

## Micro Display counter K 04 ... K 07, shock resistant



- 4-, 5-, 6- and 7 digit Micro adding counter
- High shock resistance
- Low power consumption; suitable for battery consumption
- small dimensions
- Large optical figures
- Different viewing possibilities
- Flush mount with integrated spring clip
- PCB-mount versions
- Solderable and wash proof
- Protection IP 65

- Stores value also at power failure
- long service life
- certified (UL Underwriters Laboratories Inc.)

### Applications

charge counting, KWh registration  
alarm systems, compact units,  
copiers, fuel dispensers,  
medical equipment, miniature  
pumps, dosing machines, gates,  
general event counting

### Technical data:

|                                                     |                                                                                                                 |                                                                 |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Electrical Connection:                              | Built-in counter<br>PCB counter:                                                                                | Flying leads<br>AWG 22 appr. 150 mm<br>Solder pins 0,4 x 1,2 mm |
| Power consumption:<br>(at 20 °C and normal voltage) | at 10 Imp/s (type 0):<br>at 25 Imp/s (type 1):<br>at 10 Imp/s (type a0):                                        | appr. 50 mW<br>appr. 250 mW<br>appr. 800 mVA                    |
| Rated voltage:                                      | type 0: 1.5/3/4.5/5/6/12 V DC<br>type 1: 3/4.5/5/6/12/24 V DC<br>type 4: 24 V DC<br>type a0: 12/24/115/230 V AC | –10 % +20 %<br>± 10 %<br>–10 % +20 %<br>± 10 %                  |
| Counting frequency:                                 | max. 10 and 25 Imp/s                                                                                            |                                                                 |
| Pulse duration:                                     | at 10 Imp/s (type 0 and a0):<br>at 25 Imp/s (type 1):                                                           | min. 50 ms<br>min. 20 ms                                        |
| Pulse interval:                                     | at 10 Imp/s (type 0 and a0):<br>at 25 Imp/s (type 1):                                                           | min. 50 ms<br>min. 20 ms                                        |
| Cycle duration factor:                              | 100 %                                                                                                           |                                                                 |
| Number of digits:                                   | 4, 5, 6 and 7                                                                                                   |                                                                 |
| Counting system                                     | adding                                                                                                          |                                                                 |
| Hight of figures                                    | K 04, K 06: 1,7 x 4 mm optical<br>K 05, K 07: 1,2 x 4 mm optical                                                |                                                                 |
| Colour of figures:                                  | white on black                                                                                                  |                                                                 |
| Reset:                                              | no reset                                                                                                        |                                                                 |

### Series:

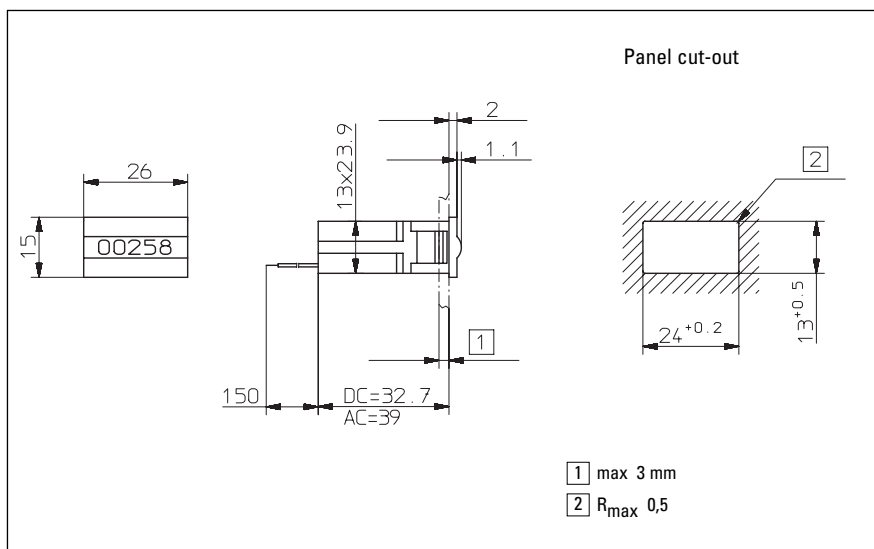
| 4 digit | 5 digit | 6 digit | 7digit  | Housing | Display    | Description          |
|---------|---------|---------|---------|---------|------------|----------------------|
| K 04.20 | K 05.20 | K 06.20 | K 07.20 | Plastic | Small side | Flush mount          |
| K 04.40 | K 05.40 | K 06.40 | K 07.40 | Steel   | Large side | PCB mount            |
| K 04.50 | K 05.50 | K 06.50 | K 07.50 | Steel   | Small side | PCB mount            |
| K 04.80 | K 05.80 | K 06.80 | K 07.80 | Plastic | Small side | PCB mount            |
| K 06.90 | K 07.90 |         |         | Plastic | Large side | PCB mount wash proof |
| K 04.92 | K 05.92 | K 06.92 | K 07.92 | Plastic | Small side | PCB mount wash proof |

