

HydroFlex™ Plus.

FLEXIBLE AND RELIABLE MICROPLATE STRIP WASHING
IN A COMPACT, MODULAR PLATFORM

✓ IVDR (EU) 2017/746*

✓ 21 CFR Part 11*



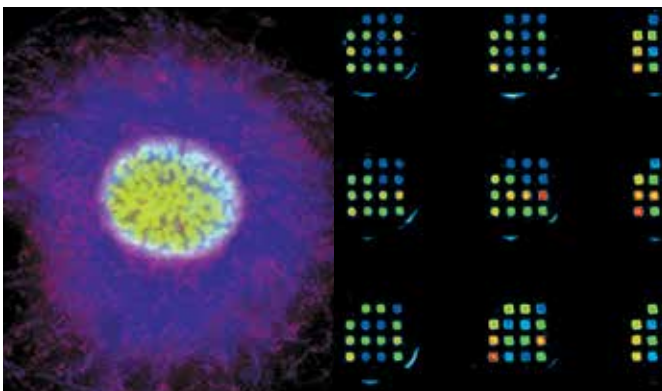
Strip washing for 96-well plates that conforms to IVDR.

The HydroFlex Plus plate washer is a truly flexible platform that provides excellent automated strip washing for 96-well microplate formats. It is ideal for a wide range of cell-, enzyme- and DNA-based applications in academia, biotech, pharma and clinical diagnostics.



ELISA WASHING

The HydroFlex Plus offers both cell and ELISA washing, without the need for dedicated wash heads. It provides consistent, high-quality washing with very low residual volumes of less than 2 μ l per well, and features multiple aspiration points for flat-bottom well geometries. The overflow function offers excellent single-step washing efficiency, avoiding the need for tedious repositioning of the wash head for sequential aspiration and dispense steps.



CELL AND PROTEIN ARRAY WASHING

Individual software control of critical wash parameters – such as aspiration and dispense speeds, and wash head positions – allows the washer to be fine-tuned to suit your cell type or protein array, providing optimal results. In addition, a very gentle, drop-wise dispense mode and move function ensure minimal cell detachment, even with weakly adherent cell types.

Compact. Reliable.

Easy to use.

Modular and upgradeable to suit your application needs

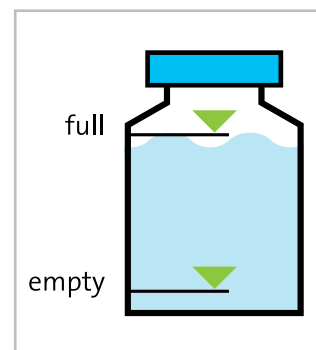
The HydroFlex Plus strip washer is capable of processing most 96-well plate formats – including strip plates, half-area plates and full plates with a variety of well geometries – helping to reduce reagent consumption.

This flexibility allows you to configure your instrument set-up according to your current application, with the option to upgrade your system with additional modules if your needs change.

HYDROFLEX PLUS OPTIONS INCLUDE:



Eight- or 16-way manifold for ELISAs and cell-based assays, allowing simultaneous washing of eight or 16 wells



Liquid level detection (LLD) system to monitor bottle fill levels

A good fit for your laboratory

RELIABLE

The HydroFlex Plus is designed to provide excellent long-term performance while minimizing maintenance and service costs. Using an advanced pump system, the HydroFlex Plus offers a mean time to first failure (MTFF) of more than 40,000 plates, typically corresponding to several years of hassle-free operation.

*REGULATORY COMPLIANT

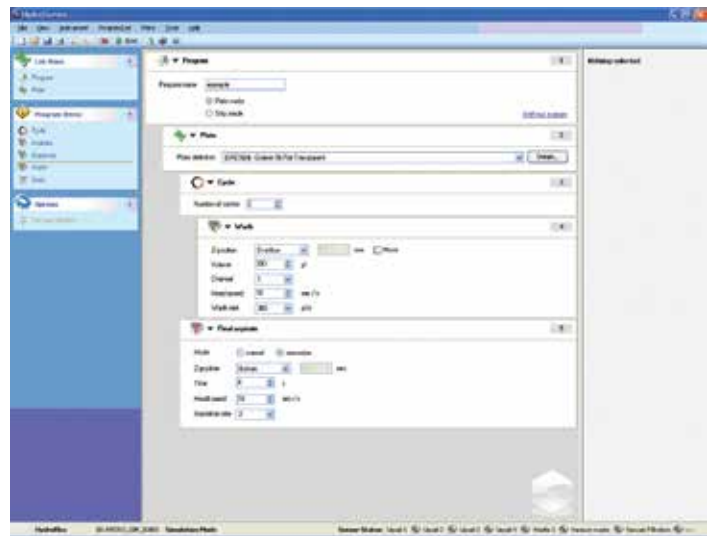
The HydroFlex Plus washer has been designed to meet the **IVDR (EU) 2017/746*** (**In Vitro Diagnostic Regulation**) for Europe when configured for ELISA washing. In combination with HydroControl™ software, it also provides **FDA 21 CFR Part 11** functionality, including electronic records, signatures and audit trails. The HydroFlex Plus is designed to meet the European directive 2011/65/EU and EU 2015/863 RoHS for the reduction of hazardous substances, as well as China RoHS for the Reduction of Hazardous Substances.

