

DEPURECO · II 3D EX H IIIC T140 DC

Depureco DF 40 SP ATEX



The Depureco DF 40 SP ATEX is a stationary dust collector for Zone 22 external (ATEX II 3D Ex h IIIC T140 Dc) with automatic reverse-jet cleaning and cartridge filters. A 4.0 kW ATEX-certified centrifugal fan delivers up to 2,700 m³/h at 370 mmH₂O vacuum through 3x or 4x cylindrical cartridges (120,000 cm² total) in antistatic polyester M class. Automatic pulsejet cleaning keeps differential pressure stable under high dust loads and extends filter life. 65 L detachable AISI 304 bin. Standard choice for central systems with continuous operation and many connection points.

APPLICATIONS

- Fixed installation in Zone 22 external under high dust loads
- Continuous operation with automatic reverse-jet cleaning
- Process venting on packaging and weighing lines
- Bulk handling where cartridge filter gives longer service intervals than star filter
- Central dust collection from multiple points with stable differential pressure

Technical specifications

ATEX marking	II 3D Ex h IIIC T140 Dc
Internal / external zone	- / 22
Motor type	3D ATEX-certificeret centrifugalventilator, 4 kW
Airflow	2700 m ³ /h
Vacuum	36.3 mbar (370 mmH ₂ O)
Container	65 L
Sound pressure	77 dB(A)
Filter class	M class
Filter type	4x cylindriske patroner, antistatisk polyester klasse M, 120.000 cm ² (IFA/BGIA M-PES per EN 60335-2-69)
Primary filter	4x Patronfilter antistatisk polyester klasse M, 120.000 cm ² total
Cleaning system	Automatisk reverse jet-rensning (pulsejet)
Collection system	Detachable container
Material	AISI 304 rustfrit stålbeholder + lakeret stål-filterhus
IP class	IP55
Power	4.0 kW
Voltage	400 V / 50-60 Hz
Dimensions (L x W x H)	630 x 1100 x 2430 mm
Weight	160 kg

Questions and answers

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

The model is EU type-approved under ATEX directive 2014/34/EU for stationary operation in external Zone 22 (dust, low risk). 'Ex h' is the construction protection type per EN ISO 80079-36/37. 'IIIC' covers all dust types including conductive metallic dust. 'T140' is maximum surface temperature in operation (140 degrees C). 'Dc' is the EPL code for Zone 22.

How does the DF 40 SP ATEX differ from the other variants in the same kW class?

Depureco offers DF 40 SP in three variants with the same chassis, same fan (4.0 kW) and same bin -- but different certification and filter configurations. ****DEX 1/3D variant**** has a star filter and manual filter cleaning; it covers dust Zone 22 external + Zone 20 internal. ****SP ATEX variant**** has 3x cartridge filter (90,000 cm²) and automatic reverse-jet cleaning for high dust loads -- dust Zone 22 external. ****DEX 3/3G variant**** is certified for gas Zone 2 instead (II 3/3G), for plants where the surrounding environment has gas risk even though the process is dust-based. All three share the same chassis construction but have different product codes.

Which filter option should I choose for fine-particle emissions?

The standard configuration on SP ATEX is 3x cartridge filter M class (120,000 cm² total, antistatic polyester) with automatic reverse-jet cleaning. The cartridge format gives more than 3x the filter area of the star variant, and the automatic cleaning system keeps differential pressure stable under high dust loads. For fine-particle emissions, HEPA H13 secondary filter option (120,000 cm² fibreglass) and PTFE antistatic membrane option (38,000 cm²) are available.

Can the DF 40 SP ATEX be installed outdoors or in humid environments?

Yes -- IP55 enclosure and insulation class F make it suitable for outdoor installation under a canopy or in humid production environments. Operating temperature range is -20 to +40 degrees C per catalogue. For permanent outdoor installation, the GX option (AISI 304 stainless steel filter chamber + bin) is recommended as corrosion protection. Ensure that grounding is maintained and drainage from the filter housing works in case of condensation.

Contact and advisory

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