

## LCD Position Display – Codix 133



- Low-price and high efficiency
- Large 8-digit LCD display, height of the figures 8 mm [0.315"]
- Optional backlighting
- Counting modes include phase discriminator (quadrature) counting (also with pulse doubling) for connection to incremental encoders
- Unified Codix design, matches the extensive Codix family
- IP 65
- Screw terminals, RM 5 mm [0.197"]
- Lifetime of the battery approximately 8 years
- Locking of the reset key
- Ambient temperature -10 ... +60 °C [14 ... 140 °F]
- All versions for positive or negative counting edge

### Technical data:

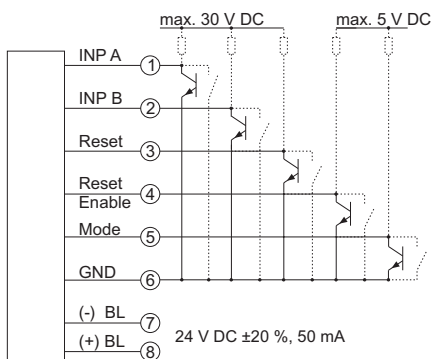
Power supply:	non-replaceable lithium battery (lifetime approximately 8 years at 20°C [68 °F])
Backlighting:	external electrical source 24 V DC +/-20 %, 50 mA
Display:	LCD, 8-digits, height of the figures 8 mm [0.315"]
Mode:	adding or subtracting (selectable) counting direction differential counting or phase discriminator single or dual evaluation, selectable
Display range:	-9999999 ... 99999999, with overflow display
Reset:	manual and electrical
UL certified:	File: E128604
EMC:	Emitted interference: EN55011 class B Immunity to interference: EN61000-6-2
Housing:	dark grey RAL 7021
Operating temperature:	-10 ... +55 °C [14 ... 131 °F]
Ambient temperature:	-10 ... +60 °C [14 ... 140 °F]
Storage temperature:	-20 ... +70 °C [-4 ... 158 °F]
Protection:	IP 65 front side
Weight:	approx. 50 g [1.764 oz]

### Counting inputs:

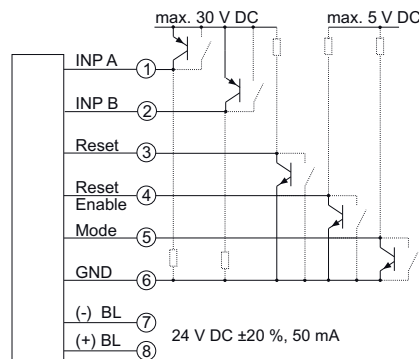
Counting input of the DC-versions (max. 30 V DC)	
Slow counting input:	max. 30 Hz NPN
Fast counting input:	max. 12 kHz (PNP), 7 kHz (NPN)
Switching level:	NPN: low: 0 ... 0.7 V, high: 3 ... 30 V DC PNP: low: 0 ... 0.7 V, high: 4 ... 30 V DC
Switching	x1 or x2 evaluation
Contact input:	open collector NPN (switching at 0 V DC)
Switching level:	NPN: low: 0 ... 0.7 V, high: 3 ... 5 V DC
Reset Input (only DC and high voltage)	
Minimum pulse time:	DC: 50 ms, high voltage: 16 ms
Contact input DC:	NPN: low: 0 ... 0.7 V, high: 3 ... 30 V DC
Electrical reset key locking (for DC and AC)	
Contact input:	open collector NPN (switching at 0 V)
Switching level:	NPN: low: 0 ... 0.7 V, high: 3 ... 5 V DC

