

# IKA

designed for scientists

 ***Fox Scientific, Inc.***

*sales@foxscientific.com • (800)369-5524*

*www.foxscientific.com*

EN



PRECISE DISPENSING | IKA PETTE fix and vario

## IKA PETTE

/// IT FITS SO COMFORTABLY IN YOUR HAND THAT YOU DON'T WANT TO LET GO

It's everything you could ever want for precise dispensing combined in one device: With the new PETTE fix and vario pipettes, IKA combines the most popular features of this laboratory classic. With uncompromisingly accurate performance and the desired reproducibility, the new PETTE is also incredibly comfortable in your hand. This makes it ideal for a wide range of applications and frequent laboratory use.

### From A to Z: autoclavable, reliable and more

IKA PETTE fix and vario are fully autoclavable, therefore ensuring easy sterilization. This guarantees fault-free, precise and safe operation. Thanks to the color coding on the IKA single-channel fix and vario pipettes, you can quickly find the right pipette. Moreover, IKA pipettes are naturally shock-resistant, UV and chemical resistant, which in turn ensures reliable dispensing.



## 18 Pipettes with 3 Grips each

PETTE is available in 18 different sizes, from the micro pipette, having a volume of 0.1 µl, up to metering of 10 ml. Ten models have a fixed volume, whereas eight are adjustable. Each pipette comes with three different grip sizes. Whether you're left-handed or right-handed, have big hands or small hands - the new PETTE is always perfectly fitted to your hand.

## Personalized Application Advice

You can test all the pipettes yourself at the IKA Application Center. Our experts are available for questions and various tests of all kinds.

## Worldwide Service

Choosing an IKA PETTE also means choosing the excellent technical service offered by IKA. Our team is available worldwide for your service and application needs. Spare parts for your pipette are guaranteed for 10 years. In addition, we calibrate your pipette on request as often as you need according to standard (ISO 8655).

**Any questions? Our service team is available for your specific requirements:**

00 8000 52457 (00 8000 IKAHELP)  
service@ika.de

### MADE IN GERMANY

Each of the 18 IKA PETTE fix and vario models is 100% produced, assembled and calibrated in Germany.



\*1+1 years after registering at [www.ika.com/register](http://www.ika.com/register), wearing parts excluded

## PETTE fix and vario

/// Simple liquid handling for fixed and variable volumes

An ergonomic feel combined with uncompromising precise performance: the IKA single fix and vario pipettes have been devised for use in many applications typical in a modern laboratory. Color coding makes it simple to find the right pipette. The fact that they are resistant to impact, UV, and chemicals, ensures the pipettes will provide long-term reliable dispensing. PETTE fix and vario are fully autoclavable, therefore ensuring easy sterilization. This guarantees fault-free, precise and safe operation.

---

4  
/// FEATURES

12  
/// COMPLETE LAB SOLUTIONS

8  
/// TECHNICAL DATA

14  
/// FAQ

10  
/// ACCESSORIES

15  
/// SCOPE OF DELIVERY



## A dose of everything you need

### Ergonomic design

IKA pipettes include three exchangeable grips in different shapes and materials. Designed for both right-handers and left-handers, as well as for people with small or large hands, they are guaranteed to fit comfortably in your hand. The minimal frictional and spring forces also ensure ergonomically-friendly dispensing; without any effort. One-handed adjustment of the volume is possible using the multi-functional knob. Moreover, the tip of the pipette can be replaced regardless of your hand position, while the volume adjustment is securely locked. Together with its pleasantly smooth surface and its low weight, the ergonomic design makes for an extremely pleasant work experience.



### Award-winning IKA PETTE

The new IKA PETTE fix and vario pipettes, available in a total of 18 different models, have received two prizes already. The Council for Design honored the laboratory classic with the German Design Award 2020 in the category "Excellent Product Design - Industry". In addition, the 78-member panel of experts from International Forum Design GmbH in Hanover praised the IKA PETTE's innovative shape and awarded the world-renowned iF Design Award 2020.

### Designed to last

The tip cone and piston are coated with a high-quality coating\* (DLC, diamond like carbon). PETTE fix and vario are constructed in a functional and minimalistic way and consist of a very few clearly-arranged parts. This combination makes for extra-sturdy pipettes that delivers reliable results day after day. Moreover, they are easy to clean.



\* Pipettes with volume up to 200 µl



### Always readable

The mechanical volume display shows the set volume in large numbers and is easy to read no matter how you hold it - even while dispensing.

### Thermally insulated

The housing and grip are thermally separated by an air layer. This layer of air insulates the pipette so that it does not heat up in your hand. This design reduces the volume errors that are typical of pipettes.

