



3 E single plate metal detector



Design example: 3 E single plate metal detector

■ Application

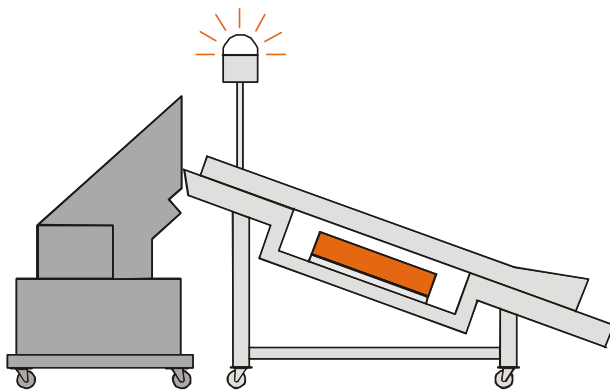
The series 3 E single plate metal detectors detect iron and non-iron metals. They are installed in the conveyor frame directly underneath the conveyor belt and are used for the inspection of bulk material being processed at low bed depth, of flat single pieces and of continuous fabrics. If only larger metal pieces are to be detected this metal detector can also be used with troughed belt conveyors or with larger pieces and thicker bed depths.

As these metal detectors are very slim they can be integrated into existing conveyor systems easily. The fact that the metal-free area near the sides of the coils is very small facilitates this type of installation also. The conveyor belt does not need to be split when the coils are mounted.

The width of coils depends on the application and can be chosen up to 700 mm. The series 3 E metal detectors have already shown their usefulness in many industrial applications by preventing damage to shredders, granulators, grinders etc.

■ Performance characteristics

- very good detection across the sensor surface
- low profile and low weight
- simple, effortless installation
- high mechanical stability
- high immunity to vibration, mechanical shocks and temperature variations
- The Control Unit of the metal detector has an optional "static mode of operation". In this mode the conveyor system can only be re-started after the metal contamination has been removed by the operator. Re-setting the metal detection signal is not possible without manual removal of the metal that triggered the signal, as long as it remains within the detection area.

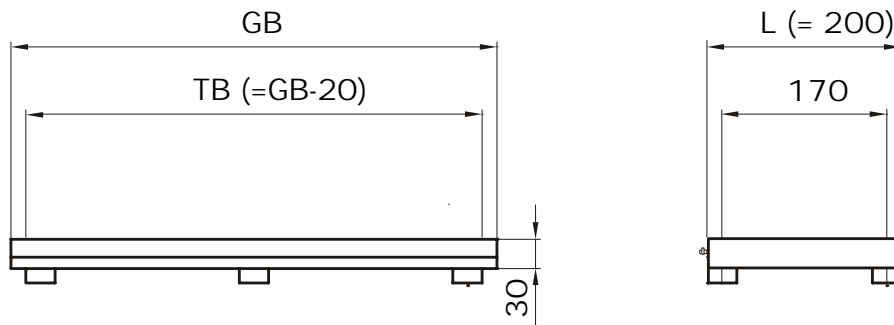


Functions principle: 3 E single plate metal detector

■ Typical applications

- Plastics industry: Examination of casts in order to protect cutters
- Mining: Protecting grinders against metal debris (e.g. from digger shovels)
- Textile industry: Examination of needled felt for broken needles
- Woodworking industry: Examination of plywood for metal inclusions

■ Dimensions and technical data



GB = width of coil
TB = detection width (approximately width of conveyor belt)
L = length of coil (in direction of belt movement)

Please specify required coil width. We will then send you a detailed and dimensioned drawing.

The sensitivity of detection depends on many factors (e.g. the width of the metal detector, the height of the material on the conveyor belt, the mode of operation). The basic sensitivity (with respect to the diameter of a Fe-ball) is available from us for any application.

Type: 3 E single plate metal detector
Housing: Aluminium
Sensor surface: Polypropylene (PP)
Dimensions: Ask for detailed drawings
Temperature range: -10° C to 65° C
Type of protection: IP 65
Scanning sensitivity: Please request information
Control Unit: Control Unit MSG 3.3 (microprocessor-driven)
Coil width: 200 to 700 mm in steps of 50 mm (custom units available)

Please ask for more information to cover any detail!

■ Standard version of delivery, special versions and complete installations

Included in standard version:

- Area metal detector with Control Unit
- Installation guide
- Operating instructions
- Standard functions and accessories (see Control Unit MSG 3.3)

Special versions:

- Special varnishes
- Special version for lower and higher temperature range
- Units for use in explosion sensitive areas

Complete installations:

- Metal detectors with ... belt conveyor, ... separation system, ... colour marking system, ... signal devices

Subject to change without notice.