|                                 |                                                                                                                                                                                                                                                                                      |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature:            | –10 ... +60 °C                                                                                                                                                                                                                                                                       |
| Mounting position               | any                                                                                                                                                                                                                                                                                  |
| Operating life:                 | > 50 x 10 <sup>6</sup> pulses                                                                                                                                                                                                                                                        |
| solderable and wash proof types | K 04.92, K 05.92, K 06.90, K 06.92, K 07.90<br>K 07.92                                                                                                                                                                                                                               |
| Protection:                     | K 04.92, K 05.92, K 06.90, K 06.92, K 07.90<br>K 07.92: IP 65 (K 04.20, K 05.20, K 06.20, K 07.20:<br>IP 65 only front side) others, depending from<br>kind of mounting                                                                                                              |
| UL-certified                    | File E43429                                                                                                                                                                                                                                                                          |
| Housing:                        | clear plastic or<br>steel (see table "Series") types with<br>protection IP 65 are fully sealed enclosure                                                                                                                                                                             |
| Weight                          | 15 ... 18 g                                                                                                                                                                                                                                                                          |
| Options                         |                                                                                                                                                                                                                                                                                      |
| K 0x.20                         | Flat pin 0.5 x 2.8 mm Art.-No.: 1.1X7.XX0.XXX<br>– different voltages<br>– version not potted<br>– different figure colours<br>– different lengths of flying leads<br>– different connections<br>– different temperature range, depends on<br>version –30 ... +85 °C, –20 ... +70 °C |

### Ordering information

- Article number
- for options please give exact counter type, voltage and options e.g.  
K 06.20, 9 V DC/0 temperature range  
–20 °C ... +70 °C

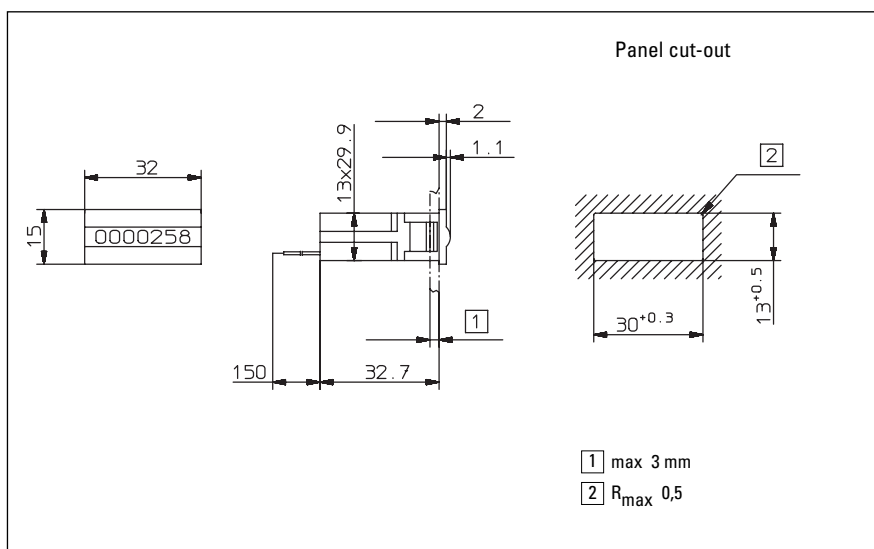
## Type K 04.20 and K 05.20



| K 04.20       | 3 V           | 4.5 V         | 12 V          | 24 V          | 115 V         | 230 V         |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (4 digit)     | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      |
| DC (10 Imp/s) | 1.100.200.006 | 1.100.200.008 | 1.100.200.012 | 1.100.200.418 |               |               |
| DC (25 Imp/s) |               |               | 1.100.200.032 | 1.100.200.033 |               |               |
| AC (10 Imp/s) |               |               |               | 1.100.200.051 | 1.100.200.054 | 1.100.200.056 |

| K 05.20       | 3 V           | 4.5 V         | 12 V          | 24 V          | 115 V         | 230 V         |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (5 digit)     | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      |
| DC (10 Imp/s) | 1.110.200.006 | 1.110.200.008 | 1.110.200.012 | 1.110.200.418 |               |               |
| DC (25 Imp/s) |               |               | 1.110.200.032 | 1.110.200.033 |               |               |
| AC (10 Imp/s) |               |               |               | 1.110.200.051 | 1.110.200.054 | 1.110.200.056 |

