Tunnel detector

Type: BD – M-Pulse2pro / M-Pulse3

Type: BD

APPLICATION

Tunnel detectors are used where high detection capacity and reliability are requested. For operation the user chooses among various operating electronics according to his application. Thus even complex tasks can be realised. The stainless steel housing and the smoothly grouting are the advantages making this sensor first class for the use in the food industry. Products with conductive components can be faded out easily due to modern digital technology. The sensors are maintenance- and calibration free.

FUNCTION

Contrary to classic metal sensors the working principle of this device is based on a system of three coils. This enables the user to analyse signals precisely and to draw conclusions on their origin. By this it is for example possible to distinguish the signals into vibration, product or metal. This additional data allows a more sensible reaction on metallic residua.

HANDLING

Depending on the operating electronics the handling is realised via a membrane keyboard with LC-display or Touchscreen. Thus all important parameters can be viewed easily and fast and changed if necessary. The sensitivity of the detector also is adjustable this way. Detailed information you will find in the documentation of the electronic M-PULSE2pro and M-PULSE3.

MOUNTING

The sensing range of the sensor partially is situated above and under the opening of the detector. Big metal pieces can already be detected in this sector. In order to guarantee the accurate functioning of the sensor, these sectors must be kept free of metal. This so-called metal-free zones are divided into two types:

- Metal-free zones for movable pieces
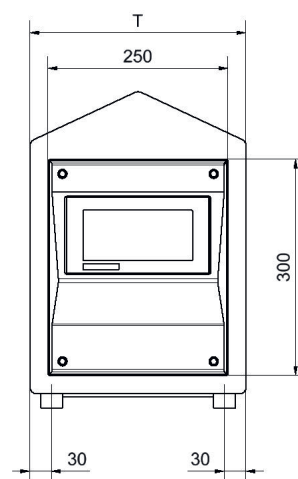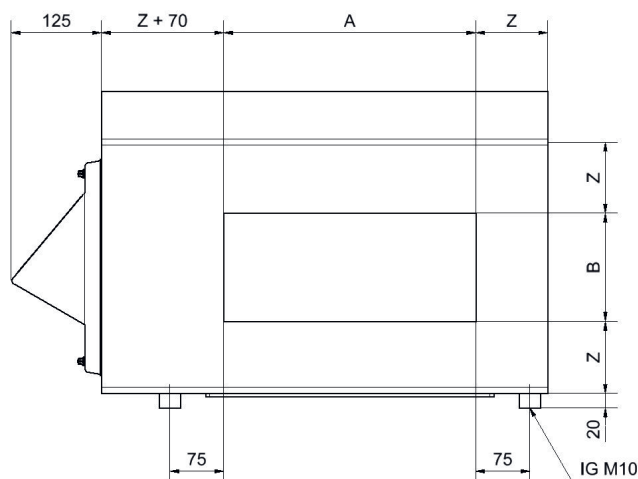- Metal-free zones for non-movable pieces

The dimensions of these zones are specified in the particular data sheets.

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Type: BD

TECHNICAL DATA

Mechanical data	
Sensor aperture - height	50 – 500 mm (50 mm steps), special size on request
Sensor aperture - width	100 – 700 mm (50 mm steps), special size on request
Material	Stainless steel (Interior zone: Epoxy)
Mounting	4x female thread M10 / deep 10
Metall free zone for static parts	1,0 x Sensor's heigth
Metall free zone for moving parts[3]	1,5 x Sensor's heigth
Conditions of use	
Storage temperature	-10 – 50°C
Operating temperature	0 – 50°C
Protection class	IP65 (IP69K for versions HPW)
Electrical connection	Supply via control unit; Control unit mounted directly at the sensor or optionally mounted up to 3 m away

DIMENSIONS (M-Pulse3)

Dimension A or B (minor dimension)	Dimension T	Dimension Z
< 100 mm	available on request	available on request
101 – 175 mm	300 mm	100 mm
176 – 250 mm	350 mm	120 mm
251 – 300 mm	400 mm	140 mm
301 – 350 mm	450 mm	160 mm
351 – 400 mm	450 mm	180 mm
401 – 500 mm	500 mm	200 mm
501 – 600 mm	550 mm	220 mm
> 600 mm	available on request	available on request

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