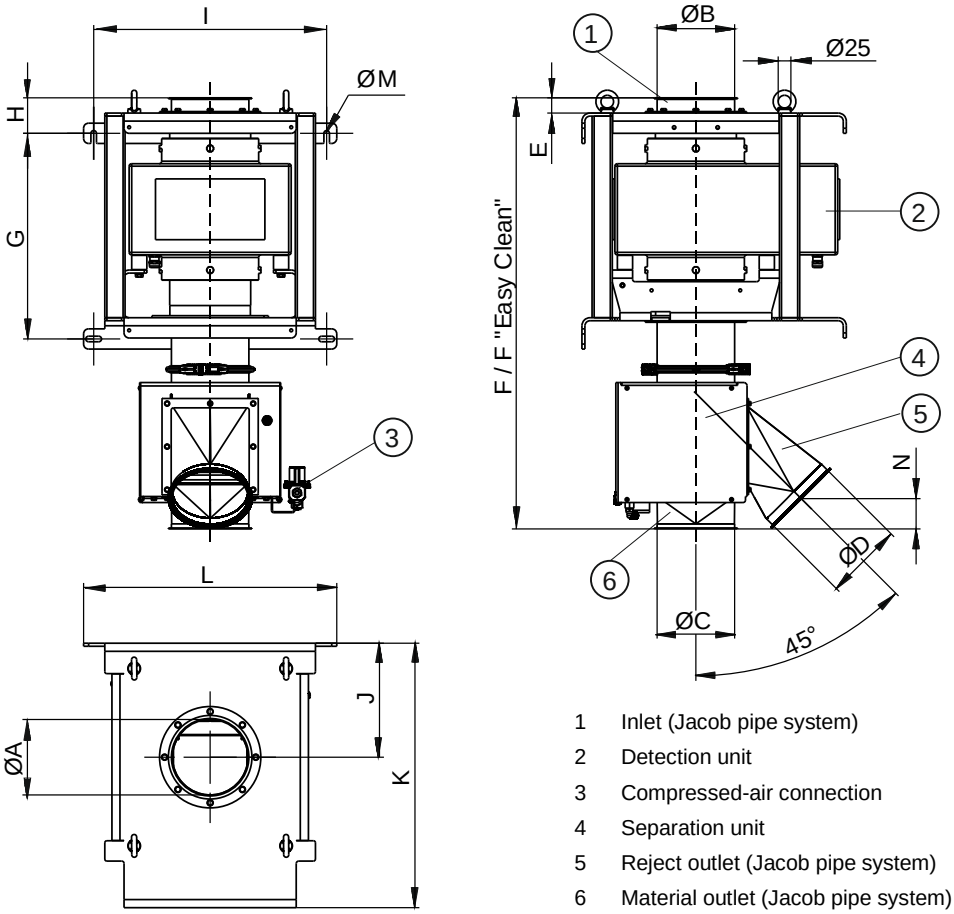
RAPID 4000 metal separator

■ Dimensions



1 Inlet (Jacob pipe system)
2 Detection unit
3 Compressed-air connection
4 Separation unit
5 Reject outlet (Jacob pipe system)
6 Material outlet (Jacob pipe system)

All dimensions in mm

■ Technical data

Type [3]			Maximum sensitivity [1]			Typical throughput [2]	Effective ID of inlet pipe Ø A	Inlet, nominal width Ø B	Material outlet, nominal width Ø C	Reject outlet, nominal width Ø D
RAPID	NW	CU	Ø Fe	Ø V2A	Ø NonFe					
4000	50	-GO	0.3	0.5	0.4	2000 l/h	40	80	80	80
4000	80	-GO	0.4	0.8	0.5	8000 l/h	78	80	80	80
4000	100	-GO	0.5	0.9	0.6	12000 l/h	99	100	100	100
4000	120	-GO	0.6	0.9	0.6	16000 l/h	119	120	120	100
4000	150	-GO	0.7	1.0	0.8	25000 l/h	149	150	150	150
4000	200	-GO	0.8	1.2	0.8	44000 l/h	188	200	200	200
4000	250	-GO	1.0	1.3	1.0	69000 l/h	234	250	250	200

