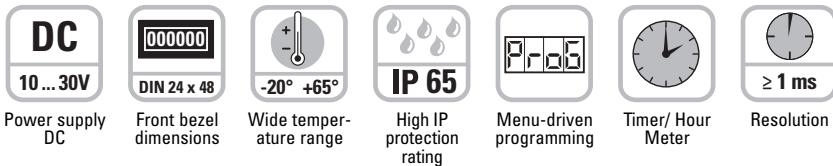**Kübler**

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)

DC 10...30V	000000 DIN 24 x 48	+/- -20° +65°	IP 65	ProG	(clock)	(clock) ≥ 1 ms
Power supply DC	Front bezel dimensions	Wide temper- ature range	High IP protection rating	Menu-driven programming	Timer/ Hour Meter	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. 3 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
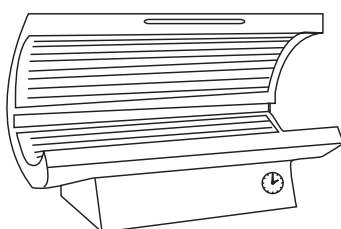
User-friendly

- **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
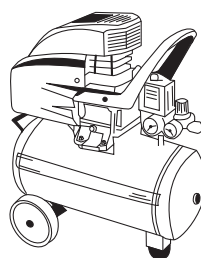
Universal

- **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 meas- urement 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 dis- plays for PLCs

- **Optional output**
  1 Hz clock pulse for active time measurement

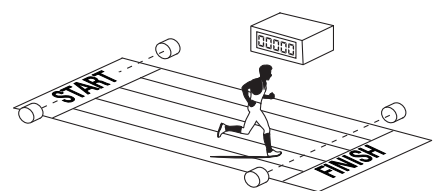## Applications for time and hour meters, short-time meters

- Time measurements such as hours run recording on all machines and plant, e.g. compressors, solariums, special lights and lamps

- Accessories, OEM equipment or retro- fitting to production machine

- Measurement of short times on processes and procedures, time recording (stop- watch function) at sporting events

- Hours run recording for motor vehicles and time monitoring for rally vehicles

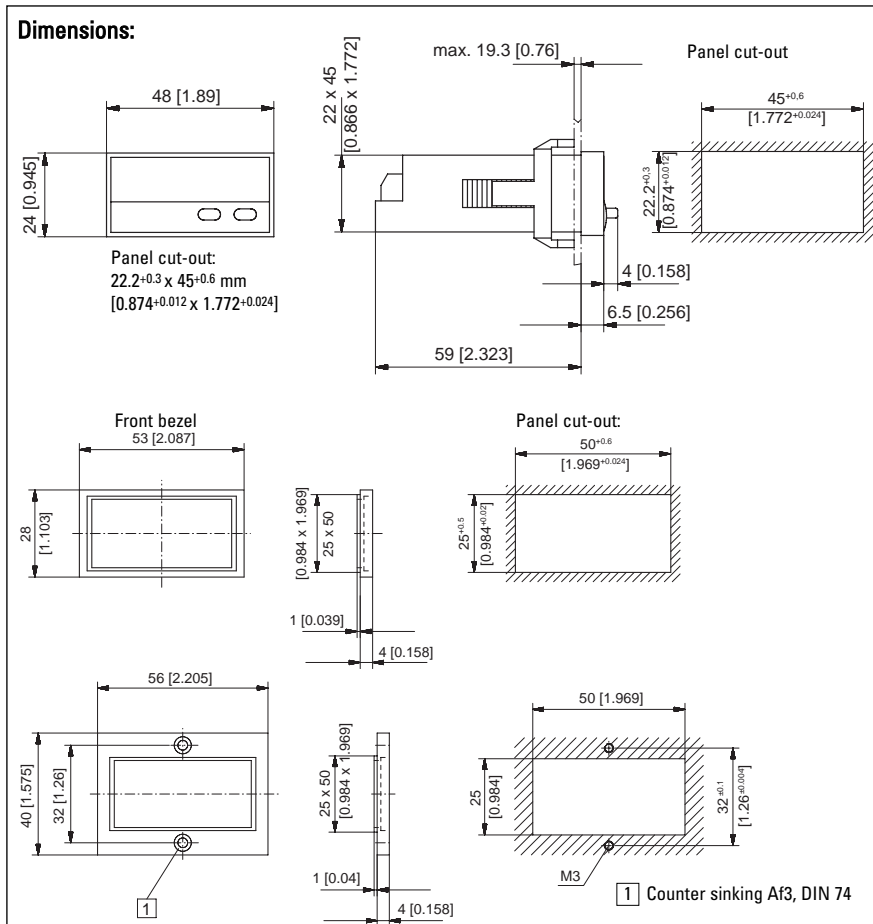
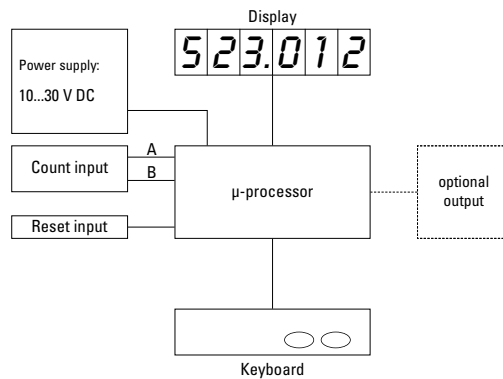Hours run of UV lamps

Operating hours

Short time measurement > 1 ms

LED Timers – Codix 523

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 kΩ
Resolution:	up to 0.001 s
Reset time:	5 ms

Level of inputs:	low: $0 ... 0.2 \times U_B$ high: $0.6 \times U_B ... 30$ V DC
Level of inputs: 4 ... 30 V DC version	low: 0 ... 2 V DC 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 = 10 ...26 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]

Timers

Block diagram:

Dimensions:

Panel cut-out: 22.2+0.3 x 45+0.6 mm [0.874+0.012 x 1.772+0.024]

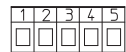**Connections:**
without optocoupler
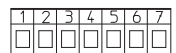1 10 ... 30 VDC
2 0 V GND
3 INP A
4 INP B
5 Reset

Connections:
with optocoupler (npn)
1 10 ... 30 VDC
2 0 V GND
3 INP A
4 INP B
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:
6.523.01X.3X0

Input switch level
0 = Standard*
A = 4 ... 30 V DC

Output
1 = Optocoupler
2 = No output*

* Standard stock model