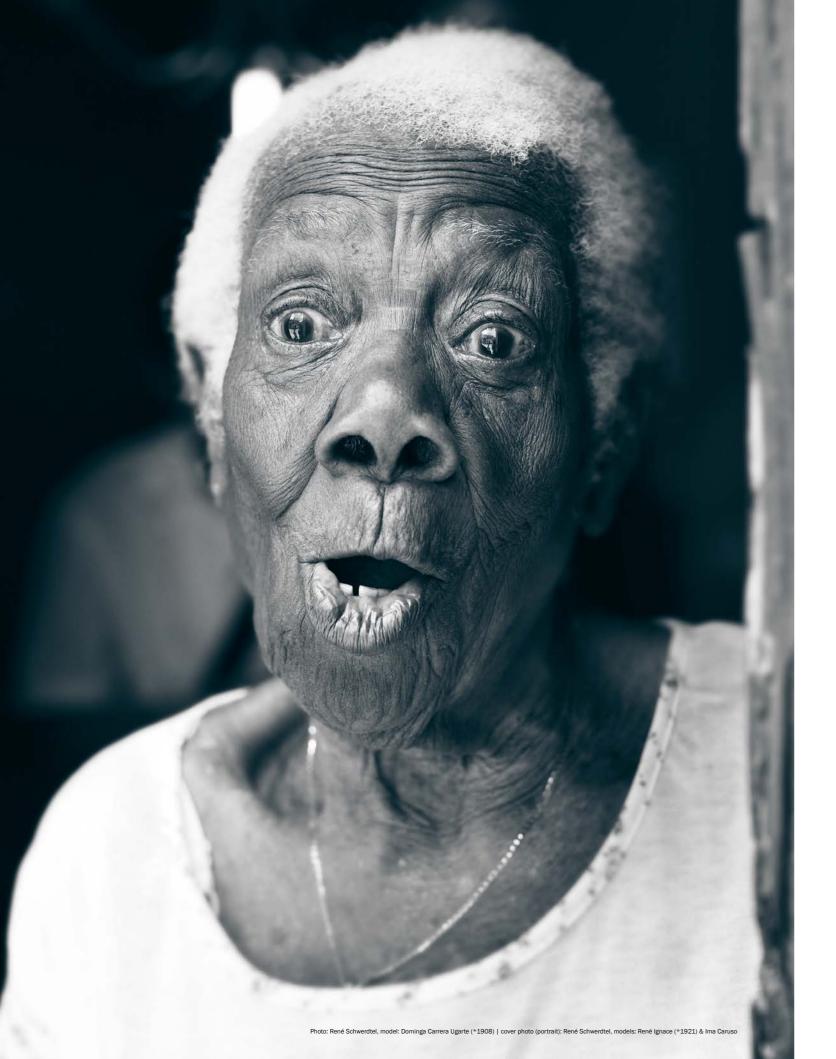


Functional elegance in nursing care

# sentida 7-i

The intelligent nursing home bed





# sentida 7-i

the intelligent nursing home bed

With sentida 7-i, not only does wissner-bosserhoff continue the success story of universal and low nursing beds, it also sets new standards in electronics and intelligent sensors, which had previously only been available for hospital beds. At the same time, the nursing home bed maintains the cozy design distinguishing all wissner-bosserhoff products.



19%

#### increase

in the number of care-dependent people of care level 3 within the last 10 years.

