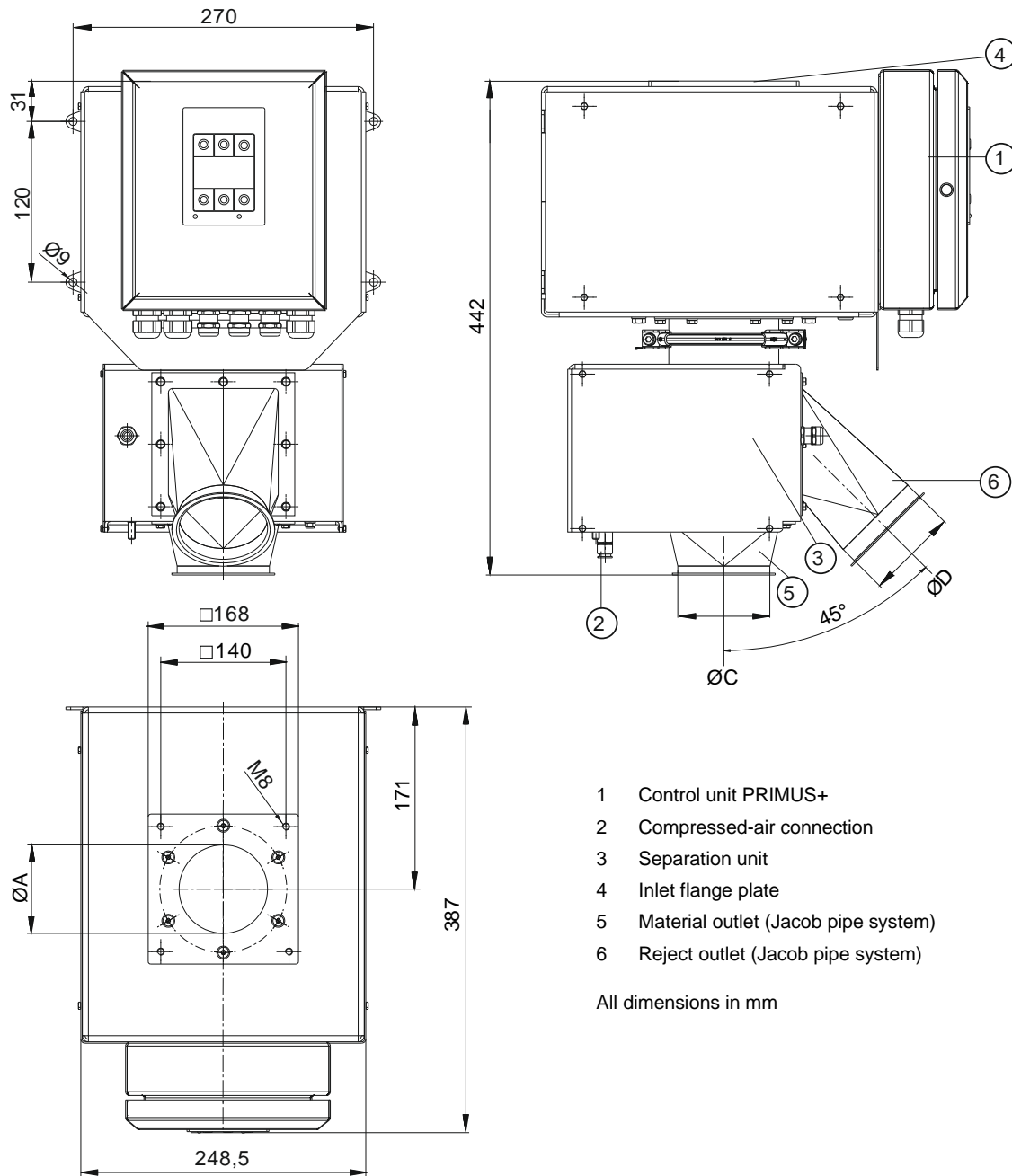


RAPID VARIO-FS 30-PP – 250-PP metal separator

■ Dimensions RAPID VARIO-FS 30-PP – 70-PP



- 1 Control unit PRIMUS+
- 2 Compressed-air connection
- 3 Separation unit
- 4 Inlet flange plate
- 5 Material outlet (Jacob pipe system)
- 6 Reject outlet (Jacob pipe system)

All dimensions in mm

■ Technical data

Type	Maximum sensitivity ¹⁾ Ø Ferrous ball	Maximum throughput ²⁾	Inlet flange plate, effective ID of inlet pipe ØA	Inlet, nominal width ØB	Material outlet, nominal width ØC	Reject outlet, nominal width ØD	Weight [kg] ³⁾
RAPID VARIO-FS 30-PP	0.3	400 l/h	27.2	/	78	78	26
RAPID VARIO-FS 50-PP	0.4	2000 l/h	44.0	/	78	78	26
RAPID VARIO-FS 70-PP	0.5	5000 l/h	67.8	/	78	78	26

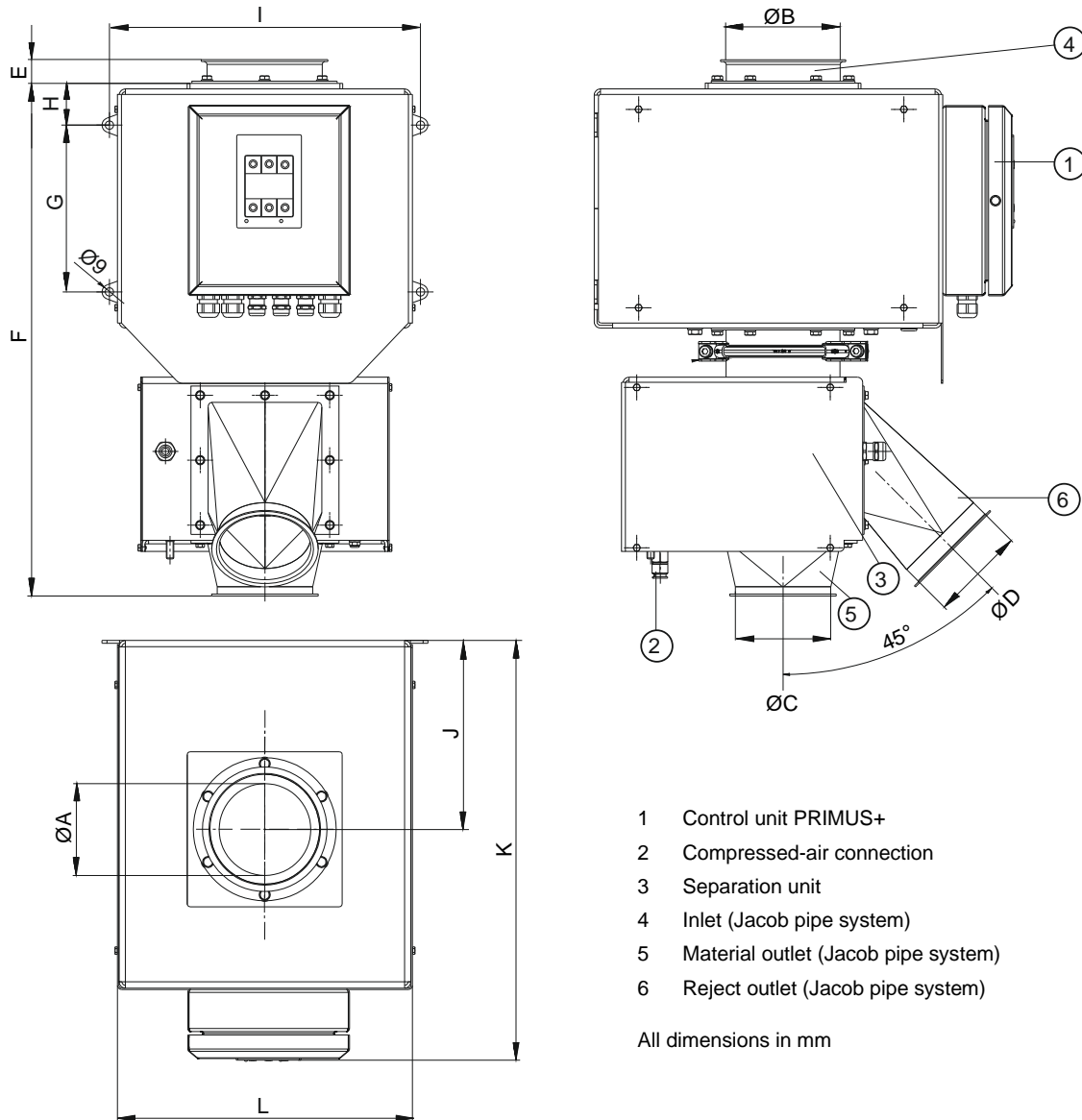
¹⁾ The stated detection sensitivity (ferrous ball Ø in mm) applies for nonconductive products at the standard operation frequency and refers to the centre of the detection aperture (most disadvantageous position). Products that show intrinsic conductivity due to moisture content, electrolytes or other 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.

