



KERN & Sohn GmbH

Ziegelei 1
D-72336 Balingen
email: info@kern-sohn.com

Phone: +49-[0]7433- 9933-0
Fax: +49-[0]7433-9933-149
Internet: www.kern-sohn.com

Operating instructions

Mechanical height measuring rod

KERN MSF 200

Version 1.2
06/2012
GB





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Mechanical height measuring rod

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English

1 Technical Data

KERN	MSF 200
Measuring range	60 – 200 cm / 24-78 inch
Readability	1 mm / 1/8 inch
tolerance	10 mm
Dimensions (D x H x W) mm	60 x 290 x 930 mm
Temperature range	+10°C ... +40°C
Storage temperature	-20°C ... + 60°C
Net weight	approx. 700 g
Admitted as medical product as per Guideline 93/42/EWG (CE 0297)	Category I with measuring function
Combinable scales	KERN MTS-M KERN MPS-PM KERN MPB-P

2 Declaration of conformity



KERN & Sohn GmbH

D-72322 Balingen-Frommern

Postfach 4052

E-Mail: info@kern-sohn.de

Tel: 0049-[0]7433- 9933-0

Fax: 0049-[0]7433-9933-149

Internet: www.kern-sohn.de

Konformitätserklärung

Konformitätserklärung für Geräte mit CE-Zeichen

Declaration for appliances with CE mark

Declaración de conformidad para equipos con rótulo CE

Déclaration de conformité pour les appareils avec marque CE

Dichiarazione di conformità per apparecchi con contrassegno CE

Conformiteitverklaring voor apparaten met CE-merkteken

Height rod: KERN MSF-200

D Wir erklären hiermit unter alleiniger Verantwortung, dass das Produkt, auf das sich diese Erklärung bezieht, mit den nachstehenden Richtlinien übereinstimmt.

Das Produkt wurde unter Berücksichtigung untenstehender Normen gefertigt und entspricht den genannten Richtlinien. Die Produkte sind konform mit den Grundlegenden Anforderungen des Anhang I der EG-Richtlinie 93/42/EWG und dürfen somit mit CE 0297 gekennzeichnet und von uns in Verkehr gebracht werden. Das Konformitätsbewertungsverfahren wurde nach RL 93/42/EWG, Anhang V durchgeführt. Das QS-System steht unter der Überwachung der Benannten Stelle DQS GmbH, Frankfurt/Main, Deutschland, Kürzel 0297.

GB We hereby declare and assume sole responsibility for the declaration that the product complies with the standards hereinafter.

The product was manufactured subject to all norms and complies with the standards stated. The products are in conformance with the basic requirements specified in Appendix I of EC Directive 93/42/EC and we are therefore entitled to apply the CE 0297 mark and to put these products into circulation. The appraisal procedure was carried out as per Directive 93/42/EC, Appendix V. The QA system is supervised by the notified body DQS GmbH, Frankfurt/Main, Germany, abbreviation 0297.

E Manifestamos bajo sola responsabilidad en la presente que el producto al que se refiere esta declaración está de acuerdo con las normas siguientes.

El producto ha sido fabricado considerando las normas de abajo y corresponde a las directivas nombradas. Los productos están conformes con los requisitos fundamentales del anexo I de la directiva CE 93/42/EWG pudiendo así ser marcados con CE 0297 y puestos en circulación por nosotros. El procedimiento de evaluación de conformidad ha sido ejecutado según RL 93/42/EWG, anexo V. El sistema QS está bajo el control del organismo nombrado DQS GmbH, Frankfurt/Main, Alemania, abreviación 0297.

F Nous déclarons par la présente que le produit auquel se réfère cette déclaration est conforme aux normes ci-après.

Le produit a été fabriqué compte tenu des normes ci-après et est conforme aux directives citées. Les produits sont conformes aux exigences fondamentales de l'annexe I à la directive CE 93/42/CEE et peuvent donc porter le label CE 0297 et être mis en circulation par nous. La procédure de certification de la conformité a été réalisée en fonction de RL 93/42/CEE, annexe V. Le système de suivi de la qualité se trouve sous le contrôle de l'organisation citée DQS GmbH, Francfort/Main, Allemagne, sigle 0297.

I Dichiariamo con ciò in responsabilità unica che il prodotto al quale la presente dichiarazione si riferisce è conforme alle norme di seguito citate.

Il prodotto è stato fabbricato tenendo in considerazione le norme sottostanti e corrisponde alle direttive indicate. I prodotti sono conformi ai requisiti fondamentali dell'appendice I della direttiva CE 93/42/EEG e possono essere marcati con CE 0297 e quindi messi in circolazione da noi. Il procedimento di valutazione per la conformità è stato eseguito secondo RL 93/42/EEG, Appendice V. Il sistema QS è sotto il controllo del centro competente DQS GmbH, Frankfurt/Main, Germania, abbreviatura 0297.

