

II 3D Ex htc IIIB T140 C Dc

Depureco PUMA FIX 3D Z22



PUMA FIX 3D Z22 is the ATEX-certified sister series to PUMA FIX. The models are ATEX certified for zone 22 (3D) -- areas where combustible dust may occasionally occur. All four models use an ATEX-certified side-channel blower, AISI 304 stainless steel collection bin (except FIX 20 which has a steel bin with optional GX), and can be supplemented with flameless vent or panel vent for directional explosion. Operating temperature -10/+40 C.

Application areas

- Combustible dust in ATEX zone 22 (3D)
- Powders with organic dust explosion risk
- Aluminium, magnesium, sugar dust and similar reactive powders
- Centralized systems in production environments with periodic dust explosion risk

Models and specifications

P variants are optimised for high air flow; S variants for high vacuum.

Specification	PUMA FIX 10 3D Z22	PUMA FIX 15 P 3D Z22 P variant: high air flow	PUMA FIX 20 3D Z22	PUMA FIX 25 3D Z22
Max air flow	730 m ³ /h	950 m ³ /h	950 m ³ /h	1380 m ³ /h
Vacuum (continuous)	260 mBar	300 mBar	350 mBar	320 mBar
Motor	7.5 kW	11 kW	15 kW	18.5 kW
Motor (HP)	10 HP	15 HP	20 HP	25 HP
Motor type	ATEX side channel blower	ATEX side channel blower	ATEX side channel blower	ATEX side channel blower
Voltage	400 V	400 V	400 V	400 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Insulation class	F (IP55)	F (IP55)	F (IP55)	F (IP55)
Sound pressure	74 dB(A)	74 dB(A)	74 dB(A)	74 dB(A)
ATEX marking	II 3D Ex htc IIIB T140 C Dc	II 3D Ex htc IIIB T140 C Dc	II 3D Ex htc IIIB T140 C Dc	II 3D Ex htc IIIB T140 C Dc
EX category	3D	3D	3D	3D
Operating temperature	-10 / +40 °C	-10 / +40 °C	-10 / +40 °C	-10 / +40 °C
Suction inlet	100 mm Ø	100 mm Ø	100 mm Ø	100 mm Ø
Collection system	AISI 304 stainless steel container	AISI 304 stainless steel container	Steel container	Steel container
Container	175 L	175 L	175 L	175 L
Dimensions (LxWxH)	840 x 1700 x 1970 mm	840 x 1700 x 1970 mm	840 x 1700 x 1970 mm	840 x 1700 x 1970 mm
Safety valve	Pressure relief valve	Pressure relief valve	Pressure relief valve	Pressure relief valve
Forklift support	Included	Included	Included	Included
Remote control	Free connector available	Free connector available	Free connector available	Free connector available
Electrical panel	Included	Included	Included	Included
Filter count	4	4	4	4
Filter surface	120.000 cm ²	120.000 cm ²	120.000 cm ²	120.000 cm ²
Filter class	M (EN 60335-2-69)	M (EN 60335-2-69)	M (EN 60335-2-69)	M (EN 60335-2-69)

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Specification	PUMA FIX 10 3D Z22	PUMA FIX 15 P 3D Z22	PUMA FIX 20 3D Z22	PUMA FIX 25 3D Z22
		P variant: high air flow		
Filter media	Antistatic polyester	Antistatic polyester	Antistatic polyester	Antistatic polyester
Cleaning system	Automatic SP (reverse air flow 6 bar)	Automatic SP (reverse air flow 6 bar)	Automatic SP (reverse air flow 6 bar)	Automatic SP (reverse air flow 6 bar)

FAQ

What does the ATEX marking II 3D Ex htc IIIB T140 C Dc cover?

II = non-mining, 3D = category 3 dust, Ex = explosion-protected, htc = protection by inherent safety (h) and thermal classification (tc), IIIB = non-conductive dust, T140 C = max surface temperature 140 C, Dc = protection level c (normal safety) for dust.

Which zone does PUMA FIX 3D Z22 cover?

Zone 22 -- areas where an explosive mixture of combustible dust and air rarely occurs during normal operation, and only for a short period if it does. Equipment for zone 21 (regular dust presence) or zone 20 (continuous dust presence) requires different certifications.

What is the difference between flameless vent and panel vent?

Flameless vent contains the flame and overpressure inside the valve during an explosion -- no fire escapes into the room. Panel vent breaks at a specific pressure and releases the explosive overpressure into a safe area (typically outside the building). The choice depends on installation geometry.

Why does FIX 20 3D Z22 have a steel bin while FIX 10/15P/25 have stainless?

FIX 20 3D Z22 ships with a steel bin as standard (GX stainless AISI 304 bin and chamber available as option). The other three models have AISI 304 stainless steel bins as standard -- the difference is part of Depureco's product structure and can be changed at order.

Contact

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