Type [3]			E	F	G	H	I	J	K	L	Ø M	N	F "Easy Clean"	Weight [4] [kg]
RAPID	NW	CU												
4000	50	-GO	50	666	318	90	400	208.5	475	440	11	39	691	66
4000	80	-GO	30	634	318	70	400	208.5	475	440	11	39	671	66
4000	100	-GO	30	667	318	70	400	208.5	475	440	11	50.5	699	68
4000	120	-GO	30	672	318	70	400	208.5	475	440	11	50.5	699	68
4000	150	-GO	30	851	406	70	460	225	522	500	11	60	853	81
4000	200	-GO	35	1210	454	75	520	255	582	560	11	108	-	132
4000	250	-GO	48	1383	544	88	590	290	652	630	11	128	-	160

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. Observe the projection of the mechanical unit: NW 80 +21 mm, NW 100 and 120 +32 mm.

[3] Example for Type-Naming: RAPID 4000-50-GO.

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

We reserve the right to change the contents due to product innovation or technical improvement.

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RAPID 4000 metal separator

■ Conditions of use

Use: Installation in pressure less pipe systems for inspection in of free falling bulk materials in the food industry, i.e. spices, herbs, grain, etc. or in the chemical and other industry for similar applications with low-level hygienic requirements.

Bulk material classification:

- **Grain shape:** Grain, granulates, grinding stock, pellets
- **Max. grain size:** Ball shape Ø < 8 mm,
- **Pourability:** Good to medium
- **Attributes:** Dry, damp, not abrasive, product effects (material conductivity) can be compensated
- **Material flow:** Free fall, falling height max 500 mm above top edge[1)] (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:** Pressureless conveying

[1)] The permissible drop height refers to standard overall height in vertical pipe systems. For aslope installing please contact the Sesotec 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 ONE, Inlet and material/reject outlets with Jacob pipe connectors. Scope of supply includes a certificate of food conformity acc. to (EG) Nr. 1935/2004 and to FDA

Mechanical design:	Detection unit and electronics housing:	Stainless steel 1.4301 (AISI 304), bead blasted
	Separation unit complete:	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, Teflon, POM, silicone
	Compressed air connection:	Nominal width 50 – 150: 5-8 bar; 6/8 mm hose connection Nominal width 200 – 250: 5-8 bar; 8/10 mm hose connection
	Compressed air consumption:	Approx. 0.5 – 3.0 standard litres / switching operation (depending on size)
Electrical design:	Control Unit:	GENIUS ONE remote, cable length 3 m
	Nominal voltage:	100-240V AC,N,PE
	Maximal current:	0.8 A-0.4 A
	Mains cable:	1.8 m with safety plug
	Ingress protection:	IP 54, (rain shelter required if operated outdoor)
	Eject duration (metal impulse):	Adjustable from 0.05 to 60 sec
	Self-monitoring system:	Detection coil and outputs
	Interfaces:	Ethernet (TCP/IP 100 Mbit/s), 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 7/8, 6/8, 5/8, 5/7)
- ☐ Design for bulk material temperatures up to 140° C (only in combination with scanning pipe made of PVDF)
- ☐ 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
- ☐ Push button for manual rejection in a separate housing
- ☐ Control Unit – installation type:
  - ☐ mounted at detection unit
  - ☐ 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
- ☐ Compressed-air monitor
- ☐ Monitor system for separation unit
- ☐ Filter control valve
- ☐ Compressed air tank
  - ☐ For the compensation of non-constant compressed air supply
  - ☐ To secure a single separation in the event of a failure of the compressed air supply
- ☐ Testing device
  - ☐ Manuel testing device (increased installation height, please refer to separate datasheet)
  - ☐ Automatic testing device (only functional test of the metal detector, please refer to separate datasheet) optional with 1 or 3 test balls (only in combination with nominal width 80 up to 250)
- ☐ Design for product freefalling height up to 1 m (increased installation height)
- ☐ Easy Clean design - swivel device of the separation unit for easier cleaning (only in combination with device connections made of Jacob-Piping-System and with nominal width 50 up to 150)

■ Accessories

- ☐ Test samples (see separate price list)
- ☐ Insight.NET (visualization, data saving and remote maintenance)

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