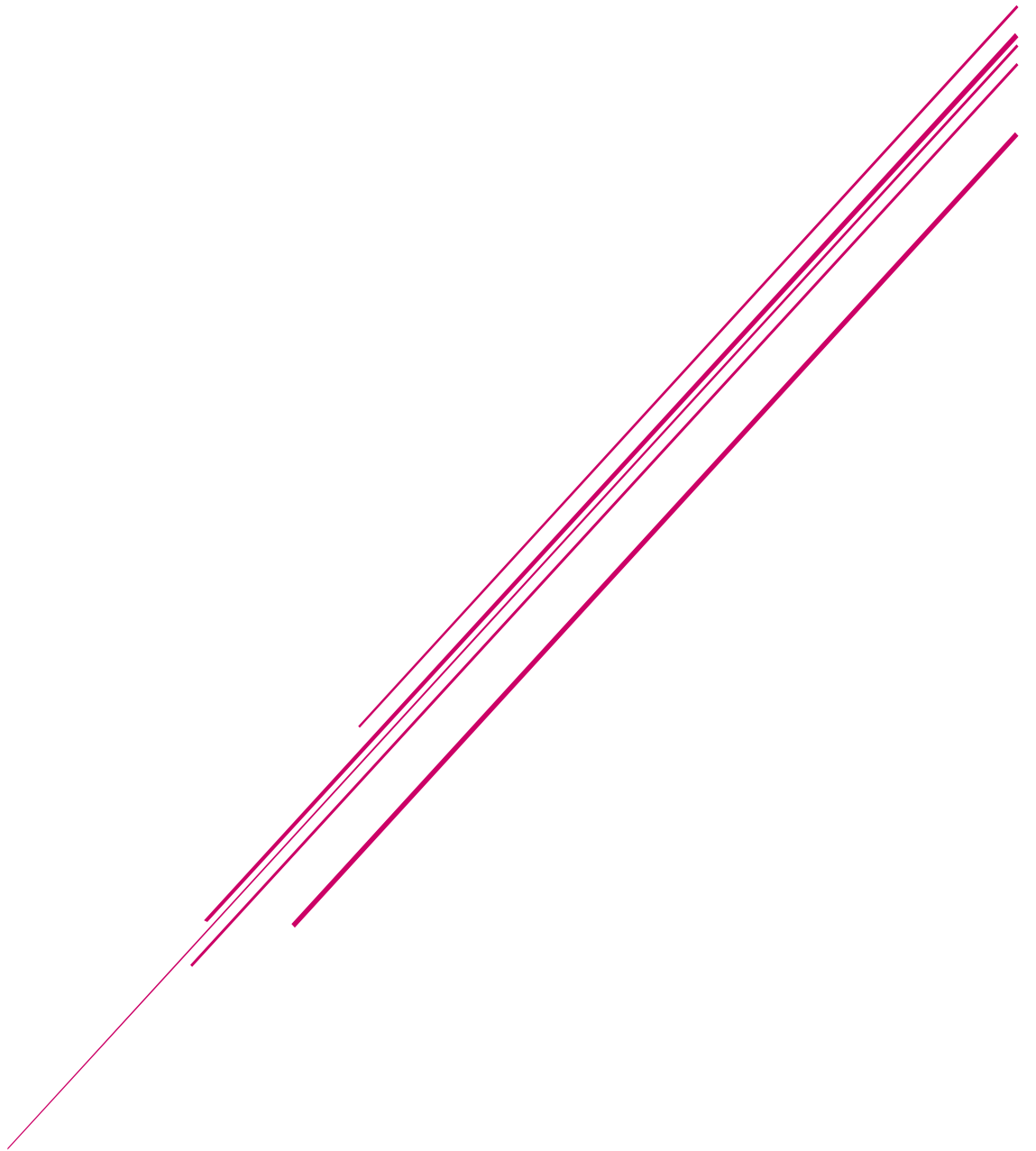


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**Fashion Measurements Manual**

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Project Coordination: Andreia Prado

Pattern Makers: Carolina Cavalcante, Jocelia Santos, Marcio Laguna and Raquel  
Carmona

Editing and Layout: Elaine Coelho

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## 1. INTRODUCTION

In an everlasting search for quality, this fashion measurements manual was developed in order to standardize the measurement process.

