

# MultiChannel

# Arm™ 384 option.

FOR FLUENT® OR FREEDOM EVO®

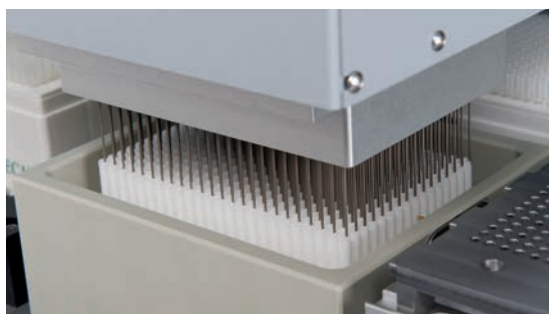


# Increased throughput and higher flexibility.

**The MultiChannel Arm™ 384 has been designed to offer higher productivity to automated liquid handling workflows in pharmaceutical and biotechnology research applications, increasing the efficiency and speed of pipetting processes, as well as delivering an outstanding level of flexibility.**



500 µl in the 96-well format with the EVA (Extended Volume Adapter) plate.



384 single wash cavities minimize cross contamination during washing.

#### **MultiChannel Arm 384 and parallel processing**

The MultiChannel Arm can be freely combined with other arms either on the Freedom EVO or on the Fluent, resulting in true parallel processing and increasing the productivity of the overall system.

#### **Broad volume range**

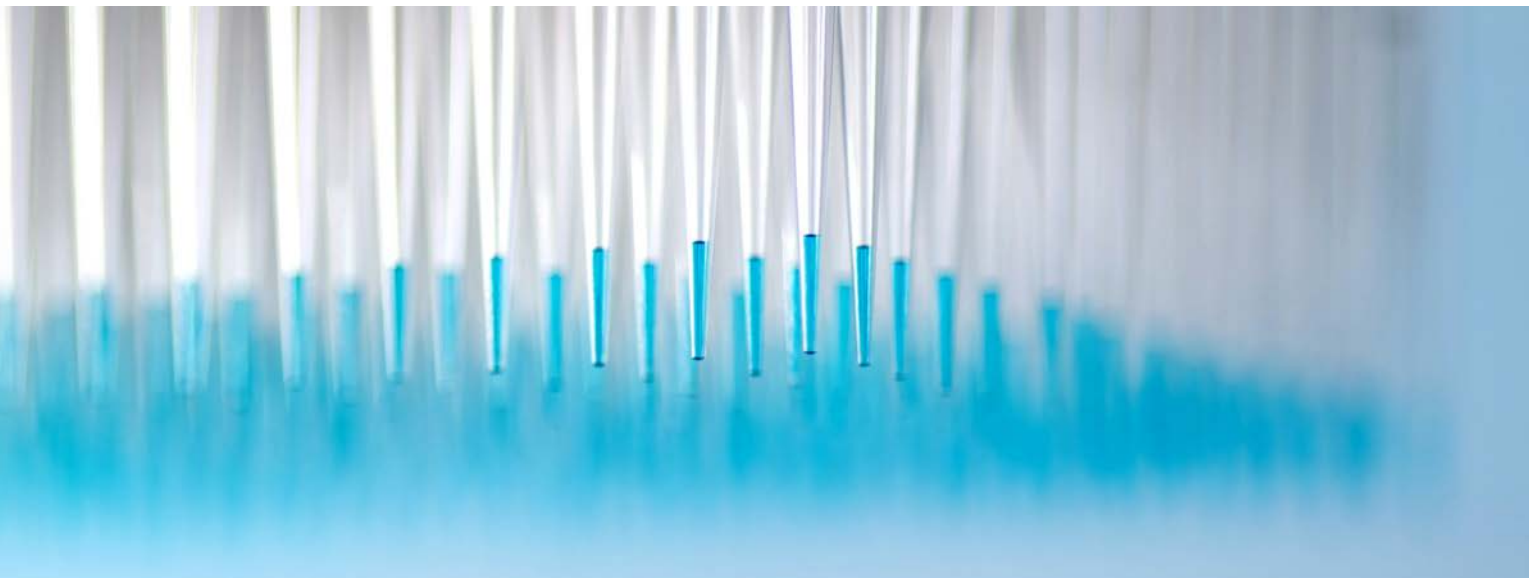
The pipetting head features a very broad volume range from 0.25 µl to 125 µl in the 384-well format and from 0.5 µl to 500 µl in the 96-well format.

