

PLICOMETRO ANALOGICO ANALOGUE SKINFOLD CALIPERS PLICOMÈTRE ANALOGIQUE PLICÓMETRO ANALÓGICO ANALOG-CALIPERZANGE

- È necessario segnalare qualsiasi incidente grave verificatosi in relazione al dispositivo medico da noi fornito al fabbricante e all'autorità competente dello Stato membro in cui si ha sede.

- All serious accidents concerning the medical device supplied by us must be reported to the manufacturer and competent authority of the member state where your registered office is located.

- Il est nécessaire de signaler tout accident grave survenu et lié au dispositif médical que nous avons livré au fabricant et à l'autorité compétente de l'état membre où on a le siège social.

- Es necesario informar al fabricante y a la autoridad competente del Estado miembro en el que se encuentra la sede sobre cualquier incidente grave que haya ocurrido en relación con el producto sanitario que le hemos suministrado.

- Jeder schwere Unfall im Zusammenhang mit dem von uns gelieferten medizinischen Gerät muss unbedingt dem Hersteller und der zuständigen Behörde des Mitgliedsstaats, in dem das Gerät verwendet wird, gemeldet werden.

REF 70200 (GIMA 27320)



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FOREWORD

The purpose of this manual is to provide the Customer with all possible information on the SKINFOLD CALIPERS, as well as the use and maintenance instructions to help maintain its performance and efficiency over time.

The user manual must be kept in good condition and stored in a place where it is accessible for quick reference.

INTENDED USE

These skinfold calipers are used to measure in mm, with a measuring range between 0 and 40 mm ($\pm 0.2\text{mm}$) and a pressure of 10g/mm^2 ($\pm 10\%$), the thickness of a skinfold with its substratum of body fat.

INSTRUCTIONS FOR USE

Before using the skinfold calipers, their operating pressure must be checked using the dynamometrical shell supplied, in the following way:

- loosen the knob on the dial and adjust the dial so that the indicator is on 0, then retighten the knob (figure 1).
- open the skinfold calipers and insert the dynamometrical shell from the elastic part between the two side plates of the skinfold calipers, keeping the outer part of the shell strictly near the inner edge of the skinfold calipers (figure 1).
- $2\text{mm} \pm 0.2\text{mm}$ should be read on the dial; if this measurement does not correspond, adjust the Allen screw on the skinfold calipers spacer in order to tighten the springs until $2\text{mm} \pm 0.2\text{mm}$ is read on the dial.
- the skinfold calipers are ready for use.

NB: for correct use, it is recommended to repeat the operation daily.

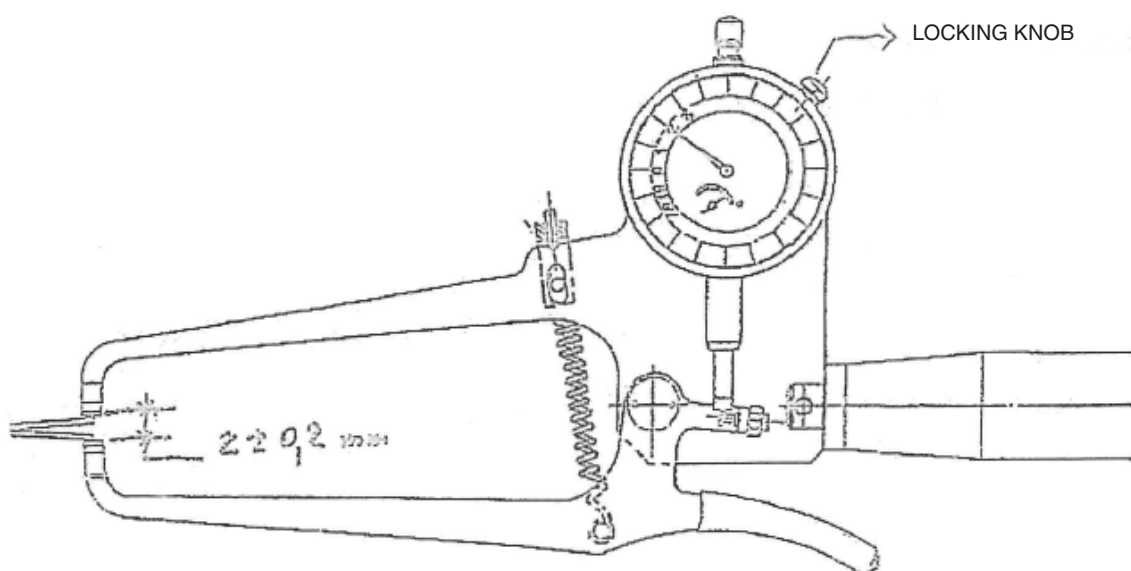


Fig. 1

HOW TO MEASURE SKINFOLDS

The skinfold calipers are applied on the skinfold after bringing the two edges of the skinfold close to the fat substrate to be measured



Fig. 2

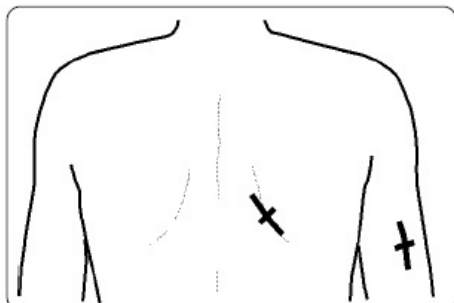
- To measure skinfolds, firmly grasp a skinfold between the tip of the thumb and index finger of your non-dominant hand and lift it. In this way, the skin and the subcutaneous fat will be lifted and separated from the underlying muscles.
- Hold the jaws of the skinfold calipers with your other hand and, after opening them by squeezing the handle, they will be released transversally on the skinfold itself, right below (about 1 cm) the fingers that lifted it, so that the thickness can be measured. The values are read in millimetres directly on the graduated scale (dial) of the skinfold calipers right after the skinfold calipers have been released, in order not to cause a progressive and excessive crushing of the soft parts
- The value to be reported will be an arithmetic average of two successive measurements if the difference between them is not greater than 5%; if the difference is greater, it is necessary to make a third accurate measurement and calculate the average between the latter and the closest of the previous ones; in case of doubt, it is possible to carry out a greater number of counter-tests.