## 2. SCOPE

The aim of this manual is to orient suppliers, inspection companies, Quality Control and Technical Product Development teams about measuring processes adopted by Marisa.

**Any adaptation to measuring methods other than those exposed in this manual will be explained in measuring tables concerning the analyzed sample.**

## 3. MEASUREMENT AND EVALUATION PROCESS

.

### 3.1 General conditions for the presentation of the piece to be measured

- Place the piece over a flat surface with greater measures than the product to be measured;
- Position the piece with the part to be measured facing up;
- Button up and zip up whenever available;
- Use a measuring tape.

## 4. How to measure tops, shirts, jackets and dresses

### A1. TOTAL FRONT LENGTH FROM HPS UNTIL BOTTOM

Measure a straight line from the fold of the shoulder drop to the bottom.



### A2. CENTER FRONT LENGTH UNTIL BOTTOM

Measure a straight line from center front to the bottom, inform when any finishing is considered.



### A3. CENTER BACK LENGTH UNTILL BOTTOM

Measure a straight line from center back to the bottom, inform when any finishing is considered.



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#### A4. SIDE LENGTH .

This measure stands for the piece side length, usually useful for bodies and swimsuits, also suitable for asymmetrical pieces. Place the measuring tape on the armhole lower end and follow the seam to the bottom.



#### A5. FRONT BODY LENGTH FROM HPS UNTIL WAIST

Straighten the piece over the table, measure from HPS (fold of the shoulder drop) to the waist cutout. Suitable for dresses, overalls, blouses with waist cutouts.



#### A6. CENTER FRONT LENGTH UNTIL BOTTOM

Measure from center front in a upright line to the waist cutout. Inform when neck or collar finishings are considered.



**A7. CENTER BACK LENGTH UNTIL WAIST**

Measure the center back in a upright line to the waist cutout. Inform when neck or colar finishings are considered.



**A8. FRONT LENGTH WITHOUT STRAPS UNTIL BOTTOM**

Straighten the piece over the table and measure HPS, disconsidering the straps, drawing a upright line to the bottom. This measure is suitable for strapped blouses and dresses.



**A9. FRONT LENGTH WITHOUT STRAPS UNTIL WAIST**

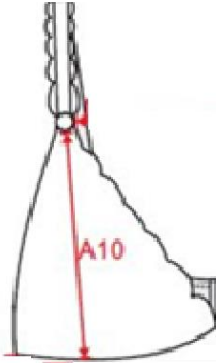
Straighten the piece over the table and measure HPS, disconsidering the straps, drawing a upright line to the waist cutout. This measure is suitable for strapped blouses and dresses.





## A10. CUP HEIGHT

Measure center cup height to the first seam. Measure the piece unstrained, disconsidering cup volume.



## B1. ACROSS SHOULDER

Suitable for pieces with armholes and sleeves. Place the piece with the back facing up. Measure across the armhole and sleeve seam to the opposite side seam. For sleeveless pieces, measure from the upper armhole end to the opposite side, considering all finishings.



## B2. ACROSS SHOULDER RELAXED

For pieces with shoulder elastic bands, off the shoulder blouses. Place the piece unstrained over the table with the elastic band overlaid and straight. Measure across the shoulder, no stretching.



## B3. ACROSS SHOULDER STRETCHED

For pieces with shoulder elastic bands, off the shoulder blouses. Stretch the elastic band thoroughly and measure across the shoulder seam.



