

# **WAMAIR® Vacuum**

FPN / FPNX

**Insertable Polygonal Dust Collectors for Negative Pressure Applications** 









### SAFE AND COMPACT DE-DUSTING IN NEGATIVE PRESSURE CONDITIONS

WAMAIR® Vacuum FPN / FPNX are specially designed for the requirements of applications in negative pressure conditions. They are suitable for virtually all industries. Thanks to their hygienic design and food-grade filter elements, they comply with the EC 1935/2004 directive, making them suitable for a wide range of food processing applications (wheat, beans, sugar, rice, coffee, cocoa, diet foods, chilli peppers, etc.).

WAMAIR® Vacuum uses pocket filter elements to separate dust particles that are held in suspension by an air stream. The dust-laden air flow passes through the filter medium, which retains the dust particles and allows the clean air to penetrate.

WAMAIR® Vacuum is designed for pneumatic conveying systems in a negative pressure range of up to -0.6 bar to protect the vacuum pump. However, it can also be used for silo venting.

Provided with special filter elements and accurate surface finishing (no sharp edges), WAMAIR® Vacuum Dust Collectors ensure comfortable access for maintenance.





### Filter Elements & Filter Media

### **Pockets**

Flat Needle-Felt Elements



**HEAT SET** 

#### Sizes available:

500 mm

L = 750 mm

L = 1,000 mm

L = 1,250 mm

L = 1,500 mm









**ANTISTATIC** 



**MICRO-FIBRE** 



WATER-REPELLENT



**MICROPOROUS ePTFE MEMBRANE** 

### **Technical Features**

#### DIMENSIONAL

- Air volume:  $150 \sim 4,000 \text{ Nm}^3/\text{h} (88 \sim 2,350 \text{ cfm})$
- Filtering surface: 3 ~ 36 m<sup>2</sup> (32 ~ 387 sq ft)
- Temperature range:  $-20 \sim 80 \, ^{\circ}\text{C} (-4 \sim 176 \, ^{\circ}\text{F})$
- Optional horizontal or vertical installation
- Mild-steel or stainless-steel casing

#### **APPLICATIONS**

- Suitable for both negative pressure down to -6,000 mm  $H_{\mbox{\tiny A}}0$ (-0.6 bar) and positive pressure (up to 500 mm H<sub>2</sub>0)
- EC 1935/2004 certification available
- ATEX-versions available (Pred = 1 barg)

#### MAINTENANCE

Inspection door with captive fastening knobs for easy and safe access for filter element replacement

#### **CLEANING SYSTEM**

- High-efficiency programmable compressed air cleaning system
- "Full Immersion" solenoid valves, integrated into air tank to minimise flow resistance

