

DEPURECO · II 3D EX H IIIB T140 DC

Depureco DV AIR WB Z22



The Depureco DV AIR WB Z22 is an **ATEX-certified filter unit with integrated 175 L container** for central vacuum systems in Zone 22 (external). The unit has **4 class M cartridge filters** (340,000 cm² antistatic polyester) with **SP-Reverse jet pulsejet cleaning**, max recommended airflow 1700 m³/h, inlet Ø130 mm. Unlike the open DV AIR variant, WB has a **175 L stainless-steel container** (ATEX requirement for corrosion resistance and electrostatic dissipation), so **no separate discharge system is required** -- dust is collected directly in the container, which can be emptied manually or via automatic replacement. The unit is **passive** and **must be mandatorily combined with a vacuum unit** (CVS Z22 or CVS ROOTS Z22). Filter inspection door and fixed frame included. Footprint 1185 x 1195 mm, height 2850 mm, weight 380 kg. ATEX marking II 3D Ex h IIIB T140 Dc.

APPLICATIONS

- Central filter unit with integrated 175 L container for ATEX Zone 22 requirements
- Combined with CVS Z22 or CVS ROOTS Z22 vacuum unit
- Max 1700 m³/h airflow with 4 class M cartridges
- SP-Reverse jet pulsejet cleaning for continuous operation
- Turn-key alternative to DV AIR: integrated dust collection without separate discharge system
- Suited to ATEX Zone 22 environments with non-conductive dust (IIIB: paper, fibre, grain, non-metal) and smaller dust volumes

Technical specifications

ATEX marking	II 3D Ex h IIIB T140 Dc
Internal / external zone	- / 22
Motor type	Ingen motor -- passiv filter-enhed; luftflow leveres af tilknyttet sugeaggregat
Airflow	1700 m ³ /h
Container	175 L
Filter class	M class
Filter type	4 patroner klasse M (340.000 cm ² antistatisk polyester, EN 60335-2-69 / IFA-BGIA M-PES)
Primary filter	Patronfilter (antistatisk polyester), 340.000 cm ² total
Cleaning system	SP-Reverse jet pulsejet-rens (trykluft-drevet, differenstryk-styret)
Collection system	Detachable container
Material	Lakeret staal-kabinet, 175 L rustfri staal-beholder (ATEX-krav for slet overflade og anti-korrosion)
IP class	-
Voltage	-
Dimensions (L x W x H)	1185 x 1195 x 2850 mm
Weight	380 kg

Questions and answers

What does the ATEX marking II 3D Ex h IIIB T140 Dc mean?

The filter unit is EU-type approved under ATEX directive 2014/34/EU for operation in external Zone 22 (dust, low risk). 'Ex h' is the constructional safety type per EN ISO 80079-36/37 -- note that this is Ex h alone (without the 'tc' suffix that CVS Z22 side-channel blowers carry). 'IIIB' covers non-conductive dust (paper, fibre, grain etc.). 'T140' is the maximum surface temperature in operation (140 degrees C). 'Dc' is the EPL code for Zone 22. The cartridges are antistatic polyester, and the **integrated container is stainless steel** -- an ATEX requirement to ensure smooth surfaces and corrosion resistance, so electrostatic charge can be dissipated and dust cannot build up.

What is the difference between DV AIR and DV AIR WB?

DV AIR is a **filter unit without container** -- it has an open Ø250 mm flange downstream and requires a separate DISCHARGE SYSTEM (rotary valve, butterfly, big-bag frame etc.) for dust collection. DV AIR WB ('With Bin') instead has an **integrated 175 L container** directly below the filter, so dust is collected in-situ and no separate discharge system is needed. WB is 'turn-key' for smaller dust volumes and simple duty cycles (empty the bin manually or via automatic discharge), while DV AIR is for larger continuous flows where automatic discharge is required.

Why does Depureco DV AIR WB Z22 require a separate vacuum unit?

Depureco DV AIR WB Z22 is a **passive filter unit** -- it has no motor and cannot draw air itself. Its role is to clean the air from a connected vacuum unit (CVS Z22 side-channel or CVS ROOTS Z22) through 4 class M cartridges (340,000 cm² antistatic polyester). Air flow comes from the vacuum unit, passes through the cartridges, and the deposited dust is cleaned by the SP-Reverse jet pulsejet system and falls into the integrated 175 L container. The catalogue note is explicit: 'DV AIR must be mandatorily combined with a suction unit'.

How does the SP-Reverse jet filter cleaning work?

SP-Reverse jet is an automatic pulsejet cleaning system. Compressed air pulses (typically 5-6 bar) are fired into the cartridges from the back in short intervals -- this releases the dust cake from the surface, and it falls into the hopper and onwards into the integrated 175 L container. Cleaning is differential-pressure driven (starts when pressure drop exceeds threshold, stops when it drops back), so the filter always keeps its efficiency without over-cleaning or wasted air.

Contact and advisory

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