# 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.

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## 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

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|---|---|
| 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

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

### DIMENSIONS & WEIGHT

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|---|---|
| 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