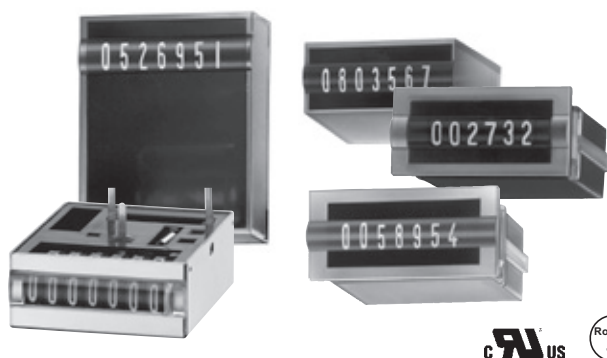


Pulse counters, electromechanical

Micro counters

High shock resistance (AC+DC)

K 04 ... K 07 / AK 07



The micro adding counter families K 04 to K 07 and AK 07 are available in a very wide variety of models and can be used in both DC as well as in AC applications.

As panel mount, base mount and PCB mount counters with a very high level of shock resistance they can be used for numerous diverse application areas.

Characteristics

- Low power consumption; suitable for battery operation
- Very compact size, large optical figures
- Different viewing possibilities
- Panel mount counter with moulded spring clips, base mount counter with screw fixing or PCB mount versions
- Version with additional magnetic shielding thanks to sheet-steel enclosure (K 0X.40 and K 0X.50)

Benefits

- Machine solderable and washable
- Stores values if power fails
- High shock resistance, long service life, IP65 protection

Applications

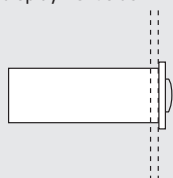
General quantity counting, alarm systems, coin-operated machines, electricity meters, vending and slot machines, photocopiers, medical equipment, car washes

Type series

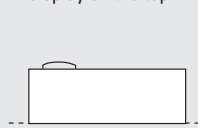
Fig.	Mounting options	Display	Housing	IP protection	4 digits	5 digits	6 digits	7 digits	Order information
1)	Panel mount with latch	front side	plastic	front side	K 04.20	K 05.20	K 06.20	K 07.20	- Art.-No.
2)	PCB mount, lying	on the top	sheet steel	—	K 04.40	—	—	K 07.40	- For options please give exact counter type, voltage and options e.g.:
3)	PCB mount, hanging	front side	sheet steel	—	—	—	—	K 07.50	K 06.20
4)	PCB mount, upright	front side	plastic	front side	—	—	K 06.80	K 07.80	9 V DC/0
5)	PCB mount, lying	on the top	plastic	front side/on rear	—	—	—	K 07.90	temperature range
6)	Base mount, upright	front side	plastic	front side	—	—	—	AK 07.00	-20°C ... +70°C

Mounting options and position of the display

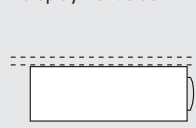
1) Panel mount / display front side



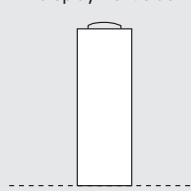
2) PCB mount, lying / display on the top



3) PCB mount, hanging / display front side



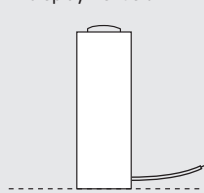
4) PCB mount, upright / display front side



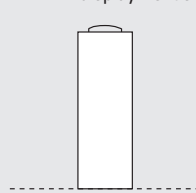
5) PCB mount, lying / display on the top



6) Base mount upright / display front side



Optional: PCB mount, upright / display front side



Pulse counters, electromechanical

Micro counters	High shock resistance (AC+DC)	K 04 ... K 07 / AK 07
----------------	-------------------------------	-----------------------

