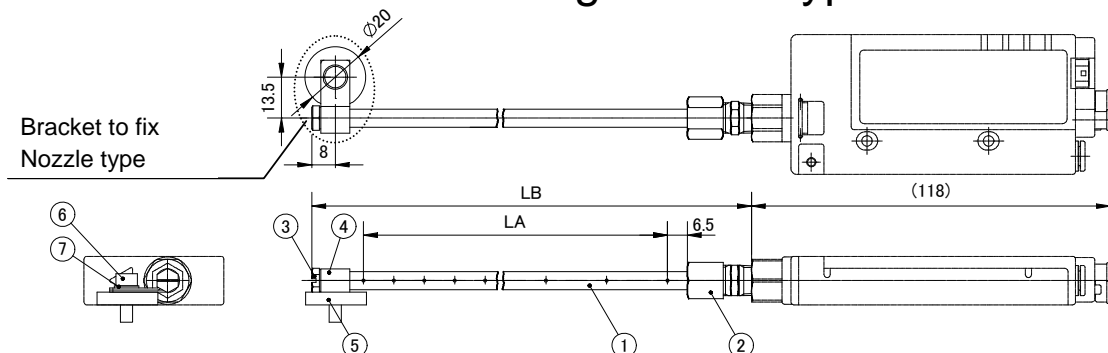


Bar nozzle for ionizer (straight type) IZN10-G-*-X216

SMC CORPORATION
4-14-1, SOTO-KANDA, CHIYODA-KU,
TOKYO 101-0021, JAPAN
URL: <http://www.smcworld.com>

Feature1: Enables same usage as bar type ionizers.



Dimensions

Part no.	LA	LB
IZN10-G-100-X216	100	145
IZN10-G-200-X216	200	245
IZN10-G-300-X216	300	345
IZN10-G-400-X216	400	445
IZN10-G-600-X216	600	645

Reference diagram

[Ionizer: IZN10-11 (Rc1/8 female thread)]
*1) Please order ionizer separately.

*2) Please see the attached diagrams for details.

Components

No	Part name	Material	Remarks
①	Bar nozzle (straight type)	SUS	—
②	Male connector flareless fitting	C3604	Electroless nickel plating (seal material: FKM)
③	Plug	C3604	Electroless nickel plating (seal material: FKM)
④	Holder	Al	Accessory
⑤	Spacer	SUS	Accessory
⑥	Hexagon socket head bolt to fix nozzle tip	SUS	Accessory
⑦	Plain washer	SUS	Accessory

Specification

Model	IZN10-G-*-X216
Nozzle type	Bar nozzle (straight type)
Fluid	Air (Clean dry air)
Operating pressure range	0.05~0.1MPa (The required supply pressure for ionizer with bar nozzle)
Ambient and fluid temperature	0~55°C (The operating conditions should be suitable for the specifications of IZN10 series.)
Effective static electricity elimination distance *3)	300mm (Please see the attached document for the details of the performance of deionization.)
Port size	R1/8

*3) The distance when used with IZN10-11 series.

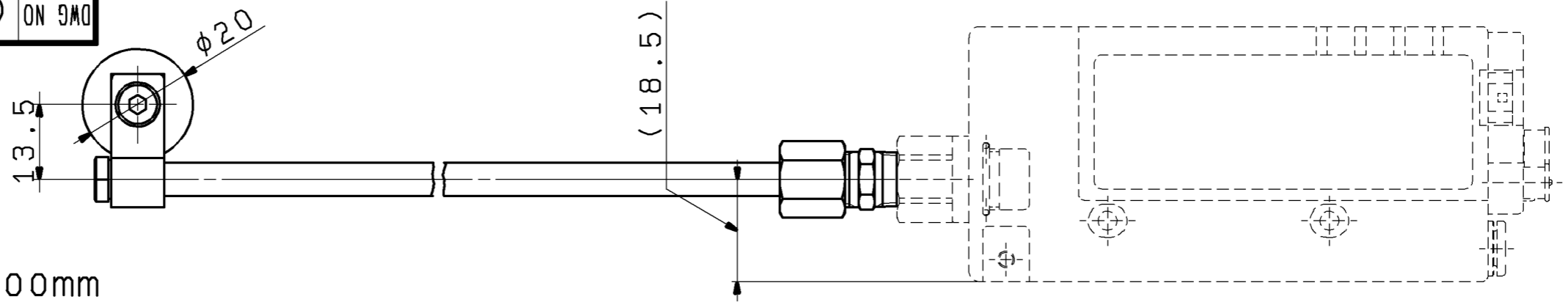
*4) The nozzle tip should be fixed in order to avoid damage to the ionizer and the nozzle port.

Part no.	Mass
IZN10-G-100-X216	30g
IZN10-G-200-X216	40g
IZN10-G-300-X216	50g
IZN10-G-400-X216	60g
IZN10-G-600-X216	80g

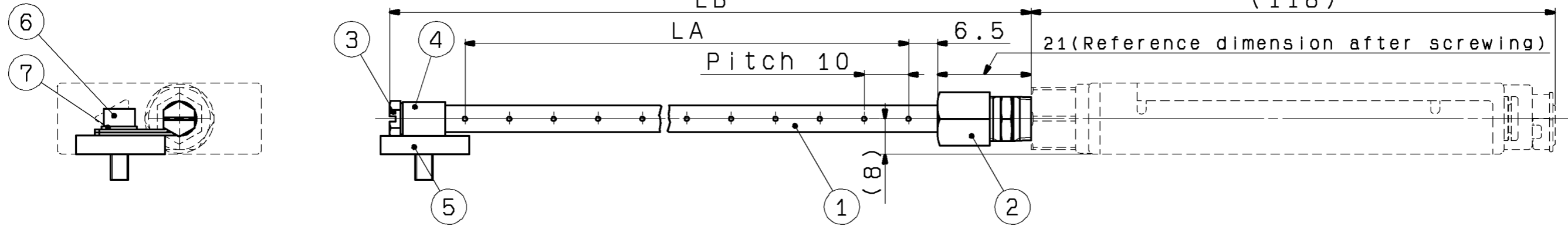
Dimensions: mm (Refer to the drawing attached to the last page)

Caution

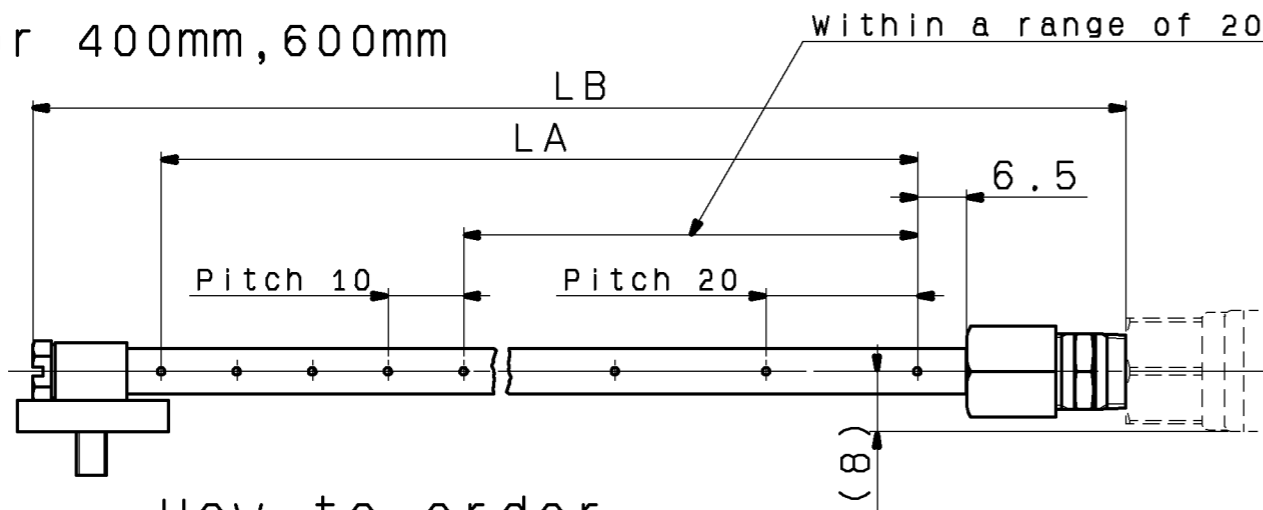
To ensure the safest possible operation of this product, please be sure to read thoroughly the "Safety Instructions" in our "Best Pneumatics" catalog before use.



