

FPV 202



### Designed for larger dust volumes

The filter cartridge pre-separator FPV 202 was specially developed to significantly extend the service life of a downstream filter and extraction system of the LN, GL or TFS series. This system is equipped with a dedustable filter cartridges, which enable the filter to be freed from dust by compressed air blasts. The system is therefore particularly suitable for applications in which large quantities of dry dust are extracted. In combination with the downstream filter and extraction system, the FPV 202 unit achieves enormously long service lives compared to the solution with pure saturation filters.

Thanks to the INSPIRE control unit, it is also possible to integrate the system flexibly into the overall system. By pre-treating (pre-coating) the filter cartridges with Pre-cofix 200, the extraction of sticky materials, such as those produced during laser processing of plastics, wood and rubber, etc., is also possible.



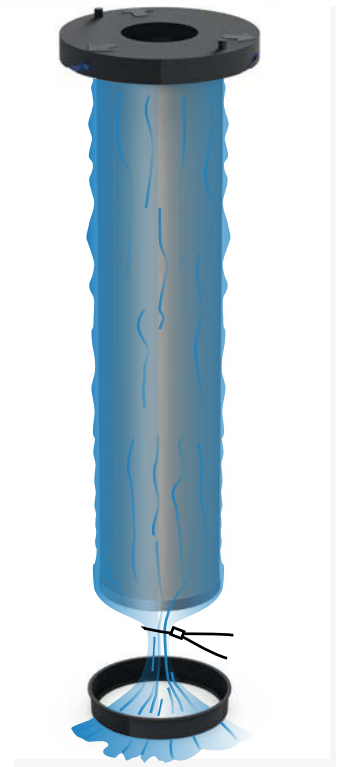
Illustration similar



### Contamination-free filter change



patented technology





## Application-dependent filter equipment

The filter cartridge pre-separator FPV 202 can be equipped with suitable filter cartridges depending on the application. There is a distinction between

Default:

For dust removal processes with dry dusts that get easily cleaned from the surface of filter cartridges. The used Polyester fleece cartridge has a conductive aluminum coating. The default filter cartridge is the optimum between filter efficiency and costs.

Optional:

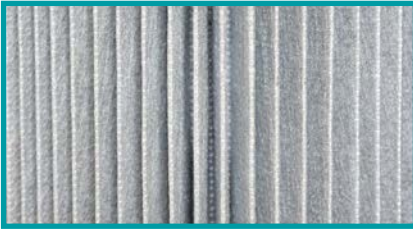
For processes with poorly cleanable dusts, e.g. in connection with precoating. The used polyester fleece cartridge with PTFE has an aluminum coating. The optional filter cartridge has a special coating which improves the cleaning process vastly. Therefore, it is optimally suitable for difficult applications.



Illustration similar



## Dedusting system



New filter cartridge



Filter cartridge in operation



Filter cartridge after dedusting

TBH antistatic filter cartridges are equipped with a microfibre surface of PES (polyester) and a conductive coating. This is a robust and well protected solution

against mechanical damage for a wide range of customer applications. PTFE coated filter cartridges are also available for special applications.



## Simple dust removal



The dust generated during the process is disposed of via the removable dust container. If required, a dust

bag can be inserted for low-contamination dust removal.