## C1. ACROSS FRONT ( \_\_ CM FROM HPS)

Define and inform height to measure across front (refer to height in the measure tables according to gender or age), draw a line from HPS to the default height and measure across the armholes. For tank tops, consider the finishing ends.

| Measure for defining across front height    |                 |
|---|-----------------|
| <p style="text-align: right;">Subsector</p> | Height from HPS |
| Women                                       | 13cm            |
| Plus Size Women                             | 16cm            |
| Men   | 16cm            |
| Plus Size Men                               | 18cm            |
| Toddlers                                    | 7cm             |
| Kids  | 8cm             |
| Teens                                       | 11cm            |

## C2. ACROSS BACK ( \_\_ CM FROM HPS)

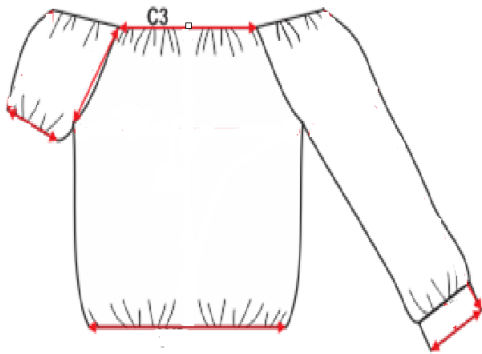
For measuring across back, set the piece with the back facing up. Draw a straight line from HPS to the default height and measure across armhole seams. For tank tops with armhole finishings, consider the bias finishing ends.

| Measure for defining across back            |                 |
|---|-----------------|
| <p style="text-align: right;">Subsector</p> | Height from HPS |
| Women                                       | 13cm            |
| Plus Size Women                             | 16cm            |
| Men   | 16cm            |
| Plus Size Men                               | 18cm            |
| Toddlers                                    | 7cm             |
| Kids  | 8cm             |
| Teens                                       | 11cm            |

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### C3. ACROSS FRONT - AT ELASTIC

Off the shoulder pieces with elastic band. Measure across front from the front armhole seam to the other, keeping the elastic unstrained.



### C4. ACROSS BACK - AT ELASTIC

Off the shoulder pieces with elastic band. Measure across back from the back armhole seam to the other, keeping the elastic unstrained.

### C5. FRONT WIDTH AT TOP EDGE

For jumpers, pinafore dresses and overalls. Measure front width across top edges considering any finishings.



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### C6. BACK WIDTH AT TOP EDGE

For jumpers, pinafore dresses and overalls. Measure back width across top edges considering any finishings or biases.



### C7. ELASTIC BACK PANEL WIDTH

Measure elastic back panel pieces across seams keeping it unstrained.



### D1. NECK WIDTH

Place the piece over the table and measure in a straight line (for pieces with biased or ribbed finishings, measure across the edges, considering the inner part only). For shirts, polos and jackets with collar, set the collar up and measure at the collar and body seam. For other collars, measure at the seam disconsidering finishings.



## D2. NECKLINE STRETCHED AT LEAST\*

This measure should be registered last, as the neckline tension might alter the piece shape. The neckline must be stretched fully to test wearability.



## D3. FRONT NECK DROP

Place the piece over the table, draw a straight line with a ruler or a measuring tape at neck width line and using the measuring tape, draw a straight line to the neckline finishing edge, finally measuring front neck drop. For pieces with a collar, frame at HPS to the collar and neck seam.



## D4. BACK NECK DROP

Place the piece over the table, draw a straight line with a ruler or measuring tape at neck width and draw a straight line to the back neck finishing, defining depth.



## D5. FRONT STRAPS DISTANCE

Measure the distance between front straps in a straight line keeping the piece unstrained.



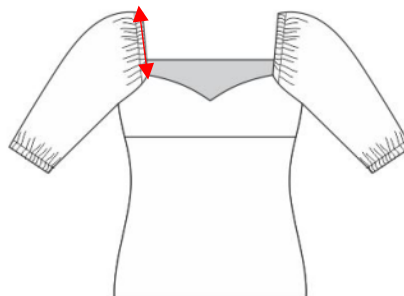
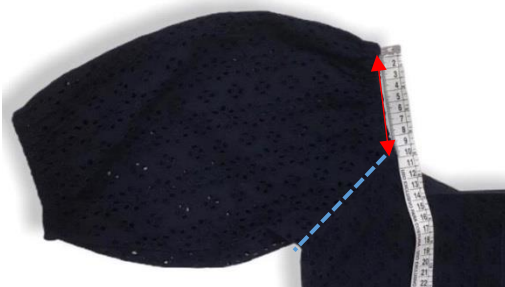
## D6. BACK STRAPS DISTANCE

Measure the distance between back straps in a straight line keeping the piece unstrained.