NL Wij verklaren hiermede op exclusieve verantwoordelijkheid dat het product, waarop deze verklaring betrekking heeft, met de hierna volgende richtlijnen overeenstemt.

Het product werd met inachtneming van de onderstaande normen vervaardigd en voldoet aan de vermelde richtlijnen. De producten zijn conform met de fundamentele, door bijlage I van de EG-richtlijn 93/42/EEG gestelde eisen en mogen bijgevolg met CE 0297 gekenmerkt en door ons in omloop gebracht worden. Het procédé ter beoordeling van de conformiteit werd conform RL 93/42/EEG, bijlage V doorgevoerd. Het kwaliteitsborgingsysteem staat onder toezicht van de benoemde instantie DQS GmbH, Frankfurt/Main, Duitsland, afgekort 0297

Mark applied	EU Directive
CE 0297	93/42/EEC

Date: 01.11.2009

Signatur :



**KERN & Sohn GmbH
Management**

KERN & Sohn GmbH, Ziegelei 1, D-72336 Balingen, Tel. +49-[0]7433/9933-0, Fax +49-[0]7433/9933-149

3 Explanation of the graphic symbols

SN WY 090563

Designation of the serial number of every device, applied at the device and on the packaging.

Number here as example



2009-08

Identification of the manufacturing date of the medical product.

Year and month here as example

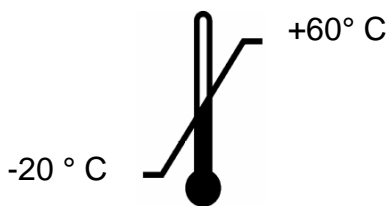


„Attention observe accompanying document“, or
„Follow operating instructions“



**Kern & Sohn GmbH
D – 72336 Balingen
Ziegelei 1**

Identification of the manufacturer of the medical product including address



Temperature limitation indicating the upper and the lower limit (storage temperature on packaging)

Temperature indication as example

10°C / 40°C

Temperature limitation in the application indicating the lower and the upper limit (Allowable ambient temperature)

Temperature indication as example

4 Basic Information (General)



This height measuring rod according to guideline 93/42/EWG is provided for determination the body height in medical practice and for medical survey, examination and treatment.

Defined purpose

Indication:

- Determining the body height in the medical practice area.
- At an upright standing person, or at a lying baby, the height measuring rod is applied to head and feet in a manner that on the display or scale the body height value can be read.

Contraindication:

No contraindication known.

Proper use

This height measuring rod is used to determine the height of persons while standing upright, or of lying babies, according to its model, in medical treatment localities. This height measuring rod is suitable to detect, prevent and survey diseases.

Ensure that the height measuring rod may only come into contact only with uninjured skin.

Improper Use

The structure of the height measuring rod may not be modified. This may result in incorrect measuring results, safety-related defects as well as destruction.

The height measuring rod may only be used according to the described conditions. Other areas of use must be released by KERN in writing.

Warranty

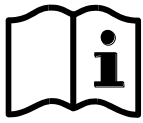
Warranty claims shall be voided in case

- Our conditions in the operation manual are ignored
- The appliance is used outside the described uses
- The appliance is modified or opened
- Mechanical damage or damage by media, liquids, natural wear and tear.
- Non correct implantation or assembly.

Test device control

For height measuring rods, we recommend a metrological examination of the accuracy of the measuring rod, however, this is not mandatory as the determination of human body height involves rather large, intrinsic inaccuracies.

5 Basic Safety Precautions



Carefully read this operation manual before setup and commissioning, even if you are already familiar with KERN products.

Staff training

The medical staff must apply and follow the operating instructions for proper use and care of the product.

Avoiding contamination

In order to avoid crossed contamination (fungal disease,...) the parts coming into contact with the patient must be cleared regularly.

Recommendation:

After every application which could have a potential contamination as consequence (e.g. direct contact with the skin).

Safety Instructions

- Observe operating instructions.
- Please use no other than the supplied fixtures for mounting.
- During assembling, ensure that screws are tightened properly and that the height measuring rod has been assembled correctly.
- For medical application recheck correctness of scale after assembly with the help of a calibrated length measuring device. (see chap. 6 „Checking the scale“)
- To prevent risk of injury, ensure that the head stop is returned to folded-in position after each use.
- The body height measuring emits only reliable values, when the back and the head are straightly aligned, nevertheless the body height of a person may change about some cm during a day.

6 Unpacking/installing

Testing upon acceptance

Please check packaging as well as the device on receipt for possibly visible external damages.

Packaging/Return

Keep all parts of the original packaging for a possibly required return.
Only use original packaging for returning.

Checking the scale

After the assembly of the height measuring rod, the scale must be checked using an external measuring rod.

