# Extraction units/dust extractor Vacomat range













For mobile use during operation









### Planning and implementation from a single source

Schuko is your specialist when it comes to extraction and filter technology, from consultation, planning and production to delivery, installation, commissioning, maintenance and operator training, we've got it all.

- That's what we mean by service.

One of our other strengths is more than 200 specialists in seven factories.

For more than 50 years, the owner-operated company's team has been producing extraction and filter systems as used in wood, paper and plastic processing.

Our customer base ranges from craftspeople and medium-sized companies to large-scale industry.

As a member of the VDMA (Verband Deutscher Maschinen- und Anlagenbau e.V., German association for mechanical and plant engineering), Schuko attaches great importance to state-of-the-art plant safety according to the applicable standards. Many products have been tested and approved by the German trade association for wood and metal (BGHM, Berufsgenossenschaften Holz und Metall) and have the corresponding seal of approval.

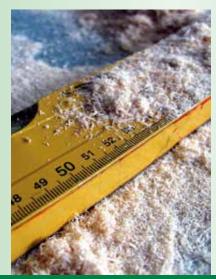
The Schuko brand is a sign of service and quality. Take us at our word and find out for yourself.

## **Dust extractor – Vacomat range**

Mobile dust extractors are ready-to-use clean air extraction systems (vacuum) for indoor use, which can be used as single or multiple machine extractors for up to 10,000 m³ per hour.

From the space-saving single station dust extraction to the powerful extraction centre for the entire machine fleet or CNC production machines, there's something for every process.







Overview – Various types are available according to your requirements

Туре	Item no.	Drive motor, 400 V, 50 Hz, 3-phase – [kW]	Suction nozzle Ø [mm]	Flow rate m³/h	Nominal flow rate [at 20 m/s]	Associated negative pressure [PA]	Filter regeneration	Filter surface area [m²]	Dimensions L x W x H [mm]	Weight [kg]	Sound pressure level [dB(A)]
140/160 XPe	304 535	2.2	140/160	1593	1447	2200	Motor-driven	9.5	1665 x 900 x 1980	306	69
180 XPe	304 631	3.0	180	2610	1832	2450	Motor-driven	13.5	2015 x 900 x 1980	369	74
200 XPe	304 644	4.0	200	2495	2262	2800	Motor-driven	14.5	2590 x 900 x 1980	465	75
250 XP	622 510	5.5	250	4400	3534	2750	Pneumatic air requirement*: Approx. 11 litres at 6 bar	32.0	3650 x 1540 x 2570	962	70
300 XP	623 010	7.5	300	5950	5089	2760	Pneumatic air requirement*: Approx. 11 litres at 6 bar	32.0	3650 x 1540 x 2570	967	74
350 XP	623 020	11	350	7950	6912	3365	Pneumatic air requirement*: Approx. 11 litres at 6 bar	50	3780 x 1550 x 2660	1070	70
350 XP TWIN	623 030	2 x 5.5	350	10000	6912	2550	Pneumatic air requirement*: Approx. 11 litres at 6 bar	50	3960 x 1610 x 2660	1160	69

<sup>\*</sup> per cleaning cycle

Note: With pulse jet cleaning, the height and length differ

Our **certified dust extractors** are perfectly suited to **wood chips and dusts** in **wood processing sectors** in particular, as there are special safety requirements due to explosive dusts here.

Our Vacomats are suitable for substances such as: **plastic, paper, non-metallic** or **mixed materials** (with dusts up to dust explosion class ST1). We recommend having these materials inspected in advance.

For **CFRP** (carbon fibre reinforced plastic), **GRP** (glass-fibre reinforced plastic) and **plaster dust**, special equipment, such as pulse jet cleaning or HEPA H13 post-filtration, provides the best results.

### Unbeatable extraction performance in a space-saving design

**Small, space-saving basic models for single machine extraction** 

### **Vacomat XPe models**

with electrical/mechanical filter cleaning using an efficient jogging motor.