Ready for automation.

Intuitive controls

The HydroFlex Plus washer can be fully programmed and operated as a standalone instrument using the built-in keypad, and features a selection of predefined cleaning protocols for easy maintenance.

Every HydroFlex Plus system is also supplied with Tecan's intuitive HydroControl software, providing example wash programs and a predefined plate library, as well as a simulation mode for offline operation. HydroControl can be pre-programmed for specific assay kits, allowing assay manufacturers to provide kit-specific wash programs and plate parameters that can be quickly transferred onto the HydroFlex Plus washer via a USB interface using the download function. It fulfills all common user administration requirements for electronic records and signatures, and has been designed to provide FDA 21 CFR Part 11 functionality.



State-of-the-art features



ADVANCED PROCESS CONTROL (OPTIONAL)

The instrument's liquid level detection system monitors fill levels in wash buffer and waste bottles to avoid spillages and unnecessary downtime, and all wash bottles contain sieves to prevent particles from entering the wash head. The system also features a range of built-in sensors, including a bubble sensor to ensure correct buffer flow, and online dispense pump diagnostics to guarantee reliable washing performance check.

AUTOMATION FOR HIGHER THROUGHPUT

For complete automation of laboratory workflows, the HydroFlex Plus washer can be easily integrated into Fluent®, Freedom EVO® or Freedom EVOLyzer® workstations, as well as other automated ELISA platforms, helping users to meet higher throughput requirements.



Flexible design.



The multifunctional HydroFlex Plus washer offers far greater flexibility than a standard plate washer, and features user-interchangeable plate carriers:

- **ELISA washing** – for improved consistency and reliability
- **Gentle washing** – of cell-based assays with adherent or weakly adherent cells
- **Microplate array washing** – for protein and antibody arrays

ADD SOME COLOR TO YOUR LAB

In addition to the standard version in white, the HydroFlex Plus is available in a range of special edition colors:

- Metallic red
- Metallic blue
- White

Features and benefits

Compact and modular design, suitable for a range of applications and laboratories

Ready for automated washing of ELISAs, cells and protein arrays

Advanced online process controls for safety and reliability

Bubble sensor unit that ensures reliable buffer dispensing

Multipoint aspiration for flat-bottom plates to achieve minimal residual volumes

Individual software control of speed settings and wash head positions


Suitable for integration with Fluent, Freedom EVO and Freedom EVOlyzer workstations

Excellent reliability and low service costs

IVDR (EU) 2017/746*

21 CFR Part 11*

Typical performance values**

Parameters	Characteristics
General	
Display unit	Liquid crystal display with two rows of 16 digits
Keyboard	Four-key membrane keyboard
Number of dispensing channels	1, 2 or 4 channels
Manifold types	8- or 16-way for parallel processing of 8 or 16 wells
Variable	
Volume of solution dispensed	50-3,000 µl in 50 µl steps (washing) 50-400 µl in 50 µl steps (dispensing)
Dispensing accuracy	≤1.2 % typical** (300 µl dispense volume, dispense rate: 3, 8-way manifold)
Dispensing uniformity CV	≤2.5 % over the plate typical** (300 µl dispense volume, dispense rate: 3, 8-way manifold)
Residual volume	Crosswise aspiration: ≤1.8 µl per well (96-well, flat-bottom Greiner® plate) (asp. rate: 3; asp. time: 4 sec; head speed: 10 mm/sec; 8-way manifold)
Interface	USB
Shaking	Linear shaking; high, medium and low settings
Power	
Supply	Auto sensing for the settings 100-120 V or 220-240 V, 50/60 Hz
Consumption	65 VA
Physical	
External dimensions of plate washer	Width: 27.5 cm, depth: 36.6 cm, height: 18.5 cm
Weight	6.6 kg
Color	

The instruments adhere to applicable safety standards to date.

* Together with HydroControl Software.

** Specifications are subject to change. Typical performance values represent the average observed factory-tested values. For product specifications refer to operators manual.

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