:** The switches comply with the "Standards for low-voltage switching devices" EN IEC 60947-5-1

**Surge voltage resistance:** Rated value 6 kV

**Thermal current I<sub>th</sub>:** 10 A Max. permissible current for continuous operation and ambient temperatures not exceeding the specified max. values.

**Contacts:** 1 NC

**Pollution degree:** 3

<b>Switching voltage and switching current:</b>	at AC-12						
	Voltage	24 V	48 V	110 V	230 V	400 V	500 V
	Current	10 A	10 A	10 A	8 A	6 A	10 A
	at AC-15						
	Voltage	24 V	48 V	110 V	230 V	400 V	500 V
	Current	6 A	6 A	6 A	4 A	3 A	1,4 A
	at DC-12						
	Voltage	24 V	48 V	110 V	230 V	400 V	500 V
	Current	10 A	5 A	2,5 A	1 A	0,3 A	0,2 A
	at DC-13						
	Voltage	24 V	48 V	110 V	230 V	400 V	500 V
	Current	3 A	1,5 A	0,7 A	0,3 A	0,1 A	0,07 A

### MECHANICAL CHARACTERISTIC

**Switching system:** The double-break, slow-make switching element is equipped with normally open or normally closed contact. The normally closed contact has forced opening. Up to six switching elements can be snapped to each holder. The NC contact opens automatically upon disconnection of the actuator. On delivery, the contact is open (= safe state). Activation (= NC contacts on the non-actuated commanding device are closed) takes place upon first-time actuation after the contact block is snapped onto the

actuator.

<b>Wire cross section:</b>	Solid 2 x (1.0 ... 1.5mm <sup>2</sup> ) – With end sleeves 2 x (0.5 ... 0.75 mm <sup>2</sup> ) Finely stranded – Without end sleeves 2 x (0.5 ... 0.75 mm <sup>2</sup> ) – With end sleeves 2 x (0.5 ... 1.5 mm <sup>2</sup> ) – For AWG cables for auxiliary contacts 2 x (18 ... 14)
<b>Terminal:</b>	Screw terminal
<b>Weight:</b>	0.01 kg
<b>Contact material:</b>	Gold
<b>Switching system:</b>	Slow-make switching element
<b>Mechanical lifetime:</b>	10 Mio. cycles of operation
<b>Operating frequency:</b>	Max. 3 600/h
<b>Tightening torque:</b>	0.8 ... 0.9 Nm

#### **AMBIENT CONDITION**

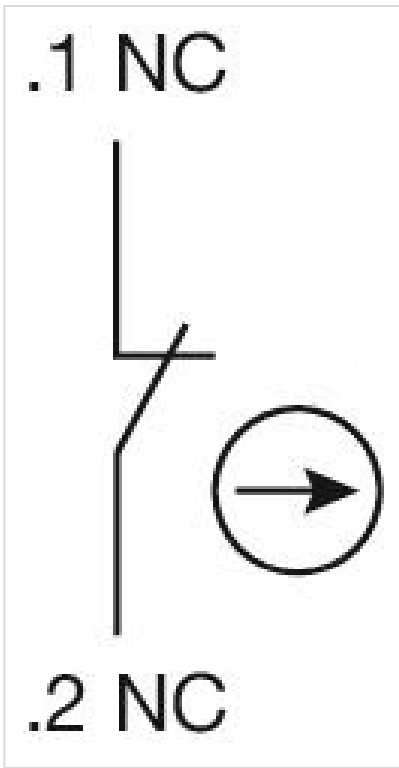
<b>Climate resistance:</b>	During operation according to IEC 60721: 3K6, 3C3, 3S2, 3M6
<b>Shock resistance:</b>	According to IEC 60068-2-27: Sinusoidal half-wave 50 g / 11 ms
<b>IP Protection:</b>	IP20 Terminal, IP40 Housing
<b>Operating temperature:</b>	– 25 °C ... + 70 °C
<b>Storage temperature:</b>	– 40 °C ... + 80 °C
<b>Vibration resistance:</b>	According to IEC 60068-2-6: 2 ... 500 Hz: 5 g

#### **CERTIFICATE**

<b>Approbations:</b>	CCC, CSA, UL
<b>Conformities:</b>	CE, UKCA

#### **OTHER**

<b>Short Description:</b>	Switching element, Slow-make switching element, 500 V AC @ 10 A, Gold, 1 NC, Screw terminal, Front mounting
<b>Switching element type:</b>	Single
<b>Wiring diagrams:</b>	



Dimension drawings:

