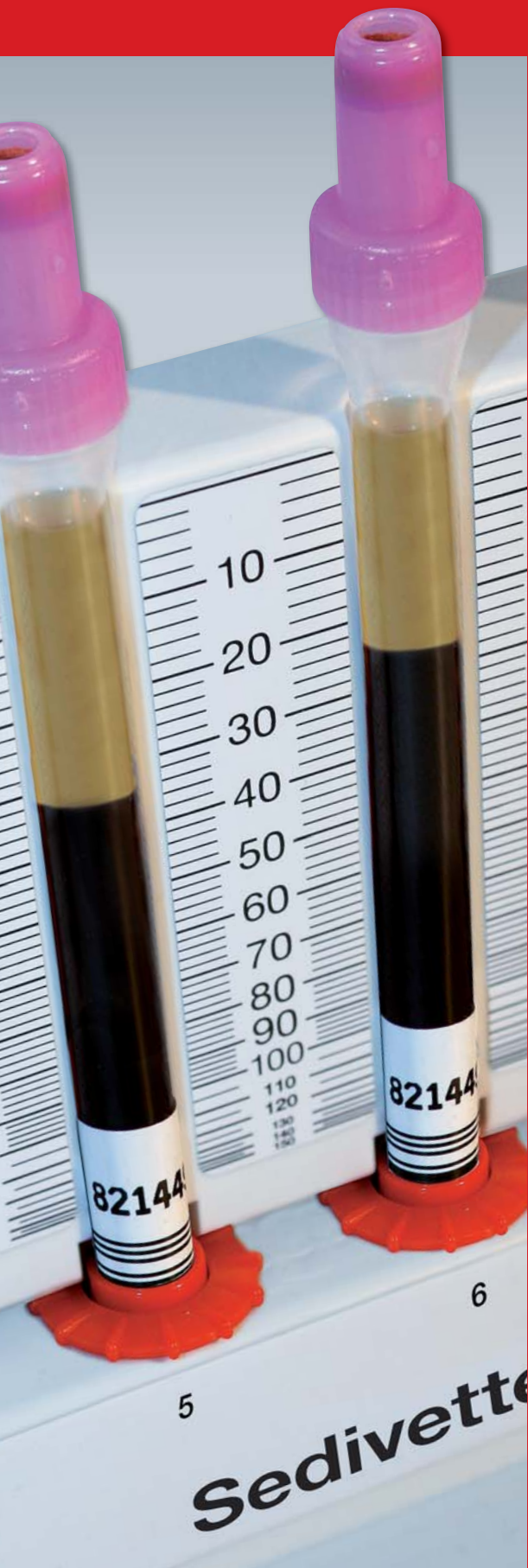


# Sediplus® system solutions

Determining ESR in a closed system



*S-Sedivette® · Sediplus® S 2000 · Sediplus® S 200  
Sarmix® M 2000 · Accessories*

S-Sedivette® • A closed system from blood collection to sedimentation



After taking the blood sample and before measuring, it is essential to give the S-Sedivette® a thorough mix.



With the S-Sedivette®, the tried-and-tested S-Monovette® closed blood collection system facilitates closed blood sedimentation without sedimentation pipettes.

- No risk of infection compared with open systems
- Sedimentation takes place in the collection tube
- Easy to use
- Saves time and money

Blood is collected in the same way as with an S-Monovette®, using either the aspiration or the vacuum method. The sampling principle can be decided according to individual vein conditions.

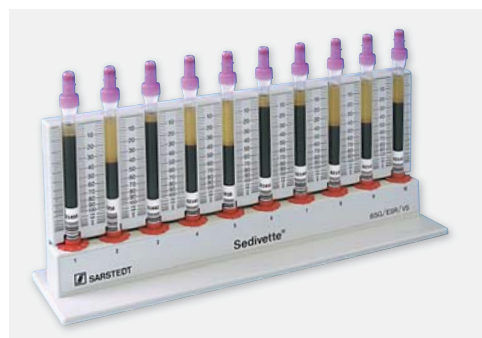
In the S-Sedivette®, which is pre-dosed with 0.7 ml citrate, 2.8 ml blood is collected (mixing ratio 1:5). After collection, the citrate blood is thoroughly mixed using the Sarmix® M 200.

A glass bead assists the mixing process for manual mixing.

For ESR measurement, place the S-Sedivette into the sedimentation rack and use the red thumb screw to set each sample level to zero.

After one hour, read the sedimentation value from the converted scale. The value corresponds to the mm value of Westergren.

