

## Multifunction display *CODIX 544*

programmable as:

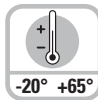
- Pulse counter
- Position display
- Frequency / speed display
- Timer/ short time meter



Power supply  
AC/DC



Front bezel  
dimensions



Wide temper-  
ature range



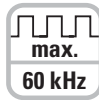
High IP  
protection  
rating



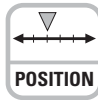
Plug-in screw  
terminal



Menu-driven  
programming



Pulse counter/  
Totaliser



Position  
display



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, 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

### Universal

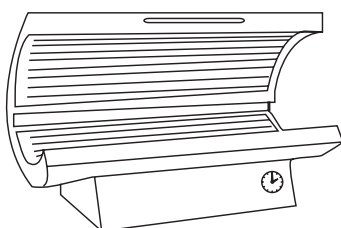
- **Individually programmable scaling**  
Multiplication and division factor (0.0001 to 99.9999), to display corresponding engineering units, e.g. position in 1/10 mm and speed in RPM.
- **4 different count input modes**  
2-channel input for detecting count direction, difference or adding mode, quadrature x1, x2 or x4
- **Frequency measurement**  
Display in 1/min or 1/sec
- **Time counting**  
Pulse width or time interval measurement in hours, minutes or seconds, as well as real-time display
- **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
- **Optional output**  
Zero signal for position and count, zero-speed monitoring, 1 Hz clock pulse for active time measurement

### Applications for Multifunction Display

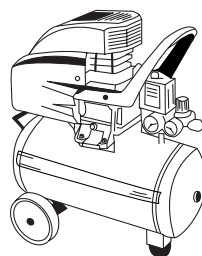
- Counting tasks such as quantity and piece counting, measuring and recording of speed and of operating and processing times
- Piece counting or tool-life measurement on die cutters, presses, extruders, wood-working machines, drilling machines,

- pick-and-place machines, guillotines, special-purpose vehicles etc.
- Positioning tasks on processing machines, such as sawing machines, milling machines, bending and folding machines, etc.

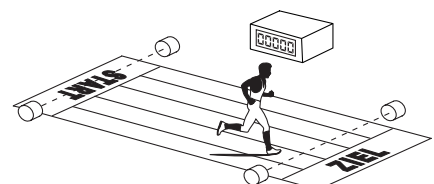
- Production data acquisition by means of piece counting (using difference or adding), or measurement of production times or production speeds.
- Totalizing flow, quantity and other scaleable media, or display of current flow rates.



Hours run of UV lamps



Operating hours



Short time measurement > 1 ms

## Multifunction display **CODIX 544**

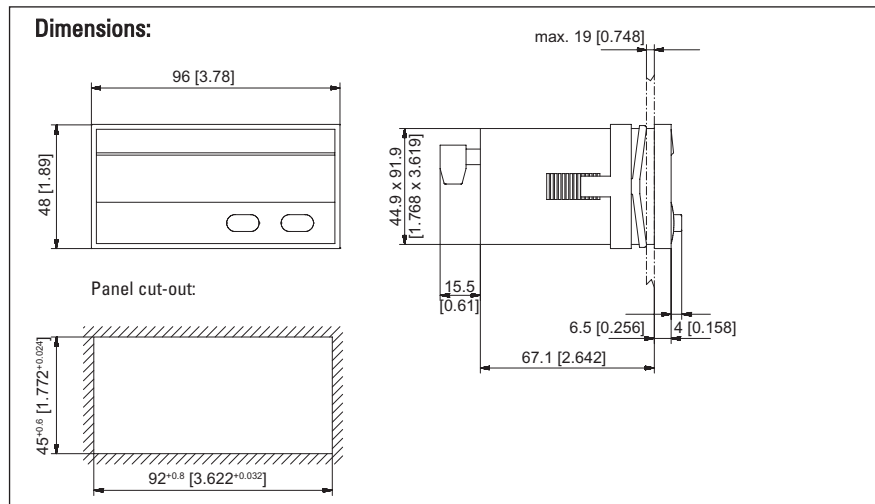
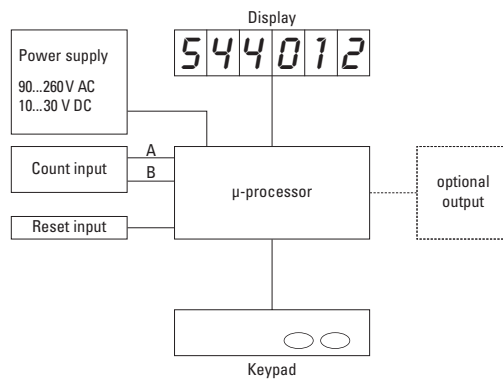
### Technical data:

Supply voltage:	10 ... 30 V DC, with reverse polarity protection 90 ... 260 V AC
Current consumption:	max. 50 mA, 6 VA
Display:	6-digit red 7-segment LED display; 14 mm high [0.551"]
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 kΩ
Counting frequency*:	60 kHz, can be damped to 30 Hz depending on operating mode at position display max. 25 kHz
Reset time:	5 ms
Display range timer:	0.001 s ... 999999 h
Input switching level (standard version):	DC-version Low: 0 ... 0.2 [0 ... 0.008"] x U <sub>B</sub> [V DC] High: 0.6 x [0.024"] U <sub>B</sub> ... 30 V DC

	AC-version
	Low 0 ... 4 V DC
	High 12 ... 30 V DC
Input switching level (5 V version):	Low: 0 ... 2 V DC High: 4 ... 30 V DC
Voltage supply for sensors:	24 V DC ±15 %/100 mA at AC-versions
Accuracy:	Tacho meter: <0,1 % Timer < 50 ppm
Ambient temperature:	-20 ... +65 °C [-4 ... 149 °F]
Storage temperature:	-25 ... +70 °C [-13 ... 158 °F]
EMC:	according to EC EMC directive 89/36/EWG
Emitted interference:	EN 61000-6-4/EN 55011 class B
Immunity to interference:	EN 61000-6-2
Protection:	IP 65 front side
Weight:	approx. 150 g [5.291 oz]

\*for further specifications please refer to the manual

### Block diagram:



### Order code:

**6.544.01X.XX0**

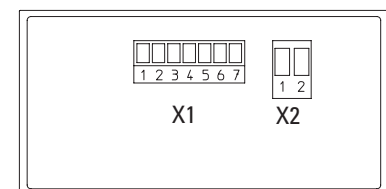
Output  
1 = Optocoupler output\*  
2 = No output

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

Voltage supply  
0 = 90 ... 260 V AC\*  
3 = 10 ... 30 V DC

\* standard stock model

### 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	Optocoupler-output Emitter	
2	Optocoupler-output Collector	
3	Set	
4	INP B	
5	INP A	
6	GNDout	n.c.
7	+24 Vout	n.c.

**Delivery specification:** Seal  
Digital display Multilingual operating instructions  
Mounting clip