



lymphology measuring for custom-made flat-knit lower extremity

effective October 1, 2017



# Notes on taking measurements for custom-made flat-knit stockings

- Flat knit compression garments should not be measured until the best possible decongestion effort has been achieved. Circumference (¿) and length (¿) measurements are taken in a distal to proximal sequence (starting at the toes and working up the leg towards the waist).
- It is essential to mark measuring points on the leg so that the circumference and length measurements are taken at the same point.
- The amount of tension applied must be determined by a person experienced in bandaging techniques and depends on edema and tissue characteristics, sensitivity to pain, fibrosis, location of the edema, mobility, and strength of the patient.
- Generally flat-knitted garments are measured under tension with the exception of cY. According to the measuring point we distinguish:

Skin measurements = loose; Measuring to the first resistance = measuring under tension without force; Full Tension = absolutely compression of the tissue.

# **Knee high**

All length measurements are contoured along the medial (inner) side of the leg

### Foot measurement points (Y, A, A1, Z)



# (A) (Z)

# cA (for straight and oblique border)

### Circumference (c) Y

Measurements taken over the heel and arch in dorsal flexion with tendons taut. Take physical dimensions without tension. Take soft tissue projections into account.

### Length (ℓ) A

Distance from heel to base of little toe (length of outer side of foot), including the joint.

### Length (ℓ) A1

Distance from heel to base of big toe (medial length), including the joint.

### Length (ℓ) Z

Closed toe: distance from heel to end of longest toe. (Not needed for open toe garments, except open toe seamed toe caps.  $\ell$ Z needed for ALL seamed toe cap garments.)

### Circumference (c) A

Apply tape measure around the metacarpophalangeal joints (first joints of toe).

### Measuring point B: just above the malleolus (ankle bone)



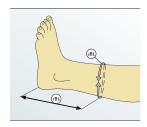
### Length (ℓ) B

From sole of foot to above (proximal to) the ankle .

### Circumference (c) B

Measure circumference, depending on indication, tightly if necessary.

### Measuring point B1: at the base of the calf



Joint space

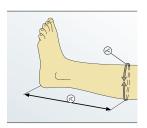
### Length (ℓ) B1

From sole of foot to base of the calf.

### Circumference (c) B1

Measure circumference, depending on indication, tightly if necessary.

### Measuring point C: at the largest calf circumference



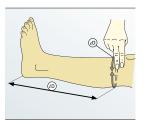
### Length ( $\ell$ ) C

From sole of foot to largest calf circumference .

### Circumference (c) C

Measure circumference, depending on indication, tightly if necessary.

### Measuring point D: at the head of the fibula



### Length (ℓ) D

From the sole of the foot to the head of the fibula (approx. two finger widths below kneecap).

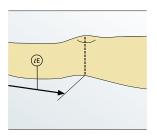
### Circumference (c) D

Measure circumference, depending on indication, tightly if necessary. Exception: AD stocking = Body dimension.

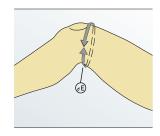
# Thigh high

All length measurements are contoured along the medial (inner) side of the leg except (I)K2 which is contoured on the posterior (back) side of the leg.

### Measuring point E: at the middle of the kneecap



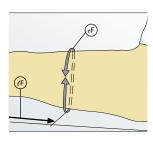
**Length** (*l*) **E** From sole of foot to middle of kneecap.



### Circumference (c) E

In general, measurements are not made tightly when the leg is bent (angle 30° - 45°), take circumference measurement one finger width proximal (above) to the back of the knee, and two finger widths proximal (above) to the knee cap. Do not place tape in the back of the knee or folds of skin.

### Measuring point F: at the middle of the thigh



Length (*l*) F
From sole of foot to middle of thigh.

Circumference (e) F Depending on the indication, the circumference is generally measured fairly tight.





Length (ℓ)G

AG stocking dimension: sole of the foot to largest point (inner aspect) below the transverse buttock fold (including top band).



Circumference (c) G

Depending on the indication, the circumference is generally measured fairly tight at the widest part of upper thigh (not always the top of the thigh.)

### Measuring point K1: at the pubic bone



Length ( $\ell$ ) K1 From sole of foot to the pubic bone.

### Measuring point K2: at the gluteal fold



Length ( $\ell$ ) K2 From sole of foot to gluteal fold.

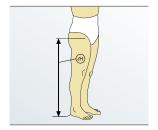
Circumference (e) K Measure around both legs at the gluteal fold.

Obligatory measurement for medi!

# Waist high

All length measurements are contoured along the body except "H" and "T" which are straight lengths.

### Measuring point H: widest point of the pelvis

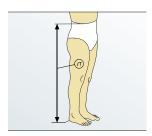


Length (ℓ) H From sole of foot to widest point of pelvis.



Circumference (c) H Circumference of pelvis at the widest point, or buttocks, measure tightly depending on indication.

### Measuring point T: at the waist

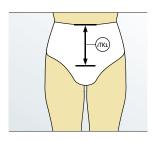


Length (ℓ) T From the sole of the foot to the top border of the garment (patient-specific).

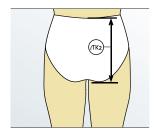


Circumference (c) T Circumference of torso, measured under moderate tension.

### Measuring points for front (t) TK1 and back (t) TK2 top border of the garment



Length (ℓ) TK1 Front length TK1: measure vertically next to body, at the level of the pubic bone to the top border of the garment.



Length (ℓ) TK2 Back length TK2 measure vertically near the body, at the level of the transverse gluteal fold to the border of the garment.

### Measuring a suspensory

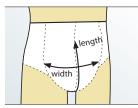


Fig. A

### Length & width

Measure the width and length of the suspensory, as marked in Figures A and B - this measurement can be taken over the underwear.