#### **Reduction in running costs**

It works with both disposable tips and washable stainless steel tips, which can be automatically interchanged during a run. Using fixed washable tips for the pipetting of reagents or solvents offers a reduction in running costs. It can be easily switched to disposable tips whenever the assay protocol demands it.

#### **Main benefits**

- Highest degree of pipetting formats by on-the-fly exchange of tip adapter plates
- Tip arrays with 384, 96, 32, 24, 16, 12 or 8 tips
- Satisfy the demands of your assay with a broad volume range of 0.25 to 125 µl in the 384-well format and 0.5 to 500 µl in the 96-well format
- Easy reconfiguration through automatic exchange between disposable and washable fixed tips

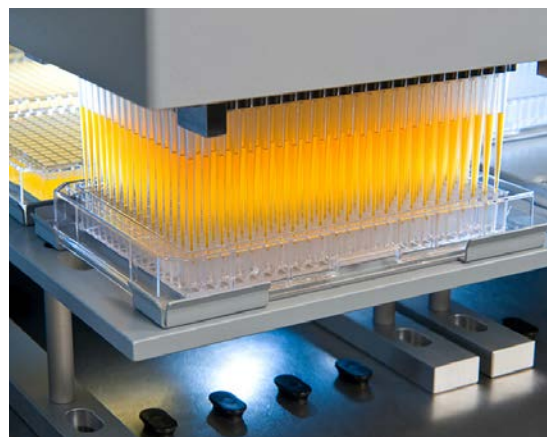


### Pipette with 384, 96, 32, 24, 16, 12 or 8 tips

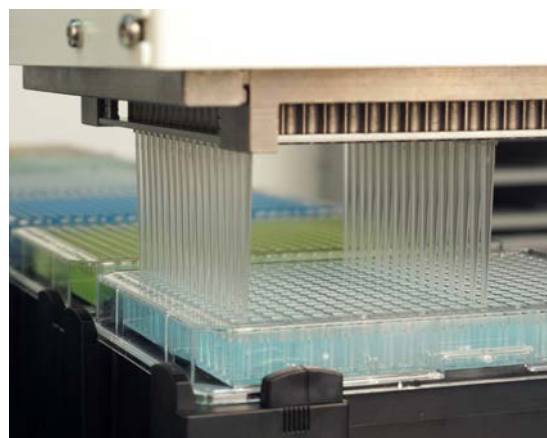
The head can rapidly change tip adapter plates during a run to offer a variety of pipetting formats. It can mount four sets of 96 tips from a box of 384 tips, saving considerable deck space, or alternatively mount 96 tips directly out of a box of 96 tips for higher volume applications. It can even mount single rows of 24 or 12 tips and columns of 32, 16 or 8 tips. This feature can be used to pipette controls or to conduct serial dilutions over different plate formats. With the Extended Volume Adapter (EVA) the 384-channel head can pipette up to 500  $\mu$ l in the 96-well format.

### Optional gripper for the Freedom EVO

An optional gripper can be mounted on the pipetting arm to move plates, tip racks and other labware for added functionality. The gripper option has individual movements in the y- and z-axes, as well as a 360° rotation axis to transport labware pieces and load positions in landscape and portrait orientation. The gripper module enables fast access to devices located on or around the workstation, such as microplate readers and washers, as well as storage and incubation devices. Furthermore, it can also be used to de-lid a plate for the duration of a pipetting step.



High speed replication with the MultiChannel Arm 384.



Double serial dilution ideal in e.g. compound management.

