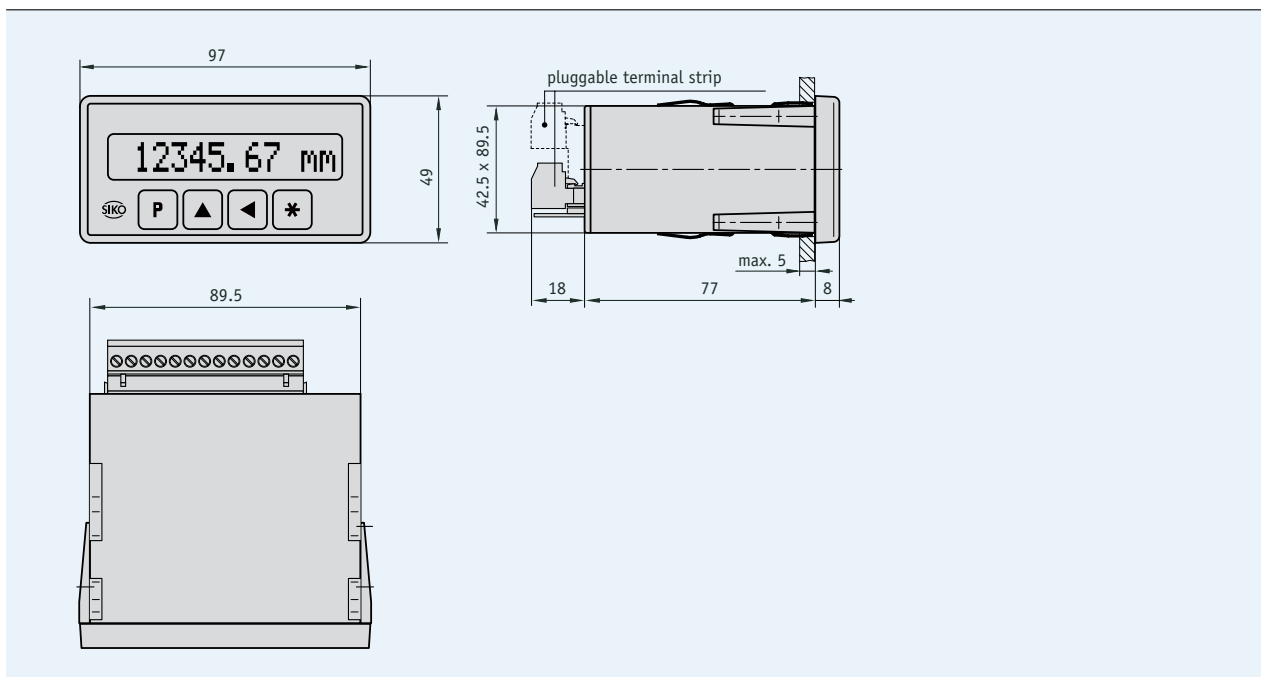


### Profile

- High contrast LCD readout (1 line of 12 digits)
- Display of units
- Inputs for incremental or absolute encoder (SSI), length and angle measurement, speed or number of pieces
- Free programming via front keyboard
- With reference connection
- Optional: RS232 or RS485 interface
- Optional: Switching outputs



### 6.1



### Mechanical data

Feature	Technical data	Additional information
Operating temperature	0 ... +50 °C	
Storage temperature	-20 ... +85 °C	
Condensation	inadmissible	
Protection category	IP40 for whole device IP60 front with switchboard mounting	DIN 40050
Connection	13-pin connector strips	
Keyboard	membrane keys with pressure point	
Housing	plastic	switchboard cutout 45 x 92 mm, DIN 43700
Weight	0.4 kg 0.25 kg	with 230 V and 110 V with 24 V

### Electrical data

Feature	Technical data	Additional information
Voltage supply	24 V DC $\pm 20\%$ 24 V AC $\pm 10\%$ 115 V AC $\pm 10\%$ 230 V AC $\pm 10\%$	
Current consumption	120 mA	with 24 V, without encoder
Switching outputs	$\leq 30$ V/100 mA	2 freely programmable outputs
Display	12-digit LCD dot matrix	
Display range	-9 999 999 ... +9 999 999	additionally sign and unit of measurement
Encoder input	PP, OC, OP, LD5, LD24, SSI/5, SSI/24 DREH/PP, DREH/OC, S/PP, S/OC	length and angle measurement speed measurement number of pieces measurement
Encoder input frequency	max. 500 kHz	
Encoder supply	24 V DC (200 mA) 5 V DC (200 mA)	
Counter capacity	$\pm 2^{23}$ increments	
Pulse analysis	quadruple	incremental encoder
Interference protection class	EN61000-6-2, EN6100-6-4	

### 6.1

### Pin assignment

Incremental PP, OC, OP, LD5, LD24	Speed/number of pieces speed/PP, speed/OC, S/PP, S/OC	Absolute SSI/5, SSI/24	PIN
+Ub encoder supply	+Ub encoder supply	+Ub encoder supply	1
A-signal	A-signal	clock+	2
B-signal		data+	3
Index signal			4
GND, screen encoder supply	GND, screen encoder supply	GND, screen encoder supply	5
24 V DC out	24 V DC out	24 V DC out	6
RFS	RFS	CAL	7
N.C.	N.C.	N.C.	8
GND	GND	GND	9
N.C.	N.C.	N.C.	10
PE	PE	PE	11
0 V GND	0 V GND	0 V GND	12
+ Ub operating voltage	+ Ub operating voltage	+ Ub operating voltage	13
Encoder supply	encoder supply	encoder supply	14
/A-signal (LD, OP)		clock-	15
/B-signal (LD, OP)	/index signal (LD, OP)	data-	16
/Index signal (LD, OP)			17
GND	GND	GND	18
N.C.	N.C.	N.C.	19
GND	GND	GND	20
N.C.	N.C.	N.C.	21
DÜA/TXD/A1	DÜA/TXD/A2	DÜA/TXD/A1	22
DÜB/RXD/A2	DÜB/RXD/A3	DÜB/RXD/A2	23
N.C.	N.C.	N.C.	24
N.C.	N.C.	N.C.	25
N.C.	N.C.	N.C.	26

## Order

Feature	Order data	Specifications	Additional information
Operating voltage	1	230 V AC ±10 %	
	2	115 V AC ±10 %	
	3	24 V AC ±10 %	
	4	24 V DC ±20 %	
Encoder input	PP	push-pull	
	OC	open collector	
	OP	PP invertiert	
	LD/5	line driver/5 V DC encoder supply	
	LD/24	line driver/24 V DC encoder supply	
	SSI/5	SSI/5 V DC encoder supply	
	SSI/24	SSI/24 V DC encoder supply	
	DREH/PP	speed/24 V DC encoder supply	push-pull
	DREH/OC	speed/24 V DC encoder supply	open collector
S/PP	number of pieces/24 V DC encoder supply	push-pull	
S/OC	number of pieces/24 V DC encoder supply	open collector	
Counting frequency (kHz)	25		
	250		
	500		
Switching output	S0	without	
	SM	with	
Interface/protocol	XX/XX	without	
	S1/00	RS232/standard	
	S3/00	RS485/standard	
Front foil	BS	blue	
	BN	blue neutral	without company logo
Software	S	length measurement	
	SW02	angle measurement, 0–360°	

## Order code

MA10/4 - EG - A - B - C - D - RM - E - F - G

**Scope of delivery:** MA10/4, User information, Mating connectors

**Additional information:**

General information and areas of application

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