

seca 220

**Measuring rod
for
seca column scales**

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1. DEVICE DESCRIPTION

1.1 Intended use

The medical measuring rod **seca 220** is used with seca column scales primarily in hospitals, medical practices and in-patient care facilities in accordance with national regulations.

In combination with a scale the measuring rod serves as a complete measuring station and is therefore used for conventional determination of weight and height as well as establishment of general state of nutrition; It assists the physician supervising treatment in making a diagnosis or deciding on a course of treatment.

To make an accurate diagnosis, however, other specific examinations have to be ordered by the physician and their results taken into account, in addition to determining weight and height values.

1.2 Functional description

The measuring rod is compatible to a range of seca column scales. The measuring rod consists of two telescopic elements:

- Lower telescopic element:
Measuring range 1: 60 cm -130.5 cm
- Upper telescopic element:
Measuring range 2: 130.5 cm - 200 cm

The head slide of the measuring rod is locked at the top of the upper telescopic element to measure persons taller than 130.5 cm. The head slide needs to be released to measure persons smaller than 130.5 cm. The measuring flap on the head slide can be folded down.

1.3 User qualification

Assembly Devices that are shipped partially assembled may only be mounted by sufficiently qualified persons such as specialist dealers, hospital technicians or seca service technicians.

Operation The device may only be operated by healthcare professionals.

2. SAFETY INFORMATION

2.1 Safety information in these instructions for use



CAUTION!

Used to identify a hazardous situation. If you fail to take note of this information, minor to moderate injuries may result.

ATTENTION!

Used to identify possible incorrect usage of the device. If you fail to take note of this information, you may damage the device, or the measured results may be incorrect.

NOTE:

Includes additional information about use of the device.

2.2 Basic safety precautions

- Please observe the information in this user manual.
- Keep this user manual in a safe place. This user manual is part of the product and must be readily available.



CAUTION!

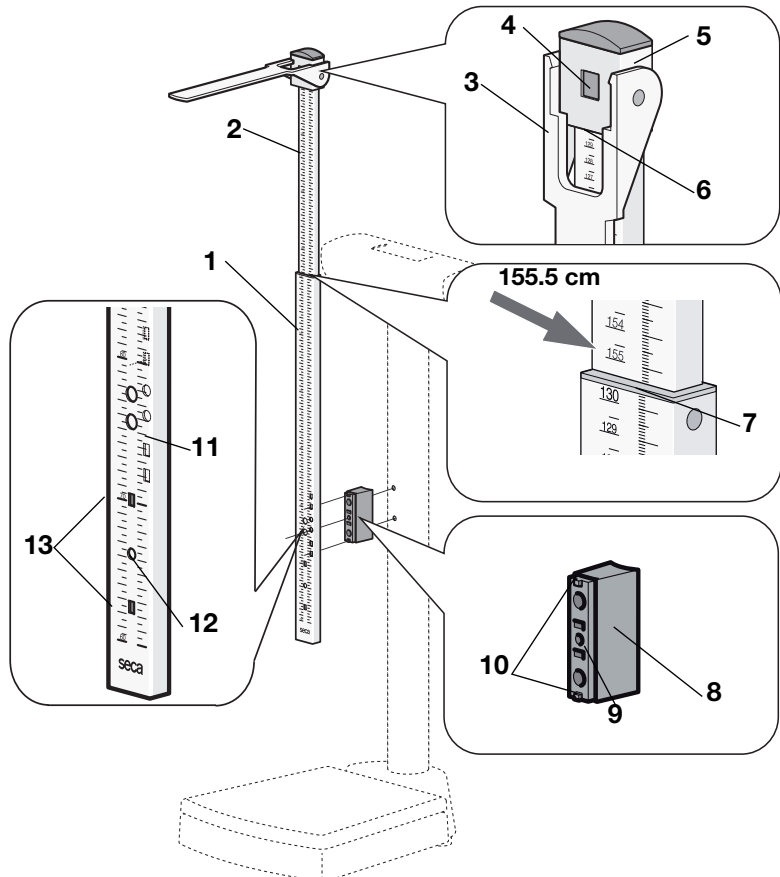
Patient hazard, damage to device

- Use the supplied assembly material only.
- Fold down the measuring slide after each measurement.
- Have the device serviced regularly as described in the respective section of this document.
- Technical changes to the device are not permitted. The unit contains no user-serviceable parts. Make sure that maintenance and repair are only carried out by an authorised seca service partner. You can find your local service partner at www.seca.com or send an email to service@seca.com.

