

VESSEL

Let us think.

New

Static Electricity Removal

Pneu-Power Ion Gun  **RoHS**

No. G-9

*No need
Power cable
Only Air
supply*



**No More
Power Supply!** PAT.P.

Innovative ionizing gun working only with compressed air!



Abbeon Cal, Inc.

Industrial Plastic Working Equipment & Precision Instruments

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STAT·CLEAN
series

Innovation!

No need for electric wiring.

Advantages of Pneu-Power Ion Gun (Self-power generating ionizer)

(1) No more cable troubles!

Troubles in relation to an electric power cable, that is most frequently encountered with ionizing guns, no longer occur.

(2) No separate high voltage power unit

Neither outlet nor extended high voltage cable is required.

(3) Efficient use of space as air tube only is mandatory.

Safe especially in applications where operators need to move widely (e.g because of large parts)

Outstanding ionizing performance and ion balance

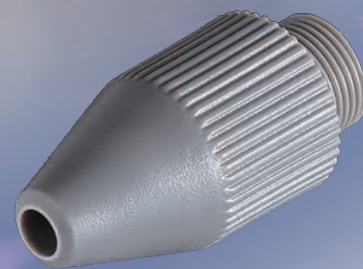
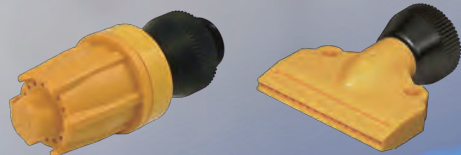
Decay time: within 1 sec., Ion balance: within 30V

Low noise

84dBA under 0.3MPa. Optional Silent Nozzles (below) enable to decrease the noise level further.

No.BB-ZSN 73dBA

No.N-2WN 72dBA



Replaceable Needle Electrode

Tungsten electrode can be replaced when worn out.

Trigger

Light force is required to activate the air supply

Coiled High Voltage Transformer

Ion generation method is AC corona discharge.

Hanger + Metal Fitting

There is reinforced metal fitting in the hanging part.



Motor Cartridge (Replaceable)

Convert compressed air to electricity. The compressed air rotates the blades to generate electricity and supplies power to the device.



Power supply from an external device is not required.

Air turbine rotates the motor, and this generates the power for ion generation.

Structure

Supplied compressed air is diverged into 2 routes: one is for power generation and another for dust removal.

After the motor generates enough power, the air joins again and blows out from the tip of the gun. When the air pressure increases, a special valve opens to extract the overflow, preventing the motor from overspeeding (patent pending).

Comply with CE RoHS



Air Joint

Φ8 × Φ5 air tube applicable. A combination of air tube (black) 3 m + air plug of Φ 8 × Φ 5 is available as an option (G-9UTP).

Static Electricity Removal Pneu-Power Ion Gun

Eliminate static electricity only with compressed air!

Applications

Removal of static electricity and/or dust in the following cases:

- * Before painting process of large parts for cars, furniture, music instruments;
- * Before bringing into a clean room parts which are just taken out of the package;
- * Big size film, sheet material, and so on.



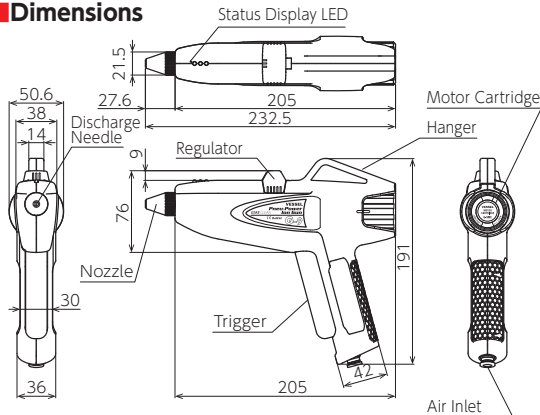
Caution

● Use this product within the range of 0.3 ~ 0.6MPa. Do not feed with pulse air (Power generation failure). ● Use clean air only. Feeding oil is strictly prohibited. If the air is mixed with water or oil, this may cause malfunctions. ● This product is not explosion-proof. Usage in hazardous area is strictly prohibited. ● Motor cartridge is a consumable.

Pneu-Power Ion Gun No.G-9

CE RoHS

■ Dimensions



■ Option

Silent Nozzle N-2WN EDP No. 806087
 Straight Silent Nozzle BB-ZSN EDP No. 621708
 Plug with Urethane Tube G-9UTP EDP No. 806148

■ Replacement Parts

Needle Electrode GN-H EDP No.806124
 Screwdriver for Needle Electrode Replacement G-7DR EDP No.806061
 Motor Cartridge G-9MC EDP No.806147

