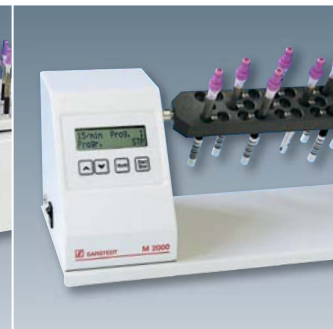
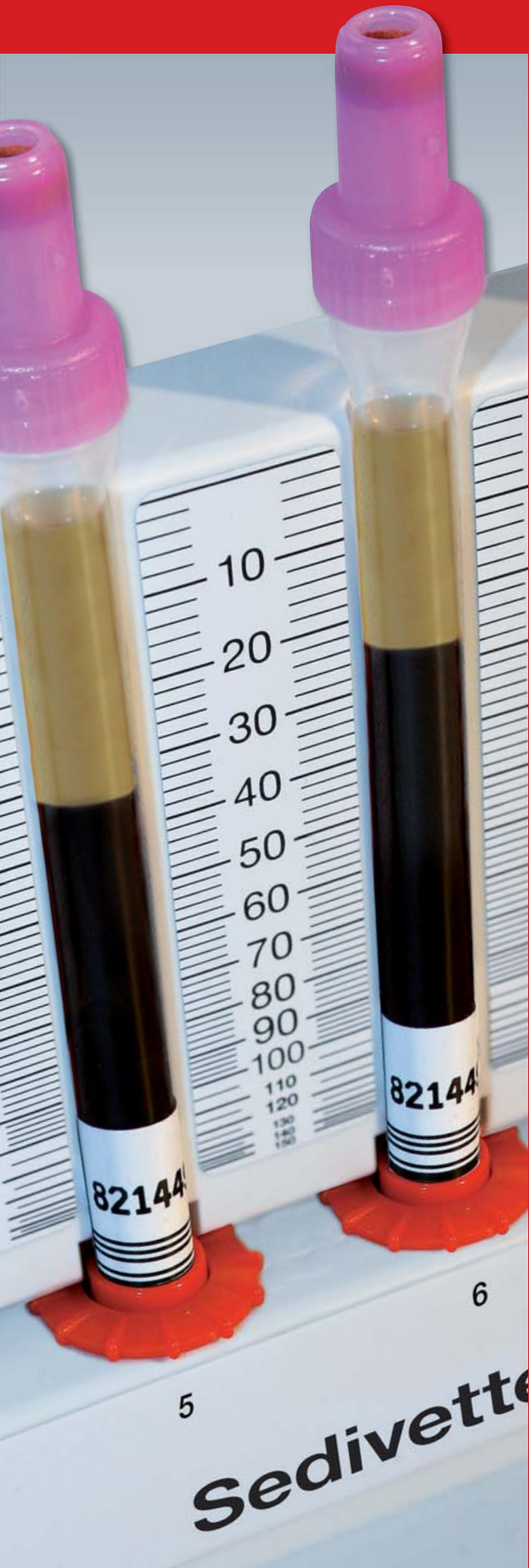


Sediplus® System Solutions

The New Generation of ESR Determination from Enclosed Systems



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

S-Sedivette® • Enclosed system from blood collection to sedimentation

With the S-Sedivette®, the proven enclosed blood collection concept of the S-Monovette® system also provides enclosed blood sedimentation without a sedimentation pipette.

- Minimizes potential risk of infection by avoiding sample transfer to pipettes
- Sedimentation rate is measured in the collection tube
- Easy to use
- Hygienic
- Economical and time-saving

As with the S-Monovette®, blood is drawn by either the aspiration or the vacuum principle, allowing the collection technique best suited to fit the individual patient's vein conditions.

A 2.8 ml volume of blood is drawn into the S-Sedivette® pre-dosed with 0.7 ml citrate (mixing ratio 1:5). After collection, the citrate blood is thoroughly mixed in the Sarmix® M 200. For manual handling, a pre-dosed glass bead is used for mixing.

For ESR measurement, place the S-Sedivette® into the sedimentation rack and use the knurled thumb screw to adjust the sample level to zero.

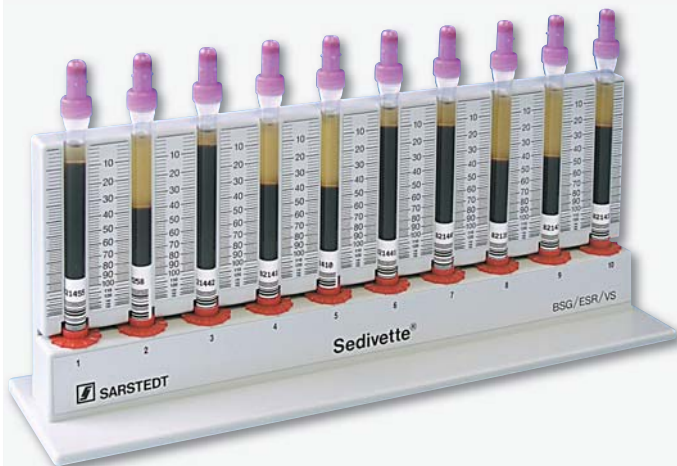
After one hour, read the sedimentation value from the converted graduation. The value corresponds to the mm value of the Westergren method.