- Make sure you only use genuine seca accessories and spare parts. Otherwise the warranty provided by seca will become null and void.

3. OVERVIEW



3.1 Controls and mounting elements









No.	Element	Function
1	Lower telescopic element	Measuring range 1: 60 cm - 130.5 cm
2	Upper telescopic element	Measuring range 2: 130.5 cm - 200 cm
3	Measuring flap	<ul style="list-style-type: none"> • To be positioned on top of the patient's head • Can be folded down

No.	Element	Function
4	Lock	<ul style="list-style-type: none"> Locks head slide at top of upper telescopic element for measurement in measuring range 2 Releases head slide for measurement on lower telescopic element (measuring range 1)
5	Head slide	<ul style="list-style-type: none"> Locked at top of upper telescopic element To be released for measurement on lower telescopic element (measuring range 1)
6	Read-off line 1 (red)	For measurements in measuring range 1
7	Read-off line 2 (red)	For measurement in measuring range 2
8	Spacer	Connects the measuring rod to the scale
9	Carriage	Slides vertically <ul style="list-style-type: none"> For mounting the spacer on the scale For adjusting the measuring rod
10	Guide pins	<ul style="list-style-type: none"> Engage in the guide holes of the measuring rod Ensure that the measuring rod is mounted in a vertical position
11	Mounting range	<ul style="list-style-type: none"> 2 mounting positions at the rear for mechanical seca scales 1 mounting position on the front for electronic seca scales For details see "Selecting the mounting position" on page 9
12	Fixing hole	The fixing screw of the measuring rod is inserted in this hole
13	Guide holes	The guide pins of the spacer are inserted here

3.2 Marking on the device and on the rating plate

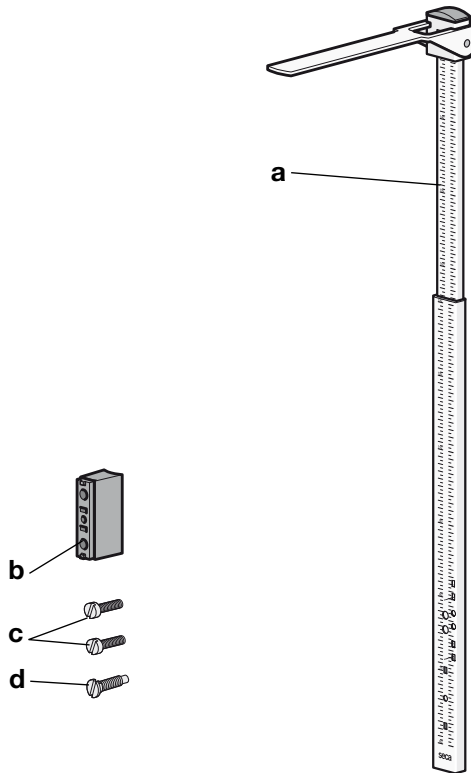
Text/Symbol	Meaning
Model	Model number
xx/xx	Batch number, engraved on back of device
	Follow instructions for use
	Device conforms to EC directives <ul style="list-style-type: none"> 0123: Notified body for medical products: TÜV SÜD Product Service

3.3 Marking on the packaging

	Protect from moisture
	Arrows indicate top of product. Transport and store in an upright position.
	Fragile Do not throw or drop.
	Permitted min. and max. temperature for transport and storage
	Permitted min. and max. moisture for transport and storage
	Packaging material can be disposed of through recycling programs