Source: German Federal Ministry for Health | Diagram: Own picture

142.533 119.834 2002 2012

6

#### hours/day

for residents needing care level 3. At least 4 hours of this time are spent on daily basic care. hours/day

of nursing are required in cases of hardship. Nursing care needs to be provided at least three times per night

Source: German Federal Ministry for Health



thanks to multiple functionality in the fields of:

- Intensive care
- Care for residents affected by dementia
- Palliative care
- Post-acute care and rehabilitation
- Geriatric psychiatry
- Preventive care

wissner-bosserhoff | sentida 7-i

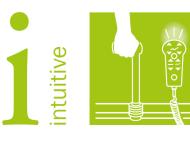
# The sentida 7-i innovation

nteractive











- Integrated weighing system makes laborious weighing unnecessary
- Fully automatic weight measurement facilitates documentation
- Weekly and monthly overview for medical purposes



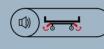
#### Bed-exit assistant

- Fall prevention thanks to the reliable weighing system-based bed exit system
- Early-warning mode for fast response times
- Flexible nurse call timing, connected night light



#### Safety sensor

- Braking assistant to reduce the risk of falls when the bed's brakes are not engaged
- Bed height assistant to help prevent falls from dangerous heights
- Side guard assistant for comprehensive resident protection







#### Self mobilization with Mobi-Lift®

- Stimulating care at the highest level
- Fold-away Mobi handle with integrated height adjustment
- Intelligent light concept helps the resident get to the bathroom at night



#### **Humidity** assistant

- Humidity sensor mat detects humidity in bed
- · Well suited for residents with light incontinence
- For improved continence of the resident



sentida 7-i is a nursing home bed which makes everyday life easier for both the nursing staff and residents with its sophisticated functions. It offers the highest degree of integrated intelligence with many innovative functions. Operation is intuitive and easy-to-understand, with interactive fittings completing the concept, which was designed for demanding nursing tasks to the highest of standards.



# sentida 7-i at a glance











- Comfortable 7" LCD touchscreen
- Direct selection of safety-relevant buttons
- Energy saving mode







#### Mobi-Lift® for self mobilization

- Mobilization aid
- Integrated height adjustment
- · Minimum physical strain







#### Comfort resident handset

Improved and extended functionality

- Illuminated display
- · Integrated LED light
- GO safety button
- · Separate legrest



















#### Patented SafeFree® sideguard concept

Often imitated but never duplicated our contribution for less restraint in agreement with the Werdenfels care pathway\* and the Redufix\*\* project

- Divided side guards, each adjustable in 4 different heights
- No middle post, no dangerous central gap



#### 3-stop strategy\*\*\*

for height adjustment

- · Fall prevention during sleeping phases at 27 cm bed height
- · Safe mobilization at chair height at 41 cm bed height
- Optimal nursing position at 80 cm bed height



#### BiNetic patient surface

with double retraction:

Real bedsore prevention - more than just a backrest in accordance with DBfK (German nurses association) recommendation.

- Your benefit: Reduction of pelvic compression as well as friction and shearing forces due to legrest retraction by 6 cm
- · Backrest retraction by 11 cm



#### Night light function

Optionally, a night light can be integrated

- · Helps the resident find their way at night
- More safety for the resident

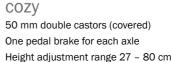
wissner-bosserhoff | sentida 7-i

- · Simple power connection control
- · Control via handset



#### Undercarriage







#### extra mobile

125 mm design castors (optional) Foot-end brake bar Height adjustment range 27 - 80 cm\*\*\*\*

# The CareBoard®

#### nursing to touch

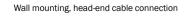
The comprehensive functionality of sentida 7-i can be easily operated using the CareBoard®. The 7" LCD touchscreen enables the nursing staff to organize the various functions in clear menus in order to facilitate everyday nursing care for the user.

- Clearly structured LCD touchscreen for easy and intuitive operation;
   without complicated menus and descriptions
- Energy saving mode: automatic switch-off after 3 minutes
- LED to monitor battery/power connection
- · Allows all or individual functions to be locked



#### Two positions to choose from







Holder at the foot section, foot-end cable connection

# Acute care package

#### for intensive and critical care

In addition to the medical benefits, safety and compliance with the IEC 60601-2-52 standard are the first priority. The sentida 7-i nursing home bed offers preset emergency and therapy positions, which can also be initiated if the LCD touchscreen is down.

