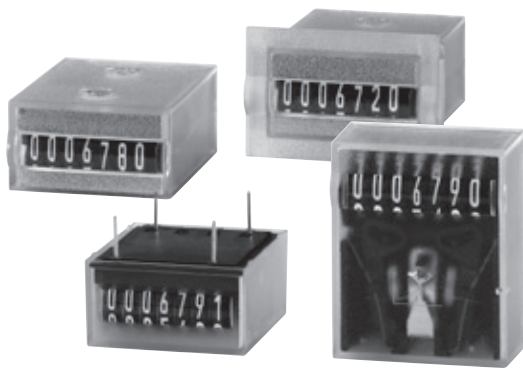


Pulse counters, electromechanical

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

Pulse counters

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

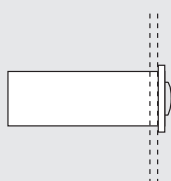
General quantity counting, photocopiers, electricity meters, vending and slot machines, coin-operated machines, car washes, alarm systems, medical equipment, heat quantity measurement

Type series

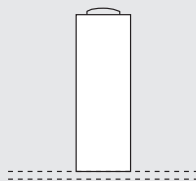
Fig.	Mounting options	Display	El. connection	IP protection	6 digits	7 digits	Order information - Art.-No. 1.680.9X0.0XX - For options please give exact counter type, voltage and options e.g.: K 67.20 9 V DC/0 temperature range -20°C ... +70°C [-4°F ... +158°F]
1)	Panel mount with latch	front side	flying 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	

Mounting options and position of the display

1) Panel mount / display front side



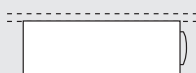
2) PCB mount, upright / display front side



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



Pulse counters, electromechanical

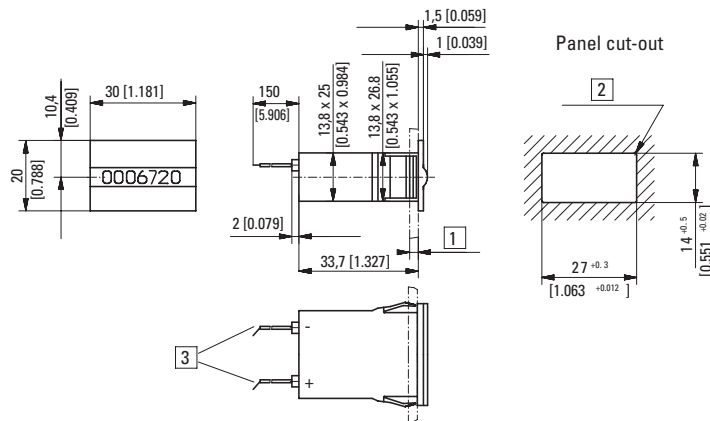
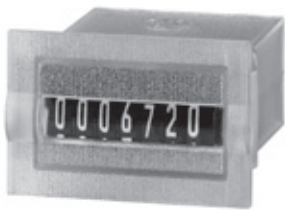
Micro counters	Magnetic field resistant and high shock resistance (DC)	K 66 / K 67
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Technical data		
Electrical connection	panel mout PCB mount	flying leads, AWG 22 approx. 150 mm [5.91"], 6 mm [0.24"] stripped wire ends, tinned solder pins \varnothing 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.XX7.XXX.XXX
K 66.20, K 67.20	solder pins \varnothing 0.64 mm [0.025"] X.XX1.XXX.XXX
K 66.80, K 67.80	flying leads, AWG 22 approx. 150 mm [5.91"]
Further options	<ul style="list-style-type: none"> - 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

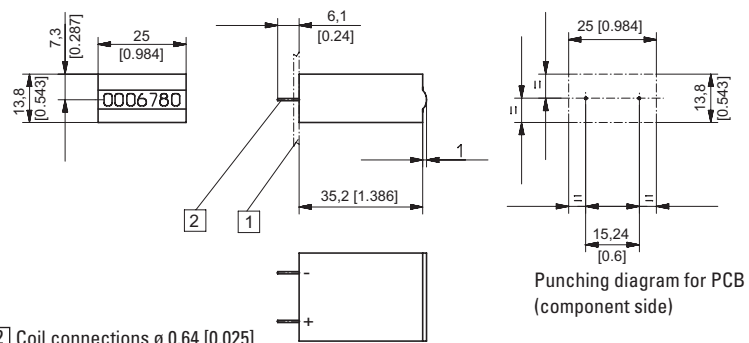
Panel mount with latch / display front side Type K 67.20