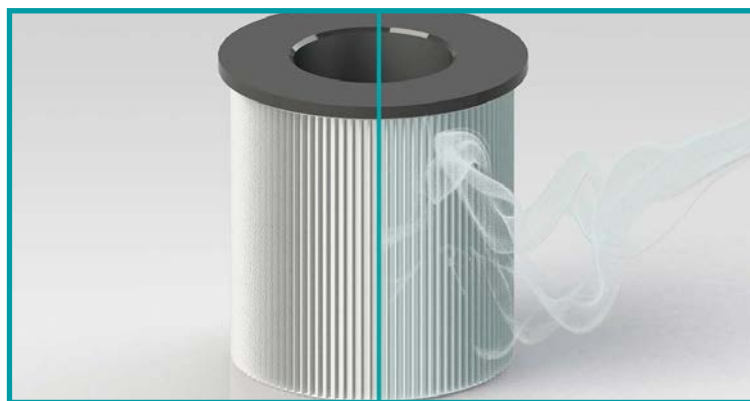


## Precoating process



Precoating of the FPV 202 with Precifix 200 takes place manually via an optionally available precoat socket (see ordering data). For this purpose, the cover cap of the precoat socket is opened when the extraction system is switched on. The user can then slowly pour the Precifix 200 powder (follow the dosing instructions!) into the nozzle and close the cover cap

again. The Precifix 200 distributes evenly on the surface of the filter cartridge, protecting it and creating a thin separation layer between the filter medium and the extracted debris particles. This enormously increases the application range of cartridge filter systems of the FP and FPV series and greatly extends the filter service life, even under difficult conditions.



without Precifix 200

with Precifix 200

## Dedusting control system



The FP 202 is equipped with a special dedusting control system, which enables the filter cartridge to be automatically freed from dust and thus increase the filter service life enormously.

Depending on the application, different options can be parameterized by the customer:

Differential-pressure controlled dedusting (factory setting)

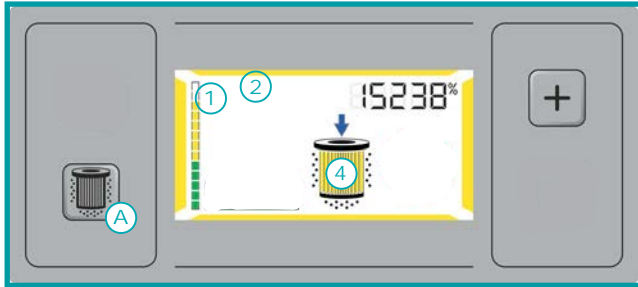
- The system continuously measures the current filter saturation and automatically starts the dedusting cycle when a set value is reached (factory setting: 75% filter saturation).
- Interval dedusting (parameterizable via interface)  
The system automatically starts the dedusting cycle at adjustable intervals (minutes/hours).
- Start dedusting via interface  
Depending on the application, the customer can easily activate the cleaning process via the interface. This function is recommended when the customer's work process may not be unexpectedly disturbed.

### Additional functions:

Control of shut-off valve, cycle times, etc.

## Inspiring control

Continuous full control over the system



- . A - Manual start of filter-cartridge dedusting
- . 1 - Saturated filter notification
- . 2 - System status indication
- . 3 - Hour meter indication
- . 4 - Dedusting active indication

## SUB-D 25 interface

External control of the system



Powerful control unit

- . Start / Stop button
- . Group-error output  
(speed, temperature, "filter full"100%)
- . External power control
- . Parameterization access for activating special functions and dedusting mode
- . Message cache
- . Digital interface (RS232)

Illustration similar



## Applications



### **Refilling work, packaging processes, feeding and conveying processes**

When materials are moved from one place to another, such as during packaging or transportation, this process can cause particles to be released. Especially since they are not visible to the human eye, the risk should not be underestimated. Particles can develop from turbulences. TBH filter and extraction systems safely remove these particles from the ambient air.



### **Mechanical processing (grinding, deburring, milling, drilling, cutting)**

Processes such as grinding, deburring, milling, drilling or cutting generate dust, vapours and gases. These by-products must be extracted before their tiny particles are inhaled and can cause serious harm to the human body.



### **Laser technology**

Lasers are used for processing metals, woods and plastics. Due to this versatility, companies are intensively involved in laser technology. This not only increases efficiency, but also creates unwanted by-products, regardless of type and performance. TBH systems ensure safe extraction of fine dust and laser fumes.