The emergency stop button immediately stops any unwanted bed movements and instantly disconnects the bed from the power supply. Electrical CPR can be performed and the patient moved into the Trendelenburg position automatically at the touch of a button.

The bed comes equipped with a battery as standard. All emergency functions can be activated in the event of a power cut. Thanks to the mechanical CPR function, the nurse can lower the backrest by hand.



GO safety



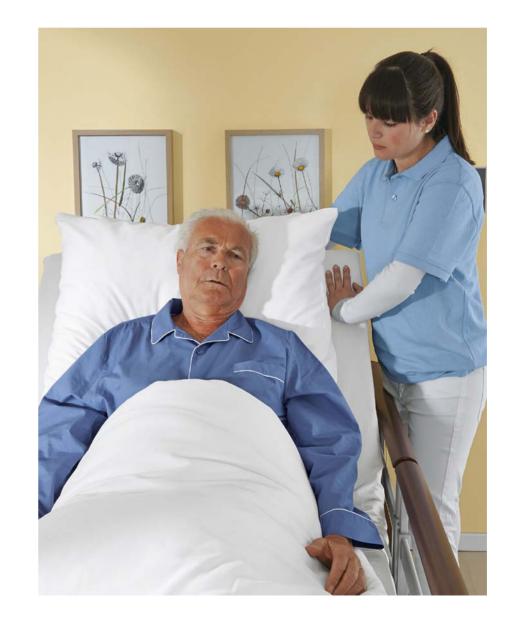
Emergency stop button



Automatic Trendelenburg position



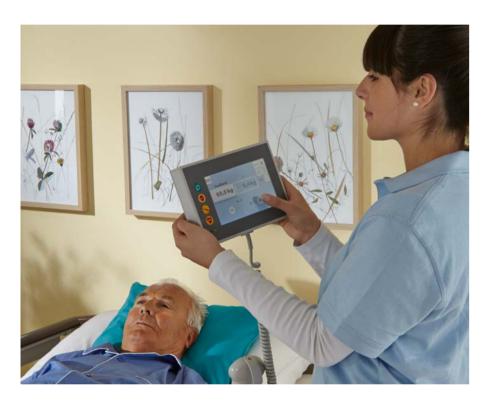
Electric CPR button

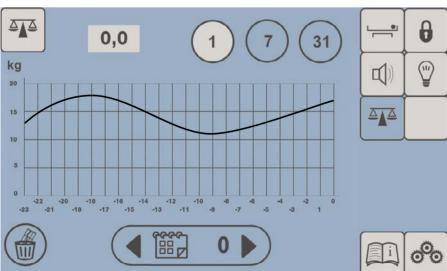


# Weight monitoring with touchscreen

quick weighing - easy documentation

The integrated weighing system supports the nursing staff during documentation, without the complicated use of a lifter. In addition to this, the weight chart, which is saved hourly and can be displayed in intervals of days, weeks and months, can improve medical care and also helps to draw conclusions concerning the dosage of medication or the assessment of lymphatic fluid accumulation in the legs.





# Weighing with accessories is exhausting and timeand cost-intensive

- It puts stress on the resident
- The residents need to be repositioned more often
- Permanent monitoring is not possible



# Advantages of the integrated weighing system

- Determination of absolute and relative body weight directly in bed
- Storage of weight data and graphical representation in an analysis tool
- Freezing the weight measurement in case of changes in weight by external causes (e.g. accessories)
- Easy zeroing of absolute weight and weight changes

### Bed-exit assistant

safety + freedom day and night due to intelligent bed exit sensor system

wissner-bosserhoff is a reliable partner for reducing freedom-depriving measures (FDM). With sentida 7-i, wissner-bosserhoff presents an intelligent nursing home bed with an intelligent sensor system, which reliably helps reduce freedom-depriving measures day and night. It is equipped with an automatic night light, which is activated when the resident leaves the bed and is deactivated when the resident is back in bed again. sentida 7-i is compatible with standard nurse call systems.





