boso

Blood Pressure Monitor

egotest

Users Instructions

Contents of the kit

1 blood pressure instrument with cuff
1 set of instructions for use
1 case

Symbols on the blood pressure monitor

Symbol	Function/meaning
CE 0124	Device complies with the European Medical Devices Directive
	Year of manufacture

Preliminary remarks

This blood pressure instrument complies with the international standard ISO 81060-1.
All Calibration testing – at least every two years –, has to be carried out either by the manufacturers or the local authorised dealer in accordance with the relevant distributor directives.

A modification of the device and/or the accessories is not permitted. This can lead to measurement errors.
The device can be used by any user skilled in auscultatory blood pressure measurement.

Purpose

Non-invasive recording of systolic and diastolic blood pressure in humans. The instrument can be used with any arm circumference as shown on the corresponding cuff.

Important

- **Please use only boso cuffs.**

The cuff must be selected such that it fits the arm circumference.

- Keep this unit from being knocked or dropped, and protect it from dirt and moisture..

- Care has to be taken not to puncture the cuff with any sharp instruments (Scissors, Needles).

The patient must follow these basic rules when having his/her blood pressure measured:

– sit comfortably
– not cross his/her legs
– rest his/her back and arms on the chair or another surface
– have the centre of the cuff placed on the upper arm at the level of the heart
– relax as much as possible and keep silent while his/her blood pressure is being measured
– be calm for 5 minutes before the first reading

The following phases are recommended in the case of auscultatory measurement

– adults: phase V (K5)
– children aged 3 to 12: phase IV (K4)
– pregnant women: phase V (K5), except when sounds are audible when the cuff is deflated: in this case phase IV (K4)

Korotkoff sounds should be used.

– K5 is the point at which tones heard through the stethoscope are no longer audible
– K4 is the point at which tones heard through the stethoscope change from a clear sound to a muffled sound.

Inscriptions

“mmHg” is the unit in which blood pressure is measured
“shock protected” = the instrument has been tested and found to work correctly after being dropped from a height of up to one metre.

General Information on Blood Pressure

Your heart, like a pump that works continuously to distribute the blood under pressure to every blood vessel throughout your body, ensures that vital, oxygenated blood ist delivered to all the organs.

Blood pressure is determined by the strength of the heartbeat, the elasticity and the diameter of the blood vessels, as well als various other factors.

The pressure created by the contraction (systolic pressure) of the heart muscles is higher, and that at the relaxation (diastolic pressure) ist lower. Both these values are necessary for the correct evaluation and in medical diagnosis.

Therefore, both the systolic and diastolic pressures are mea-

sured when the blood pressure is taken. The measurement unit is „mmHg“ = millimetres mercury column.

Blood pressure is never constant, but always changing. In the morning it is lower than in the evening, and it is lowest when we are asleep. Depending on physical and mental exertion, it also changes individually.
Eating, smoking, fear or stress have an influence on our blood pressure. The seasons too have their effect, with the pressure in the short term, therefore, higher blood pressure values are negligible. If the blood pressure, however, stays constantly above the average values one speaks of high blood pressure. You GP calls this hypertension.

High blood pressue may not immediately by evidenced by any feeling of being unwell. But unobserved and untreated, it can lead to serious health problems. Therefore it is important to have your blood pressure checked by your GP on a regular basis.

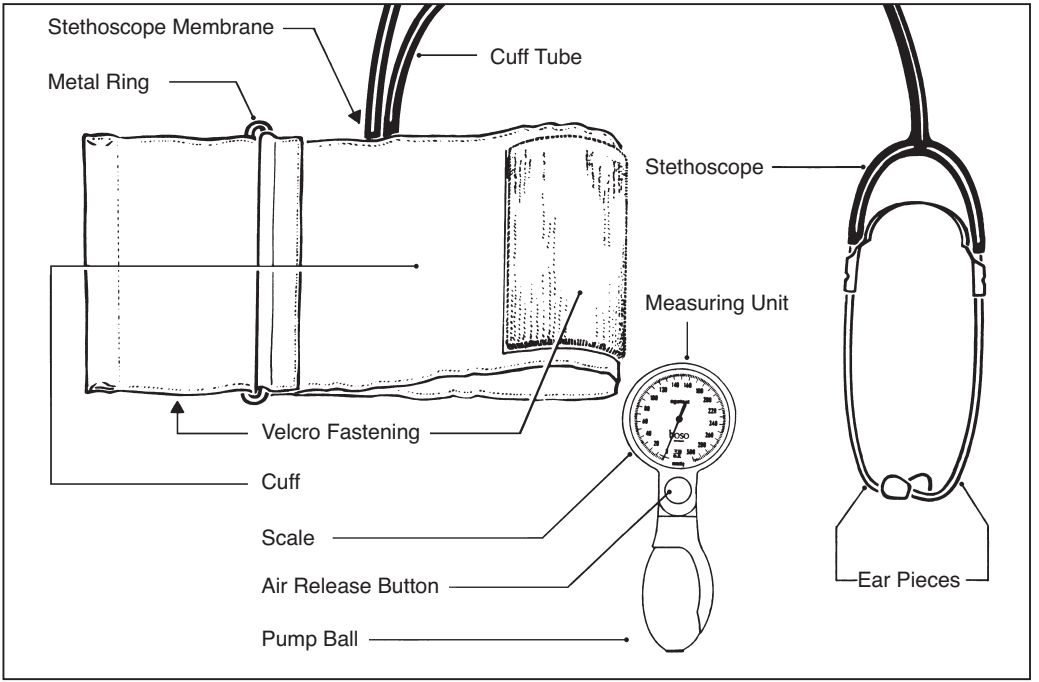
Low blood pressure (hypotension) can be the cause of unpleasant effects such als dizziness and lassitude, yet in intself does not represent a serious risk factor to health.

