LED Frequency Meters – Codix 542

- Fast High Rate Accuracy System (HRA)
- Display scaleable 1/min or 1/sec

Power supply AC/DC | Front bezel dimensions | Wide temperature range | High IP protection rating | Plug-in screw terminal | Menu-driven programming | Operation with gloves | Frequency meter/ Tachometer | 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.

User-friendly

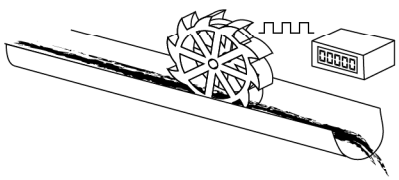
- **Big keys**
  Can also be operated when using gloves
- **Easy to programme**
  Easy menu-driven programming and operation
  Possibility to enter the programming mode during operation, with authentication query

Universal

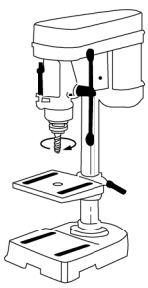
- **Individually programmable scaling**
  Multiplication and division factor (0.0001 to 99.9999), to display corresponding engineering units, e.g. position in 1/10 mm and speed in RPM
- **Programmable decimal point**
  Can be set between 0.0 and 0.000 – this determines the resolution
- **Programmable delay until 0 is displayed**
- **Display in 1/min or 1/sec**
- **AC or 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**
  For zero-speed monitoring

Applications for Speed and Frequency Displays

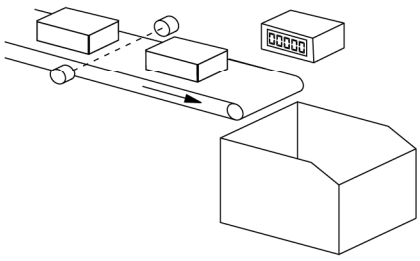
- Rotary speed applications, e.g. OEM equipment or retrofitting to drilling machines
- OEM equipment for flow rate measuring, e.g. current flow rate; production data such as volume/time
- Speed applications on motors, turbines, machines; feed-rate measurement
- Recording of production rates
- Frequency measurement



Mass flow rate



Drilling machine head, rotary speed



Production rate

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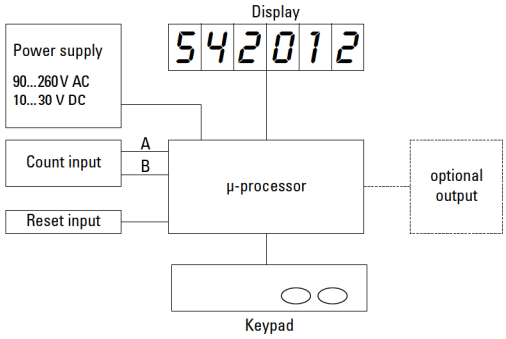
Technical data:

Supply voltage:	10 ... 30 V DC, with reverse polarity protection 90 ... 260 V AC
Current consumption:	max. 50 mA, 6 VA
Display:	6-digit 7-segment red LED-display; 14 mm [0.551"] high
Data retention:	EEPROM
Housing:	dimension 96 x 48 mm [3.78 x 1.89"] according to DIN 43 700; RAL 7021, grey
Polarity of the inputs:	programmable, npn or pnp
Input resistance:	approx. 5 kΩ
Count frequency*:	max. 60 kHz, can be damped to 30 Hz depending on operating mode
Measurement principle:	measurement principle: Gate and/or time-interval (period duration) measurement, with high accuracy <0.1% (HRA)

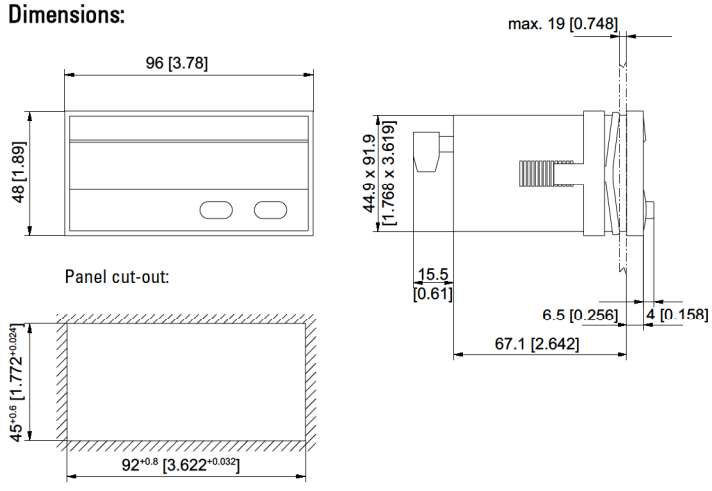
Input switching level (standard version):	DC version:	Low: 0 ... 0,2 x UB [V DC] High: 0.6 x UB ... 30 V DC
	AC version:	Low: 0 ... 4 V DC High: 12 ... 30 V DC
Input switching level 4 ... 30 V DC version:		Low 0 ... 2 V DC High 4 ... 30 V DC
Voltage output for sensors:	24 V DC ±15 %/100 mA for AC-version	
Accuracy:	<0.1 %	
Ambient temperature:	–20 ... +65 °C [–4 ... 149 °F] non-condensing	
Storage temperature:	–25 ... +70 °C [–13 ... 158 °F]	
EMC:	Immunity to interference: EN55011 class B Emitted interference EN61000-6-2	
Protection:	IP 65 front side	
Weight:	approx. 150 g [5.291 oz]	

*for further information please refer to the manual

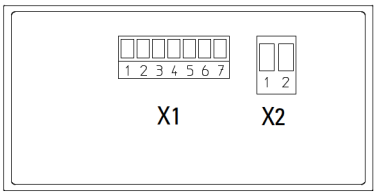
Block diagram:



Dimensions:



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

Order code:

6.542.01X.XX0

Output
1 = Optocoupler-output
2 = No output*

Switching level of inputs
0 = standard*
A = 4 ... 30 V DC level

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

* standard stock model

Delivery specification:

Digital display
Mounting clip
Gasket
Multilingual operating instructions