Schuko

Schuko

2

2

### **Key points/features**

Vacomats are mobile dust extractors that can extract large quantities of dust and chips in the smallest of spaces. These clean air extraction systems (vacuum) for indoor use can be used as single or multiple machine extractors for up to 10,000 m³ per hour. They are produced in accordance with EU standard DIN EN 16770 and are particularly suited to wood processing companies where special safety requirements exist due to the danger of dust explosions. Materials in dust explosion class ST1 are suitable.

### **User-friendly cleaning (regeneration)**

The **designations XP and XPe** describe the method of filter regeneration.

- On the Vacomats XP, filter hose regeneration (cleaning) takes place pneumatically/mechanically. Dust and chips are tapped out using a patented "vertical vibration unit" in a way that is gentle on the filter. A compressed air connection is required for this (input pressure approx. 6 bar, working pressure 4 bar, air required per regeneration cycle, approx. 3.5 l). The regeneration mechanism can be started manually when switched off.
- Filter cleaning on the **Vacomats XPe** is purely **electrical/mechanical** via an efficient jogging motor. The automatic switch-on and switch-off mechanism starts automatically as soon as all machines are switched off. It is triggered by querying the wood processing machine via potential-free contacts. The controller for the motor-driven vibration is included in the scope of delivery. (Transformer coils are also available).
- Pulse jet cleaning XP-D or XPe-D (optional) —
  recommended for very high and particularly fine dust content.
  Cleaning via the compressed air tank takes place offline after extraction operation.

### **Highlights**

- Time savings thanks to autonomous monitoring of the extraction power.
- Highly efficient, energy-saving motors of the latest design, adapted to the power class and "Made in Germany".
- Safe investment thanks to the latest technological developments.
- **Optimum efficiency** thanks to powerful fans that were developed and produced in-house.
- Individual, user-friendly location positioning in the workspace thanks to a robust chassis with two fixed and two braked castors.

#### 1 Filter material\*\*

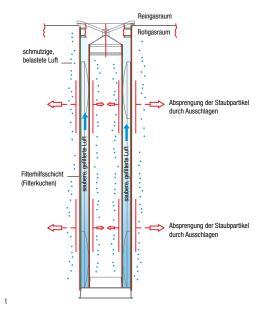
**Constant extraction power** even if the dust content is high thanks to filter hoses made of antistatic polyester needled felt\*. This is particularly beneficial, as it prevents dusts sticking permanently to the filters.

<sup>\*\*</sup>Filter material in dust class M, tested according to DIN EN 60335-2-69-AA



### Depending on the requirements – the optimum device

The Vacomats of series 140/160, 180 and 350 are equipped with the patented **Schuko Cone® filter hoses**. In contrast to standard filter hoses, these have a 60 % larger filter surface area, as they have a double-walled filter layer.



**Quick and easy commissioning** – the following are included in the scope of delivery:

- A switch cabinet that is suitable for the model
- Mobile thanks to two fixed and two braked castors
- 6 m cable, plug (apart from 350 XP TWIN)
- Integrated phase inverter and a set of chip collection bags

Discharge variants (see page 13)

Chip collection barrels, chip container, rotary valve, inclined tube auger

### 2 Chip collection barrels

- The number of chip collection barrels (1 to 4 tonnes) depends on the extraction power and the Vacomat version and varies between 240 I and 480 I according to individual requirements.
- **Effortless disposal** of production residues (dust and chips) in dust-tight chip collection barrels with an inlaid chip collection bag (diameter 770 mm, size V, item no. 582 500).
- Easy to check the fill level through the window.

### 3 Chip container 100/4/130 (optional)

- **Volume reduction** and pre-compaction for automatic discharge via a rotary valve or a discharge auger.
- Time saving the barrel does not have to be changed for larger volumes of dust and chips.
- Problem-free installation to connect a Compacto briquetting press
- Easy to check the fill level through an inspection/ viewing flap.





### Quality and safety that pay off







### **Quality – Expertise and safety**

With over 200 employees in seven factories, Schuko is an owner-operated company that has been producing extraction and filter systems as used in wood, paper and plastic processing for more than 50 years. Our customer base ranges from craftspeople and medium-sized companies to large-scale industry.

