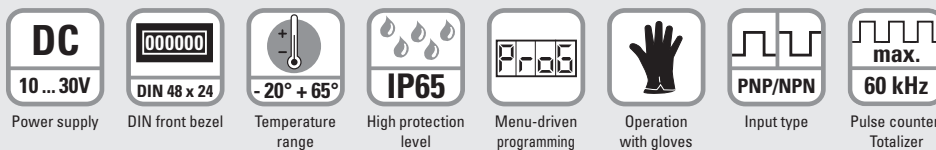




The Codix 520 is a simple voltage powered pulse counter for fast and slow count pulses, with 6-digit LED display, for NPN / PNP input signals.



Powerful

- Fast count input – input frequency max. 60 kHz.
- Robust housing – IP65 protected.
- Very bright LED display, 8 mm high.
- Simple totalizing and quantity counter
 - single channel count input and reset input.
 - programmable for positive (PNP) or OV (NPN) switching input pulses.
 - fast count input with an input frequency of max. 60 kHz, can be damped to 30 Hz for mechanical contacts.
- Short start-up time – detects input pulses just 16 msec after being switched on => no pulses are lost with a simultaneous motor start-up.

User-friendly

- Large keys – can also be operated when wearing gloves.
- Simple uniform menu-driven programming and operation – possible to enter the programming also during operation with a confirmation prompt.
- Programmable decimal point, can be set from 0.0 to 0.000.
- Manual or electrical reset – tamper-proof due to lockable reset function.
- As an alternative to the HTL inputs, devices are available with a 4 ... 30 V DC input level, for use as parallel displays to PLCs.

Order code

6.520 . 012 . 3 X 0^a

^a Input switching level
 0 = Standard (HTL)¹⁾
 A = 4 ... 30 V DC

Delivery specification

- 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.

Pulse counters, electronic

LED pulse counters Adding (DC) Codix 520

Accessories	Dimensions in mm [inch]	Order no.
Adapter front bezel, 72 x 36 [2.83 x 1.42]	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 162704 Set
Adapter front bezel, 48 x 48 [1.89 x 1.89]	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 T008883
Adapter front bezel, 60 x 50 [2.36 x 1.97]	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 N003001
Transparent cover, lockable, IP65	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]	N003002
Sealing cover type K1, IP65	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]	G008301
Mounting frame 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 G300004

Suitable gaskets, other accessories and installation examples for optional accessories can be found in chapter accessories or in the accessories section under: www.kuebler.com/accessories.

Technical data

General technical data	
Display	6 digits, red 7 segment LED display; 8 mm [0.32"] high
Data backup	EEPROM
Operating temperature	10 ... 26 V DC -20°C ... +65°C [-4°F ... +149°F] > 26 ... 30 V DC -20°C ... +55°C [-4°F ... +131°F] (non-condensing)
Storage temperature	-25°C ... +70°C [-13°F ... +158°F]

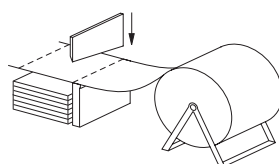
Inputs	
Polarity of inputs	programmable, NPN or PNP for all inputs
Input resistance	approx. 5 kΩ
Counting frequency	max. 60 kHz, can be damped to 30 Hz
Minimum pulse duration of the reset input	5 ms
Input switching level (HTL)	LOW 0 ... 0.2 x U _B (V DC) HIGH 0.6 x U _B ... 30 V DC
Input switching level at 4 ... 30 V DC	LOW 0 ... 2 V DC HIGH 4 ... 30 V DC

Electrical characteristics	
Power supply	10 ... 30 V DC, with integrated reverse polarity protection
Current consumption	max. 45 mA
EMC standards	EN 55011 class B, EN 61000-6-2, EN 61000-6-3, EN 61326-1
UL approval	file E128604

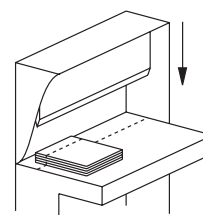
Mechanical characteristics	
Housing	front panel mount 48x24 mm [1.89 x 0.94"] acc. to DIN 43700; RAL 7021, dark grey
Protection	IP65 (front side)
Weight	approx. 50 g [1.76 oz]
Vibration resistance acc. to EN 60068-2-6	10 ... 55 Hz / 1 mm [0.04"] / 30 min
Shock resistance acc. to EN 60068-2-27	100 G: 2 ms 10 G: 6 ms

Applications for pulse counters / totalizers

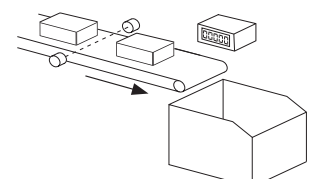
- Simple count tasks such as quantity and piece counting
- Accessories, OEM equipment or retrofitting to production machines
- Piece counting on die cutters, presses, extruders, woodworking machines, drilling machines, pick-and-place machines, guillotines, special-purpose vehicles etc.



