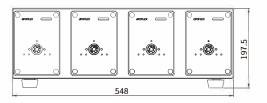
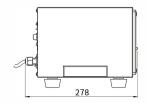
A **Halma** company

■ Small footprint, compact structure

PFS outline dimension





PFU outline dimension

119

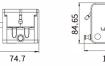
175.5



PFH01 outline dimension

PFH02 outline dimension







Filling Drive	Pump Head	Pump Head Number	Roller Number	Tubing ID (mm)	Recommended Filling Volume	Max Filling Volume per Second	Accuracy
PFU	Microliter Pump Head PFH01	1	12	0.5, 0.8, 1.2, 1.6, 2.4, 3.2	≽30uL	2mL/s	
	Milliliter Pump Head PFH02		8	0.6, 0.8, 1.2, 1.6, 2.4, 3.2, 4.8	≥200uL	16mL/s	≤±1%
PFS	Microliter Pump Head PFH01	4	12	0.5, 0.8, 1.2, 1.6, 2.4, 3.2	≽30uL	2mL/s	Q±170
	Milliliter Pump Head PFH02		8	0.6, 0.8, 1.2, 1.6, 2.4, 3.2, 4.8	≥200uL	16mL/s	





dPOFLEX® PFU PFS

High Precision Peristaltic Pump Filling System

Filling Accuracy Better than $\pm 1\%$

Precise Filling of Micro Volumes as Low as 30uL

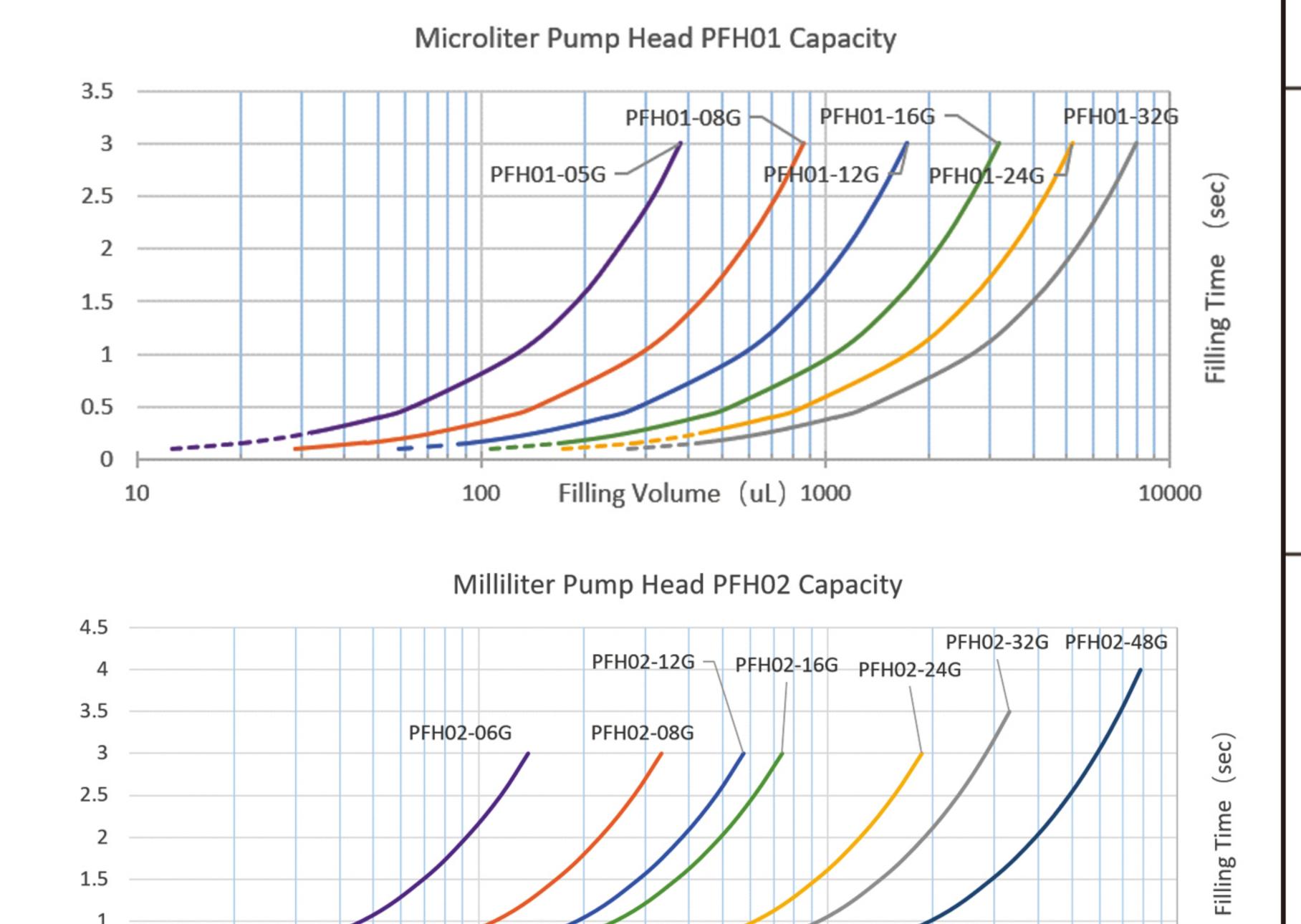
High Efficiency up to 120 Bottles/Minutes/Channel



