Position and Frequency display CODIX 52P

separate inputs for frequency and position

DC 10...30V	000000 DIN 24 x 48	-10° +50°	IP 65	ProG	max. 60 kHz	POSITION	1/sec 1/min	t/Hz HRA
Power supply DC	Front bezel dimensions	Wide temperature range	High IP protection rating	Menu-driven programming	Pulse counter/ Totaliser	Position display	Frequency meter/ Tachometer	Frequency meter HRA
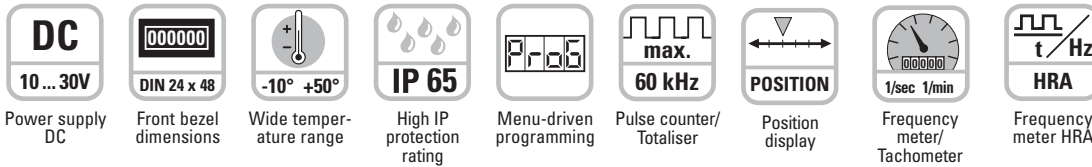
Powerful

• **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
 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 and inputs for frequency- and pulse counting**

• **4 different count input modes for the position display**
  2-channel input for detecting count direction, difference or adding mode, quadrature x1, x2 or x4. 1 separate input for rotary speed and speed, display in 1/min or 1/sec

• **DC 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.
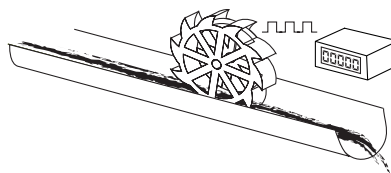
Applications for Frequency and Position Display/ Totaliser
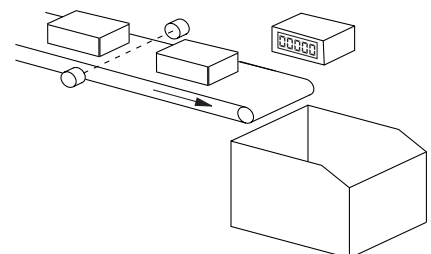
Position and rotary speed applications, e.g.

• OEM equipment or retrofitting to drilling machines

• OEM equipment on flow measuring plant, e.g. total flow and current flow

• Total piece count and pieces per minute, where the pulse counting occurs in the add/subtract mode, in order to deduct reject parts

• Production data acquisition: total piece count and production speed, or absolute distance traversed and current speed
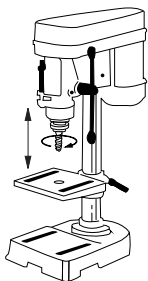
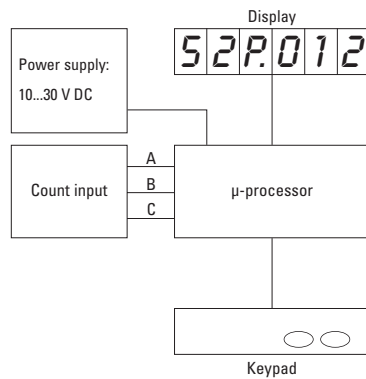Rotary speed and drilling depth | Flow rate and total volume | Piece count on conveyor and production speed

