

# Pulse counters, electronic

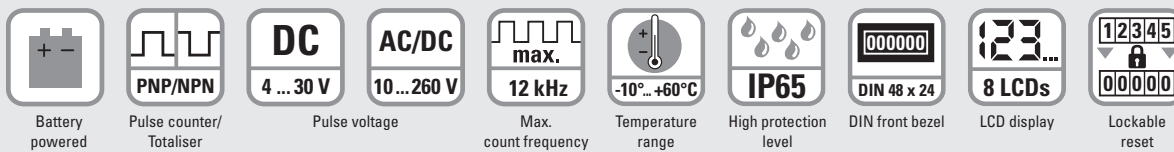
LCD pulse counters

Adding or subtracting (battery)

Codix 130



The Codix 130 is a simple battery powered pulse counter for fast and slow count pulses with 8-digit LCD display, optional backlighting, for NPN, PNP and high voltage applications.



## Powerful

- High quality LCD display with 8 mm high figures
- Count direction adding and subtracting via control input
- Battery life approx. 8 years
- Optional display backlighting
- Filter function for bounce-free counting with mechanical contacts
- Count frequency max. 12 kHz
- High protection level IP65

## Simple

- Screw terminals, RM 5 mm
- Reset key lockable via the input 'Reset Enable'
- For positive and negative counting edges, depending on version
- High voltage version for 10 ... 260 V AC/DC voltage pulses
- Large 8-digit LCD display with 8 mm high figures

## Order code

6.130 . 012 . 850  
a b

### a Backlighting

5 = without<sup>1)</sup>  
 6 = with<sup>1)</sup>

### b Count input (input type: count) – single-channel, adding or subtracting counting

	Input type	INP A			INP B				
0 <sup>1)</sup> =	Count <sup>2)</sup>	0 ... 0.7 V DC	count	NPN	7 kHz	0 ... 0.7 V DC	count	NPN	30 Hz
2 <sup>1)</sup> =		4 ... 30 V DC	count	PNP	12 kHz	0 ... 0.7 V DC	count	NPN	30 Hz
3 <sup>1)</sup> =		10 ... 260 V AC/DC	count	AC/DC	30 Hz	10 ... 260 V AC/DC	reset	AC/DC	–

### Delivery specification

- Pulse counter
- Mounting clip
- Front bezel for screw mounting (T008181)  
56 x 40 mm [2.20 x 1.57"],  
panel cut-out 50 x 25 mm [1.97 x 0.98"]
- Front bezel for clip mounting (T008180)  
53 x 28 mm [2.09 x 1.10"],  
panel cut-out 50 x 25 mm [1.97 x 0.98"]
- Gasket
- Instruction manual, multilingual

1) Stock types

2) Single-channel, adding or subtracting counting

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LCD pulse counters	Adding or subtracting (battery)	Codix 130
<b>Accessories</b>		Dimensions in mm [inch]
<b>Adapter front bezel, 72 x 36 [2.83 x 1.42]</b>	For cut-out 68 x 33 [2.68 x 1.30] to cut-out 45 x 22.2 [1.77 x 0.87], for counters 48 x 24 [1.89 x 0.94], as set	black and silver anodised
<b>Adapter front bezel, 48 x 48 [1.89 x 1.89]</b>	For cut-out 45 x 45 [1.77 x 1.77] to cut-out 45 x 22.2 [1.77 x 0.87], with clip mounting for counters 48 x 24 [1.89 x 0.94]	black
<b>Adapter front bezel, 60 x 50 [2.36 x 1.97]</b>	For cut-out 54 x 29 [2.13 x 1.14] to cut-out 45 x 22.2 [1.77 x 0.87], with screw mounting and gasket for counters 48 x 24 [1.89 x 0.94]	black
<b>Transparent cover, lockable, IP65</b>	For cut-out 54 x 29 [2.13 x 1.14], for screw mounting to front bezel F1B or adapter front bezel N003001, for counters with cut-out 50 x 25 [1.97 x 0.98] or 45 x 22.2 [1.77 x 0.87]	
<b>Sealing cover type K1, IP65</b>	Suitable for front bezel 60 x 50 [2.36 x 1.97], for screw mounting of electromech. counters and via adapter front bezel N003001 for counters 48 x 24 [1.89 x 0.94]	
<b>Mounting frame</b> with cut-out 50 x 25 [2.36 x 1.97] via separate adapter also for 45 x 22.2 [1.77 x 0.87]	For snap-on mounting on 35 [1.38] top-hat DIN rail, for counters 53 x 28 [2.09 x 1.10] and via separate adapter (T008180) for counters 48 x 24 [1.89 x 0.94]	chromated

