Stepless Speed Viscometer - High-Range Digital Viscometer - 12-80,000,000 mPa·s - 0.1-200 rpm

Model **MSVSC-S1SWISS, MSVSC-S2SWISS, MSVSC-S3SWISS, MSVSC-SASWISS** | Brand **Master Science**





The Master Science Stepless Speed Viscometer is a high-range rotational viscometer with continuously variable speed, allowing the operator to set exactly the shear rate a method requires. Depending on the model, it measures from 12 mPa·s up to 80,000,000 mPa·s.

KEY HIGHLIGHTS

- Any speed you need
- Huge measuring span
- Temperature on screen
- High precision
- Expandable

AT A GLANCE

±1 % of full scale
ACCURACY

stepless control sets any speed in range.
METHOD NEEDS A NON-STANDARD SPEED

L1 to L4 (S1, S2, S3); 21, 27, 28, 29 (SA)
SPINDLES

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

support@themsci.com
www.themsci.com

Scan to view online

Overview

An RTD temperature probe reads sample temperature in real time, and optional software adds automatic data collection, storage and comparison of historical results.

> For routine checks with fixed speeds, see the Master Science rotational digital viscometer.

Key Benefits

Any speed you need
stepless control sets the exact rpm specified in a standard or customer method.

Huge measuring span
the Master Science Stepless Speed Viscometer reaches 80,000,000 mPa·s on the S3 model.

Temperature on screen
the RTD probe shows sample temperature next to the viscosity value.

High precision
±1 % accuracy and ±0.5 % repeatability of full scale.

Expandable
software, baths, heaters and adapters extend the application range.

Technical Specifications

GENERAL

General	Specifications of the four Master Science Stepless Speed Viscometer models:
Brand	Master Science
Model Number	MSVSC-S1SWISS, MSVSC-S2SWISS, MSVSC-S3SWISS, MSVSC-SASWISS
SKU	MSVSC-S1SWISS, MSVSC-S2SWISS, MSVSC-S3SWISS, MSVSC-SASWISS
Models	MSVSC-S1SWISS, MSVSC-S2SWISS, MSVSC-S3SWISS, MSVSC-SASWISS
Measuring Range	**S1: 20 to 600,000; S2: 12 to 6,000,000; S3: 160 to 80,000,000; SA: 50 to 10,000,000 mPa·s**
Speed (stepless)	S1: 1 to 60 rpm; S2/S3: 0.1 to 99.9 rpm; SA: 0.1 to 200 rpm
Spindles	L1 to L4 (S1, S2, S3); 21, 27, 28, 29 (SA)
Accuracy	**±1 % of full scale**
Repeatability	±0.5 % of full scale
Readability	**0.01 cP below 10 cP; 0.1 cP below 10,000 cP; 1 cP above**
Temperature Measurement	RTD probe
Power	Adapter, 100 to 240 V, 50/60 Hz

DISPLAY & DATA

Display	LCD: viscosity, speed, torque, spindle, temperature, maximum range
Output	RS232

DIMENSIONS & WEIGHT

Package Size	400 × 350 × 360 mm (S1–S3); 420 × 360 × 530 mm (SA)
Weight	8 kg (S1–S3); 9.3 kg (SA)

COMMON LABORATORY PROBLEMS AND HOW THIS VISCOMETER HELPS

Common Laboratory Problems and How This Viscometer Helps	How the Master Science Stepless Speed Viscometer handles difficult viscosity tests:
Method needs a non-standard speed	stepless control sets any speed in range.
Extremely thick materials	high-range models measure up to 80 million mPa·s.
Unknown sample temperature	the RTD probe reads it directly.
Comparing batches over time	optional software stores and compares data.
Low viscosity liquids	an ultra-low adapter extends the lower range.

Applications

The Master Science Stepless Speed Viscometer is used for
Adhesives, sealants and pastes Paints, inks and resins Food sauces, creams and syrups Cosmetics and pharmaceutical gels Petroleum products and asphalt

Measurement

- Continuously variable speed
- Automatic range display for each spindle and speed
- Fine readability down to 0.01 cP

Temperature

- RTD probe included
- Compatible with thermostatic baths and heaters

Data

- RS232 output
- Optional PC software for automatic collection and comparison

Standard Accessories Included

- Viscometer main unit
- Standard spindle set
- Spindle guard
- Base with levelling feet
- Lifting stand
- Power adapter
- Spanner
- RS232 output interface
- RTD temperature probe

Optional Accessories

- Ultra-low viscosity adapter with L0 spindle
- Small sample adapter
- Temperature-controlled heater
- Spindle L5
- Data collection software
- Dedicated printer
- Thermostatic bath