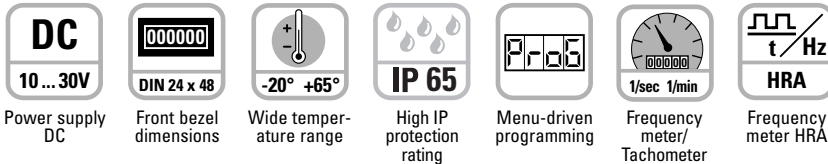


## LED Frequency Meters – Codix 522

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



### 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.



### User-friendly

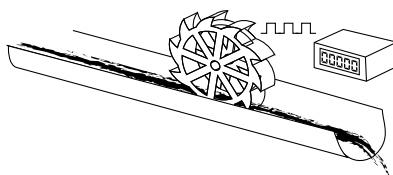
- **Big keys**  
Can also be operated when using gloves
- **Easy to programme**  
Easy menu-driven programming and operation  
Possibility to enter the programming mode during operation, with authentication query

### Universal

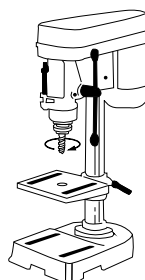
- **Individually programmable scaling**  
Multiplication and division factor (0.0001 to 99.9999), to display corresponding engineering units, e.g. position in 1/10 mm and speed in RPM
- **Programmable decimal point**  
Can be set between 0.0 and 0.000 – this determines the resolution
- **Programmable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

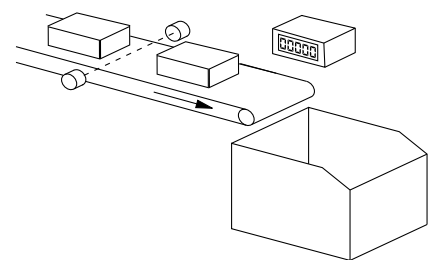
- Rotary speed applications, e.g. OEM equipment or retrofitting to drilling machines
- OEM equipment for flow rate measuring, e.g. current flow rate; production data such as volume/time
- Speed applications on motors, turbines, machines; feed-rate measurement
- Recording of production rates
- Frequency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



Mass flow rate



Drilling machine head, rotary speed



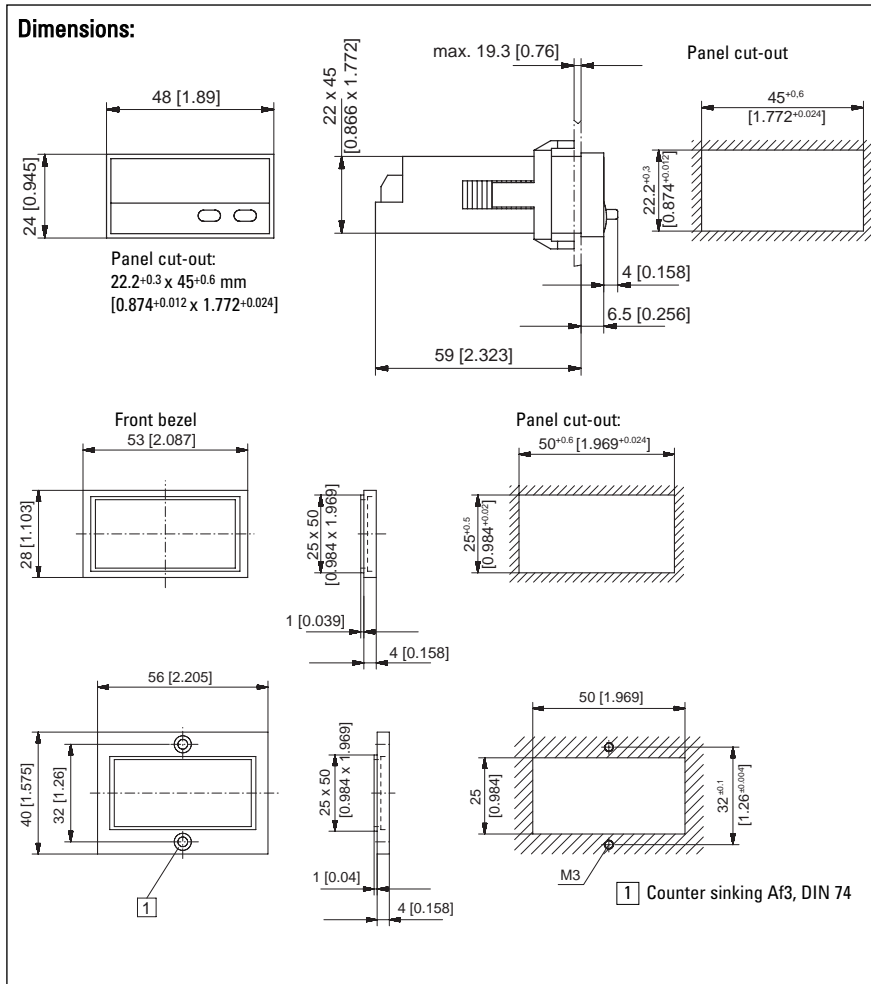
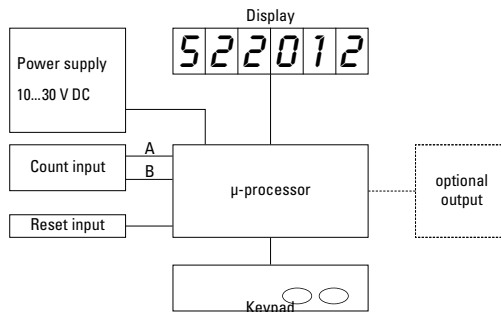
Production rate