The practical rack enables parallax-free reading.



Order no.	Description
06.1690.001	<b>S-Sedivette®</b> 50 pcs./inner box, 500 pcs./outer box
90.1090	<b>S-Sedivette rack with graduated back wall</b> for 10 S-Sedivettes

Sediplus® S 2000 • Automatic 40 channel blood sedimentation measuring device



Based on SARSTEDT's many years of experience in the field of blood sedimentation, an automatic 40-channel blood sedimentation measuring device is available, the Sediplus® S 2000, thanks to the use of the IR transmission measuring method and state-of-the-art microprocessor electronics.

It is optimised for use with the S-Sedivette®.

The Sarmix® M 2000 and Sarmix® M 200 mixers, which were specially developed for the S-Sedivette®, are available for mixing citrate blood.

The Sediplus® S 2000 enables the simultaneous and independent measurement of up to 40 samples. User-friendliness was a priority. After identifying the sample with the barcode reader, the S-Sedivette® must be inserted into a free measuring point. All other functions are automatic.

The measuring plate moves up and down for the measuring process. When this happens, each S-Sedivette® is illuminated by a measuring beam. The measuring beam shines on a detector behind the S-Sedivette®. The demarcation between supernatant and erythrocyte sediment can be clearly detected by the change in light intensity.

The 1 h and 2 h values or the ½ h and 1 h values are measured and, when the measurement is completed, the complete log is sent to the central EDP. The log contains the measuring point, the identification number, the measuring values and any notes, if the S-Sedivette® was underfilled or if there was a power failure during measuring. Monitoring the sedimentation is no longer necessary.

ID numbers or names can also be entered manually and the measurement results can be read from the display or printed.

The basic unit, with 40 measuring stations, includes the operator panel and is upgradeable to a maximum of 160 measuring stations using the 40-channel extension units.

Order no.	Description
90.189.700	<b>Sediplus® S 2000, 230 V</b>
90.189.710	<b>Extension unit for Sediplus® S 2000</b>
90.189.730	<b>Barcode reader for Sediplus® S 100, S 200, S 2000</b>

Sediplus® S 200 • 10 channel blood sedimentation measuring device

Designed with the small lab in mind, with a lower throughput of samples, or for local measuring on the ward, SARSTEDT presents a 10-channel blood sedimentation measuring device in a closed system, the Sediplus® S 200.

The use of the tried-and-tested reflection measuring procedure, in conjunction with state-of-the-art microprocessor electronics, guarantees the required level of precision.

Due to an optimal combination with the S-Sedivette® blood sedimentation system, the ESR can be reliably determined at any time and directly after blood has been safely collected.

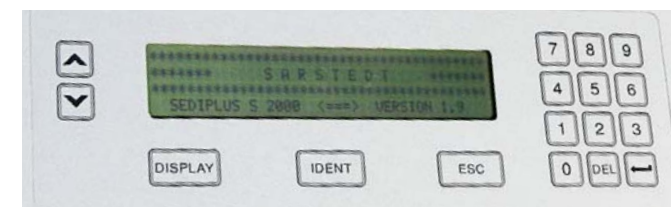
Immediately after collection, the citrate blood should be thoroughly mixed using the Sarmix® M 200. This mixer was specially developed for use with the S-Sedivette®.

After remixing in the Sarmix® M 200, start measuring by inserting the filled S-Sedivette® into a free measuring point and pressing the Start button.

LEDs for each measuring point indicate by changing colour (red – orange – green) whether the measurement is taking place in the first or second hour, or whether it has finished. The measured values displayed correspond directly to Westergren values in mm.

Order no.	Description
90.189.900	<b>Sediplus® S 200, 100 - 240 V</b>
92.189.930	<b>Barcode reader for Sediplus® S 100/S 200</b>

Further accessories can be found on the following pages.