With the boso-egotest you can now do your own regular checkups and can considerably contribute to safe-guarding your health and recognising any disorders at the early stage.

Your blood pressure should by taken twice a day, if at all possible, always at the same time: in the morning when you get up and in the evening when the body had a chance to relax again.

The World Health Organization (WHO) has set the following guideline for the assessing of blood pressure values:

	Systolic	Diastolic
Too high	over 140 mmHg	over 90 mmHg
Normal – borderline	130 to 139 mmHg	85 to 89 mmHg
Normal	120 to 129 mmHg	80 to 84 mmHg
Optimum	up to 119 mmHg	up to 79 mmHg


Stethoscope Membrane
Cuff Tube
Metal Ring
Stethoscope
Measuring Unit
Velcro Fastening
Cuff
Scale
Air Release Button
Pump Ball
Ear Pieces

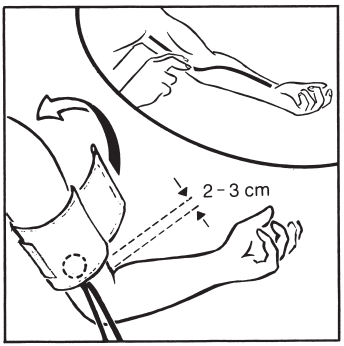
Preparing To Take your Blood Pressure

It is recommended that you take your blood pressure at the free left upper arm.

Care has to be taken, that there is no pressure from pushed-up sleeves, that could influence the actual blood pressure. Any tight clothing should, therefore, be removed.

Fitting the Cuff:

The cuff must not be fitted over wounds as this could lead to further injury.



Blood pressure must always be measured on the arm with the higher pressure values.

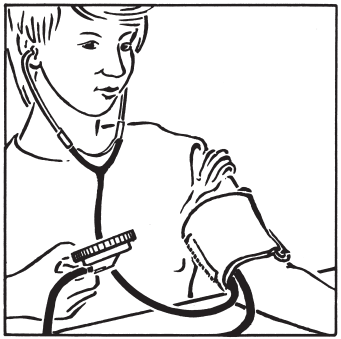
To do this, first measure blood pressure on both arms and subsequently always on the arm which produced the higher reading.

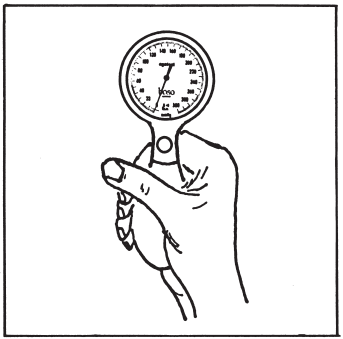
Place cuff in such a manner that the lower cuff edge finishes ca. 2 – 3 cm above the elbow and the centre of the rubber bag rests on top of the artery.

Important: The round stethoscope membrane on the inside of the cuff must be placed at main artery on the inside of the upper arm.

Now, gently but firmly, pull tight the cuff end that goes through the metal ring and flip it over and to the outside of your upper arm. With a light pressure the velcro closure is then secured.

The cuff must not be too tight; there should roughly be a 2-finger width of space between arm and cuff.





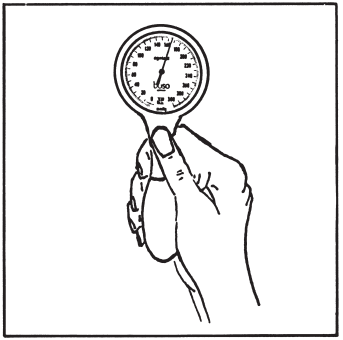
Taking your Blood Pressure

Sit yourself comfortably and place your arm, slightly angled and relaxed, onto a table.

Important: Your upper arm with the cuff should be roughly in line with your heart.

Be sure that you keep your arm perfectly still and that you do not speak whilst you are taking your blood pressure.

