



HydroFlex[™] – ELISA configuration

The reliable microplate washer for ELISA assays & cells



HydroFlex

High wash efficiency

Building on a decade of experience in microplate washing, the HydroFlex configured for ELISAwashing & cell washing, sets a new standard in performance and reliability.

Its advanced design allows you to combine full control over critical wash parameters with advanced options for online process control. For a minimum residual volume of only 2µl per well, the HydroFlex provides a sophisticated crosswise aspiration function, using multiple aspiration points per well.

To achieve high wash-efficiency without compromising throughput, overflow washing replaces tedious, sequential aspiration- and dispense-steps with a single procedure.

High reliability

For uncompromised performance and high longterm stability, the HydroFlex uses advanced pump technology.

The HydroFlex provides a unique proof of quality via an MTTF-record (mean time to first failure record) of over 40,000 plates, typically corresponding to several years of operation.

Regulatory compliance

The HydroFlex configured for ELISA washing, has been designed to meet the European directive 98/79/EC for in-vitro diagnostic products. Additionally, the HydroControl™ software fulfils the requirements for electronic records and electronic signatures, and has been designed to meet the FDA regulation 21 CFR part 11.

Cell washing

For gentle washing of adherent cells for research use, the HydroFlex provides an extra-gentle dropwise dispense mode.

Additionally, a set of tunable wash parameters including aspiration speed and aspiration height is available, to minimizing cell detachment even with weakly adherent cell lines.

Available options

Liquid Level control option:

This process-control function allows online monitoring of filling volumes in the entire bottle set of the HydroFlex, including bottles for wash buffer(s) and waste.

Product highlights:

- Low residual volume of only 2µl/well
- Multiple aspiration points per well
- High wash efficiency via overflow procedure
- Drop-wise dispensing for gentle cell washing
- Automated buffer switching
- Proven reliability via MTTF-benchmark value
- Advanced process control options
- IVDD 98/79/EC compliant for ELISA washing
- Ready for robotic integration



HydroFlex – Typical performance values

Parameters	Characteristics
General	
Display unit	Liquid crystal display with two rows of sixteen 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	
volume of solution dispensed	50 – 3000 μl in 50 μl steps for washing
	50 – 400 μl in 50 μl steps for dispensing
Dispensing accuracy	≤1.2 %
	(300µl dispense volume, dispense rate: 3, 8-way manifold)
Dispensing uniformity CV	≤ 2.5 % over the plate
	(300µl 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)
Vacuum range	High level vacuum filtration: -150 to -850 mBar absolute pressure
	Low level vacuum filtration: -50 to -150mBar absolute pressure
Interface	USB
Shaking	Linear shaking; high-, medium- and low-setting
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Power	
Supply	Auto sensing for the settings
	100 – 120 V or 220 – 240 V, 50/60 Hz
Consumption	65 VA
Physical	
Outside dimensions for plate washing	Width: 27.5 cm, Depth: 36.6 cm, Height: 18.1 cm
Weight	6.6 kg
Colour	0.0 ng
Colour	

The instruments adhere to applicable safety standards to date.

Tecan – Who we are

Tecan is a leading global provider of life science laboratory instruments for the biopharmaceuticals, forensics, clinical diagnostics and academic sectors, specializing in the development and production of automation and detection solutions, including microplate readers, microarray products and washers.

Founded in Switzerland in 1980, Tecan has manufacturing, research and development sites in both North America and Europe, and maintains a sales and service network in 52 countries. To date, Tecan has distributed approximately 20,000 microplate readers worldwide, and is committed to continuous technological improvements and compliance with the highest global quality standards.

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