For 100mm, 200mm, 300mm



For 400mm, 600mm



How to order

IZN10-G-***-X216

Length of bar nozzle

Part number	LA	LB
IZN10-G-100-X216	100	145
IZN10-G-200-X216	200	245
IZN10-G-300-X216	300	345
IZN10-G-400-X216	400	445
IZN10-G-600-X216	600	645

提出用



Note

1. This is a nozzle for the option of ionizer IZN10-11**.

ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS
7	M4(Small round)	Flat washer	SUS	1	Accessory
6	M4x12	Hexagon thin socket head bolt	SUS	1	Accessory
5	XT590-216-2	Spacer	SUS	1	Accessory
4	AL-4	Holder	Aluminum	1	Accessory
3	M-5P-X112	Plug	C3604	1	Electroless nickel plating Fluororubber specifications
2	H06-01-X2	Male connector self-aligned fitting	C3604	1	Electroless nickel plating Fluororubber specifications
1	XT590-216-1-*	Bar nozzle(straight)	SUS	1	XT590-216-1-100...100mm XT590-216-1-200...200mm XT590-216-1-300...300mm XT590-216-1-400...400mm XT590-216-1-600...600mm

ITEM	PART NO	PART NAME	MATERIAL	QTY	REMARKS
					FINISH
					PAINT
					PACKING
					MATERIAL
					MATERIAL SIZE
					MODEL
					QTY
					THIRD ANGLE
					SCALE
					1 : 1
					DWG NAME
					Bar nozzle(straight)
					DWG NO
					© IZN10-G-***-X216
					REVISION
					G

TOLERANCES JIS B 0405	GRADE	DRAWN DATE	SCALE
RANGE (mm)	f ± m ± c ±	DESIGNED Y. Seo	1 : 1
0.5 ≤ D ≤ 3	0.05 0.1 0.2	DATE 2008-04-11	
3 < D ≤ 6	0.05 0.1 0.3	CHECKED T. Sato	
6 < D ≤ 30	0.1 0.2 0.5	DATE 2008-04-23	
30 < D ≤ 120	0.15 0.3 0.8	APPROVED N. Fujiwara	
120 < D ≤ 400	0.2 0.5 1.2	DATE 2008-04-23	
400 < D ≤ 1000	0.3 0.8 2		
1000 < D ≤ 2000	0.5 1.2 3		

Technical Information

IZN10 Measurement of static elimination of bar nozzle

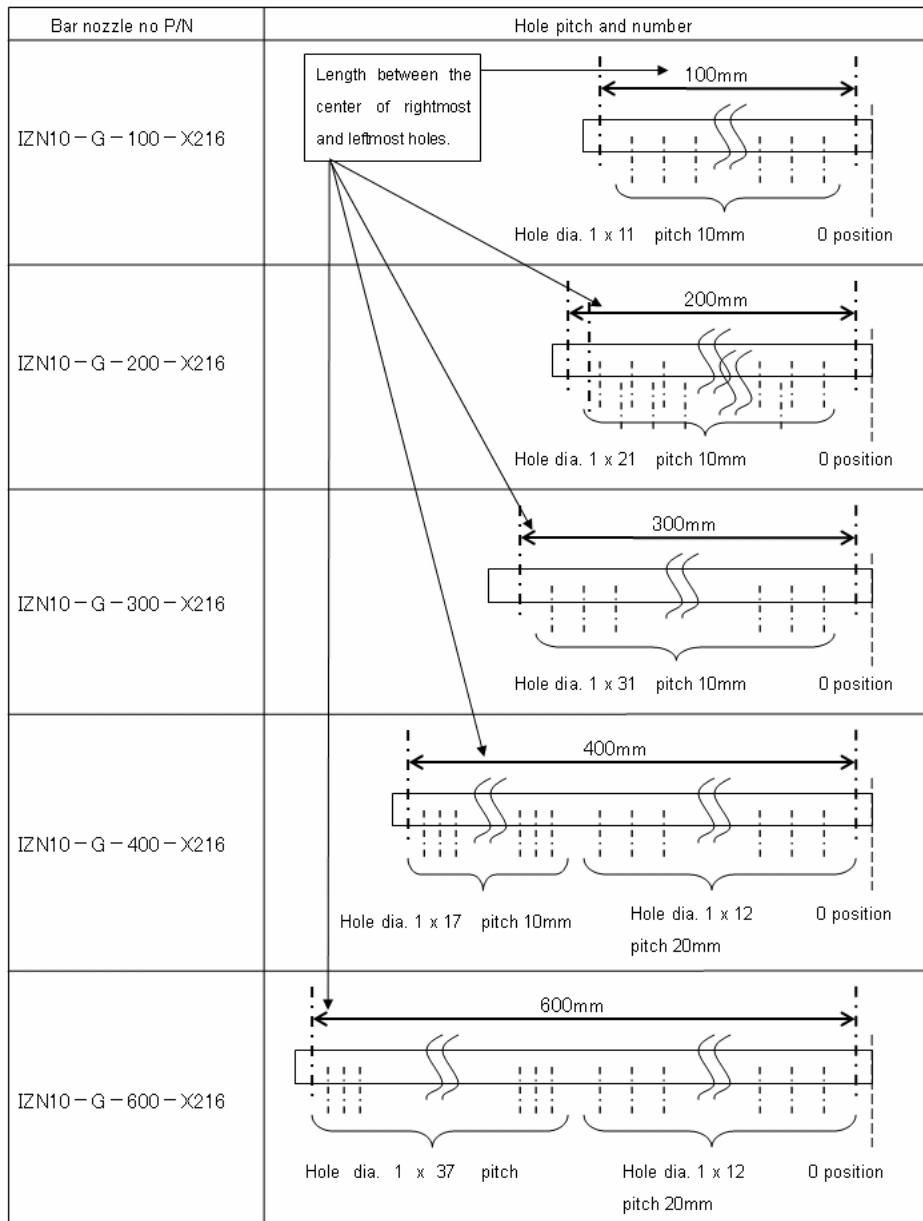
Info. description	IZN10 Measurement of static elimination of bar nozzle			Prepared	2008.7.2
Responsible Dept.	PD-3	Model	IZN10	Info No. .	IZ*-TDM0021

1. General

Measured static elimination performance of IZN10-11 (nozzle with female thread) option bar nozzle.

2. Sample

- (1) IZN10-11(lonizer main body)+IZN10-G-100-X216(Bar nozzle :Length between the center of rightmost and leftmost holes. 100mm)
- (2) IZN10-11(lonizer main body)+IZN10-G-200-X216(Bar nozzle :Length between the center of rightmost and leftmost holes. 200mm)
- (3) IZN10-11(lonizer main body)+IZN10-G-300-X216(Bar nozzle :Length between the center of rightmost and leftmost holes. 300mm)
- (4) IZN10-11(lonizer main body)+IZN10-G-400-X216(Bar nozzle :Length between the center of rightmost and leftmost holes. 400mm)
- (5) IZN10-11(lonizer main body)+IZN10-G-600-X216(Bar nozzle :Length between the center of rightmost and leftmost holes. 600mm)



Drawing 1.Bar nozzle

Related info.		Comment	

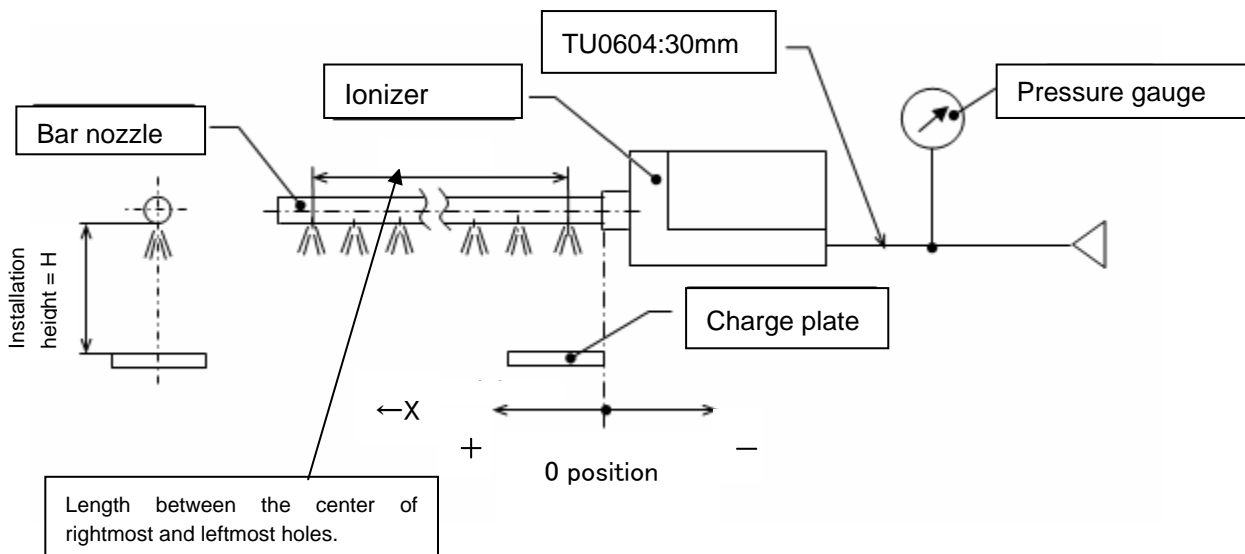
Info. description	IZN10 Measurement of static elimination of bar nozzle			Prepared	2008.7.2
Responsible Dept.	PD-3	Model	IZN10	Info No. .	IZ*-TDM0021

1. Test condition

- (1) Test condition : General environment (Laboratory) Room temp. 22.7°C Humidity 46.8%
- (2) Installation height : $H=50\text{mm}$
- (3) Supply pressure : 0.05/0.1MPa
- (4) Instruments :
 - Static elimination time / Ion balance measurement tool Charge plate monitor of TREK Model158 $\square 25\text{mm}(20+/-2\text{pF})$
 - Pressure gauge PPA100 COMPACT MANOMETER of SMC

2. Test condition

- (1) Set supply pressure to measure flow characteristic. Then, set the charge plate as in drawing 2, and set the root of the bar nozzle to zero position to measure static elimination time.
- (2) Move the charge plate to X direction until static electricity can not be eliminated.
- (3) Distance for moving the charge plate depends on sample.



