



GIMA

**SFIGMOMANOMETRI A MERCURIO
MERCURY SPHYGMOMANOMETER
SPHYGMOMANOMÈTRES À MERCURE
BLUTDRUCKMESSER MIT QUECKSILBER
ESFIGMOMANÓMETROS DE MERCURIO
ESFIGMÔMETROS A MERCÚRIO
ΠΙΕΣΟΜΕΤΡΟ ΜΕ ΥΔΑΡΓΥΡΟ**

**MANUALE D'USO E MANUTENZIONE
USE AND MAINTENANCE BOOK
INSTRUCTIONS DE FONCTIONNEMENT ET ENTRETIEN
BETRIEBS UND WARTUNGS ANWEISUNGEN
MANUAL DE USO Y MANTENIMIENTO
MANUAL DE USO E MANUTENÇÃO
ΕΓΧΕΙΡΙΔΙΟ ΧΡΗΣΗΣ ΚΑΙ ΣΥΝΤΗΡΗΣΗΣ**

ATTENZIONE: Gli operatori devono leggere e capire completamente questo manuale prima di utilizzare il prodotto.

ATTENTION: The operators must carefully read and completely understand the present manual before using the product.

AVIS: Les opérateurs doivent lire et bien comprendre ce manuel avant d'utiliser le produit.

ACHTUNG: Die Bediener müssen vorher dieses Handbuch gelesen und verstanden haben, bevor sie das Produkt benutzen.

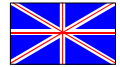
ATENCIÓN: Los operadores tienen que leer y entender completamente este manual antes de utilizar el producto.

ATENÇÃO: Os operadores devem ler e entender completamente este manual antes de usar o produto.

ΠΡΟΣΟΧΗ: Οι χειριστές αυτού του προϊόντος πρέπει να διαβάσουν και να καταλάβουν πλήρως τις οδηγίες του εγχειριδίου πριν από την χρήση του.



GIMA Spa - Via Marconi, 1 - 20060 Gessate (MI) - Italia
ITALIA: Tel. 199 400 401 (8 linee r.a.) - Fax 199 400 403
E-mail: gima@gimaitaly.com - www.gimaitaly.com
INTERNATIONAL: Tel. ++39 02 953854209 - Fax ++39 02 95380056
E-mail: export@gimaitaly.com - www.gimaitaly.com



FEATURES

We would like to thank you for having purchased a precision GIMA sphygmomanometer.

All GIMA sphygmomanometers are manufactured with high quality materials and, when maintained at perfect operating efficiency through regular calibration checks, ensure complete reliability and precision, even after several years of use.

Our line of sphygmomanometers offers the same quality standards for both professional and home models.

The sphygmomanometer you have purchased complies with EEC directive 93/42/CEE. The last page of the present manual reports a copy of the Declaration of Conformity.

PRESCRIPTIONS



It must be noted that self-measuring instruments are not a substitute for regular medical checkups, and that only your doctor can accurately analyze these measurements.

Arterial pressure is highly influenced by one's nervous tension and physical fatigue. It is therefore recommended that you **perform the measurement under conditions of both physical and mental relaxation**, while in a sitting or supine position and, where possible, always at the same time of day, far from meal times.

Remember: do **not move while measuring your pressure** and do not wear clothing that covers your arm and could limit blood circulation.

Pressure varies during the day: it is lower in the morning and higher in the evening; it is also lower in the summer and higher in the winter.



Before measuring blood pressure when using a mercury sphygmomanometer, open the column containing the mercury by turning the lever counter-clockwise. At the end of the measurement, tilt the device until there is no more mercury in the column and close it by turning the lever clockwise.

INSTALLATION

After opening the packages, first of all it is necessary to check all pieces and parts composing the product. Check that they are all present and in perfect conditions.

Apply the armband to your bare left arm, 2-3 cm. above your elbow joint, and then prop up your forearm, keeping it at heart level. Close the armband using the Velcro strap.

If not specifically indicated, all GIMA sphygmomanometers are equipped with armbands for adults; upon request, we can provide armbands for the obese, for use on the thigh and for children, ranging from premature babies up to 14-year-olds.