For this put an external, verified measuring rod with the respective accurateness on the weighing plate or, in case of wall assembly, vertically on the floor. The height measuring rod must be shifted in a way that the horizontally unfolded flap touches the external measuring rod with the lower side at 150 cm.

Information:

The measure of the external measuring rod is not congruent with the scale of the height measuring rod, it is displaced by some cm, as the offset between the flap and the reading mark thus will be considered.

If the measure does not match exactly, loosen again slightly and shift a little the screws used for assembly and then check again the measure of 150 cm.

Scope of supply

Height measuring rod



1 x bracket



2 x dowel, "wall bracket"



2 x screw, "scales stand bracket"



Screw „Measuring rod on tripod of scales“



2 x screws „Measuring rod on wall with bracket“



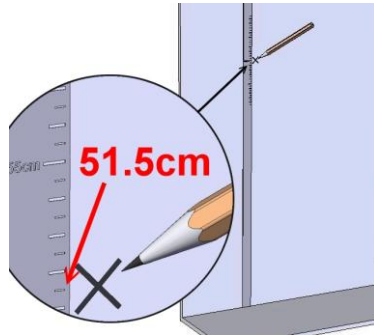
2 x rubber ring „Measuring rod on wall“



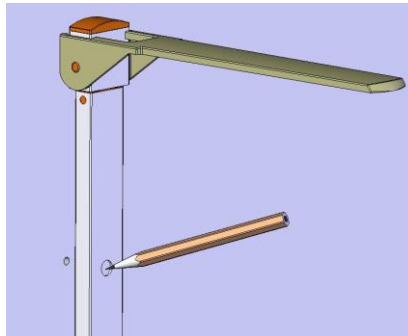
Operating instructions

7 Installation

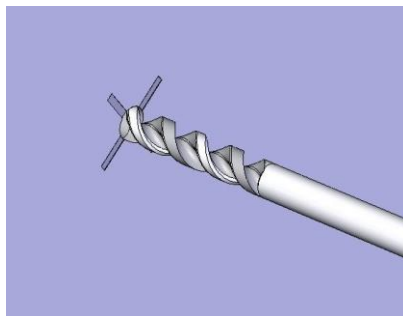
Wall assembly



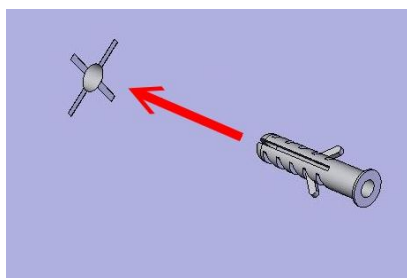
1. Set marking at 51.5cm above the floor, using a verified length measuring device.



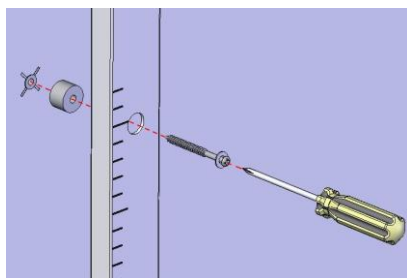
2. Extend height measuring rod and mark the second hole vertically above it.



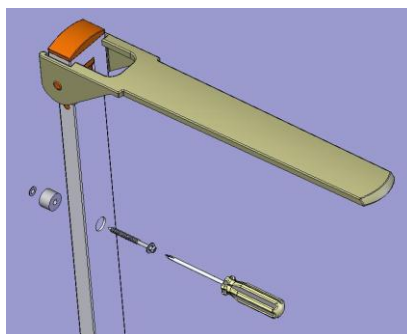
3. Drill both holes.



