# **INTEGR**



# VIAFLO 96 | VIAFLO 384

Microplate Pipetting – Easy and Affordable

# VIAFLO 96 | VIAFLO 384

### Handheld microplate processing

Have you reached the limits of productivity with traditional handheld pipettes? Would you like to increase your pipetting throughput and reproducibility without investing in big automation?

VIAFLO 96 and VIAFLO 384 enable transfers of 96 and 384 samples in a single step, thus increasing pipetting throughput and reproducibility significantly. At a fraction of the cost, they often surpass throughput capabilities of even expensive robots.

## **VIAFLO 96**

VIAFLO 96 is a handheld 96 channel pipette designed to fit on any lab bench. The unique operating concept makes it as easy to use as a traditional handheld pipette.





# **VIAFLO 384**

VIAFLO 384 is an enhanced version of the successful VIAFLO 96 pipette. It offers the same intuitive operation and compact design, but allows working with both 96 and 384 channel heads for an even higher productivity.



### **Small space requirements**

With its compact design, this benchtop system requires little space on a lab bench and fits into most laminar flow hoods to allow work under sterile conditions. Up to three stage positions accommodate tip racks, microplates, reagent reservoirs or other SBSsize labware. Up to 8 microplates can be stacked to make maximum use of the stage positions.



### GripTips for reliable pipetting results

Reliable tip sealing and firm tip attachment to the pipette are essential for reproducible and error-free pipetting.

VIAFLO 96 and VIAFLO 384 features the advanced GripTip system. During loading the GripTip pipette tips are locked onto the tip fitting of the pipetting head, which guarantees that they will never accidently fall off, even when performing a tip touch on the sidewall of a vessel. In addition, the system provides a perfect sealing of every tip attached, preventing uneven pipetting or sample spillage.

The GripTips are comfortably loaded and ejected without any physical effort due to a power assisted mechanism activated by a push button. The loading procedure also guarantees that GripTips are not touched by the user and remain sterile.

GripTips are offered in non-sterile, sterile and sterile filtered configurations to serve all application requirements. Filtered GripTips reliably protect the pipetting head and samples against contaminations caused by aerosols.



GripTips are packaged in two different tip racks dependent on the pipette tip volume. Larger volume GripTips, 300  $\mu$ l and 1250  $\mu$ l, are packaged in racks of 96 tips. Smaller volume GripTips, 12.5  $\mu$ l and 125  $\mu$ l, are packaged in space efficient racks of 384 tips. These XYZ racks contain four times as many tips and are molded from an anti-static material to prevent static build up.

GripTips for use with VIAFLO 96 and VIAFLO 384 undergo a strict quality control to assure perfectly straight pipette tips, enabling accurate dispenses into 96 and 384 well plates.

#### Intuitive use

VIAFLO 96 and VIAFLO 384 offer the ease of use of traditional handheld pipettes. No position programming or special training is required. To move the pipetting head to the desired position, simply push in that direction. The servo assisted steering mechanism supports the movement for an effortless workflow and precise tip positioning.



A choice of ten predefined pipetting modes provides users with convenient solutions for the most common liquid handling tasks.

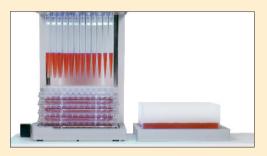
Standard pipetting routines, such as plate to plate transfers or multiple dispenses from a reservoir to different plates, can be executed with minimal set up time.

For more elaborate pipetting routines, up to 40 personalized custom programs can be created and saved.

All settings of the pipette are easily modified over the touch wheel controlled graphical user interface.

#### **Reservoir to plate transfers**

- Compound addition
- Medium exchange
- Cell seeding
- Addition of buffers and reagents



The "Repeat Dispense" mode allows for a very efficient filling of multiple microplates with the same liquid.

### Plate to plate transfers

- Plate duplication
- Supernatant transfers/collections
- Plate reformatting 96 well ↔ 384 well



An exact aspiration height can be defined to precisely remove supernatant and ensures pipette tips do not impact the bottom of a plate.

