

Gebrauchsanweisung

Aneroid Blutdruckmessgerät und Manschette

Instructions

Aneroid Sphygmomanometers and Cuffs

Mode d' emploi

Tensionmètres anéroïdes et brassards

Instrucciones para el uso

Esfígmomanómetros aneroides y brazaletes

инструкция по эксплуатации

Анероидные тонометры и манжеты

Istruzioni per l' uso

Sfigmomanometri aneroidi e bracciali

Rudolf Riester GmbH
P.O. Box 35 | Bruckstraße 31
DE - 72417 Jüngingen | Germany
Tel.: (+49) +7477-9270-0
Fax: (+49) +7477-9270-70
E-Mail: info@Riester.de | www.Riester.de



Selection of suitable cuff sizes

A. Nylon-velcro cuffs, Disinfectable one piece cuff

Our nylon-velcro cuffs, disinfectable one piece cuff have a tuffed strip on one side and hooks on the other. This ensures that the cuffs can be easily opened and closed quickly and repeatedly. On all the models (with the exception of sanaphon®), the cuffs are calibrated, i.e. provided with measurement lines. To make sure that you have chosen the right cuff size, check to see whether the white index line is in the range between the arrows after the cuff has been put on. If the index line fails to reach this range, the cuff is too small. If it is beyond the range, the cuff is too large. Precise blood pressure readings can be obtained only if the correct cuff size is used.

Nylon-Velcro cuffs (Two Piece Reusable Velcro Cuff), The following cuff sizes are available for all models (except sphygmotensiophone, sanaphon® and exacta), see cuff table:

Disinfectable one piece cuff (One Piece Reusable Velcro Cuff One Tube/Two Tube), The following cuff sizes are available for all models (except sphygmotensiophone, sanaphon®, ri-san self-measurement and exacta), see cuff table:

sanaphon® and ri-san® (Two Piece Reusable D-Ring Cuff Self-Mesurment):
Measure your arm circumference to make sure that it lies within the range indicated on the cuff. The following sizes are available: child, adult, large adult and thigh. These sizes correspond to the circumferences given in the above table.

B. Cotton-velcro cuffs self-measurement (Two Piece Reusable Cuff sphygmotensiophone):
Our cotton-velcro cuffs have a tuffed strip on one side and hooks on the other. This ensures that the cuff can be easily opened and closed quickly and repeatedly. Measure your arm circumference to make sure that it lies within the range indicated on the cuff.

C. Cotton hook cuffs (Two Piece Reusable Hook Cuff):
On one side of these cuffs, metal bars have been worked into the fabric covering; metal hooks have been riveted to the fabric on the other side. The metal hooks are inserted into the metal bars in the cuff fabric. Measure the circumference of your arm to make sure that it lies within the range indicated on the cuff.

The following cuff sizes are available for the models listed below: R1 shock-proof®, minimus® II, minimus® III, bigben Round / Square (all versions) and ri-san, see cuff table:

D. Cotton bandage cuffs (Two Piece Reusable Bandage Cuff):
There is a bandage strip and a hook on one side of the bandage cuff. To attach the cuff, simply insert the hook into the bandage strip. Measure the circumference of your arm to make sure that it lies within the range indicated on the cuff.

The following cuff sizes are available for the models listed below: R1 shock-proof®, minimus® II, minimus® III, bigben Round / Square (all versions) and ri-san, see cuff table:

E. Patient position for intended use: sit comfortably, legs not crossed, back and arm supported, center of cuff on the upper arm at the level of the right cardiac atrium; the patient should be as relaxed as possible and should refrain from talking during the measuring process; approx. 5 minutes should elapse before the first measurement is taken.

F. Close the valve by turning the deflation screw clockwise (except in the case of ri-can®):

G. Putting on the cuff: Put the cuff on in such a way that the lower edge of the cuff is approx. 2 to 3 cm above the crook of the arm (level of the right cardiac atrium) or approx. 5 cm above the knee joint. Make sure that the marking sign is placed above the artery. The white index strip should be within the marked index range.

H. After putting on the cuff, inflate the cuff to approx. 20 mmHg above the expected systolic blood pressure value (= the upper value) with the aid of the ball.

I. When measuring blood pressure, the position of the operator is normally in front of the patient or at the patient's side.

J. It is recommended to use phase V of the Korotkoff sounds (K5) for auscultatory measurement in adults; to use phase IV of the Korotkoff sounds (K4) for auscultatory measurement in children aged 3 to 12 years; and to use phase V of the Korotkoff sounds (K5) for auscultatory measurement in pregnant female patients, except if the Korotkoff sounds can be heard during deflation of the cuff - if this is the case, K4 is to be used.