#### Automatic night light

- Night light is automatically switched on when the resident leaves the bed
- Night light is switched off again as soon as the resident is back in bed



#### Individual alarm system

- Freely adjustable from 0 seconds (immediate alarm) to 30 minutes
- · Adaptation to resident's mobility
- Early-warning mode for hyperactive residents.
   The nursing staff is called as soon as the resident seems to fall out of bed





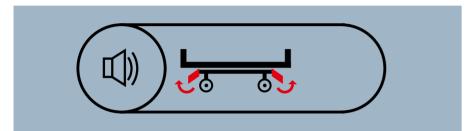
#### More safety = less freedom-depriving measures

- Faster response time in the event of falls
- Greater safety during night and weekend shifts

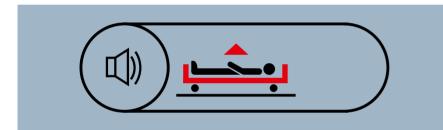
# Safety sensor

for the benefit of your residents

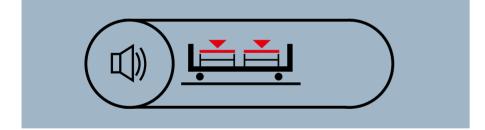
Three sensor assistants ensure a higher level of safety around the nursing home bed. A signal is sent by the integrated sensor system as soon as an activated assistant reports an unsafe situation involving the bed. This prevents accidents caused by falls.



The braking assistant signalizes if the brake is released and not locked again after nursing care or cleaning.



In addition to this, the bed height assistant notifies nursing staff if the selected bed height, e.g. the low position, is changed. This way, falls from dangerous heights are avoided.



The side guard assistant reports intended or unintended deactivation of the bed's side guards, and thus helps to increase safety for very active residents.

#### Monitoring states



inactive



active



nurse call



Care mode allows all light alarms to be deactivated.

This avoids the unintended activation of light alarms during daily routine nursing tasks. After 10 minutes it automatically switches back on.

## Self mobilization

thanks to Mobi-Lift®





#### Mobi-Lift®:

- Can be folded down
- Ergonomical
- Stable

# Immobility syndrome

The mobility of persons confined to bed is limited. If this restricted mobility is not countered, patients develop immobility syndrome.

#### RISKS:

- Risk of thrombosis
- Risk of bedsores
- Confusion
- Change in respiratory function
- Risk of constipation

(Source: Pflegeassistenz: Lehrbuch für Gesundheits- und Krankenpflegehilfe und Altenpflege, Thieme Verlag); (Nursing assistance: a textbook for health, nursing and geriatric care, published by Thieme)



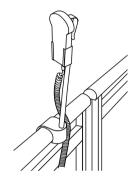
- When getting up, residents can pull out and use the mobilization aid integrated into the bed side by themselves
- Special feature: Mobi Lift® is equipped with an integrated function key for height adjustment of the bed
- The nursing staff is relieved of strain concerning both autonomous and supported mobilization

## Illuminated handset

for increased residential comfort and safety

Thanks to its clear structure and ergonomic design, the handset impresses at first glance. At night, the illuminated control panel and integrated LED light are useful for orientation and safe mobilization.

The GO safety button optimally follows the principle of zero fault tolerance. It is impossible to trigger a function by accidentally pressing a button.



The handset is easy to reach for both the resident and staff at all times (accessory handset holder, model No. 10-0419 and 10-0421).