Position the earpiece of the stethoscope (preferably our DUCA model) on the artery, under your arm.



ATTENTION: do not use and do not deposit mercury sphygmomanometers in places subject to risk of fire.

FUNCTIONING

1) After applying the armband, use the bulb to pump up to approximately 20 mmHg beyond the level of individual systolic pressure: in other words, until the brachial artery is blocked (maximum level). It is essential that the person being measured remains seated and calm, and that his/her **forearm is resting at heart level**, with the inside part facing up.

2) To measure blood pressure, turn the release/deflation screw on the bulb, unscrewing it slowly in a counter-clockwise direction. The ideal deflation speed is around **2-3 mmHg/sec.**

Visually check deflation speed: on the scale, the indicator must move at a speed of between 1 and 1.5 gradations per second.

The models featuring automatic deflation of the gauge, which automatically regulates deflation speed at 2-3 mmHg/sec. Simply press the valve up to the first pressure point.

3) Due to the gradual decompression, your blood starts to run through the brachial artery again, which in turn causes an initial pulsation, that is clearly perceived by the phonendoscope: the pressure indicated on the gauge needle at the exact moment this first beat is recorded is referred to as the **“systolic or maximum pressure”**.

Systole = maximum pressure level when the heart contracts and blood is pushed into the blood vessels.

As you proceed with decompression, the pulsations gradually decrease until they suddenly disappear or become so low as to be imperceptible.



The pressure indicated by the gauge needle at the moment the pulsations disappear is referred to as the “**diastolic or minimum pressure**”.

Diastole: minimum blood pressure level when the heart muscle is expanding and refilling with blood.

4) Now completely open the release valve until air begins to come out of the armband. Blood pressure measurement is now completed.

MAINTENANCE

1. Pump

How to clean: the pump can be cleaned with a damp cloth. There is no need to sterilize it since the parts do not come into direct contact with the patient's body.

2. Armbands

Cleaning: After removing the plenum chamber, the liners can be wiped with a damp cloth, or you can wash them with soap and cold water. If you use this second method, rinse the armbands with clean water and leave them to air dry. Nylon armbands must not be ironed.

The plenum chamber and tubes can be wiped with a damp cotton cloth.

3. Glass column

How to clean: The column must be cleaned at regular intervals (for example during the recommended maintenance periods) using a specific brush to assure exact measurement results. After cleaning, the mercury can move freely inside the column and quickly react to the pressure variations of the cuff.

Replacing: Only qualified personnel, specialized in the maintenance of these devices, can replace the mercury column.

Before replacing the glass column, the wall models must be disassembled carefully. Tilt the device carefully until the mercury is no longer visible. Close the safety device to prevent the mercury from leaking out. Lift the sliding element or the knurled screw (according to the model) that is on the upper end of the column and slide out the column. Insert the cleaned column or a new one exactly in the upper and lower supports and make sure the red part of the scale is in front and the “0” on the bottom.

During cleaning operations make sure the mercury does not touch the clothes. Mercury is a substance that must be recycled or disposed of as special waste.

Any material that has come into contact with the mercury must be put inside a container or plastic bag and sealed before being disposed of. In any case it must never be disposed of in the environment where it can pollute the water stratum and fields.

GIMA WARRANTY CONDITIONS

Congratulations for purchasing a GIMA product.

This product meets high qualitative standards both as regards the material and the production. The warranty is valid for 12 months from the date of supply of GIMA.

During the period of validity of the warranty, GIMA will repair and/or replace free of charge all the defected parts due to production reasons. Labor costs and personnel traveling expenses and packaging not included.

All components subject to wear are not included in the warranty.

The repair or replacement performed during the warranty period shall not extend the warranty.

The warranty is void in the following cases: repairs performed by unauthorized personnel or with non-original spare parts, defects caused by negligence or incorrect use.

GIMA cannot be held responsible for malfunctioning on electronic devices or software due to outside agents such as: voltage changes, electro-magnetic fields, radio interferences, etc.

The warranty is void if the above regulations are not observed and if the serial code (if available) has been removed, cancelled or changed.

The defected products must be returned only to the dealer the product was purchased from. Products sent to GIMA will be rejected.