³⁾ Guide value, the actual weight may be different depending on options and configuration. All dimensions in mm

RAPID VARIO-FS 30-PP – 250-PP metal separator

■ Dimensions RAPID VARIO-FS 100-PP – 150-PP



■ Technical data

Type	Maximum sensitivity ¹⁾ Ø Ferrous ball	Maximum throughput ²⁾	Inlet flange plate, effective ID of inlet pipe ØA	Inlet, nominal width ØB	Material outlet, nominal width ØC	Reject outlet, nominal width ØD	Weight [kg] ³⁾
RAPID VARIO-FS 100-PP	0.7	12000 l/h	99	99	99	99	37
RAPID VARIO-FS 120-PP	0.8	16000 l/h	119	119	119	99	37
RAPID VARIO-FS 150-PP	1.2	25000 l/h	149	149	149	149	45

Type	E	F	G	H	I	J	K	L
RAPID VARIO-FS 100-PP	28	553	180	45	336	204	462	318.5
RAPID VARIO-FS 120-PP	28	553	180	45	336	204	462	318.5
RAPID VARIO-FS 150-PP	36	649	215	45	400	190	462	373.5

¹⁾ The stated detection sensitivity (ferrous 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.

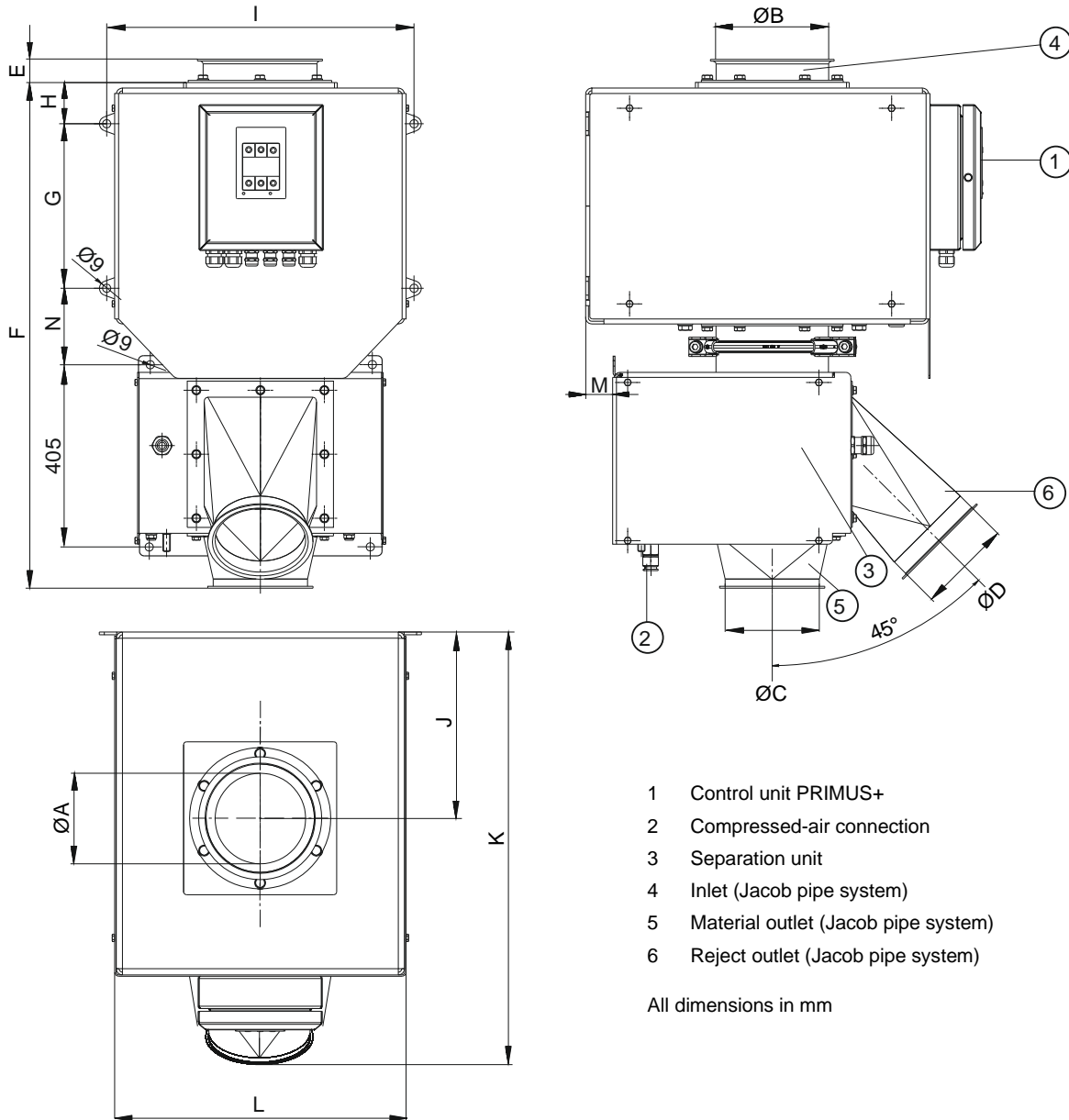
²⁾ The stated throughput rate is based on well pourable granules. The shape of the particles and thus the flow characteristic of the bulk material determine the throughput rate which can vary. Upstream installed magnet separators may also reduce the throughput rate due to reduction of the cross section.

