

**LED timers**      **h, min, sec or hh.mm.ss (DC)**      **Codix 523**



The Codix 523 is an externally powered timer, hour meter or short-time meter with 4 start input types and individually adjustable time base.

The 6-digit LED display shows the NPN, PNP input signals used for pulse width or time interval measurement.



<b>DC</b> 10 ... 30 V Power supply	<b>000000</b> DIN 48 x 24 DIN front bezel	<b>-20° + 65°</b> Temperature range	<b>IP65</b> High protection level	<b>PROG</b> Menu-driven programming	<b>Timer</b>	<b>≥ 1 ms</b> Resolution
------------------------------------------	-------------------------------------------------	----------------------------------------	--------------------------------------	----------------------------------------	--------------	-----------------------------

### Powerful

- High accuracy thanks to quartz time base
- Robust housing – IP65 protected
- Very bright LED display, 8 mm high
- Time base can be set individually
  - hours, minutes or seconds, the decimal point allows setting it even more accurately, up to max. 3 decimal places
  - smallest achievable resolution: milliseconds
  - time base hours (minutes and seconds as real-time display)
- Short start-up time – detects incoming pulses already 16 ms after having been switched on => no loss of pulses in case of a simultaneous motor start
- Individually adjustable Start/Stop function  
2 Start/Stop inputs allow achieving 4 different measuring principles such as, for example, active or passive pulse width measurement, time interval measurement with one single input or with separate inputs.

### User-friendly and universal

- Large keys – pressing either of the keys switches between displays (can also be operated wearing gloves)
- Programming
  - simple uniform menu-driven programming and operation
  - possibility to enter the programming mode also during operation with an authentication query
- Manual or electrical reset  
Tamper-proof thanks to lockable reset function
- Freely programmable setpoint  
Start time at which time counting begins
- As an alternative to the HTL inputs, devices with a 4 ... 30 V DC input level are available, for use as parallel displays for PLCs
- Optional output: 1 Hz clock pulse in case of active time measurement

### Order code

6.523 . 01 X . 3 X 0  
a      b

**a** Output

- 1 = Optocoupler
- 2 = No output <sup>1)</sup>

**b** Input switch level

- 0 = Standard (HTL) <sup>1)</sup>
- A = 4 ... 30 V DC

Delivery specification

- Timer
- Mounting clip
- Gasket
- Instruction manual, multilingual
- Front bezel for screw mounting (T008181)  
56 x 40 mm [2.20 x 1.57"], panel cut-out 50 x 25 mm [1.97 x 0.98"]
- Front bezel for clip mounting (T008180)  
53 x 28 mm [2.09 x 1.10"], panel cut-out 50 x 25 mm [1.97 x 0.98"]

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
 Http://www.100y.com.tw

1) Stock types

# Hour meters / timers, electronic

<b>LED timers</b>	<b>h, min, sec or hh.mm.ss (DC)</b>	<b>Codix 523</b>
-------------------	-------------------------------------	------------------

Accessories	Dimensions in mm [inch]	Order-No.
<b>Adapter front bezel, 72 x 36 [2.83 x 1.42]</b>	For cut-out 68 x 33 [2.68 x 1.30] to cut-out 45 x 22.2 [1.77 x 0.87], for counters 48 x 24 [1.89 x 0.94], as set black and silver anodised	<b>162704 Set</b>
<b>Adapter front bezel, 48 x 48 [1.89 x 1.89]</b>	For cut-out 45 x 45 [1.77 x 1.77] to cut-out 45 x 22.2 [1.77 x 0.87], with clip mounting for counters 48 x 24 [1.89 x 0.94] black	<b>T008883</b>
<b>Adapter front bezel, 60 x 50 [2.36 x 1.97]</b>	For cut-out 54 x 29 [2.13 x 1.14] to cut-out 45 x 22.2 [1.77 x 0.87], with screw mounting and gasket for counters 48 x 24 [1.89 x 0.94] black	<b>N003001</b>
<b>Transparent cover, lockable, IP65</b>	For cut-out 54 x 29 [2.13 x 1.14], for screw mounting to front bezel F1B or adapter front bezel N003001, for counters with cut-out 50 x 25 [1.97 x 0.98] or 45 x 22.2 [1.77 x 0.87]	<b>N003002</b>
<b>Sealing cover type K1, IP65</b>	Suitable for front bezel 60 x 50 [2.36 x 1.97], for screw mounting of electromech. counters and via adapter front bezel N003001 for counters 48 x 24 [1.89 x 0.94]	<b>G008301</b>
<b>Mounting frame</b> with cut-out 50 x 25 [2.36 x 1.97] via separate adapter also for 45 x 22.2 [1.77 x 0.87]	For snap-on mounting on 35 [1.38] top-hat DIN rail, for counters 53 x 28 [2.09 x 1.10] and via separate adapter (T008180) for counters 48 x 24 [1.89 x 0.94] chromated	<b>G300004</b>