A Halma company

Micro-volume filling with high precision and efficiency to prevent costly overfilling

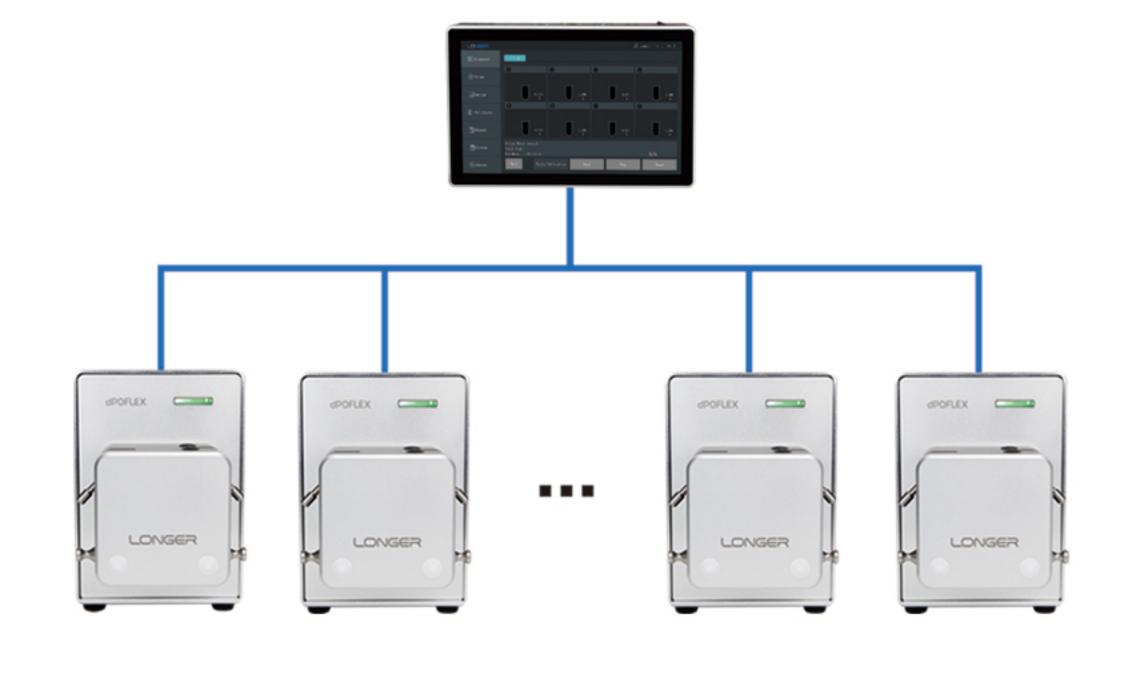
- · Precise filling of micro volumes as Low as 30uL
- \cdot Filling accuracy better than $\pm 1\%$
- Big flow rate up to 16mL/s
- · High efficiency up to 120 bottles/minutes/channel



Pump Head	Filling Volume (uL)	Tubing ID (mm)	Typical Filling Time(s)	
PFH01	30	0.5	0.25	
	50	0.5	0.4	
	100	0.8	0.35	
	200	1.2	0.35	
	500	1.6	0.47	
	1000	2.4	0.6	
	1500	3.2	0.6	
	2000	3.2	0.75	
	200	0.6	0.4	
PFH02	300	0.8	0.3	
	500	1.2	0.3	
	1000	1.6	0.4	
	2000	2.4	0.35	
	3000	3.2	0.3	
	5000	4.8	0.25	
	10000	4.8	0.5	