4. BEFORE YOU REALLY GET STARTED...

4.1 Scope of delivery



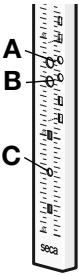
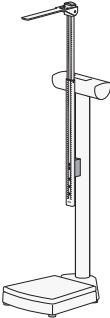
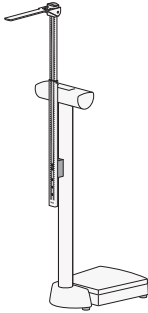
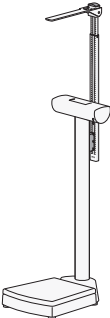
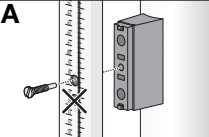
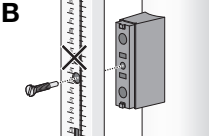
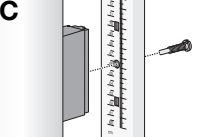
No.	Component	Pcs.
a	Measuring rod seca 220	1
b	Spacer connecting measuring rod to column of scale	1
c	Screw M5 x 30 mm Connects spacer to scale	2
d	Screw M6 x 13 mm (total length: 22 mm) Connects measuring rod to spacer	1
	Instructions for use, not shown	1

4.2 Mounting the measuring rod

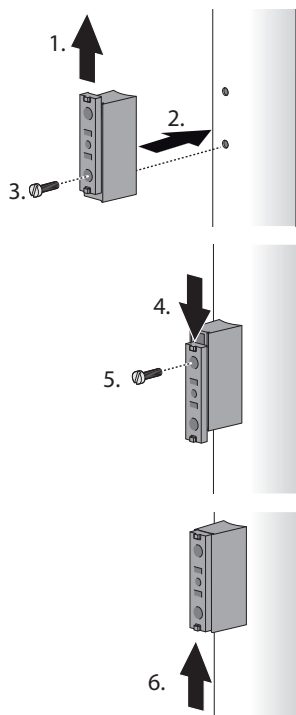
Selecting the mounting position

To ensure the measured results are correct, the position of the measuring rod varies depending on the model of the scale. The following table gives the mounting position for your seca column scale:

- First row: Mounting positions of the spacer and the measuring rod on the scale
- Left-hand column: Mounting positions of the measuring rod on the spacer

Position at spacer	Position at scale		
			
	<p>seca 711 seca 712</p>	<p>seca 700 seca 711-220 kg</p>	<p>-</p>
	<p>-</p>	<p>seca 709 seca 710</p>	<p>-</p>
	<p>-</p>	<p>-</p>	<p>Electronic column scales, e.g. seca 704</p>

Attaching spacer to column

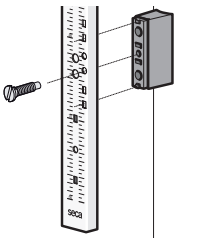
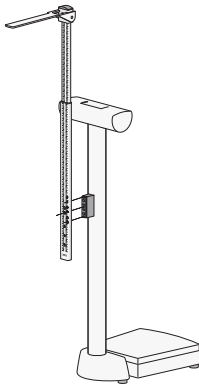
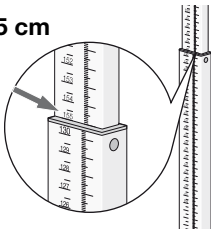


To mount the spacer on the column of the scale, proceed as follows.

1. Slide the carriage so you can insert a screw in the bottom hole.
2. Line up the spacer with the holes in the column.
3. Insert a screw in the bottom hole of the spacer and tighten securely.
4. Slide the carriage so you can insert a screw in the top hole.
5. Insert a screw in the top hole of the spacer and tighten securely.
6. Slide the carriage into the centre.

Attaching measuring rod to spacer

155 cm



CAUTION!

False measurement results

No proper measurement results will be possible if the mounting position selected is not suitable for your column scale.

- Make sure to select the correct mounting position for your column scale (see “Selecting the mounting position” on page 9.)

1. Pull the upper telescopic element out to the 155 cm mark.

The holes in the lower telescopic element are exposed.

2. Adjust the measuring rod as provided for your model of scale (here: position for models **seca 709** und **seca 710**).

