SE-BLL Laminar Air Blower Ionizer

Wide-area pulsed DC static elimination up to 1000 mm — five lengths, no compressed air, replaceable ionizer module



KEY DATA

Operating voltage
24 V DC (21 – 28 V)

Ionization range
Up to 1000 mm

Ionization performance
1 kV → 100 V in < 7 s at 1000 mm distance

Ionization type
Pulsed DC

Overview

The FÖGE SE-BLL is a laminar flow pulsed DC ionizing blower designed for wide-area static elimination at workstations, production line positions and precision assembly areas — without compressed air or an external high-voltage power unit. Powered by 24 V DC via the SE-PSU-24-C-M12 power supply (sold separately), the SE-BLL drives a uniform laminar airflow along the full length of the unit and delivers ionized air to the target surface at distances up to 1000 mm. This reach makes it the right tool for covering wide workbenches, large plastic parts, screen and optical assemblies and ESD-sensitive electronics areas from a single overhead position.

Key features

- Ionization range up to 1000 mm — covers wide workbenches and large parts from a single position
- Five lengths: SE-BLL-F-530-C / -700-C / -1055-C / -1420-C / -2130-C — match the unit to the width of the work area
- Integrated pulsed DC ionization — balanced positive and negative ion output
- 24 V DC powered — no HV power unit required; SE-PSU-24-C-M12 adapter sold separately
- No compressed air needed — laminar fan-driven airflow carries the ions to the target
- Replaceable ionizer module — service the ionization assembly without replacing the full unit
- Replaceable foam filter (10 PPI) — protects fans and ionizing system from dust
- Quiet operation — 38 – 40 dB at 1000 mm depending on length
- Fan speed set with the ▲ / ▼ front panel buttons — step-adjustable airflow for different working distances
- LED status indicators — 24 V supply, ionization status, fan speed level
- Adjustable 2-way mounting bracket — bottom or rear mounting
- M12 5-pin connector — use a 4-pin M12 cable (sold separately)

Technical specifications

Product code	SE-BLL-F-xxxx-C (530 / 700 / 1055 / 1420 / 2130)
Power supply (sold separately)	SE-PSU-24-C-M12 (220 V AC to 24 V DC)
Operating voltage	24 V DC (21 – 28 V)
Ionization type	Pulsed DC — shockless
Pin current (safety)	< 250 µA

Ionization range	Up to 1000 mm
Ionization performance	1 kV → 100 V in < 7 s at 1000 mm distance
Fan speed adjustment	Front panel buttons (▲ / ▼) — step-adjustable
Emitter pin material	Tungsten — extremely long lifetime
Pin cleaning	Manual — remove the front cover and clean the tungsten pins with the brush of the FÖGE maintenance kit
Ionizer module	Replaceable — the full unit does not need to be replaced at service
Filter	Replaceable foam filter, 10 PPI
Polarity	Alternating pulsed DC — balanced ion output
Connector	M12, 5-pin (cable not included)
LED indicators	24 V supply · ionization status (green: OK, red: fault) · fan speed level
Controls	Power button · fan speed buttons ▲ / ▼
Ground terminal	Yes — do not operate without connecting the ground terminal to earth
Mounting	Adjustable 2-way mounting bracket — bottom or rear mounting · 4 × ⌀ 9 mm holes
Operating temperature	0 – 50 °C
Max. humidity	70 % rH
Housing	Industrial-grade, impact-resistant
EMC compliance	2014/30/EU — EMC Directive
Electrical safety	2014/35/EU — Low Voltage Directive

Ionization range measured under standard conditions (20 °C, 50 % rH) with fans at maximum speed. Effective range may vary with ambient temperature, humidity and fan speed setting. Air flow speed and noise level are measured at 1000 mm.

Variants, performance and dimensions

Product	Power consumption	Air flow speed at 1000 mm	Noise level at 1000 mm	Ionized air outlet A (mm)	B (mm)	Overall length C (mm)
SE-BLL-F-530-C	18 W	1.6 m/s	38 dB	541	53	684
SE-BLL-F-700-C	21 W	2.1 m/s	39 dB	711	53	854
SE-BLL-F-1055-C	19 W	3.1 m/s	40 dB	1066	53	1209
SE-BLL-F-1420-C	31 W	2.1 m/s	40 dB	1431	53	1649
SE-BLL-F-2130-C	39 W	3.1 m/s	40 dB	2141	53	2359