Display counters electronic

Position and Frequency display CODIX 52P
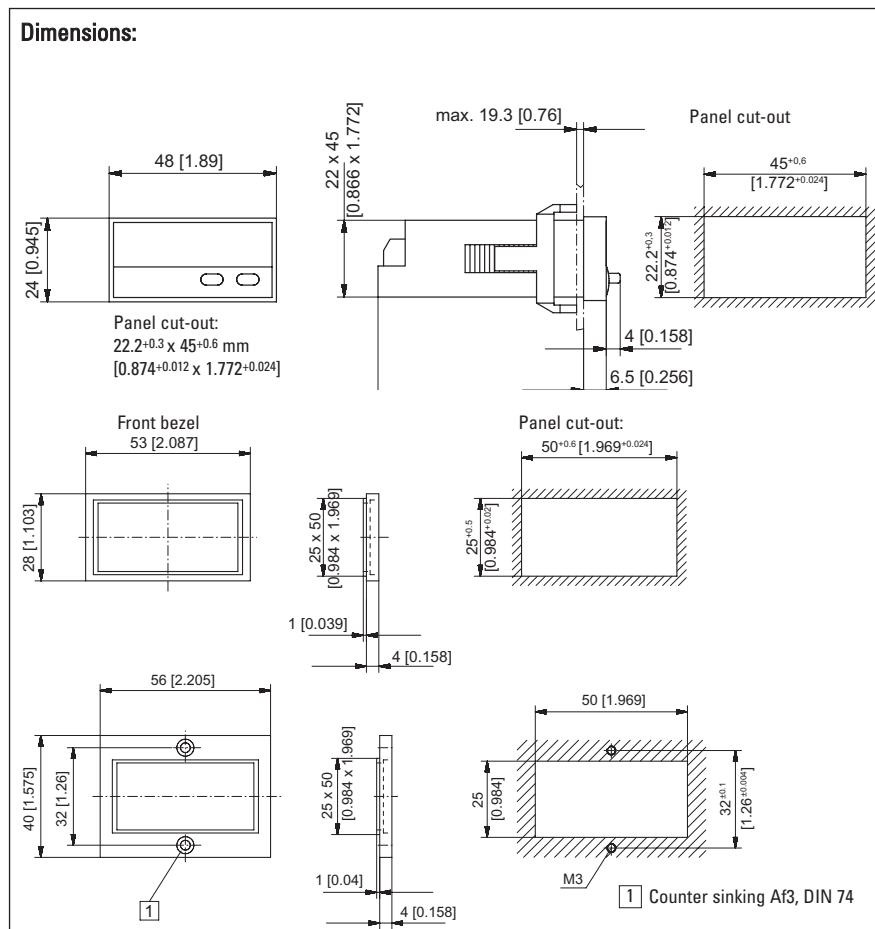
Technical data:

Supply voltage:	10 ... 30 V DC, with reverse polarity protection	Level of inputs:	Low: 0 ... 0.2 x U_B [V DC] High: 0.6 x U_B ... 30 V DC
Current consumption:	max. 40 mA	Level of inputs: 5 V version	Low: 0 ... 2 V DC High: 4 ... 30 V DC
Display:	6 digit red 7-segment LED; 8 mm [0.315"] high	Accuracy:	<0.1 % (Frequency display, tachometer)
Data backup:	EEPROM	EMC:	according to EC EMC directive 89/36/EWG
Housing:	dimension 48 x 24 mm [1.89 x 0.945"] according to DIN 43 700; RAL 7021, grey	Immunity to interference:	EN 61 000-6-4/EN 55 011 class B
		Emitted interference:	EN 61 000-6-2
Polarity of inputs:	programmable, npn or pnp for all inputs	Ambient temperature:	–10 ... +50 °C [14 ... 122 °F]
Input resistance:	approx. 5 kΩ	Storage temperature:	–25 ... +70 °C [–13 ... 158 °F]
Counting frequency:	30 kHz, can be damped to 30 Hz	Protection:	IP 65 front side
Reset time:	5 ms	Weight:	approx. 50 g [1.764 oz]

Block diagram:

Dimensions:

Panel cut-out: 22.2$^{+0.3}$ x 45$^{+0.6}$ mm [0.874$^{+0.012}$ x 1.772$^{+0.024}$]

Front bezel 53 [2.087]

1 Counter sinking Af3, DIN 74
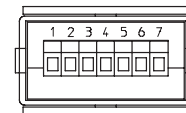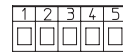
Connections:

without optocoupler
1 10 ... 30 V DC
2 0 V GND
3 INP A
4 INP B
5 Reset

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 Seal
1 Multilingual operating instructions

Order code:

6.52P.012.3X0

Input switch level
0 = Standard*
A = 5 V

* standard stock model