### Simple maintenance and adjustment

As many parts as necessary and as few as possible: Thanks to its sophisticated design, the volume unit with piston and seal can be disassembled and cleaned in just a few simple steps. If adjustment is necessary, it can be easily undertaken without the need for tools.

## Convenient color coding

The different colors of the dispensing heads make it easier to choose the right pipette tip.



PETTE FIX	IDENT-NO.	MAX. VOLUME TIP
5 µl	0020011219	10 µl
10 µl	0020011220	10 µl
20 µl	0020011221	200 µl
25 µl	0020011222	200 µl
50 µl	0020011223	200 µl
100 µl	0020011224	200 µl
200 µl	0020011225	200 µl
250 µl	0020011226	1000 µl
500 µl	0020011227	1000 µl
1000 µl	0020011228	1000 µl



IKA PETTE VARIO	IDENT-NO.	MAX. VOLUME TIP
0,1 – 2 µl	0020011210	10 µl
0,5 – 10 µl	0020011211	10 µl
2 – 20 µl	0020011213	200 µl
10 – 100 µl	0020011214	200 µl
20 – 200 µl	0020011215	200 µl
100 – 1000 µl	0020011216	1000 µl
0,5 – 5 ml	0020011217	5 ml
1 – 10 ml	0020011218	10 ml

## High-tech – Only the best for your lab

At IKA, we believe a common piece of everyday lab equipment, like pipettes, deserves the attention of our best engineers. After all, it's about making work easier for users, covering a wide range of applications and guaranteeing work that conforms to standards. One look at the state-of-the-art production of PETTE fix and vario reveals a lot about what awaits you with the new PETTE.



### Pick-by-light assembly

The IKA pipettes are completely assembled according to the pick-by-light procedure. Our order pickers are able to assemble the pipettes quickly and without errors using computer-controlled eye-catching lights and acknowledgment knobs. The pleasing result for our customers are hardly any return rates and short delivery times.



### Calibration by robots

"Pit" and "Patty" are the names which our developers have lovingly given to the specially developed robots which calibrate all assembled pipettes fully automatically and according to standard. Pit and Patty can independently identify inaccuracies and analyze faults.

#### Calibration certificate and quality certificate

You receive your IKA PETTE fix and vario with an individual quality certificate (QC) and calibration certificate according to ISO 8655.

#### IKA calibration software

The IKA software for independent planning, execution and documentation of calibration intervals is extremely user-friendly.

#### IKA calibration service

If you would rather have your pipettes calibrated externally, you are also welcome to send them in to our calibration service.



## Technical data

TECHNICAL DATA	IKA PETTE fix 5 µl   10 µl   20 µl   25 µl   50 µl   100 µl   200 µl	IKA PETTE fix 250 µl   500 µl   1000 µl
Design	Air displacement piston-operated pipette	Air displacement piston-operated pipette
Handling	Mechanical	Mechanical
Volume	Fix	Fix
Number of channels	1	1
Colour Code	Gray   Gray   Yellow   Yellow   Yellow   Yellow   Yellow	Blue
Nominal volume	5 µl   10 µl   20 µl   25 µl   50 µl   100 µl   200 µl	250 µl   500 µl   1000 µl
Accuracy with nominal volume	0.06 ±µl   0.12 ±µl   0.2 ±µl   0.25 ±µl   0.35 ±µl   0.6 ±µl   1.2 ±µl	1.5 ±µl   3 ±µl   6 ±µl
Accuracy with nominal volume	1.2 ±%   1.2 ±%   1 ±%   1 ±%   0.7 ±%   0.6 ±%   0.6 ±%	0.6 ±%
Precision with nominal volume	0.03 ±µl   0.06 ±µl   0.06 ±µl   0.075 ±µl   0.15 ±µl   0.2 ±µl   0.4 ±µl	0.5 ±µl   1 ±µl   2 ±µl
Precision with nominal volume	0.6 ±%   0.6 ±%   0.3 ±%   0.3 ±%   0.3 ±%   0.2 ±%   0.2 ±%	0.2 ±%
Certificate of conformity according to ISO 8655	Yes	Yes
Autoclavable	Yes	Yes
Dimensions (W x H x D)	30 x 248 x 63 mm	30 x 247 x 63 mm
Weight	0.084 kg   0.084 kg   0.085 kg   0.085 kg   0.085 kg   0.085 kg   0.086 kg	0.083 kg
Permissible ambient temperature	5 – 40 °C	5 – 40 °C
Permissible relative humidity	90 %	90 %

