

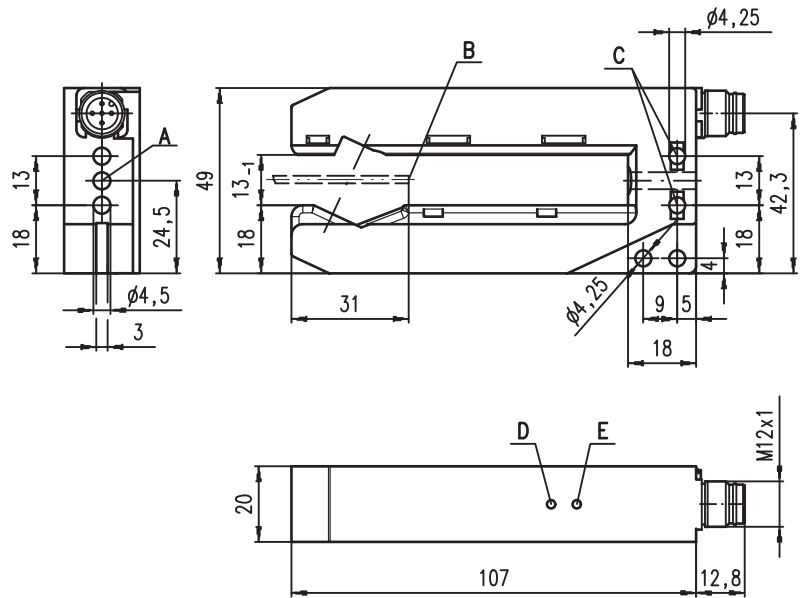
GSU 710/66

Double Sheet Testing Unit

Part No. 501 08368



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



18 - 30 V
DC

- Reliable detection of multi-layer paper and plastic sheets and metal foils
- Measurement range from 20g/m² paper to 800g/m² cardboard
- Plug connection
- Operating state indicators via light-emitting diodes
- Push-pull switching outputs

Electrical connection

GSU 710/66.4P-S12	
18-30V DC +	1 —■—) br/BN
Singlesheet ⊗	2 —■—) ws/WH
GND	3 —■—) bl/BU
Doublesheet ⊗	4 —■—) sw/BK
Teach in ⌒	5 —■—) gr/GY

Accessories:

(available separately)

- M12 connectors (KD ...)
- Ready-made cables (K-D ...)



Änderungen vorbehalten • GSU_710gb_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	≤ 50 mA
Switching outputs	2 push-pull switching outputs ¹⁾
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
Colour	red
Weight	approx. 100 g
Connection type	M12 connector, 5-pin

Environmental data

Ambient temp. (operation/storage)	0°C ... +50°C / -40°C ... +70°C
Protective circuit ²⁾	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	.../...P (PNP): ≥ 10V / ≤ 2V or floating
Teach-in duration	max. 100 ms
Teach-in delay	approx. 300 ms

1) Function: .../...P = active high (+24V); not active low (0V)

The push-pull switching outputs must not be connected in parallel

2) 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 "double sheet" output.

In the standard mode, 2-layer paper sheets with weights between approx. 40 g/m² and approx. 400 g/m² are detected without additional calibration.

With the "teach-in", the measurement range limits can be expanded to between approx. 20 g/m² and approx. 800 g/m².

The calibration process is started by applying a high signal at the "teach-in" input.

Calibration is performed either directly on a medium - if a sheet is in the detection range at the calibration time - or calibration is performed automatically if a medium is inserted into the detection range after the calibration time.

The calibration process is concluded after approx. 100 ms.

When switched back on, the sensor again functions in standard mode 40 - 400 g/m².

Remarks

- **Approved purpose:**
The GSU 710 double sheet testing unit is a monitoring unit predominantly designed for single sheet checking in paper processing machines.

⚠ Attention!

The GSU 710 is not a safety module according to the EU machinery directive.

Order guide

Designation	Part No.
GSU 710/66.4P-S12	501 08702