3. Position the measuring rod on the spacer at the height provided for your model of scale (here: position for models **seca 709** und **seca 710**).

4. Check that the guide pins of the spacer are inserted in the guide holes of the measuring rod.

5. Screw the measuring rod to the spacer.

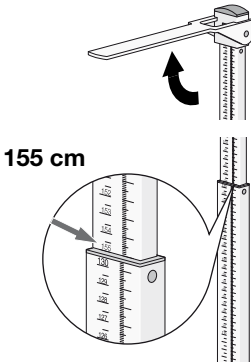
6. Check the position of the measuring rod (see “Verifying position of measuring rod” on page 12).

4.3 Verifying position of measuring rod

Checking position

After mounting the measuring rod, you must check its position and correct if necessary. To do so, proceed as follows:

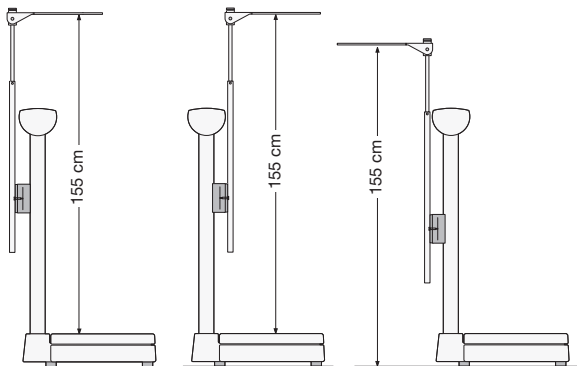
1. Unfold the measuring flap.
2. Pull the upper telescopic element out to the 155 cm-mark.
The fixing screw in the lower telescopic element is exposed so that you can correct the position of the measuring rod if necessary.
3. Measure the distance between the underside of the measuring flap and the patient standing area, e.g. using a tape measure.



NOTE:

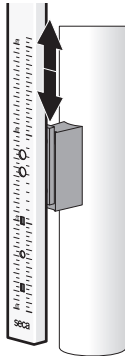
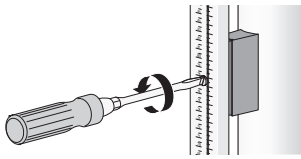
The area on which the patient stands for height measurement is the weighing platform or the floor, depending on the model of the scale.

Requirement: The measured distance (reference dimension) between the underside of the measuring flap and the patient standing area is 155 cm.



4. Should the value measured deviate from the reference dimension, note down the deviation and correct the vertical position of the measuring rod as described in the following section.

Adjusting position



To correct the position of the measuring rod proceed as follows:

1. Slightly loosen the screw on the measuring rod.
2. Adjust the measuring rod together with the carriage of the spacer according to the measured deviation from the reference dimension.
3. Tighten the screw on the measuring rod.
4. Check the distance between the measuring flap and patient standing area once again.
5. If necessary, re-adjust the position of the measuring rod.

NOTE:

- If you are unable to set the specified reference dimension, check that you have selected the correct mounting position for your seca column scale (see “Selecting the mounting position” on page 9.).
- Your seca service partner will also be happy to help. You can find your local seca service partner at www.seca.com or just send an e-mail to service@seca.com.