K. Place the chestpiece of the stethoscope, preferably our model anesthetist, catalog no. 4177-01 - 4177-05, over the artery underneath the cuff.

L. For the units intended for home use, no separate stethoscope is needed, since the chestpiece is integrated in the cuff. If a unit intended for home use is used, the membrane of the chestpiece installed in the cuff must be placed above the artery. The cuff is put on by pulling the free end of the cuff through the metal retainer and closing the cuff with the aid of the hook-and-loop fastener.

M. A-N-velcro cuffs, Fasten the bandage cuff by hooking the hook onto the bandage strap.

N. Bandage cuffs: Fasten the bandage cuff by hooking the hook onto the small metal rods of the cuff cover.

O. To enable blood pressure measurement, open the deflation screw by turning it counterclockwise. The deflation rate should ideally range between 2 and 3 mmHg/min and can be set by delicate adjustment of the screw. Visual check of the rate: The cuff must move downwards by 1 to 1.5 scale marks per second on the scale. After completion of the measurement, open the cuff completely for rapid deflation of the cuff.

P. The ri-san® model is equipped with a push-button valve. Activate this valve in such a way that the ideal deflation rate between 2 and 3 mmHg/s is achieved. To completely deflate the cuff, press the button all the way to the stop position.

Q. When the upper blood pressure value (systole) has been reached, rhythmic beats can be heard.

R. Diastole = The upper blood pressure value is the value that results when the heart contracts and the blood is pressed into the blood vessels.

S. When the lower blood pressure value (diastole) has been reached, the beats fall silent.

T. Diastole = The lower blood pressure value which prevails when the heart muscle has expanded and is once again filling up with blood.

U. The blood pressure measurement has been completed.

V. We would like to point out to you that a unit intended for home use does not replace regular visits to the doctor and that only the doctor can accurately analyze your measured values.

again filling up with blood.
• The blood pressure measurement has been completed.
• We would like to point out to you that a unit intended for home use does not replace regular visits to the doctor and that only the doctor can accurately analyze your measured values.

How to care for the aneroid sphygmomanometer

General information

The goal of cleaning and disinfection of medical products is the protection of patients, users and third persons and conserving the value of the medical products. On account of the product design and the used material, no defined limit of maximum processing cycles can be fixed. The lifetime of the medical products depends on their function and on a appropriate treatment of the devices. Before returning faulty products for repair they must have gone through the described reprocessing process.

1. Manometer and bulb

Manometer and bulb can be cleaned outside with a humid cloth until optical cleanliness is given.

ATTENTION!

Never place the manometer in liquid! This item is not approved for automated reprocessing and sterilization. These procedures cause irreparable damage!

2. Cuffs

Cotton and Nylon velcro cuff (latex and latex free)

Cleaning:

After removing the bladder, wipe the nylon-velcro covers with a damp cloth. Alternatively, these can be washed with soap and cold water like all the other cuffs. If you decide on the latter course, rinse the cuffs with clear water afterwards and let them air dry. Wipe the bladder and tubes with a damp cloth.

Disinfection:

After removing the bladder, wash the cuff covers in cold water to which disinfectant has been added. Afterwards, let them air dry. Only disinfectants with approved efficiency and in accordance with the national standards can be used. The bladder and tubes can be wiped with a cotton cloth moistened with ethanol.

Disinfectable one piece cuff

Cleaning:

The cuff can be wiped with a damp cloth. Alternatively, it can be washed with soap and cold water like all the other cuffs. Please rinse the cuff with clear water afterwards. In addition this cuff can be washed at up to 60°C in the washing machine. Before next use, please ensure that no liquid is remaining in the cuff. This can affect the measurement results negatively and it can damage the manometer technology.

Disinfection:

The cuff can be completely inserted into liquid disinfectant. Only disinfectants with approved efficiency and in accordance with the national standards can be used. Before next use, please ensure that no liquid is remaining in the cuff. This can affect the measurement results negatively and it can damage the manometer technology.

IMPORTANT!

Do not iron nylon-velcro cuffs. Disinfectable one piece cuff. Never expose the cuffs to intensive solar radiation! Never touch the cuff covers or bladders with a sharp instrument, since this could cause damage!

Maintenance

The product does not require any maintenance.