Drawing 2 : Test condition

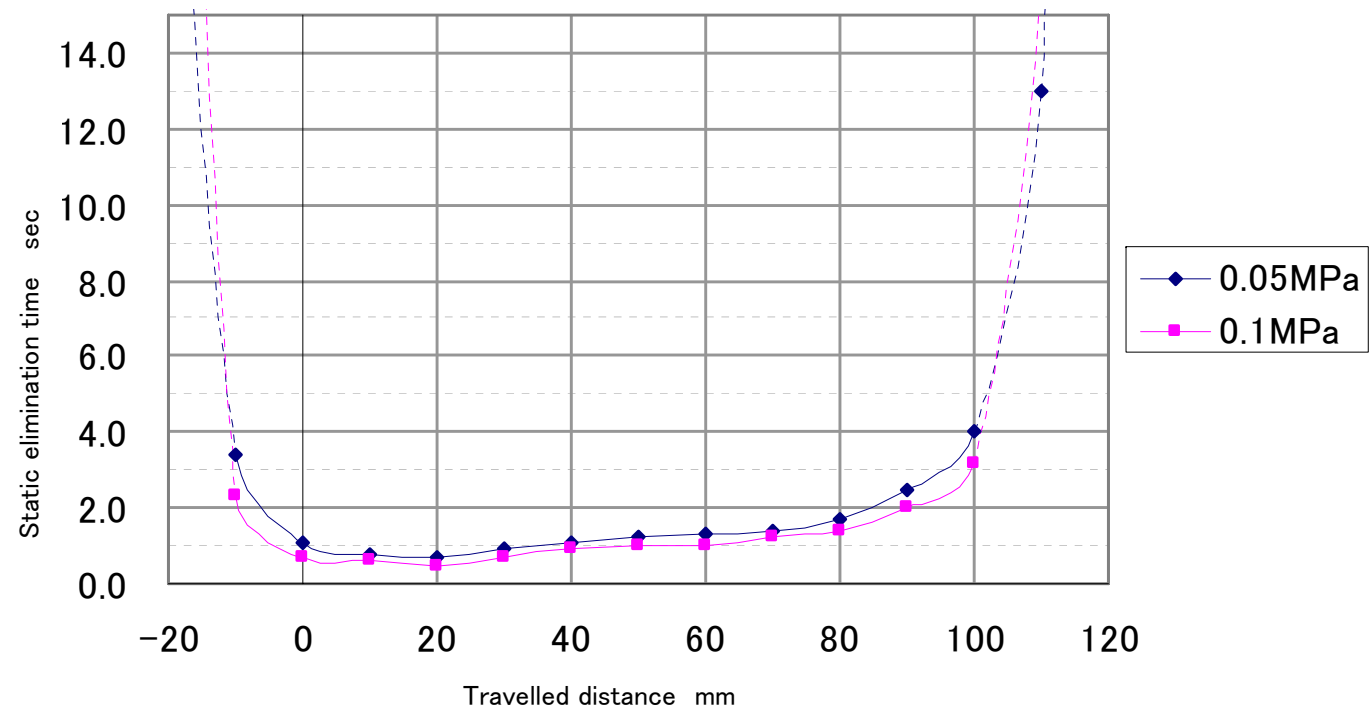
Related info.		Comment	

Info. description	IZN10 Measurement of static elimination of bar nozzle			Prepared on	2008. 7. 2
Responsible Dept.	PD-3	Model	IZN10	Info No. .	IZ*-TDM0021

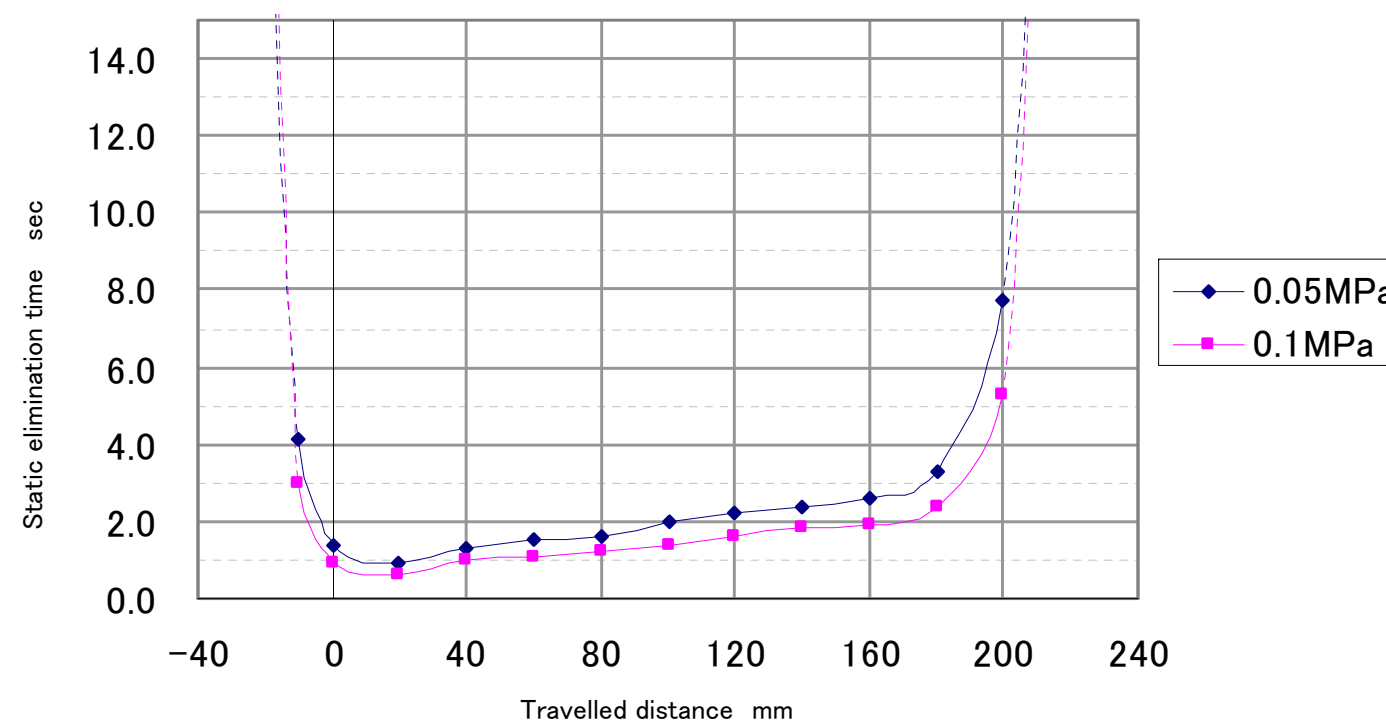
5. Test result

Test result is shown in the charts below

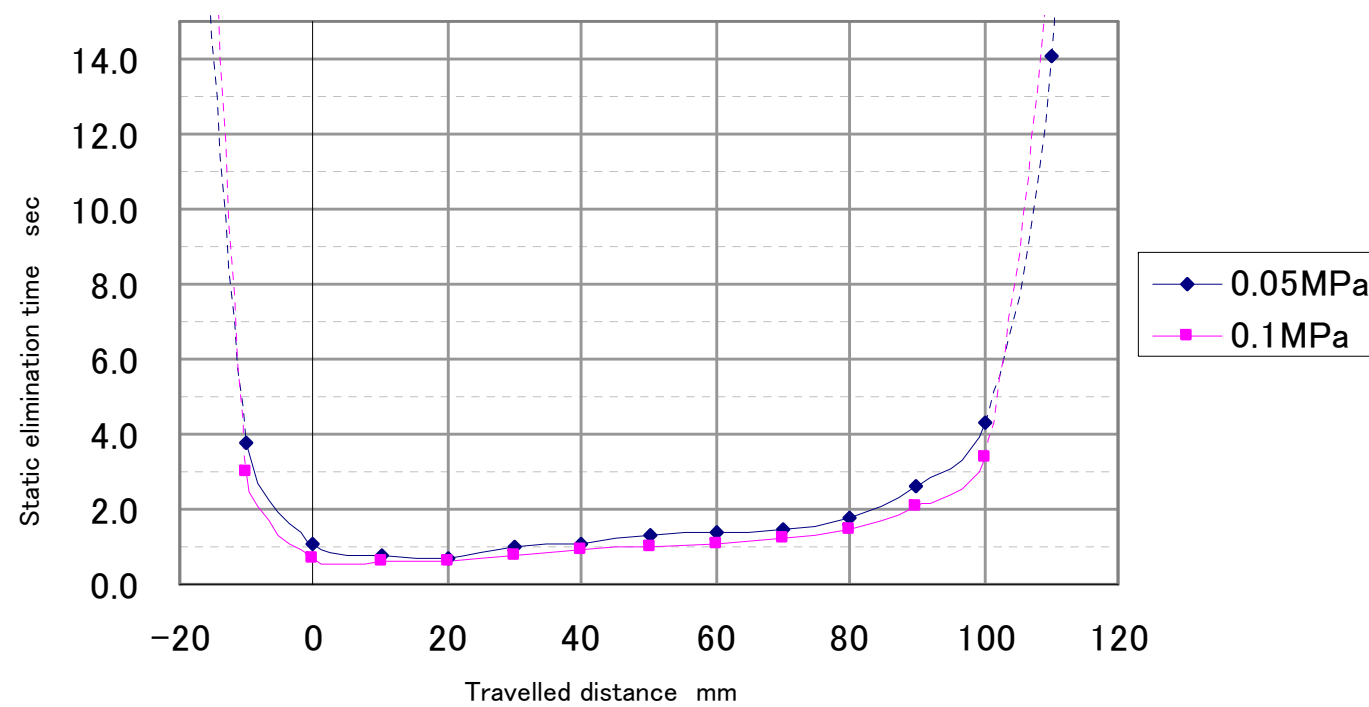
(a) Static elimination time +1000V~+100V (Bar length 100mm)