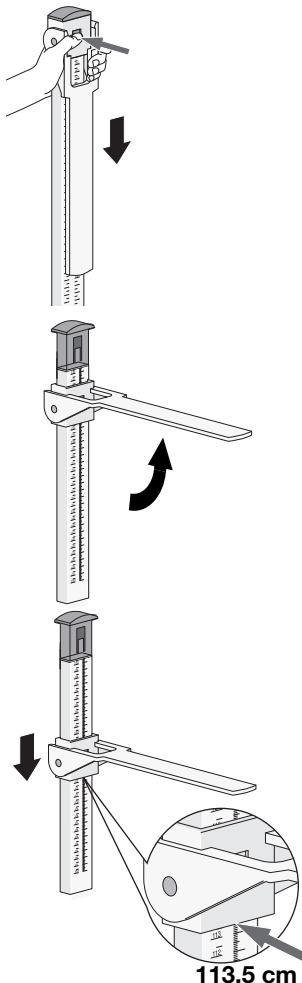
5. PERFORMING LENGTH MEASUREMENT



CAUTION! Patient hazard

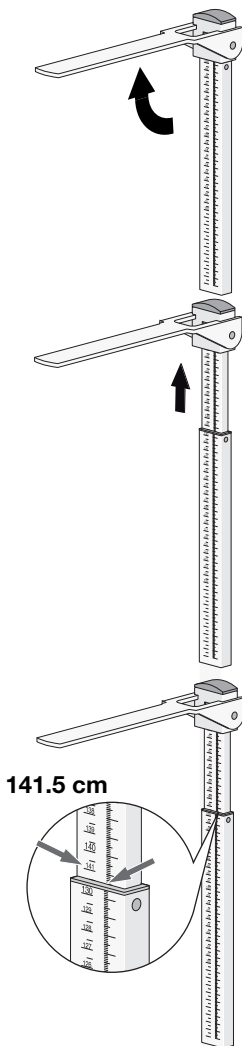
Allways perform a function check as described in section "Function Check" on page 17 before using the device.

5.1 Measuring patients smaller than 130.5 cm



1. Unlock the head slide by pressing on the lock.
2. Unfold the measuring flap so it engages in a horizontal position.
3. Ask the patient to step under the measuring flap:
 - Back to the measuring rod
 - Body kept straight
 - Head straight: So-called "Frankfurt plane" parallel to the measuring flap
4. Move the head slide on the lower telescopic element until the measuring flap rests on the patient's head.
5. Read off the measured result at the read-off line (read-off line 1) of the headslide (here: 113.5 cm).
6. Ask the patient to step away from the measuring rod.
7. Fold the measuring flap down.
8. Move up the head slide until it engages in the lock.

5.2 Measuring patients taller than 130.5 cm



1. Unfold the measuring flap so it engages in a horizontal position.
2. Pull the upper telescopic element out until the patient can comfortably stand under the measuring flap.
3. Ask the patient to step under the measuring flap:
 - Back to the measuring rod
 - Body kept straight
 - Head straight: So-called "Frankfurt plane" parallel to the measuring flap
4. Slide down the upper telescopic element until the measuring flap rests on the patient's head.
5. Read off the measured result at the read-off line (read-off line 2) of the lower telescopic element (here: 141.5 cm).
6. Ask the patient to step away from the measuring rod.
7. Slide the upper telescopic element to the lowest position.
8. Fold the measuring flap down.

6. HYGIENE TREATMENT

ATTENTION!

Damage to device

Inappropriate detergents may damage the sensitive surfaces of the devices.

- Do not use caustic or abrasive detergents.
- Do not use spirits or benzine.

6.1 Cleaning

- ◆ Use a soft cloth dampened with mild soapsuds to clean the surfaces of the device.

6.2 Disinfecting

1. Follow the instructions on the disinfectant.
2. Disinfect the device at regular intervals with a commercially available disinfectant, e.g. with 70% isopropyl alcohol.

Please take note of the following terms:

- Prior to every measurement with direct skin contact:
 - Weighing platform
 - Head slide and measuring flap
 - Measuring flap extension (if applicable)
- After every measurement with direct skin contact:
 - Weighing platform
 - Head slide and measuring flap
 - Measuring flap extension (if applicable)
- If required:
 - Column and display of the scales
 - Telescopic elements of the length measuring rod
 - Heel stop (if applicable)

6.3 Sterilizing

This device may not be sterilised.

7. FUNCTION CHECK

- ◆ Perform functional check prior to each operation.

A complete functional check includes:

- Visual inspection for mechanical damage
- Visual and functional inspection of all movable parts
- Functional check of the control elements



CAUTION! **Risk of injury**

If you notice any faults or deviations during the functional check, do not use the unit.

- Have repairs of the unit carried out by seca service or an authorized service partner.

