Preset counters, electromechanical

## Standard counters



The electromechanical preset counters MVs 16 (with manual and electrical reset) boast a robust construction.
They are ideal for use in harsh industrial environments.
The subtracting counters are set to a value via the keys on the front, the signal occurs when the count value reaches 0 .

## Characteristics

- 6 -digit subtracting preset counter.
- Manual and electrical reset.
- Potential free changeover (microswitch) on reaching zero.
- Contact switches for " 0 " count position and remains unswitched until reset to zero.


## Benefits

- Delivery complete with push-on connectors.
- Versions with transparent cover or sealing cover on request.


## Applications

Piece counting, batch quantities and automation.

| Type series |  |
| :--- | :--- |
| Description | Type |
| Front bezel 2 with mounting clip | MVs $\mathbf{1 6 . 2 3}$ |


| Accessories | Dimensions in mm [inch] | Order no. |  |
| :--- | :--- | :--- | :--- |
| Socket box, type 926.1 | for counters MVs 16 for plug-in connections | transparent | $\mathbf{G 0 0 8 4 3 3}$ |
| Mounting frame <br> with cut-out $50 \times 50[2.36 \times 2.36]$ <br> via separate adapter also for $45 \times 45[1.77 \times 1.77]$ | for snap-on mounting on $35[1.38]$ top-hat DIN rail, <br> for counters $48 \times 48[1.89 \times 1.89], 53 \times 53[2.09 \times 2.09]$ <br> and $55 \times 55[2.17 \times 2.17]$ | chromated | $\mathbf{G 3 0 0 0 0 0}$ |

Suitable gaskets as well as further accessories can be found in the accessories section or in the accessories area of our website at: www.kuebler.com/accessories.

| Type / Counting mechanism |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voltage | Type max. | Pulse frequency min. | Pulse on time min. | Pulse interval | Pulse ratio | On-time approx. | Power consump. ripple max. | Permi. residual (non-condensing) | Operating temp. |
| V DC | 1 | 25 Hz | 24 ms | 16 ms | $3: 2$ | 100 \% | 4 W | 48 \% | $-10^{\circ} \mathrm{C} \ldots+45^{\circ} \mathrm{C}\left[+14^{\circ} \mathrm{F} \ldots+113^{\circ} \mathrm{F}\right]$ |
| V AC | a | 18 Hz | 22.2 ms | 33.3 ms | 2:3 | 100 \% | 4.5 VA | - | $-10^{\circ} \mathrm{C} \ldots+45^{\circ} \mathrm{C}\left[+14^{\circ} \mathrm{F} \ldots+113^{\circ} \mathrm{F}\right]$ |

Preset counters, electromechanical

Standard counters Subtracting, 6 digits (AC+DC)

| Technical data |  |
| :---: | :---: |
| Electrical connection | tinned flat pins $0.8 \times 2.8 \mathrm{~mm}$ [ $0.032 \times 0.11^{\prime \prime}$ ] <br> (with push-on connectors) socket box $0.3 \times 2.8 \mathrm{~mm}$ [ $\left.0.012 \times 0.11^{\prime "}\right]$ |
| Rated voltages counting mechanism | $\begin{aligned} & 12 / 24 / 48 / 115 \vee D C \pm 10 \% \\ & 24 / 48 / 115 / 230 \vee A C \pm 10 \% \\ & 24 / 48 / 115 \vee D C \pm 10 \% \\ & 24 / 48 / 115 / 230 \vee A C \pm 10 \% \end{aligned}$ |
| High of figures | 4 mm |
| Color of housing | similar to RAL 7001 |
| Color of figures | white on black |
| Counting mechanism shaft | stainless steel |
| Mounting position | any |
| Service life | approx. $100 \times 10^{6}$ pulses |
| Protection | IP40 (front side) |
| Weight with electrical reset | approx. 170 g [ 6.00 oz ], approx. 210 g [7.41 oz] |
| EMC standards | EN 55011 class B, EN 61000-6-2, EN 61000-6-3 |
| Device safetydesigned to <br> protection class <br> application area | EN 61010 part 1 2 pollution level 2 |
| Test voltage | 2000 V AC, effective |
| Switching contact | 1 change over contact (micro switch), contact making in 2nd half step at zero |
| Load (max.) AC | 250 V AC 2.0 A |
| (at resistive load) DC | 24 V DC 2.0 A |
|  | 60 V DC 0.7 A |
|  | 115 V DC 0.4 A |
|  | 230 V DC 0.2 A |
| At inductive load: suitable spark quenching is required on inductive load, reducing the max. current to approx. $60 \%$ |  |

## Options

## Electrical reset

$$
\begin{aligned}
\text { on time } & 20 \% \text { max. } 1 \text { minute } \\
\text { minimum pulse time } & 0.25 \mathrm{sec} . \\
\text { power consumption } & 10 \mathrm{~W} \text { at } \mathrm{DC}, 14 \mathrm{VA} \text { at } \mathrm{AC}
\end{aligned}
$$

## Connection diagrams

## Manual and electrical reset

DC


Front bezel 2 with mounting clips,
manual and electrical reset
Type MVs 16.23


1 Push-on connector $0.8 \times 2.8$ tinned [ $0.032 \times 0.11]$ Flat pin $0.8 \times 2.8$ [ $0.032 \times 0.11]$ tinned
Color of housing grey (standard)

|  |  |  | Art. no. |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Type | Voltage | Display | 24 V | 115 V | 230 V |  |
| MVs 16.23 | DC $(25 \mathrm{~Hz})$ | 6-digits | 2.320 .230 .033 | - | - |  |
|  | AC $(18 \mathrm{~Hz})$ |  | 2.320 .230 .061 | 2.320 .230 .064 | $\mathbf{2 . 3 2 0 . 2 3 0 . 0 6 6}$ |  |

