

Static Electricity Removal

HIGH POWER IONIZING FLEXIBLE NOZZLE C & ROHS

New

No. HPF-1 Use this product with the GP-1 4kV.

Good for Highly Charged Products

- •300mm flexible tube useful to point the nozzle for effective neutralization.
- •Pin-point static electricity removal even in a place difficult for installation.
- Powerful removal of dust and static electricity with compressed air.
- •Titanium electrode needle (discharge needle)
- Silicon shielded cable for high voltage
- ·Ion Balance Circuit (with High Voltage Power Supply Unit GP-1 4kV)
- Safety Circuit/Anomaly Detection Circuit (with High Voltage Supply Unit GP-1 4kV)



Fix the SUS Cover with a jig or alike when using the product by bending 30° or more. (Min. bending radius: inside dimension radius 60mm)



Commercial Frequency Type High Voltage Power Supply



wly Developed [Option] High Voltage Power Supply Unit No. **GP-1 4kV** [Option] **Power Adaptor ◎ No. AD24-GP**



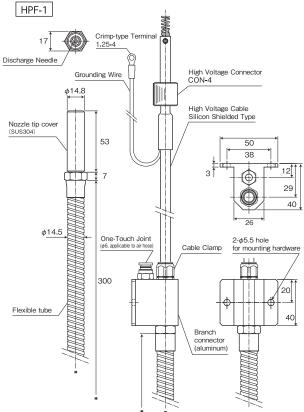
Applications: Packaging, Bag-making, Printing, Parts feeding machine

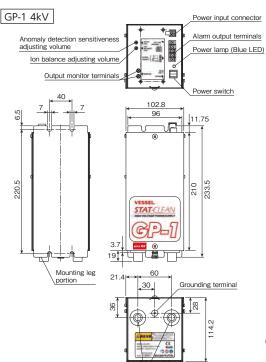
High Power Ionizing Flexible Nozzle No. HPF-1











■ High Power Ionizing Flexible Nozzle Specifications

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Model	HPF-1
Type	High voltage applied type ionizing Flexible Nozzle
Structure	Direct-coupled (Touch the electrode when applying current may bring electric shocks.)
Applied high voltage	High voltage power supply unit GP-1 4kV
Ionizing method	Alternating current corona discharge method
Applied voltage &Frequency	3.5kVAC and 50 to 60Hz (set/adjusted on the GP-1 4kV side).
Operating fluid & Input pressure	Clean dry air/Max. input pressure:0.4MPa
Operating temp & humidity	0 to 45°C and 10 to 80%RH(without freezing or dew condensation)
Storage temp & humidity	-10 to 50°C and 10 to 80%RH(without freezing or dew condensation)
Installation distance	Approx. 50 to 300mm (the distance between a charged object and the discharge tip of the gun)
Decey time	Approx.1 sec. or less (Input air pressure:0.3MPa, Distance:150mm)
Ion balance	Adjustable on the GP-1 4kV (A Charged plate monitor or equivalent is required.)
Installation place	Indoors
Protective circuit	High Voltage Power Supply GP-1 is equipped with a high voltage anomaly detection function and automatic stop circuit.
High voltage cable	3m(standard) ^{*1} , silicon shielded cable
Termination connector	High Voltage Connector CON-4
Air connection	dia.6mm tube applied, one-touch joint
Material	Nozzle tip cover: SUS304, Electrode needle: Titanium, Insulation: Fluororesin, Flexible tube: Steel, chrome plated, Air branch unit: Aluminum
Size	See the external dimension diagram.
Weight	Approx. 690g, including high pressure cable (3m) and high pressure connector.
Noise	Approx. 95dBA (Input air pressure:0.3MPa)
Air consumption	Approx. 150L/min (Input air pressure:0.3MPa)
Life expectancy	10,000 hours (only as a guide)**2 (8hours operation x 250days x 5years)
*1 Lo	nger cable up to 5m can be made-to-order. *2 This is not a period of warranty.

High Voltage Power Supply Specifications

Model	GP-1 4kV
Operating Temp./Humidity	$0\sim50^{\circ}$ C/ $10\sim90\%$ RH(without freezing or dew condensation)
Storage Temp./Humidity	-30~70℃/10~95%RH(without freezing or dew condensation)
Installation Place	Indoors
Rated Input Voltage	24V DC±10%
Variable Output Range Without Loud (rms)	AC output 4kV DC output -150 to +550V
Secondary Short Circuit Current	5 mA or lower
Output Monitor	$1/1000V \pm 5\%$ of the output voltage is emit to the monitor terminals.
Low-voltage Detection	Anomaly detection function will operate when each output drops to about 85% or less of the set voltage due to high voltage short circuit or abnormal sparks.
Overcurrent Detection	Anomaly detection function will operate when the output current is about 4mA or more.
Anomaly Detection Sensitivity Adjustment	The anomaly detection response speed can be adjusted (using external adjustment knob)
Power Supply Input	Molex 5569-04A1-210
High Voltage Output Connector	Ceramic high voltage output terminal×2
Alarm Output Terminal	C contact relay output
Switches And Displays	On-off rocker switches. Blue LED power indicator lamp (goes off when anomaly is detected)
Material	Housing SPCC, painted white
Size	W102.8×D233.5×H114.2mm
Weight	Approx. 4.5kg



Power Adapter Specifications

Model	AD24-GP AD24-GPE
Rated input	100~240V AC (50/60Hz), 0.4A
Rated output	24V DC, 0.75A
Operating temp. Humidity	0~40°C 10~85%RH (without freezing or dew condensation)
Coed length	DC output cord and AC input cord,approx. 1.8m each



● 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 WARNING 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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High voltage output connectors

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



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