

Harvard Apparatus P-1500 Peristaltic Pump with Weight Scale Integration



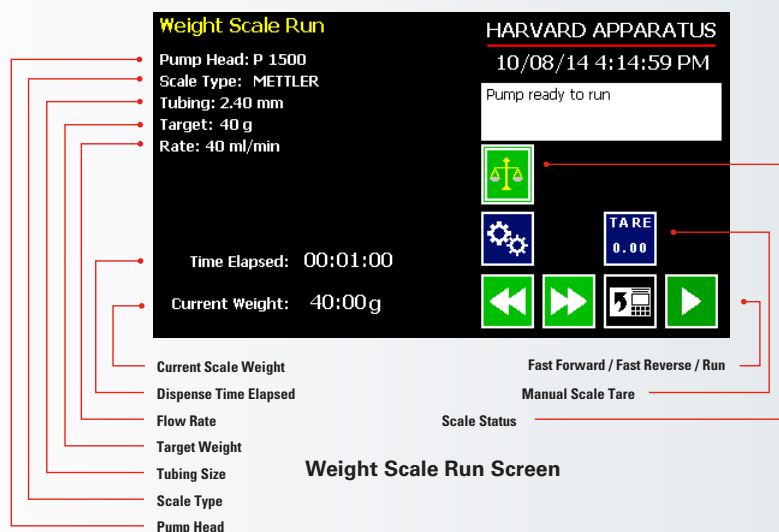
The Harvard Apparatus P-1500 Peristaltic Pump with Weight Scale integration allows the user to dispense fluids based on units of weight. The peristaltic controller provides scale communication allowing the pump to query the scale during operation for precise dispensing. This new option is compatible with Mettler Toledo XS series, the Ohaus Defender 5000 series, and the Ohaus Ranger series scales (scales sold separately).

KEY FEATURES

- Intuitive touch screen with integrated weight scale control
- Automatically dispenses to predefined sample weight
- User selectable auto-tare, slow-down and anti-drip features
- Key pump and scale parameters clearly displayed
- Remote pump head can be placed up to 5 ft (1.5 M) from controller
- Weight scale command set for system integration

APPLICATIONS

- Reproductive biotechnology sampling
- Organic solvent dispensing
- Automated weighing of food samples



Weight Scale Run

Pump Head: P 1500
Scale Type: METTLER
Tubing: 2.40 mm
Target: 40 g
Rate: 40 ml/min

Time Elapsed: 00:01:00
Current Weight: 40:00 g

HARVARD APPARATUS
10/08/14 4:14:59 PM
Pump ready to run

TARE 0.00

Fast Forward / Fast Reverse / Run
Manual Scale Tare

Scale Status

Weight Scale Run Screen

- Current Scale Weight
- Dispense Time Elapsed
- Flow Rate
- Target Weight
- Tubing Size
- Scale Type
- Pump Head

Harvard Apparatus P-1500 Peristaltic Pump

Advanced Features

Anti Drip

When enabled, the anti-drip feature automatically runs the pump in the reverse direction for approximately 500 milliseconds after the pump finishes dispensing. This prevents any unwanted solution that remains in the tubing from dripping out and skewing the dispensed weight. This feature will greatly improve the accuracy of highly precise dispenses.

Auto-Tare

The auto tare feature allows the Harvard P-1500 peristaltic pump to automatically zero the connected scale each time the pump completes a dispense. This feature provides the user with increased efficiency by eliminating the need to stop and manually clear the scale between dispenses.

Slow-Down

The slow down functionality allows the user to more accurately dispense a solution by effectively eliminating the risk of over dispensing due to high flow rates. The user can select an additional slower taxi flow rate setting that will activate when the dispense solution reaches a predefined weight.

Ordering Information

Order #	Product
70-7008	P-1500 with Weight Scale Integration

Replacement Parts

70-7005	P-1500 Motor Drive, 4 rollers, 1 channel
70-7009	Control box with Weight Scale Integration
2601046	Scale to Controller Cable (DB9 to RJ-11)

Connectivity

The Weight Scale Controller contains RS-232 ports for scale and PC communication. USB can also be used to control both the pump and the scale. A complete set of commands are available for system integration. A scale communication cable (RJ-11 to RS-232) is also provided.

Tubing

Harvard Apparatus also offers tubing for the P-1500 Peristaltic Pump. The pumps is compatible with tubing inner diameter sizes of 0.8 to 8mm (0.03 to 0.314 in). Note: Higher accuracy can be achieved when using smaller inner diameter tubing.

Specifications

Pump Model	P-1500 with Weight Scale Integration
Number of Channels	1
Number of Rollers	4
Tube Size (Inner Diameter)	0.8 to 8 mm (0.03 to 0.314 in)
Flow Rate (ml/min/channel)	Tubing Size Dependent
Min/Max	0.001 ; 1,500
Computer Control	Yes (USB/RS-232) with Command Set
TTL Control	Yes
Analog Control	Yes
Power	100-250 VAC, 50/60 Hz
Weight	2.5 kg (5.5 lbs)

* Note: P70 and P230 Motor Drives are also compatible with weight scale control. The feature will only work with one or combined channels. Please consult the factory for additional information.

Standard Pump Tubing for P-1500 Pump Head

Tubing ID	Max Flow (ml/min)	Wall Thickness	Tygon® ST R-3603 Order #	Tygon® LFL Order #	Tygon® SI Silicone 3350 Order #	PharMed Ismaprene Order #
0.8 mm (1/32 in)	15	1.6 mm (1/16 in)	73-1806	–	–	72-0958
1.6 mm (1/16 in)	60	1.6 mm (1/16 in)	72-1016	72-9383	73-3255	72-0906
3.2 mm (1/8 in)	242	1.6 mm (1/16 in)	72-1020	72-9384	73-3256	72-0960
4 mm (5/32 in)	378	1.6 mm (1/16 in)	72-1022	–	–	–
4.8 mm (3/16)	545	1.6 mm (1/16 in)	72-1024	72-9385	73-3257	72-0964
6.4 mm (1/4 in)	969	1.6 mm (1/16 in)	72-1026	72-9386	73-3259	72-0965
8 mm (5/16)	1515	1.6 mm (1/16 in)	72-1027	72-9388	73-3261	72-0967
Length Supplied			15 m (49 ft)	7.5 m (24.6 ft)	15 m (49 ft)	7.5 m (24.6 ft)

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