Technical data:	
Measuring principle:	IR transmission
Measuring range:	0–70 mm absolute, corresponding to 0–147 mm Westergren
Measuring accuracy:	+/- 1 mm measuring path
Display:	mm Westergren
Measuring stations:	40 positions
	Extension unit 40 positions
	Up to a total of 160 positions
Memory:	Date, time, unit, position, sample ID, measuring values
Data output:	Display and RS 232 to EDP, data manager or printer
Power supply:	230 V, 50–60 Hz, 50 W
Dimensions (WxDxH):	315 x 326 x 175 mm
Weight:	Basic unit 5 kg
	Extension unit 3.5 kg



Technical data:	
Measuring principle:	IR Reflection 880 nm
Measuring range:	0–63 mm absolute, corresponding to 0–109 mm Westergren
Measuring accuracy:	+/- 1 mm measuring path
Display:	mm Westergren
Measuring stations:	10
Memory:	Sample ID, position, measured values
Data output:	Display and RS 232 to EDP, data manager or printer
Interfaces:	RS 232 (EDP, data manager, printer) PS/2 for keyboard and/or barcode reader
Power supply:	100–240 V, 50–60 Hz, 12 V DC, 1.25A mains adapter
Dimensions (WxDxH):	300 x 160 x 300 mm
Weight:	2.6 kg without mains adapter



## Sarmix® M 2000 • Rotation mixer



The Sarmix® M 2000 laboratory mixer has an impressive range of applications, varying from a gentle mixing movement to powerful vibrations.

8 mixing programs with different rotation and vibration movements are available, along with 6 rotors for tubes of different diameters (available separately). Operation using the clearly and functionally arranged control buttons is very simple.

A rotor with 40 positions (order no. 92.180.615) and an optimised mixing program are available for use with the S-Sedivette®.

### Technical data:

Type of movement:	Rotating, rocking and vibrating movements
Setting ranges:	Rotation: 4 to 40 rpm, Angle: 0 to 360 degrees vibration
Display:	2-row LCD Display
Removable rotors:	See accessories
Connection:	12 V DC-Adapter
Dimensions (WxDxH):	400 x 165 x 150 mm, 17.3 x 6.5 x 5.9 inches
Weight:	Approx. 2.5 kg

Order no.	Description
<b>90.180.600</b>	<b>Sarmix® M 2000, incl. 12 V DC mains adapter basic device without rotor</b>
92.180.610	Disc rotor for 23 tubes Ø 8–12 mm
92.180.611	Disc rotor for 2 tubes up to Ø 35 mm and 6 tubes up to Ø 20 mm and 6 tubes up to Ø 12.5 mm
92.180.612	Block rotor for 40 tubes of up to Ø 11.5 mm
92.180.613	Block rotor for 24 tubes of up to Ø 15 mm
92.180.614	Block rotor for 7 tubes of up to Ø 28 mm
92.180.615	Block rotor for 40 tubes of up to Ø 8.5 mm (S-Sedivette®)
92.180.616	Block rotor for 14 tubes of up to Ø 28 mm (50 ml tubes)
92.180.617	Block rotor for 24 tubes of up to Ø 17 mm (15 ml tubes)

## Accessories for Sarmix® S 2000 and Sarmix® S 200

### Thermal printer



This thermal printer is a light, compact device with RS 232 (D-sub) connection to the measuring data output of Sediplus® S 100, S 200 and S 2000. It has a robust ABS casing. The built-in battery enables operation independently of the mains.

Order no.	Description
<b>90.189.720</b>	<b>Thermal printer with 230/6 mains adapter</b>
<b>90.188.055</b>	<b>Paper roll for thermal printer, 5 pcs</b>

### Sediplus® Data-Manager



The data manager serves to control and monitor the transfer of data (measurement logs) from Sediplus® S 100 (with interface), S 200 (with interface) or S 2000 to a serial or parallel printer and lab data management.

Order no.	Description
<b>90.189.750</b>	<b>Sediplus® Data Manager with interface cable; EU mains plug; UK, US adapter</b>

### SediTest S 200 and Test-Sedivettes



Sediplus® S 200 and S 2000 function checking. Following a defined procedure, the functional elements relevant to measuring (mechanics and optics) can be checked channel by channel, thus ensuring that the device functions faultlessly.

Order no.	Description
<b>92.189.915</b>	<b>SediTest S 200 for Sediplus® S 200</b>
<b>91.189.715</b>	<b>Test-Sedivettes for Sediplus® S 2000</b>

### Barcode reader for Sediplus® S 2000



The optional barcode reader for the S 2000 serves for safe identification of the S-Sedivette® sample tubes before measurement begins. It reads all current codes. With the barcode reader mounting bracket, which can be attached to the S 2000, work is completely effortless.

Order no.	Description
<b>90.189.730</b>	<b>Barcode reader for Sediplus® S 100, S 200, S 2000</b>

SARSTEDT AG & Co.  
P.O. Box 12 20  
D-51582 Nümbrecht  
Phone +49 2293 305-0  
Fax +49 2293 305-3992  
export@sarstedt.com  
www.sarstedt.com