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](http://www.kuebler.com/accessories).

## Technical data

General technical data	
<b>Display</b>	6 digits, red 7 segment LED display; 8 mm [0.32"] high
<b>Data backup</b>	EEPROM
<b>Operating temperature</b>	10 ... 26 V DC -20°C ... +65°C [-4°F ... +149°F] > 26 ... 30 V DC -20°C ... +55°C [-4°F ... +131°F] (non-condensing)
<b>Storage temperature</b>	-25°C ... +70°C [-13°F ... +158°F]

Electrical characteristics	
<b>Power supply</b>	10 ... 30 V DC, with integrated reverse polarity protection
<b>Current consumption</b>	max. 45 mA
<b>EMC</b>	Emitted interference EN 55011 class B Immunity to interference EN 61000-6-2

Mechanical characteristics	
<b>Housing</b>	front panel mount 48x24mm [1.89 x 0.94"] acc. to DIN 43700; RAL 7021, dark grey
<b>Protection</b>	IP65 (front side)
<b>Weight</b>	approx. 50 g [1.76 oz]

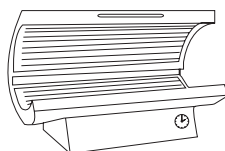
Inputs	
<b>Polarity of inputs</b>	programmable, NPN or PNP for all inputs
<b>Input resistance</b>	approx. 5 kΩ
<b>Resolution</b>	up to 0.001 s
<b>Minimum pulse duration of the reset input</b>	5 ms
<b>Input switching level standard version (HTL)</b>	LOW 0 ... 0.2 x U <sub>B</sub> [V DC] HIGH 0.6 x U <sub>B</sub> ... 30 V DC
<b>Input switching level at 4 ... 30 V DC</b>	LOW 0 ... 2 V DC HIGH 4 ... 30 V DC
<b>Accuracy</b>	<50 ppm

Outputs (optional)	
<b>Output power optocoupler</b>	max. 30 V, 10 mA

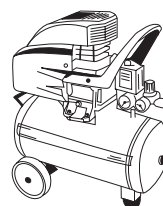
勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

## Applications for time and hour meters, short-time meters

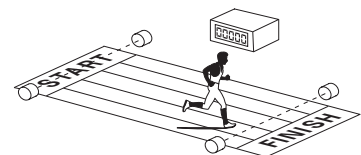
- Time measurements such as hours run recording on all machines and plant, e.g. compressors, solariums, special lights and lamps
- Accessories, OEM equipment or retrofitting to production machine
- Measurement of short times on processes and procedures, time recording (stopwatch function) at sporting events
- Hours run recording for motor vehicles and time monitoring for rally vehicles



