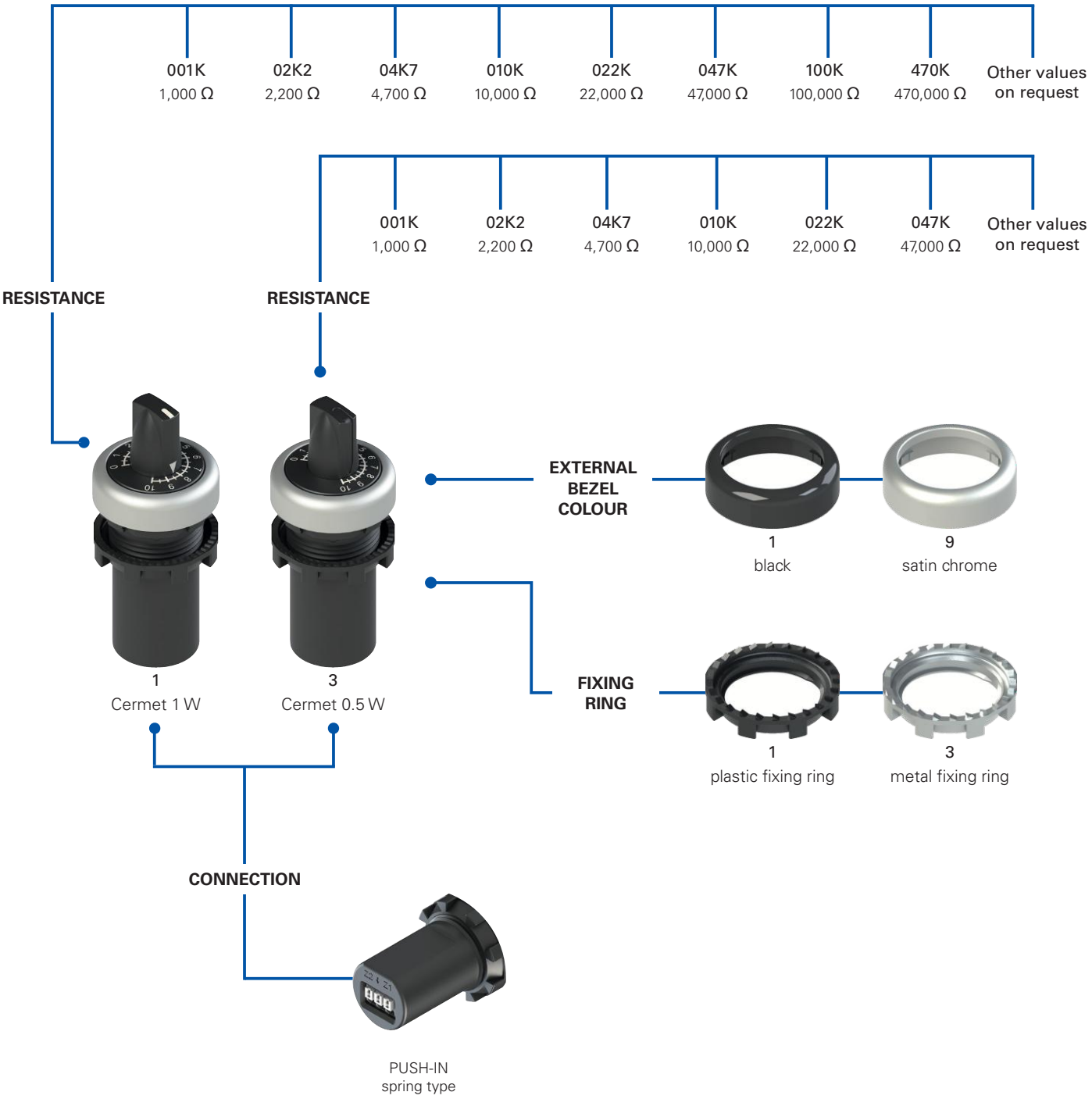
Selection diagram



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 fixing ring (standard)
2	plastic fixing ring and shaped ring
3	metal fixing ring
4	metal fixing ring and shaped ring

Resistance	
001K	1 kΩ
02K2	2.2 kΩ
04K7	4.7 kΩ
010K	10 kΩ
022K	22 kΩ
047K	47 kΩ
100K	100 kΩ (for 1 W versions only)
470K	470 kΩ (for 1 W versions only)

Other values on request.