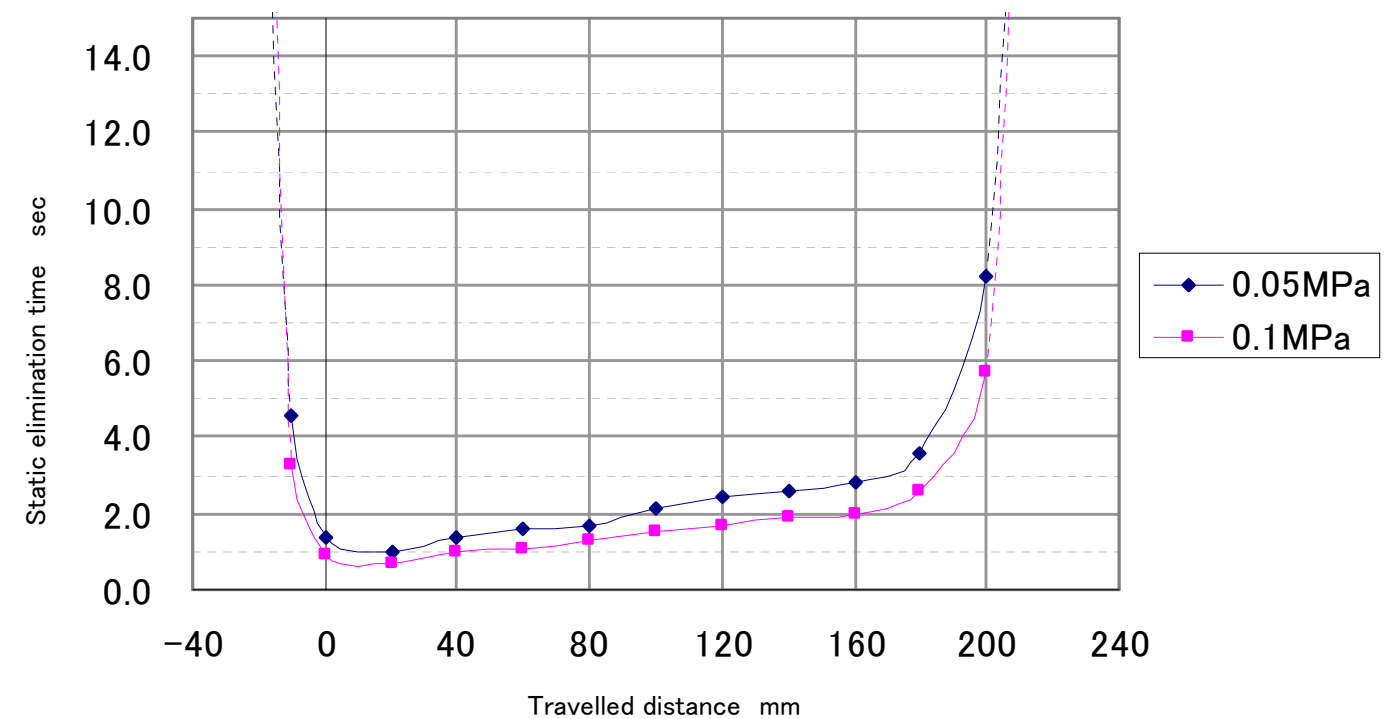
(c) Static elimination time +1000V~+100V (Bar length 200mm)



(b) Static elimination time -1000V~-100V (Bar length 100mm)



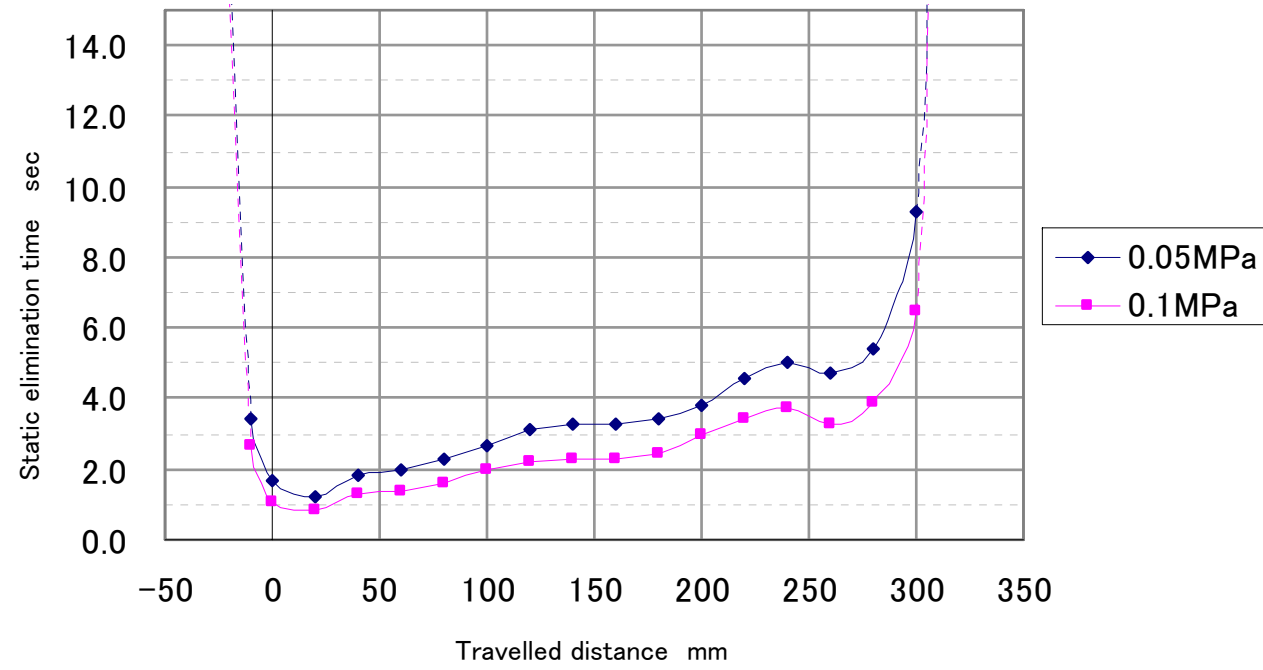
(d) Static elimination time -1000V~-100V (Bar length 200mm)



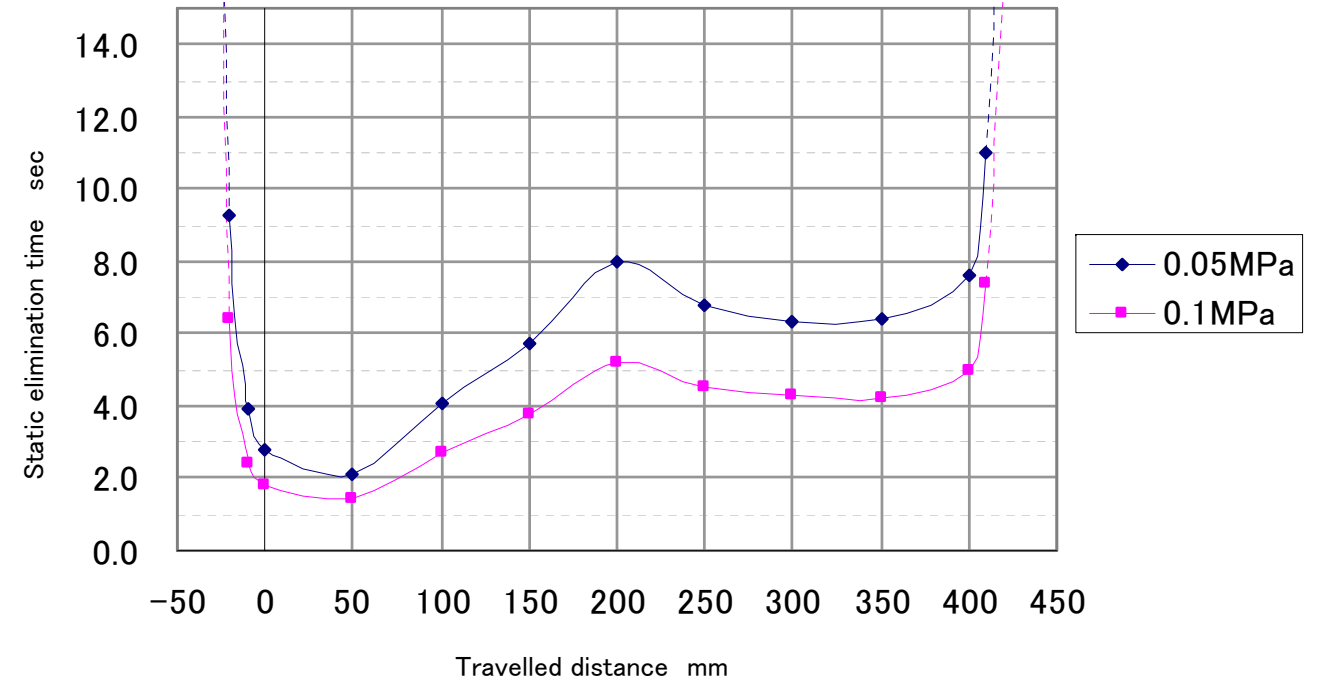
Related info.		Comment	

Info. description	IZN10 Measurement of static elimination of bar nozzle			Prepared on	2008.7.2
Responsible Dept.	PD-3	Model	IZN10	Info No. .	IZ*-TDM0021