Test of precision

Remove the tube from the manometer and hold the manometer in a vertical position. When the pointer stands still at 0 on the scale, the instrument has been adjusted properly. If the pointer is below or above 0, the instrument must be recalibrated. Either take it to an authorised **Riester** dealer or send it to us.

Monitoring of instruments

All countries except for Germany:

The respective legal provisions apply for all countries, except for Germany. The reference manometer, which is used for calibration, must be traceable to national and international measurement standards.

Warning:

It is not allowed to make changes to the device.

Technical Data

Minimal environmental conditions under which the error tolerance of +/- 3 mm Hg must be satisfied:

Measurement conditions: 10°C (50°F) to 40°C (104°F) at a relative air

Storage conditions: -20°C (-4°F) to 70°C (158°F) at a relative air

humidity of 85 % [non-condensing]

Versions:

Type of indication:

Scale graduation:

Range shown on scale:

Measurement range:

Pointer movement:

Tube adapter:

Pressure generation:

Air-release valve that can be regulated

Disposal:

You can obtain information on disposal from your appropriate local facility or from your local environmental advisor.

| | |
|--------------------|--|
| | CE-Kennzeichnung kennzeichnet die Übereinstimmung mit der Europäischen Medizinprodukte Richtlinien 93/42 EWG CE marking indicates compliance with European Medical Devices Directive 93/42 EEC Le marquage CE indique que le produit est conforme à la directive européenne relative aux dispositifs médicaux 93/42/CEE Marca CE que indica la conformidad con la directiva sobre productos sanitarios europeos 93/42 CEE Маркировка CE подтверждает соответствие европейской Директиве по продуктам медицинского назначения 93/42 ЕЗС Il contrassegno CE definisce la conformità con la Direttiva europea sui Dispositivi Medici 93/42 CEE |
| SN | Seriennummer / Serial number / Numéro de série / número de serie / номер серии / Numero di serie |
| | Hersteller / Manufactured by / Fabricant / Fabricante / фабрикант / fabricante |
| | Zulässiger Temperaturbereich in °C für Lagerung und Transport Temperature limits in °C for storage and transport Limites de température, en °C, lors du stockage et du transport Límites de temperatura en °C para almacenamiento y transporte Допустимый диапазон температур в °C при хранении и транспортировке Intervallo di temperatura ammesso in °C per la conservazione e il trasporto |
| | Zulässiger Temperaturbereich in °F für Lagerung und Transport Temperature limits in °F for storage and transport Limites de température, en °F, lors du stockage et du transport Límites de temperatura en °F para almacenamiento y transporte Допустимый диапазон температур в °F при хранении и транспортировке Intervallo di temperatura ammesso in °F per la conservazione e il trasporto |
| | Markierungszeichen auf der Manschette für die Lage der Manschette auf der Arterie. Marking sign on the cuff to indicate the position of the cuff above the artery. Marquage sur le brassard permettant le positionnement de ce dernier sur l'artère Marca de referencia en el brazalete para ubicación del brazalete sobre la arteria. Метки на манжете обозначают требуемое положение манжеты на артерии. Simbolo riportato sul bracciale che indica la posizione del bracciale stesso sull'arteria. |
| | Gebrauchsanweisungen befolgen Follow the operating instructions Suivre les instructions Seguir las instrucciones del manual Соблюдать руководство по применению Rispettare le istruzioni per l'uso |
| | Vorsicht Bruchgefahr Fragile, handle with care Attention: fragile Frágil, manipular con precaución Осторожно! Опасность разрушения! Attenzione, fragile |
| | Trocken Lagern Keep dry Mantenir au sec Mantener seco Хранить в сухом месте Conservare in luogo asciutto |
| | Grüner Punkt (länderspezifisch) Grüner Punkt (country-specific) Point Vert (spécifique au pays) Punto verde (específico del país) Маркировка «Зеленая точка» (действует в конкретной стране) Punto Verde (specifico del paese) |
| | Produkt enthält Latex Product contains latex Le présent produit contient du latex Este producto contiene látex. Изделие содержит латекс. Il prodotto contiene lattice. |
| | Latexfrei Latexfree Sans latex Senza lattice Без латекса Sin látex |
| | Achtung! Gebrauchsanweisung befolgen. Caution! Follow the operating instructions. Attention! Suivez les instructions d'utilisation! Attenzione! Seguire le istruzioni operativa! Внимание! Следуйте инструкциям по эксплуатации. Atención! Siga las instrucciones del manual de uso! |
| LOT YY/XXXX | LOT-Nummer / YY = steht für den jeweiligen Monat / XXXX = steht für das jeweilige Jahr LOT-number / YY = stands for the respective month / XXXX = stands for the respective year Número de lot / YY = signifie le mois / XXXX = stands pour l'année respective Número di LOT / YY = sta per il rispettivo mese / XXXX = rappresenta il rispettivo anno LOT-номер / YY = обозначает месяц производства / XXXX = обозначает год производства Número de lote / YY = representa el mes respectivo / XXXX = representa el año respectivo |
| | Symbolo Armumfang Icon arm circumference Icônes circonférences de bras Símbolo circonferencia brazo Обозначение окружности руки Simbolos de circunferencias del brazo |
| | Herstellungsdatum Date of Manufacture Date de fabrication Data di produzione Дата производства Fecha de manufactura |
| | Achtung Attention Attention Attenzione ВНИМАНИЕ Atención |