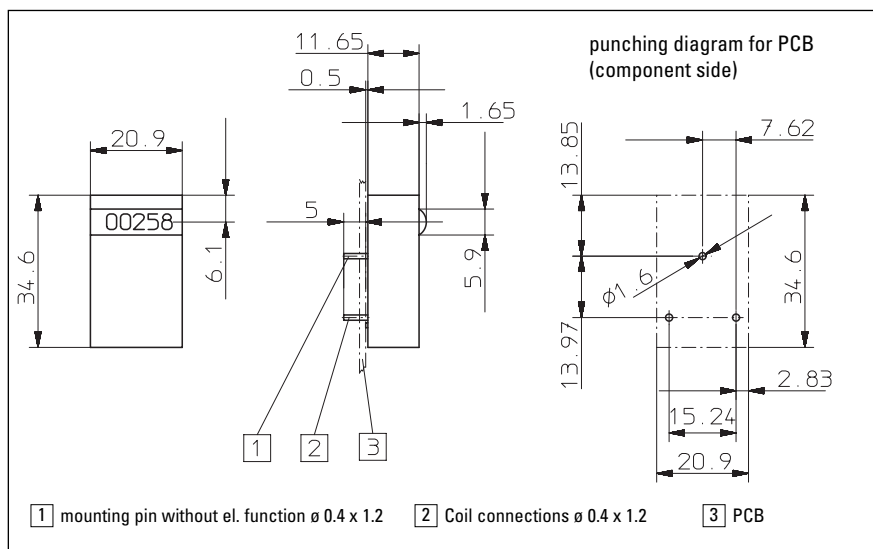
## Type K 06.20 and K 07.20



| K 06.20       | 3 V           | 4.5 V         | 12 V          | 24 V          | 115 V         | 230 V         |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (6 digit)     | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      |
| DC (10 Imp/s) | 1.120.200.006 | 1.120.200.008 | 1.120.200.012 | 1.120.200.418 |               |               |
| DC (25 Imp/s) |               |               | 1.120.200.032 | 1.120.200.033 |               |               |
| AC (10 Imp/s) |               |               |               | 1.120.200.051 | 1.120.200.054 | 1.120.200.056 |

| K 07.20       | 3 V           | 4.5 V         | 12 V          | 24 V          | 115 V         | 230 V         |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (7 digit)     | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      |
| DC (10 Imp/s) | 1.130.200.006 | 1.130.200.008 | 1.130.200.012 | 1.130.200.012 |               |               |
| DC (25 Imp/s) |               |               | 1.130.200.032 | 1.130.200.033 |               |               |
| AC (10 Imp/s) |               |               |               | 1.130.200.051 | 1.130.200.054 | 1.130.200.056 |

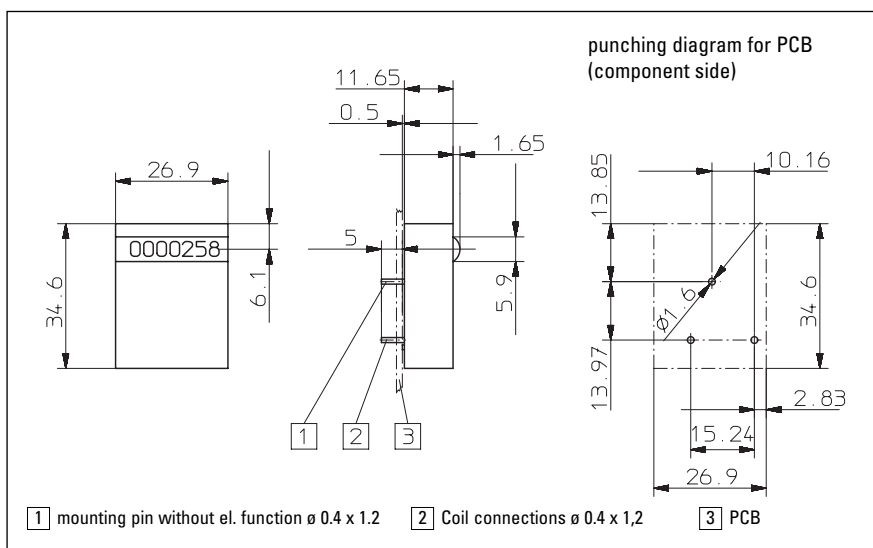
## Type K 04.40 and K 05.40



| K 04.40<br>(4 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.100.401.006   | 1.100.401.008     | 1.100.401.012    | 1.100.401.418    |
| DC (25 Imp/s)        |                 |                   | 1.100.401.032    | 1.100.401.033    |

| K 05.40<br>(5 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.110.401.006   | 1.110.401.008     | 1.110.401.012    | 1.110.401.418    |
| DC (25 Imp/s)        |                 |                   | 1.110.401.032    | 1.110.401.033    |