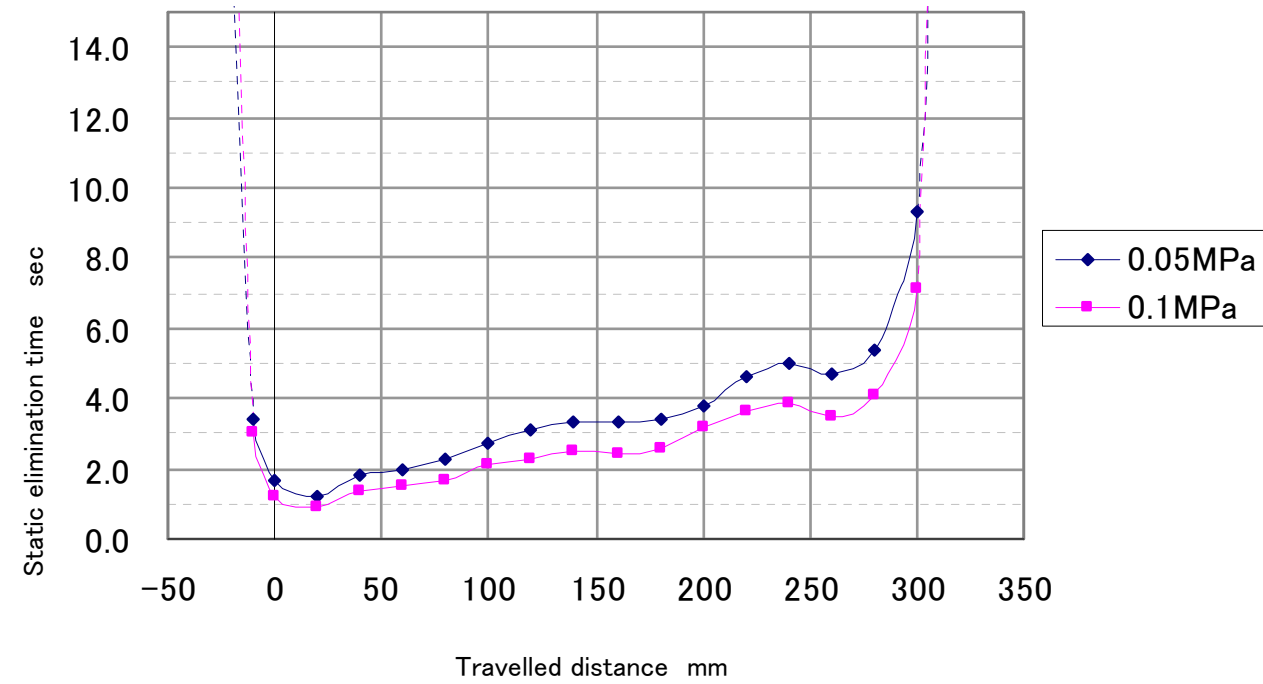
(e) Static elimination time +1000V~+100V (Bar length 300mm)



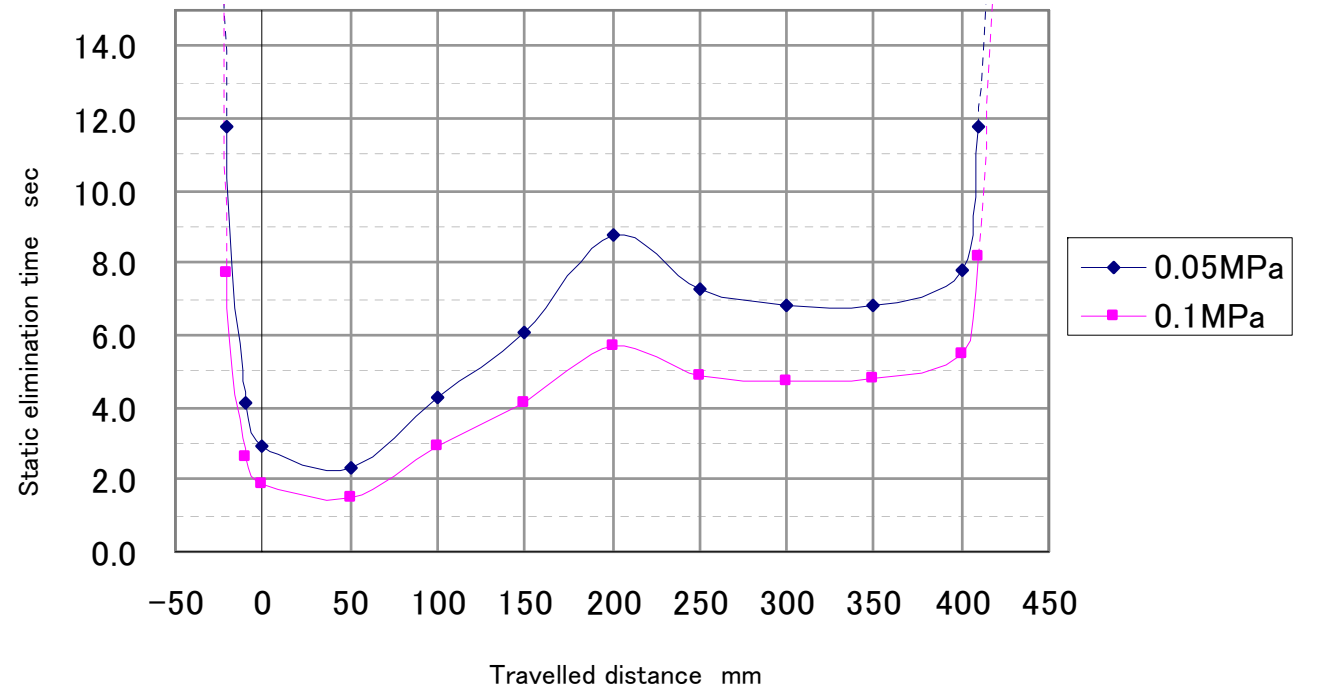
(g) Static elimination time +1000V~+100V (Bar length 400mm)



(f) Static elimination time -1000V~-100V (Bar length 300mm)



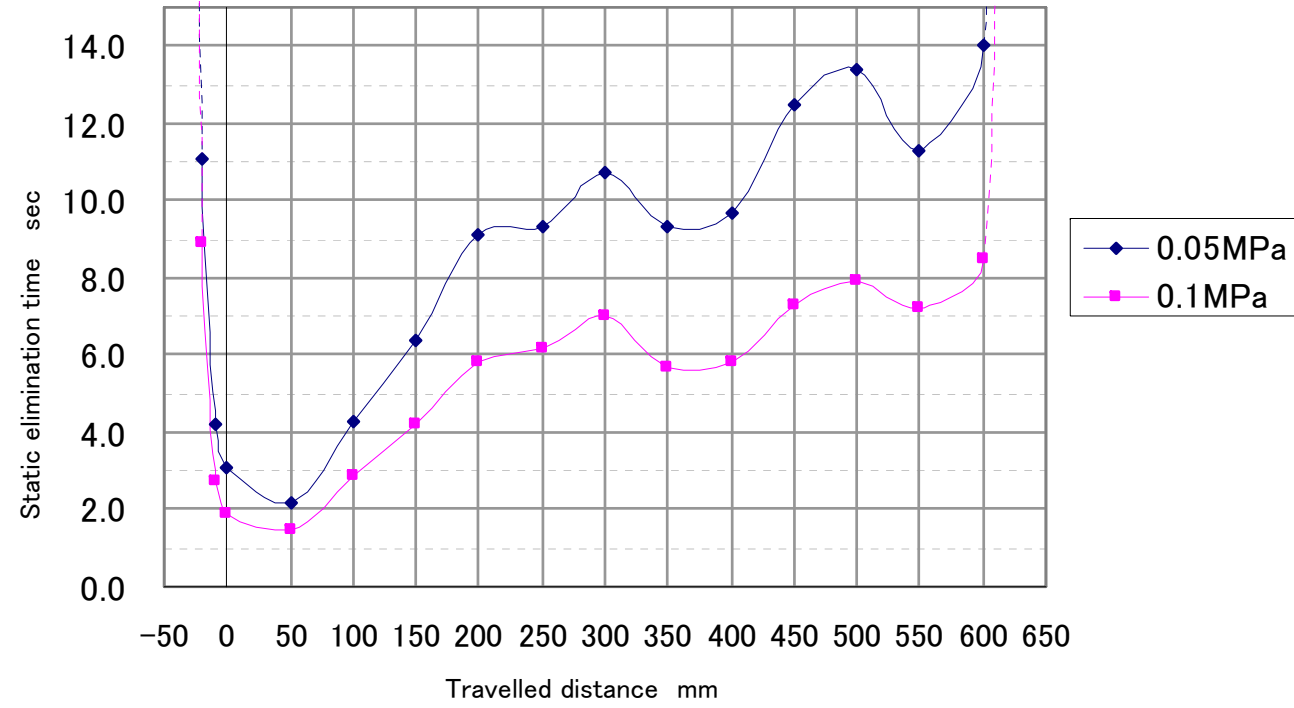
(h) Static elimination time -1000V~-100V (Bar length 400mm)