Which length to choose

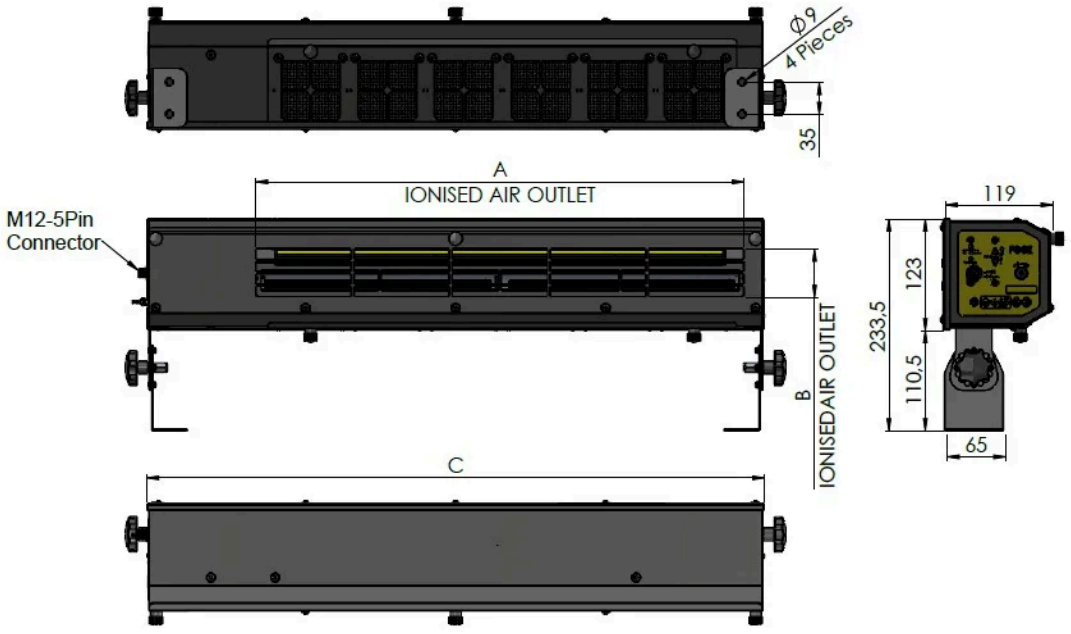
Model	Typical coverage width	Best for
SE-BLL-F-530-C	Up to 500 mm	Single operator workstation, small PCB or component tray, narrow conveyor
SE-BLL-F-700-C	Up to 650 mm	Standard workbench position, medium electronics assembly area
SE-BLL-F-1055-C	Up to 1000 mm	Wide workbench, dual-operator station, medium conveyor or inspection line
SE-BLL-F-1420-C	Up to 1350 mm	Large machine installation, automotive trim or headlight inspection station
SE-BLL-F-2130-C	Up to 2000 mm	Extra-wide bench or machine, full-width coverage of large plastic or optical parts

Electrical connection — M12 pin assignment

Pin	Function
1	+24 V DC supply
2	Fault output
3	GND
4	Remote control

Use a 4-pin M12 cable. The device connector has 5 pins; the centre pin is reserved for factory programming and is not used by the 4-pin cable.

Dimensional drawing

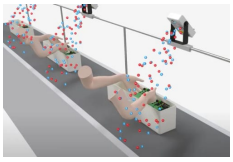


Dimensional drawing of the SE-BLL laminar air blower: ionized air outlet length A and height B, overall length C, cross-section 119 × 233.5 mm, M12 5-pin connector, 4 × ⌀ 9 mm bracket holes

Complete system — what you need

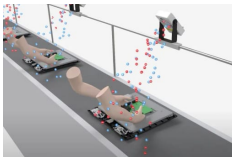
SE-BLL blower (select length)	SE-BLL-F-530-C / -700-C / -1055-C / -1420-C / -2130-C
SE-PSU-24-C-M12 power supply	220 V AC to 24 V DC adapter — required · sold separately
4-pin M12 cable	Industrial M12 connection cable — length to suit installation · sold separately
Foam filter (optional)	Replaceable 10 PPI foam filter — orderable as accessory
Replacement ionizer module	Spare ionizer assembly — contact FÖGE for the part code
Maintenance kit (optional)	FÖGE Antistatic Maintenance Kit — cleaning fluid and brush

Application examples



Battery & Electronic Component Assembly Conveyor

Static neutralization, critical contamination control, and ESD protection during the automated conveyance and assembly of electric vehicle (EV) batteries, standard automotive batteries, and general sensitive electronic devices.



TV Panel & Electronics Assembly Conveyor

Static neutralization, contamination control, and ESD protection during the automated conveyance and multi-stage assembly of flat-panel televisions and monitors.

Product information and ordering: sales@fogegmbh.com · +49 9372 9809477 · foge-antistatic.com