

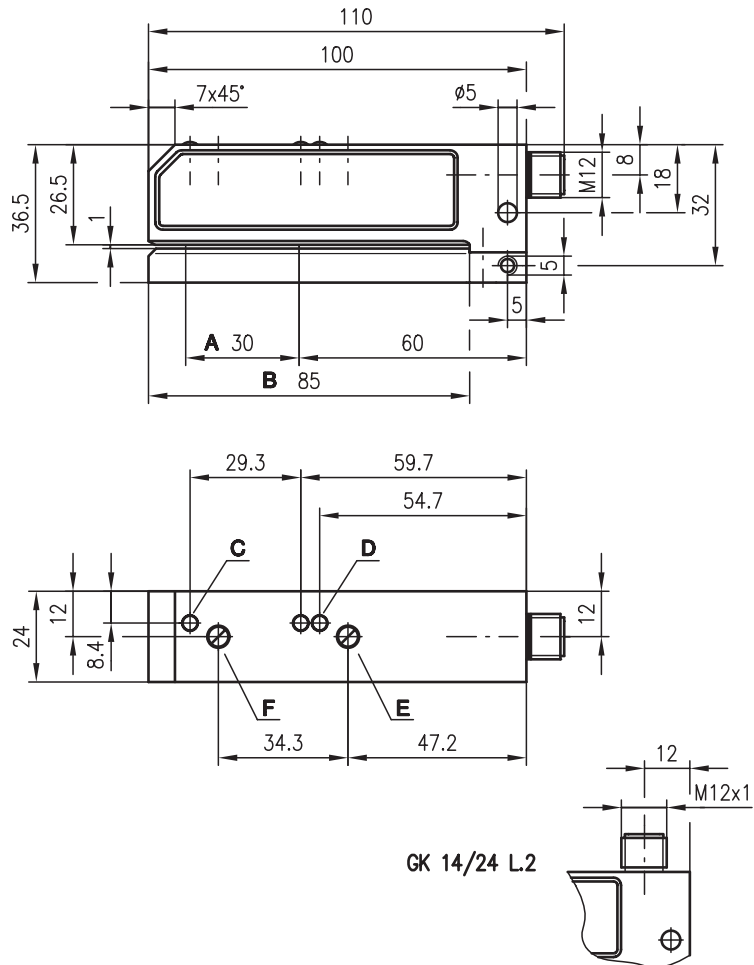


GK 14

Capacitive forked sensor

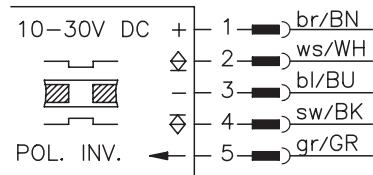


Dimensioned drawing



- A Sensor
- B Mouth depth
- C Display switching output
- D Display base adjustment
- E Base adjustment
- F Sensitivity adjustment:
Clockwise rotation = increase sensitivity

Electrical connection



1 mm



- Forked sensor for reliable detection of transparent and opaque labels
- PNP and NPN transistor output for optimum adaptation to the controller
- Robust metal housing with bevelled inlet edges
- Inverting input for easy adaptation of the output signal level



Accessories:

(available separately • see page 66)

- M12 connectors (KD ...)
- Cable with M12 connector (K-D...)

We reserve the right to make changes • GS_a04e.fm



Specifications

Optical data

Mouth width	0.9mm ± 0.1 mm
Mouth depth	85mm

Timing

Switching frequency ¹⁾	5000Hz
Response time	0.1 ms
Delay before start-up	≤ 100ms

Electrical data

Operating voltage U_B	10 ... 30VDC (incl. residual ripple)
Residual ripple	≤ 15% of U_B
Bias current	≤ 35mA
Switching output	1 PNP transistor output 1 NPN transistor output
Function characteristics	direction dependent, reversible
Signal voltage high/low	$\geq (U_B - 2V) / \leq 2V$
Output current	200 mA
Sensitivity	adjustable with multitrans potentiometer
Base adjustment	adjustable with multitrans potentiometer

Indicators

LED yellow	label/gap
LED yellow (2x)	Base adjustment

Mechanical data

Housing	aluminium, anodised
Weight	175g
Connection type	M12 connector, 5-pin

Environmental data

Ambient temp. (operation/storage)	0°C ... +60°C
Protective circuit ²⁾	1, 2
VDE safety class	III
Protection class	IP 65

Options

Inverting input high/low	$\geq 8V / \leq 2V$
Input resistance	10k Ω

1) Max. label speed 10m/s, min. label gap 2mm

2) 1=polarity reversal protection, 2=short-circuit protection for all outputs

Order guide

	Designation	Part No.
Rear connector	GK 14/24 L	500 26371
Top connector	GK 14/24 L.2	500 31714

Tables

Diagrams

Remarks

● Base setting

- Set sensitivity to max. (turn potentiometer to the right), then turn back 1/2 turn to the left.
- Base adjustment without label tape such that both LEDs are equally bright.
- If necessary, reduce the sensitivity setting (in steps of 1/4 turn to the left).

● Base adjustment

Perform after new mounting, cleaning, sensitivity increase.

● Switching behaviour

A signal change on the switching output occurs when a label enters at the minimum velocity. The output signal remains constant until the next edge of an existing or entering label is detected.