

# 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







protection rating



Menu-driven









Frequency meter/ Tachometer

Timer/ Frequency

# 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

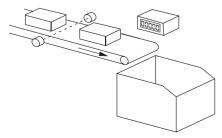
# Applications for dual functions

# Pulse and frequency (speed) e.g. production data acquisition: total piece count and speed on OEM equip-

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



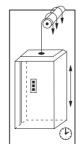
Piece count on conveyor and production speed

#### • Pulse and time (Maintenance counter)

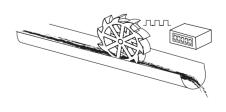
Used in the lift industry as trip counters and hours-run meters and on production machines for piece and time counting, flow and time measurement, materials handling time and quantities

# • 2 timers

Measurement of total time and orderspecific times, maintenance intervals and total time, time of day and total time.



Trip counter and hours-run



Flow rate and total volume

# Time meter electronic



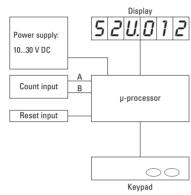
# Universal with dual functions CODIX 52U

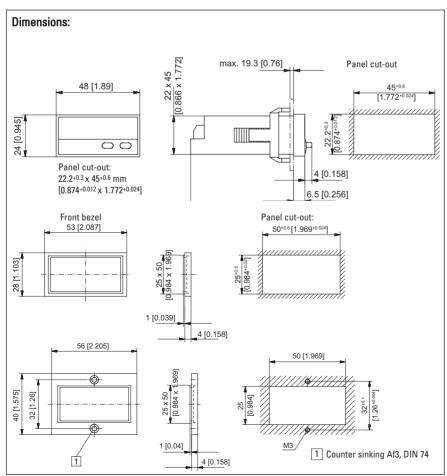
#### Technical data:

Supply	10 30 V DC,
voltage:	with reverse polarity protection
Current consumption:	max. 40 mA
Display:	6-digit red 7-segment 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 $\Omega$
Display range:	0.001 s 999999 h
Reset time:	5 ms

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
Level of inputs:	Low: 0 2 V DC
5 V version	High: 4 30 V DC
Optocoupler output:	Max. 30 V, 10 mA
Accuracy:	<0.1 % (Frequency display, tachometer)
EMC:	according to EC EMC directive 89/36/EWG
Immunity to interference:	EN 61000-6-4/EN 55011 class B
Emitted interference:	EN 61000-6-2
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:





#### Connections:

without optocoupler



- 1 10 ... 30 V DC
- 2 0 V GND
- 3 INPA
- 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