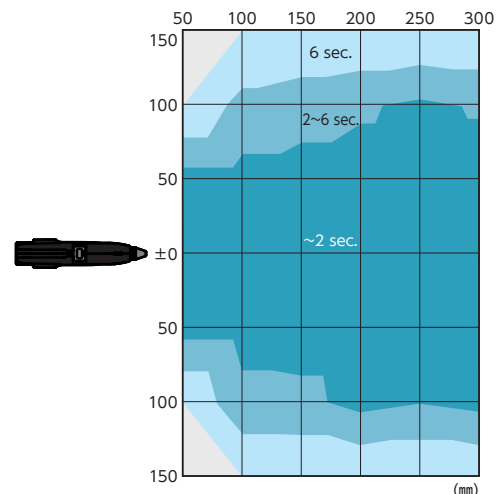
■ Specifications

Model	G-9
Type	High voltage type ionizer
Structure	Direct-coupled
Applied High Voltage	Coiled transformer (Built-in)
Ionizing Method	AC corona discharge type
Applied Voltage/Frequency	8k VAC p-p (±5%)/ 32kHz (Typ.)
Air Connection	8mm tube applicable, one-touch joint
Operating Fluid/Input Pressure	Clean dry air/ 0.3~0.6 MPa (Rating 0.5MPa)
Air Consumption	200L/min (0.5MPa)
Air Speed	12.3m/s (0.5MPa, 200L/min, 150mm)
Decay Time	±1000V→±100V : 1 sec. or less (0.5MPa, 200L/min, 150mm)
Ion Balance	±30V (0.5MPa, 200L/min, 1m)
Noise	88dBa (0.5MPa, 200L/min, 1m)
Protective Circuit	High voltage short detection circuit/ automatic stop/ automatic recovery
Operating Temp./Humidity	0~+45 °C/ 10~90 %RH (without freezing or dew condensation)
Storage Temp./Humidity	-30~+50 °C/ 10~90 %RH (without freezing or dew condensation)
Material	Main body, Nozzle, Motor cartridge: Polycarbonate Discharge needle: Tungsten
Size	H191 x W232.5 x D50.6 mm
Weight	Approx. 470 g
Installation	Indoor
Accessories	Instruction manual

■ Actual Measurement Data (For reference)

Left-Right Distance		50 mm	100 mm	150 mm	200 mm	250 mm	300 mm
150 mm	Ion Balance	0	0	0	0	0	0
	Decay Time (+)	>10	>10	>10	>10	>10	>10
	Decay Time (-)	>10	>10	>10	>10	>10	>10
100 mm	Ion Balance	7	-5	-3	-2	-1	0
	Decay Time (+)	>10	3.07	2.82	0.96	1.82	1.02
	Decay Time (-)	>10	3.13	2.5	0.99	1.93	1.11
50 mm	Ion Balance	-4	-2	-2	-1	0	0
	Decay Time (+)	0.61	0.63	0.59	0.62	0.66	0.73
	Decay Time (-)	0.74	0.59	0.58	0.64	0.67	0.77
±0 mm	Ion Balance	-3	-3	3	-1	0	-1
	Decay Time (+)	0.59	0.57	0.63	0.61	0.64	0.71
	Decay Time (-)	0.65	0.62	0.6	0.59	0.64	0.68
50 mm	Ion Balance	-3	-2	-2	-1	-1	0
	Decay Time (+)	0.61	0.58	0.59	0.65	0.69	0.75
	Decay Time (-)	0.67	0.63	0.6	0.65	0.68	0.79
100 mm	Ion Balance	-2	-2	-3	-1	-1	-1
	Decay Time (+)	>10	4.69	3.46	2.47	1.2	2.32
	Decay Time (-)	>10	6.5	3.04	3.09	1.32	2.39
150 mm	Ion Balance	-10	-7	-1	0	0	0
	Decay Time (+)	>10	>10	>10	>10	>10	>10
	Decay Time (-)	>10	>10	>10	>10	>10	>10

* Air pressure: 0.5MPa, Air volume: 203L/min, Decay time: ±1000V → ±100V (Model7100)



Measurement Data	Air Volume (L/min)		Air Speed (m/s)						Noise (dB-A)	Standard Nozzle		N-2WN		BB-ZSN	
	LED Instantaneous Value Yellow → Green		50 mm	100 mm	150 mm	200 mm	250 mm	300 mm		Air Pressure	Air Vol.	Noise	Air Vol.	Noise	Air Vol.
0.3 MPa	126	198	8.8	8.6	7.8	7.6	7.3	6.9	0.3 MPa	158	83.1	157	72.4	139	73.3
0.5 MPa	138	208	15.1	13.8	12.3	11.5	11.1	10.6	0.5 MPa	(223)	104.8	(233)	80.2	(215)	81.6

■ Recommended Maintenance Frequency

Discharge needle and the surroundings ... 1 week
 Motor cartridge ... 6 months (to be replaced)

■ Estimated Lifetime

Main body ... 5 years
 Motor cartridge ... 6 months
 * This information is shown for reference only. This is not a guarantee.



Warning

● For your safety, read the instruction manual carefully before using this product. ● Never use this product in hazardous area requiring explosion proof measures. ● A high voltage is applied on this product. Make sure that water, oil, etc., do not come in contact. ● Avoid condensation as it can result in electric shock or product damage. ● Keep away metal objects such as tools or wires, or body parts such as fingers, hands, or face from the discharge needle due to applied high voltage.

● For improvements, the product specifications, size, price and other information may be subject to change without prior notice.

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