As a member company of the VDMA (Verband Deutscher Maschinen- und Anlagenbau e.V., German association for mechanical and plant engineering), we attach great importance to state-of-the-art plant safety according to the applicable standards.

**Clean air and < 0.1 mg/m³ residual dust content – M**any products have the H3 test mark and the GS mark (geprüfte Sicherheit, tested safety).

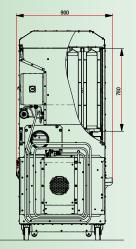
### 7 locations, 6 of which are in Germany – always nearby

Consultation, planning, production, delivery, installation, commissioning, maintenance, operator training and comprehensive customer service for quick and qualified service.

Everything from a single source – That's what we mean by service.





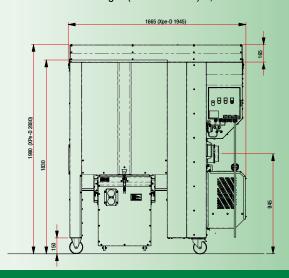


### Vacomat 140/160 XPe

One version for all applications

**User-friendly operation** with tried and tested electrical/ mechanical filter cleaning using an efficient jogging motor.

Insertion height (without cover) 1,834 mm



## The Vacomat 140/160 XPe with 1 chip collection barrel

### Vacomat 140/160 XPe technical data

Vacomat	Item no.	Drive motor, 400 V, 50 Hz, 3-phase – [kW]	Suction nozzle Ø [mm]	Flow rate m³/h	Nominal flow rate [at 20 m/s]	Associated negative pressure [Pa]	Filter regeneration	Filter surface area [m²]	Dimensions L x W x H [mm]	Weight [kg]	Sound pressure level [dB(A)]	
140/160 XPe	304 535	2.2	140/160	1593	1447	2200	Motor-driven	9.5	1665 x 900 x 1980	306	69	

Note: With pulse jet cleaning, height H + 100 mm, length L + 280 mm, weight + 37 kg (item no. 624 900) electrical controller (item no. 70102311)

#### **Top equipment:**

- Constant extraction power even if the dust content is high thanks to Schuko Cone® filter hoses made of antistatic polyester needled felt\*
- Patented Schuko Cone® filter hoses that, in contrast to standard filter hoses, have a 60 % larger filter surface area, as they have a double-walled filter layer
- Convenient disposal of production residues in an inlaid chip collection bag, size V (item no. 582 500)
- Easy to check the fill level thanks to the window in the handy, large chip collection barrel
- **Ergonomic operation** thanks to a comfortable position of the switch cabinet in the operator's field of vision. For querying 1 potential-free contact (can be expanded freely by the customer's electrician) and 3 transformer coils (can be double-occupied) to detect the machine and control the motor-driven vibration (not included in the scope of delivery).

- **Energy-saving, high-efficiency motor** with improved ventilation, "Made in Germany"
- Improved working conditions and quieter operation thanks to optimised return air emission with direct connection to standardised Schuko ducts
- **Variation option** thanks to extraction nozzles that can be installed on the left or right and with a diameter of 140 mm or 160 mm. The adapter from a diameter of 160 mm to 140 mm is also supplied of course
- The compact design enables flexible transport through standard doors (900 x 2,100 mm)
- **Fast commissioning** the Vacomat-is ready to use and equipped with a 6 m cable, a phase inverter and a set of chip collection bags
- **Easier maintenance** the filter hoses can replaced individually during service without removing the vibration frame.





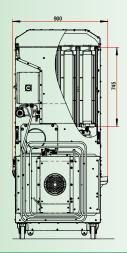
### Vacomat 180 XPe

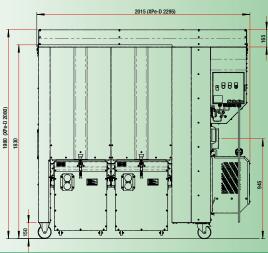
with electrical/mechanical filter cleaning using an efficient jogging motor.

