

# Pin tool liquid handling for the FLIPR Tetra system

Nanoliter transfers for real-time kinetic cellular assays

## BENEFITS

- Accelerate throughput of kinetic cell based assays
- Switch formats between pin tool and pipettor in minutes without tools
- Minimize assay preparation time
- Reduce compound consumption

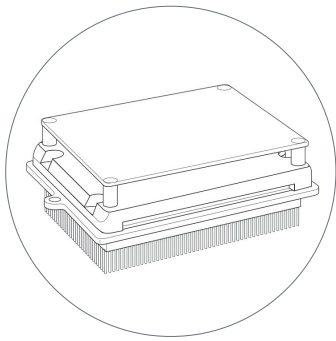
The FLIPR Tetra® High-Throughput Cellular Screening System includes a pin tool option for nanoliter liquid transfer. The pin tool pipettor is a complementary addition to the existing 96-, 384- and 1536-well pipetting options. When the system is configured with the pin tool, you get a cost-effective screening instrument capable of ultra high-throughput to accelerate your kinetic cell based assays.

Using pins from V&P Scientific, the pin tool pipettor allows direct transfer of compounds that have been suspended in 100% DMSO or ethanol. The transfer of compounds in nanoliter volumes—as low as 19 nL—eliminates the need for an intermediate dilution plate to decrease DMSO concentration. Because transfer volumes are small, DMSO concentrations are 1% or less, and toxic effects to the cells are minimized. In addition, by transferring compounds directly from the library to the read plate, consumable costs, including plates and tips, are significantly decreased, minimizing assay preparation time and increasing throughput.

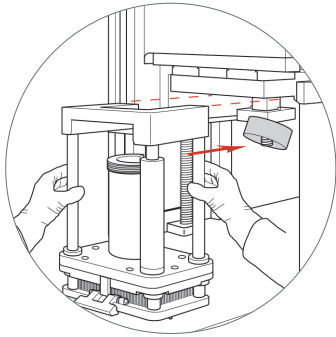
The pin tool also allows non-specific or “sticky” compounds to easily transfer using the optional hydrophobic-lipophobic pin coating. Because the compounds do not stick to the pins, accurate dispensing of compounds is achieved.

The FLIPR Tetra system provides user-configurable fluidic components to enable you to exchange between pin tools with traditional pipettors in less than 10 minutes. Pin tools are available for different liquid volumes in 384- and 1536-well formats. (See ordering information table.)

Transition between pin tools and adjust transfer volume using FLIPR® Screenworks® Software. The software also enables you to customize pin washing using up to two solvents, as well as automate the use and exchange of disposable blotting stations.



**Pin selection.** A selection of pins are available for each format (384- and 1536-well) to choose volume ranges appropriate for your assay.



**Real-time data handling.** User-configurable heads enable you to switch formats between pin tool and pipettor in minutes without tools.

## Ordering information

Pin tool pipettor head kits can be ordered with the FLIPR Tetra system or ordered separately to customize your existing system. Multiple pin tools are available for both 384- and 1536-well pin tool heads. Contact your account manager for configuration options.

### 384-well Pin Tool Head Kit

- FLIPR Tetra Pin Tool Head, 384
- FLIPR Tetra Pin Tool, 384
- 384 pins from the 1310-FP1N and 1310-FP3N series
- Wash station reservoir top, 1536

### 384-well Pin Tool

- FLIPR Tetra Pin Tool, 384
- 384 pins from the 1310-FP1N and 1310-FP3N series

### 1536-well Pin Tool Head Kit

- FLIPR Tetra Pin Tool Head, 1536
- FLIPR Tetra Pin Tool, 1536
- 1536 pins from the 1310-FP1N and 1310-FP3N series
- Wash station reservoir top, 1536

### 1536-well Pin Tool

- FLIPR Tetra Pin Tool, 1536
- 1536 pins from the 1310-FP1N and 1310-FP3N series

### Pin types and accessories

Description	Volume*	Part number
Solid pin	19–68 nL	1310-FP1N
6 nL slot pin	26–74 nL	1310-FP1NS6
10 nL slot pin	31–79 nL	1310-FP1NS10
20 nL slot pin	43–89 nL	1310-FP1NS20
30 nL slot pin	53–99 nL	1310-FP1NS30
40 nL slot pin	64–109 nL	1310-FP1NS40
50 nL slot pin	74–117 nL	1310-FP1NS50
Hydrophobic-lipophobic solid pin	19–68 nL	1310-FP1NH
6 nL hydrophobic-lipophobic solid pin	26–74 nL	1310-FP1NS6H
10 nL hydrophobic-lipophobic solid pin	31–79 nL	1310-FP1NS10H
20 nL hydrophobic-lipophobic solid pin	43–89 nL	1310-FP1NS20H
30 nL hydrophobic-lipophobic solid pin	53–99 nL	1310-FP1NS30H
40 nL hydrophobic-lipophobic solid pin	64–109 nL	1310-FP1NS40H
50 nL hydrophobic-lipophobic solid pin	74–117 nL	1310-FP1NS50H
Solid pin	84–240 nL	1310-FP3N Solid Pin
100 nL solid pin	178–326 nL	1310-FP3NS100
200 nL solid pin	278–424 nL	1310-FP3NS200
500 nL solid pin	527–656 nL	1310-FP3NS500
Hydrophobic-lipophobic solid pin	84–240 nL	1310-FP3NH
100 nL Hydrophobic-lipophobic solid pin	178–326 nL	1310-FP3NS100H
200 nL Hydrophobic-lipophobic solid pin	278–424 nL	1310-FP3NS200H
500 nL Hydrophobic-lipophobic solid pin	527–656 nL	1310-FP3NS500H
Pin tool base	n/a	2300-1758
Pin tool cover	n/a	2300-1757

\*Refer to V&P Scientific for performance parameters at [www.vp-scientific.com](http://www.vp-scientific.com).

## Contact Us

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