Technical data		
Electrical connection		
Panel mount, base mount	flying leads, AWG 22 approx. 150 mm, 6 mm stripped wire ends, tinned	
PCB mount	solder pins ø 0.4 x 1.2 mm	
Power consumption (at 20°C and normal voltage))		
at 10 Hz (type 0)	approx. 50 mW	
at 25 Hz (type 1)	approx. 250 mW	
at 10 Hz (type a0)	approx. 800 mVA	
Rated voltage	type 0	1,5/3/4,5/5/6/12 / 24 V DC, -10 %, +20 %
	type 1	3/4,5/5/6/12/24 V DC, ±10 %
	type a0	12/24/115/230 V AC, ±10 %
Counting frequency		max. 10 and 25 Hz
Pulse duration		
	at 10 Hz (type 0 and a0)	min. 50 ms
	at 25 Hz (type 1)	min. 20 ms
Pulse interval		
	at 10 Hz (type 0 a0)	min. 50 ms
	at 25 Hz (type 1)	min. 20 ms
Cycle duration factor		100 %
Number of digits		4, 5, 6 and 7
Counting system		adding
Height of figures	K 04, K 06, AK 06	1.7 x 4 mm optical
	K 05, K 07, AK 07	1.2 x 4 mm optical
Colour of figures		white on black
Reset		no reset

Operating temperature	-10°C ... +60°C (non-condensing)	
Mounting position	horizontal, other on request	
Soldering temperature	265°C, 3 s	
Operating life	> 50 x 10 ⁶ pulses	
Solderable and wash proof types	K 0X.92, K 06.90, K 07.90	
Protection	K 0X.92, K 0X.90	IP65
	AK 0X.00, K 0X.80, K 0X.20 other types	IP65 (only front side) depending on kind of mounting
UL approval	File E43429	
Housing	PC (Polycarbonate), transparent or sheet steel types (see table) with IP65 protection, fully sealed (potted)	
Weight	15 ... 18 g	

Options		
K 0x.20	flat pin 0.5 x 2.8 mm Art.-No.: 1.1X7.XX0.XXX	
	flat pin 0.4 x 1.2 mm Art.-No.: 1.1X9.XX0.XXX	
	– different voltages	
	– version not potted	
	– different figure colours	
	– different lengths of flying leads	
	– different connections	
	– different temperature range, depends on version	
	-30°C... +85°C, -20°C ... +70°C	

Pulse counters, electromechanical

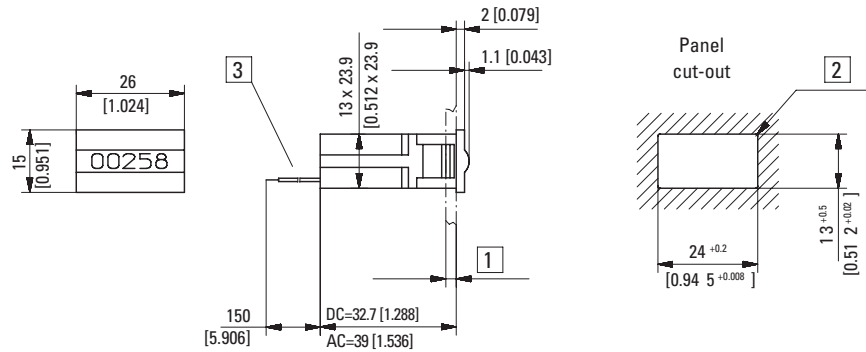
Micro counters

High shock resistance (AC+DC)