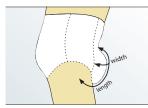


Fig. B

### LOWER EXTREMITY MEASURING & ORDER FORM: CUSTOM-MADE FLAT-KNIT

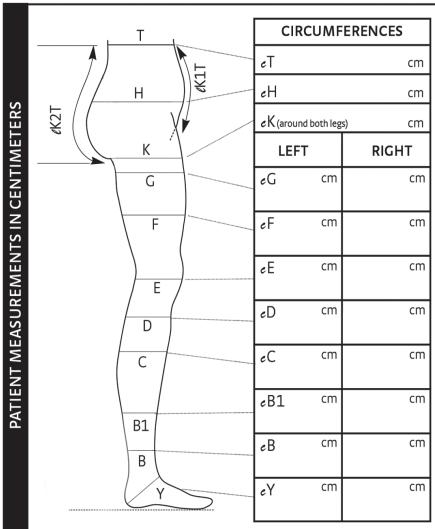


Fax Order: 1-888-840-0939

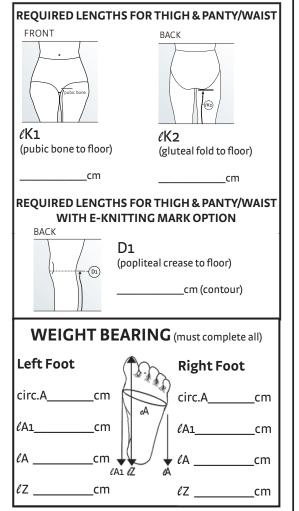
### email: customs@mediusa.com

Customer name		Account #
PO#	email _	
Patient name		email

Bill to	Ship to



LENG	THS (la	ndmarks to floor)			
ℓT (straig	ght line)	€K1T €K2T			
ℓH (stra	ight line)				
LEF	Т	RIGHT			
ℓG	cm	cm			
еF	cm	cm			
€E	cm	cm			
€D	cm	cm			
еC	cm	cm			
<i>€</i> B1	cm	cm			
ℓB	cm	cm			



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### LOWER EXTREMITY MEASURING & ORDER FORM: CUSTOM-MADE FLAT-KNIT

Fax order: 1-888-840-0939 email: customs@mediusa.com

STYLE/MATERIAL	□ mediven® 550 □ mediven® mondi □ mediven® sensoo (cclii)		OPTIONS	FOOT  Open toe Closed toe:  Tricot (half compression) *default Netting (no compression; 550 only)		OBLIQUE ENDING  ☐ Standard ☐ Straight	☐ Steep		
STYLE/M	NOTE: ONLY ONE STYLE PER FORM  ☐ Knee high ☐ Thigh high ☐ Waist high ☐ Thigh w/waist attachmer ☐ One leg Waist high* ☐ Bicycle shorts (T to F)*				MONDI SILVER  □Y-C	550 ONLY OPTIONS  Gluteal shaper (tricot gusset only)  Hallux ease (closed toe or seamless toe cap only)  ONS  Y knitting mark at ankle		□ ADDED LENGTH IN FRONT (include \( K1 \) and \( K2 \) measurements below) Needed for all thigh high stockings	
	☐ Capri shorts (T to C)* ☐ Men's leotard ☐ with fly	☐ Leggings (T to B)* ☐ Maternity panty * (slight compression panel)			□Y-D □Y-G  KNITTING OPTIO			GUSSET: Tricot (standard)	SUSPENSORY: Tricot
COMPRESSION	PANTY SECTION CCLI: ☐ 18-21mmHg CCLIII: ☐ 34-46mmHg  LEFT LEG CCLI: ☐ 18-21mmHg	CCLII: □ 23-32mr CCLIV: □ 49-60m	mHg**		SILICONE TOPB	□ E knitt  AND  comb pattern, 5	ong mark at knee Scm wide only) vide)	Netting Compressive	Netting Compressive Width cm Length cm
	CCLIII: 34-46mmHg	CCLIV: ☐ 49-60m			Peony (beaded		LYMPHPADS*  ☐ Removeable (standard)  Width(cm) Length(cr		
<b>-</b>	CCLI: ☐ 18-21mmHg CCLIII: ☐ 34-46mmHg	CCLII: ☐ 23-32mr CCLIV: ☐ 49-60m	mHg**		Lateral/along oblique border Anterior/vertically	□ 15 X 5 cm	□ 10 X 4.5 cm	OR ☐ Silk Lining Width(cm)   Location	_
COLOR QTY	Left  Standard Colors  Caramel Black Cashmere* Sand	Right  Trend Co  Anthracite  Aqua  Blue-Jeans	olors*   Magenta   Mint-Green		OVC1 L			ZIPPER*	ior
DESIGN	Must pick 1 color & 1 pattern <b>Colors Patterns</b>	ors Patterns Stars		WAISTBAND  ☐ Adjustable (Standard) ☐ Velcro ☐ Silicone beaded (5cm wide) ☐ Knitted ending  LEVAMED SILICONE ANKLE PADS*			SWAROVSKI CRYSTALS  Pattern:  Beauty  Brilliance		
	☐Brown ☐ Crosses ☐ Gray ☐ Ornaments	n Crosses Pyramids			Add 1 cm to cY measurement per pad.  Left: ☐ Inner ☐ Outer ☐ Permanent ☐ Removeable  Right: ☐ Inner ☐ Outer ☐ Permanent ☐ Removeable			Romance	
	*Not available in mediven **mediven 550 only NOTES:	sensoo. Trend colors a	and fashion ele	ments	requíre an extra 5 d	ays for produc	tion.		