## Electronic control system



FUNCTION	FPV 202
Filter-saturation Indicator	✓
Visual and audible indication of filter saturation	✓
Display & notification of malfunctions	✓
Manual start of filter-cartridge dedusting	✓
Filter dedusting indication	✓

INTERFACE FUNCTION	Sub-D
Interface	Sub-D
Pre-warning, filter saturated to 75%*	✓
Visual and audible indication of filter saturated	✓
Group-error output (speed, temperature, "filter full" 100%)	✓
External dedusting start*	✓
Message cache	✓
Parameterization access for activating special functions	✓

\* Message, e.g. to control the dedusting from an external source

## Further information on the series

Scan QR code:



## Technical data FPV 202



Illustration similar



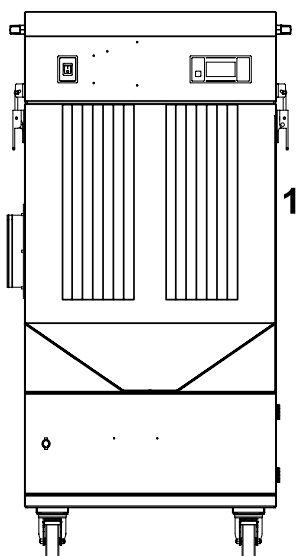
### Delivery scope:

- . Completely assembled (incl. the selected filter equipment)
- . Castors for mobile use
- . Crane eyelets (optional)
- . Power cord

TECHNICAL DATA	UNIT	FPV 202
Max. permissible air flow rate*	m <sup>3</sup> /h	2000
Voltage	V	100-240
Frequency	Hz	50/60
Weight	kg	170
Dimensions (HxWxD)	mm	1540x700x780
Room height for filter removal	mm	2060
Intake socket NW**	mm	80 - 200
Discharge socket NW***	mm	100 - 200
Filter Surface	m <sup>2</sup>	16.2
Dust collection container	Liters	50
Dedusting control system	-	✓
Color	RAL	7035

\* depending on application    \*\* rear/right    \*\*\* selectable

## Ordering data FPV 202



FPV 202

DESIGNATION	ART. NO.
FPV 202 100-240 V 50/60 Hz	90211
Equipotential bonding system	15391

FILTER EQUIPMENT	
6 x Filter cartiges antistatic	Standard 1
6x Filter cartige set antistatic, PTFE	20185

SPARE FILTER	
Filter cartige set antistatic, 6 Pcs	20171 1
Filterpatronen-Set antistatic, 6 Pcs, PTFE	20183

PRECOATING SOCKET	
NW 80	14481
NW 100	14482
NW 125	14484
NW 160	14483
NW 200	13714

INTAKE SLEEVE	ART. NO.
Left*	13171
Rear side*	13172
NW 80**	16533
NW 100**	16534
NW 125**	16535
NW 160**	16536
NW 200**	16537

\* Indicates position only \*\* Sleeve dimension

EXHAUST NOZZLE	
Right	Standard
NW 100	16534
NW 125	16535
NW 160	16536
NW 200	16537

FILTER CLEANING	
Controlled by differential pressure	Standard
Only overrun cleaning	14407
No automatic cleaning	20223*

\* Necessary for manual precoating or automated production lines. There is no automated cleaning of the filters. The filter cleaning is controlled manually by pressing the button on the front panel or via the interface/customer PLC. Additional filter cleaning modes can be easily parameterized via the system's interface..