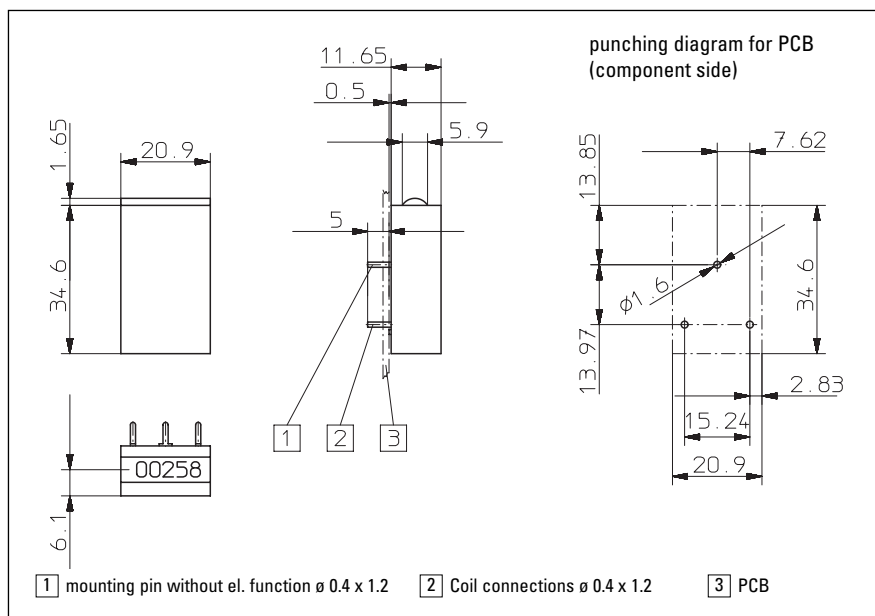
## Type K 06.40 and K 07.40



| K 06.40<br>(6 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.120.401.006   | 1.120.401.008     | 1.120.401.012    |                  |
| DC (25 Imp/s)        |                 |                   | 1.120.401.032    | 1.120.401.033    |

| K 07.40<br>(7 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.130.401.006   | 1.130.401.008     | 1.130.401.012    |                  |
| DC (25 Imp/s)        |                 |                   | 1.130.401.032    | 1.130.401.033    |

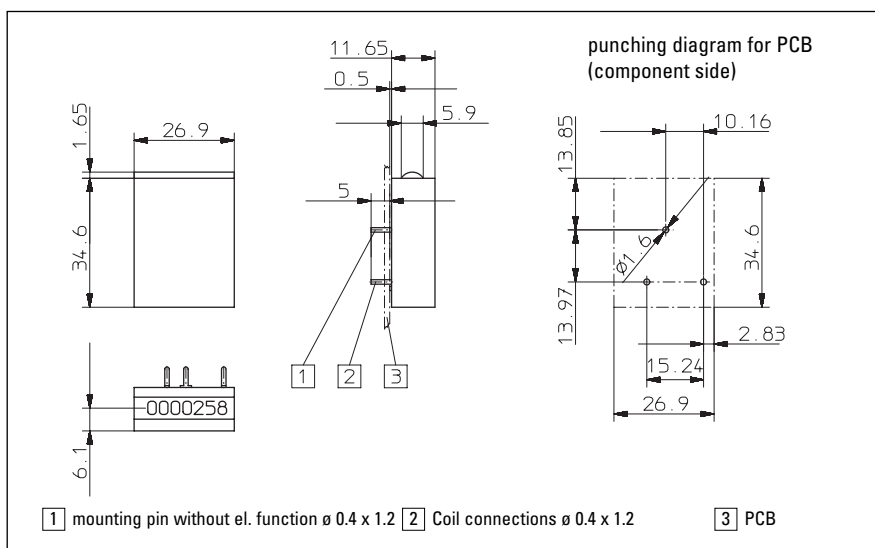
## Type K 04.50 and K 05.50



| K 04.50<br>(4 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.100.501.006   | 1.100.501.008     | 1.100.501.012    | 1.100.501.418    |
| DC (25 Imp/s)        |                 |                   | 1.100.501.032    | 1.100.501.033    |

| K 05.50<br>(5 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.110.501.006   | 1.110.501.008     | 1.110.501.012    | 1.110.501.418    |
| DC (25 Imp/s)        |                 |                   | 1.110.501.032    | 1.110.501.033    |

