

Actuator

51-
141.022D

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Your product:



51-141.022D Actuator

FRONT

Front dimension: Ø 18 mm

Front form: Round

MOUNTING

Design: Raised

Mounting type: Panel mounting

ELECTRICAL CHARACTERISTICS

Switching voltage and switching 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)
- 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)

Contacts: 1 NC / 1 NO

Rated Operational Voltage U_e : 250 VAC/DC according to EN IEC 60947-1

Switching rating: 250 V @ 5 A

Electrical lifetime: 50 000 cycles of operation

Electric strength: 2500 VAC, 50 Hz, 1 min. between all terminals and earth, according to IEC 61058-1, part 15

Protection class: II

Standards: According to EN/IEC 61058-1

Thermal current I_{th} : 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

Terminal:	Plug-in terminal, 2.8 x 0.5 mm
Contact material:	Gold
Switching action:	Rest (a) - Momentary
Switching system:	Snap-action switching element
Switching system:	Self-cleaning, double-break snap action switching system, 1 normally closed and 1 normally open contact per element.
Switching positions:	2 positions
Switching angle:	42° right
Mechanical lifetime:	50 000 cycles of operation
Operating force:	1,8 ... 6 N, depending on the number of switching elements
Tightening torque:	Fixing nut max. 0.5 Nm
Weight:	0.026 kg

AMBIENT CONDITION

IP front protection:	IP65, according to DIN EN 60529
Operating temperature:	– 25 °C ... + 55 °C
Storage temperature:	– 40 °C ... + 85 °C
Shock resistance:	15 g for 11 ms, as per DIN / EN 60512-4-3, DIN / EN 60068-2-27 (Single impacts, semi-sinusoidal)
Vibration resistance:	10 g at 10 Hz...1500 Hz, amplitude 0.75 mm (Sinusoidal), according to DIN EN 60512-4-4, DIN EN 60068-2-6
Climate resistance:	Standard condition, as per DIN EN 60068-2-30 Changing condition, as per DIN EN 60068-2-14

CERTIFICATE

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

OTHER

Short Description:	Actuator, Ø 18 mm, Round, 1 NC / 1 NO, Rest (a) - Momentary, Plug-in terminal, 2.8 x 0.5 mm, IP65, according to DIN EN 60529
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Black

Standard lock: DOM 311

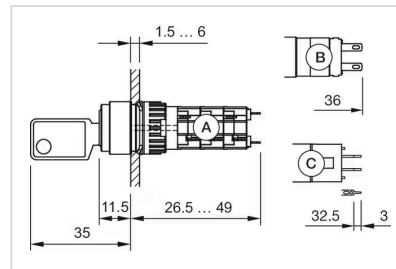
A diagram of a circle with a vertical radius line from the center to the top edge, labeled '0'. An arc on the right side of the circle is labeled '1'.

Figure 1 shows the dimensions of the test specimens. The specimens are cylindrical with a diameter of 18 mm and a height of 18 mm. The specimens are divided into three groups: A, B, and C. Group A has a central hole with a diameter of 6 mm and a depth of 10 mm. Group B has a central hole with a diameter of 6 mm and a depth of 10 mm. Group C has a central hole with a diameter of 6 mm and a depth of 10 mm. The cross-sectional view shows the central hole with a diameter of 6 mm and a depth of 10 mm. The cross-sectional view also shows the outer diameter of 18 mm and the height of 18 mm.

Technical drawing of a shaft-hub assembly. The shaft has a diameter of $\varnothing 16.2^{+0.2}_0$ mm. The hub has an inner diameter of $18^{+0.1}_0$ mm and an outer diameter of 24 mm. The shaft length is 18 mm. The hub length is 18 mm. The assembly is shown with a cross-section view of the shaft and a side view of the hub. The dimensions and tolerances are as follows:

- Shaft diameter: $\varnothing 16.2^{+0.2}_0$ mm
- Hub inner diameter: $18^{+0.1}_0$ mm
- Hub outer diameter: 24 mm
- Shaft length: 18 mm
- Hub length: 18 mm

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