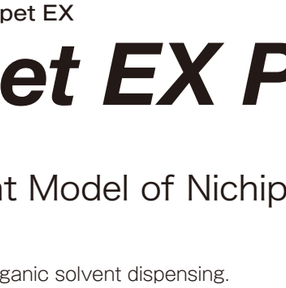
Solvent Resistant Nichipet EX

Nichipet EX PlusⅡ

Chemical Resistant Model of Nichipet Series

- 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℃ 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.

Chemical-guard O-ring with minimum expansion ratio



Easy calibration with enclosed jig

Specifications

Cat. No	Volume setting	Volume range(μL)	Increments (μL)	Usable tips
00-NPLO2-2	Digital setting	0.1 – 2	0.002	BMT-UT/UTR、CT-UT/UTR
00-NPLO2-10		0.5 – 10	0.01	BMT-SS/SSR、CT-SS/SSR
00-NPLO2-20		2 – 20	0.02	BMT-SE/SER、SG/SGR、CT-SG/SGR
00-NPLO2-100		10 – 100	0.1	BMT-SE/SER、SG/SGR、CT-SG/SGR、SE/SER
00-NPLO2-200		20 – 200	0.2	BMT-SE/SER、SG/SGR、CT-AG/AGR、SE/SER
00-NPLO2-1000		100 – 1000	1	BMT-L/LR、CT-L/LR
00-NPLO2-5000		1000 – 5000	10	BMT-X/XR
00-NPLO2-10000		1000 – 10000	10	BMT-Z

＊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.

Chemicals	Temperature	Test days	Perfluoro rubber O-ring	Fluorine rubber normal O-ring
Inorganic acid & Organic acid				
Glacial acetic acid	40℃	8	A	C
Acetic anhydride	40℃	8	A	C
Inorganic alkalies				
28% Ammonia water	40℃	21	A	D
Furan & Aldehyde				
Tetrahydrofuran	40℃	21	B	D
2-Methyl Tetrahydrofuran	40℃	21	B	D
Acetaldehyde	25℃	21	B	D
Acetophenone	40℃	21	A	C
Inclusive nitrogen compound				
Acrylic nitrile	40℃	21	A	C
Ethylene diamine	40℃	21	B	D
Pyridine	40℃	21	A	C
N, N - dimethylformamide	40℃	21	A	D
N, N - dimethylacetamide	40℃	21	A	D
N-methyl-2-pyrrolidone	100℃	7	A	D

Chemicals	Temperature	Test days	Perfluoro rubber O-ring	Fluorine rubber normal O-ring
Ketone, Ester, Ether				
Acetone	40℃	21	B	D
Methyl ethyl ketone	40℃	21	A	D
Diethylene carbonate	40℃	21	A	D
Acetylacetone	40℃	21	A	D
Methyl formate	25℃	21	B	D
Methyl acetate	40℃	21	A	D
Acetic ether	40℃	21	B	D
Isoamyl acetate	40℃	21	A	D
Acrylic acids	40℃	21	A	C
Ethyl acrylate	40℃	21	A	D
Diethyl oxalate	40℃	21	A	D
Triethyl phosphate	40℃	21	A	D
Tricresyl phosphate	100℃	7	A	C
Diethyl ether	25℃	21	B	C

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

＊visit our web-site for part lists.