Mild Steel or Stainless-steel

**Door and Housing** 

### **Options and Accessories**

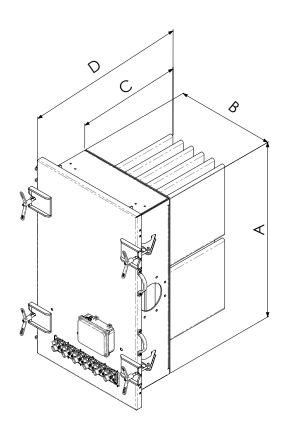
- Connectivity with Modbus RS485

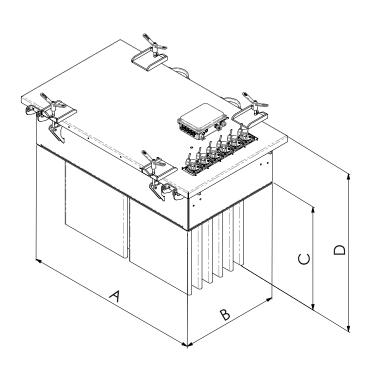
- WiFi or GPRS module



**Winter Protection** 

# **Overall Dimensions**





TYPE AND VOLUME INDEX		Surface (m²)	Filter elements	Number of lines	A (mm)	B (mm)	C (mm)	D (mm)	Weight (kg)
570 x 570	FPN(X)_T1	03	6	1	680	650	500	820	115
	FPN(X)_T2	05	6	1	680	650	750	1,070	120
	FPN(X)_T3	06	6	1	680	650	1,000	1,320	125
	FPN(X) <mark>_</mark> T4	08	6	1	680	650	1,250	1,570	130
	FPN(X) <mark>_</mark> T5	09	6	1	680	650	1,500	1,820	135
845 x 570	FPN(X) <mark>_</mark> T6	05	9	1	680	925	500	820	140
	FPN(X) <mark>_</mark> T7	07	9	1	680	925	750	1,070	145
	FPN(X) <mark>_</mark> T8	09	9	1	680	925	1,000	1,320	150
	FPN(X) <mark>_</mark> T9	12	9	1	680	925	1,250	1,570	160
	FPN(X)_TA	14	9	1	680	925	1,500	1,820	165
570 x 1065	FPN(X)_TB	06	12	2	1,180	655	500	820	185
	FPN(X)_TC	09	12	2	1,180	655	750	1,070	195
	FPN(X)_TD	12	12	2	1,180	655	1,000	1,320	200
	FPN(X)_TE	15	12	2	1,180	655	1,250	1,570	215
	FPN(X)_TF	18	12	2	1,180	655	1,500	1,820	225
1065 x 570	FPN(X)_TV	06	12	1	685	1,150	500	820	185
	FPN(X)_TH	09	12	1	685	1,150	750	1,070	195
	FPN(X)_TW	12	12	1	685	1,150	1,000	1,320	200
	FPN(X)_TJ	15	12	1	685	1,150	1,250	1,570	210
	FPN(X)_TK	18	12	1	685	1,150	1,500	1,820	215
1065 x 1065	FPN(X)_TP	12	24	2	1,180	1,150	500	820	270
	FPN(X)_TQ	18	24	2	1,180	1,150	750	1,070	290
	FPN(X)_TR	24	24	2	1,180	1,150	1,000	1,320	300
	FPN(X)_TS	30	24	2	1,180	1,150	1,250	1,570	330
	FPN(X)_TT	36	24	2	1,180	1,150	1,500	1,820	345

### **Benefits**



HYGIENIC HOUSING DESIGN Easy and quick access for cleaning



**CAPTIVE LOCKING SYSTEM**Filter element replacement within a few minutes by one person only



STURDY, COMPACT HOUSING Versatile configurations



**EASY MAINTENANCE**Minimised plant downtime thanks to quick and easy maintenance

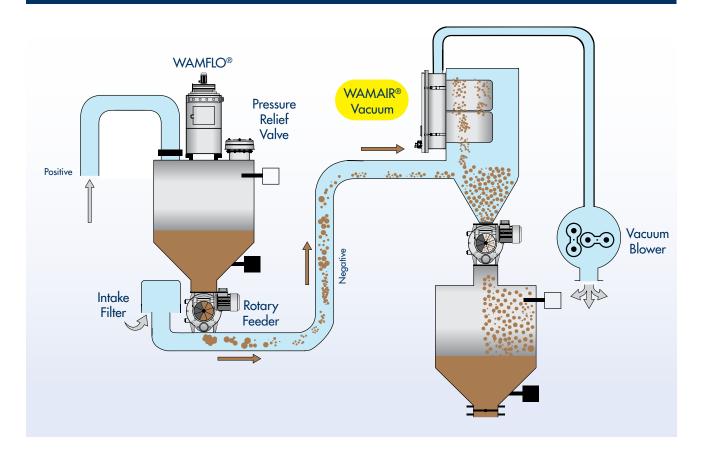


LOW EMISSION LEVEL WAM® filter elements and media (BIA/IFA-certified)



WORLDWIDE SUPPORT
Technical support and worldwide
availability of spare parts thanks to the
WAMGROUP® subsidiary network

### **Dilute Pneumatic Vacuum Conveying System**



### **Selection of Industries**



Flour Milling



Rice Milling



Canned Food Processing



**Diet Foods Processing** 



Sugar Processing



Cocoa Processing



Coffee Processing



Chili Pepper Processing

## **Application**









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This brochure has been edited for distribution in European Union countries.





