

Solvent Resistant Nichipet EX II

Nichipet® EX Plus II

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.



Easy calibration with enclosed jig.



Ceramic plunger is used to prevent from corrosion by solvents. (200μL - 10000μL)



Chemical-guard O-ring with minimum expansion ratio.



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.

■ Hyper Blower System; a longer push stroke from the second stop position, to improve dispensing efficiency. (2μL, 10μL)

■ Easy-Calibration function provides simple lab calibration.

■ The one-touch locking mechanism makes it easy to lock the sample volume.

*All features of Nichipet EX II are available on Nichipet Premium.

- Since the volume indicator is made of glass, ultraviolet germicidal of the clean bench will not make it cloud.
- From prolonged irradiation, the surface layer of plastic may deteriorate or discolor, but its performance is not affected.

Specifications

Cat. No	Volume setting	Volume range(μL)	Increments (μL)	Usable tips
00-NPLO2-2	Digital setting	0.1 - 2	0.002	BMT2-UT/UTWR/UTWRB, FUT/FUTRB
00-NPLO2-10		0.5 - 10	0.01	BMT2-SSW/SSWR/SSWRB, FSS/FSSRB
00-NPLO2-20		2 - 20	0.02	BMT2-SG/SGR/SGRB, FSG/FSGRB
00-NPLO2-100		10 - 100	0.1	BMT2-SG/SGR/SGRB, FSE/FSERB
00-NPLO2-200		20 - 200	0.2	BMT2-SG/SGR/SGRB, FAG/FAGRB
00-NPLO2-1000		100 - 1000	1	BMT2-LG/LGR/LGRB, FLG/FLGRB
00-NPLO2-5000		1000 - 5000	10	BMT2-X/XR/XRB
00-NPLO2-10000		1000 - 10000	10	BMT2-Z/ZR/ZRB

* See p.19-20 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 subject to change without notice due to modifications for quality improvement.

* The Nichipet EX Plus II 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 Plus II 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 plus II.

▷ 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	* For more information, please feel free to contact us.				
O-148LCT Air craft engine oil	175°C	20	A	B					