Piece-counting



Number of cuts



Piece-counting on conveyor

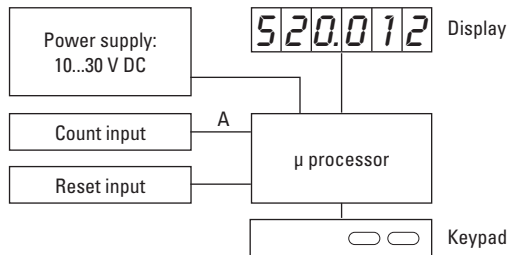
Pulse counters, electronic

LED pulse counters

Adding (DC)

Codix 520

Block diagram



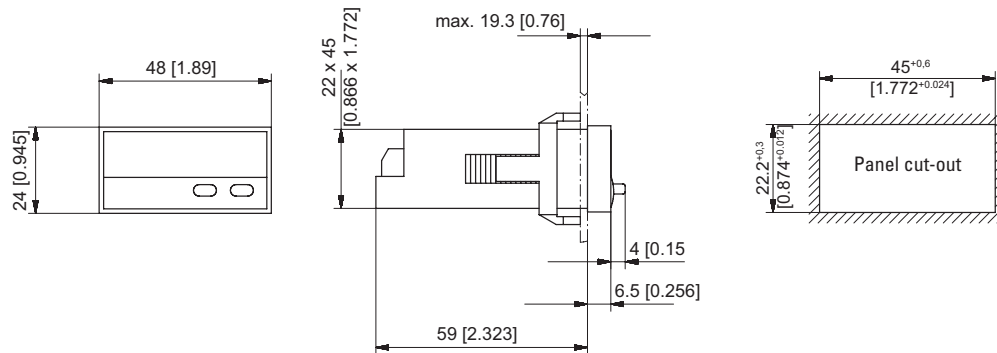
Terminal assignment



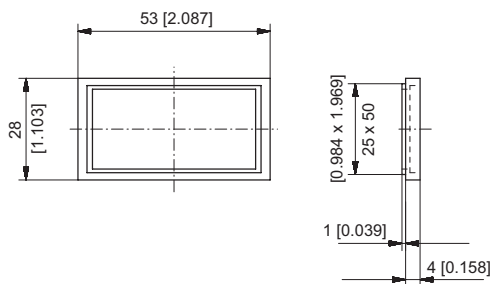
PIN	without optocoupler
1	10 ... 30 V DC
2	0 V GND
3	INP
4	–
5	Reset

Dimensions

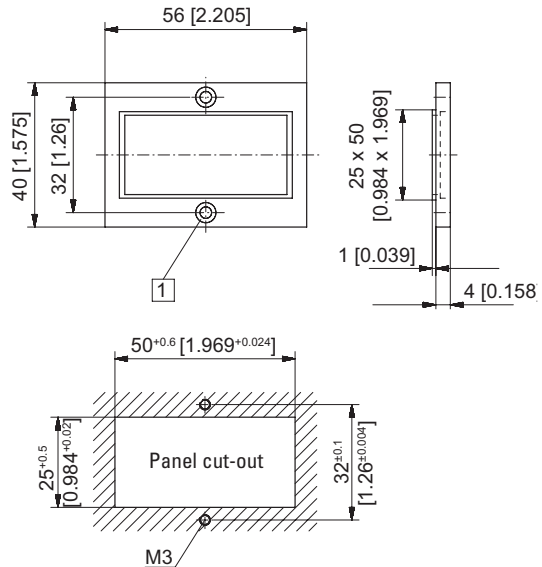
Dimensions in mm [inch]



Front bezel for clip mounting (included in delivery)



Front bezel for screw mounting (included in delivery)



1 Countersinking Af3, DIN 74