Potentiometer type	
1	Cermet 1 W
3	Cermet 0.5 W

Potentiometer version 0.5 W
Package with **50 pc.**

External bezel colour	
1	black (standard)
9	satin chrome (standard)



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 Д-IT.PA07.B.37848/24

Features approved by UL

Ratings: 30 Vac, 31 mA (Supplied by class 2 or limited energy external power supply source).
For Use on a Flat Surface of a Type 1, 4X, 12 and 13.
Tightening torque 2.0 Nm.

Please contact our technical department for the list of approved products.

Technical data

General data

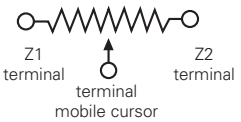
Protection degree:	IP67 acc. to EN 60529 IP69K acc. to ISO 20653
Ambient temperature:	-40°C … +80°C
Mechanical endurance:	
1 W version	50,000 operating cycles
0.5 W version	10,000 operating cycles
Tightening torque of the fixing ring:	2 … 2.5 Nm
Utilization requirements:	See page 179

Electrical data

Rated insulation voltage (Ui):	
1 W version	300 Vac/dc
0.5 W version	200 Vac
Resistive material:	Cermet
Operation:	linear
Resistance tolerance:	±10%
Cross-section of rigid/flexible wires w. wire-end sleeve:	min. 1 x 0.34 mm² (1 x AWG 24) max 1 x 1.5 mm² (1 x AWG 16)
Wire cross-section with pre-insulated wire-end sleeve:	min. 1 x 0.34 mm² (1 x AWG 24) max. 1 x 0.75 mm² (1 x AWG 18)
Connection system:	PUSH-IN spring type
Cable stripping length (x):	min.: 8 mm, max: 12 mm



Pin assignment:



Application features, 1 W version:

Resistance	Rated operating voltage Ue max	Rated operating current Ie max	Max power (70 °C)
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.

Application features, 0.5 W version:

Resistance	Rated operating voltage Ue max	Rated operating current Ie max	Max power (70 °C)
1 kΩ	21 V	23.8 mA	0.5 W
2.2 kΩ	31 V	16.1 mA	0.5 W
4.7 kΩ	46 V	10.8 mA	0.5 W
10 kΩ	67 V	7.4 mA	0.5 W
22 kΩ	99 V	5.0 mA	0.5 W
47 kΩ	145 V	3.4 mA	0.5 W

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

In compliance with standards:
IEC 60947-1, IEC 60947-5-1, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60204-1, EN IEC 63000, UL 508, CSA C22.2 No. 14.

Compliance with the requirements of:
Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, RoHS Directive 2011/65/EU.

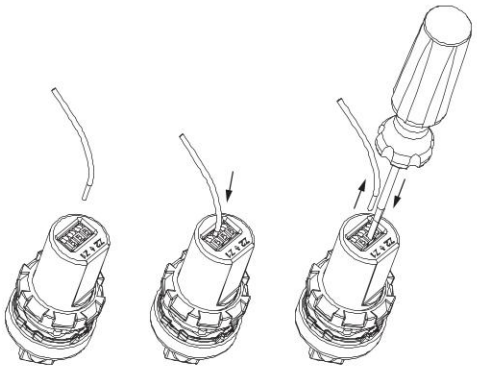
General data

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.
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.

PUSH-IN spring-operated connection



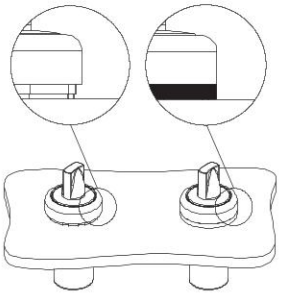
The potentiometer is provided with a three-pole terminal board with PUSH-IN type spring-operated connection. This technology allows a very handy quick wiring procedure. The wire is simply inserted into the appropriate hole, without the need for any auxiliary tooling, through the use of rigid or flexible wires with crimped wire-end sleeve. Release is obtained by pressing the appropriate wire-releasing button.

Protection degrees IP67 and IP69K

IP69K
IP67

These devices are designed to be used under the toughest environmental conditions, and they pass the IP67 immersion test acc. to EN 60529. They can therefore be used in all environments where the maximum degree of protection is required for the housing. 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 80°C).

Shaped ring



The shaped ring can be used when no label holder or other devices are applied; it prevents dirt and other residues from settling between the potentiometer and the panel or housing.
This turns out to be particularly useful in the sectors where high standards of cleanness and hygiene are required.

Metal fixing ring



The fixing ring in metal is particularly suitable for those applications which require tighter fitting of the panel-mounted device, such as for example in metal panels having holes without reference notches.

Dimensional drawings

All values in the drawings are in mm