Erläuterung der verwendeten Symbole

Explanation of the symbols used

Explication des symboles utilisés

Explicación de los símbolos utilizados

Разъяснение

ис

яльзумымы

символдар

Spiegazione dei simboli utilizzati

Auf dem Gerät bzw. Auf der Verpackung finden sich folgende Symbole.

The following symbols are depicted on the packaging.

Les symboles suivants figurent sur l'appareil ou sur son emballage.

En el dispositivo o en su embalaje encontrarás los siguientes símbolos.

На

| | | |
|---|-------------|------------|
| рибяре и у | | |
| Two Piece Reusable Velcro Cuff составные из двух частей составные из двух частей | | |
| 5-7,5cm | 5-8cm | |
| Infant | 7,5 - 13 cm | 8-13cm |
| Child | 13 - 20 cm | 13-17cm |
| Small Adult | 17 - 26 cm | 17-24cm |
| Adult | 24 - 32 cm | 24-34cm |
| Adult XXL | 32 - 48 cm | 34-44cm |
| Thigh | 42 - 50 cm | 42-50cm |
| Thigh XL | 50 - 70 cm | 50-70cm |
| One Piece Reusable Velcro Cuff One Tube / Tow Tube | | |
| LOT On the Cover | | |
| Newborn | ----- | 5 - 8 cm |
| Infant | ----- | 8 - 13 cm |
| Child | ----- | 13 - 17 cm |
| Small Adult | ----- | 17 - 24 cm |
| Adult | ----- | 24 - 32 cm |
| Adult XXL | ----- | 32 - 41 cm |
| Two Piece Reusable Cuff Sphygmotensiophone | | |
| LOT Inside the Cover | | |
| Infant | 7,5 -13 cm | 7,5 -13 cm |
| Child | 13 - 20 cm | 13 - 20 cm |
| Adult | 24 - 32 cm | 24 - 32 cm |
| Two Piece Reusable Hook Cuff | | |
| LOT Inside the Cover | | |
| Adult | 24 - 32 cm | 24 - 32 cm |
| Two Piece Reusable Bandage Cuff | | |
| LOT Inside the Cover | | |
| Adult | 24 - 32 cm | 24 - 32 cm |

WARRANTY

This product has been manufactured under the strictest quality standards and has undergone a thorough final quality check before leaving our factory. We are therefore pleased to be able to provide a warranty of 2 years from the date of purchase on all defects, which can verifiably be shown to be due to material or manufacturing faults. A warranty claim does not apply in the case of improper handling. All defective parts of the product will be replaced or repaired free of charge within the warranty period. This does not apply to wearing parts. For R1 shock-proof, we grant 5 years, for precisa N shock-proof, 3 years for the calibration, which is required by CE-certification. A warranty claim can only be granted if this Warranty Card has been completed and stamped by the dealer and is enclosed with the product. Please remember that all warranty claims have to be made during the warranty period. We will, of course, be pleased to carry out checks or repairs after expiry of the warranty period at a charge. You are also welcome to request a provisional cost estimate from us free of charge. In case of a warranty claim or repair, please return the Riester product with the completed Warranty Card to the following address:

Seriенnummer bzw. Chargennummer, Serial number or batch number

Numéro de série/de lot, Número de serie o de lote

Серийный номер или номер партии, Numero di Serie risp. numero di carica

Datum, Date, Date, Fecha, data, Data,

Stempel und Unterschrift des Fachhändlers,

Stamp and signature of the specialist dealer,

Cachet et signature du revendeur,

Sello y firma del establecimiento especializado,

печать и подпись официального дилера,

Timbro e Firma del Venditore specializzato