› Electronic Counters
Impulse Counter and Tachometer
CTR24L

- › High brightness display: 6-digit LED, height 8 mm
- › Maximum input frequency 30 k Hz
- › Combined function: Impulse counter and Tachometer
- › Reset on panel or external with inhibition option
- › Supply: 10 → 30 V⎓
- › Easy to program
- › Scaling factor
- › Decimal point
- › Accessories for 50 x 25 mm cut-out
- › Highly resistant to shocks and impacts
- › Excellent visibility due to the large digit size



CTR24L

Product selection			
Model	**Type**	**Functions**	**Part Number**
CTR24L	**2513**	Combined: Counter and Tachometer	**87623572**

Accessories	
Description	**Part Number**
Adaptor for 50 x 25 mm cut-out - Fixed with screws	**26546843**
Adaptor for 50 x 25 mm cut-out - Fixed with screws	**26546844**
DIN rail adaptor	**26546840**
Clip-fixing kit (supplied with the product)	**26546848**

General characteristics	
Physical details and protection	
Consumption	10 → 30 V⎓ max 55 mA with protection against polarity reversal
Connection by 5 screw terminals at rear of casing	●
Connection capacity	1.5 mm²
Fixed using bracket	●
Degree of protection front face	IP 65
Data memory	EEPROM
Temperature limits use (°C)	-20 →+55
Temperature limits stored (°C)	-25 →+70
Breakdown voltage	According to EN 610110-1: 2000 V/50 Hz/1 min.
Conformity to standards	EN 61000-6-2 - EN 55011 class B
Altitude (m)	2000
Certifications	UL - cULus - CE
Weight (g)	50

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Description:

Crouzet Impulse Counters, accurate and durable solutions for pulse measurement needs

Crouzet's electronic impulse counters are reliable devices designed for measuring and recording electrical impulses in industrial applications. Crouzet's impulse counters use a combination of mechanical and electrical components to precisely count electrical pulses, offering a reliable solution for various industrial control and monitoring tasks.

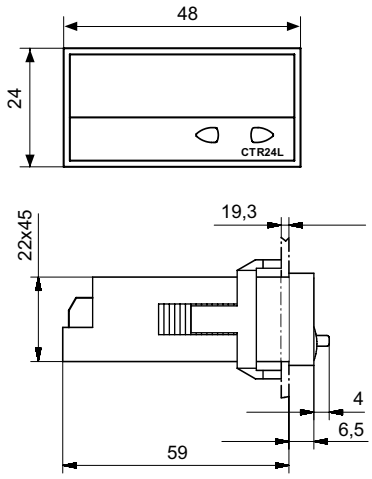
For more information about: please visit **www.crouzet.com**

Operating characteristics	
Function	Impulse counter and Tachometer
Display	6-digit LED
Height digits (mm)	8
Input specifications	
Inputs	2 counter inputs, 1 tachometer input, 1 reset input
Low level	0 → 0.2 x Ub VDC
High level	0.6 x Ub → 30 V⎓
Cyclical ratio	Any (maximum frequency given for a cyclical ratio = 1/1) Schmitt trigger input
Polarity	NPN or PNP for all inputs (programming)
Minimum impulse duration for reset (ms)	5
Frequency of filtered input (Hz)	Filter active: 30 Filter disabled: maximum frequency (programming)
Input impedance (kΩ)	Appr.5
Impulse counter	
Display details	19 999 →999 999
Elimination of non-significant zeros	●
Counting input modes	Cnt.Dir → Counter input INPA and counter direction input INPB Up.dn → INPA INPB differential counting Up.up → Sum of INPA + INPB QuAd → Phase discriminator QuAd2 → Phase discriminator with doubling of impulses QuAd4 → Phase discriminator with quadrupling of impulses
Inputs INPA / INPB	Dynamic
Reset to zero - Panel	If not locked during programming
Scale factor	1 → 99.9999
Scaling factor	1 → 99.9999
Decimal point	0 0.0 0.00 0.000
Maximum counting frequency	Combined Counter + Tachometer functions: CntDir → 30 k Hz UpDown → 10 k Hz UpUp → 10 k Hz Quad1 → 15 k Hz Quad2 → 15 k Hz Quad4 → 10 k Hz
Tachometer	
Display details	0 → 999 999
Elimination of non-significant zeros	●
Conversion time	1/s or 1/min
Input INPC	Dynamic
Accuracy	< 0.1 %
Measurement principle	< 38 Hz: measurement of period duration > 38 Hz: measurement with duration time base = 26.3 ms
Scale factor	1 → 99.9999
Scaling factor	1 → 99.9999
Decimal point	0 0.0 0.00 0.000
Maximum counting frequency	30 k Hz