K 04 ... K 07 / AK 07

Panel mount counter
4- and 5-digit display front side

Type K 04.20 / K 05.20

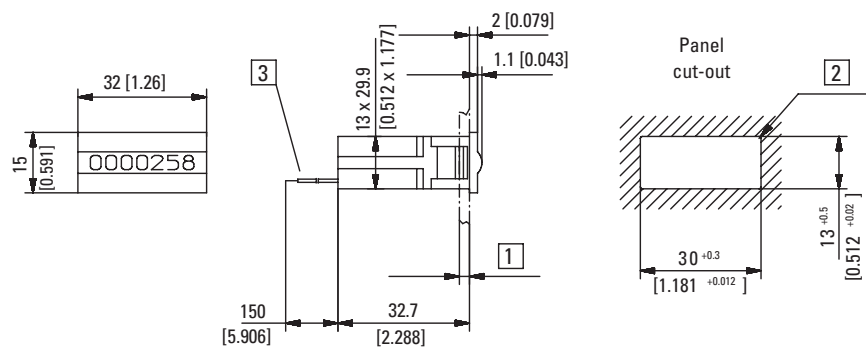


1) 1.2 ... 3 mm 2) R_{max} 0.5 3) Coil connections

Type	Voltage	Display	Art.-No. 3 V	4.5 V	12 V	24 V	115 V	230 V
K 04.20	DC (10 Hz) / 0	4 digits	1.100.200.006	1.100.200.008	on request 1.100.200.032	on request 1.100.200.033 1.100.200.051	1.100.200.054	1.100.200.056
	DC (25 Hz) / 1							
	AC (10 Hz) / a0							
K 05.20	DC (10 Hz) / 0	5 digits	1.110.200.006	1.110.200.008	on request 1.110.200.032	1.110.200.418 ¹⁾ 1.110.200.033 1.110.200.051	1.110.200.054	1.110.200.056 ¹⁾
	DC (25 Hz) / 1							
	AC (10 Hz) / a0							

Panel mount counter
6- and 7-digit display front side

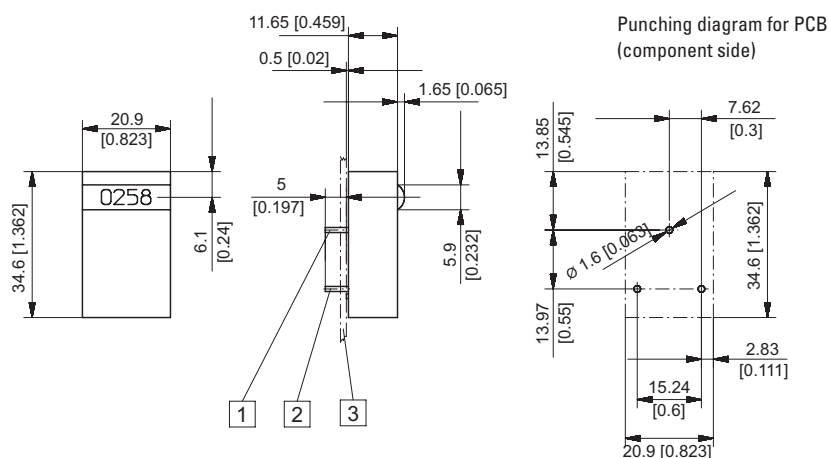
Type K 06.20 / K 07.20



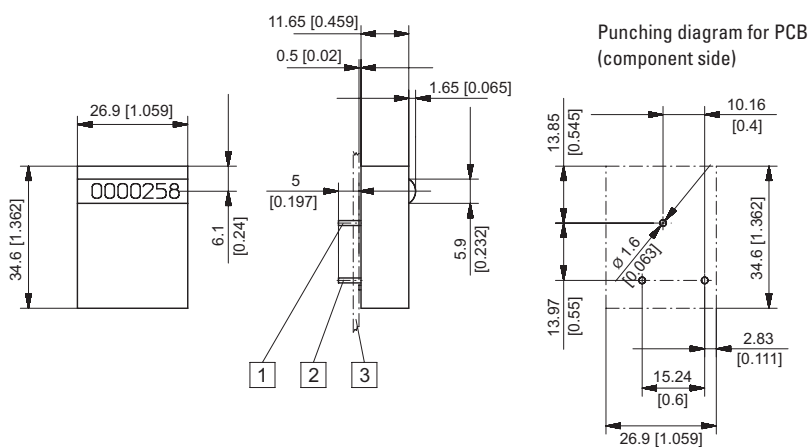
1) 1.2 ... 3 mm 2) R_{max} 0.5 3) Coil connections