## D7. FRONT NECK DROP AT THE SLEEVE

For pieces with puffed sleeves or elastic neck, measure in a straight line keeping the piece unstrained.



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### D8. LOOP HEIGHT

Measure loop height.



### D9.FRILL LENGTH

Measure frill length at seam or at the middle, informing where found.



### D10. BACK NECK WIDTH

For american style top pieces, measure from the armhole finishing edge across the other edge.



### COLLAR LENGTH FROM CENTER BUTTON TO CENTER BUTTONHOLE

Measure from the button center to buttonhole center at collar band to define collar length circumference.



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## F1. COLLAR HEIGHT AT CENTER BACK

Measure a straight line from collar center to neck seam. If collar band is present, measure from collar edge to collar band seam.



## F2. COLLAR POINT HEIGHT

Measure a straight line at collar point edge.



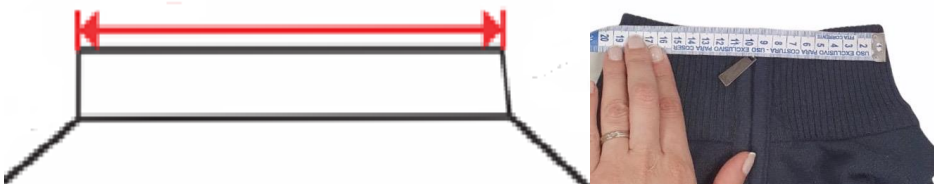
## F3. COLLAR BAND HEIGHT AT CENTER BACK

Measure a straight line at collar band center from the collar seam to the neck seam.



## F4. COLLAR OPENING OVERLAPPED

Measure turtleneck collar in a straight line.



## G1. TOTAL STRAP LENGTH

Measure total strap length keeping it unstrained and considering any adjustments if present.





## G2. STRAP WIDTH

Measure across strap edges.



## H1. FRONT ARMHOLE (STRAIGHT)

For measuring the armhole, place the measuring tape at the fold of the shoulder drop and draw a straight line to the side seam. For raglan pieces with biased neck, measure from the neck finishing edge to the side seam. For pieces with different collars, measure in a straight line from the neck seam to the side seam.



## H2. BACK ARMHOLE (STRAIGHT)

For raglan pieces, measure the back armhole in the same way as front armhole was measured. In biased neck pieces, measure from the finishing edge to the side seam. For pieces with different collars, measure in a straight line from the neck seam to the side seam.



## 11. UPPERARM WIDTH/ BICEP (2,5CM FROM ARMHOLE)

Measure a straight line 2,5cm from the armhole and sleeve seam.



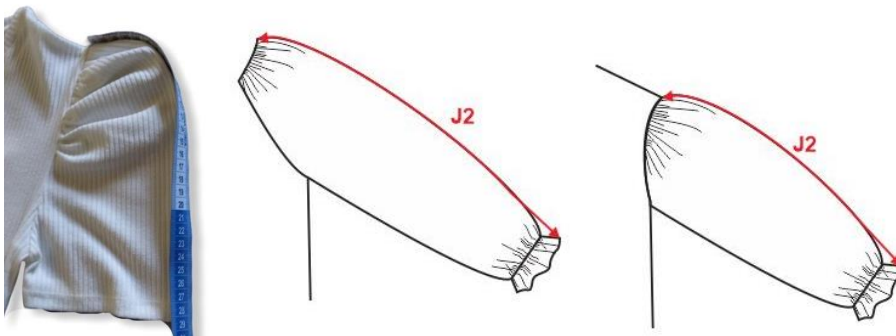
## J. SLEEVE LENGTH

Measure from the armhole and sleeve seam, along the sleeve edge to the hem, considering the cuff or the hem finishing. For raglan pieces with biased neck, measure from the finishing edge to the cuff edge. For raglan with different collars, measure from the cutout to the cuff edge.




## J2. PUFF SLEEVE LENGTH

Measure from the sleeve and armhole seam along the sleeve edge to the hem, considering the cuff or finishing.



