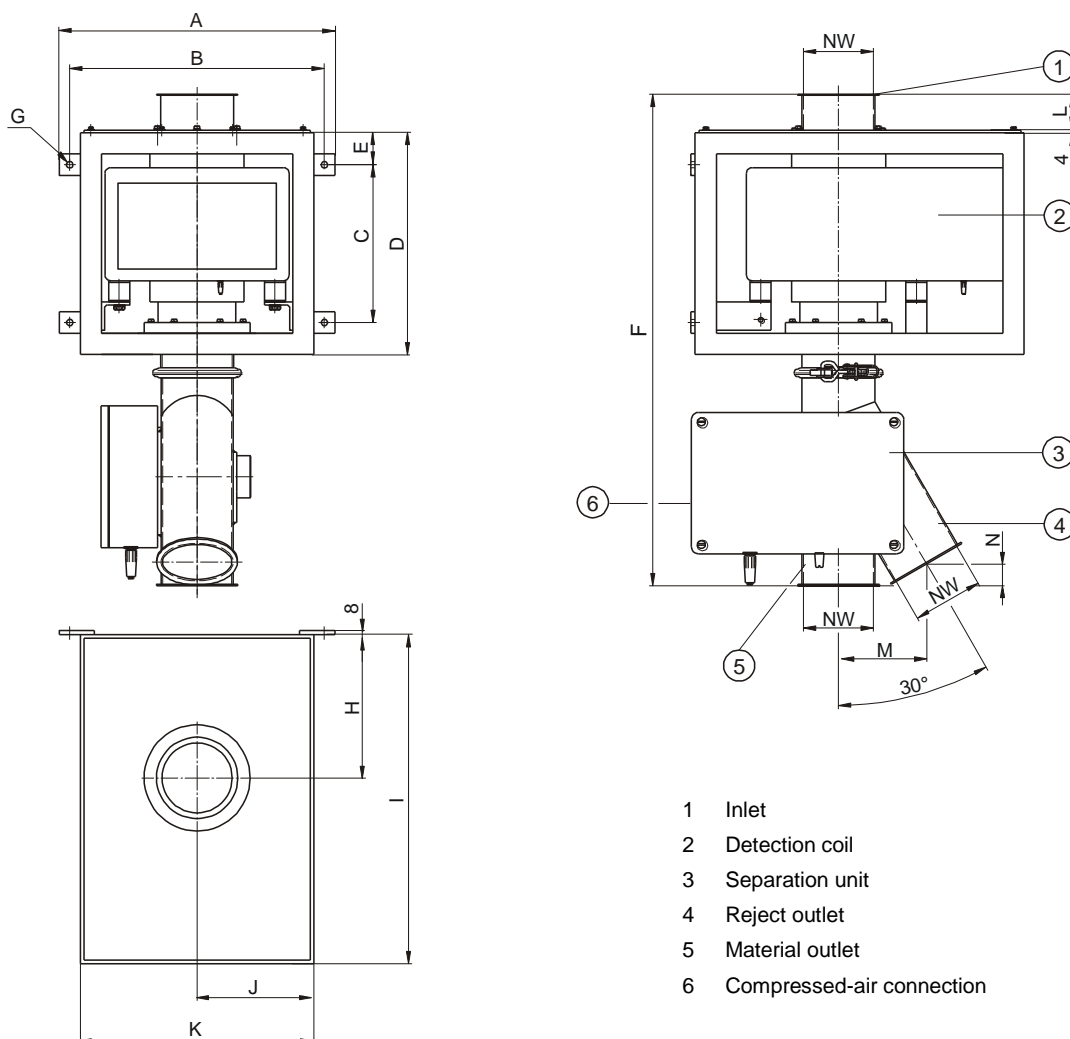


RAPID 5000-GP metal separator

■ Dimensions



■ Technical data

Type	Max. scanning sensitivity ¹⁾			Max. throughput ²⁾	Nominal width Ø NW System Jacob	Weight [kg]
	Ø Fe	Ø V2A	Ø NonFe			
R5000-080-GP	0.4	0.8	0.5	8000 l/h	80	75
R5000-100-GP	0.5	0.8	0.6	12000 l/h	100	75
R5000-120-GP	0.6	0.9	0.6	16000 l/h	120	75
R5000-150-GP	0.7	1.0	0.8	25000 l/h	150	125
R5000-200-GP	0.8	1.1	0.8	44000 l/h	200	145
R5000-250-GP	1.0	1.3	1.0	69000 l/h	250	190

Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N
R5000-080-GP	390	360	203	293	55	615	9	221.0	496	165	330	51	app. 108	app. 23
R5000-100-GP	390	360	223	313	45	695	9	202.5	471	165	330	51	app. 124	app. 30
R5000-120-GP	390	360	238	328	45	749	9	215.0	496	165	330	51	app. 148	app. 43
R5000-150-GP	470	440	375	465	45	947	11	240.0	540	205	410	51	app. 175	app. 51
R5000-200-GP	570	540	450	600	75	1183	11	265.0	590	245	490	37	app. 228	app. 68
R5000-250-GP	640	610	650	800	75	1482	11	320.0	708	280	560	42	app. 272	app. 75

Larger types on request

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). 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 stated throughput rate is based on well pourable granules. The shape of the particles and thus the flow characteristic of the bulk material determine the throughput rate which can vary. Upstream installed magnet separators may also reduce the throughput rate due to reduction of the cross section.



