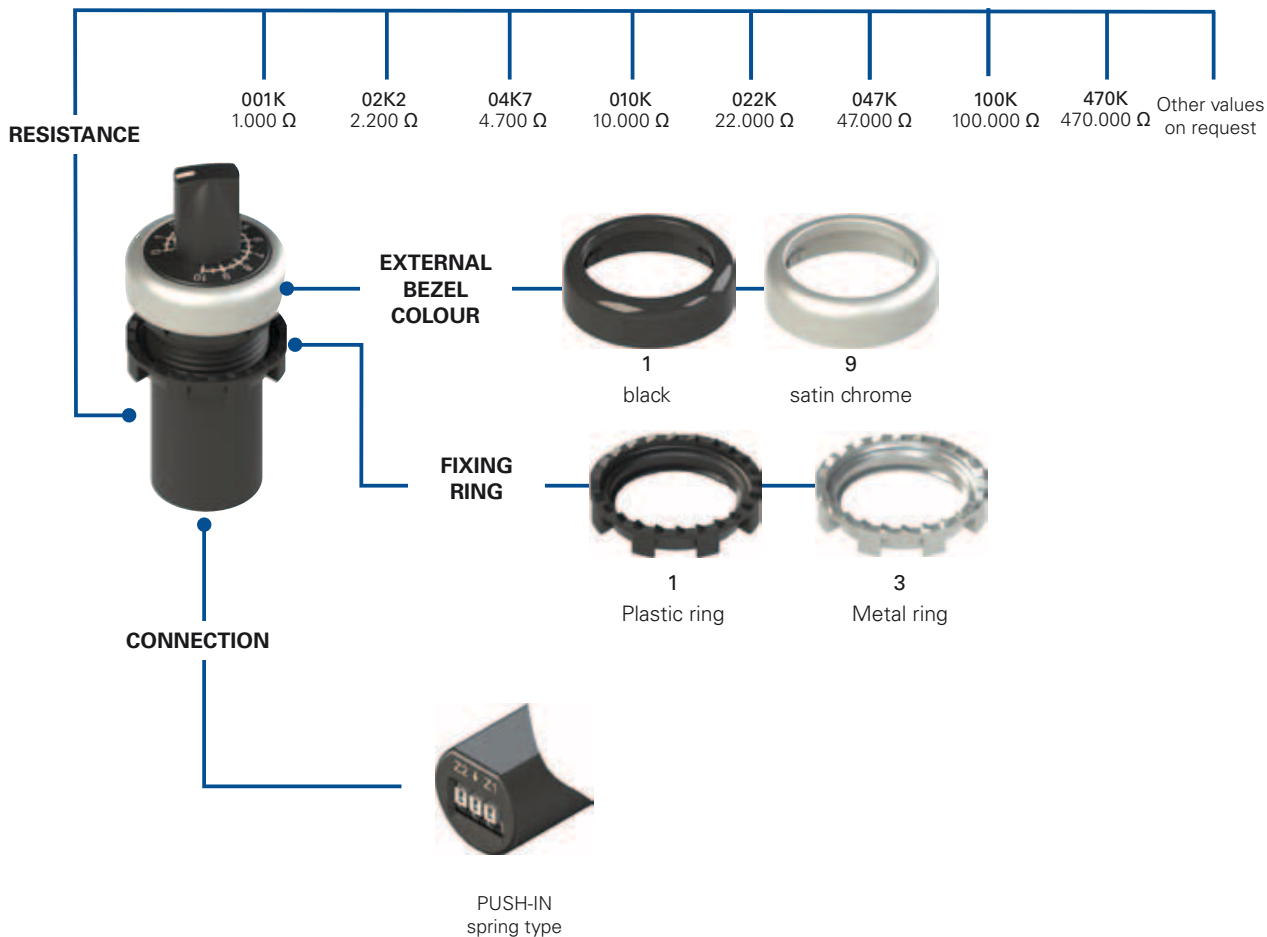


Selection diagram



Code structure

**Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

**E6 1DM02K2-D111**

Fixing ring and shaped ring

- 1 Plastic ring (standard)
- 2 Plastic fixing ring and shaped ring
- 3 Metal ring
- 4 Metal fixing ring and shaped ring

External bezel colour

- 1 black (standard)
- 9 satin chrome (standard)

Resistance

- 001K** 1 kΩ
- 02K2** 2,2 kΩ
- 04K7** 4,7 kΩ
- 010K** 10 kΩ
- 022K** 22 kΩ
- 047K** 47 kΩ
- 100K** 100 kΩ
- 470K** 470 kΩ

Other values on request



**Main features**

- Fully integrated potentiometer in monolithic body
- Protection degrees IP67 and IP69K
- Rotary potentiometer with Cermet technology
- 3-pole PUSH-IN type spring-operated connection system
- Various resistance values

**Quality marks:**



UL approval: E131787  
 EAC approval: RU C-IT ДМ94.В.01024

**Features approved by UL**

Operating voltage (Ue): 30 Vac or 42.4 V (peak)

**In compliance with standards:**

IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1, UL 508, CSA 22-2 No. 14.

