

DOUBLE SHEET DETECTOR DBK-03A



Application

The main task of the Double Sheet Detector DBK-03A is the protection of tools and machines that could be damaged as consequence of feeding more than one sheet.

The most important area of application is the metal packing industry. Both ferrous and non-ferrous materials, e.g. tinplate and aluminium, are processed here at a high speed.

There is a danger of occurring double sheets in the process of separating as well as in the process of transferring sheets.

Such failures can be located with the help of the Double Sheet Detector DBK-03A and the machine control is able to react specifically.

Regarding the thickness of the sheets the series 03 is specified for using in the metal packaging industry.

Sheets with a thickness from circa 0.1 to 0.4 mm can be controlled by this series.

The Double Sheet Detector DBK-03A consists of two components:

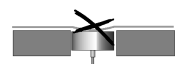
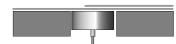
- monitoring unit DBA-03A
- Double sheet sensor DBS-01

The Double Sheet Detector DBK-03A is intended for industrial conditions. Degrees of protection:

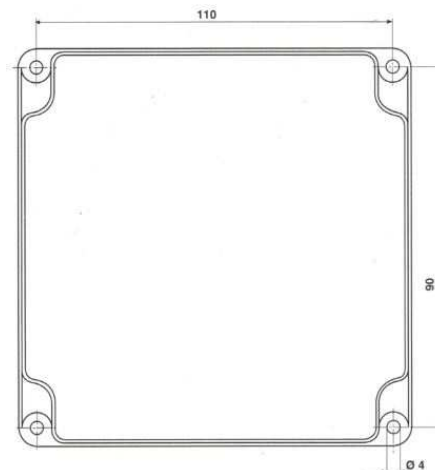
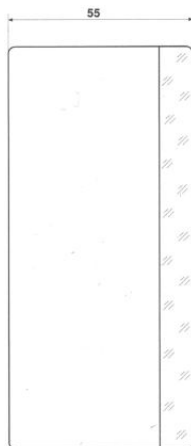
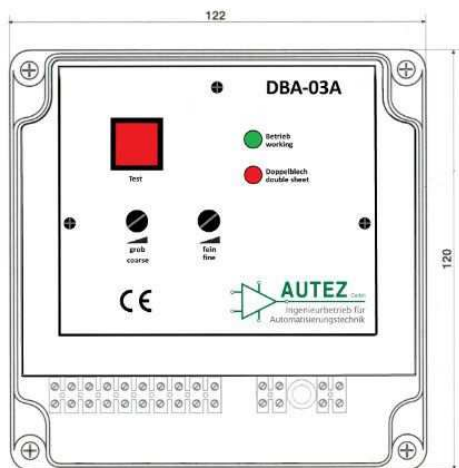
- IP 65 for monitoring unit DBA-03A
- IP 67 for sensor DBS-01

Advantages of the DBK-03A

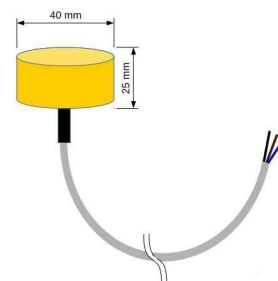
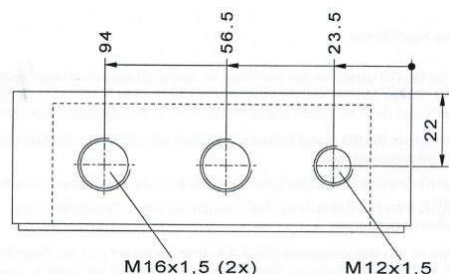
- Universal controller with two outputs.
One relay output for direct circuit breaking,
a second transistor output for activating other
electronic components.
- Perfect location of double sheet in a sheet
thickness range of circa 0.1 to 0.4 mm.
- Applicability to ferrous and non-ferrous materials.
- Non-reactive, therefore no distortion of sheets and no adhesion between sheet and
sensor.
- The one sensor system without ferrite plug on the opposite side provides good
conditions for installation.
- Flush mounting in metal is allowed.
Operating voltage: 24 V DC / 230 V AC



Technical data



Dimension for fastening of the monitoring unit



Sensor with open cable end, cable length 5 m

Sheet thickness: circa 0.1 ... 0.4 mm
 Material: Ferrous and non-ferrous metal
 Sensor technology: Non-reactive one sensor system

Monitoring unit DBA-03A

Operating voltage: 24 V DC / 230 V AC
 Power consumption: Approximately 2.5 VA
 Dimension: W = 122 mm, H = 120 mm, D = 55 mm
 Weight: 0,5 kg
 Degree of protection: IP 65 (German standard)
 1st output: Change-over contact, switching capability 2 A, 250 V
 2nd output: n-p-n transistor (opto-coupler) for activation of electronic components applicable as p- or n-switch
 $U_{cmax} = 60 \text{ V}$, $I_{cmax} = 30 \text{ mA}$
 Cable terminal: Screw terminal, cable box bushing

Sensor DBS-01

Dimension: $\varnothing 40 \text{ mm}$, H = 25 mm
 Degree of protection: IP 67 (German standard)
 Cable length: 5 m
 Weight: 0,26 kg