Type	Voltage	Display	Art.-No. 3 V	4.5 V	12 V	24 V	115 V	230 V
K 06.20	DC (10 Hz) / 0	6 digits	1.120.200.006	1.120.200.008	on request 1.120.200.032	1.120.200.418 1.120.200.033 1.120.200.051	1.120.200.054	1.120.200.056
	DC (25 Hz) / 1							
	AC (10 Hz) / a0							
K 07.20	DC (10 Hz) / 0	7 digits	1.130.200.006	1.130.200.008	1.130.200.012 ¹⁾ 1.130.200.032 ¹⁾	1.130.200.418 1.130.200.033 ¹⁾ 1.130.200.051	1.130.200.054 ¹⁾	1.130.200.056 ¹⁾
	DC (25 Hz) / 1							
	AC (10 Hz) / a0							

K 04 ... K 07 / AK 07



			Art.-No.				
Type	Voltage	Display	3 V	4.5 V	12 V	24 V	
K 04.40	DC (10 Hz) / 0	4 digits	1.100.401.006	1.100.401.008	on request	on request	
	DC (25 Hz) / 1				1.100.401.032	1.100.401.033	



Type	Voltage	Display	Art.-No. 3 V	4.5 V	12 V	24 V	
K 07.40	DC (10 Hz) / 0 DC (25 Hz) / 1	7 digits	1.130.401.006	1.130.401.008 ¹⁾	on request 1.130.401.032	on request 1.130.401.033	

Pulse counters, electromechanical

Micro counters

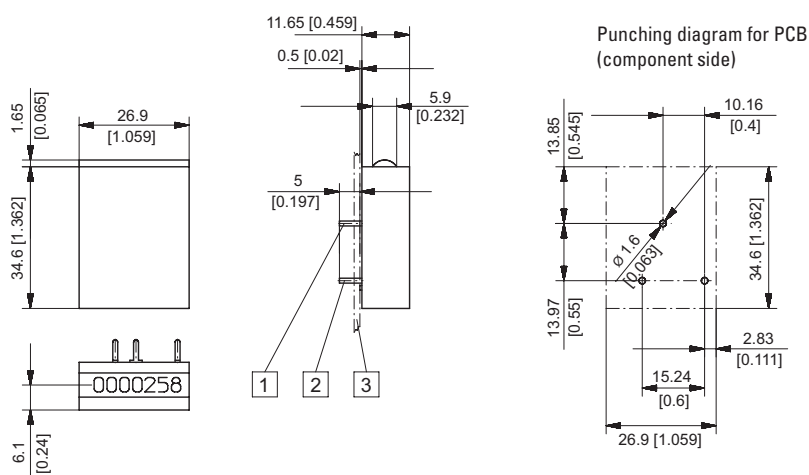
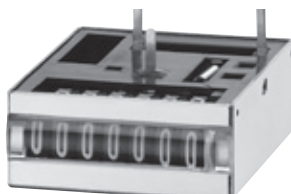
High shock resistance (AC+DC)

K 04 ... K 07 / AK 07

PCB mount, hanging
7-digit display front side

Type K 07.50

Colour of housing blue (zinc-plated)

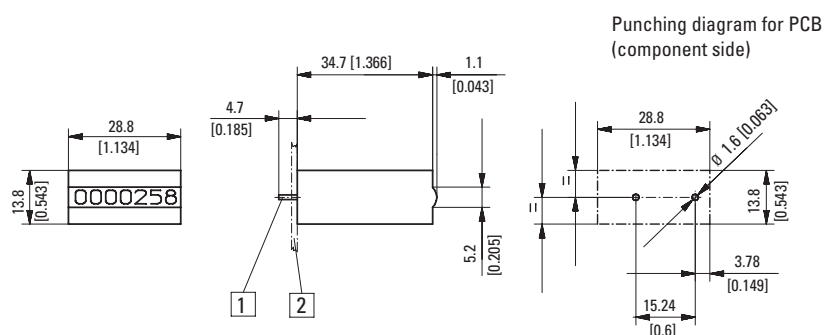


1 Mounting pin without el. function 0.4 x 1.2 2 Coil connections 0.4 x 1.2 3 PCB

Type	Voltage	Display	Art.-No. 3 V	4.5 V	12 V	24 V	
K 07.50	DC (10 Hz) / 0 DC (25 Hz) / 1	7 digits	1.130.501.006	1.130.501.008	on request 1.130.501.032	on request 1.130.501.033	

