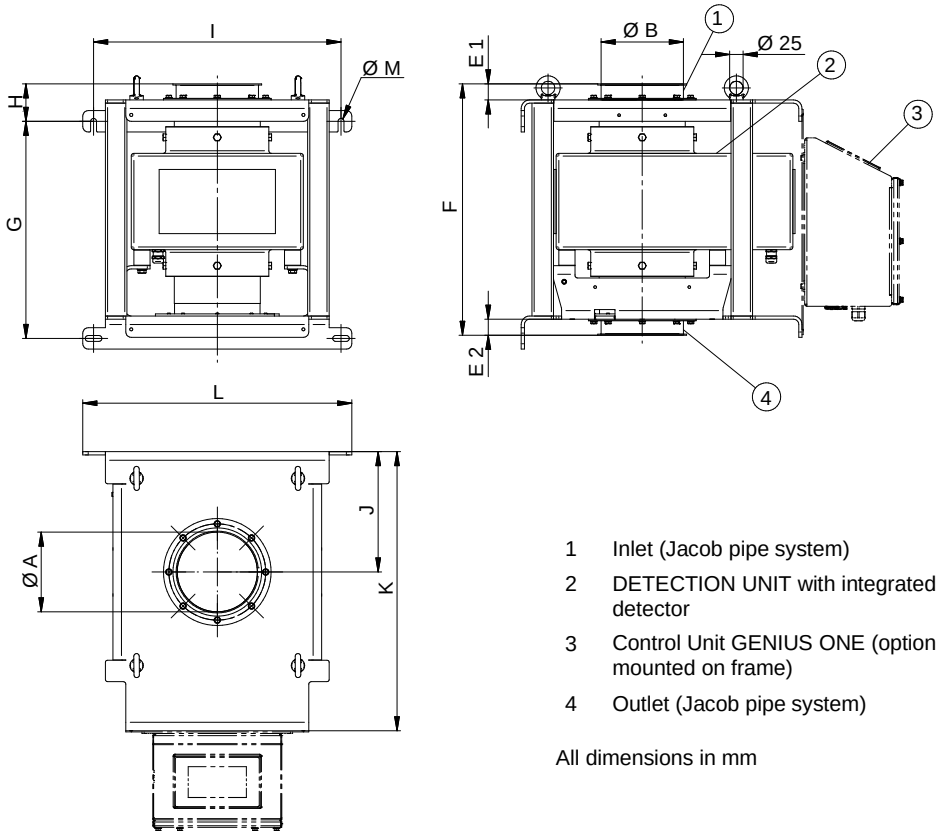
DETECTION UNIT RG 50-250

■ Dimensions DETECTION UNIT with metal detector P-SCAN RG



1 Inlet (Jacob pipe system)
2 DETECTION UNIT with integrated metal detector
3 Control Unit GENIUS ONE (option mounted on frame)
4 Outlet (Jacob pipe system)

All dimensions in mm

■ Technical data

Type [3]			Max. scanning sensitivity [1]			Max. throughput [2]	Effective ID of inlet pipe ØA	Nominal width inlet, outlet ØB Jacob pipe system
Detection Unit	NW	CU	Ø Fe	Ø V2A	Ø NonFe			
RG	50	-GO	0.3	0.5	0.4	2000 l/h	40	80
RG	80	-GO	0.4	0.8	0.5	8000 l/h	78	80
RG	100	-GO	0.5	0.9	0.6	12000 l/h	99	100
RG	120	-GO	0.6	0.9	0.6	16000 l/h	119	120
RG	150	-GO	0.7	1.0	0.8	25000 l/h	149	150
RG	200	-GO	0.8	1.1	0.8	44000 l/h	188	200
RG	250	-GO	1.0	1.3	1.2	69000 l/h	238	250

Type [3]			E1	E2	F	G	H	I	J	K	L	M	Weight [4] [kg]
Detection Unit	NW	CU											
RG	50	-GO	50	30	402	318	90	400	208,5	475	440	11	56
RG	80	-GO	30	30	382	318	70	400	208,5	475	440	11	56
RG	100	-GO	30	30	382	318	70	400	208,5	475	440	11	56
RG	120	-GO	30	30	382	318	70	400	208,5	475	440	11	56
RG	150	-GO	30	30	470	406	70	460	225	522	500	11	65
RG	200	-GO	35	35	526	454	75	520	255	582	560	11	94
RG	250	-GO	48	48	642	544	88	590	290	652	630	11	120

All dimensions in mm

[1] The stated detection sensitivity (ball Ø in mm) applies for nonconductive products at the standard operation frequency and refers to the centre of the detection aperture (most disadvantageous position) for free fall application. Products that show intrinsic conductivity due to moisture content, electrolytes or other conductive contents may reduce the sensitivity as well as variations of product temperature, environmental effects (mechanical shocks and vibrations, electromagnetic pollution) or the set product angle. The detectable size of metal particles depends on their nature, shape and position while passing the metal detector.

