

DEPURECO · II 1/2D EX HTC IIIC T140°C DA/DC

Depureco FOX 10 SP DEX 1/2D



The FOX 10 SP DEX 1/2D is the heaviest self-cleaning variant in the FOX family: 7.5 kW, 550 m³/h at 280 mbar, cartridge filter with reverse jet, H14 HEPA included. ATEX II 1/2D Ex htc IIIC T140°C Da/Dc. At 1860 mm tall and 242 kg, the unit is robust enough to run 24/7 in Zone 21 without filter cycling or motor thermals becoming a problem. When the task requires the FOX family's maximum vacuum plus full self-cleaning without compromise.

APPLICATIONS

- Full 24/7 operation in critical production (pharmaceutical, safety-sensitive)
- Fine dust with aggressive character (metal powder, ceramics)
- Installations where operator intervention must be completely absent
- Backup units standing ready to take over on primary machine failure
- Long hoses (15-20 m) with simultaneous high-flow demand

Technical specifications

ATEX marking	II 1/2D Ex htc IIIc T140°C Da/Dc
Internal / external zone	20 / 21
Motor type	Sidekanalblaeser 3-fase (7.5 kW) med intern cyklon-forseparation
Airflow	550 m ³ /h
Vacuum	280 mbar (2855 mmH ₂ O)
Container	100 L
Sound pressure	74 dB(A)
Filter class	M class
Filter type	Cartridge antistatisk polyester klasse M, 90.000 cm ² , reverse jet cleaning (automatisk) + H14 absolutfilter 28.000 cm ² (inkluderet)
Primary filter	Cartridge antistatisk polyester klasse M, 90.000 cm ²
Cleaning system	Automatisk reverse jet cleaning
Collection system	Detachable container
Material	Lakeret staalkonstruktion, AISI 304 stoevbeholder
IP class	IP65
Power	7.5 kW
Voltage	400 V / 50-60 Hz
Inlet	Diameter 80 mm
Dimensions (L x W x H)	660 x 1200 x 1860 mm
Weight	242 kg

Questions and answers

Is the FOX 10 SP the upper limit before I should consider PUMA?

Yes, in practice. The FOX 10 SP and PUMA 10 SP 1/2D are at similar price points (about 12,000-19,000 EUR), but PUMA offers: (a) 175 L container versus 100 L, (b) 100 mm inlet versus 80 mm, (c) TUEV-certified electrical panel with remote control. If you're already in the 12,000 EUR+ segment and have room for the PUMA chassis (850 x 1550 versus 660 x 1200), PUMA is typically the better choice -- unless you specifically need the FOX cyclone.

Can the FOX 10 SP handle 50 mm and 100 mm hoses simultaneously via a T-coupling?

Yes, but with caveats. The 80 mm inlet reduces flow through the 100 mm arm of a T-coupling by about 15-20 percent due to the step-up pressure drop. For mixed installations, it is often better to choose PUMA (100 mm + reducer) than FOX (80 mm + expansion). For 50 mm hose, use reducer P00278 (35 EUR) -- moderate pressure drop but good handling.

How hot does the FOX 10 SP get under continuous operation?

Motor surface can reach 80-95°C under full load, while the chassis surface stays below 60°C thanks to the IP65 enclosure and cooling fins. The T140°C ATEX limit applies to internal contact surfaces with dust (filter housing, suction duct) -- here the temperature stays well below 140°C with good margin even under worst-case conditions. Operator safety: gloves recommended when touching the motor area after operation.

Can I use the FOX 10 SP for welding dust?

Partially. Welding dust has a high fraction of fine dust (<10 micron) that suits the H14 HEPA. BUT welding dust can contain glowing particles -- you must have the Spark Trap TAN (1,020 EUR) between the pickup and the machine. And welding fume is mixed dust+gas that requires consideration of ATEX Gas classification in addition to dust. For regular welding dust, consider a dedicated welding-fume unit instead.

Contact and advisory

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