8. TROUBLESHOOTING

Problem	Cause/Solution
<p>Measurement does not return plausible results.</p>	<p>Measurement result read off incorrectly</p> <ul style="list-style-type: none"> - Use the correct edge for the measuring range currently in use ("Performing length measurement" from page 14) - Read off the decimal places for the current measuring range in the correct direction ("Performing length measurement" from page 14) <p>Incorrect position/posture of patient</p> <ul style="list-style-type: none"> - Correct the position/posture of the patient ("Performing length measurement" from page 14) <p>Measuring rod mounted incorrectly on column scale</p> <ul style="list-style-type: none"> - Mount the measuring rod correctly ("Before you really get started..." from page 8)

9. SERVICING

The seca measuring rod does not require maintenance. Should any part of it fail to function, please contact an authorised service partner.

You can find your local service partner at www.seca.com or just send an e-mail to

10. TECHNICAL DATA

10.1 General technical data

General technical data	
Dimensions <ul style="list-style-type: none"> • Depth • Width • Height (retracted) • Height (extended) 	17 mm 40 mm 980 mm 1480 mm
Weight	approx. 0.7 kg
Temperatur range <ul style="list-style-type: none"> • Operation • Storage • Transport 	+10 °C to +40 °C (50 °F to 104 °F) -10 °C to +65 °C (14 °F to 149 °F) -10 °C to +65 °C (14 °F to 149 °F)
Air pressure <ul style="list-style-type: none"> • Operation • Storage • Transport 	700 - 1060 hPa 700 - 1060 hPa 700 - 1060 hPa
Humidity <ul style="list-style-type: none"> • Operation • Storage • Transport 	30% - 80% no condensation 0% - 95% no condensation 0% - 95% no condensation
Medical device in accordance with Directive 93/42/EEC	Class I with measuring function

10.2 Technical data, length measuring

Technical data, length measuring	
Measuring range 1	60 cm - 130.5 cm
Measuring range 2	130.5 cm - 200 cm
Graduation	1 mm
Accuracy	better than ± 5 mm

11. WARRANTY

We offer a two-year warranty from the date of delivery for defects attributable to faulty material or poor workmanship. This excludes all moveable parts such as (rechargeable) batteries, cables, power supply units, etc. Defects which are covered by the warranty shall be rectified free of charge for customers on production of the sales receipt. No further claims can be accepted. The costs of shipment in both directions shall be borne by the customer where the device is not located at the customer's premises. In the event of any damage during shipment warranty claims can only be asserted where the complete original packaging was used for shipment and the scales were secured inside in the same manner as in the original packaging. You should therefore keep all packaging.

The warranty shall become null and void where the device is opened by persons not expressly authorised to do so by seca.

We ask customers based abroad to contact their local sales agent directly in the case of warranty claims.



Konformitätserklärung
Declaration of conformity
Certificat de conformité
Dichiarazione di conformità
Declaración de conformidad
Overensstemmelsesattest
Försäkran om överensstämmelse
Konformitetserklæring
Vaatimuksenmukaisuusvakuutus
Verklaring van overeenkomst
Declaração de conformidade
Δήλωση Συμβατότητας
Prohlášení o shodě
Vastavusdeklaratsioon
Megfelelőségi nyilatkozat
Atitikties patvirtinimas
Atbilstības apliecinājums
Oświadczenie o zgodności
Izjava o skladnosti
Vyhlásenie o zhode
Onay belgesi

Das Längenmessgerät
The equipment for measuring length
Appareil de mesure à fonctionnement
Strumento per la misura della statura
Equipo para medición longitudinal
Højdemåleren
Längdmätinstrumentet
Lengdemåleren
Pituuden mittauslaite
De lengtemeter
O aparelho de medição da altura
Η συσκευή μέτρησης
Přístroj k měření délky
Pikkusemõõtesead
A távolságmérő
Ilgio matuoklis
Iekārta garuma mērīšanai
Urządzenie do pomiaru długości
Naprava za merjenje dolžine
Dĺžkové meradlo
Boy ölçüm cihazı