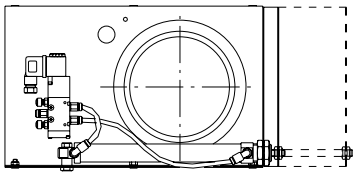
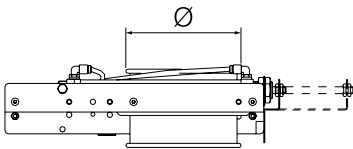
## Accessories



### PRESSURE REGULATOR for autom. dedusting

USE	DESIGNATION	ART. NO.
FPV 202	preset to 2 bar operating pressure	11783

Pressure regulator



### PNEUMATIC SHUT-OFF VALVES

- automatic control via the extraction system
- prevents the back-thrust of filtrate into the intake piping during filter-cartridge dedusting
- Shut-off valve can easily be integrated into the intake piping

USE	DESIGNATION	NW (mm)	ART. NO.
FPV 202	Pneumatic shut-off valve	80	15286
		100	15287
		125	15288
		160	15289
		200	15290
FPV 202	Protective cover	80	17015
		100	17016
		125	17017
		160	17018
		200	17019
FPV 202	Shut-off valve control line	-	16371



### SIGNAL MODULE

USE	ART. NO.
FPV 202	16673

## Accessories



### DUST BAG

Dust bag for low-contamination disposal of the dedusted filtrate

USE	DESIGNATION	ART. NO.
FPV 202	Dust bag	16710



### SET OF CRANE EYELETS

USE	DESIGNATION	ART. NO.
FPV 202	Set of crane eyelets	14408



### PRECOATING SOCKET

USE	NW (mm)	ART. NO.
FPV 202	NW 80	14481
FPV 202	NW 100	14482
FPV 202	NW 125	14484
FPV 202	NW 160	14483
FPV 202	NW 200	13714



### PRECOATING ACCESSORIES

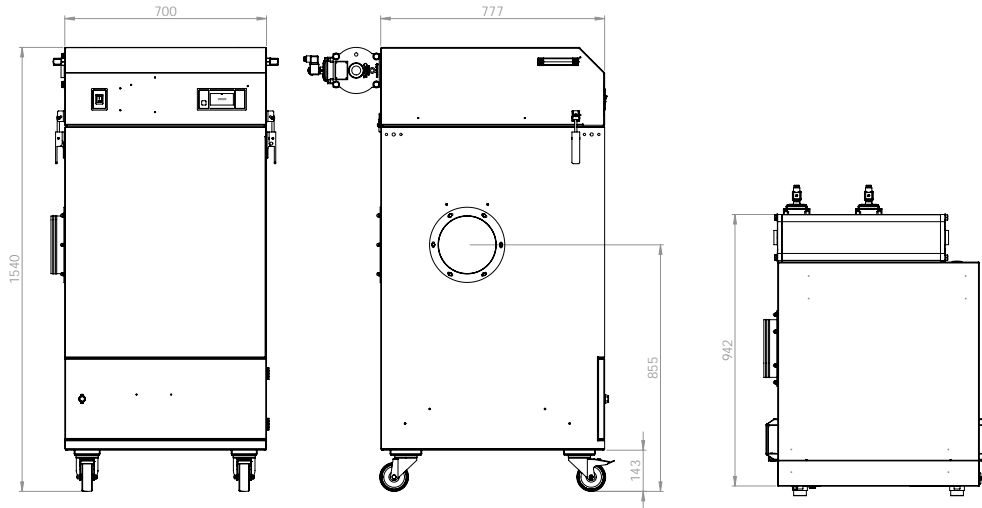
USE	DESIGNATION	ART. NO.
FPV 202	Precofix 200, 15 liters	14389
FPV 202	Precofix 200, 60 liters	14417

### USB CONNECTION CABLE

USE	DESIGNATION	CABLE LENGTH	ART. NO.
FPV 202	USB connection cable	1.5 meters	16455

DELIVERY SCOPE: Connection cable (incl. software)

## Technical drawings



FPV 202

## OFFICES

OPIRA BRISBANE  
32 DIVIDEND ST  
MANSFIELD, QLD 4122

OPIRA MELBOURNE  
25 GRAHAM RD  
CLAYTON SOUTH, VIC

OPIRA PERTH  
9 EARLSTON PLACE  
BOORAGOON WA 6154

OPIRA SYDNEY  
20 DUKE STREET  
FORESTVILLE, NSW 2087

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