Dimensions (mm)

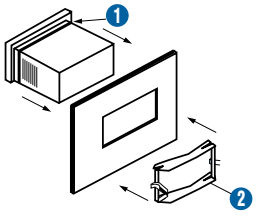
Panel Mounted

CTRL24

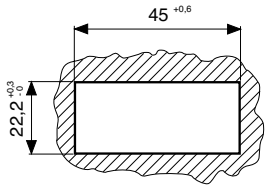


1 Seal
2 Fixing yoke

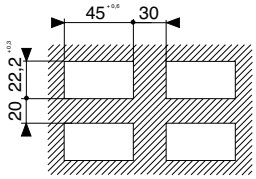
Fixing strip with clip-on yoke



Panel Cut-out

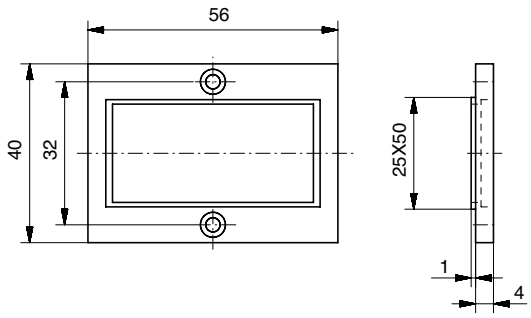


4 appliances

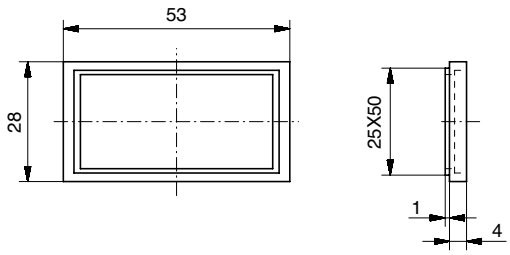


Accessories

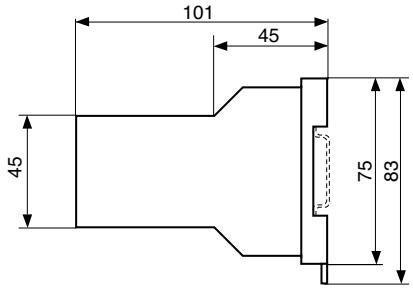
26546843 - Adaptor for 50 x 25 mm cut-out - Fixed with screws

