

GSU 710/22.4

Double Sheet Testing Unit

en 05-2014/06 50109306-01



18 - 30 V
DC

- Reliable detection of multi-layer paper and plastic sheets and metal foils
- Measurement range from 40g/m² paper to 350g/m² cardboard
- Plug connection
- Operating state indicators via light-emitting diodes
- NPN switching outputs
- Teach input

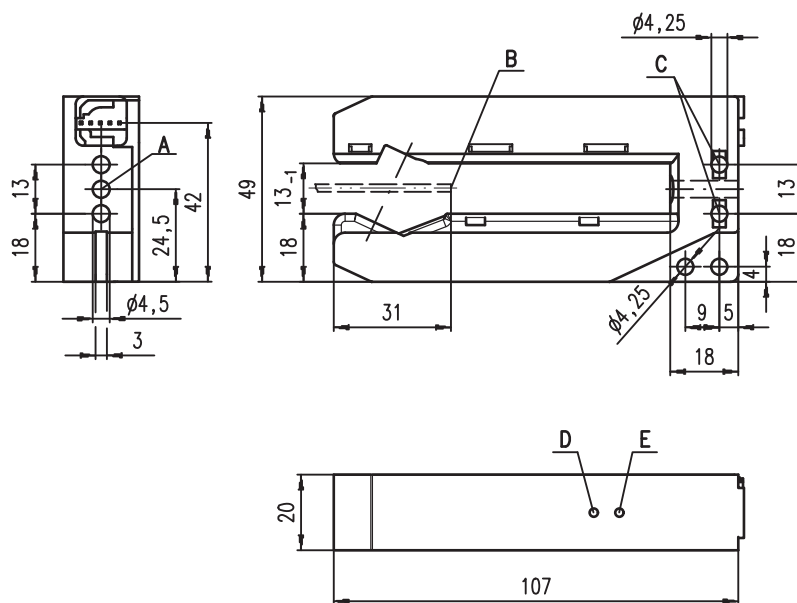


Accessories:

(available separately)

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

Dimensioned drawing



- 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

| | | |
|-------------|---|---|
| 18-30V DC + | 1 | ■ |
| Singlesheet | 2 | ■ |
| Doublesheet | 3 | ■ |
| GND | 4 | ■ |
| Teach in | 5 | ■ |

We reserve the right to make changes •

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 ¹⁾ | 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/m².

Order guide

| Designation | Part No. |
|--------------------|----------|
| GSU 710/22.4-MODU5 | 50108700 |

Remarks

● Intended use:

The GSU 710 double sheet testing unit is a monitoring unit predominately designed for single sheet checking in paper processing machines.

Operate in accordance with intended use!

- ⚠ This product is not a safety sensor and is not intended as personnel protection.
- ⚠ The product may only be put into operation by competent persons.
- ⚠ Only use the product in accordance with the intended use.