Insertion height (without cover) 1,834 mm









### The Vacomat 180 XPe with 2 chip collection barrels

#### Vacomat 180 XPe technical data

Vacomat	Item no.	Drive motor, 400 V, 50 Hz, 3-phase – [kW]	Suction nozzle Ø [mm]	Flow rate m³/h	Nominal flow rate [at 20 m/s]	Associated negative pressure [Pa]	Filter regeneration	Filter surface area [m²]	Dimensions L x W x H [mm]	Weight [kg]	Sound pressure level [dB(A)]
180 XPe	304 631	3.0	180	2610	1832	2450	Motor-driven	13.5	2015 x 900 x 1980	369	74

Note: With pulse jet cleaning, height H + 100 mm, length L + 280 mm, weight + 42 kg (item no. 624 900) electrical controller (item no. 70102311)

#### **Top equipment:**

- Patented Schuko Cone® filter hoses made of antistatic polyester needled felt\*\* that, in contrast to standard filter hoses, have a 60 % larger filter surface area and a double-walled filter layer
- User-friendly operation with electrical/mechanical regeneration using an efficient jogging motor
- Variation option thanks to extraction nozzles that can be installed on the left or right
- Energy-saving, high-efficiency motor "Made in Germany"
- The flow rate pressure is monitored to ensure faultless extraction

- Easy to check the fill level thanks to the window in the two large chip collection barrels
- Convenient disposal of production residues in inlaid chip collection bags, size V (diameter 770 mm, item no. 582 500)
- Optimised transport option through standard doors (900 x 2,100 mm)
- **Fast commissioning.** The Vacomat is ready to use and equipped with a 6 m cable, an integrated phase inverter and a set of spare chip collection bags
- For the best results with CFRP, GRP and plaster dusts, we offer special equipment such as pulse jet cleaning or HEPA H13 post-filtration for our Vacomats (on request)

**Accessories** (available as options, page 11)

Pulse jet cleaning

<sup>\*\*</sup>Filter material in dust class M, tested according to DIN EN 60335-2-69-AA



### The Vacomat 200 XPe with 3 chip collection barrels

#### Vacomat 200 XPe technical data

Vacomat	Item no.	Drive motor, 400 V, 50 Hz, 3-phase – [kW]	Suction nozzle Ø [mm]	Flow rate m³/h	Nominal flow rate [at 20 m/s]	Associated negative pressure [Pa]	Filter regeneration	Filter surface area [m²]	Dimensions L x W x H [mm]	Weight [kg]	Sound pressure level [dB(A)]	
200 XPe	304 644	4.0	200	2495	2262	2800	Motor-driven	14.5	2590 x 900 x 1980	465	75	

Note: With pulse jet cleaning, height H + 100 mm, length L + 280 mm, weight + 42 kg (item no. 624 900) electrical controller (item no. 70102311)

#### **Top equipment:**

- Improved extraction power thanks to a highly efficient fan on the clean air side
- Variation option thanks to extraction nozzles that can be installed on the left or right
- Constant extraction power even if the dust content is high thanks to durable filter hoses made of antistatic polyester needled felt\*\* that prevent dust sticking permanently
- User-friendly operation thanks to electrical/mechanical regeneration using an efficient jogging motor
- Easy to check the fill level thanks to the window in the three large chip collection barrels
- Energy-saving, high-efficiency motor "Made in Germany"

- Convenient disposal of production residues in chip collection bags, size V (Ø 770 mm, item no. 582 500)
- The flow rate pressure is monitored to ensure faultless extraction
- **Optimised transport option** through standard doors (900 x 2,100 mm)
- **Fast commissioning**. The Vacomat is ready to use and equipped with a 6 m cable, an integrated phase inverter and a set of chip collection bags

**Accessories** (available as options, page 11)

Pulse jet cleaning

<sup>\*\*</sup>Filter material in dust class M, tested according to DIN EN 60335-2-69-AA

