Multifunction Counter, electronic



LED Multifunction Counters – Codix 524

programmable as:

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





















Timer/ Hour Meter

лл t/Hz HRA

Front bezel dimensions

Wide temperature range

High IP protection rating

Menu-driven programming

Pulse counter/ Totaliser

Position display

Frequency meter/ Tachometer

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

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

- DC power supply
- Inputs

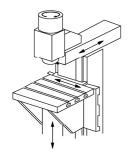
As an alternative to the HTL inputs, devices with a 4 ... 30 V DC input level are available, for use as parallel displays for PLCs.

Optional output

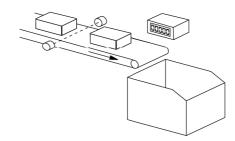
Zero signal for position and count, zerospeed monitoring, 1 Hz clock pulse for active time measurement

Applications for Multi-function 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, woodworking machines, drilling machines,
- pick-and-place machines, quillotines, 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



Position or rotary speed on milling machine



Piece count on conveyor or production speed



Drilling machine head, speed or drilling depth

Multifunction Counter, electronic



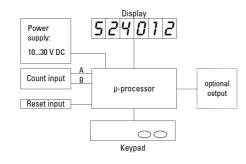
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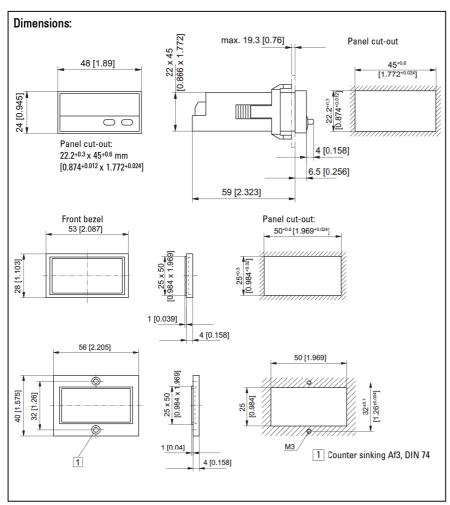
Technical data:

Supply voltage:	10 30 V DC,	
	with reverse polarity protection	
Current consumption:	max. 55 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 kΩ	
Counting frequency:	60 kHz, can be damped to 30 Hz	
Display range timer:	0.001 s 999999 h	
Reset time:	5 ms	

Level of inputs:	low: high:	0 0.2 x U _B [V DC] 0.6 x U _B 30 V DC	
Level of inputs:	low:	0 2 V DC	
(4 30 V DC version)	high:	4 30 V DC	
Optocoupler output:	max. 30 V, 10 mA		
Accuracy:	tachometer:	<0.1 %	
	timer:	50 ppm	
EMC:	Emitted interference: EN55011 Class B Immunity to interference: EN61000-6-2		
Ambient temperature:	-20 +65 °C [4 149 °F] at Ub = 1026 V DC		
(non condensing)	-20 +55 °C [4 131 °F] at Ub = >26 30 V DC		
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 INPB

5 Reset

Connections:

with optocoupler

1 10 ... 30 V DC

2 0 V GND

3 INP A

4 INP B

5 RESET

6 Emitter

7 Collector

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 Multilingual operating instruction

Order code:

6.524.01X.3X0 Input switch level 0 = Standard* A = 4 ... 30 V DC level Output 1 = Optocoupler output* 2 = No output*

* standard stock model