## LED Frequency Meters – Codix 522

### Technical data:

Power supply:	10 ... 30 V DC, with reverse polarity protection	Level of the inputs:	Low: 0 ... 0.2 x U <sub>B</sub> [V DC] High: 0.6 x U <sub>B</sub> ... 30 V DC
Current consumption:	max. 50 mA	Level of inputs:	Low: 0 ... 2 V DC High: 4 ... 30 V DC
Display:	6-digit 7-segment red LED display; figures 8 mm [0.315"] high	4 ... 30 V DC version	High: 4 ... 30 V DC
Data retention:	EEPROM	Optocoupler output:	Max. 30 V, 10 mA
Housing:	Dimensions 48 x 24 mm [1.89 x 0.945"] according to DIN 43 700; RAL 7021, grey	Accuracy:	<0.1 %
Polarity of the inputs:	programmable, npn or npn	Ambient temperature:	-20 ... +65 °C [4 ... 149 °F] at U <sub>B</sub> = 10 ... 26 V DC -20 ... +55 °C [4 ... 131 °F] at U <sub>B</sub> = >26 ... 30 V DC
Input resistance:	approx. 5 kΩ	Storage temperature:	-25 ... +70 °C [-13 ... 158 °F]
Count frequency:	60 kHz, can be damped to 30 Hz	EMC:	Immunity to interference: EN55011 class B Emitted interference EN61000-6-2
Measurement principle:	Measurement principle: Gate and/or time interval (period duration) measurement, with high accuracy <0.1% (HRA)	Protection:	IP 65 front side
		Weight:	approx. 50 g [1.764 oz]

### Block diagram:



### Connection:

- without optocoupler
- |   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| □ | □ | □ | □ | □ |
- 10 ... 30 V DC
  - 0 V GND
  - INP
  - 
  -

### Connection:

- with optocoupler (npn)
- |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| □ | □ | □ | □ | □ | □ | □ |
- 10 ... 30 V DC
  - 0 V GND
  - INP
  - 
  - 
  - Emitter
  - Collector

### Delivery specification:

- Digital display
- Panel mounting clip
- Bezel for screw mounting, panel cut out 50 x 25 mm [1.969 x 0.984"]
- Bezel for clip mounting, panel cut out 50 x 25 mm [1.969 x 0.984"]
- Gasket
- Multilingual operating instruction

### Order code:

6.522.01X.3X0

- Input switching level
  - 0 = standard\*
  - A = 4 ... 30 V DC level
- Output
  - 1 = Optocoupler output
  - 2 = No output\*

\*standard stock model