**General data**

**Integrated potentiometer**



Thanks to its monolithic shape, it has been possible to integrate all the mechanical and electrical components needed for its end use inside the E6 series potentiometer body; it is therefore not necessary to assemble any other parts, such as knobs or trimmers, all that is required is to insert the circuit wires into the incorporated terminal board. Precise choices made in terms of design and materials have led to the creation of an object featuring remarkable mechanical resistance when in operation and

maximum protection preventing any liquids or foreign bodies from penetrating inside.

Moreover, the resistive element used is made of a composite ceramic and metal material, produced with the Cermet technology, which ensures remarkable stability and constancy in the set resistance value.

**Protection degrees IP67 and IP69K**

**IP69K**  
**IP67**

These devices are designed to be used in the toughest environmental conditions and they pass the IP67 immersion test acc. to EN 60529. They can therefore be used in all environments where maximum protection

degree of the housing is required. Due to their special design, these devices are suitable for use in equipment subjected to cleaning with high pressure hot water jets. These devices meet the IP69K test requirements according to ISO 20653 (water jets with 100 bar and a 80°C).

**Technical data**

**General data**

Protection degree: IP67 acc. to EN 60529  
 IP69K acc. to ISO 20653  
 Ambient temperature: -40°C ... +80°C  
 Mechanical endurance: 50,000 operating cycles  
 Mechanical travel: 250°  
 Tightening torque of the fixing ring: 2 ... 2.5 Nm  
 Utilization requirements: See page 139

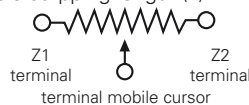
**Electrical data**

Rated insulation voltage (Ui): 300 Vac/dc  
 Resistive material: Cermet  
 Operation: linear  
 Resistance tolerance: ±10%  
 Cross-section of rigid/flexible wires w. wire-end sleeve: min 1 x 0.34 mm<sup>2</sup> (1 x AWG 24)

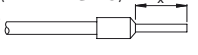
max 1 x 1.5 mm<sup>2</sup> (1 x AWG 16)  
 Wire cross-section with pre-insulated wire-end sleeve: min 1 x 0.34 mm<sup>2</sup> (1 x AWG 24)

**Connection system:**

Cable stripping length (x):



max 1 x 0.75 mm<sup>2</sup> (1 x AWG 18)

PUSH-IN spring type   
 min.: 8 mm  
 max.: 12 mm

Resistance	Rated operating voltage Ue max	Rated operating current Ie max	Power (70 °C) max.
1 kΩ	31 V	31 mA	1 W
2,2 kΩ	46 V	21 mA	1 W
4,7 kΩ	63 V	14 mA	1 W
10 kΩ	100 V	10 mA	1 W
22 kΩ	148 V	6,7 mA	1W
47 kΩ	217 V	4.6 mA	1 W
100 kΩ	300 V	3 mA	0,9 W
470 kΩ	300 V	0,75 mA	0,23 W

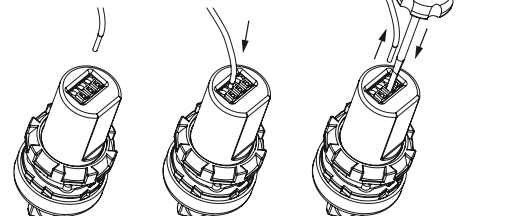
Other resistance values are available. Please contact our sales office.

**Compliance with the requirements of:**

Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EC

**PUSH-IN spring-operated connection**

The potentiometer is provided with a three-pole terminal board with PUSH-IN type spring-operated connection. This technology allows a very handy quick wiring procedure, since the wire just needs to be inserted into the appropriate hole in order to be secured and to establish the electrical connection. This operation can be carried out without the help of any tool, but simply using rigid or flexible wires with a crimped wire-end sleeve. Release is obtained by pressing the appropriate wire-releasing button.



**Dimensions**

All measures in the drawings are in mm