K. ELBOW WIDTH ( \_\_ CM FROM SHOULDER)

Refer to the following table for shoulder height and draw a straight line to find the elbow height.

| Measure for elbow height  |                       |
|---|-----------------------|
|  | Height from the elbow |
| Subsector   |                       |
| Women   | 30cm                  |
| Plus Size Women   | 30cm                  |
| Men   | 35cm                  |
| Plus Size Men   | 35cm                  |
| Toddlers  | 15cm                  |
| Kids  | 20cm                  |
| Teens   | 27cm                  |

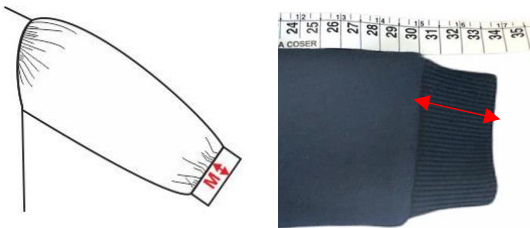
L. SLEEVE OPENING

Measure at the cuff edge. If the piece has an open cuff, measure it buttoned.



M. CUFF HEIGHT

Measure from the cuff edge to the sleeve seam.



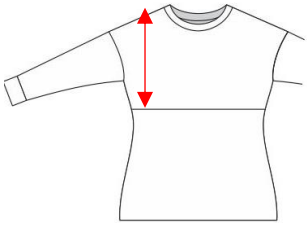
N1. CHEST (2,5CM FROM ARMHOLE)

Measure a straight line 2,5cm below the armhole and side seam.



## N2. CHEST (\_\_CM FROM HPS)

For pieces with no armholes or with displaced armholes, measure in a straight line from the HPS referring to the following table.

| Measures for chest height   |                   |
|---|-------------------|
|  | Height from HPS   |
| Subsector   |                   |
| Women   | From 30cm to 35cm |
| Plus Size Women   | From 33cm to 38cm |
| Mens  | From 33cm to 38cm |
| Plus size Men   | From 38cm to 40cm |
| Toddlers  | From 13cm to 18cm |
| Kids  | From 18cm to 23cm |
| Teens   | From 23cm to 28cm |

## O4. WAIST AT CUTOUT

Measure a straight line at cutout.



## O5. WAIST (\_\_CM FROM HPS)

Refer to the following table to measure waist height from HPS and measure in a straight line across edges.

| Measures for Waist Height   |                 |
|---|-----------------|
|  | Height from HPS |
| Subsector   |                 |
| Women   | 40cm            |
| Plus Size Women   | 50cm            |
| Men   | 49cm            |
| Plus size Men   | 50cm            |
| Toddlers  | 24cm            |
| Kids  | 30cm            |
| Teens   | 36cm            |

## O6. WAIST ( \_\_ CM FROM ARMHOLE)

Refer to the following table to find waist height from armhole and measure in a straight line across waist edges.

| Measure for waist height   |                     |
|--|---------------------|
| <br>Subsector | Height from armhole |
| Women  | 17cm                |
| Plus Size Women  | 22cm                |
| Toddlers   | 12cm                |
| Kids   | 13cm                |
| Teens  | 16cm                |


## O7. WAIST AT THE ARMHOLE END

This measure is useful for jumpers and pinafores without waist cutouts or waistbands. Measure a straight line across armholes.




## Q2. HIP WIDTH ( \_\_ CM FROM WAIST)

Refer to the following table to find hip height from HPS and measure in a straight line across edges.

| Measure for hip height   |                 |
|--|-----------------|
| <br>Subsector | Height from HPS |
| Women  | 58cm            |
| Plus Size Women  | 70cm            |
| Toddlers   | 36cm            |
| Kids   | 45cm            |
| Teens  | 54cm            |

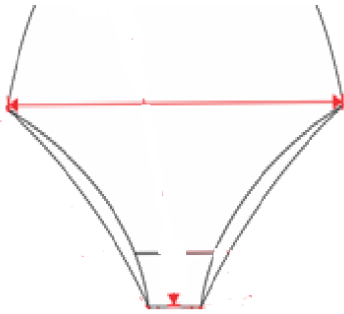
Q3. HIP WIDTH ( \_\_ CM FROM ARMHOLE)

