## **Hour Meters / Timers, electronic**



## LED Timers - Codix 523

For use as a timer, hour meter or short-time meter

- Pulse width measurement (operating time)
- Time interval measurement (start/stop)















ower supply Front bezel Wide temper-DC dimensions ature range

High IP protection rating

Menu-driven programming

driven Timer/Ho mmina Meter

ner/ Hour

Resolution

## **Powerful**

- High accuracy
  Thanks to quartz time base
- Robust housing IP 65 protection
- LED display Very bright, 8 mm high
- Time base can be set individually
   Hours, minutes or seconds can be set even more precisely thanks to the max.

   decimal places. Smallest attainable resolution: milliseconds
- Fast start-up time

Detects incoming pulses just 16 ms after being switched on -> so no pulses are lost with a simultaneous motor start-up



## **User-friendly**

- · Big keys
- Pressing either of the keys switches between displays
- Can also be operated when using gloves
- Easy to programme
- Easy menu-driven programming and operation
- Possibility to enter the programming mode during operation, with authentication query

#### Universal

- Individually programmable start/stop function
- By means of 2 start/stop inputs, up to 4 different measuring principles can be achieved, e.g. active or passive pulse width measurement, time interval measurement with one input or with separate inputs
- Manual or electrical reset
   Tamper-proof, due to lockable reset
  function
- User-programmable setpoint
   Start time at which the time counting should begin
- DC power supply
   With sensor power supply
- Inputs

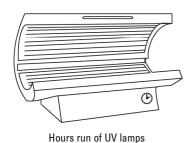
As an alternative to the HTL inputs, devices with a 4 ... 30 V DC input level are available, for use as parallel displays for PLCs

Optional output

1 Hz clock pulse for active time measurement

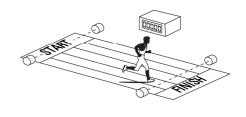
## Applications for time and hour meters, short-time meters

- 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









Short time measurement > 1 ms

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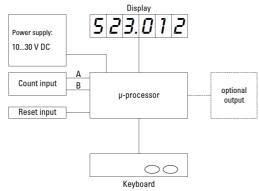
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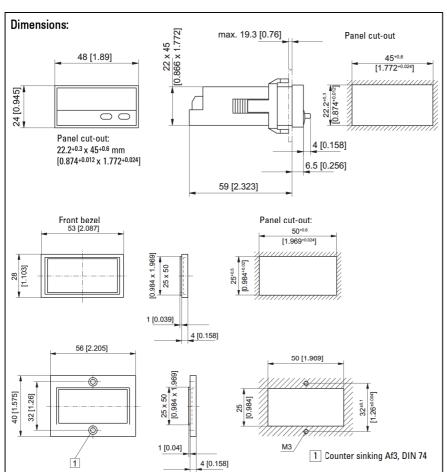
## Technical data:

Supply voltage:	10 30 V DC,
	with reverse polarity protection
Current consumption:	max. 55 mA
Display:	6-digit 7-segment red LED;
	8 mm [0.315"] high
Data backup:	EEPROM
Housing:	dimension 48 x 24 mm [1.89 x 0.945"]
	according to DIN 43 700; RAL 7021, grey
Polarity of Inputs:	programmable, npn or pnp for all inputs
Input resistance:	approx. 5 k $\Omega$
Resolution:	up to 0.001 s
Reset time:	5 ms

Level of inputs:	low: 0 0.2 x U <sub>B</sub> high: 0.6 x U <sub>B</sub> 30 V DC
Level of inputs:	low: 0 2 V DC
4 30 V DC version	high: 4 30 V DC
Optocoupler output:	max. 30 V, 10 mA
Accuracy:	<50 ppm
Ambient temperature:	-20 +65 °C [4 149 °F] at Ub = 1026 V DC -20 +55 °C [4 131 °F] at Ub = >26 30 V DC non condensing
Storage temperature:	–25 +70 °C [–13 158 °F]
EMC:	Immunity to interference: EN55011 class B Emitted interference EN61000-6-2
Protection:	IP65 front side
Weight:	approx. 50 g [1.764 oz]

#### Block diagram:





## **Connections:**

without optocoupler



2 0 V GND

3 INPA

4 INPB

5 Reset

## **Connections:**

with optocoupler (npn)



2 0 V GND

3 INPA

4 INPB

5 Reset

6 Emitter

7 Collector

#### **Delivery specification:**

1 Digital display

1 Panel mounting clip

1 Bezel for screw mounting, panel cut out 50 x 25 mm [1.969 x 0.984"]

1 Bezel for clip mounting, panel cut out 50 x 25 mm [1.969 x 0.984"]

1 Gasket

1 Multilingual operating instruction

## Order code:

model

6.523.01X.3X0 Input switch level 0 = Standard\* A = 4 ... 30 V DC Output 1 = Optocoupler 2 = No output\* \* Standard stock

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