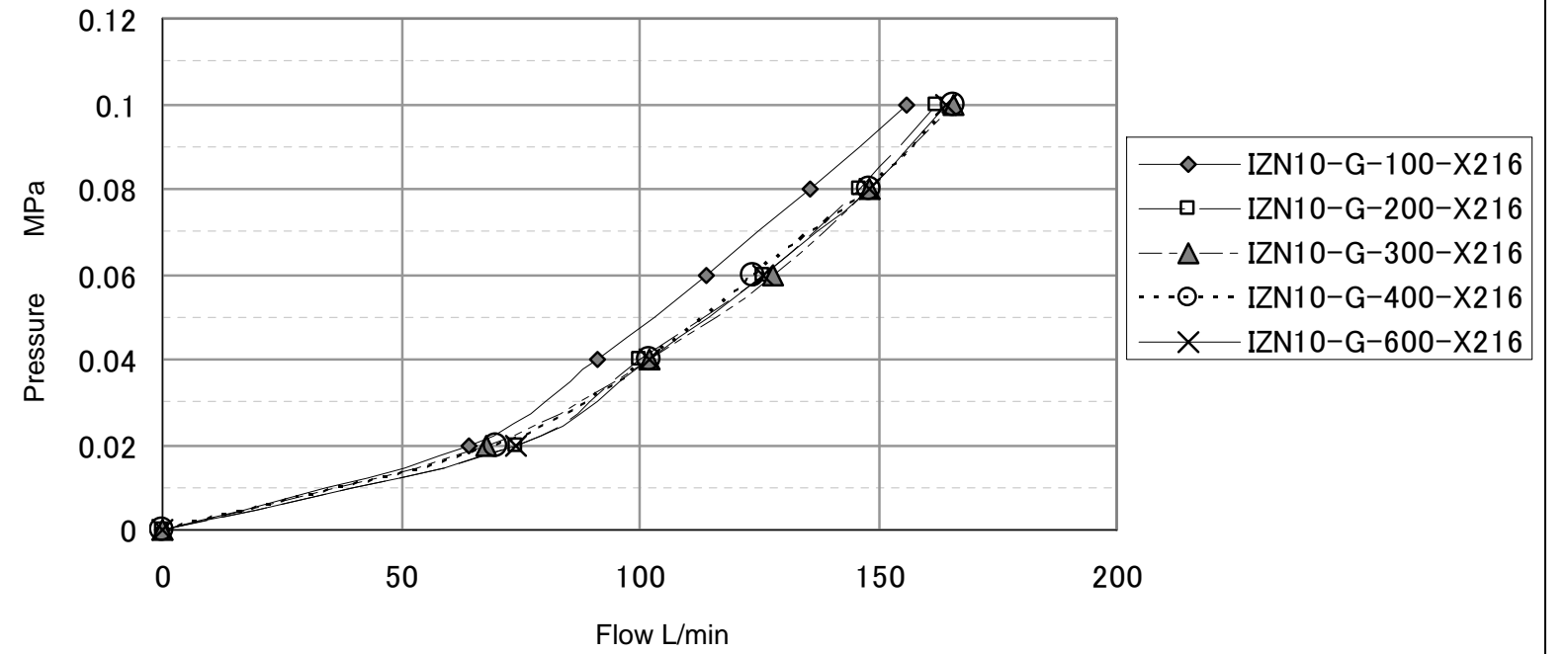
Related info.		Comment	

Info. description	IZN10 Measurement of static elimination of bar nozzle			Prepared on	2008.7.4
Responsible Dept.	PD-3	Model	IZN10	Info No. .	IZ*-TDM0021

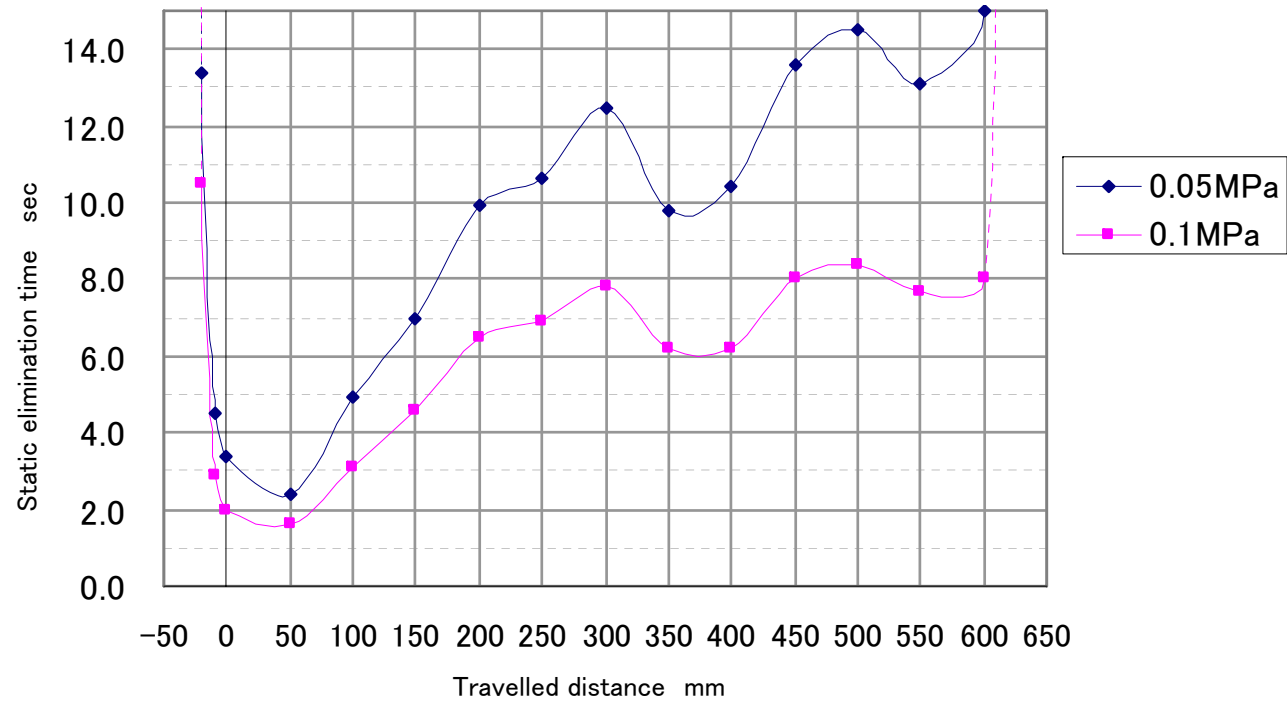
(i) Static elimination time +1000V~+100V (Bar length 600mm)



(k) Flow characteristic
Result of flow depending on pressure for bar nozzle



(j) Static elimination time -1000V~-100V (Bar length 600mm)



Related info.		Comment	

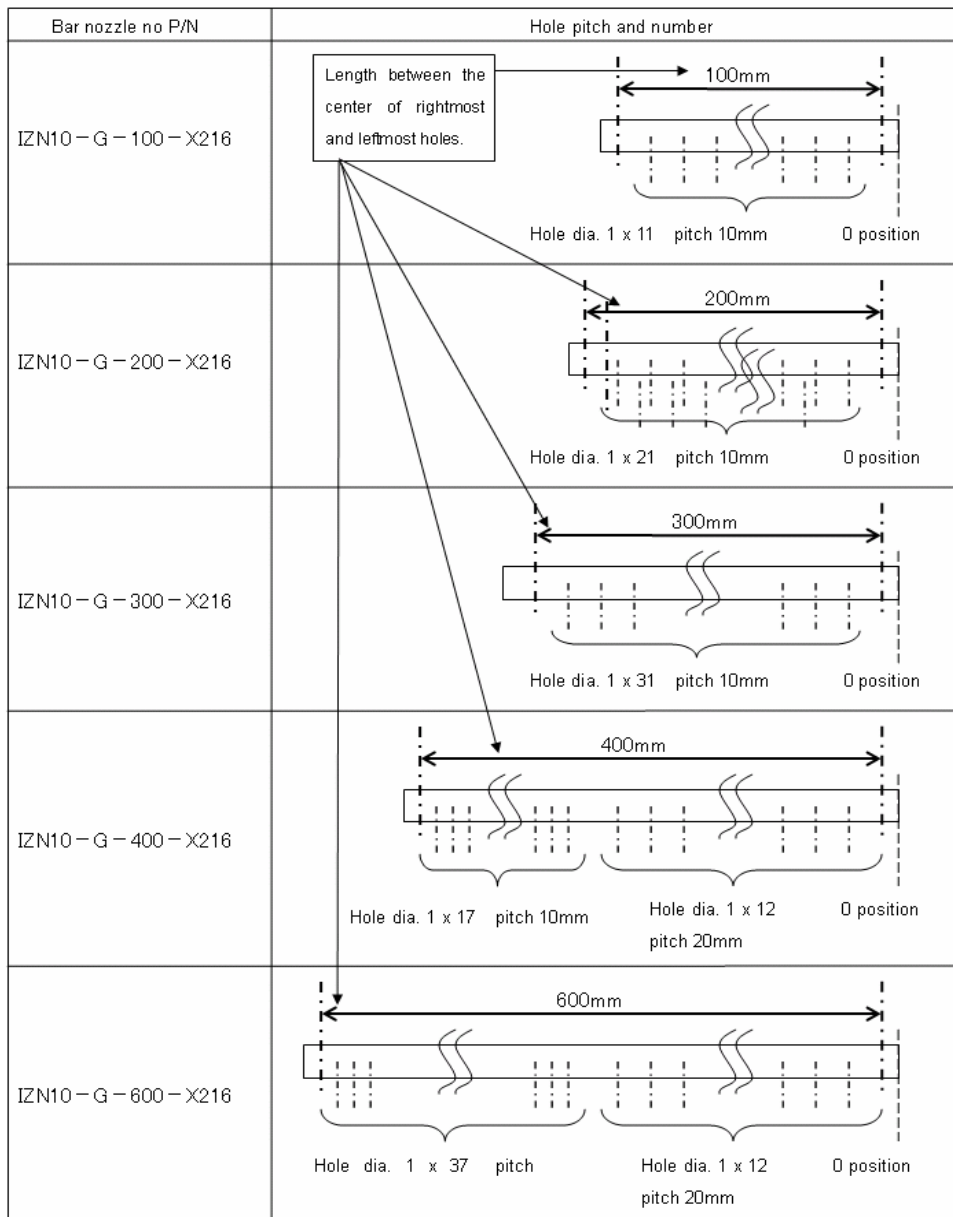
Info. description	IZN10 Measurement of static elimination of bar nozzle		Prepared	2008.7.2
Responsible Dept.	PD-3	Model	IZN10	Info No. .
				IZ*-TDM0020

1. General

Measured static elimination performance of IZN10-11 (nozzle with female thread) option bar nozzle.

