

Solvent Resistant Nichipet EX

# Nichipet EX PlusII

Chemical Resistant Model of Nichipet Series



Materials used for pipette body have high tolerance to solvents. Non-grease designed. No need to worry about continuous autoclaving.



An alloy spring to avoid metal corrosion by organic solvents.



Chemical-guard O-ring with minimum expansion ratio.



Easy calibration with enclosed jig.



Ceramic plunger is used to prevent from corrosion by solvents. (200ul to 10000ul type)



Resin material of ejector pipe could enhance high tolerance to solvents.

- Advanced durability against organic solvent dispensing.
  - ▷PTFE (Fluorine resin) in the air tight chamber of the instrument.
  - ▷A Perfluoro rubber O-ring with low cubical expansion in the air tight parts.
  - ▷All models have plungers made in materials resistant to organic solvents.
  - ▷An alloy spring to avoid metal corrosion by organic solvents.
- Hyper blower system, longer second-push stroke, improves dispensing efficiency.(2μL,10μL)
- Fully autoclavable. ( 121°C for 20 minutes )
- Enhanced UV resistance for better use in UV hoods.
- Easy-Calibration function provides simple lab calibration.
- Ceramic plungers are used for volume models larger than 100μL.
- The one-touch locking mechanism makes it easy to lock the sample volume.

\*All features of Nichipet EXII are available on Nichipet Premium.

## Specifications

Cat. No	Volume setting	Volume range(μL)	Increments (μL)	Usable tips
00-NPLO2-2	Digital setting	0.1 - 2	0.002	BMT2-UT/UTR, FUT/FUTRB
00-NPLO2-10		0.5 - 10	0.01	BMT2-SS/SSR, FSS/FSSRB
00-NPLO2-20		2 - 20	0.02	BMT2-SG/SGR, SE/SER, FSG/FSGRB
00-NPLO2-100		10 - 100	0.1	BMT2-SG/SGR, SE/SER, FSG/FSGRB*, FSE/FSERB
00-NPLO2-200		20 - 200	0.2	BMT2-SG/SGR, SE/SER, FSE/FSERB*, FAG/FAGRB
00-NPLO2-1000		100 - 1000	1	BMT2-LG/LGR, LE/LER, FLG/FLGRB, FLE/FLERB
00-NPLO2-5000		1000 - 5000	10	BMT2-X/XR
00-NPLO2-10000		1000 - 10000	10	BMT2-Z/ZR

\*The filters of NPLO2-5000 and NPLO2-10000 are not compatible with NPL0-5000 and NPL0-10000. Please find page 23-24.  
\*See P15-16 for tip selection.

## Accuracy and Precision

Cat. No	Volume(μL)	Accuracy(%)	Precision(%)	Cat. No	Volume(μL)	Accuracy(%)	Precision(%)
00-NPLO2-2	0.2	±12.0*	≤6.0*	00-NPLO2-200	20	±1.0	≤0.5
	1	±5.0	≤2.5		100	±0.8	≤0.3
	2	±3.0	≤1.0		200	±0.8	≤0.2
00-NPLO2-10	1	±4.0	≤3.0	00-NPLO2-1000	100	±1.0	≤0.5
	5	±1.0	≤1.0		500	±0.8	≤0.3
	10	±1.0	≤0.5		1000	±0.7	≤0.2
00-NPLO2-20	2	±5.0	≤3.0	00-NPLO2-5000	1000	±1.0	≤0.3
	10	±1.0	≤1.0		2500	±0.8	≤0.3
	20	±1.0	≤0.4		5000	±0.6	≤0.2
00-NPLO2-100	10	±2.0	≤1.0	00-NPLO2-10000	1000	±2.0	≤0.4
	50	±1.0	≤0.3		5000	±0.8	≤0.3
	100	±0.8	≤0.3		10000	±0.4	≤0.2

\*The AC and CV values below 0.2μL depend much on the operator's skill and the environment under which the pipette is used.  
\*The AC and CV values are the values by use of the disposable tips described in the catalogue.  
\*The specification and price are subjected to change without notice due to modifications for quality improvement.

\*The Nichipet EX PlusII is made of parts resistant to organic solvents which makes it more durable than previous pipettes in environments with organic solvents. However, it does not guarantee accuracy of dispensing organic solvents.  
\*As the body of the Nichipet EX PlusII is not resistant to organic solvents, make sure it does not come in contact with the organic solvents.

## The chemical resistance of Perfluoro rubber O-ring

- ▷A perfluoro rubber O-ring is installed in Nichipet EX plusII.
- ▷The volume growth of Perfluoro rubber against acid, alkalis, ammonia water, ester, furan and amine is small.

A : Volume expansion rate below 5% ..... No problem at all  
B : Volume expansion rate 5% - 20% ..... No problem  
C : Volume expansion rate 20% - 50% ..... Possible with some conditions  
D : Volume expansion rate over 50% ..... Nonusable

Chemicals	Temperature	Test days	Perfluoro	Fluorine rubber normal O-ring	Chemicals	Temperature	Test days	Perfluoro	Fluorine rubber normal O-ring
Inorganic acid & Organic acid					Ketone, Ester, Ether				
Glacial acetic acid	40°C	21	A	C	Acetone	40°C	21	B	D
Acetic anhydride	40°C	21	A	C	Methyl ethyl ketone	40°C	21	A	D
Inorganic alkalies					Methyl isobutyl ketone				
28% Ammonia water	40°C	21	A	D	Isophorone	40°C	21	A	D
Furan & Aldehyde					Diacetone alcohol				
Tetrahydrofuran	40°C	21	C	D	gamma - Butyrolactone	40°C	21	A	C
2-Methyl Tetrahydrofuran	40°C	21	B	D	Diethylene carbonate	40°C	21	A	D
Acetaldehyde	25°C	21	B	D	Acetylacetone	40°C	21	A	D
Acetophenone	40°C	21	A	C	Methyl formate	25°C	21	B	D
Inclusive nitrogen compound					Methyl acetate				
Acrylic nitrile	40°C	21	A	C	Acetic ether	40°C	21	B	D
Ethylene diamine	40°C	21	B	D	Isoamyl acetate	40°C	21	A	D
Pyridine	40°C	21	A	C	Methyl acetoacetate	40°C	21	A	C
N,N - dimethylformamide	40°C	21	A	D	Ethyl acetoacetate	40°C	21	A	C
N,N - dimethylacetamide	40°C	21	A	D	Acrylic acids	40°C	21	A	C
N-methyl-2-pyrrolidone	100°C	7	A	D	Ethyl acrylate	40°C	21	A	D
Carbon hydride, Carbon hydride halide					Diethyl oxalate				
Toluene	40°C	21	A	B	Triethyl phosphate	40°C	21	A	D
Xylene	40°C	21	A	B	Tricresyl phosphate	100°C	7	A	C
Chloroform	40°C	21	B	B	Diethyl ether	25°C	21	B	C
Alcohols					1, 4 - dioxan				
Methyl carbitol	40°C	21	A	B	Methyl - t - butyl ether	100°C	7	A	C
Ethyl carbitol	40°C	21	A	B					
Others, Oil, Steam									
DN cut HS-1 cutting oil	130°C	11	A	A					
O-148LCT Air craft engine oil	175°C	20	A	B					

\*For more information, please feel free to contact us.