Pulse  
counters

## Technical data

General technical data	
<b>Display</b>	LCD, 8 digits, 8 mm [0.32"] high
<b>Backlighting</b>	external electrical source 24 V DC $\pm 20\%$ , 50 mA
<b>Modes</b>	adding or subtracting (selectable)
<b>Display range</b>	-9999999 ... 99999999, with overflow display
<b>Reset</b>	manual and electrical
<b>Working temperature</b>	-10°C ... +55°C [+14°F ... +131°F] (non-condensing)
<b>Operating temperature</b>	-10°C ... +60°C [+14°F ... +140°F] (non-condensing)
<b>Storage temperature</b>	-20°C ... +70°C [-4°F ... +158°F]
<b>Altitude</b>	up to 2000 m [6562']

Electrical characteristics	
<b>Power supply</b>	internal lithium battery approx. 8 years at 20°C [68°F]
<b>EMC</b>	Emitted interference EN 55011 class B Immunity to interference EN 61000-6-2
<b>Device safety</b>	Designed to EN 61010 part 1 Protection class 2 Application area Pollution level 2
<b>UL approval</b>	File-No.: E128604

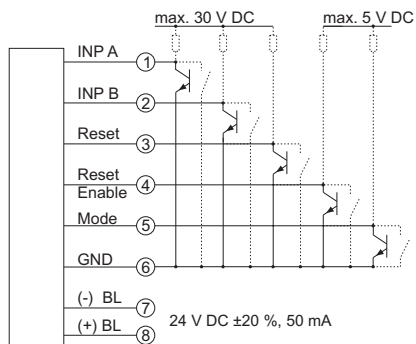
Mechanical characteristics	
<b>Housing</b>	dark grey RAL 7021
<b>Protection</b>	IP65 (front side)
<b>Weight</b>	approx. 50 g [1.76 oz]

Counting inputs	
<b>Counting input of the DC-versions (max. 30 V DC)</b>	
slow counting input	max. 30 Hz NPN
fast counting input	max. 12 kHz (PNP), 7 kHz (NPN)
switching level NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 30 V DC
switching level PNP	LOW 0 ... 0.7 V DC HIGH 4 ... 30 V DC
<b>Counting input of the high voltage versions (10 ... 260 V DC/V AC)</b>	
optocoupler input,	max. 30 Hz
min. pulse time	16 ms
switching level	LOW 0 ... 2 V AC/DC HIGH 10 ... 260 V AC/DC
<b>Counting direction switching (only DC-version)</b>	
mode	see order table
contact input	Open Collector NPN (switching at 0 V)
switching level NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC
<b>Reset input (only DC and high voltage)</b>	
minimum pulse time	DC 50 ms high voltage 16 ms
contact input DC – NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 30 V DC
high voltage input	10 ... 260 V AC/DC
<b>Electrical reset key locking (for DC and high voltage)</b>	
contact input	Open Collector NPN (switching at 0 V)
switching level NPN	LOW 0 ... 0.7 V DC HIGH 3 ... 5 V DC