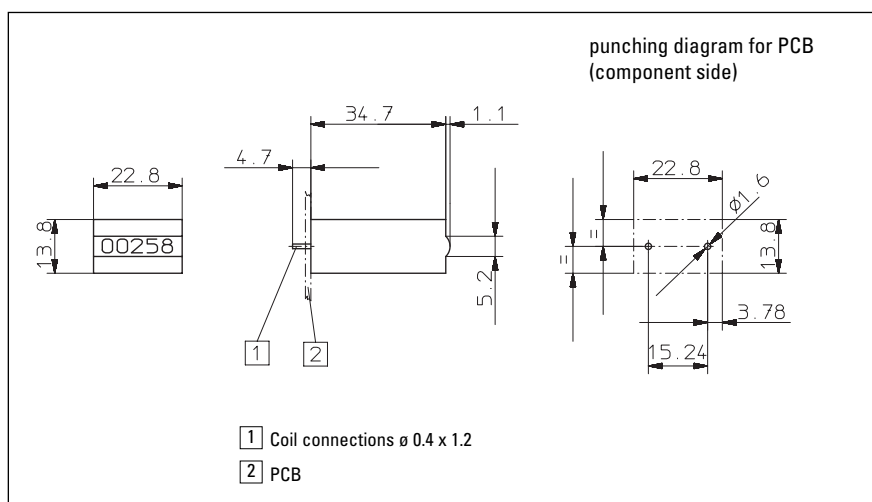
## Type K 06.50 and K 07.50



| K 06.50<br>(6 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.120.501.006   | 1.120.501.008     | 1.120.501.012    | 1.120.501.418    |
| DC (25 Imp/s)        |                 |                   | 1.120.501.032    | 1.120.501.033    |

| K 07.50<br>(7 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.130.501.006   | 1.130.501.008     | 1.130.501.012    | 1.130.501.418    |
| DC (25 Imp/s)        |                 |                   | 1.130.501.032    | 1.130.501.033    |

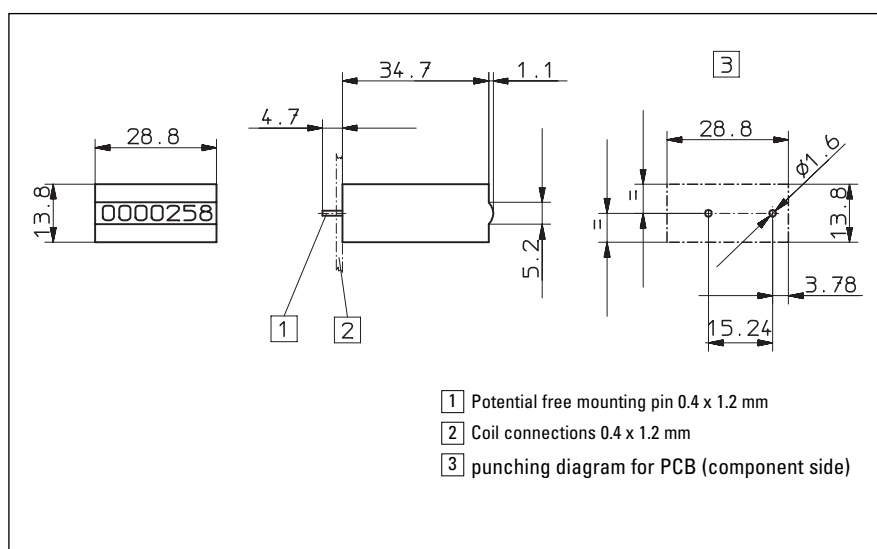
## Type K 04.80 and K 05.80



| <b>K 04.80</b><br>(4 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|-----------------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)               | 1.100.800.006   | 1.100.800.008     | 1.100.800.012    | 1.100.800.418    |
| DC (25 Imp/s)               |                 |                   | 1.100.800.032    | 1.100.800.033    |

| <b>K 05.80</b><br>(5 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|-----------------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)               | 1.110.800.006   | 1.110.800.008     | 1.110.800.012    | 1.110.800.418    |
| DC (25 Imp/s)               |                 |                   | 1.110.800.032    | 1.110.800.033    |