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



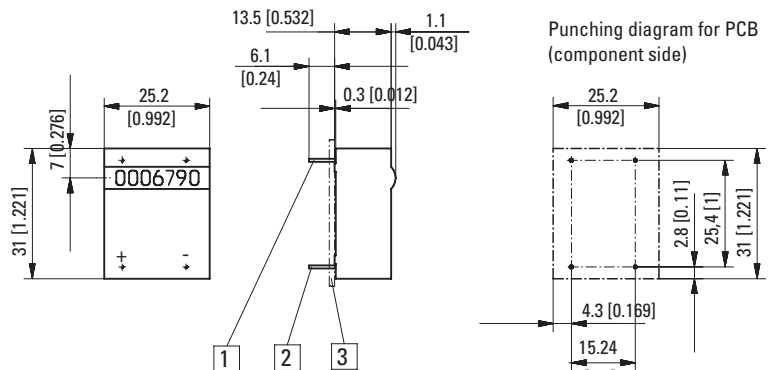
1) PCB 2) Coil connections \varnothing 0.64 [0.025]

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

Pulse counters, electromechanical

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

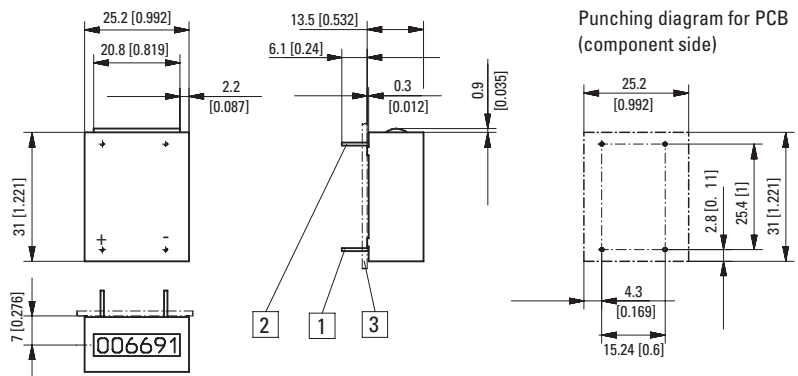
PCB mount, lying / display on the top
Type K 67.90



1 Mounting pin without el. function \varnothing 0.64 [0.025] 2 Coil connections \varnothing 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

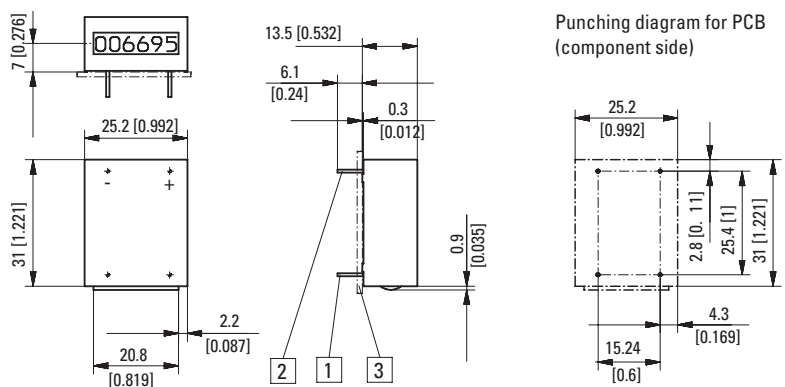
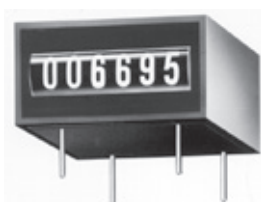
PCB mount, hanging / display front side
Type K 66.91 / K 67.91



1 Mounting pin without el. function \varnothing 0.64 [0.025] 2 Coil connections \varnothing 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



1 Mounting pin without el. function \varnothing 0.64 [0.025] 2 Coil connections \varnothing 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]

Pulse counters