### Vacomat 250 XP and Vacomat 300 XP



### The mobile giants - Vacomat 250 XP and Vacomat 300 XP

#### Vacomats 250 XP and 300 XP technical data

Vacomat	Item no.	Drive motor 400 V, 50 Hz, 3-phase ~[kW]	Suction nozzle Ø [mm]	Flow rate m³/h	Nominal flow rate [at 20 m/s]	Associated negative pressure [Pa]	Filter regeneration pneumatic air requirement*:	Filter surface area [m²]	Dimensions L x W x H [mm]	Weight [kg]	Sound pressure level [dB(A)]
250 XP	622 510	5.5	250	4400	3534	2750	Approx. 11 litres at 6 bar	32.0	3650 x 1540 x 2570	962	70
300 XP	623 010	7.5	300	5950	5089	2760	Approx. 11 litres at 6 bar	32.0	3650 x 1540 x 2570	967	74

<sup>\*</sup> per cleaning cycle

Note: With pulse jet cleaning, height H + 50 mm, length L + 285 mm (item no. 625 300) electrical controller (item no. 70102312)

The Vacomats 250 XP and 300 XP are identical. The only difference is the extraction opening and fan power. The extraction side is on the right as standard but the left is also possible if required.

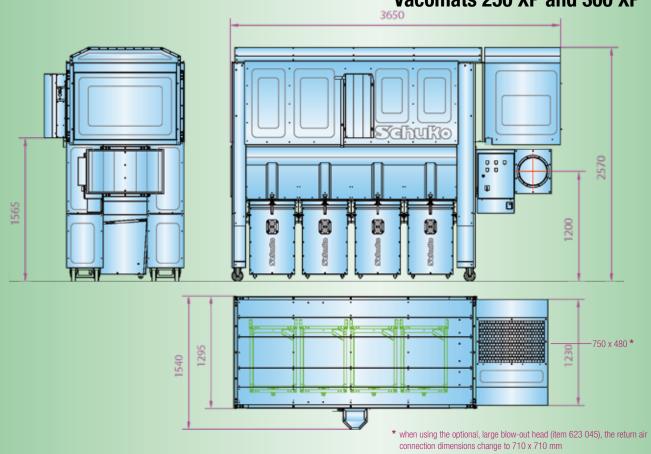
### Top equipment:

- Longer dust extractor service life thanks to a large settling chamber (low material strain on the filter medium)
- Quiet operation thanks to double-walled filter hose cladding, 70/74 dB(A)
- Easy to check the fill level thanks to the window in the four chip collection barrels
- Convenient disposal of production residues in chip collection bags, size V Ø 770 mm (item no. 582 500)
- User-friendly operation thanks to automatic filter regeneration (pneumatic/mechanical)
- Constant extraction power even if the dust content is high thanks to durable filter hoses made of antistatic polyester needled felt\*\*

- Energy-saving, high-efficiency motor "Made in Germany"
- Time savings thanks to autonomous monitoring of the extraction power using a pressure cell with indicator light
- Greater safety thanks to an automatic fire extinguishing system according to GS-HO-07, with a powder fire extinguisher (no water damage)
- Automatic switch cabinet, type V22/23 (for Vacomat 5.5/7.5 kW), rotational direction monitoring, automatic fan start-up when starting up to 8 processing machines, automatic filter regeneration
- Optimised transport options
   Standard height for transport 2,120 mm;
   without cover, 1,960 mm

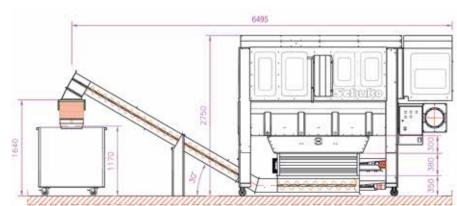
<sup>\*\*</sup>Filter material in dust class M, tested according to DIN EN 60335-2-69-AA

### Vacomats 250 XP and 300 XP



### Side discharge auger for Vacomat 250 XP/300 XP

with variable container filling on the left, without protective device for the container (optional)