### Connection diagram:

DC type:  
6.133.012.8x0

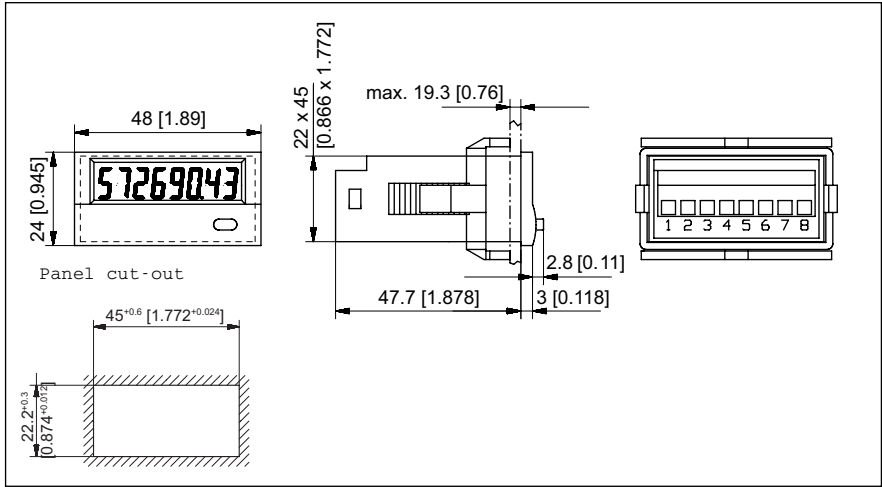


DC type:  
6.133.012.8x1

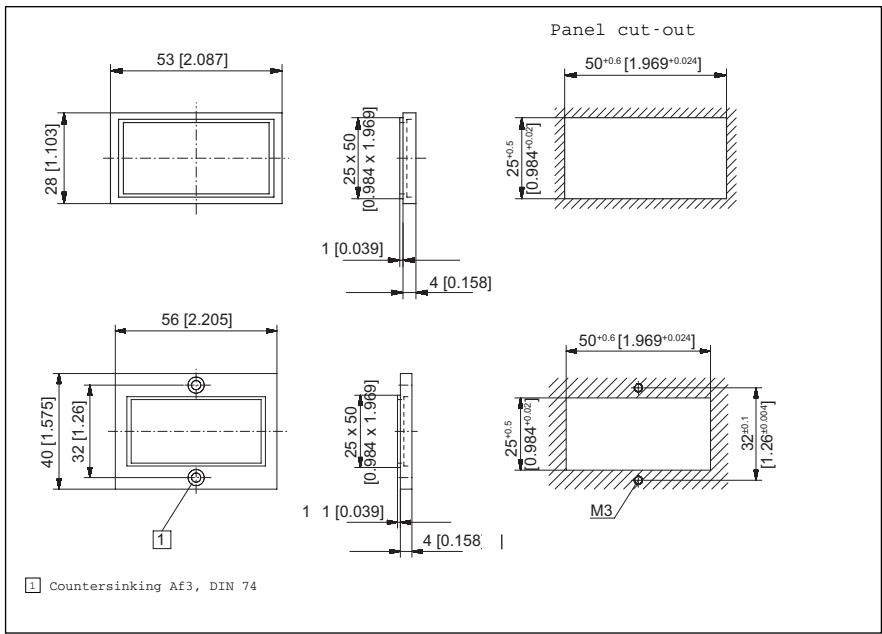


## LCD Position Display – Codix 133

### Dimensions:



### Dimensions for bezels (included in delivery)



### Delivery specification:

- Digital display
- Panel mounting clip
- Bezel for screw mounting (56 x 40 mm) [2.205 x 1.575"], panel cut out 50 x 25 mm [1.969 x 0.984"]
- Bezel for clip mounting (53 x 28 mm) [2.087 x 1.103"], panel cut out 50 x 25 mm [1.969 x 0.984"]
- Gasket
- Operating instructions

### Order code:

Type	Input type	Count inputs							
		INP A				INP B			
6.133.012.8x0*	Quad <sup>4</sup> /Quad <sup>2</sup> <sup>5</sup>	0 ... 0.7 V DC	channel A	NPN	3 kHz	0 ... 0.7 V DC	channel B	NPN	3 kHz
6.133.012.8x1*		4 ... 30 V DC	channel A	PNP	6 kHz	4 ... 30 V DC	channel B	PNP	6 kHz

X: 5 = no backlight\*  
X: 6 = with backlight

4) Phase discriminator for incremental encoders with x1 evaluation

5) Phase discriminator for incremental encoders with x2 evaluation  
\* standard stock model