#### Sample transfers within plates

- Serial Dilutions
- Mixing and resuspension

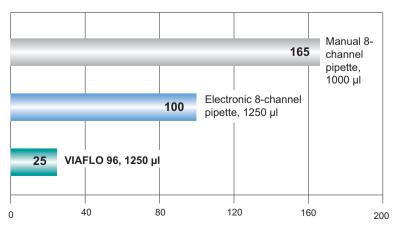


Performing serial dilutions and mixing of entire plates is easily accomplished. The number of mixing cycles and mixing speed can be exactly defined.

### Accelerate multiwell pipetting

VIAFLO 96 and 384 offer unmatched speed when transferring 96 or 384 samples at once. It is ideal for fast and precise sample transfers either from plate to plate, reservoir to plate or within plates.

VIAFLO 96 is **75% faster** than an 8-channel electronic pipette for filling five 96 well plates. Additionally, the risk for pipetting errors is minimized.



#### Flexible volume range

Users can simply change the pipetting head of their VIAFLO 96 and VIAFLO 384 to guarantee optimal matching of the available volume range to the application performed. Changing a pipetting head of VIAFLO 96 and VIAFLO 384 is easy and takes less than one minute. Each channel of a pipetting head is independent, having its own precise piston and sealing to exclude any cross-channel influences for error-free pipetting.



### **Plate holder options**

VIAFLO 96 and VIAFLO 384 feature two deck positions (A and B) to accommodate different plate holders. They can be removed and replaced by another option any time to adapt the instrument to various application requirements.



Standard plate holder Plate holder with slide function

For 96 channel pipetting. The standard plate holder (6205) is used for simple 96 well transfers. The plate holder with slide function (6210) enables a grid offset to access 384 well plates with a 96 channel head.



# Spring loaded plate holder with slide function

For 96 and 384 channel pipetting. Available for position A (6215) and B (6220), these plate holders feature a spring load mechanism to secure microplates in place. Recommended for applications that require an exact plate positioning. Both holders also feature the slide function.



### Row dilution plate holder

In addition to serial dilutions in columns, this plate holder enables serial dilutions in rows. It works for both 96 and 384 well plates.



Plate holder inserts: PCR cooling plates These aluminum 96 and 384 well PCR cooling plates keep reagents cooled during sample preparation in a PCR plate. The cooling plates feature an SBS footprint, fit into any of our plate holders but can also be used for other applications or with other instruments.

6230	-14

#### Three position stage

For 96 and 384 channel pipetting. The stage provides three plate holder positions. Move the stage to the left and right to work with all three positions. It features the spring mechanism and slide function

on all three positions. The three position stage occupies both deck positions A and B and cannot be combined with another plate holder.

Technical data	VIAFLO 96	VIAFLO 384		
Channels	96 96, 384			
Pipetting technology	air displacement			
Compatible plate formats	96 and 384 well microplates, shallow and deep well			
Dimensions (W x D x H)	42 cm x 30 cm x 54	42 cm x 30 cm x 54 cm (17" x 12" x 21")		
Weight	25.7 kg (56.7 lbs)	27.7 kg (61.1 lbs)		
Operating conditions	Temperature: 5°C - 40°C, Humidity: < 85% non-condensing			
Power requirements	100 - 240 VAC, 50/ 60 Hz			

#### Head specifications

Part no.	6101 / 6131	6106 / 6136	6102 / 6132	6103	6104
Vol. Range	0.5 - 12.5 µl	2 - 50 µl	5 - 125 µl	10 - 300 µl	50 - 1250 µl
Accuracy	±1.5%	±1.5%	±1.5%	±1.2%	±1.8%
Precision	≤1.0%	≤1.0%	≤1.0%	≤0.8%	≤0.8%

Specifications presented for nominal volume. Please refer to our website for a complete list of specifications.

