SE-DCA-110 Pulsed DC Antistatic Bar with Compressed Air – 11 kV

Long-range static elimination up to 1000 mm — compressed air-assisted ionization, 24 V DC, no HV transformer



KEY DATA

Ionization output voltage
11 kV pulsed DC

Ionization range
25 – 1000 mm

Ordering length
300 – 2000 mm in 100 mm steps

Overview

The FÖGE SE-DCA-110 is a high-power 11 kV pulsed DC antistatic bar engineered for applications where standard ionizing bars cannot reach — delivering effective static elimination at distances up to 1000 mm through integrated compressed air assistance. By directing ionized air from the bar's nozzles at the target surface, the SE-DCA-110 extends its ionization reach far beyond what a passive bar can achieve. This makes it the right choice for film and plastic winding systems, injection mould cavities, automated conveyor lines, robotic handling systems and any installation where the bar must be positioned well away from the material surface.

Key features

- 11 kV pulsed DC ionization — high-power output for demanding long-range static elimination
- Ionization range up to 1000 mm — compressed air carries ions to the target far beyond passive bars
- 24 V DC operation — ionization voltage generated internally; no external HV transformer or HV cabling
- Two air fitting variants: -S (straight ⌀ 8 mm) and -L (L-type / 90° ⌀ 8 mm)
- Orderable in any length from 300 mm to 2000 mm
- Shockless design — tungsten emitter pins, safe for operators
- Balanced pulsed DC — alternating positive and negative ion output for fast, complete neutralisation
- Integrated LED status indicator — operational and fault status at a glance
- M12 connector for a 4-pin M12 cable — robust industrial connection; cable ordered separately
- Compressed air connection: ⌀ 8 mm hose, minimum 2 bar, dry filtered
- Industrial-grade, impact-resistant housing for continuous-duty production
- EMC and Low Voltage Directive compliant: 2014/30/EU · 2014/35/EU

Technical specifications

Product code	SE-DCA-110-xxxx-S (straight fitting) · SE-DCA-110-xxxx-L (L-type fitting) — xxxx = length in mm
Power supply (sold separately)	SE-PSU-24-C-M12 (220 V AC to 24 V DC)
Ionization type	Pulsed DC — shockless
Pin current (safety)	< 250 µA

Ionization output voltage	11 kV pulsed DC
Operating voltage	24 V DC (21 – 28 V) · 0.5 A max.
Ionization range	25 – 1000 mm *
Ordering length	300 – 2000 mm in 100 mm steps
Air connection	⌀ 8 mm hose — straight (-S) or L-type 90° (-L) fitting
Air pressure	Minimum 2 bar · dry, filtered
Air consumption	205 l/min per 1000 mm length at 6 bar (scale proportionally by length)
Emitter pin material	Tungsten — extremely long lifetime
Polarity	Alternating pulsed DC — balanced ion output
Connector	M12 — use a 4-pin M12 cable (order separately)
Status indicator	Integrated LED — operational status
Operating temperature	0 – 50 °C
Max. humidity	70 % rH, non-condensing
Protection class	IP65 (with connector)
Housing	Industrial-grade, impact-resistant
Mounting	FG-AC-0005 T-fixings (M6 × 40 mm stud and flange nut; 2 per bar up to 1000 mm, +1 per additional 500 mm) · 180° adjustable mounting bracket
EMC compliance	2014/30/EU — EMC Directive
Electrical safety	2014/35/EU — Low Voltage Directive

* Ionization range up to 1000 mm measured under standard conditions (20 °C, 50 % rH) with clean dry compressed air at rated pressure. Effective range may vary with ambient humidity, temperature, air pressure and line speed.

Which variant to choose — S or L fitting

The two variants differ only in the air connection fitting. All other specifications are identical.

	SE-DCA-110-xxxx-S	SE-DCA-110-xxxx-L
Air fitting	Straight — ⌀ 8 mm hose	L-type (90°) — ⌀ 8 mm hose
Fitting location	End of bar — hose exits parallel to bar axis	End of bar — hose exits at 90° to bar axis
Best for	Standard installations with direct hose routing	Space-constrained installations where a straight hose run is blocked

Electrical connection — M12

Pin	Function
1	+24 V DC
2	Not used
3	24 V– (GND)
4	Fault output

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. Pin 2 is not used. Pin 4 provides a fault output signal for external fault indication. Do not connect or disconnect while power is applied.

Complete system — what you need

SE-DCA-110 bar (variant + length)	Specify variant (-S or -L) and length in mm (300 – 2000). Example: SE-DCA-110-0600-S = 600 mm, straight fitting
SE-PSU-24-C-M12 power supply	220 V AC to 24 V DC power supply, M12 version — required · sold separately
M12 cable	Industrial M12 connection cable — length to suit installation · sold separately
Compressed air supply	Dry, filtered compressed air · ⌀ 8 mm hose · minimum 2 bar at the bar · customer-supplied
Mounting brackets (optional)	Standard and custom brackets — contact FÖGE for options
Maintenance kit (optional)	FÖGE Antistatic Maintenance Kit — cleaning tools and spare tungsten emitter pins

Application examples



Film Winder (Long-Distance Neutralization)

Winding continuous plastic film webs into finished rolls using a simplified, long-range static elimination setup.



Foam Sheet Extrusion (Winding & Storage Section

Winding continuous foam webs into finished rolls using a simplified, long-range static elimination setup.

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