Refer to the following table to find hip height from armhole and measure in a straight line across edges..

| Measure for hip height   |                     |
|--|---------------------|
|  <p>Subsector</p> | Height from armhole |
| Women  | 38cm                |
| Plus Size Women  | 40cm                |
| Toddlers   | 23cm                |
| Kids   | 29cm                |
| Teens  | 34cm                |

Q4. HIP IN THE SIDE END (LEG OPENING)

For bodysuits and swimsuits, measure the hip across the leg opening top edges.



R3. FRONT GUSSET HEIGHT

This measure is suitable for bodysuits and swimsuits. Measure the height from the cutout at the center from the cutout or closing to the lower edge.



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### W2. HEM/BOTTOM (TOPS,SKIRTS AND DRESSES)

Measure along the edge keepin it unstrained.



### W3. HEM/BOTTOM STRETCHED (TOPS,SKIRTS AND DRESSES)

Measure along the hem edge when fully stretched. Suitable for elastic hems.



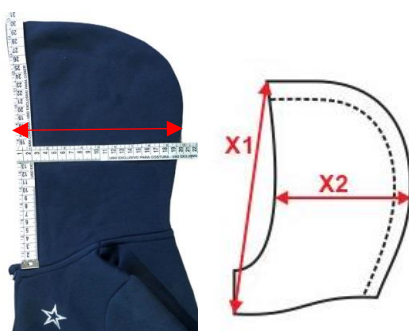
### X1. FRONT HOOD HEIGHT

Measure in a straight line from the top edge to the neck seam.



### X2. CENTER HOOD WIDTH

Measure in a straight line from the hood center across edges.



**20.1 How to measure bottoms: pants, skirts, and shorts**

**A2. CENTER FRONT LENGTH UNTIL BOTTOM**

Measure in a straight line from the waistband edge to the skirt center front bottom.



**A3. CENTER BACK LENGTH UNTILL BOTTOM**

Measure in a straight line from the waistband edge to the skirt center back bottom.



**A4. SIDE LENGTH (BODY)**

Measure from the waistband edge to the bottom. Suitable for skirts and shorts.





## O1. WAIST OVERLAPPED

Overlap piece edges and measure it straight along the edge, keeping it unstrained.



## O3. WAIST STRETCHED

This measure should be noted when the piece has a elastic waistband. It must be at least 2cm wider than the model minimum hip measure for a suitable fit. To get this measure, the waistband must be stretched to its full capacity and measured along the edge.





## P. WAISTBAND HEIGHT

The waistband must be measured from the edge to the lower seam, disconsidering backstitches, just the edges.



**Q1. HIP WIDTH ( \_\_CM FROM WAIST)**

The hip height can vary greatly, depending from the length where the waist will fit the model. Therefore, refer to the following table to find the measure for hip height and measure across edges to find hip width.

| Measure for waist height   |  |
|--|--|
|  <p>Subsector</p> | <p>Height from waist</p>   |
| <p>Women</p>   | <p>17cm Medium waist – 20cm High waist – 22cm clochard</p>  |
| <p>Plus Size Women</p>   | <p>20cm Medium waist – 22cm high waist - clochard</p>  |
| <p>Men</p>   | <p>20cm</p>  |
| <p>Plus size Men</p>   | <p>22cm</p>  |
| <p>Toddlers</p>  | <p>12cm</p>  |
| <p>Kids</p>  | <p>14cm</p>  |
| <p>Teens</p>   | <p>17cm</p>  |

**R1. FRONT RISE**

The front rise is measured from the waist edge to the back rise seam, placing the measuring tape along the curve keeping the piece unstrained.



**R2. BACK RISE**

The back rise is measured the same way as front rise, from waist edge to the front rise seam, along the curve keeping the piece unstrained.



**R3. ZIPPER LENGTH**

The zipper's main function is to improve the piece wearability. It must be measured along its opening.