4. Insert the dowels.

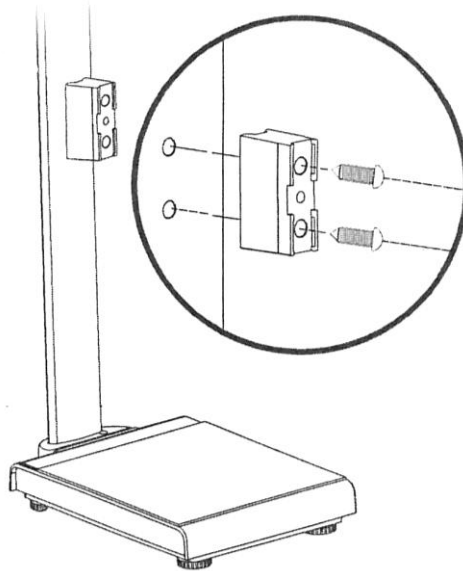


5. Insert lower screw and tighten it.

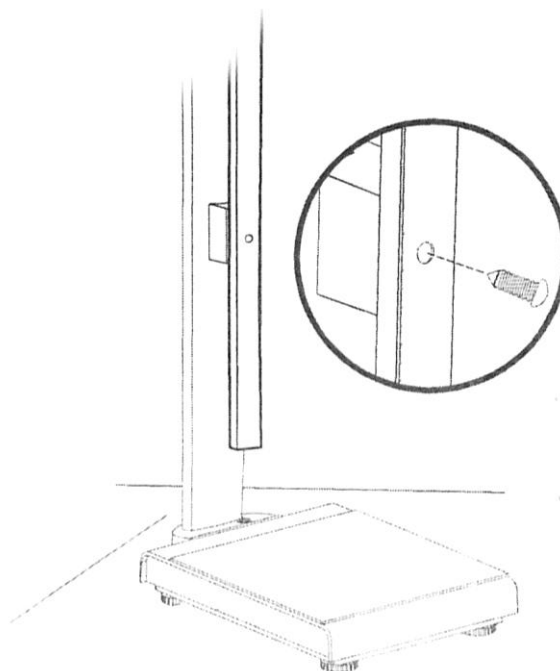


6. Insert upper screw and tighten it.

How to attach to KERN scale



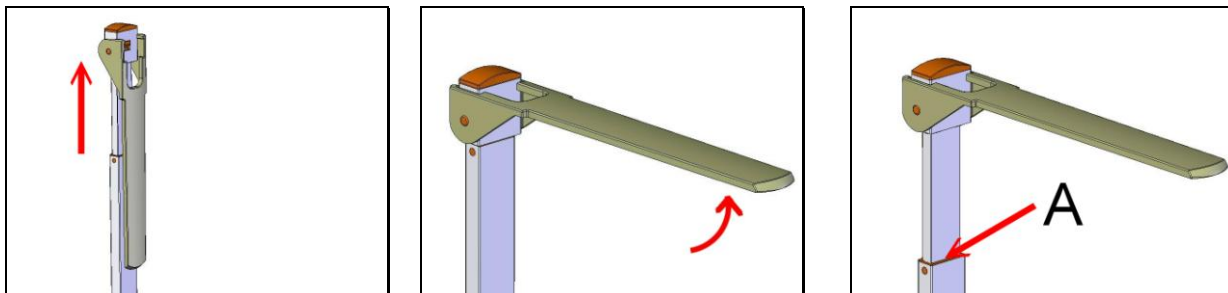
Use the 2 screws for screwing the bracket into the supplied insert nuts on the stand of the scales.



Extend the height measuring rod and tighten it in the lower hole of the bracket with the help of the appertaining screw.

8 Body height measurement

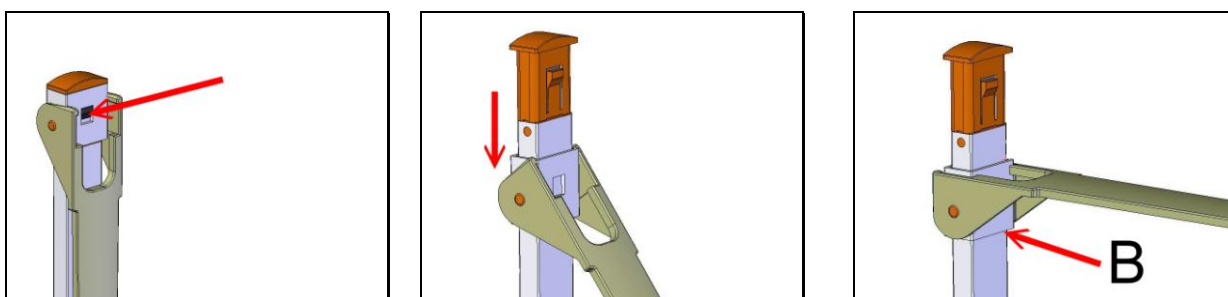
Body height above 130 cm



1. Pull measuring rod upwards
2. Move head stop up into horizontal position until it locks.
3. Carefully push the measuring rod down until the head stop gently touches the head of the aligned person. Read body height on the measuring rod (marking A).



Body height until 130 cm



4. Press locking and keep it pressed.
5. Shift head stop downwards.
Then move head stop up into horizontal position until it locks.
6. Carefully push the measuring rod down until the head stop gently touches the head of the aligned person.
Read body height on the measuring rod (marking B).

9 Cleaning, Maintenance, Disposal

Cleaning	Please do not use aggressive cleaning agents (solvents or similar agents), but a cloth dampened with mild soap suds, or household cleaner.
Disinfection	For disinfection the following substances are allowed: <ul style="list-style-type: none">▪ Methylated spirit▪ 2 % Kohrsolin▪ 1% Sokrena solution▪ 5% Sagrotan▪ 5% Gigasept
Service, maintenance	The appliance may only be opened by trained service technicians who are authorized by KERN.
Disposal	Disposal of packaging and appliance must be carried out by operator according to valid national or regional law of the location where the appliance is used.