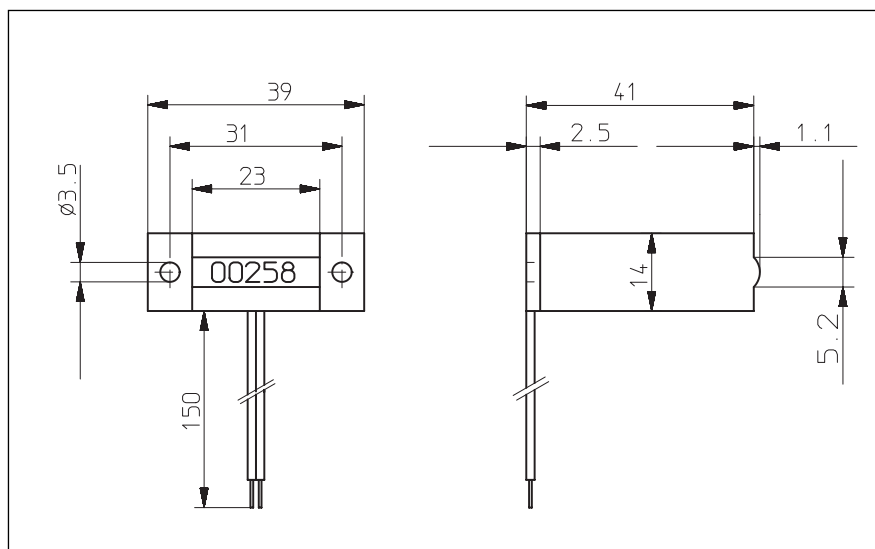
## Type K 06.80 and K 07.80



| <b>K 06.80</b><br>(6 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. | 115 V<br>Art.-No. | 230 V<br>Art.-No. |
|-----------------------------|-----------------|-------------------|------------------|------------------|-------------------|-------------------|
| DC (10 Imp/s)               | 1.120.800.006   | 1.120.800.008     | 1.120.800.012    | 1.120.800.418    |                   |                   |
| DC (25 Imp/s)               |                 |                   | 1.120.800.032    | 1.120.800.033    |                   |                   |
| AC (10 Imp/s)               |                 |                   |                  | 1.120.800.051    | 1.120.800.054     | 1.120.800.056     |

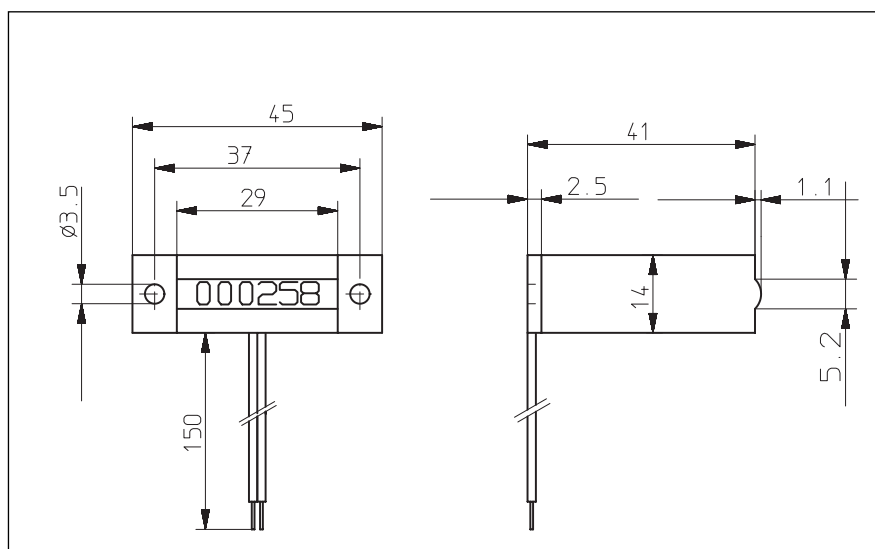
| <b>K 07.80</b><br>(7 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. | 115 V<br>Art.-No. | 230 V<br>Art.-No. |
|-----------------------------|-----------------|-------------------|------------------|------------------|-------------------|-------------------|
| DC (10 Imp/s)               | 1.130.800.006   | 1.130.800.008     | 1.130.800.012    | 1.130.800.418    |                   |                   |
| DC (25 Imp/s)               |                 |                   | 1.130.800.032    | 1.130.800.033    |                   |                   |
| AC (10 Imp/s)               |                 |                   |                  | 1.130.800.051    | 1.130.800.054     | 1.130.800.056     |

## AK 05.00



| AK 05.00      | 3 V           | 4.5 V         | 12 V          | 24 V          | 115 V         | 230 V         |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (5 digit)     | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      |
| DC (10 Imp/s) | 1.110.000.006 | 1.110.000.008 | 1.110.000.012 | 1.110.000.418 |               |               |
| DC (25 Imp/s) |               |               | 1.110.000.032 | 1.110.000.033 |               |               |
| AC (10 Imp/s) |               |               |               | 1.110.000.051 | 1.110.000.054 | 1.110.000.056 |