seca 220

Chargennr.: siehe Rückseite Messstab
Batch no.: see back of measuring rod
N° de lot : voir au dos de la toise de mesure
N° di lotto: v. parte posteriore dell'asta graduata
N° de lote: véase lado trasero de la varilla
Charge nr.: se på bagsiden af længdemåleapparat
Partinr.: se måtstavens baksida
Lot nr.: se baksida målestav.
Valmistuserän numero: ks. mittasauvan takaosaa
Chargennummer: zie achterzijde meetlat
N° de carga: vide retaguarda da vareta de medição
Αρ. σειράς: Βλέπε στην πίσω πλευρά του μετρητή
Číslo šarže: viz zadní strana - měřidlo
Partiinumber: vt mõõtelati tagaküljelt
Gyártási tételszám: lásd a távolságmérő hátlapját
Partijos Nr.: žr. skirtuką galinėje pusėje
Sērijas Nr.: skat. mērlatas aizmugurē
Nr partii: patrz na odwrocie listwy pomiarowej
Štev. šarže: oglejte si zadnjo stran merilne palice
Číslo šarže: pozri zadnú stranu meracej laty
Şarj numarasi: ölçüm çubuğunun arka kısmına bakın

- D** ... erfüllt die geltenden Anforderungen folgender Richtlinien:
93/42/EWG über Medizinprodukte.
- GB** ... complies with the applicable requirements of the following directives:
93/42/EEC governing medical devices.
- F** ...satisfait aux directives et normes suivantes:
93/42/CEE relatives aux dispositifs médicaux.
- I** ...è conforme ai requisiti delle seguenti direttive: 93/42/CEE in materia di prodotti medicali.
- E** ... cumple las exigencias vigentes de las siguientes directivas:
93/42/CEE sobre productos sanitarios.
- DK** ... opfylder de gældende krav fra følgende direktiver:
93/42/EØF om medicinprodukter.
- S** ... uppfyller gällande krav i följande direktiv och normer:
93/42/EEG om medicintekniska produkter.
- N** ... oppfyller gjeldende krav i følgende direktiver:
93/42/EØF om medisinske produkter.
- FIN** ... täyttää seuraavien direktiivien voimassa olevat määräykset:
93/42/ETY, lääkinnälliset laitteet
- NL** ... voldoet aan de geldende eisen van de volgende richtlijnen:
93/42/EEG betreffende medische hulpmiddelen.
- PT** ... cumpre os requisitos válidos das seguintes directivas:
93/42/CEE relativa a dispositivos médicos.
- GR** ... πληρεί όλες τις ισχύουσες απαιτήσεις των ακόλουθων Οδηγιών:
93/42/EOK περί ιατροτεχνολογικών προϊόντων.
... splňuje platné požadavky těchto směrnic:
93/42/EHS o zdravotnických prostředcích.
- CZ** ...vastab järgmiste direktiividega kehtestatud nõudeid:
93/42/EMÜ meditsiinivahetite kohta.
- EST** ... teljesíti a következő irányelvek érvényben lévő követelményeit:
93/42/EGK irányelv az orvostechnikai termékekről.
- HU** ... išpildo galiojančius tokių direktyvų reikalavimus:
93/42/EEB ir medicinos prietaisų
- LT** ... atbilst šādu direktīvu spēkā esošajām prasībām:
93/42/EEK par medicīnas ierīcēm.
- LV** ... spełnia obowiązujące wymagania następujących dyrektyw:
93/42/EWG o wyrobach medycznych.
- PL** ... izpolnjuje veljavne zahteve naslednjih direktiv: 93/42/EGS o medicinskih pripomočkih.
- SLO** ... spĺňa platné požiadavky nasledovných smerníc:
93/42/EHS o medicínskych výrobkoch.
- SK** ... aṣağidaki yönergelerin geçerli talimatlarını yerini getirir:
tıbbi ürünler hakkında 93/42/AET yönetmeliği.
- TR**

Hamburg, August 2013



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: www.seca.com

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seca operates worldwide with Headquarters in Germany
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China, Japan, Mexico, Austria, Poland and UAE

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Precision for health