

## Universal with dual functions *CODIX 52U*

**4 dual functions in one device**  
 > solves all applications where 2 different values must be displayed simultaneously.

- Counter with 2 totalizing ranges
- Totaliser and time counter
- Totaliser and frequency counter
- Timer with 2 time ranges



Power supply DC



Front bezel dimensions



Wide temperature range



High IP protection rating



Menu-driven programming



Pulse counter/ Totaliser



Frequency meter/ Tachometer



Timer/ Hour Meter



Frequency meter HRA

### Powerful

- **Fast count input**  
Input frequency max. 60 kHz
- **Robust housing**  
IP 65 protection
- **LED display**  
Very bright, 8 mm high
- **HRA – High Rate Accuracy System**  
Frequencies up to 38 Hz are calculated using time-interval (period duration) measurement.  
Frequencies > 38 Hz are calculated using a special time base (gate time) measurement. A very high accuracy of > 0.1% is achieved, even with very short gate times. The resulting measurement is available after a max. of 50 ms.
- **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

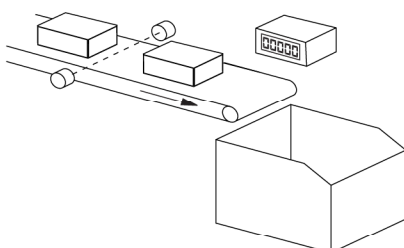
- **Big keys**  
Can also be operated when using gloves
- **Easy to programme**  
Easy menu-driven programming and operation  
Possibility to enter the programming mode during operation, with authentication query  
Pressing the right key switches between displays

### Universal

- **Individually programmable scaling**  
Multiplication and division factor (0.0001 to 99.9999), to display corresponding engineering units, e.g. position in 1/10 mm and speed in RPM
- **Separate factors for frequency- and pulse counting**
- **DC power supply**
- **Inputs**  
As an alternative to the HTL inputs, devices with a 5 VDC input trigger level are available, for use as parallel displays for PLCs
- **Timer specials**  
Timer or hours-run meter with various Start Stop measurements, time range settings in hours, minutes or seconds, with decimal point. Resolutions up to 1/1000 can be programmed

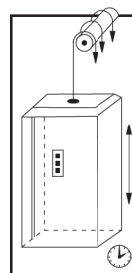
### Applications for dual functions

- **Pulse and frequency (speed)**  
e.g. production data acquisition: total piece count and speed on OEM equipment, flow rate measuring systems – total flow and current flow
- **2 pulse counters**  
Measurement of batch and total piece count or of daily production count and total count values



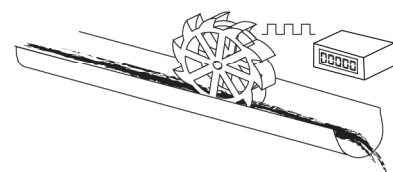
Piece count on conveyor and production speed

- **Pulse and time (Maintenance counter)**  
Used in the lift industry as trip counters and hours-run meters and on production machines for piece and time counting, flow and time measurement, materials handling time and quantities



Trip counter and hours-run

- **2 timers**  
Measurement of total time and order-specific times, maintenance intervals and total time, time of day and total time.