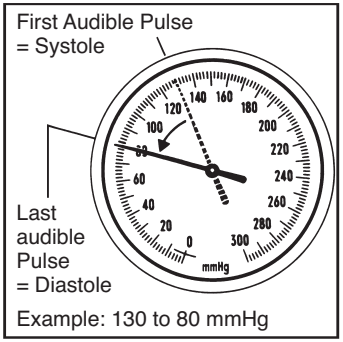
- Place the earpieces of the stethoscope firmly into your ears. They can be turned in their spring allowing you to place them independently forward into the ear passages.
- Take the Rubber Ball into your hand and pump up the cuff with steady and rhythmic pressure on the ball. The Air release valve is automatically closed with the first inflation. Continue pumping until the pointer on the scale shows a value 30 – 40 mmHg above your normal upper blood pressure value.
- If you do not know this on the first occasion, inflate to 190 mmHg.



- Place your thumb with light pressure on the Air Release button and observe the fall of pressure on the scale. By altering the pressure of your thumb onto the button you can regulate the rate by which air is released.

  The air release rate should be about 2 – 3 mmHg per second between systole and diastole, that is to say that it should take about 20 – 25 seconds for the pointer to fall from 150 to 100 on the scale.

When using your blood pressure unit for the first time try out this procedure before you take your actual measurement. After an interval of about 2 minutes you can start again and take your blood pressure as follows:



- As the pointer slowly returns, observe the first audible sounds from the stethoscope: At the first pulse you hear (Korotkoff-Sound) read off the pointer position on the scale: This is your upper blood pressure value (Systolic blood pressure). To avoid a reading error, read the pressure values perpendicular to the scale.
  Make a note of this value!

- Listen to your heart beats while the pointer slowly moves on. The sounds become weaker until they cease completely.

  At the last audible tone again make a note of where the pointer is positioned: this is your lower blood pressure value (diastolic blood pressure).

- With a short, firm pressure on the Air release button the valve is then fully opened and the remainder of the air expelled from the cuff.

- To take the cuff off again, simply pull open the velcro closure and pull it off your arm.

If you want to repeat the measurement, wait at least two minutes by which time the blood circulation should be back to normal.

General Notes on Taking your Own Blood Pressure

You should take your blood pressure twice daily, in the morning and in the evening, each time in relaxed state.

Since physical exertions such as sports, but also eating, smoking and drinking of alcohol, influence the blood pressure values, you should always avoid these before taking your blood pressure.

As previously mentioned, your blood pressure fluctuates during the day, and as there may also be other factors influencing it you can also get diverging results when you take several mesurements one after the other.

Occasional or irregular measurements are not a safe basis for a correct evaluation. This is only possible when you take your blood pressure regularly and under equal conditions over an extended period of time.

Enter your measured values into a table to allow a valid comparison.

Should you get high blood pressure values over a period of time, make an appointment with your GP and show him your results.

If your doctor diagnoses high blood pressure, please keep strictly to any prescribed medication without a ltering this yourself, should you happen to achieve lower values when you take your own blood pressure.

Cleaning of Unit and Cuff

To clean the unit only use a soft dry cloth. To clean the cuff, first remove the rubber bag and then wash the cuff itself by hand in warm water (maximum 30 degrees Celsius).

Disinfection

For disinfectant wipes (at least 5 minutes exposure time) of the device and the cuff, we recommend the disinfectant liquid Microzid Liquid Sensitiv (Schülke & Mayr).
To disinfect the cuff, we recommend spray disinfection.

Technical Data

Measurement range: 0 – 300 mmHg
Accuracy of pressure indicated: ± 3 mmHg or 2% of the reading (whichever is greater)

Storing conditions:
–30°C – 70°C, 15 – 85% rel. humidity

Operating conditions:
10°C – 40°C, 15 – 85% rel. humidity

Disposal

Please ensure that the device is disposed of according to all regional and national environmental regulations.

Warranty Conditions:

We give 3 years warranty from the date of purchase. The purchase date has to be proven by the invoice. Within the warranty period defects are eliminated free of charge. After repairs the warranty period is not extended on the whole unit, but only to the replaced components.

Excluded from the warranty are parts subject to normal wear and tear (e.g. cuff), transport damages and any damage caused by improper handling (e.g. non-compliance with the instructions for use). Damages due to disassembly by unauthorized persons are also excluded from warranty.
No claims for damages against us are substantiated by the warranty.
In the case of justified warranty claims the device has to be sent along with the original invoice to:

BOSCH + SOHN GmbH u. Co. KG
Bahnhofstraße 64 · 72417 Jungingen · Germany

Procedure

- Place the cuff with the stethoscope membrane positioned on the main artery of the arm.
- Place the earpieces of the stethoscope into your ears.
- Inflate pressure to 30 – 40 mmHg above the upper blood pressure value.
- Do not move your arm and do not speak!
- Press button of pressure release valve so that the pointer sinks to 2 – 3 mmHg per second (it should take 20 – 25 seconds for the pointer to fall from 50 to 100).
- When you hear the first pulse from the stethoscope, read off the upper blood pressure value and make a note of this.
- At the last audible pulse read off and make a note of the lower blood pressure value.
- Take off stethoscope. Press downfully on the pressure release button to complete deflation, then remove cuff.

CE 0124

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