# Conveying Unit type PPV for granular and powdered bulk goods

# Rapid installation

**Easy cleaning** 

Can be used for ATEX

Sole form of energy is compressed air

Low overall height

## **Preferred applications**

The type PPV conveyor is used to feed processing machines, mixers or reactors safely with free-flowing powders or granular bulk solids. Typical areas of application are in the food production sector, the plastics industry, chemicals and pharmaceuticals. It offers particular advantages when transferring small batches from a wide variety of receptacles. It allows products from sacks, barrels, bins or silos to be easily made ready for the next process.

### Special advantages

- Conveying air generated by pneumatically actuated vacuum nozzle
- Pneumatic control for conveying cycles
- Pneumatic detection to determine whether product is needed in the following process
- No electrical energy at controls or conveyor
- Sole form of energy is compressed air, can thus be used in areas protected from dust explosion
- · Stainless steel housing

- Compact design with vacuum nozzle
- Low overall height and weight, resulting in benefits for installation and cleaning
- Filter with air purge cleaning, filter media matched to product
- Easy to dismantle for cleaning thanks to clamping ring with quick release fastener

# THE INNOVATION





#### How it works

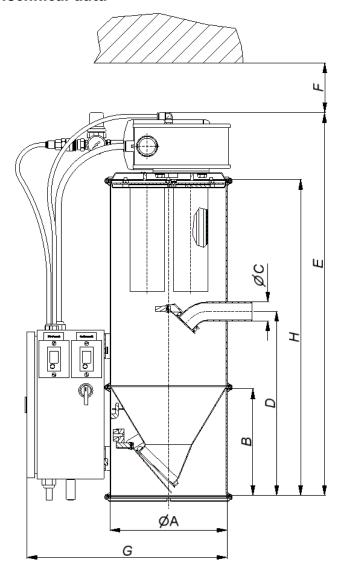
Feeding a process with the conveyor is carried out in batch operations. Actuating the toggle switch at the pneumatic controls supplies the vacuum nozzle with compressed air and generates a partial vacuum in the conveyor. This causes the product to be sucked from the discharge point into the conveyor. The conveying time is set at the controls. Once

this has finished, the discharging time starts, the filter is cleaned and the product discharged into the following hopper. The integrated level monitor signals when the product is needed again and starts a new conveying cycle automatically. Thanks to a vent filter at the base of the conveyor, the next hopper can be vented upon filling or discharge.



PPV 320-50

#### **Technical data**



required	space

F = removal of filter (detach cover + remove filter insert)

Installation position	vertical, see installation drawing as applicable							
Type of conveying	vacuum conveying system							
Filling mode	discontinuous							
Volume [litres]	6 12		15					
Net weight [kg]	~15	~26	33					
Filtration area [m2]	0,18 0,35		0,7					
Vacuum nozzle								
max. suction power [NI/min]	880	1800	1800					
air consumption [NI/min]	333	820	820					
operating pressure [bar]	5-6	3-4	3-4					
sound level [dBA]	50-65	55 - 78	55 - 78					
weight [kg]	1	2,53	2,53					
Control								
without remote control	6,5							
with remote control	7							
Feed time can be adjusted	10 – 300 sec.							
Discharge / pause time	5 – 120 sec.							
Filter cleaning pulse	0,2 - 1 sec.							
Max. ambient temperature	0 – 50°C							
Supply pressure [bar]	6-7							
Compressed air supply line	Pipe ½" / hose Ø12 (max. 5 m)							
Compressed air quality	ISO 8573-1:2010							
	Food / Pharma [1:2:1]							
	Chemical / Plastic [2:2:1]							

PPV 235-38

PPV 320-38

Туре	ØΑ	В	ØС	D	E	F	G	Н
PPV 235-38	235	215	38	371	771	~100	402	637
PPV 235-38 TR	235	215	38	371	796	~100	402	637
PPV 320-38	320	415	38	556	967	~100	487	827
PPV 320-38 TR	320	415	38	556	990	~100	487	827
PPV 320-50	320	415	50	751	1376	~300	487	1222
PPV 320-50 TR	320	415	50	601	1251	~300	487	1083

## Design

#### Mechanical system

The conveyor is distinguished by the compact configuration of vacuum generator, receiver and control unit. Another key advantage is the energy supply: no other form of energy is needed apart from compressed air. The conveyor is designed so as to be quick to dismantle, making thorough cleaning possible. Furthermore,

only high-grade stainless steel is used in its construction. Special versions for the food production or pharmaceuticals sector are also available. The filter elements can be chosen to exactly match the product that needs conveying in order to achieve maximum filtration of conveying air and separation of the product.

#### **Control system**

The controls are installed directly on the conveyor. If it is necessary to operate the conveyor from a greater distance, a remote control unit can be fitted. The controls have a built-in request indicator that automatically triggers another conveyor cycle.



PPV receiver controls



AZO GmbH + Co. KG D-74706 Osterburken Tel. +49 (0)6291 92-0 azo-solids@azo.com www.azo.com