The master controller can control multiple units which can be set with individual parameters

- · One PFC controller can control up to 32 channels
- · In multi-channel system, each channel could be set with the same parameters or individual parameters





The multi-channel system with PFU filling units (up to 32 units controlled by one PFC controller)

The multi-channel system with PFS filling systems (up to 8 systems controlled by one PFC controller)

7-inch high-resolution touchscreen has powerful functions, flexible configuration, and easy-to-use

- · Intuitive graphic interface for a fantastic interactive experience
- · Up to 500 recipes can be stored and recalled easily

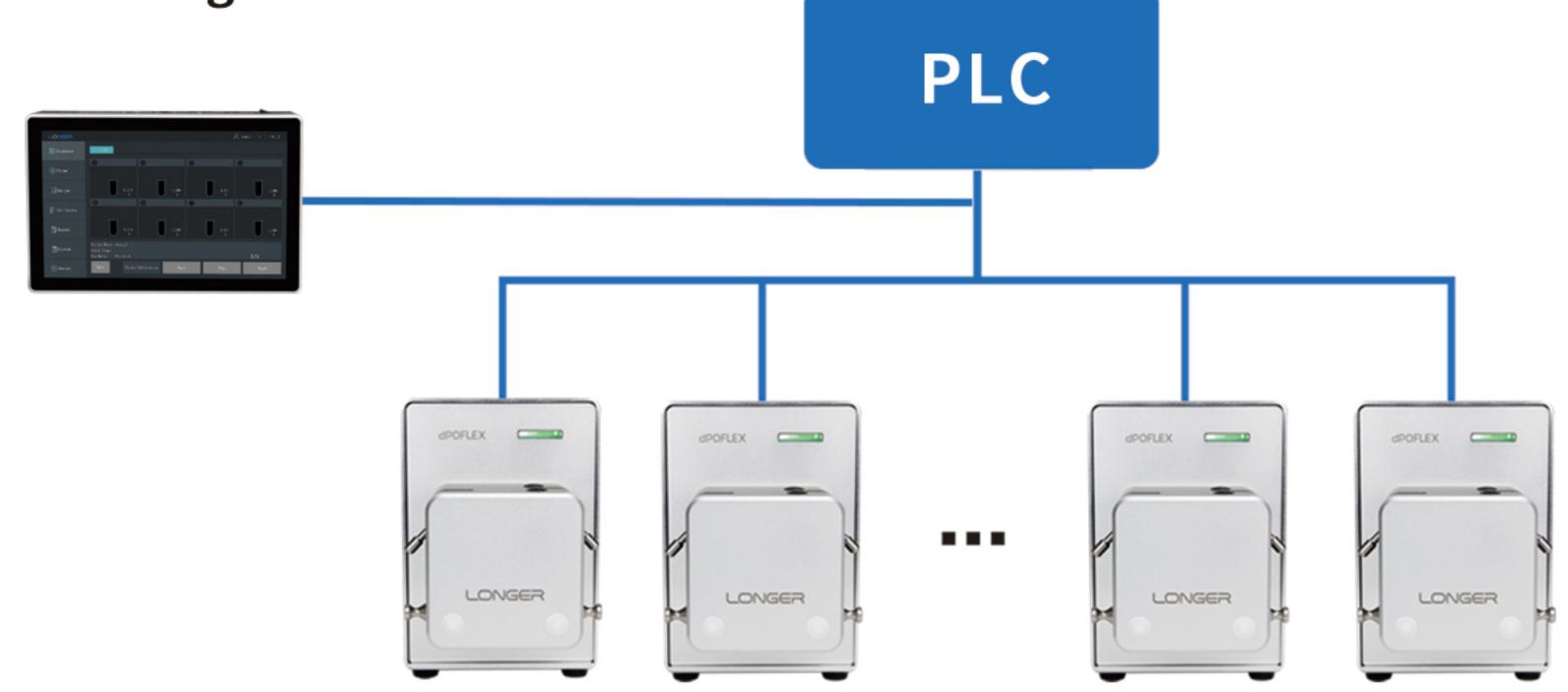
· Three levels of user accesses(administrator, developer, operator), operation log, batch report(can be saved to USB flash drive or printed directly), and electronic signature, for GMP and FDA 21CFR Part 11 compliance





