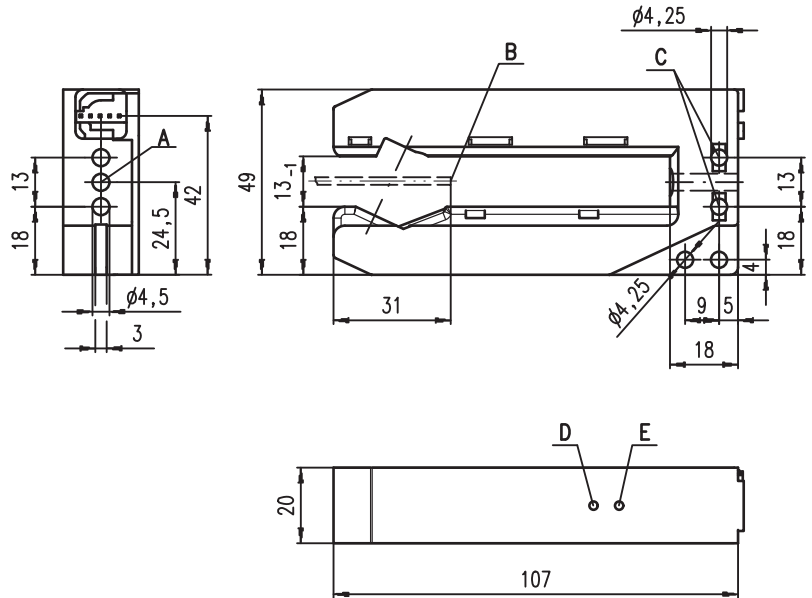


**GSU 710/22.4**

**Double Sheet Testing Unit**

**Dimensioned drawing**

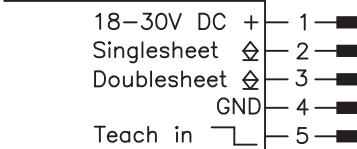
en 04-2011/08 50109306



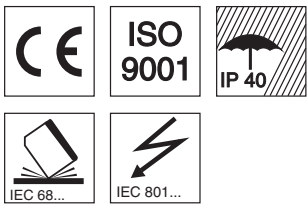
- A Through hole
- B Minimum intrusion depth of sheet edge
- C Inlay nut M4 possible
- D Red indicator diode
- E Yellow indicator diode

**Electrical connection**

GSU 710/22.4-MODU5



- Reliable detection of multi-layer paper and plastic sheets and metal foils
- Measurement range from 40g/m<sup>2</sup> paper to 350g/m<sup>2</sup> cardboard
- Plug connection
- Operating state indicators via light-emitting diodes
- NPN switching outputs
- Teach input



**Accessories:**

(available separately)

- Ready-made cable, 2m long (K-D MODU5-5P-2m-PVC, Part no. 50114946)

We reserve the right to make changes • DS\_GSU\_710\_22\_en.fm

## Specifications

### Physical data

Mouth width	13 mm
Mouth depth	89 mm
Minimum intrusion depth	31 mm
Converter frequency	approx. 330 kHz

### Timing

Switching frequency	200 Hz
Response time	5 ms
Delay before start-up	≤ 300 ms acc. to IEC 60947-5-2

### Electrical data

Operating voltage $U_B$	18 ... 30 VDC (incl. residual ripple)
Residual ripple	≤ 15% of $U_B$
Open-circuit current	≤ 40 mA
Switching outputs	2 NPN transistor outputs
Function characteristics	single sheet detected, or ≥ 1 sheet double sheet detected, or ≥ 2 sheets
Signal voltage high/low	≥ ( $U_B - 2V$ ) / ≤ 2V
Output current	max. 100 mA per output

### Indicators

Yellow LED	single sheet detected
Red LED	double sheet detected

### Mechanical data

Housing	plastic
Color	red
Weight	approx. 100 g
Connection type	AMP-Modu, 5-pin

### Environmental data

Ambient temp. (operation/storage)	0°C ... +50°C / -40°C ... +70°C
Protective circuit <sup>1)</sup>	1, 2, 3
VDE safety class	II, all-insulated
Protection class	IP 40
Standards applied	IEC 60947-5-2

### Options

#### Teach-in input

Teach-in input resistance	$R_{in}$ : 10 kΩ
Teach-in active/not active	≤ 2V / ≥ 10V or not connected
Teach-in duration	max. 100 ms
Teach-in delay	approx. 300 ms

1) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs

## Mode of operation

The "singlesheet" output signals that an object is within the detection range. This output may be used to check for presence. A detected double sheet is signalled at the "doublesheet" output.

By applying a low signal to the teach-in input, the calibration process is started. If a sheet is then transported through the detection range, a calibration to this medium takes place. The calibration process is completed after approx. 100 ms. The additional teach-in allows the measurement range limits to be extended somewhat.

When switched back on, the sensor again functions in standard mode  
40-350 g/m<sup>2</sup>.

## Order guide

Designation	Part No.
GSU 710/22.4-MODU5	501 08700

## Remarks

- **Approved purpose:**  
This product may only be used by qualified personnel and must only be used for the approved purpose. This sensor is not a safety sensor and is not to be used for the protection of persons.