

Nozzle Type Ionizer IZN10E Series



How to Order

IZN10E-01P06Z-B1

High frequency AC nozzle type

Nozzle type

Symbol	Type
01	Energy saving static neutralization nozzle
02	High flow rate nozzle
11	Female threads for piping*1

*1 Refer to the cautions when using the female threads for piping shown below.

Input/Output specifications

Symbol	Type
Nil	NPN input/output
P	PNP input/output

Port size (One-touch fitting)

Symbol	Type
06	<div> <div>ø6: Metric size</div> </div>
07	<div> <div>ø6.35 (1/4"): Inch size</div> </div>
16	<div> <div>ø6: Metric size (Elbow)</div> </div>
17	<div> <div>ø6.35 (1/4"): Inch size (Elbow)</div> </div>

Bracket

Symbol	Type	Part no.
Nil	None	—
B1	L-bracket	IZN10-B1
B2	Pivoting bracket	IZN10-B2
B3	DIN rail mounting bracket	IZN10-B3

* Refer to page 12. Brackets are the same as those for the current model (IZN10). Mounting is interchangeable.

Power supply cable

Symbol	Type	Part no.
Nil	With power supply cable (3 m)	IZN10E-CP
Z	With power supply cable (10 m)	IZN10E-CPZ
N	Without power supply cable	—

* Mounting is interchangeable with the current model (IZN10).

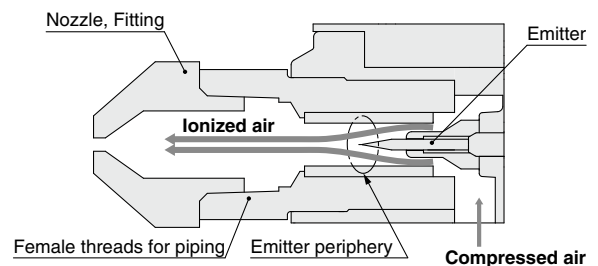


Made to Order
(For details, refer to page 21.)

Symbol	Specifications
-X367	Nozzle with right angles

Cautions when using the IZN10E-11 female threads for piping

- For the female thread (Rc1/8) type, a custom made nozzle or fittings/tubing combination must be prepared and connected by the user.
- If a nozzle with discharge port diameter or tubing with an I.D. of less than 4 mm is connected, the air pressure inside the nozzle may increase depending on the configuration.
- This product uses a high frequency AC voltage. If the air pressure around the emitter increases during ion generation, the ion generation efficiency decreases and the maintenance alarm (signal output, maintenance LED) will be activated (refer to the figure to the right).
- When the maintenance alarm is generated, the static neutralization performance is decreased.
- The table below shows the supply pressure specifications when made-to-order nozzles and fittings/tubing combinations are connected.



Sectional view of the female threads for piping

Made-to-order nozzle product names/Piping examples	Made-to-order nozzle part no. (page 23)	Supply pressure specifications
Circular diffusion nozzle	IZN10-G-X198	0.05 to 0.1 MPa
Flat diffusion nozzle	IZN10-G-X199	0.05 to 0.1 MPa
Bar nozzle (straight type)	IZN10-G-□-X216	0.05 to 0.1 MPa
Circumferential jet bar nozzle (straight type)	IZN10-G-X278	0.05 to 0.15 MPa
Bender tube nozzle	IZN10-G-□-X205	0.05 to 0.15 MPa
Long nozzle	IZN10-G-□-X226	0.05 to 0.15 MPa
Fitting (Applicable tubing O.D. 6 mm) + Tube (O.D. 6 mm, I.D. 4 mm)*1	—	0.05 to 0.1 MPa
Fitting (Applicable tubing O.D. 8 mm) + Tube (O.D. 8 mm, I.D. 5 mm)*1	—	0.05 to 0.3 MPa

*1 When connecting the tubing, use a length of tubing 500 mm or less for the connection, regardless of the inside diameter size.

- When using piping materials prepared by the user, secure an air passage of 4 mm or more inside diameter. If using tubing, ensure the minimum bending radius is used and keep the tube length to 500 mm or less.
- Please install so as not to receive a moment force on the nozzle (page 25).

IZN10E Series

Specifications

Model		IZN10E-□ (NPN specification)	IZN10E-□P (PNP specification)
Ion generation method		Corona discharge type	
Method of applying voltage		High frequency AC type	
Applied voltage*1		2.5 kVAC	
Offset voltage (Ion balance)*2	Energy saving static neutralization nozzle	±10 V	
	High flow rate nozzle	±15 V	
Air purge	Fluid	Air (Clean dry air)	
	Operating pressure*3*4	0.05 MPa to 0.7 MPa	
	Connecting tube size	ø6, ø1/4 inch	
Power supply voltage		24 VDC ±10%	
Current consumption		80 mA or less	
Input signal	Discharge stop signal	Connected to 0 V Voltage range: 5 VDC or less Current consumption: 5 mA or less	Connected to +24 V Voltage range: 19 VDC to power supply voltage Current consumption: 5 mA or less
	Reset signal		
	External switch signal 1		
	External switch signal 2		
Output signal	Discharge signal	Max. load current: 40 mA Residual voltage: 1 V or less (Load current at 40 mA) Max. applied voltage: 26.4 VDC	Max. load current: 40 mA Residual voltage: 1 V or less (Load current at 40 mA)
	Error signal		
	Maintenance signal		
Effective static neutralization range*5		20 to 500 mm	
Ambient temperature (Operating/Stored)		0 to 55°C	
Ambient humidity (Operating/Stored)		35 to 65% RH (No condensation)	
Material	Housing	ABS, Stainless steel	
	Nozzle	Stainless steel	
	Emitter	Tungsten	
Impact resistance		100 m/s ²	
Body weight	Energy saving static neutralization nozzle	70 g	
	High flow rate nozzle	70 g	
	Female threads for piping	75 g	
Bracket weight	L-bracket	30 g	
	Pivoting bracket	40 g	
	DIN rail mounting bracket (Single unit)	40 g	
Standards/Directive		CE, UL, CSA, RoHS	

*1 Measured with a probe of 1000 MΩ and 5 pF.

*2 Measurement values based on a charged plate (dimensions: 150 mm x 150 mm, capacitance: 20 pF) defined by ANSI standard (ANSI/ESD STM3.1-2006). The distance between the charged plate and the ionizer: 100 mm, the air purge is 0.3 MPa (energy saving static neutralization nozzle) / 0.1 MPa (high flow rate nozzle).

*3 Static electricity cannot be neutralized without air purge. As the concentration of ozone inside the nozzle increases, there is a possibility that the product and surrounding equipment may be adversely affected, so be sure to air purge during ion generation.

*4 To stop the air purge temporarily during operation, turn the discharge stop signal input OFF to prevent the increase of ozone concentration inside the nozzle.

*5 Except female threads for piping.

* Refer to the cautions on page 10 when using the IZN10E-11 (female threads for piping).

Model		IZN10E-C□-□
Input voltage*1		100 to 240 VAC, 50/60 Hz
Output voltage		24 VDC
Output current		1 A max
Ambient temperature	Operating	0 to 40°C
	Stored	-20 to 60°C
Ambient humidity	Operating/Stored	10 to 90%RH
Standards/Directive		CE, cUL

*1 For the AC cord type, note that the rated voltage of the AC cord included as an accessory is 125 V (See page 13).