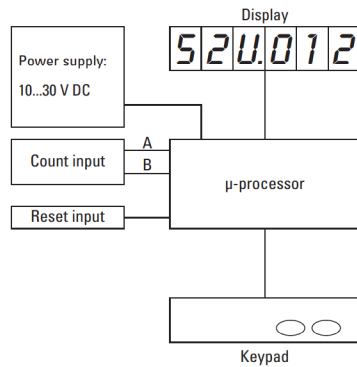
Flow rate and total volume

## Universal with dual functions **CODIX 52U**

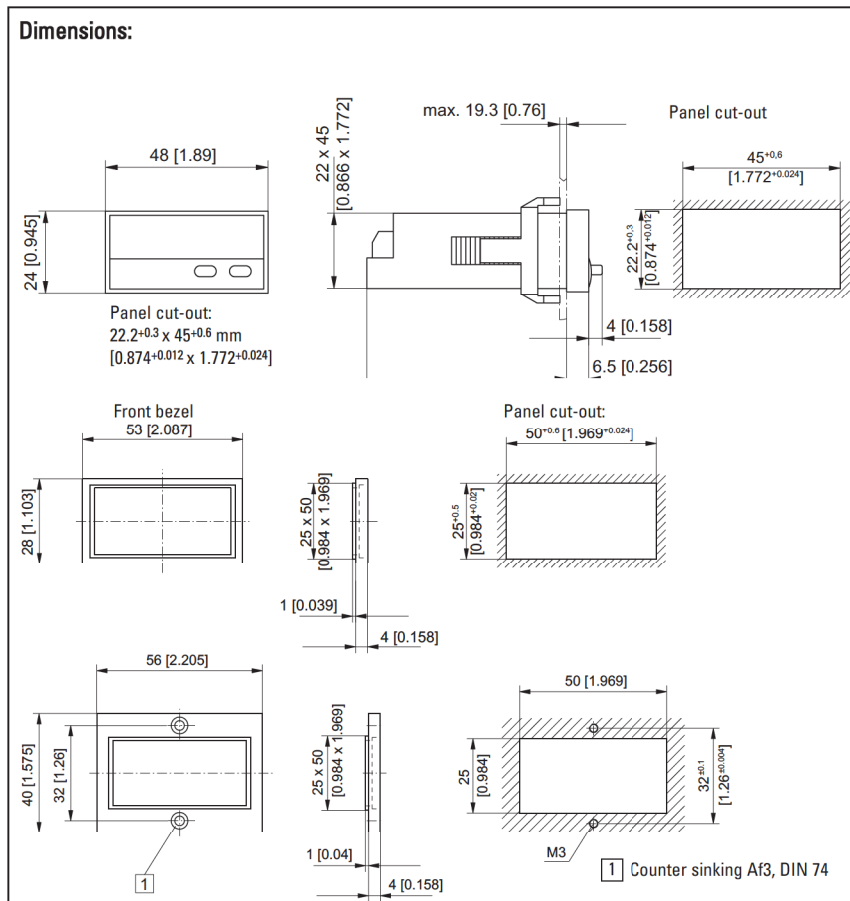
### Technical data:

Supply voltage:	10 ... 30 V DC, with reverse polarity protection	Level of inputs:	Low: 0 ... 0.2 x U <sub>B</sub> [V DC] High: 0.6 x U <sub>B</sub> ... 30 V DC
Current consumption:	max. 40 mA	Level of inputs:	Low: 0 ... 2 V DC High: 4 ... 30 V DC
Display:	6-digit red 7-segment LED; 8 mm [0.315"] high	5 V version	High: 4 ... 30 V DC
Data backup:	EEPROM	Optocoupler output:	Max. 30 V, 10 mA
Housing:	dimension 48 x 24 mm [1.89 x 0.945"] according to DIN 43 700; RAL 7021, grey	Accuracy:	<0.1 % (Frequency display, tachometer)
Polarity of inputs:	programmable, npn or pnp for all inputs	EMC:	according to EC EMC directive 89/36/EWG
Input resistance:	approx. 5 kΩ	Immunity to interference:	EN 61000-6-4/EN 55011 class B
Display range:	0.001 s ... 999999 h	Emitted interference:	EN 61000-6-2
Reset time:	5 ms	Ambient temperature:	-10 ... +50 °C [14 ... 122 °F]
		Storage temperature:	-25 ... +70 °C [-13 ... 158 °F]
		Protection:	IP 65 front side
		Weight:	approx. 50 g [1.764 oz]

### Block diagram:



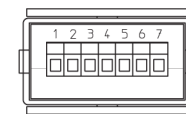
### Dimensions:



### Connections:

without optocoupler

- 1 10 ... 30 V DC
- 2 0 V GND
- 3 INP A
- 4 INP B
- 5 Reset



### Delivery specifications:

- 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 Seal
- 1 Multilingual operating instructions

### Order code:

6.52U.012.3X0

Input switch level  
0 = Standard\*  
A = 5 V

\* standard stock model