RAPID 5000-GP metal separator

■ 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
- **Max. grain size:** Ball shape $\varnothing < 8\text{mm}$,
- **Pourability:** Good, medium, poor
- **Attributes:** Dry, damp, not abrasive, product effects (material conductivity) can be compensated
- **Material flow:** Free fall, falling height max 500 mm above top edge¹⁾ (no back draft of material)
- **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⁾ The permissible drop height refers to standard overall height in vertical pipe systems. For aslope installing please contact the S+S sales technician.

■ Scope of delivery / Design / Connections

Scope of delivery: Metal separator composed of detection and separation unit connected together by a pull ring and separated control unit GENIUS+, inlet and outlets made according to Jacob pipe system.

Mechanical design:

Detection unit and electronics housing:	Stainless steel 1.4301 (AISI 304), bead blasted
Separation unit complete:	Stainless steel 1.4301 (AISI 304)
Scanning pipe:	PP (outside antistatic coated)
Parts in contact with product:	Stainless steel 1.4301 (AISI 304), PP, NBR
Compressed air connection:	5-8 bar; 6/8 mm hose connection
Compressed air consumption:	Approx. 0.5 – 3.0 l / switching operation (depending on size)

Electrical design:

Operating voltage:	100-240 VAC ($\pm 10\%$), 50/60 Hz
Current consumption:	Approx. 250 mA/115 VAC, approx. 120 mA/230 VAC
Mains cable:	1.8 m with safety plug
Connecting cable (device / control unit):	3 m
Ingress protection:	IP 65, (rain shelter required if operated outdoor)
Eject duration (metal impulse):	Adjustable from 0.05 to 60 sec
Self-monitoring system:	Detection coil and outputs
Operation:	See technical data sheet for control unit GENIUS+

■ Accessories

- | | | |
|---|---|--|
| <input type="checkbox"/> Visual alarm | <input type="checkbox"/> Combination alarm (visual alarm and audible alarm) | <input type="checkbox"/> Push button for functional test in a separate housing |
| <input type="checkbox"/> Failure indication | <input type="checkbox"/> Failure indication | <input type="checkbox"/> Test samples |
| <input type="checkbox"/> Failure and metal indication | <input type="checkbox"/> Failure and metal indication | <input type="checkbox"/> UL/CSA certificate |
| <input type="checkbox"/> Audible alarm | <input type="checkbox"/> Filter control valve | |
| <input type="checkbox"/> Failure indication | <input type="checkbox"/> Push button for manual rejection in a separate housing | |
| <input type="checkbox"/> Failure and metal indication | | |

■ Options

- | | | |
|---|--|--|
| <input type="checkbox"/> GENIUS+ Touch with USB interface | <input type="checkbox"/> Profibus | <input type="checkbox"/> Cable set for remote control unit 6 m or 10 m |
| <input type="checkbox"/> Multi-frequency technology Duo | <input type="checkbox"/> Central data management system | <input type="checkbox"/> Manual test facility |
| <input type="checkbox"/> Serial interface RS232 with plug (IP65, 4-pole) | <input type="checkbox"/> Software InsightLog.NET (saving log data) | <input type="checkbox"/> Semiautomatic test facility with one test samples |
| <input type="checkbox"/> Serial interface RS485 with plug (IP65, 4-pole) | <input type="checkbox"/> Software Insight.NET (visualisation, logging, remote control and diagnosis) | <input type="checkbox"/> Easy-Clean design (overall height F +50 mm) |
| <input type="checkbox"/> Ethernet interface (TCP/IP 100 Mbit/s, IP65, RJ45) | <input type="checkbox"/> Compressed-air monitor | <input type="checkbox"/> US-power cable |
| <input type="checkbox"/> WLAN interface (802.11 b/g) with integrated aerial | <input type="checkbox"/> Monitor system for separation unit | |

■ Special versions / Supplementary systems

- | | |
|---|--|
| <input type="checkbox"/> Design for bulk material temperatures up to 140° C | <input type="checkbox"/> Pipe transition pieces, customized flanges |
| <input type="checkbox"/> Explosion-proof version ATEX | <input type="checkbox"/> Model with improved wear out protection |
| <input type="checkbox"/> Pharma design | <input type="checkbox"/> Magnet systems for pre-removal of ferrous metals |
| <input type="checkbox"/> Special supply voltages | <input type="checkbox"/> Increased free fall height up to 1 m (heigher drop height on request) |