Accessories (available as options)		Item no.
Supplementary controller for V22/23/24 automatic start-up	of up to 8 machines including triggering 8 corresponding pushers	7010 2211
Electrically-triggered pulse jet regeneration	for Vacomat 250 XP, 300 XP, 350 XP6	7010 2312
<b>Pulse jet cleaning</b> plus 280 mm length and 100 mm height, 37 or 42 kg plus 285 mm length and 50 mm height, approx. 50 kg	For improved filter regeneration for Vacomat 140/160, 180, 200 XPe for Vacomat 250/300 XP for Vacomat 350 XP/TWIN	624 900 625 300 625 500
Rotary valve, type ZRS 10, ATEX-approved	1,400 x 260 mm (note: height + 150 mm)	710 820
Drop shaft	on rotary valve 1,400 x 260 mm	623 050
Inclined tube auger	Length 3,000 mm for installation below the rotary valve, 1,400 x 260 mm	623 060
Chip container SPB 100/4/130	Contents 1 m³ (total height remains unchanged, no supply box)	750 150
Prepared for different <b>Compacto briquetting presses</b>		

Note: For process-related reasons, it is often not possible to fill the chip collection barrels evenly.



# **Vacomat 350 XP/TWIN** - designed especially for demanding vacuuming work directly at the point of requirement (PoD, point of dust)

#### Vacomats 350 XP and 350 XP TWIN technical data

Vacomat	Item no.	Drive motor 400 V, 50 Hz, 3-phase ~[kW]	Suction nozzle Ø [mm]	Max. flow rate m³/h	Nominal flow rate [at 20 m/s]	Associated negative pressure [Pa]	Filter regeneration pneumatic air requirement*:	Filter surface area [m²]	Dimensions L x W x H [mm]	Weight [kg]	Sound pressure level [dB(A)]
350 XP	623 020	11	350	7950	6912	3365	Approx. 11 litres at 6 bar	50	3780 x 1550 x 2660	1070	70
350 XP TWIN	623 030	2 x 5.5	350	10000	6912	2550	Approx. 11 litres at 6 bar	50	3960 x 1610 x 2660	1160	69

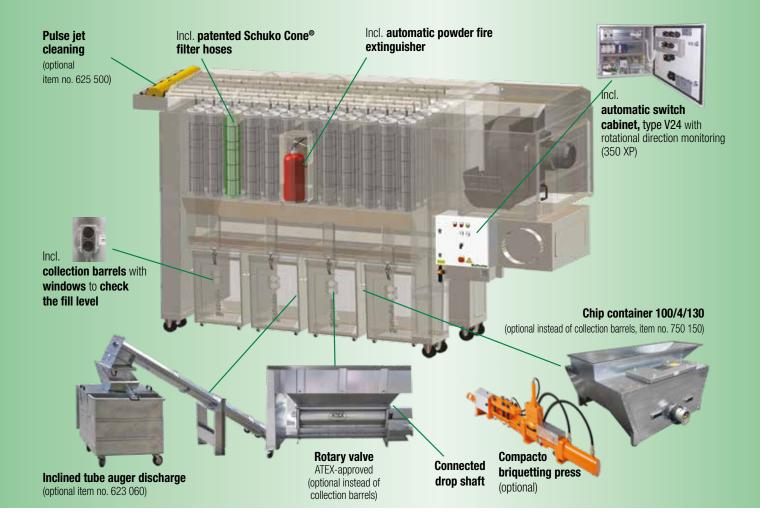
<sup>\*</sup> per cleaning cycle

Note: Pulse jet cleaning length L + 285 mm (item no. 625 500) for Vacomat 350 XP plus electrical controller (item no. 70102312)

#### Top equipment/tried and tested technology

- Constant extraction power even if the dust content is high thanks to durable filter hoses made of antistatic polyester needled felt in dust class "M", tested according to DIN EN 60335-2-69-AA
- Longer dust extractor service life thanks to a larger filter surface area and a large settling chamber (low material strain on the filter medium)
- User-friendly operation thanks to automatic pneumaticmechanical filter regeneration, optional: pulse jet cleaning can be supplied
- . Short pipe lengths and therefore low resistivity
- The chip fill level can be checked easily thanks to windows in the four large, mobile chip collection barrels