TECHNICAL DATA	IKA PETTE vario 0.1-2 µl   0.5-10   2-20 µl   10-100 µl   20-200 µl	IKA PETTE vario 100-1000 µl   0,5-5 ml   1-10 ml
Design	Air displacement piston-operated pipette	Air displacement piston-operated pipette
Handling	Mechanical	Mechanical
Volume	Variable	Variable
Number of channels	1	1
Colour Code	Gray   Gray   Yellow   Yellow   Yellow	Blue   Green   Red
Nominal volume	2 µl   10 µl   20 µl   100 µl   200 µl	1000 µl   5000 µl   10 000 µl
Volume min.	0.1 µl   0.5 µl   2 µl   10 µl   20 µl	100 µl   500 µl   1000 µl
Volume max.	2 µl   10 µl   20 µl   100 µl   200 µl	1000 µl   5000 µl   10 000 µl
Increments	0.002 µl   0.01 µl   0.02 µl   0.1 µl   0.2 µl	1 µl   5 µl   10 µl
Accuracy with nominal volume	0.028 ±µl   0.1 ±µl   0.2 ±µl   0.8 ±µl   1.2 ±µl	6 ±µl   30 ±µl   60 ±µl
Accuracy with nominal volume	1.4 ±%   1 ±%   1 ±%   0.8 ±%   0.6 ±%	0.6 ±%   0.6 ±%   0.6 ±%
Precision with nominal volume	0.014 ±µl   0.04 ±µl   0.06 ±µl   0.2 ±µl   0.4 ±µl	2 ±µl   7.5 ±µl   15 ±µl
Precision with nominal volume	0.7 ±%   0.4 ±%   0.3 ±%   0.2 ±%   0.2 ±%	0.2 ±%   0.15 ±%   0.15 ±%
Accuracy with 50% of nominal volume	0.025 ±µl   0.075 ±µl   0.12 ±µl   0.5 ±µl   1 ±µl	5 ±µl   30 ±µl   40 ±µl
Accuracy with 50% of nominal volume	2.5 ±%   1.5 ±%   1.2 ±%   1 ±%   1 ±%	1 ±%   1.2 ±%   0.8 ±%
Precision with 50% of nominal volume	0.015 ±µl   0.04 ±µl   0.06 ±µl   0.15 ±µl   0.3 ±µl	1 ±µl   6.25 ±µl   10 ±µl
Precision with 50% of nominal volume	1.5 ±%   0.8 ±%   0.6 ±%   0.3 ±%   0.3 ±%	0.2 ±%   0.25 ±%   0.2 ±%
Accuracy with 10% of nominal volume	0.024 ±µl   0.025 ±µl   0.1 ±µl   0.3 ±µl   0.5 ±µl	3 ±µl   12 ±µl   30 ±µl
Accuracy with 10% of nominal volume	12 ±%   2.5 ±%   5 ±%   3 ±%   2.5 ±%	3 ±%   2.4 ±%   3 ±%
Precision with 10% of nominal volume	0.012 ±µl   0.018 ±µl   0.03 ±µl   0.1 ±µl   0.14 ±µl	0.6 ±µl   3 ±µl   6 ±µl
Precision with 10% of nominal volume	6 ±%   1.8 ±%   1.5 ±%   1 ±%   0.7 ±%	0.6 ±%   0.6 ±%   0.6 ±%
Certificate of conformity according to ISO 8655	Yes	Yes
Autoclavable	Yes	Yes
Dimensions (W x H x D)	30 x 248 x 63 mm	30 x 247 x 63 mm   30 x 219 x 63 mm   30 x 222 x 63 mm
Weight	0.089 kg   0.089 kg   0.09 kg   0.09 kg   0.091 kg	0.088 kg   0.099 kg   0.108 kg

The accuracy and precision data listed in the table (acc. to DIN EN ISO 8655) only apply if IKA pipette tips are used. Technical specifications are subject to change.

## Accessories

If required, the following IKA devices are available for your lab to enhance your work using PETTE fix and vario pipettes:



### LINEA Pipette holder

Secure and easy accessible mount for frequently used pipettes.

Ident-No.: 0020018987

### Pipette tips

The IKA range of pipette tips includes tips with and without filters. They provide a more accurate sample delivery and increased reproducibility. Available in sizes 0.1 µl – 10 ml.

Ident-No. IKA Tip I box (5 ml): 0020017830



### Pipette calibration software

IKA provides user-friendly pipette calibration software for planning, performing and documenting calibration tests.

