CXG201/211/212/221/231

Electronic display counters

- Pulse counting, position display, frequency-/speed display, time meter, short-term measurement
- Supply voltage 10…30 VDC
- Programmable using 2 large keys
- Multiplier and decimal setting for scalable figures
- Set value for time meters and position display
- Max. counting frequency up to 60 kHz

		CXG201	CXG211	CXG212	CXG221	CXG231
Mounting	Flush mounting	•	•	•	•	•
Function	One-channel, adding counting method	•				
	Two-channel counting method, counting direction, difference, totalising, phase discriminator (single, double, 4 times)		•	•		
	Rotation display, frequency display, speed display (1/sec, 1/min)				•	
	Operating hours/timer meters with resolution in msec					•
	Optocoupling signal entry at 0			•		
Display range	0…999 999	•			•	•
	-199 999…999 999		•	•		
Counting inputs	NPN	•	•	•	•	•
	PNP	•	•	•	•	•
Order no.		CXG201M4N	CXG211M4N	CXG212M4N	CXG221M4N	CXG231M4N

Applications

- Single quantity counting, display of speeds, rotations and frequencies, operating hours and process times
- Positioning display, production data display via difference or addition counting
- Throughput and quantity display

Settings

Reset key/
Location selection

Programming key

Technical data

Power supply	10…30 VDC with integrated reverse voltage protection
Current consumption	Max. 50 mA
Display	6-digit red, 7-segment LED display, 8 mm high
Data protection	EEPROM
Counting display	See overview (display range)
Reset	Manual, electrical or lockable
Standards	IEC 61 000-6-4 / IEC 55 011 class B
	IEC 61 000-6-2
EMC	CE-compliant with EU Directive 89/36/EC
Housing	Dark grey RAL 7021
Ambient temperature	10–26 VDC: –20 °C...+65 °C, no condensation
	>26-30 VDC: –20 °C...+55 °C, no condensation
Storage temperature	–25 °C to +70 °C
Protection type	IP 65 front
Dimensions	Front dimensions and switchboard section see dimension diagram

Counting inputs

Inputs

Polarity of inputs	NPN or PNP programmable for all inputs
Counting frequency	Max.. 60 kHz, can be reduced to 30 Hz (position display max. 25 kHz)
Input resistance	Approx. 5 kΩ
Switching level	Low: 0…0.2 × U_B (VDC),
	High: 0.6 × U_B …30 VDC
Reset input	Min. 5 ms

Outputs

Optocoupler	Max. 30 VDC, 10 mA

Pulse counter (CXG201)

Display range	0…999 999, decimal space 0.0…0,000

Pulse counter and position display (CXG211 U. CXG212)

Display range	-199 999…999 999, decimal space 0.0…0,000
Display scaling	Divisor: 0 - 99.9999, multiplier: 0 - 99.9999

Frequency display (CXG221)

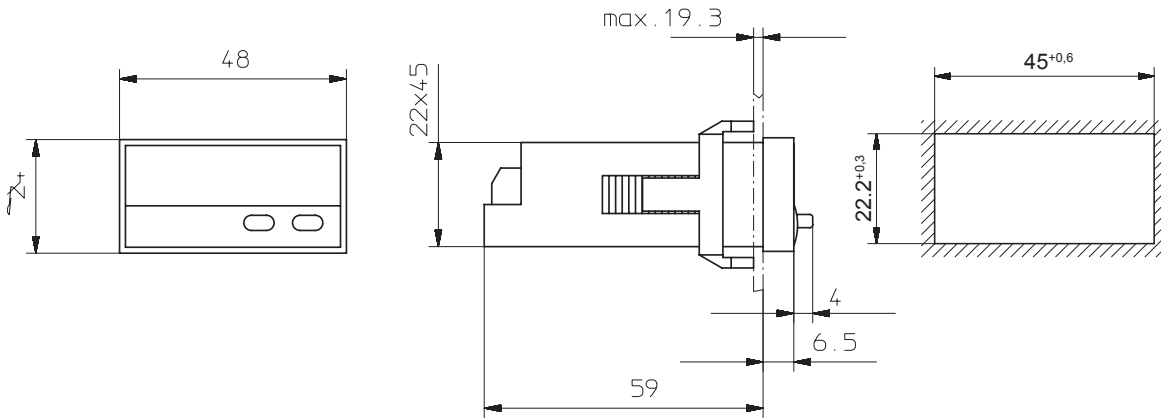|	
Display range	0…999 999, decimal space 0.0…0,000
Display scaling	Divisor: 0 - 99.9999, multiplier: 0 - 99.9999
Display unit	1/min, 1/sec, period duration principle > 38 Hz, gate time measurement principle < 38 Hz

Hour meter (CXG213)

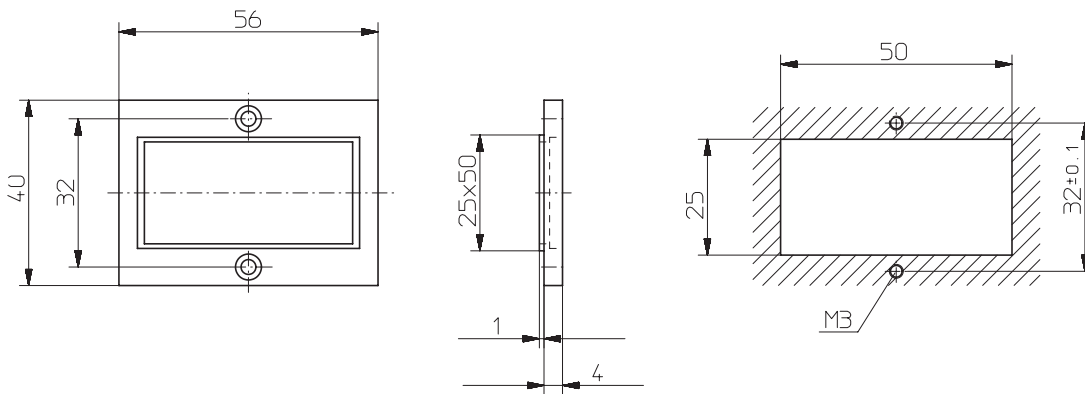|	
Display range	0…999 999, decimal space 0.0…0.000 (detemines the resolution of the time range)
Time range	Hrs, mins or sec and hh.mm.ss
Resolution	1 ms

Various measurement types of timing (pulse widths and period duration)

Dimension diagrams
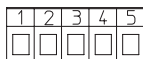
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Dimensions for mounting frames (included in scope of delivery)
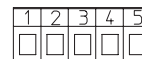

Pin assignment

CXG201

1 10 ... 30 V DC
2 0 V GND
3 INP
4 –
5 Reset

CXG211,212,221,231

1 10 ... 30 V DC
2 0 V GND
3 INP A
4 INP B
5 Reset

Scope of delivery

- Digital display
- Clamping springs
- Front frames for screw mounting (56 × 40 mm) or panel cut-out (50 × 25 mm)
- Sealing
- Instruction manual