

# Universal with dual functions CODIX 54U

#### 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 AC/DC



dimensions



ature range















High IP Plug-in screw protection rating

Menu-driven programming

Frequency meter/ Tachometer

Timer/

Frequency meter HRA

# **Powerful**

- Fast count input Input frequency max. 60 kHz
- Robust housing IP 65 protection
- LED display Very bright, 14 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
- AC or DC power supply With sensor 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

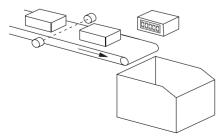
Timer specials

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



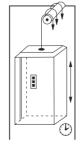
Piece count on conveyor and production speed

# Pulse and time (Maintenance counter)

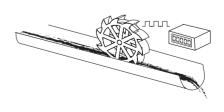
Used in the lift industry as trip counters and hours-run meters and on production machines for piece and time counting, flow and time measurement, materials handling time and quantities

### 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 54U

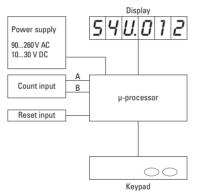
### Technical data:

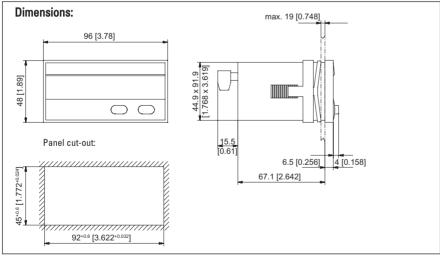
Supply	10 30 V DC, with reverse polarity protection
voltage:	90 260 V AC
Current consumption:	max. 50 mA, 6 VA
Display:	6-digit 7-segment red LED display;
	14 mm [0.551"] high
Data backup:	EEPROM
Housing:	Dimension 96 x 48 mm [3.78 x 1.89"]
	according to DIN 43 700; RAL 7021, grey
Polarity of Inputs:	programmable, npn or pnp for all inputs
Input resistance:	approx. 5 k $\Omega$
Counting frequency*:	60 kHz, can be damped to 30 Hz
	depending on operating mode
Display range:	0.001 s 999999 h
Reset time:	5 ms
Input switching level	DC-version:
(standard version):	Low: 0 0.2 [0 0.008"] x U <sub>B</sub> [V DC]
	High: 0.6 [0.024"] x U <sub>B</sub> 30 V DC

<sup>\*</sup>for further specifications please refer to the manual

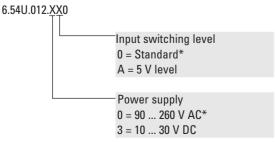
AC-version: Low 0 ... 4 V DC High 12 ... 30 V DC Input switching level Low 0 ... 2 V DC (5 V version): High 4 ... 30 V DC 24 V DC  $\pm$ 15 %/100 mA at AC version Voltage supply for sensors: <0.1 % (Frequency display/Rate meter) Accuracy: <50 ppm (Timer) -20 ... +65 °C [-4 ... 149 °F] non-condensing Ambient temperature: −25 ... +70 °C [−13 ... 158 °F] Storage temperature: EMC: according to EC EMC directive 89/36/EWG EN 61000-6-4/EN 55011 class B Emitted interference: Immunity to interference: EN 61000-6-2 Protection: IP65 from front Weight: approx. 150 g [5.291 oz]

### Block diagram:

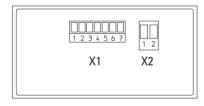




# Order code:



### **Connections:**



### Connection: X2

Pin	AC-version	DC-version
1	90 260 V AC	0 V DC (GND)
2	90 260 V AC	10 30 V DC

# Connection: X1

Pin	AC-Version	DC-Version
1	n.c.	
2	n.c.	
3	Reset	
4	INP B	
5	INP A	
6	GNDout	n.c.
7	+24 Vout	n.c.

Delivery specifica-

tion: Digital display

Multilingual operating instructions

Mounting clip

www.kuehler.com