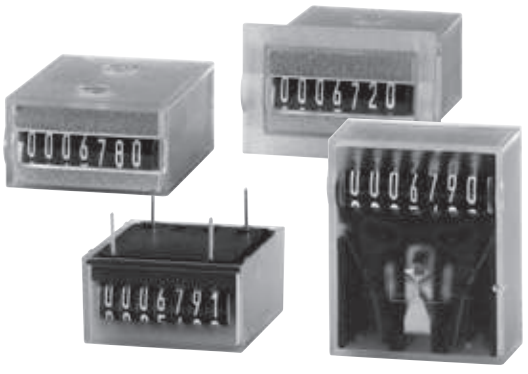
Micro counters | Magnetic field resistant and high shock resistance (DC) | K 66 / K 67



The micro adding counters K 66 (6-digit) and K 67 (7-digit) boast a very high level of shock resistance and, as a result of the patented ACR counting system, are not affected by magnetic fields.

They can be used as either panel mount or as PCB mount devices in a wide variety of application areas, where a high level of resistance against tampering is required.

Characteristics

- Not affected by magnetic fields, as moving parts are made of plastic or non-ferrous metal (patented system)
- Maximum shock resistance, as a counter-rotating movement is required for counting, ACR system (Air Coil Reverse, patented)
- Low power consumption; suitable for battery operation
- Very compact size, large figures
- Different viewing possibilities

Benefits

- Machine solderable and washable
- IP65 protection
- Long service life
- Stores values if power fails

Applications

General quantity counting, photocopiers, electricity meters, vending and slot machines, coin-operated machines, car washes, alarm systems, medical equipment, heat quantity measurement

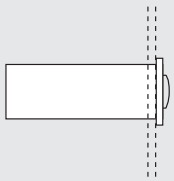
Type series

Fig.	*Mounting options*	*Display*	*El. connection*	*IP protection*	*6 digits*	*7 digits*
1)	Panel mount with latch	front side	flying leads	front side	–	**K 67.20**
2)	PCB mount, upright	front side	solder pins	front side/on rear	–	**K 67.80**
3)	PCB mount, lying	on the top	solder pins	front side/on rear	–	**K 67.90**
4)	PCB mount, hanging	front side	solder pins	front side/on rear	**K 66.91**	**K 67.91**
5)	PCB mount, lying	front side	solder pins	front side/on rear	**K 66.95**	**K 67.95**

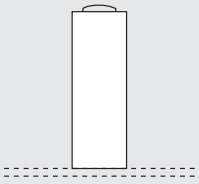
Order information
- Art.-No. 1.680.9X0.0XX
- For options please give exact counter type, voltage and options e.g.:
  K 67.20
  9 V DC/0
  temperature range -20°C ... +70°C [-4°F ... +158°F]

Mounting options and position of the display

1) Panel mount / display front side



2) PCB mount, upright / display front side



3) PCB mount, lying / display on the top



4) PCB mount, hanging / display front side



5) PCB mount, lying / display front side



Optional: PCB mount, lying / display at the bottom



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Micro counters | Magnetic field resistant and high shock resistance (DC) | K 66 / K 67

Technical data

Electrical connection	panel mout	flying leads, AWG 22 approx. 150 mm [5.91"], 6 mm [0.24"] stripped wire ends, tinned
	PCB mount	solder pins ø 0.64 mm [0.025"]
Power consumption: at 20°C [68°F]	up to 6 V DC up to 12 V DC at 24 V DC	approx. 70 mW approx. 120 mW approx. 500 mW
Rated voltage		1.5 / 3 / 4.5 / 5 / 6 / 12 / 24 V DC, -10% / +20%
Counting frequency		max. 10 Hz (type 0)
Pulse duration / pulse interval		min. 50 ms / min. 50 ms
Cycle duration factor		100 %
Counting system		adding
Height of figures (optical)	K 66 K 67	4 x 1.7 mm [0.16 x 0.067"] 4 x 1.25 mm [0.16 x 0.049"]
Colour of figures		white on black
Reset		no reset
Operating temperature		-10°C ... +60°C [+14°F ... +140°F] (non-condensing)
Mounting position		horizontal, other on request
Operating life		> 50 x 10^6 pulses

Soldering temperature	max. 265°C [+509°F], 3 s
Protection	IP65 (K 66.20, K 67.20: only front side)
Housing	PC (Polycarbonate), transparent types with protection IP65 are sealed
Weight	9 ... 11 g [0.32 ... 0.39 oz]