Ident-No.: 20022141

Item	Description	Ident-No.
<b>ACCESSORIES</b>		
LINEA	Pipette rack	0020018987
Tip xs bag	Pipette tip, 10 µl, transparent	0020017816
Tip xs tray	Pipette tip, 10 µl, transparent	0020017818
Tip xs box +	Filter tip, 10 µl, sterile, transparent	0020017820
Tip s bag	Pipette tip, 200 µl, transparent	0020017822
Tip s tray	Pipette tip, 200 µl, transparent	0020017823
Tip s box +	Filter tip, 200 µl, sterile, transparent	0020017824
Tip m bag	Pipette tip, 1000 µl, transparent	0020017826
Tip m box	Pipette tip, 1000 µl, transparent	0020017827
Tip m box +	Filter tip, 1000 µl, sterile, transparent	0020017828
Tip l bag	Pipette tip, 5 ml, transparent	0020017829
Tip l box	Pipette tip, 5 ml, transparent	0020017830
Tip xl bag	Pipette tip, 10 ml, transparent	0020017831
Tip xl box	Pipette tip, 10 ml, transparent	0020017832
Pipette tip box xs/s	Stacking box	0020017834
Refill tray xs	Refill tray	0020017836
Refill tray s	Refill tray	0020017837
Pipette tip box l	Stacking box	0020017892



## Complete lab solutions

Our goal is to always offer you not only the highest quality devices, but also perfect laboratory solutions. And whoever uses pipettes for dispensing also needs ...



Matrix Orbital  
Ident-No.: 0030000627

## Thermoshakers

IKA Matrix is part of the new high-performing thermoshaker product family. Even the smallest volumes mix reliably and completely in all laboratory applications (i.e. blood samples, pharmaceutical agents, DNA/RNA samples or ELISA assays). There is no cross-contamination; instead, what you get is optimum mixing. This is what the IKA Matrix thermoshakers are all about:

- > You can mix, heat, cool or even all at the same time
- > They are impressive, with a speed of up to 3 000 rpm
- > Aluminum die cast housing ensures secure positioning and excellent stability
- > Variable inserts broaden the scope of application

## Dispersers

The new IKA UTTD power control disperser assures the best stirring, dispersing, grinding and homogenization results and has been devised in particular for the safe processing of infectious, toxic or odor-intensive samples. A particularly powerful motor gives it its name.

It's strengths at a glance:

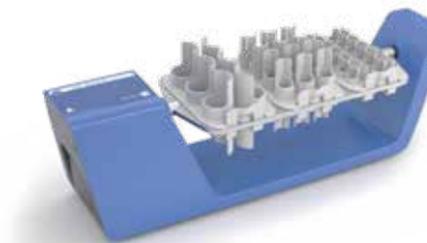
- > Disposable sample tubes systematically prevent cross-contamination
- > Time can be preprogrammed and frequently used parameters stored in the library
- > The direction of rotation is easily reversed
- > The turbo button brings even more intensity when mixing, dispersing or grinding



ULTRA-TURRAX®  
Tube Drive Power control  
Ident-No.: 0025005981



Loopster digital  
Ident-No.: 0004016000



Trayster basic  
Ident-No.: 0004005000



VORTEX 3  
Ident-No.: 0003340000

## Shakers

IKA offers the perfect laboratory shaker for all mixing and shaking tasks. In addition to the tried and tested orbital and horizontal shakers, this also includes the incubation shaker.

IKA shakers:

- > Keep samples in motion
- > Reach up to 3 000 rpm in continuous operation
- > Offer digital display, timer function and control via the laboratory software labworldsoft®
- > Have an extensive range of attachments
- > Are durable and safe



ROCKER 3D digital  
Ident-No.: 0004001000



KS 3000 ic control  
Ident-No.: 0003940100

## FAQ

### 1. Is every pipette individually calibrated upon delivery?

Yes, every pipette is reliably calibrated at IKA using state-of-the-art robotics. The calibration complies with EN ISO 8655.

### 2. Can I also calibrate the pipette later?

Yes, calibration tests for PETTE fix and vario are extremely user-friendly with the IKA IPCS Pipette calibration software.

### 3. Can I also have my pipette calibrated by IKA?

We are happy to take care of the calibration of your pipettes according to standard. Our service team will be happy to answer any questions you may have.

By e-mail: [service@ika.de](mailto:service@ika.de)

By phone: 00 8000 4524357

### 4. Are tools needed for the readjustment?

No, PETTE fix and vario are designed so that you do not need any tools for the readjustment.

### 5. Do tips from other manufacturers also fit onto IKA pipettes?

All models of PETTE fix and vario are compatible with pipette tips from most manufacturers.

### 6. Which liquids are ideally used for reverse pipetting?

Reverse pipetting is most suitable for liquids with high vapor pressure, high viscosity and a foaming tendency. It is also ideal for very small volumes. On the other hand, forward pipetting is used in aqueous solutions such as buffer solutions or dilute solutions.

### 7. How to sterilize IKA PETTE fix or vario?

IKA pipettes are fully autoclavable by heat sterilization under the following conditions: 121 °C, 2 bar for 20 minutes. Thanks to its simple design, the pipette can be cleaned and autoclaved even when disassembled. Alternatively, methods using UV radiation can be used.

## Scope of delivery

