

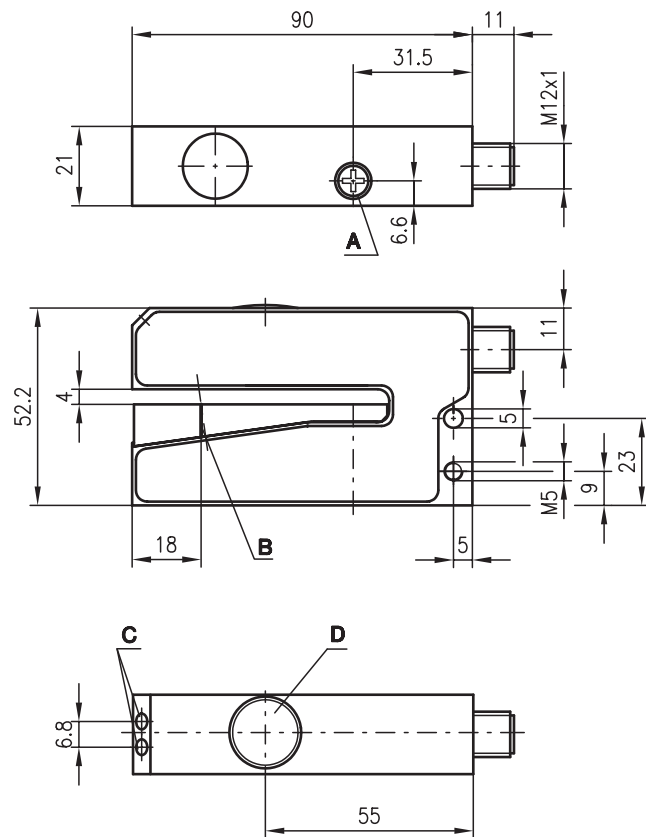


GSU 14/24

Ultrasonic Label Fork

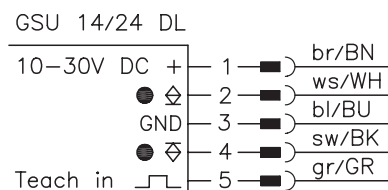
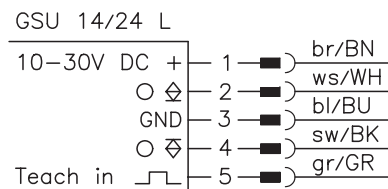


Dimensioned drawing



- A** The support table can be removed and cleaned after loosening the screw
- B** Sensor marker
- C** Indicator diode
- D** Teach-in button

Electrical connection



4mm



- Forked sensor for reliable detection of:
 - foil labels on foil carrier
 - foil labels on paper carrier
 - paper labels on paper carrier
 - metallised foil labels
 - thin metal foils
- Simple adjustment via teach-in by pressing a button or remote calibration
- Static PNP and NPN transistor outputs for optimum adaptation to the controller
- Robust metal housing with bevelled inlet edges and M12 connector

We reserve the right to make changes • gs_a01e.fm



Accessories:

(available separately)

- M12 connectors (KD ...)



Specifications

Physical data

Mouth width	4 mm
Mouth depth	67 mm
Label length	≥ 2 mm
Label spacing	≥ 2 mm
Band speed	≤ 2 m/s (120 m/min)
Repeatability ¹⁾	± 0.2 mm
Delay before start-up	≤ 100 ms

Electrical data

Operating voltage U _B	10 ... 30 VDC (incl. residual ripple)
Residual ripple	≤ 15% of U _B
Bias current	≤ 60 mA
Switching outputs	PNP and NPN transistor output
Function characteristics	light/dark switching
Signal voltage high/low	≥ (U _B -2V)/≤ V
Output current	200 mA

Indicators

LED green	ready
LED green flashing	teach-in activated
LED yellow	switching point in the label gap

Mechanical data

Housing	aluminium, anodised
Colour	red/black
Weight	300 g
Connection type	M12 connector, 5-pin

Environmental data

Ambient temp. (operation/storage)	0°C ... +60°C / -40°C ... +70°C
Protective circuit ²⁾	1, 2
VDE safety class	III
Protection class	IP 65
Standards applied	IEC 60947-5-2

Options

Teach-in input

Active/not active	≥ 8V/≤ 2V
Activation/disable delay	≤ 0.2 ms
Input resistance	10 kΩ

1) material dependent

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

Order guide

	Designation	Part No.
light switching (signal in the label gap)	GSU 14/24 L	500 61406
dark switching (signal on the label)	GSU 14/24 DL	500 37974

Remarks

Function

Manual teach-in

1. Insert label band at the correct position (band's center at sensor's marker).
2. The button on the device is pressed to teach - green LED flashes.
3. Label tape advances so that 2 ... 3 label gaps pass through the measuring zone.
4. The button is then pressed again. The green LED illuminates continuously. The teaching process is concluded.

Function

Remote teach-in

1. Insert label band at the correct position (band's center at sensor's marker).
2. Apply voltage at "Teach in" control input. Teach-in is activated.
3. Advance 2 ... 3 label gaps through the sensor.
4. Disconnect voltage.

Measurement values are stored. Teach-in ends after 100ms.

- To achieve high repeatability, the label band must be slightly under tension.
- The label band's center should be positioned above the sensor's marker (see also there).
- The label material used determines the achievable precision and the reliability of gap detection!