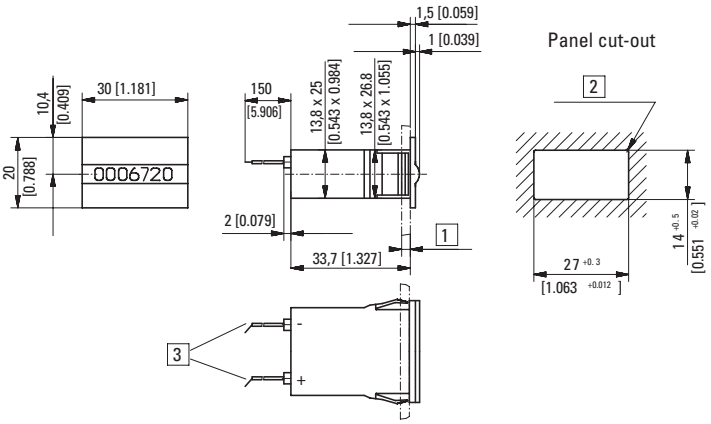
Options

K 66.20, K 66.80, K 67.20, K 67.80	flat pin 0.8 x 2.8 mm [0.032 x 0.11"] and push on connectors X.XX**7**.XXX.XXX
K 66.20, K 67.20	solder pins ø 0.64 mm [0.025"] X.XX**1**.XXX.XXX
K 66.80, K 67.80	flying leads, AWG 22 approx. 150 mm [5.91"]
Further options	- different voltages - counting frequency > 10 Hz - different colour of figures - extended temperature range -30°C ... +85°C [-22°F ... +185°F] or -20°C ... +70°C [-4°F ... +158°F] - solderable and washable version

Panel mount with latch / display front side

Type K 67.20





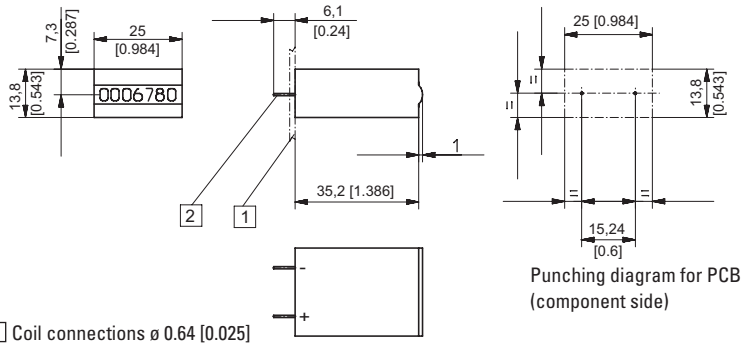
1 1.2 ... 3 mm [0.047 x 0.12] 2 R_{max} 0.5 [0.020] 3 Coil connections

Type	Voltage	Display	Art.-No. 3 V	4.5 V	5 V	6 V	12 V	24 V	
K 67.20	DC (10 Hz) / 0	7 digits	**1.660.200.006**	**1.660.200.008**	**1.660.200.009** 1)	**1.660.200.010**	**1.660.200.012** 1)	**1.660.200.013** 1)	

PCB mount upright / display front side

Type K 67.80





Punching diagram for PCB (component side)

1 PCB 2 Coil connections ø 0.64 [0.025]

Type	Voltage	Display	Art.-No. 3 V	4.5 V	5 V	6 V	12 V	24 V	
K 67.80	DC (10 Hz) / 0	7 digits	**1.660.800.006**	**1.660.800.008**	**1.660.800.009**	**1.660.800.010**	**1.660.800.012**	**1.660.800.013**	

Dimensions in mm [inch]

1) Stock types

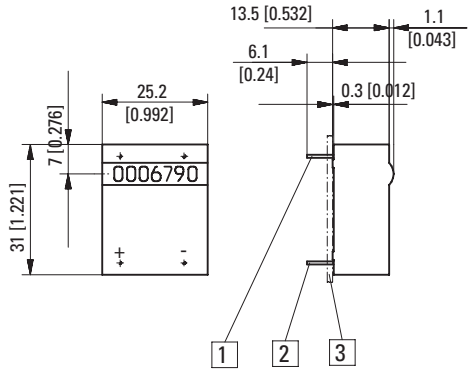
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Pulse counters, electromechanical