The practical rack enables parallax-free reading.



Note:

Mix the S-Sedivette® thoroughly after blood collection and prior to analysis.



Ordering Information

Order No.	Description
06.1690.001	S-Sedivette® 50 pcs./inner box, 500 pcs./outer box
90.1090	S-Sedivette® Rack with graduated back wall for 10 S-Sedivettes

Sarmix® M 2000 • Rotating Mixer

The Sarmix® M 2000 laboratory mixer is suited for a wide range of applications, from gentle mixing to vigorous shaking.

The instrument has 8 mixing programs of varying motions and degrees of rotation, as well as 6 optional rotors for various tube diameters. A practical and well-designed control panel makes the Sarmix® M 2000 easy to operate.

A 40-place rotor (Order No. 92.180.615) along with an optimized mixing program makes the instrument ideal for use with the S-Sedivette®.



Technical Specification:

Type of movement:	rotating, rocking, shaking
Range:	Rotation: 4 to 40 rpm Angle: 0 to 360° Shaking
Display:	LCD, 2 lines
Replacement rotors:	refer to Accessories
Connection:	12 V DC adapter
Dimensions (WxDxH):	440 x 165 x 150 mm 17.3 x 6.5 x 5.9 inches
Weight:	abt. 2.5 kg

Ordering Information

Order No.	Description
90.180.600	Sarmix® M 2000, including 12 V DC power pack (basic version without rotor)
92.180.610	Plate rotor for 23 tubes Ø 8 - 12 mm
92.180.611	Plate 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 up to Ø 11.5 mm
92.180.613	Block rotor for 24 tubes up to Ø 15 mm
92.180.614	Block rotor for 7 tubes up to Ø 28 mm
92.180.615	Block rotor for 40 tubes up to Ø 8.5 mm (S-Sedivette®)
92.180.616	Block rotor for 14 tubes up to Ø 28 mm (50 ml tubes)
92.180.617	Block rotor for 24 tubes up to Ø 17 mm (15 ml tubes)

Sarmix® M 200 • For use with the S-Sedivette® Blood Collection System

The Sarmix® M 200 has been specially designed to mix blood samples in the S-Sedivette®.

Mixing is required to spread the anti-coagulant throughout the sample after blood collection as well as to ensure re-suspension of the erythrocytes prior to measuring the sedimentation rate.

Mixing is carried out by placing the S-Sedivette® into the instrument rotor in an inclined position. High rotational speed transports the blood into the upper section of the S-Sedivette®. At low speed, the blood flows down to the lower base. 8 Cycles at high and low speed ensure good, standardized mixing procedures.



Technical Specification:

Capacity:	4 S-Sedivettes max.
Mixing principle:	intermittent rotation
Number of cycles:	8
Connected voltage:	12 V DC +20%/-5% stabilized
Power consumption:	300 mA
Plug:	DIN 45323, positive pole inside
Power supply:	230 V, 50-60 Hz
Dimensions (WxDxH):	110 x 160 x 240 mm
Weight:	1 kg

Ordering Information

Order No.	Description
90.180.700	Sarmix® M 200, 230 V, including power pack 230/12

Sediplus® S 2000 • Automated 40-channel instrument for ESR determination

Sarstedt's long-standing experience in the field of blood sedimentation, the application of a new IR transmission measuring method and state-of-the-art micro processor electronics provide an automated 40-channel instrument for ESR determination, the Sediplus® S 2000.

Optimal combination with the S-Sedivette® blood sedimentation system enables reliable determination of sedimentation rates at any time and immediately after safe blood collection. The Sarmix® M 2000 and Sarmix® M 200 are specially engineered for mixing the citrate blood in the S-Sedivette®.

The Sediplus® S 2000 conveniently enables simultaneous and independent measuring of up to 40 ESR samples. Following sample identification via a barcode reader, the S-Sedivette® is inserted into a free channel. All other process are fully automated.

During measurement, the measuring plate scans up and down. As a result, every S-Sedivette® is screened by a measuring beam. The measuring beam hits a detector behind the S-Sedivette®. The demarcation between the supernatant and erythrocyte sediment is precisely detected by means of a change in light intensity.

The 1 h and 2 h values or the 1/2 h and 1 h values are measured and, following termination of the measurement, a complete protocol is sent to the central EDP. The protocol lists the measuring position, the identification number and the measuring values as well as noting underfilled S-Sedivettes or power failure during the measuring procedure. Personal monitoring of ESR is no longer necessary.

Alternatively, ID numbers or names may be entered manually. Results are shown on the display or issued via a serial printer.

The basic unit with 40 measuring channels includes an operator panel and may be extended by 40 channel extension modules to a total of 160 positions.

