## GSU 710/22.4

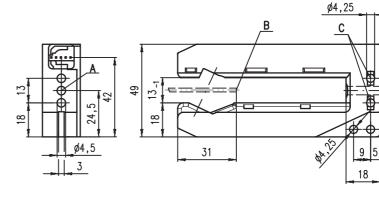
# **Double Sheet Testing Unit**

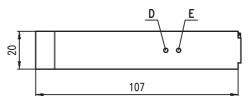






- Reliable detection of multi-layer paper and plastic sheets and metal foils
- Measurement range from 40 g/m<sup>2</sup> paper to 350g/m<sup>2</sup> cardboard
- Plug connection
- Operating state indicators via light-emitting
- NPN switching outputs
- Teach input





- Through hole Α
- Minimum intrusion depth of sheet edge В
- С Inlay nut M4 possible
- Red indicator diode D
- Yellow indicator diode



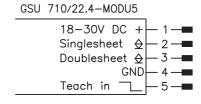
# **Accessories:**

#### (available separately)

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

### **Electrical connection**

**Dimensioned drawing** 





#### GSU 710/22.4

# **Specifications**

Physical data

Mouth width 13mm Mouth depth 89mm Minimum intrusion depth 31 mm

approx. 330kHz Converter frequency

**Timing** 

Switching frequency 200Hz Response time

5ms ≤ 300ms acc. to IEC 60947-5-2 Delay before start-up

**Electrical data** 

18 ... 30VDC (incl. residual ripple)  $\leq$  15% of  $U_B$ Operating voltage U<sub>B</sub>

Residual ripple ≤ 40 mA Open-circuit current

2 NPN transistor outputs single sheet detected, or ≥ 1 sheet Switching outputs Function characteristics

double sheet detected, or ≥ 2 sheets

 $\geq$  (U<sub>B</sub>-2V)/ $\leq$  2V max. 100mA per output Signal voltage high/low

Output current

**Indicators** 

Yellow LED single sheet detected

Red LED double sheet detected

Mechanical data

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

**Environmental data** 

Ambient temp. (operation/storage) Protective circuit 1)

 $0^{\circ}\text{C}$  ... +50°C/-40°C ... +70°C 1, 2, 3 II, all-insulated IP 40 VDE safety class Protection class IEC 60947-5-2 Standards applied

**Options** 

Teach-in input

Teach-in input resistance

 $R_{in}$ :  $10k\Omega$  $\leq 2V/\geq 10V$  or not connected max. 100msTeach-in active/not active

Teach-in duration 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 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.

GSU 710/22.4 - 05 2014/06