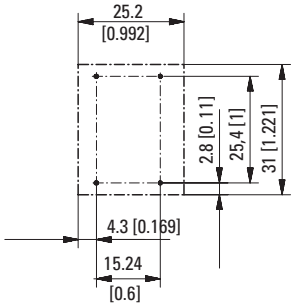
Micro counters | Magnetic field resistant and high shock resistance (DC) | K 66 / K 67

PCB mount, lying / display on the top
Type K 67.90





Punching diagram for PCB (component side)

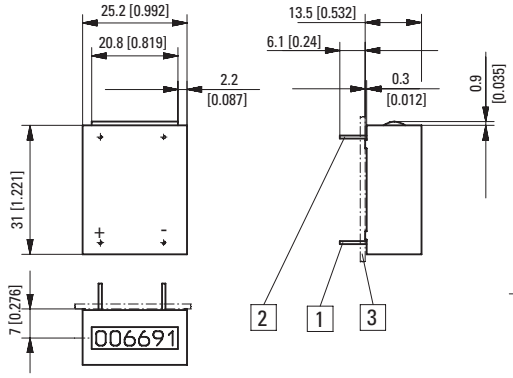


1 Mounting pin without el. function ø 0.64 [0.025] 2 Coil connections ø 0.64 [0.025] 3 PCB

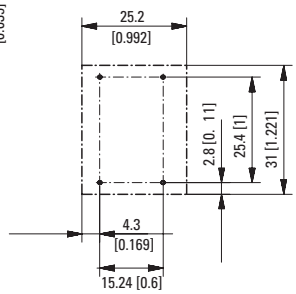
Type	Voltage	Display	Art.-No. 3 V	4.5 V	5 V	6 V	12 V	24 V	
K 67.90	DC (10 Hz) / 0	7 digits	**1.660.900.006**	**1.660.900.008**	**1.660.900.009**	**1.660.900.010**	**1.660.900.012**	**1.660.900.013**	

PCB mount, hanging / display front side
Type K 66.91 / K 67.91





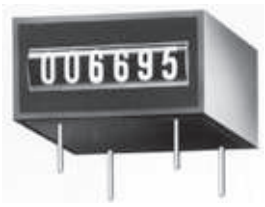
Punching diagram for PCB (component side)

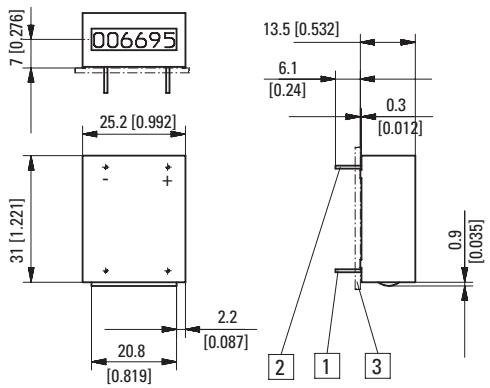


1 Mounting pin without el. function ø 0.64 [0.025] 2 Coil connections ø 0.64 [0.025] 3 PCB

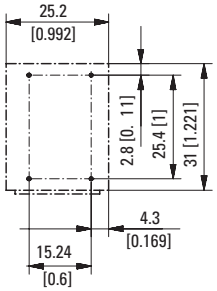
Type	Voltage	Display	Art.-No. 3 V	4.5 V	5 V	6 V	12 V	24 V	
K 66.91	DC (10 Hz) / 0	6 digits	**on request**	**on request**	**1.650.910.009**	**on request**	**1.650.910.012**	**1.650.910.013**	
K 67.91	DC (10 Hz) / 0	7 digits	**1.660.910.006**	**1.660.910.008**	**1.660.910.009**	**1.660.910.010**	**1.660.910.012**	**1.660.910.013**	

PCB mount lying / display front side
Type K 66.95 / K 67.95





Punching diagram for PCB (component side)



1 Mounting pin without el. function ø 0.64 [0.025] 2 Coil connections ø 0.64 [0.025] 3 PCB

Type	Voltage	Display	Art.-No. 3 V	4.5 V	5 V	6 V	12 V	24 V	
K 66.95	DC (10 Hz) / 0	6 digits	**on request**	**on request**	**1.650.950.009**	**on request**	**1.650.950.012**	**1.650.950.013**	
K 67.95	DC (10 Hz) / 0	7 digits	**1.660.950.006**	**1.660.950.008**	**1.660.950.009**	**1.660.950.010**	**1.660.950.012**	**1.660.950.013**	

Dimensions in mm [inch]

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