[2] The throughput rate depends on the flow characteristics and density of the bulk material, on the installation location of the metal separator, and on the possible presence of any upstream magnet systems.

[3] Example for Type-Naming: DETECTION UNIT RG 80-GO.

[4] Guide value, the actual weight may be different depending on options and configuration.

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DETECTION UNIT RG 50-250

■ Conditions of use

Use: For inspection of free falling bulk materials in the food industry, i.e. spices, herbs, grain, flour, milk powder, etc. or in the chemical and pharmaceutical industry for similar applications with high hygienic requirements.

Bulk material classification:

- **Grain shape:** Powder, fine-grained bulks, granules, flakes etc.
- **Max. grain size:** Depending on the pipe diameter
- **Pourability:** Good, medium, poor
- **Attributes:** Dry, damp, not abrasive, product effects (material conductivity) can be compensated
- **Material flow:** Free fall, no back draft of material) [1)]
- **Bulk material temperature:** Maximum +80° C
- **Ambient conditions:** -10° C to +50° C, 25% to 85% rH, no condensation
- **Storage and shipping conditions:** -10° C to +50° C, 25% to 85% rH, no condensation
- **Max. conveying pipe pressure:** Maximum 0.1 bar

[1)] For installation in incline pipe systems, for pipes with material column or for pressure or suction lines with high speed conveying please contact the Sesotec sales team.

■ Scope of delivery / Design / Connections

Scope of delivery: Ready to install detection unit with integrated metal detector, integrated scanning pipe and separated control unit GENIUS ONE; inlet and outlet with pipe connector type Jacob.

Mechanical design:

DETECTION UNIT and electronics housing:	Stainless steel 1.4301 (AISI 304), bead blasted
Scanning pipe:	PP (outside antistatic coated)
Parts in contact with product:	Stainless steel 1.4301 (AISI 304), PP

Electrical design:

Control Unit:	GENIUS ONE remote, cable length 3 m
Nominal voltage:	100-240V AC,N,PE
Maximal current:	0.5 A-0.25 A
Mains cable:	1.8 m with safety plug
Ingress protection:	IP 65, (rain shelter required if operated outdoor)
Self-monitoring system:	Detection coil and outputs
Interfaces:	Ethernet (TCP/IP 100 Mbit/s) and USB (on board – without hardware connectors)
Operation:	See technical data sheet for control unit GENIUS ONE

■ Options

- ☐ Multifrequency technology DUO - two different operation frequencies (only in combination with operation frequency 6/8 or 5/7)
- ☐ Design for bulk material temperatures up to 140°C (only in combination with scanning pipe made of PVDF, compressed air supply required)
- ☐ Scanning pipe made of PVDF (for bulk material temperatures up to 140°C or for improved wear protection)
- ☐ UL/CSA certificate (only in combination with US power cable)
- ☐ Power cable
  - ☐ US-power cable
  - ☐ UK-power cable
- ☐ Signal devices
  - ☐ Visual alarm; failure and metal indication
  - ☐ Audible alarm; failure and metal indication
  - ☐ Combination alarm; failure and metal indication
- ☐ Control Unit – installation type:
  - ☐ Mounted on detection coil
  - ☐ Remote, cable length 6 m
  - ☐ Remote, cable length 10 m
- ☐ Connect-Bundle (hardware connectors implemented in the control unit housing for USB-port and Ethernet interface)
- ☐ Additional interface
  - ☐ Profibus
- ☐ Testing device
  - ☐ automatic testing device (only functional test of the metal detector, please refer to separate data sheet) optional with 1 or 3 test balls (only in combination with nominal width 80 up to 250, compressed air supply required)

■ Accessories

- ☐ Test samples
- ☐ Insight.NET (Visualisierung, Protokollierung, Fernbedienung und Diagnose)

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