2. Sample

- (1) IZN10-11(lonizer main body)+IZN10-G-100-X216(Bar nozzle :Length between the center of rightmost and leftmost holes100mm)
- (2) IZN10-11(lonizer main body)+IZN10-G-200-X216(Bar nozzle :Length between the center of rightmost and leftmost holes200mm)
- (3) IZN10-11(lonizer main body)+IZN10-G-300-X216(Bar nozzle :Length between the center of rightmost and leftmost holes300mm)
- (4) IZN10-11(lonizer main body)+IZN10-G-400-X216(Bar nozzle :Length between the center of rightmost and leftmost holes400mm)
- (5) IZN10-11(lonizer main body)+IZN10-G-600-X216(Bar nozzle :Length between the center of rightmost and leftmost holes600mm)



Drawing 1.Bar nozzle

Related info.		Comment	

2 / 4
2008.7.2

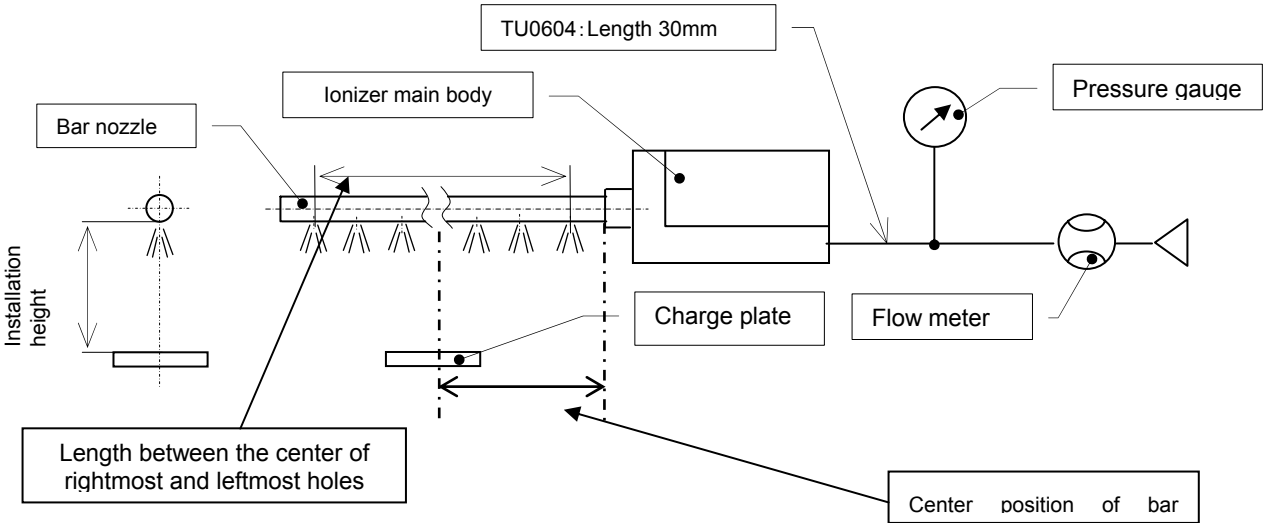
Info. description	IZN10 Measurement of static elimination of bar nozzle	Prepared	
Responsible Dept.	PD-3	Model	IZN10
		Info. No.	IZ*-TDM0020

1. Test condition

- (1) Test condition : General environment(Laboratory) Room temp 24.2°C Humidity 30.7%
- (2) Installation height : 50mm, 100mm, 200mm, 300mm
- (3) Supply pressure : 0.05, 0.1MPa
- (4) Instruments :
 - Static elimination time / Ion balance measurement tool Charge plate monitor of TREK Model158 □150mm(20±2pF)
 - Pressure gauge PPA100 COMPACT MANOMETER of SMC

2. Test condition

Set samples at 50mm, 100mm, 200mm, and 300mm of height, and set the charge plate at the center position of bar nozzle. Supply pressure above to each sample to measure the static elimination time and ion balance each time.



Drawing 2 Test condition

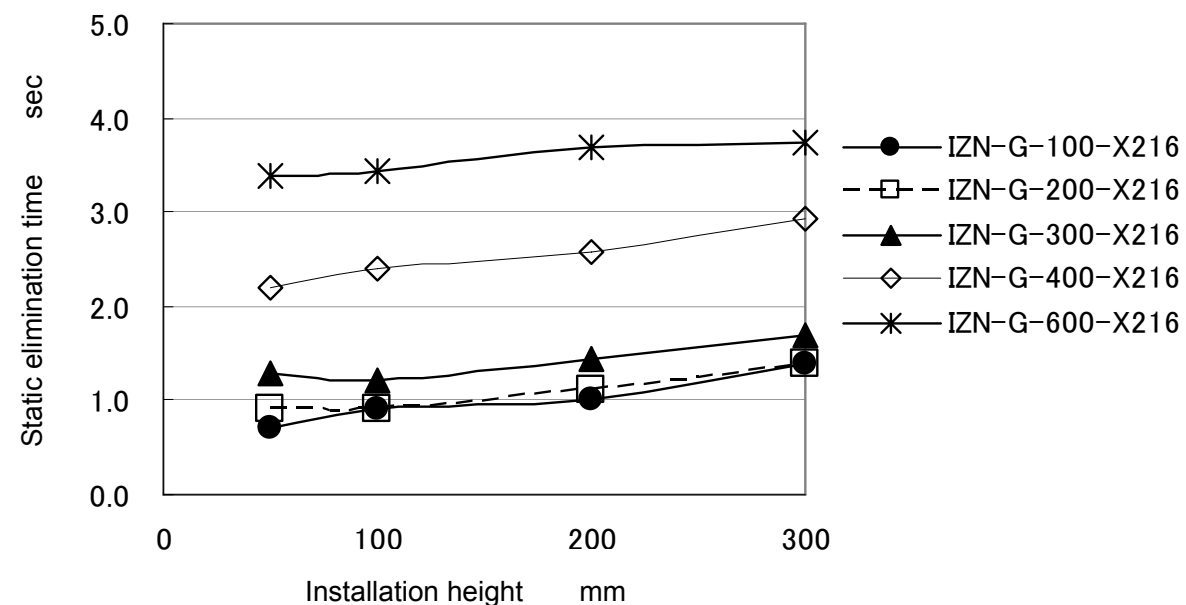
Related info.		Comment	

Info. description	IZN10 Measurement of static elimination of bar nozzle			Prepared on	2008.7.2
Responsible Dept.	PD-3	Model	IZ*-TDM0020	Info No. .	IZ*-TDM0020

