VESSEL®

Super Compact Slim Body

A rotating nozzle enables to ionize anywhere.

STAT·CLEAN **N-1**

Super Slim Nozzle-Type Ionizer

The N-1 features an outstanding ionizing performance with a new-concept rotating nozzle in a compact body for installation in confined spaces.

Super slim and compact design enabling to be installed at any place for any direction

The newly developed high voltage transformer and control circuit further enhance the operability.

Change the blow direction by turning the rotary corner nozzle (included as accessory).

The nozzle position clicks at 90° intervals.

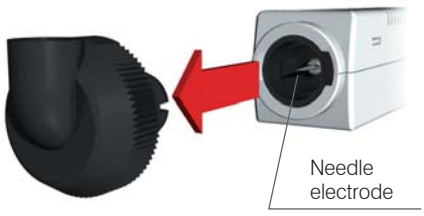
The corner nozzle minimizes resistance in a tube through which ions pass, and prevents the volume of ions from decreasing.

(In the case of using an air piping, mixture inside a long tube causes ions to decline, resulting in inferior ionizing performance.)

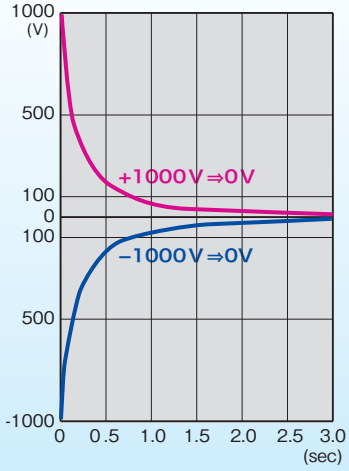
Corner nozzle (elbow)

Easy to replace the nozzles and clean the electrode needle.

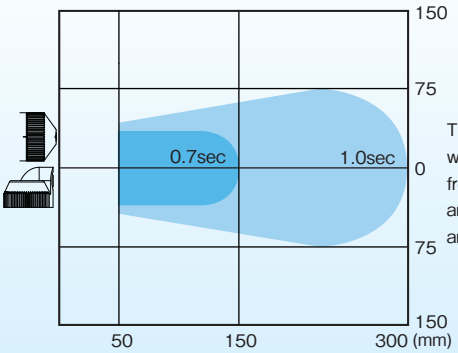
The screw-type nozzle can be removed easily. The needle electrode can be cleaned easily just after removing the screw-type nozzle.



Decay time / Static erasing area



The decay time is measured with the time for the voltage to decay from ±1000V to ±100V at an operating air pressure of 0.3MPa and the CPM20pF(150×150mm) installed 150mm to the front.



The static erasing area is measured with the time for the voltage to decay from ±1000V to ±100V at an operating air pressure of 0.3 MPa and the CPM20pF (150×150mm).

STAT·CLEAN N-1

SUPER SLIM NOZZLE

EDP No.621639

Standard nozzle (straight)

Alarm outputs and daisy chains.

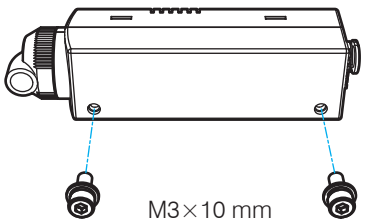
With the 6-pole terminals enabling the high voltage error signals to be output and the 24 VDC power to be supplied.

Lamps for easy recognition of operating status.

The blue lamp lights during normal operation.

The red lamp lights when high voltage error occurs.

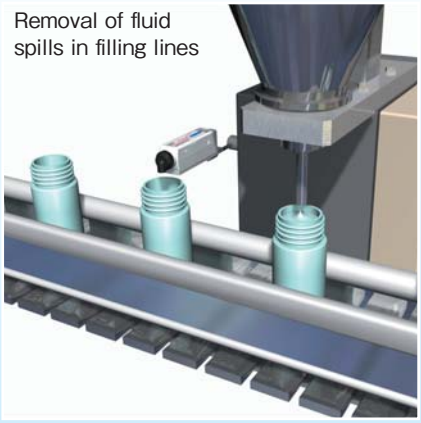
Simple and easy mounting with 2 screws.



M3×10 mm
+ thickness on mounting side

Applications

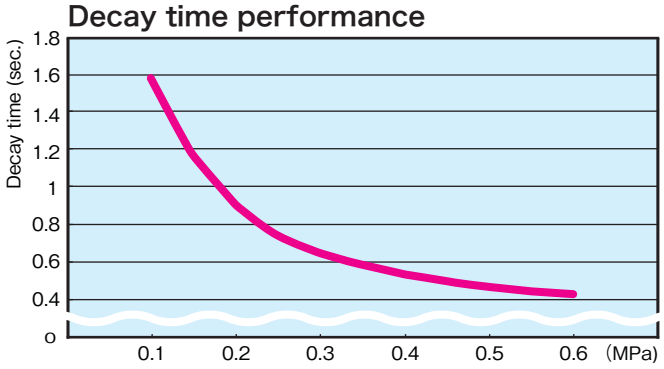
Removal of fluid spills in filling lines



