

DEPURECO · II 1/3D EX H IIIC T140 DA/DC

# Depureco DF 22 DEX 1/3D



The Depureco DF 22 DEX 1/3D is a stationary dust collector for Zone 22 external + Zone 20 internal (ATEX II 1/3D Ex h IIIC T140 Da/Dc). A 2.2 kW ATEX-certified centrifugal fan delivers up to 1,400 m<sup>3</sup>/h at 350 mmH<sub>2</sub>O vacuum through a 24,000 cm<sup>2</sup> star filter in antistatic polyester M class. Dust is collected in a 65 L detachable AISI 304 bin beneath the filter (option: 100 L on 65 L variants). Manual filter cleaning via external handle. Designed for fixed installations -- process venting, silo breathing, production exhaust -- where a mobile trolley doesn't solve the problem. Grounding included as standard.

## APPLICATIONS

- Fixed installation in Zone 22 external + Zone 20 internal
- Process venting on mixing, sieving and packaging lines
- Silo breathing and conveyor belt exhaust
- Centralised dust collection from multiple points piped into one unit
- Replacement of mobile trolleys where fixed installation lowers total cost

# Technical specifications

<b>ATEX marking</b>	II 1/3D Ex h IIIC T140 Da/Dc
<b>Internal / external zone</b>	20 / 22
<b>Motor type</b>	3D ATEX-certificeret centrifugalventilator, 2,2 kW
<b>Airflow</b>	1400 m <sup>3</sup> /h
<b>Vacuum</b>	34.3 mbar (350 mmH <sub>2</sub> O)
<b>Container</b>	65 L
<b>Sound pressure</b>	73 dB(A)
<b>Filter class</b>	M class
<b>Filter type</b>	Stjernefilter antistatisk polyester klasse M, 24.000 cm <sup>2</sup> (IFA/BGIA M-PES per EN 60335-2-69)
<b>Primary filter</b>	Stjernefilter antistatisk polyester klasse M, 24.000 cm <sup>2</sup>
<b>Cleaning system</b>	Manuel filterrens
<b>Collection system</b>	Detachable container
<b>Material</b>	AISI 304 rustfrit staalbeholder + lakeret staal-filterhus
<b>IP class</b>	IP55
<b>Power</b>	2.2 kW
<b>Voltage</b>	400 V / 50-60 Hz
<b>Dimensions (L x W x H)</b>	660 x 800 x 1630 mm
<b>Weight</b>	120 kg

# Questions and answers

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## What does the ATEX marking II 1/3D Ex h IIIC T140 Da/Dc mean?

The model is EU type-approved under ATEX directive 2014/34/EU for stationary operation with internal Zone 20 (dust, high risk) and 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). 'Da/Dc' is the EPL code for the two zones.

## How does the DF 22 DEX 1/3D differ from the other variants in the same kW class?

Depureco offers DF 22 DEX in three variants with the same chassis, same fan (2.2 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 cm<sup>2</sup>) 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 is the star filter M class (24,000 cm<sup>2</sup>, antistatic polyester). For fine-particle emissions or emission requirements below 0.1 mg/m<sup>3</sup>, Depureco offers a HEPA H13 secondary filter option (120,000 cm<sup>2</sup> fibreglass). The combination gives a filter stack that meets requirements for hazardous, pharmaceutical or metallic fine dust. A PTFE antistatic membrane option (38,000 cm<sup>2</sup>) is also available for dusts with high binding properties.

## Can the DF 22 DEX 1/3D 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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## PARTICULAIR

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