Sometimes, especially in women, it may be difficult to lift the skinfolds due to the fact that the subcutaneous tissue is often integral with the un-

derlying muscle, to which it adheres firmly. In this case, it is advisable to pinch and release the skin fold several times before using the skinfold calipers

SKINFOLDS TO BE MEASURED:

- Tricipital and subscapular in men (fig.3)
- Tricipital and front thigh in women (fig.4-5)

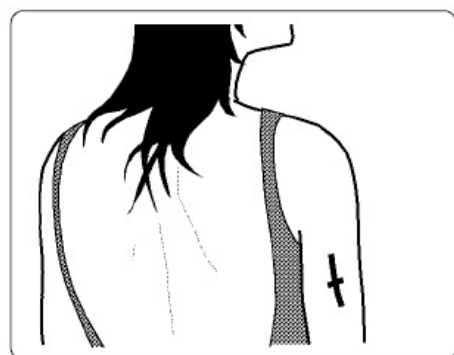


(fig. 3)

Tricipital:

Vertical skinfold measured along the mediotricipital line halfway between the olecranon (elbow) and coracoid apophysis (shoulder).

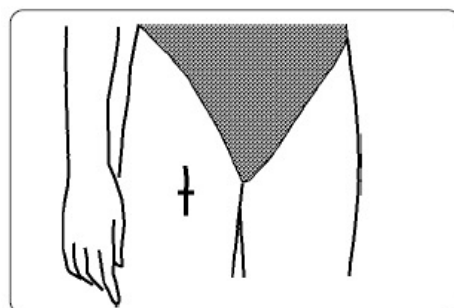
Subscapular: Oblique skinfold at 45°, in the direction from the upper-medial to the lower-lateral, measured just below the tip of the scapula (shoulder).



(fig. 4)

Tricipital:

Vertical skinfold measured along the mediotricipital line halfway between the olecranon (elbow) and coracoid apophysis (shoulder).



(fig. 5)

Front thigh:

Vertical skinfold on the front midline of the thigh, halfway between the kneecap and the upper margin of the iliac crest.

TABLE FOR ESTIMATING FAT PERCENTAGES IN MEN

- 1) Add up the thicknesses of the TRICIPITAL and SUBSCAPULAR skinfolds after measuring them with the skinfold calipers
- 2) In the column indicating the patient's age, slide down until you find the value measured.
- 3) Using a ruler, move to the right towards the OBESITY and DIAGNOSIS columns and determine the values.

AGE <35 aa	AGE 35-50 aa	AGE >50 aa	BODY FAT %	ADIPOSITY DIAGNOSIS
8-12	7-11	6-10	4	Very thin
13-18	12-17	11-16	8	Thin
19-25	18-23	17-22	12	Average
26-32	24-30	23-29	16	Slight adiposity
33-40	31-37	30-35	20	Excessive adiposity
41-49	38-46	36-43	24	Obesity
50-58	47-54 .	44-50	28	High obesity

TABLE FOR ESTIMATING FAT PERCENTAGES IN WOMEN

- 1) Add up the thicknesses of the TRICIPITAL and FRONT THIGH skinfolds after measuring them with the skinfold calipers
- 2) In the column indicating the patient's age, slide down until you find the value measured.
- 3) Using a ruler, move to the right towards the OBESITY and DIAGNOSIS columns and determine the values.

AGE <35 aa	AGE 35-50 aa	AGE >50 aa	BODY FAT %	ADIPOSITY DIAGNOSIS
17-24	16-22	15-20	13	Very thin
25-33	23-31	21-29	17	Thin
34-43	32-40	30-38	21	Average
44-52	41-49	39-47	25	Slight adiposity
53-61	50-58	48-55	29	Excessive adiposity
62-71	59-67	56-64	33	Obesity
72-84	68-79	65-74	37	High obesity

WARNINGS/MAINTENANCE












The SKINFOLD CALIPERS must be used by qualified personnel only.

Do not use the device if it is damaged. Do not repair it yourself; contact the manufacturer if necessary.

The skinfold calipers must be cleaned using a cloth dampened with substances that do not damage steel and it must always be stored in its case in a dry place.

Cleaning agents can be, for example, alcohol or glass cleaner.

These SKINFOLD CALIPERS are designed to last: it is resistant to most chemicals, except for methyl ethyl ketones (M.E.K.), thinners and nail polish removers.

	Product code		Lot number		Caution: read instructions (warnings) carefully
	Keep away from sunlight		Keep in a cool, dry place		Serial number
	Medical Device compliant with Regulation (EU) 2017/745		Manufacturer		Consult instructions for use
	Medical Device		Date of manufacture		

GIMA WARRANTY TERMS

The Gima 12-month standard B2B warranty applies.