Dissolution Sampling System, 8 or 12 Channels, RSD <0.5%, 1-15 mL Volume, Automatic Filtration

Model **MSDISS-Y8SWISS,MSDISS-Y12SWISS** | Brand **Master Science**





The Master Science Dissolution Sampling System automates the sampling side of a dissolution test. Precision syringe pumps with 26 mL syringes draw, filter and dispense each sample, then replace the withdrawn medium with an equal volume, so the operator does not have to pull samples by hand at every time point.

KEY HIGHLIGHTS

- Less manual handling
- Consistent volumes
- Clean filtrate
- Correct medium volume
- Controlled access

AT A GLANCE

RSD <0.5%
SAMPLING ACCURACY

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

Scan to view online

Overview

Two versions are offered: Version A with 8 sampling channels and Version B with 12 channels. Both handle up to 16 sampling times per run, single volumes from 1 to 15 mL (expandable to 30 mL) and intervals from 1 minute up to 999 h 59 min. The Dissolution Sampling System connects to most dissolution testers and supports wireless online operation.

Values below are taken from the manufacturer specification sheet. Version A = 8 channels, Version B = 12 channels.

Pair the Dissolution Sampling System with an 8-vessel dissolution tester for a fully automated test setup.

The Dissolution Sampling System is used wherever dissolution samples must be collected on schedule with minimal operator time.

Common sampling problems in dissolution testing and how the Dissolution Sampling System helps:

Overview

- Precision syringe pumps for filtration, sampling and medium replenishment
- Pre-filtration and terminal filtration; filters can be rinsed by circulation and are easy to replace
- Pump speed below 25 mL/min, with sampling and filtration usually finished within 30 s
- Precision and speed sampling modes

Key Benefits

Less manual handling
Samples are drawn, filtered and collected automatically at each programmed time point.

Consistent volumes
Syringe pump drive gives repeatability of RSD ≤0.5% and channel-to-channel RSD ≤1%.

Clean filtrate
Initial filtrate can be sent to waste before the retained portion is collected.

Correct medium volume
Equal-volume replenishment returns fresh medium after each draw.

Controlled access
Fingerprint or password login, three permission levels and an audit trail.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSDISS-Y8SWISS,MSDISS-Y12SWISS
SKU	MSDISS-Y8SWISS,MSDISS-Y12SWISS
Sampling Channels	Version A: 8; Version B: 12
Sampling Times	16 times
Sampling Modes	Precision, speed
Sampling Accuracy	**RSD <0.5%**
Sampling Interval	1 min to 999 h 59 min
Single Sampling Volume	1-15 mL (expandable up to 30 mL)
Sampling Consistency	Channel-to-channel RSD ≤1%
Sampling Repeatability	RSD ≤0.5%
Syringe	26 mL, 0.5% accuracy
Test Tube Collection Volume	15 mL
Dispensing Function	Available
Liquid Replenishment	Equal-volume replenishment
Initial Filtrate Volume	0-10 mL
Initial Filtration	10 μm columnar filter tips
Inline Filter	φ25 mm Luer-lock, cellulose membrane, 0.45 μm or 0.8 μm pore size
Communication	Wireless network
Privilege Management	3 levels, 7 users
Audit Trail	128 entries × 366 days
Login Method	Username + password, fingerprint
Online Printing	Supported

COMMON LABORATORY PROBLEMS AND HOW THIS INSTRUMENT HELPS

Missed time points	Programmed intervals from 1 min to 999 h 59 min run without operator attention.
Volume variation between vessels	Syringe pump sampling keeps channel-to-channel RSD ≤1%.
Particles in samples	Initial and inline filtration remove undissolved material before collection.
Medium volume loss	Equal-volume replenishment restores the vessel volume after each draw.
Unclear records	Audit trail and user login show who ran each test.

Applications

- **Automated sampling for tablet and capsule dissolution tests**
- **Dissolution profile studies with many time points**
- **QC release testing in pharmaceutical labs**
- **Formulation development and comparison studies**
- **Collecting filtered samples for later HPLC or UV analysis**

Tubing and Collection

- Corrosion-resistant, high-pressure-resistant tubing
- 10 mL sample tubes with sealing caps supplied
- Optional collection into 2 mL or 10 mL sealed vials, or directly into ampoules
- Sampling needle with septum-piercing and vial-ejection mechanism and built-in PTFE tubing

Control and Data

- Wireless online operation
- Fingerprint and password login
- 3-level, 7-user privilege management with audit trail
- Online printing

Standard Accessories Included

- 10 mL sample tubes with sealing caps

Optional Accessories

- 2 mL sample vials with sealing caps
- 10 mL sample vials with sealing caps