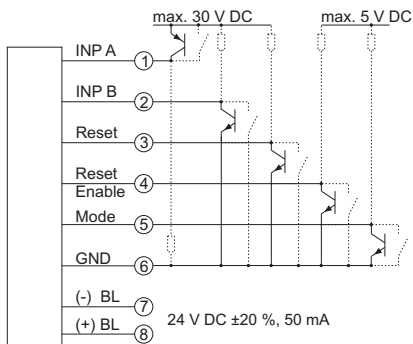
# Pulse counters, electronic

## Terminal assignment

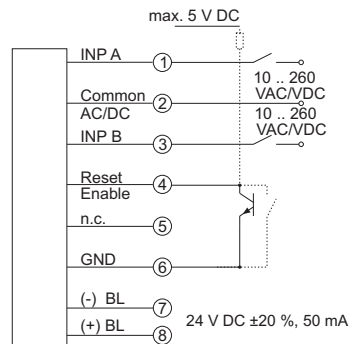
DC type: 6.130.012.8x0



DC type: 6.130.012.8x2



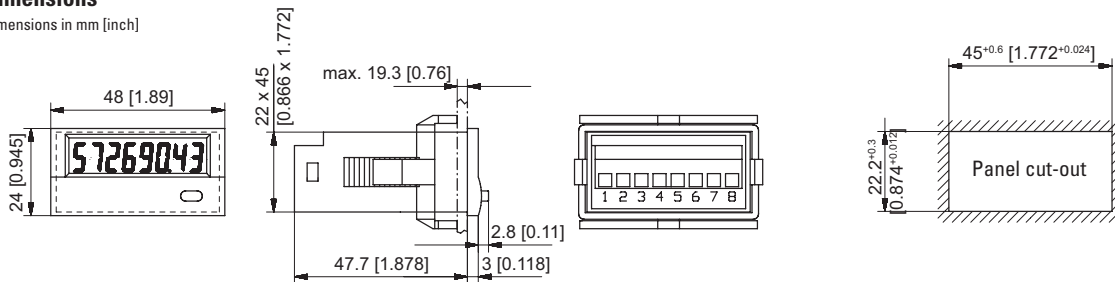
AC type: 6.130.012.8x3



BL = backlighting

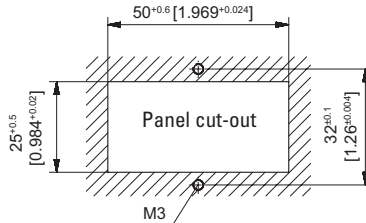
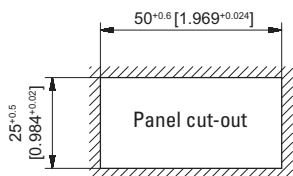
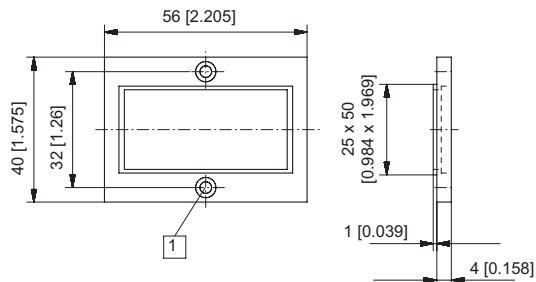
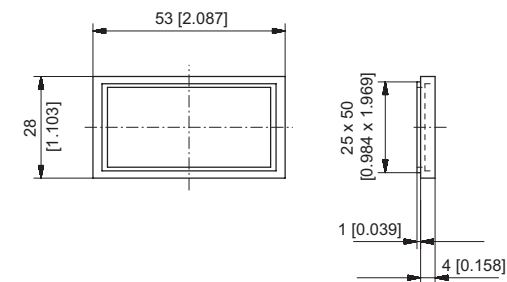
## Dimensions

Dimensions in mm [inch]



Front bezel for clip mounting (included in delivery)

Front bezel for screw mounting (included in delivery)



1 Countersinking Af3, DIN 74