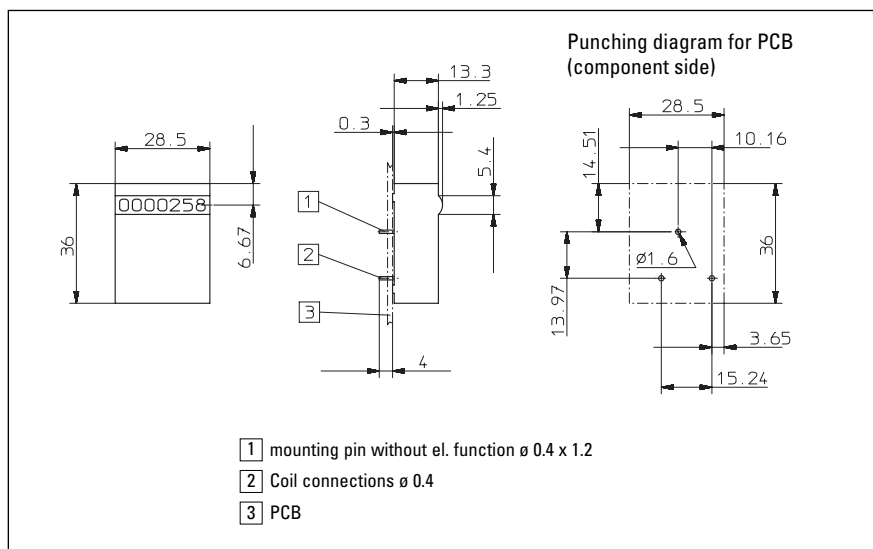
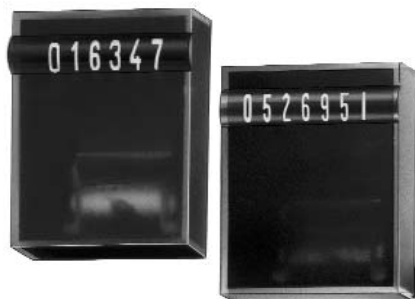
## Type AK 06.00 and AK 07.00



| AK 06.00      | 3 V           | 4.5 V         | 12 V          | 24 V          | 115 V         | 230 V         |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (6 digit)     | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      |
| DC (10 Imp/s) | 1.120.000.006 | 1.120.000.008 | 1.120.000.012 | 1.120.000.418 |               |               |
| DC (25 Imp/s) |               |               | 1.120.000.032 | 1.120.000.033 |               |               |
| AC (10 Imp/s) |               |               |               | 1.120.000.051 | 1.120.000.054 | 1.120.000.056 |

| AK 07.00      | 3 V           | 4.5 V         | 12 V          | 24 V          | 115 V         | 230 V         |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (7 digit)     | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      |
| DC (10 Imp/s) | 1.130.000.006 | 1.130.000.008 | 1.130.000.012 | 1.130.000.418 |               |               |
| DC (25 Imp/s) |               |               | 1.130.000.032 | 1.130.000.033 |               |               |
| AC (10 Imp/s) |               |               |               | 1.130.000.051 | 1.130.000.054 | 1.130.000.056 |

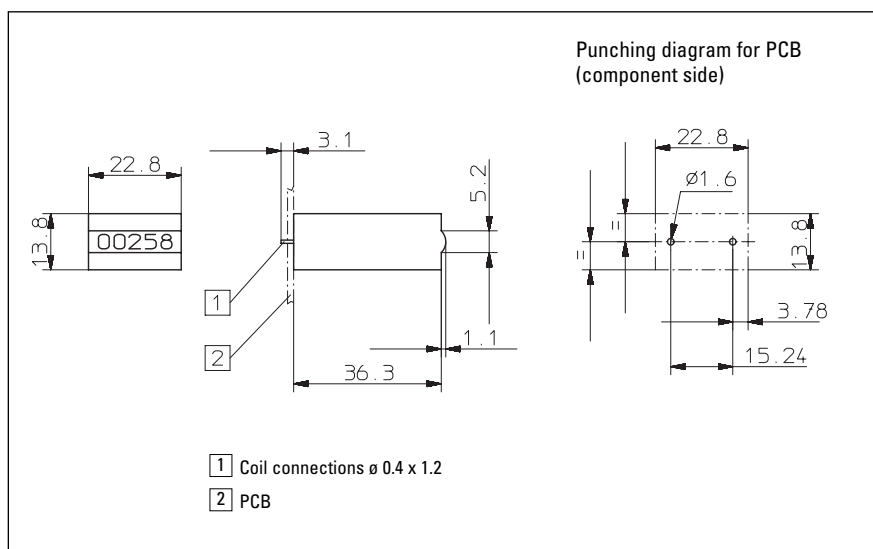
## Type K 06.90 and K 07.90



| K 06.90<br>(6 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. | 115 V<br>Art.-No. | 230 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|-------------------|-------------------|
| DC (10 Imp/s)        | 1.120.900.006   | 1.120.900.008     | 1.120.900.012    | 1.120.900.418    |                   |                   |
| DC (25 Imp/s)        |                 |                   | 1.120.900.032    | 1.120.900.033    |                   |                   |
| AC (10 Imp/s)        |                 |                   |                  | 1.120.900.051    | 1.120.900.054     | 1.120.900.056     |