- Automatic switch cabinet with intelligent controller for automatic fan start-up when starting up to 8 machines via a transformer coil or a potential-free contact
- Automatic motor rotational direction monitoring via an indicator on the switch cabinet
- Easy maintenance thanks to autonomous monitoring of the extraction power and indication of the current degree of contamination (pressure cell with indicator light)
- Space-saving, compact design approved for indoor use (depending on the chip material)
- Improved transport option. Height reduction by removing the cover. Insertion height 1,960 mm without leg extensions and without cover (can be removed on site)
- The **TWIN** is ready for a fixed connection (wiring provided by the customer)



### **Highlights**

### **High energy efficiency:**

- Powerful fans that are produced in-house
- Energy-efficient, German IE3 motors
- Minimum resistance thanks to optimised air guidance and short lines
- Saves heating costs thanks to complete heat recovery when used indoors
- Intelligent controller combined with the networked machines (optional)

### **Device configuration**

- Standard with highly efficient 11 kW fan on the clean air side, with a fixed speed
- Right extraction side (option of left at a surcharge)
- TWIN with 2x 5.5 kW frequency-controlled motors for the greatest possible adjustment of individual extraction power for highly variable operating conditions

### Protects the environment and employees:

- At 0.1 mg/m³ ambient air, the dust level is significantly lower than the prescribed dust threshold value for the air return in workspaces
- Additional reliability thanks to a supply box as expansion space with backflow flap
- Safety equipment: automatic fire extinguishing system with powder fire extinguisher in accordance with GS-HO-07 (no water damage)
- Quiet thanks to double-walled cladding on the filter hose and fan casing 69/70 dB(A)
- Innovative, tested safety in accordance with EU standard DIN EN 16770

### Patented Schuko Cone® filter elements:

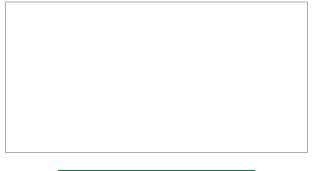
- 50 m² filter surface area in a minimum of space
- Long service life thanks to low filter surface area load
- High degree of separation
- Compact size
- Low power consumption

### Accessories (available as options)

riododdiidd (aranabio ad optiono)		110111 1101
Supplementary controller for V22/23/24 to control	max. 8 pneumatic or motor-driven pushers	70102211
Electrically-triggered pulse jet cleaning	for Vacomat 250 XP, 300 XP, 350 XP	70102312
Pulse jet cleaning	for Vacomat 350 XP/TWIN	625 500
Rotary valve, type ZRS 10, ATEX-approved	1,400 x 260 mm x 380 mm (note: height + 150 mm)	710 820
Drop shaft	on rotary valve 1,400 x 260 mm	623 050
Inclined tube auger	Length 3,000 mm for installation below the rotary valve, 1,400 x 260 mm	623 060
Chip container SPB 100/4/130	Contents 1 m³ (total height remains unchanged, no supply box)	750 150
Prepared for different <b>Compacto briquetting presses</b>		



### We stand for new ideas!





## \*\* +49 (0)7581 / 4871-0 international@schuko.com

49196 Bad Laer · Gewerbepark 2 88348 Bad Saulgau · Mackstraße 18 97478 Knetzgau · Industriestraße 22 55481 Kirchberg/H. · Kappeler Str. 20 a 14959 Trebbin · Heinrich-Schulte-Südhoff-Str. 1 25451 Quickborn · Pascalstr. 22 62-561 Ślesin, POLAND · Kolonia Sarnowa · Biskupie Sarnowskie 9 Service

**2** +49 (0)5424 / 806-0

**\*** +49 (0)7581 / 4871-0

**2** +49 (0)9527 / 9228-0

**2** +49 (0)6763 / 30319-0

**\*** +49 (0)33731 / 867-0

**2** +49 (0)4106 / 7671-0

**\*\*** +48 (0)63 / 2456400

**2** +49 (0)180 / 1111900

· info@schuko.de

· saulgau@schuko.de

· knetzgau@schuko.de

· kirchberg@schuko.de

· trebbin@schuko.de

· quickborn@schuko.de

· slesin@schuko.pl

· service@schuko.de