³⁾ Guide value, the actual weight may be different depending on options and configuration.

All dimensions in mm

RAPID VARIO-FS 30-PP – 250-PP metal separator

■ Dimensions RAPID VARIO-FS 200-PP – 250-PP



■ Technical data

Type	Maximum sensitivity ¹⁾ Ø Ferrous ball	Maximum throughput ²⁾	Inlet flange plate, effective ID of inlet pipe ØA	Inlet, nominal width ØB	Material outlet, nominal width ØC	Reject outlet, nominal width ØD	Weight [kg] ³⁾
RAPID VARIO-FS 200-PP	1.5	44000 l/h	188	199	199	199	105
RAPID VARIO-FS 250-PP	2.0	69000 l/h	234	249	249	199	125

Type	E	F	G	H	I	J	K	L	M	N
RAPID VARIO-FS 200-PP	35	931	240	55	485	248	664	458.5	47	135
RAPID VARIO-FS 250-PP	48	1044	320	55	565	258	674	538.5	57	148

¹⁾ The stated detection sensitivity (ferrous 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.

³⁾ Guide value, the actual weight may be different depending on options and configuration.

All dimensions in mm

RAPID VARIO-FS 30-PP – 250-PP metal separator

■ Conditions of use

Use: For inspecting free falling bulk materials in the plastics industry and similar applications in other industries as well as applications with low hygienic requirements.

Bulk material classification:

- **Grain shape:** Powder, Granulates, Flakes
- **Max. grain size:** Ball shape $\varnothing < 8$ 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 edge (No back draft of material), depressurized
- **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

■ Scope of delivery / Design / Connections

Scope of delivery: Metal separator comprising two moduls, a detection modul with the attached control unit PRIMUS+ and a separation modul connected by a pull ring.
Inlet and outlets made according to Jacob pipe system (except NW 30, 50, 70)

Mechanical design:

Electronics housing:	Sheet steel, varnished, aluminium grey (RAL 9007)
Detection unit:	Nominal width 30-70, cover plate varnished, aluminium grey (RAL 9007) Nominal width 100-250 cover plate stainless steel 1.4301 (AISI 304), surface brushed
Separation unit complete:	Stainless steel 1.4301 (AISI 304), bead blasted
Scanning pipe:	PE-EL (electrical conductive to avoid false tripping)
Parts in contact with product:	Stainless steel 1.4301 (AISI 304), PE-EL, Teflon, POM, SBR / NR caoutchouc
Compressed air connection:	RV-FS/30-150-PP: 5-8 bar; 6/8 mm hose connection RV-FS/200-250-PP: 5-8 bar, 8/10 mm hose connection
Compressed air consumption:	RV-FS/30-120-PP: approx 0.4 l / switch operation RV-FS/150-PP: approx 0.5 l / switch operation RV-FS/200-250-PP: approx 1.3 l / switch operation

Electrical design:

Nominal voltage:	100-240V AC,N,PE
Maximal current:	0.4 A-0.2 A
Mains cable:	1.8 m with grounded plug
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
Interfaces:	Ethernet (TCP/IP 100 Mbit/s), (on board – without hardware connectors)
Scanning sensitivity:	Adjustable from 1% to 100%
Operation:	See technical data sheet for Control Unit PRIMUS+

■ Options

- | | | |
|---|--|--|
| <input type="checkbox"/> Parts in contact with product suitable for food (only available with scanning pipe made of PP or PVDF) | <input type="checkbox"/> Combination alarm (visual / audible) | <input type="checkbox"/> Monitoring bundle (monitor system for separation unit and compressed air monitor) |
| <input type="checkbox"/> Scanning pipe made of PVDF (for parts of contact with food and/or improved wear protection) | <input type="checkbox"/> Failure and metal indication | <input type="checkbox"/> Filter control valve |
| <input type="checkbox"/> US/CSA certificate | <input type="checkbox"/> Push button for manual rejection in a separate housing | <input type="checkbox"/> Cable set for separation unit, plug-gable |
| <input type="checkbox"/> UK-power cable | <input type="checkbox"/> Control unit – installation type: | <input type="checkbox"/> Top cover |
| <input type="checkbox"/> US-power cable | <input type="checkbox"/> remote, length 6 m | <input type="checkbox"/> Inlet connection Jacob NW 80 (for NW 30, NW 50 and NW 70) |
| | <input type="checkbox"/> remote, length 15 m | |
| | <input type="checkbox"/> Connect-Bundle (hardware connectors implemented in the control unit for Ethernet interface) | |

■ Accessories

- Test samples
- Insight.NET (visualization, data saving and remote maintenance)