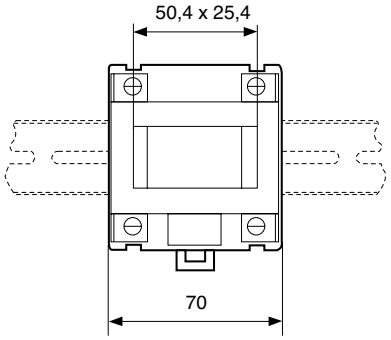


26546844 - Adaptor for 50 x 25 mm cut-out - Fixed with clips



26546840 - DIN rail adaptor

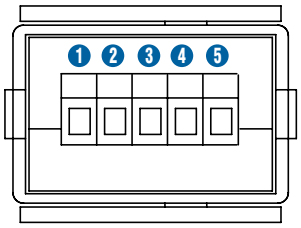




Accessory supplied with the counter

Connections

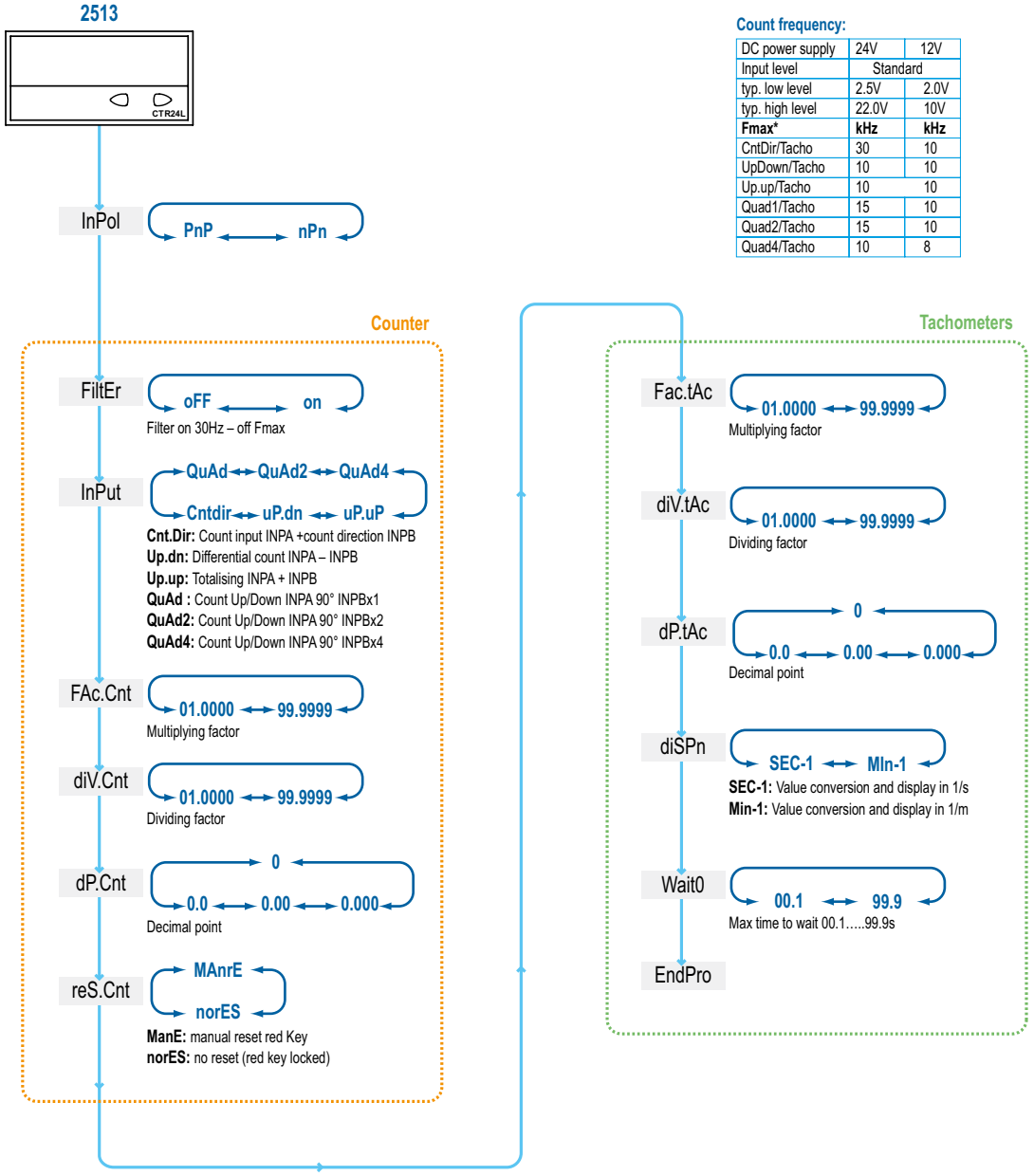
2513



1. Supply: 10 →30 V⎓
2. Supply: GND (0 V⎓)
3. INPA (Counter)
4. INPB (Counter)
5. INPC (Tachometer)

Applications

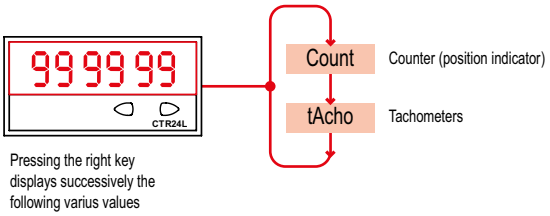
Programming diagram



Count frequency:

DC power supply	24V	12V
Input level	Standard	
typ. low level	2.5V	2.0V
typ. high level	22.0V	10V
Fmax*	**kHz**	**kHz**
CntDir/Tacho	30	10
UpDown/Tacho	10	10
Up.up/Tacho	10	10
Quad1/Tacho	15	10
Quad2/Tacho	15	10
Quad4/Tacho	10	8

SELECTION OF THE DISPLAYED VALUE



Pressing the right key displays successively the following varius values

Warning:
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