

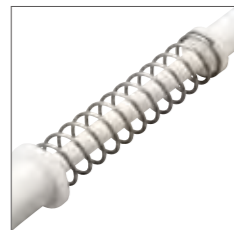
Solvent Resistant Nichipet EX

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.



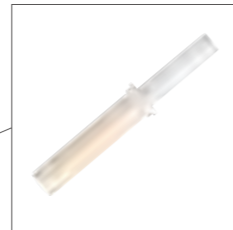
An alloy spring to avoid metal corrosion by organic solvents.



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. (200μL - 10000μL)
- 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/UTWR/UTWRB, FUT/FUTRB |
| 00-NPLO2-10 | | 0.5 - 10 | 0.01 | BMT2-SS/SSR/SSRB, 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 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 subject 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 | *For more information, please feel free to contact us. | | | | |
| 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 | | | | | |