Technical Specification:

Measuring principle:	IR Transmission
Measuring range:	0 to 70 mm absolute, equivalent to 0 to 147 mm Westergren
Measuring accuracy:	+/- 1 mm measuring path
Display:	mm Westergren
Measuring channels:	Basic unit 40 channels
	Extension unit 40 channels
	up to a maximum of 160 channels
Data memory:	Date, time, module, position, sample ID, measuring values
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:	5 kg



Ordering Information

Order No.	Description
90.189.700	Sediplus® S 2000, 230 V
90.189.710	Extension module for Sediplus® S 2000
90.189.730	Barcode Reader for Sediplus® S 2000

Additional accessories are described on the following pages.

Sediplus® S 200 • 10 Channel ESR measuring instrument

A 10 channel instrument for ESR measuring in an enclosed system, the Sediplus® S 200 is especially suited for laboratories with reasonably small sample throughput. Using the proven reflection measuring principle in combination with state-of-the-art micro processor electronics provides the necessary precision.

The optimal combination with the S-Sedivette® ESR system enables reliable determination of sedimentation rates at any time and immediately after safe blood collection.

Immediately after blood collection, the citrate blood should be thoroughly mixed in the Sarmix® M 200 specially designed for use with the S-Sedivette®.

After repeated mixing in the Sarmix® M 200, measurement is started by placing the filled S-Sedivette® into a free measuring channel and by pushing the start button.

Status LEDs are allocated to each measuring channel, showing by changes of colour (red - orange - green) whether measurement is carried out after one or two hours or if measurement has been completed. Results indicated directly correspond to the Westergren values in mm.



Technical Specification:

Measuring principle:	IR-Reflexion 880nm
Measuring range:	0-63 mm absolute, equivalent to 0 to 109 mm Westergren
Measuring accuracy:	+/- 1 mm measuring path
Display:	mm Westergren
Measuring channels:	10
Data memory:	Sample-ID, position, measuring values
Output:	Display Option: with RS 232 to EDP, Data-Manager or printer
Interfaces:	RS 232 (LIS, Data-Manager, Printer), PS/2 for keyboard and/or Barcode Reader
Power supply:	230 V, 50-60 Hz, 50 W
Dimensions (WxDxH):	300 x 160 x 300 mm
Weight:	4.4 kg

Ordering Information

Order No.	Description
90.189.900	Sediplus® S 200, 100 - 240 V
92.189.930	Barcode Reader for Sediplus® S 100/S 200

Accessories for Sediplus® S 2000 and Sediplus® S 200

Thermo Printer



The Thermo Printer is a compact, lightweight device with RS 232 (SUB-D) connection to the measuring data output of Sediplus® S 100, S 200 and S 2000. It is provided with a robust ABS casing and is entirely free from wear and tear. The integral accumulator enables operation independent from power supply.

Ordering Information

Order No.	Description
90.189.720	Thermo Printer with power pack 230/6
90.188.055	Paper roll for Thermo Printer, 5 pieces

Sediplus® Data-Manager



The Data-Manager serves to control and monitor the data transfer (measuring protocols) from Sediplus® S 100 (with interface), S 200 (with interface) or S 2000 to a serial or parallel printer and the LIS.

Ordering Information

Order No.	Description
90.189.750	Sediplus® Data-Manager with interface cable; EU plug power pack; UK, US adapter

SediTest S 200 and Test Sedivettes



Test Sedivettes are used for functional tests of the Sediplus® S 2000. Channel by channel, the functional elements relevant to measuring (mechanical and optical) can be checked to a defined procedure to ensure trouble-free operation of the instrument.

Ordering Information

Order No.	Description
92.189.915	SediTest S 200 for Sediplus® S 200
91.189.715	Test-Sedivettes for Sediplus® S 2000

Barcode Reader for Sediplus® S 2000



The optional barcode reader for the S 2000 facilitates safe identification of the S-Sedivette® sample tube prior to measurement. The instrument is designed to read any standard barcode. The holder attached to the S 2000 enables non-tiring operation.

Ordering Information

Order No.	Description
90.189.730	Barcode Reader for Sediplus® S 2000
92.189.930	Barcode Reader for Sediplus® S 100/S 200

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Contribution to 20,000 r.g

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20.495	10000	10000 x 1
20.496	25000	25000 x 1
20.497	50000	50000 x 1
20.498	100000	100000 x 1
20.499	250000	250000 x 1
20.500	500000	500000 x 1

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Consumables for automated pipetting

SARSTEDT

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S-Monovette®-Rack

Universell, praktisch, 6 Farben

- in zwei Größen lieferbar:
 - Rack D17: 50 Bohrungen, Ø 17 mm
 - Rack D22: 50 Bohrungen, Ø 22 mm
- Widerstandsfähiges Material
- Stöpsel aus Isoliermaterial
- Für alle S-Monovetten passend
- 20 Bohrerlöcher, zwei Vertiefungen für S-Monovetten-Rubberschlinge
- Besonders für polystyrenische Proteinbestimmung geeignet
- Zu Proteinverfärbungstabletten zusammenbaubar

in 6 Farben lieferbar

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