Pulse counters, electronic

LED pulse counters
2 counters with separate scaling (DC)
Codix 52T


The Codix 52T is a voltage powered dual pulse counter with a common input and separate scaling, for fast and slow count pulses, with 6-digit LED display for NPN, PNP input signals and display switching between $A$ and $B$.


## Powerful

- Fast count input - input frequency max. 60 kHz .
- Robust housing - IP65 protected.
- Very bright LED display, 8 mm high.
- Single channel dual totalizer
- programmable for positive (PNP) or OV (NPN) switching input pulses.
- fast count inputs with an input frequency of max. 60 kHz , can be damped to 30 Hz for mechanical contacts.
- Short start-up time - detects input pulses just 16 msec after being switched on => no pulses are lost with a simultaneous motor start-up.



## User-friendly and universal

- Large keys - can also be operated when wearing gloves.
- Simple uniform menu-driven programming and operation - possible to enter the programming also during operation with a confirmation prompt.
- Individually programmable scaling for both counters multiplication and division factor (0.0001...99.9999), to display corresponding units in, for example, litres, length or packaging size.
- Simple display switching between counters 1 and 2 .
- DC supply voltage.
- As an alternative to the HTL units, models are also available with a fixed signal level threshold >4 V DC for use with TTL signals.
- Reset manual or electrical, programmable separately for both counters (the reset can also be locked out).

| Order code | $6.52 \mathrm{~T} \cdot\|012\| \cdot{ }^{3}{ }_{0}^{\mathrm{X}} \mathrm{e}^{0}$ |
| :---: | :---: |
| a Input switching level <br> 0 = Standard (HTL) <br> A = Fixed level <br> LOW 0... 2 V DC <br> HIGH 4 ... 30 V DC | Delivery specification <br> - Counter <br> - Mounting clip <br> - Front bezel for screw mounting (T008181) $56 \times 40 \mathrm{~mm}$ [ $2.20 \times 1.57^{\prime \prime}$ ], panel cut-out $50 \times 25 \mathrm{~mm}\left[1.97 \times 0.98^{\text {" }}\right]$ <br> - Front bezel for clip mounting (TOO8180) $53 \times 28 \mathrm{~mm}$ [ $2.09 \times 1.10^{\prime \prime}$ ], panel cut-out $50 \times 25 \mathrm{~mm}\left[1.97 \times 0.98^{\prime \prime}\right]$ <br> - Gasket <br> - Instruction manual, multilingual |

Pulse counters, electronic

## LED pulse counters 2 counters with separate scaling (DC) Codix 52T

Accessories / Mounting examples



Pulse counters, electronic

| LED pulse counters | 2 counters with separate scaling (DC) | Codix 52T |
| :--- | :--- | :--- |


| Technical data |  |  |  |
| :---: | :---: | :---: | :---: |
| General technical data |  | Inputs |  |
| Display | 6 digits, red 7 segment <br> LED display; 8 mm [0.32"] high | Polarity of inputs | programmable, NPN or PNP for all inputs |
| Data backup | EEPROM | Input resistance | approx. $5 \mathrm{k} \Omega$ |
| Operating temperature $\begin{aligned} & 10 \ldots 26 \mathrm{~V} \text { DC } \\ &>26 \ldots 30 \mathrm{VDC}\end{aligned}$ | $\begin{aligned} & -20^{\circ} \mathrm{C} \ldots+65^{\circ} \mathrm{C}\left[-4^{\circ} \mathrm{F} \ldots+149^{\circ} \mathrm{F}\right] \\ & -20^{\circ} \mathrm{C} \ldots+55^{\circ} \mathrm{C}\left[-4^{\circ} \mathrm{F} \ldots+131^{\circ} \mathrm{F}\right] \\ & \text { (non-condensing) } \end{aligned}$ | Counting frequency | max. 60 kHz , can be damped to 30 Hz |
|  |  | Minimum pulse duration of the reset input | 5 ms |
| Storage temperature | $-25^{\circ} \mathrm{C} \ldots+70^{\circ} \mathrm{C}\left[-13^{\circ} \mathrm{F} \ldots+158^{\circ} \mathrm{F}\right]$ | Input switching level (HTL) |  |
|  |  | LOW | $0 \ldots 0.2 \times \mathrm{U}_{\mathrm{B}}(\mathrm{V}$ DC) |
| Electrical characteristics |  | HIGH | $0.6 \times \mathrm{U}_{\mathrm{B}} \ldots 30 \mathrm{~V}$ DC |
| Supply voltage | $10 \ldots 30$ VDC, with integrated reverse polarity protection | $\begin{aligned} & \text { Input switching level at } 4 \ldots 30 \mathrm{~V} \text { DC } \\ & \text { LOW } 0 \ldots 2 \mathrm{VDC} \\ & \text { HIGH } 4 \ldots 30 \mathrm{VDC}\end{aligned}$ |  |
| Current consumption | max. 40 mA |  |  |
| Mechanical characteristics |  | Approvals |  |
| Housing | front panel mount $48 \times 24 \mathrm{~mm}$ [1.89 x 0.94"] acc. to DIN 43700; RAL 7021, dark grey | UL compliant in accordance with | File no. E128604 |
|  |  | CE compliant in accordance with EMC Directive RoHS Directive | $\begin{aligned} & \text { 2014/30/EU } \\ & \text { 2011/65/EU } \end{aligned}$ |
| Protection | IP65 (front side) |  |  |
| Weight | approx. 50 g [1.76 oz] |  |  |
| Vibration resistance acc. to EN 60068-2-6 | $10 \ldots 55 \mathrm{~Hz} / 1 \mathrm{~mm}$ [0.04"] / 30 min |  |  |
| Shock resistance acc. to EN 60068-2-27 | $\begin{aligned} & 100 \mathrm{G}: 2 \mathrm{~ms} \\ & 10 \mathrm{G}: \quad 6 \mathrm{~ms} \end{aligned}$ |  |  |

## Application examples for the dual totalizer

- Logging of piece count and overall total
- Totalizing of flow volumes, quantities and other scalable media
- Counting tasks, such as quantities and piece counting
- Accessories, OEM or retrofit equipment for production machinery
- Piece counting on die-cutters, presses, extruders, wood-processing machines, drilling machines, pick-and-place machines, guillotines, special vehicles
- Measurement of two different values in just one device: e.g. with 2 inputs both the piece count and
the number of packages can be counted
- Recording of the total results from 2 work-shifts


Total piece count as well as packing units

ndividual and total quantity from 2 work-shifts

Block diagram


Terminal assignment


| PIN |  |
| :--- | :--- |
| 1 | $10 \ldots .30$ V DC |
| 2 | 0 V GND |
| 3 | INP A |
| 4 | - |
| 5 | Reset |

Pulse counters, electronic

## LED pulse counters

## 2 counters with separate scaling (DC)

Codix 52T

## Dimensions

Dimensions in mm [inch]


Front bezel for clip mounting (included in delivery)




Front bezel for screw mounting (included in delivery)


1 Countersinking Af3, DIN 74

