

# Tacta

## Mechanical Pipettes

### Product Information

Tacta is a premium mechanical pipette featuring superb comfort and reliability. Designed with comfort in mind, Tacta makes pipetting effortless and safe, while producing accurate and reliable results time after time. Tacta is made from carefully selected materials, with each component designed to meet the highest standards.



### Description

Tacta is a premium mechanical pipette available in volume range from 0.1 to 10 000  $\mu\text{l}$  in single channel models, and from 0.5 to 300  $\mu\text{l}$  in multichannel models.

### Features

- Low pipetting cycle forces reduce the risk of WRULD (Work Related Upper Limb Disorder)
- Ergonomic design for comfortable pipetting
- Optiload feature in both single and multichannel models for easy and light tip loading with perfect tip sealing
- Optiject soft tip ejection feature detaches the tip in a smooth, controlled manner
- Optilock's dual-function volume locking prevents accidental volume changes
- Easy-to-read, four-digit volume display helps to set exact volumes
- Color-coding of volumes to ease the selection of corresponding pipette tips
- Safe-Cone Filters available for models above 10  $\mu\text{l}$  with convenient built-in filter ejection mechanism
- Fully autoclavable without disassembling
- Simple to clean and maintain with only three parts to disassemble

- Easy calibration adjustment with adjustment scale ensures accurate results, also in cases where factory calibration does not apply, for example when pipetting viscous liquids
- Materials have high chemical and UV-resistance to ensure a long life span for the pipette

### Intended Use

Manual liquid handling for volumes ranging from 0.1  $\mu\text{l}$  to 10 ml.

## Technical Data

Technical Specifications	
Weight	79 g (1-ch, 1000 µl) 138 g (8-ch, 300 µl)
Length	138 mm (1-ch, 1000 µl) 240 mm (8-ch, 300 µl)
Autoclavability	Fully autoclavable (121°C, 20 min, 1 bar)
UV-resistance	High Wavelength: shortwave ultraviolet (254 nm) Power: 2x20 W (twin tubes) Distance from lamp to table surface: 620 mm Fixture type: UVP XX-20S
Pipetting principle	Air displacement
Pipetting modes	Pipetting (P) Reverse pipetting (rP) Post-delivery mixing
Stand options	Carousel Stand for 6 pipettes Linear Stand Pipette Holder for one pipette (included in the pipette package)

Safe-Cone Filter ejector	Built-in ejector
Limitations	The accuracy and precision values are valid under the controlled conditions described in ISO 8655. Test temperature: +20°C to +25°C +/-0.5°C Humidity: 40-70%
Instrument use outside +20°C to +25°C	When using instruments outside this temperature range, the correction factor for water density (Z-value µl/mg) must be used.
Transportation conditions	Temperature: -50°C to +50°C Humidity: 10-90% Shocks: <10 G
Long-term storage conditions	Temperature: -20°C to +40°C Humidity: 10-60%
Warranty	2 years

### Volume Adjustment

The calibration of Tacta is based on ISO 8655-6: gravimetric test method for volumetric instruments. It has been factory-checked using the forward-pipetting technique and certified according to ISO 3696 at 22°C using grade-3 distilled water.

The pipette calibration should be adjusted when necessary, for example when reverse pipetting, when pipetting liquids other than water, when using the pipette at high altitudes, or when the geometry of the tip you use clearly differs from standard tip geometry.

For accurate adjustment results, please refer to the table below.

### Volume Adjustment

Model [µl]	Channels	Increment [µl]	-45	-10	-5	-1	0	1	5	10	45
0.1-3	1	0.002	-0.9	-0.02	-0.01	-0.002	0	0.002	0.01	0.02	0.9
0.5-10	1	0.01	-0.45	-0.1	-0.05	-0.01	0	0.01	0.05	0.1	0.45
2-20	1	0.02	-0.9	-0.2	-0.1	-0.02	0	0.02	0.1	0.2	0.9
10-100	1	0.1	-4.5	-1	-0.5	-0.1	0	0.1	0.5	1	4.5
20-200	1	0.2	-9	-2	-1	-0.2	0	0.2	1	2	9
100-1000	1	1	-45	-10	-5	-1	0	1	5	10	45
500-5000	1	5	-225	-50	-25	-5	0	5	25	50	225
1000-10000	1	10	-450	-100	-50	-10	0	10	50	100	450
0.5-10	8 & 12	0.01	-0.45	-0.1	-0.05	-0.01	0	0.01	0.05	0.1	0.45
5-100	8 & 12	0.1	-4.5	-1	-0.5	-0.1	0	0.1	0.5	1	4.5
30-300	8 & 12	0.2	-9	-2	-1	-0.2	0	0.2	1	2	9

## Ordering Information

Order Code	Channels	Volume Range [μl]	Color Coding	Increment [μl]	Test Volume [μl]	Systematic Error* [%]	Random Error* [%]
Tacta							
LH-729010	1	0.1-3	●	0.002	3	1.30	0.80
					1.5	2.40	1.60
					0.3	10.00	6.00
LH-729020	1	0.5-10	●	0.01	10	1.00	0.60
					5	1.50	1.00
					1	2.50	1.50
LH-729030	1	2-20	●	0.02	20	0.90	0.40
					10	1.20	1.00
					2	3.00	2.00
LH-729050	1	10-100	●	0.10	100	0.80	0.15
					50	1.00	0.40
					10	2.00	1.00
LH-729060	1	20-200	●	0.20	200	0.60	0.15
					100	0.80	0.30
					20	2.30	0.90
LH-729070	1	100-1000	●	1.00	1000	0.70	0.20
					500	0.70	0.20
					100	2.00	0.50
LH-729080	1	500-5000	●	10.0	5000	0.50	0.20
					2500	0.60	0.30
					500	2.00	0.60
LH-729090	1	1000-10000	●	20.0	10000	0.60	0.20
					5000	1.20	0.30
					1000	3.00	0.60
LH-729120	8	0.5-10	●	0.01	10	1.50	1.00
					5	2.50	2.50
					1	4.00	4.00
LH-729130	8	5-100	●	0.10	100	0.70	0.25
					50	1.00	0.70
					10	3.00	1.50
LH-729140	8	30-300	●	0.20	300	0.60	0.25
					150	1.00	0.50
					30	2.00	1.00
LH-729220	12	0.5-10	●	0.01	10	1.50	1.00
					5	2.50	2.50
					1	4.00	4.00
LH-729230	12	5-100	●	0.20	100	0.70	0.25
					50	1.00	0.70
					10	3.00	1.50
LH-729240	12	30-300	●	0.20	300	0.60	0.25
					150	1.00	0.50
					30	2.00	1.00

\* The listed systematic and random error values are only valid for pipetting mode and are achieved under strictly controlled conditions during type tests as per ISO 8655.

Due to our continuous product development, the systematic and random error values may change without prior notice.