PCB mount, upright
6- and 7-digit display front side

Type K 06.80 / K 07.80



1 Coil connections 0.4 x 1.2 2 PCB

Type	Voltage	Display	Art.-No. 3 V	4.5 V	12 V	24 V	115 V	230 V
K 06.80	DC (10 Hz) / 0 DC (25 Hz) / 1 AC (10 Hz) / a0	6 digits	1.120.800.006	1.120.800.008	on request 1.120.800.032	on request 1.120.800.033 1.120.800.051	1.120.800.054	1.120.800.056
K 07.80	DC (10 Hz) / 0 DC (25 Hz) / 1 AC (10 Hz) / a0	7 digits	1.130.800.006	1.130.800.008	on request 1.130.800.032 ¹⁾	on request 1.130.800.033 1.130.800.051	1.130.800.054	1.130.800.056

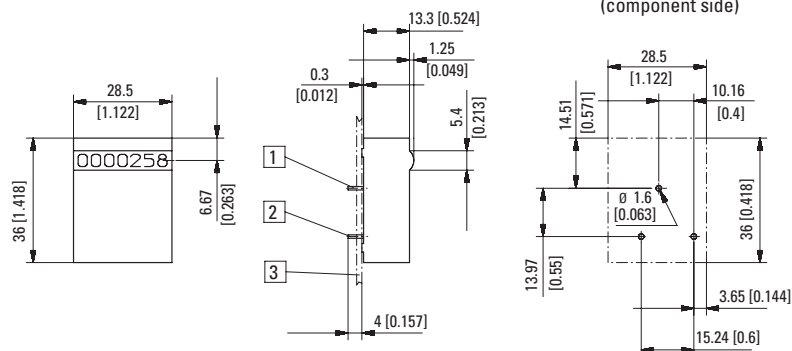
Pulse counters, electromechanical

Micro counters

High shock resistance (AC+DC)

K 04 ... K 07 / AK 07

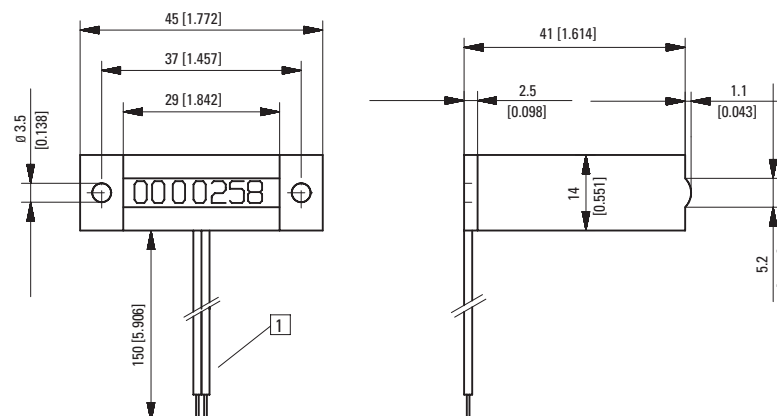
PCB mount, lying
7-digit display on the top
Type K 07.90



1) Mounting pin without el. function 0.4 x 1.2 2) Coil connections 0.4 x 1.2 3) PCB

Type	Voltage	Display	Art.-No. 3 V	4.5 V	12 V	24 V	115 V	230 V
K 07.90	DC (10 Hz) / 0	7 digits	1.130.900.006	1.130.900.008	1.130.900.012 ¹⁾ 1.130.900.032	on request	1.130.900.054	1.130.900.056
	DC (25 Hz) / 1					1.130.900.033		
	AC (10 Hz) / a0					1.130.900.051		

Base mount, upright
7-digit display front side
Type AK 07.00



1) Coil connections

Type	Voltage	Display	Art.-No. 3 V	4.5 V	12 V	24 V	115 V	230 V
AK 07.00	DC (10 Hz) / 0	7 digits	1.130.000.006	1.130.000.008	1.130.000.012 1.130.000.032	1.130.000.418 1.130.000.033 1.130.000.051	1.130.000.054	1.130.000.056 ¹⁾
	DC (25 Hz) / 1							
	AC (10 Hz) / a0							