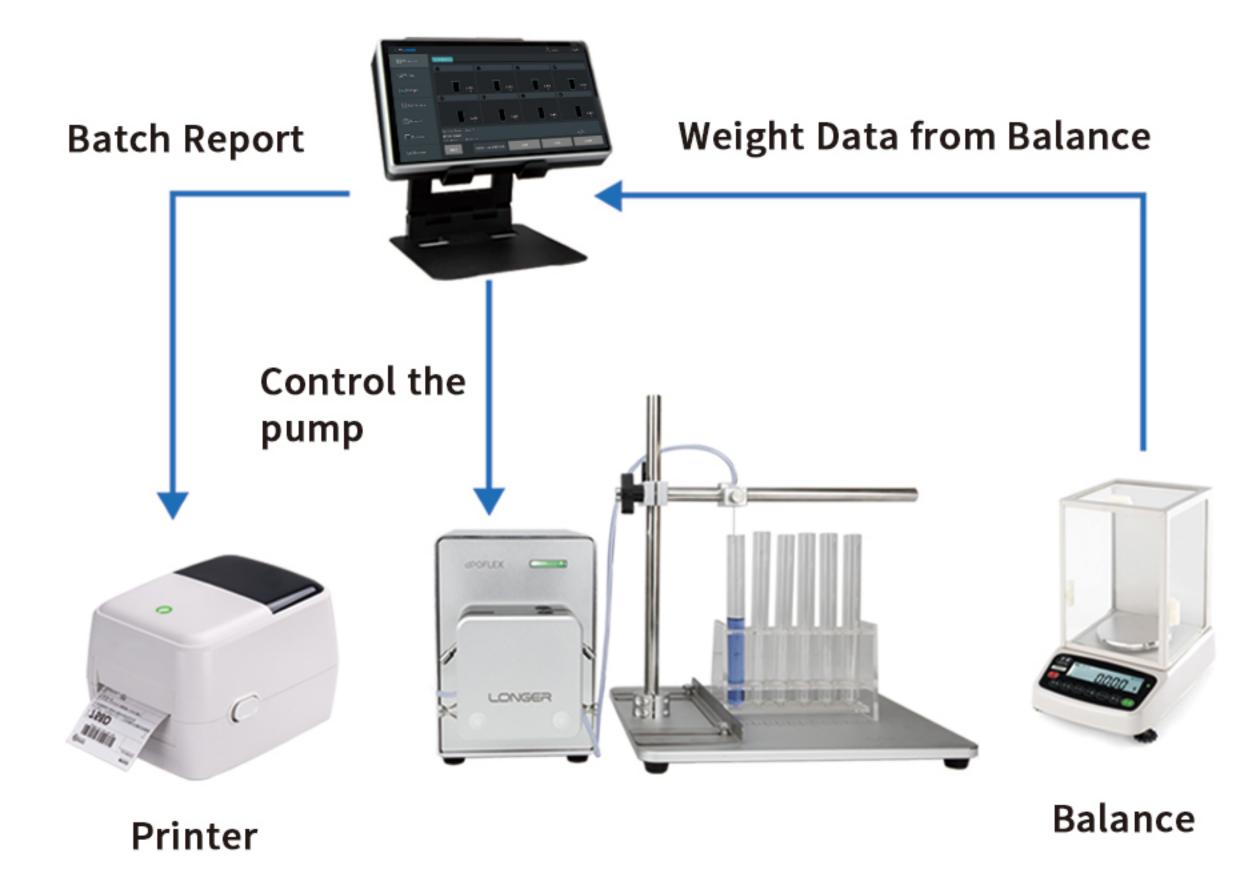
■ Filling unit PFU and system PFS can be integrated into semi-automatic systems or fully automated systems

- · PFU can be remotely controlled via RS485 interface with Modbus RTU protocol, PFS can be remotely controlled via RS485 interface with Modbus RTU protocol or Ethernet with TCP/IP protocol
- · Interfaces for start input, stop input, disable drive input, and malfunction status output, enable the automatic system integration



A variety of calibration modes to improve calibration efficiency and ensure filling accuracy

- · PFC controller could automatically read the filled weight from a compatible balance
- · The on-line calibration can be performed during the operation (95%-105% calibration range)



High-quality accessories help build a tabletop intelligent dispensing system

- · Silicone tubing compliant with USP requirement
- · Filling stand for different vials, bottles, or microtubes
- High-precision filling probe
- Footswitch
- Tubing weights set
- Printer