Hours run of UV lamps



Operating hours

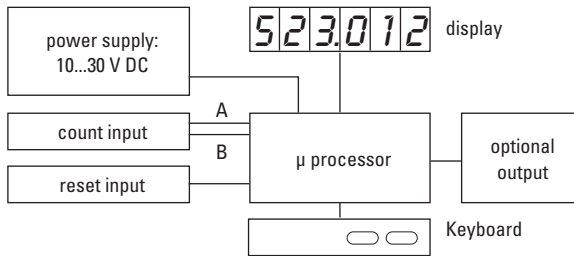


Short time measurement > 1 ms

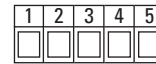
# Hour meters / timers, electronic

**LED timers**      **h, min, sec or hh.mm.ss (DC)**      **Codix 523**

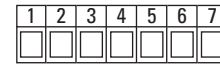
### Block diagram



### Terminal assignment



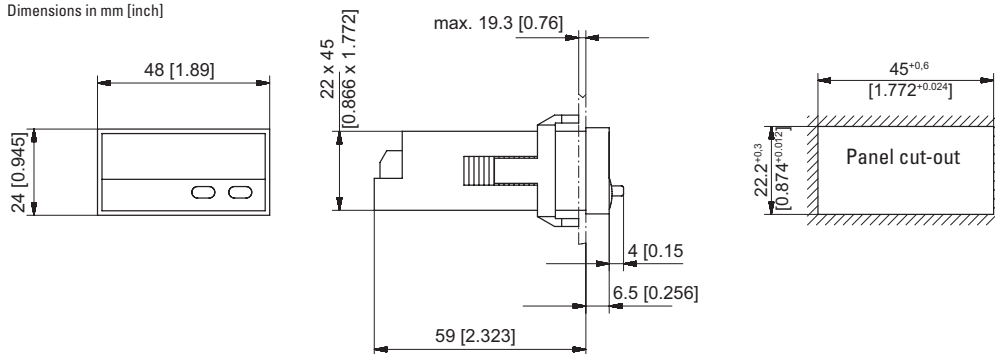
PIN	without optocoupler
1	10 ... 30 V DC
2	0 V GND
3	INP A
4	INP B
5	reset



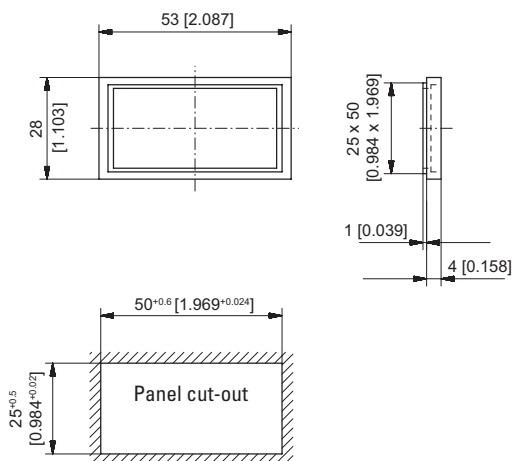
PIN	with optocoupler (NPN)
1	10 ... 30 V DC
2	0 V GND
3	INP A
4	INP B
5	reset
6	emitter
7	collector

### Dimensions

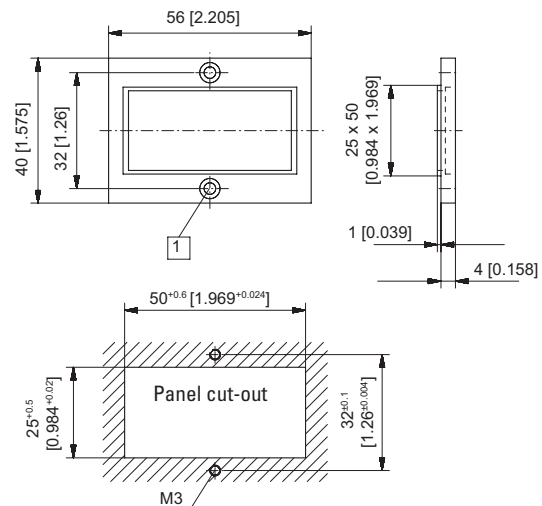
Dimensions in mm [inch]



### Front bezel for clip mounting (included in delivery)



### Front bezel for screw mounting (included in delivery)



勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)