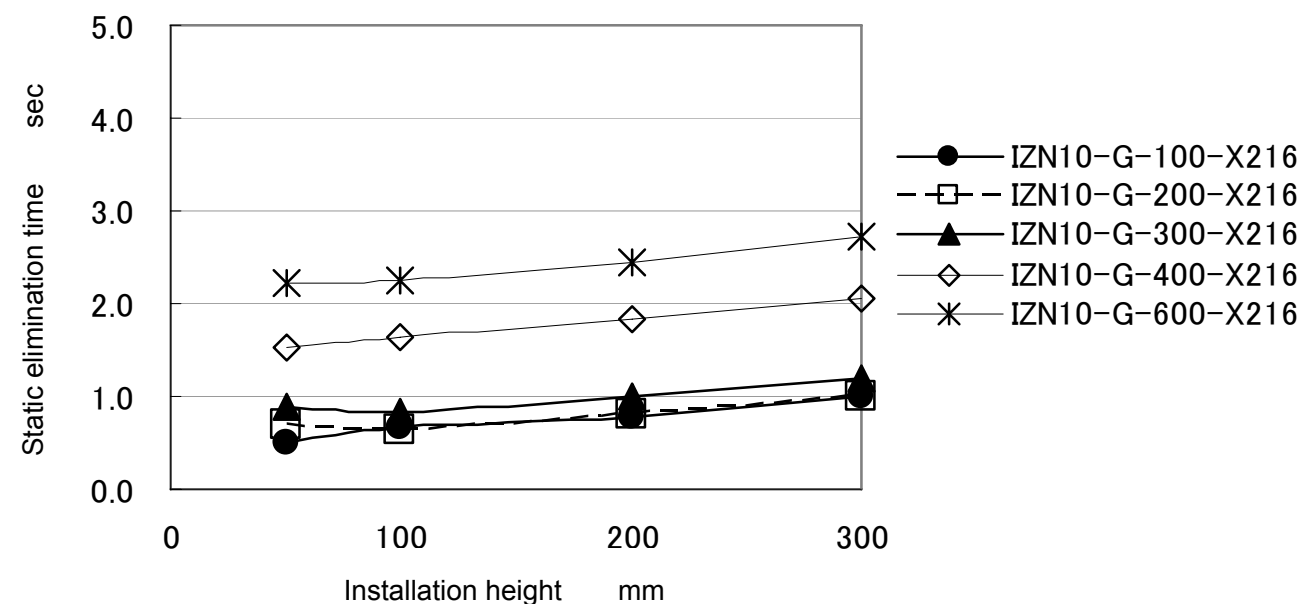
5. Test result

Test 1

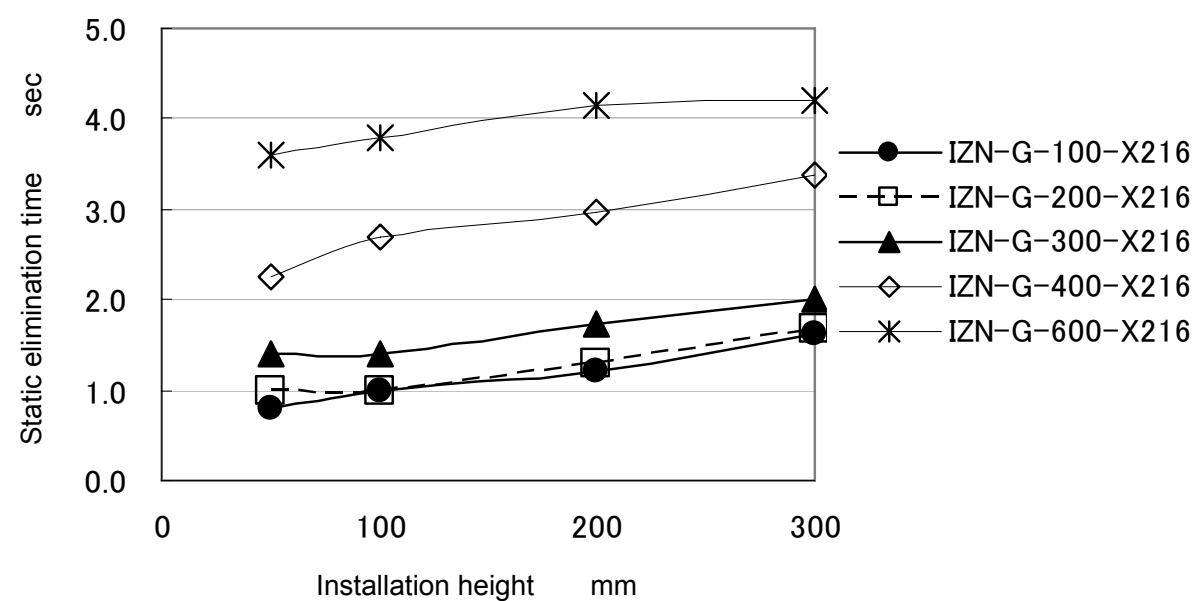
(a) Static elimination time (+1000V → +100V) Supply pressure 0.05MPa



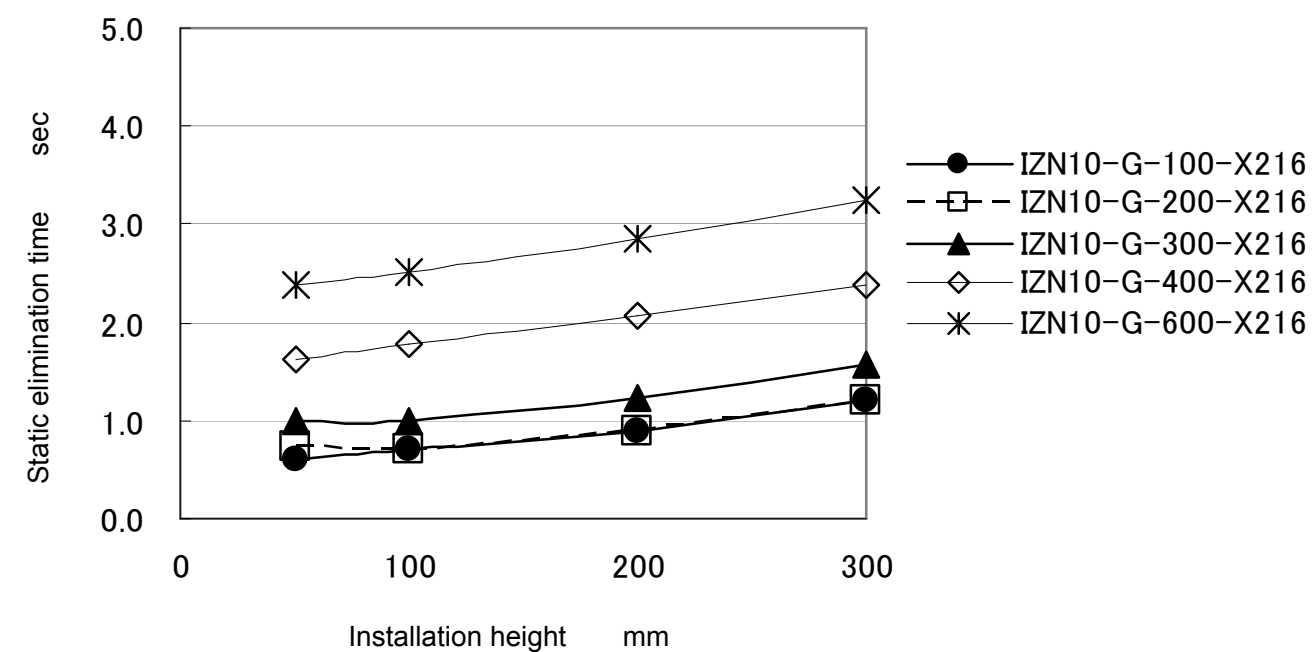
(c) Static elimination time (+1000V → +100V) Supply pressure 0.1MPa



(b) Static elimination time (-1000V → -100V) Supply pressure 0.05MPa



(d) Static elimination time (-1000V → -100V) Supply pressure 0.1MPa



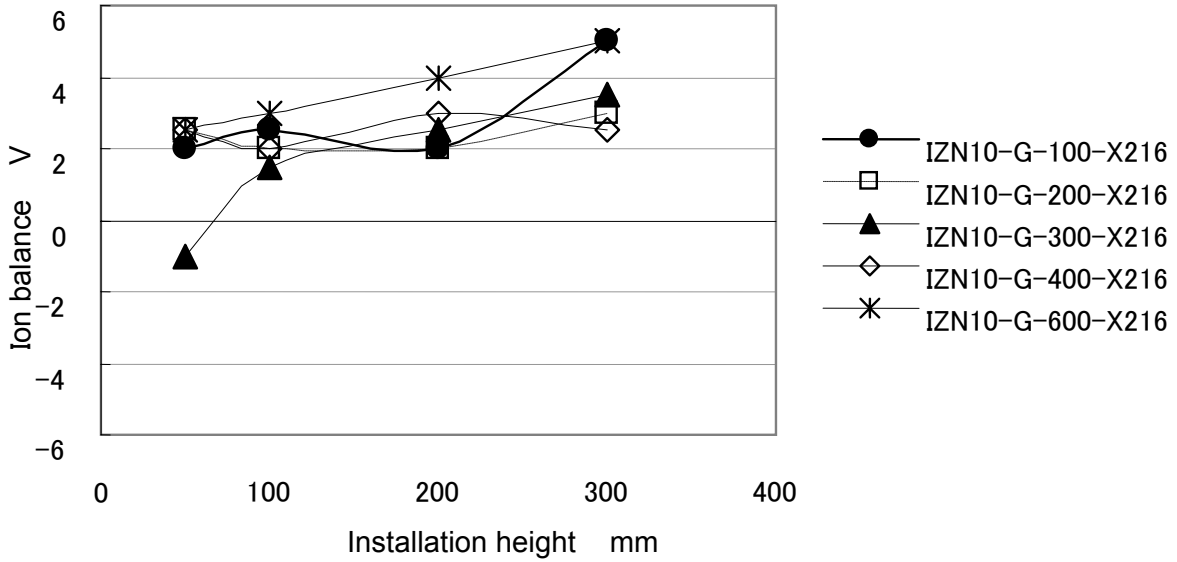
Related info.		Comment	

Info. description	IZN10 Measurement of static elimination of bar nozzle	Prepared
Responsible Dept.	PD-3	Model
		IZN10

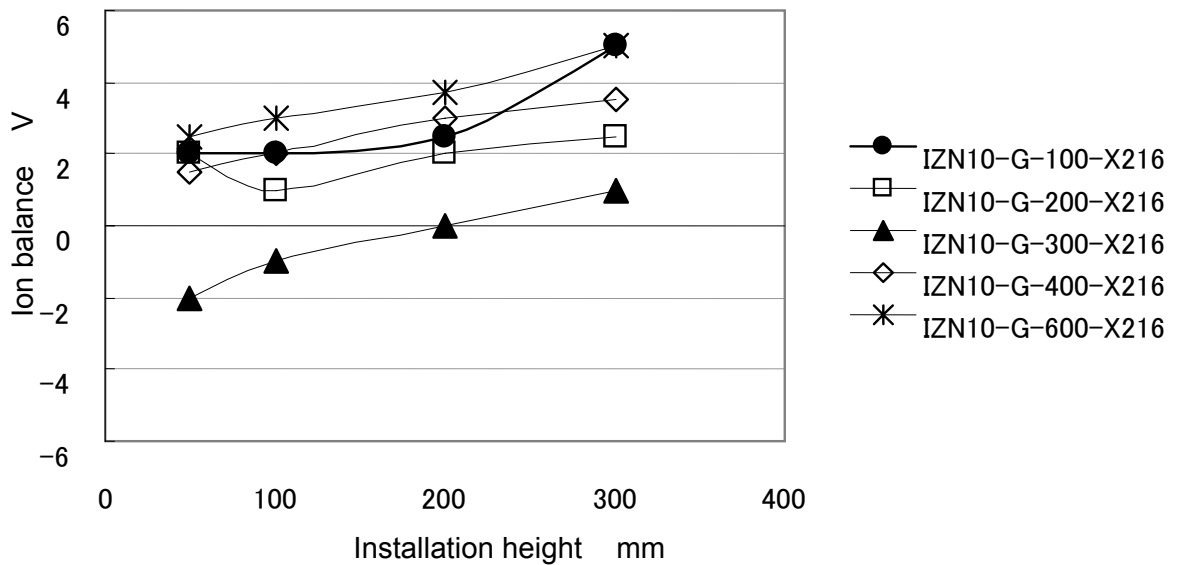
5. Test result

Test 1

(e) Ion balance Supply pressure 0.05MPa



(f) Ion balance Supply pressure 0.1MPa



Related info.		Comment	