| K 07.90<br>(7 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. | 115 V<br>Art.-No. | 230 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|-------------------|-------------------|
| DC (10 Imp/s)        | 1.130.900.006   | 1.130.900.008     | 1.130.900.012    | 1.130.900.418    |                   |                   |
| DC (25 Imp/s)        |                 |                   | 1.130.900.032    | 1.130.900.033    |                   |                   |
| AC (10 Imp/s)        |                 |                   |                  | 1.130.900.051    | 1.130.900.054     | 1.130.900.056     |

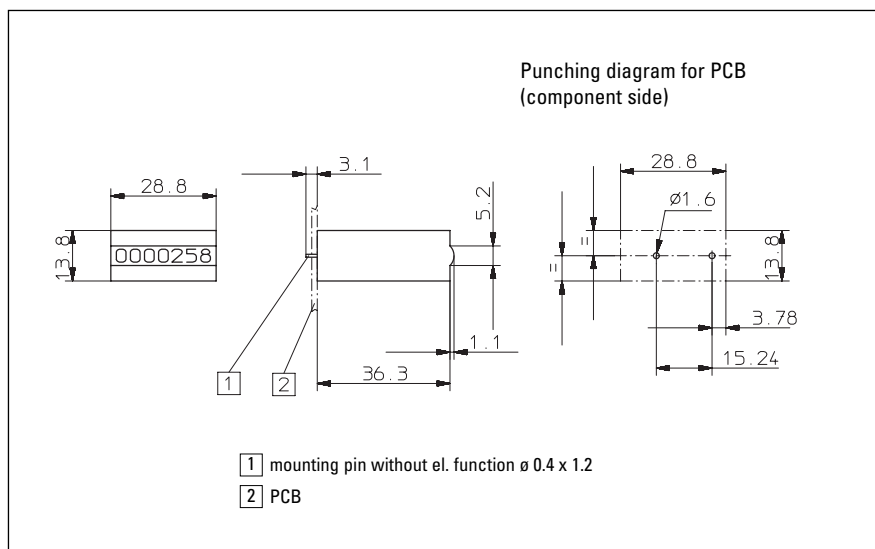
## Type K 04.92 and K 05.92



| K 04.92<br>(4 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.100.920.006   | 1.100.920.008     | 1.100.920.012    | 1.100.920.418    |
| DC (25 Imp/s)        |                 |                   | 1.100.920.032    | 1.100.920.033    |

| K 05.92<br>(5 digit) | 3 V<br>Art.-No. | 4.5 V<br>Art.-No. | 12 V<br>Art.-No. | 24 V<br>Art.-No. |
|----------------------|-----------------|-------------------|------------------|------------------|
| DC (10 Imp/s)        | 1.110.920.006   | 1.110.920.008     | 1.110.920.012    | 1.110.920.418    |
| DC (25 Imp/s)        |                 |                   | 1.110.920.032    | 1.110.920.033    |

## Type K 06.92 and K 07.92



| <b>K 06.92</b> | 3 V           | 4.5 V         | 12 V          | 24 V          | 115 V         | 230 V         |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (6 digit)      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      |
| DC (10 Imp/s)  | 1.120.920.006 | 1.120.920.008 | 1.120.920.012 |               |               |               |
| DC (25 Imp/s)  |               |               | 1.120.920.032 | 1.120.920.033 |               |               |
| AC (10 Imp/s)  |               |               |               | 1.120.920.051 | 1.120.920.054 | 1.120.920.056 |

| <b>K 07.92</b> | 3 V           | 4.5 V         | 12 V          | 24 V          | 115 V         | 230 V         |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (7 digit)      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      | Art.-No.      |
| DC (10 Imp/s)  | 1.130.920.006 | 1.130.920.008 | 1.130.920.012 |               |               |               |
| DC (25 Imp/s)  |               |               | 1.130.920.032 | 1.130.920.033 |               |               |
| AC (10 Imp/s)  |               |               |               | 1.130.920.051 | 1.130.920.054 | 1.130.920.056 |