Mounting onto chuck panels

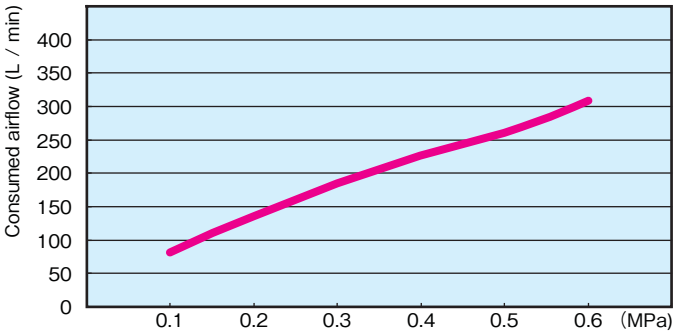
Prevention of part feeder travel faults

Decay time performance



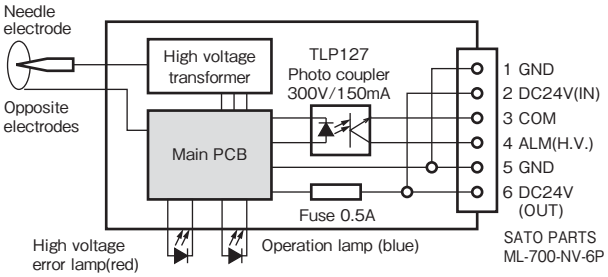
Measured the time to decay from - 1000V to - 100V by changing the supplied air pressure.
Measured with the CPM20pF (150×150mm) installed 150mm to the front.

Airflow consumption characteristics

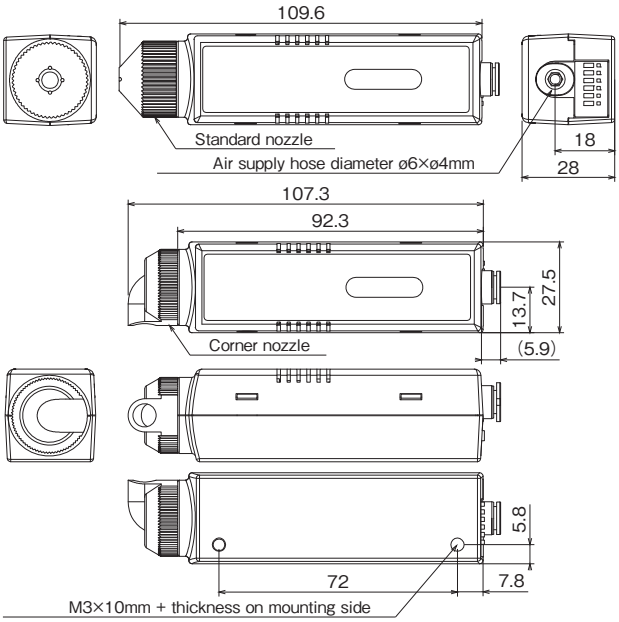


Measured the consumed airflow by changing the supplied air pressure.

Circuit diagram



External dimensions



Replacement parts

Needle electrode	GN-H	EDPNo. 806124
Speed controller	G-7SC	EDPNo. 621373
Micro-filter	G-7F	EDPNo. 621702

Options

Screwdriver for needle electrode replacement
G-7DR EDPNo. 806061

AC adapter (I/P:AC100V-240V O/P:DC24V 0.75A)
AD24-IT-EX EDPNo. 806050

Specifications

Ionizing method	Piezo high-frequency AC Corona discharge method
Applied voltage	10 kVAC(p-p)
Input power	24VDC ±5% ripple (p-p) 10% max
Current consumption	58mA (typ.)
Operating fluid	Clean dry air or nitrogen (N_2)
Operating air pressure	0.1 to 0.6MPa
Air consumption flow	Refer to table above (These are measured values and not guaranteed values)
Ion balance	±10V (with Standard Nozzle, measured 150mm from device, at 0.3MPa)
Decay time	Refer to table above (These are measured values and not guaranteed values)
Ozone production rate	0.05 ppm or less (measured 50mm from device at 0.2MPa)
Safety functions	Red lamp lights when stopped with high voltage error (Blue lamp lights during normal operation) Current fuse 0.5A / 60VDC mounted on PCB
Weight	80g
Dimensions	L 109.6 × W 27.5 × H 28 mm (with standard nozzle mounted) L 107.3 × W 27.5 × H 28 mm (with corner nozzle mounted)
Operating environment temperature and humidity	5 to 40°C, 35 to 65%RH (with no dew condensation or freezing)
Storage environment temperature and humidity	0 to 60°C, 35 to 85%RH (with no dew condensation or freezing)
Vibration resistance	60minute cycle at 10 to 55Hz frequency in each direction X, Y and Z
Material	Body / Nozzle : Flame-retardant ABS resin Needle electrode : Stainless steel
Accessories	Instruction Manual, Standard nozzle×1, Corner nozzle×1

Noise level	0.1	0.2	0.3	0.4	0.5	0.6	(MPa)
(With standard nozzle mounted)	85.3	91.3	95.1	97.4	98.7	99.6	(dBA)
(With corner nozzle mounted)	85.7	89.6	90.9	92.9	94.7	96.6	(dBA)

* The noise is measured at 1 m from the side of the blowoff port.
(Note that the measurement probe must not be in direct contact with blowoff.)

⚠WARNING

- For safety purposes, read the instruction manual carefully before using the unit.
- Do not use this product in an explosion-proof area.
- A high voltage is applied on this product. Make sure that water, oil, solvents, etc., do not come in contact.
- Avoid dew condensation as it can result in electric shock or product damage.
- Keep away metal objects such as tools or needles, or body parts such as fingers, hands or face from the needle electrode because a high voltage is applied on the needle electrode.

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