## Freedom EVO

### SPECIFICATIONS OF DISPOSABLE TIPS

#### Aqueous solutions in 384 well format\*

Tip size	Range	Volume	CV	Accuracy
15 µl	0.5-15 µl	0.5 µl	≤4%	+/- 10%
50 µl	1-50 µl	1 µl	≤4%	+/- 5%
125 µl	2-125 µl	2 µl	≤3%	+/- 5%

#### DMSO solutions in 384 well format\*

Tip size	Range	Volume	CV	Accuracy
15 µl	0.5-15 µl	0.5 µl	≤4%	+/- 5%
50 µl	0.5-50 µl	1 µl	≤4%	+/- 5%
125 µl	2-125 µl	2 µl	≤3%	+/- 5%

#### Aqueous solutions in 96 well format\*\*

Tip size	Range	Volume	CV	Accuracy	Comment
500 µl	25-500 µl	25 µl	≤5%	+/- 5%	free dispense
500 µl	25-500 µl	200 µl	≤2%	+/- 5%	free dispense

#### DMSO solutions in 96 well format\*\*

Tip size	Range	Volume	CV	Accuracy	Comment
500 µl	25-500 µl	25 µl	≤5%	+/- 5%	free dispense
500 µl	25-500 µl	200 µl	≤2%	+/- 5%	free dispense

### SPECIFICATIONS OF FIXED TIP ADAPTERS

#### Aqueous solutions in 384 well format

Adapter type	Range	Volume	CV	Accuracy
SC 384	1-15 µl	1 µl	≤8%	+/- 10%
LC 384	3-125 µl	3 µl	≤6%	+/- 5%

#### DMSO solutions in 384 well format

Adapter type	Range	Volume	CV	Accuracy
SC 384	0.5-15 µl	0.5 µl	≤6%	+/- 10%
LC 384	2-125 µl	2 µl	≤5%	+/- 5%

\*With COMBO adapter plate; \*\*With EVA adapter plate; \*\*\*With Non-EVA adapter plate

#### General liquid handling conditions:

Single pipetting mode, optimized conditions, contact dispense unless otherwise stated. Photometry measurement. CV and accuracy calculated over complete 96 or 384 well plate.

For research use only – not for use in diagnostic procedures.

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## Fluent

### SPECIFICATIONS OF DISPOSABLE TIPS

#### Aqueous solutions in 384 well format\*

Tip size	Range	Volume	CV	Accuracy
15 µl	0.5-15 µl	0.5 µl	≤4%	+/- 10%
50 µl	1-50 µl	1 µl	≤4%	+/- 5%
125 µl	2-125 µl	2 µl	≤1.75%	+/- 5%

#### DMSO solutions in 384 well format\*

Tip size	Range	Volume	CV	Accuracy
15 µl	0.25-15 µl	0.25 µl	≤5%	+/- 10%
50 µl	0.5-50 µl	1 µl	≤3%	+/- 5%
125 µl	2-125 µl	2 µl	≤3%	+/- 5%

#### Aqueous solutions in 96 well format\*\*\*

Tip size	Range	Volume	CV	Accuracy
50 µl	1-50 µl	1 µl	≤3%	+/- 10%
50 µl	1-50 µl	10 µl	≤1%	+/- 5%
200 µl	3-125 µl	3 µl	≤2.5%	+/- 10%
200 µl	3-125 µl	10 µl	≤1%	+/- 5%

#### DMSO solutions in 96 well format\*\*

Tip size	Range	Volume	CV	Accuracy	Comment
500 µl	10-500 µl	10 µl	≤5%	+/- 5%	free dispense
500 µl	10-500 µl	200 µl	≤1%	+/- 5%	free dispense

### SPECIFICATIONS OF FIXED TIP ADAPTERS

#### Aqueous solutions in 384 well format

Adapter type	Range	Volume	CV	Accuracy
SC 384	1-15 µl	1 µl	≤8%	+/- 10%
LC 384	3-125 µl	3 µl	≤6%	+/- 5%

#### DMSO solutions in 384 well format

Adapter type	Range	Volume	CV	Accuracy
SC 384	0.5-15 µl	0.5 µl	≤6%	+/- 10%
LC 384	2-125 µl	2 µl	≤4%	+/- 5%