**S. THIGH (3CM FROM CROTCH)**

This measure can only be done if the piece has over 4cm inseam length for shorts. To find the thigh in pants or shorts, stretch the piece until inseams are aligned, then place the measuring tape from the rise seam and follow along the inseam to the hem. Note the 3cm for thigh height and draw a straight line across edges to measure thigh width.



**S2. MIDDLE THIGH ( \_\_ CM FROM CROTCH)**


To find the half thigh in pants or shorts, stretch the piece until inseams are aligned, then place the measuring tape from the rise seam and follow along the inseam to the hem, Referring for height at the following tables. After setting the height, draw a straight line across edges to measure half thigh width.

| Measure for middle thigh height  |                       |
|--|-----------------------|
|  <p>Subsector</p> | Height from rise seam |
| Adult Women and Men  | 15cm                  |

| Measure for middle thigh from rise seam for <b>Children</b> - Sizes |     |     |     |     |      |      |      |      |      |
|---|-----|-----|-----|-----|------|------|------|------|------|
| 1   | 2   | 3   | 4   | 6   | 8    | 10   | 12   | 14   | 16   |
| 5cm   | 6cm | 7cm | 8cm | 9cm | 10cm | 11cm | 12cm | 13cm | 14cm |

## U. KNEE ( \_\_CM FROM CROTCH)


To find the knee in pants or shorts, stretch the piece until inseams are aligned, then place the measuring tape from the rise seam and follow along the inseam to the hem, Referring for height at the following tables After setting the height, draw a straight line across edges to measure knee width

| Measure for knee height  |                       |
|--|-----------------------|
|  <p style="text-align: center;">Subsector</p> | Height from rise seam |
| Adult Women and Men  | 35cm                  |

| Measure for knee from rise seam for <b>Children</b> - Sizes |      |      |      |      |      |      |      |        |      |
|---|------|------|------|------|------|------|------|--------|------|
| 1   | 2    | 3    | 4    | 6    | 8    | 10   | 12   | 14     | 16   |
| 11cm  | 13cm | 15cm | 17cm | 21cm | 24cm | 28cm | 30cm | 31,5cm | 33cm |

## U3. CALF ( \_\_CM FROM CROTCH)

To find the calf in pants or shorts, stretch the piece until inseams are aligned, then place the measuring tape from the rise seam and follow along the inseam to the hem, Referring for height at the following tables After setting the height, draw a straight line across edges to measure calf width.

| Measure for calf height  |                       |
|--|-----------------------|
|  <p style="text-align: center;">Subsector</p> | Height from rise seam |
| Adult Women and Men  | 48cm                  |

V1. INSEAM LENGTH

To measure the inseam in pants or shorts, stretch the piece until inseams are aligned, then place the measuring tape from the rise seam and follow along the inseam to the hem. For pieces with frayed hems, the measure must go up to the safety seam, disconsidering fray. For piece with folded hems, measure from the rise seam to the fold edge.



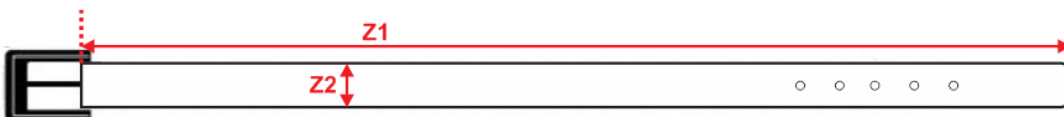
W1. HEM/ LEG OPENING

The leg opening must be measured along the piece's edge. In case of irregular or asymmetrical hems, place the measuring tape from the shorter part and draw a straight line across to the opposite edge. For shorts with round or asymmetrical hems, measure it straight along edges. For irregular hems, measure it straight.



Z1. TOTAL BELT/DRAWSTRING LENGHT

Measure at the belt or drawstring along the edges, considering adjustments and disconsidering trims such as rings, buckles or adornments. Consider the belt fabric only.



Z2. BELT HEIGHT

Measure belt height in a straight line across edges, disconsidering backstitches.

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### Z3. BELT/DRAWSTRING LENGHT (SIDE OR FIXED)

This measure stands for a piece with a fixed belt or drawstring, seamed at the side or another place. Measure it from the seam to the edge.