# Ordering information

1. Choose a base instrument

#### 2. Select one or more pipetting heads

				Compatibility	
Part no.	Description	Volume	Part no.	VIAFLO 96	VIAFLO 384
6001	96 channel pipetting heads	<u>0.5 - 12.5 µl</u>	6101	~	~
		2 - 50 µl	6106	~	<ul> <li>✓</li> </ul>
6031		5 - 125 µl	6102	~	V
		10 - 300 µl	6103	~	~
<u> </u>		50 - 1250 µl	6104	~	V
	384 channel pipetting heads	0.5 - 12.5 µl	6131	-	<ul> <li>✓</li> </ul>
		2 - 50 µl	6136	-	~
		5 - 125 µl	6132	-	~
		6001 96 channel pipetting heads	6001         96 channel pipetting heads         0.5 - 12.5 μl           6031         5 - 125 μl           6031         10 - 300 μl           50 - 1250 μl         50 - 1250 μl           384 channel pipetting heads         0.5 - 12.5 μl           2 - 50 μl         2 - 50 μl	6001         96 channel pipetting heads         0.5 - 12.5 µl         6101           6031         2 - 50 µl         6106           5 - 125 µl         6102           10 - 300 µl         6103           50 - 1250 µl         6104           384 channel pipetting heads         0.5 - 12.5 µl           2 - 50 µl         6131           2 - 50 µl         6136	Part no.         Description         Volume         Part no.         VIAFLO 96           6001         96 channel pipetting heads         0.5 - 12.5 µl         6101         ✓           6031         2 - 50 µl         6102         ✓           6031         10 - 300 µl         6103         ✓           50 - 1250 µl         6104         ✓           384 channel pipetting heads         0.5 - 12.5 µl         6131         -           2 - 50 µl         6136         -

#### 3. Add one plate holder for each deck position on A and B

Description	Part no.
Standard Plate Holder – For 96 channel applications	6205
Plate Holder with slide function – For plate reformatting 96 well $\leftrightarrow$ 384 well	6210
Spring Loaded Plate Holder A with slide function – Recommended for 384 well applications and plate reformatting	6215
Spring Loaded Plate Holder B with slide function – Recommended for 384 well applications and plate reformatting	6220
Row Dilution Plate Holder – Enables serial dilutions in rows of 96 and 384 well plates	6221
Three Position Stage (occupies both deck positions A and B) – Suitable for 96 and 384 well applications	6230

#### GripTips for use with VIAFLO 96 and VIAFLO 384

		Filter Sterile	Sterile	<b>Non</b> -sterile
Tip Size	Description	Part no.	Part no.	Part no.
12.5 µl	5 XYZ racks of 384 tips	6455	6454	6453
12.5 µl LONG	5 XYZ racks of 384 tips	6405	6404	6403
50 µl / 125 µl	5 XYZ racks of 384 tips	6465	6464	6463
300 µl	5 racks of 96 tips	6435	6434	6433
	GREENCHOICE Refills, 5 inserts of 96 tips	-	-	6432
1250 µl	5 racks of 96 tips	6445	6444	6443
	GREENCHOICE Refills, 5 inserts of 96 tips	-	-	6442

#### **Reagent reservoirs**

Description		Part no.
Reservoir Base	SBS Standard Footprint (10 bases per case)	6300
Disposable Reagent Reservoirs	100 ml, 96 well, 30 reservoirs individually sealed, sterile	6311
	100 ml, 96 well, 200 reservoirs per case, bulk pack, sterile	6312
	300 ml, 96 well, 30 reservoirs individually sealed, sterile, white	6325
	300 ml, 96 well, 200 reservoirs per case, bulk pack, sterile, white	6326
	100 ml, 384 well, 30 reservoirs individually sealed, sterile	6331
	100 ml, 384 well, 200 reservoirs per case, bulk pack, sterile	6332
Accessories		
Description		Part no

Description	Part no.
PCR 96 well Cooling Plate	6250
PCR 384 well Cooling Plate	6255



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