Illuminated control panel

LED light

LED locking of thigh rest/backrest

Adjust thigh rest/

GO safety button

Adjust height/auto contour

LED locking of height adjustment

Switch the LED light on and off



#### Extended functions

- Easy and clear operation
- Better orientation during the night through the illuminated control panel
- Integrated LED light
- Separate legrest adjustment
- Plug & Play offers fast connection possibilities on both sides

# **Humidity assistant**

sensor mat with nurse call function

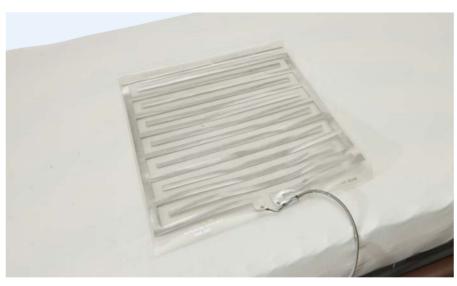
If humidity is detected in the bed, an alarm is transmitted to the nurse call system in the building. The humidity assistant immediately detects humidity in the bed and thus increases protection of the resident. A cotton humidity sensor mat, washable at 60°C (01), and a wipeable plastic humidity sensor mat (02) are available.



#### Causes of urinary incontinence

- 1. Disorder of the bladder muscles In some cases the, bladder muscles contract spontaneously (e.g. for psychological reasons). This forces urine out of the urethra.
- 2. Disorder of the urethral sphincter The signal that says "Please contract" is transmitted, however, this cannot be performed as the sphincter muscle is no longer strong enough. This is the most common cause for incontinence.
- 3. Disorder of the nervous system Signals coming from the brain are interrupted. The signal that the bladder is full is not consciously registered. The resident has no urge to urinate and the bladder overflows.

from 05/02/2014



02



# protection

A humidity sensor sheet/pad made of washable cotton or plastic detects humidity in the bed and protects the resident from maceration (especially in the case of incontinence). It provides an alternative to diapers and helps residents with light incontinence to improve their continence.

# $SafeFree^{\scriptsize{\circledR}} - \text{the patented side guard concept}$

Obtain freedom - in line with the Werdenfelser Weg\*

4 side guards



In lowered position, the divided side guards enable unhindered access to the resident for daily nursing tasks, changing wound dressings or bed sheets and linen. No need to take off and store interfering accessories like a middle post or fixed side guards

4-stage adjustment



No protection needed



Barrier-free

No middle post and no central gap protector



For safety at night, it is often sufficient to combine the low position of the bed with the first height level of the head-end side guard. This "soft protection" avoids unnecessary barriers and reduces the risk of falls sustainably. The side guards provide the resident with orientation without restriction.

Soft protection



Orientation

instead of freedom-depriving measures (FDM)



3

The 3/4 protection creates a deliberate bed egress gap at the foot end for the reduction of freedom-depriving measures (FDM), while at the same time maintaining a high safety standard. By adjusting the bed and side guard height, sentida can be adapted to residents of every size and height.

3/4 protection



Mobilization

with adaptation to resident height





The third height level is used to comprehensively secure the resident in bed. In the top position, the two parts of the side guard close together so tightly that they are just as safe as a continuous side guard. Stocking up on accessories for closing a central gap when using an abdominal belt for restraint is not necessary.

Full protection

for mattress heights from 12 to 18 cm



Safety

exceeding the requirements of the new standard IEC 60601-2-52



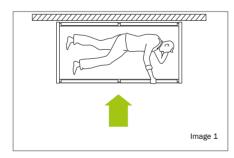
Mobilization with the right support angle according to the resident's height

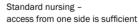


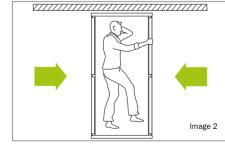


All-round access for nursing tasks with 4 divided side guards

- Flexible use of the bed for standard care, even in limited spaces (fig. 1)
- Flexible access from both sides of the bed in case of increased need for care (fig. 2)
- · Flexible use of the bed for bed egress on the left or right side to mobilize the resident
- · Avoiding follow-up costs for upgrading divided side guards





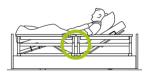


Increased need for care access from both sides needed



#### More safety due to smaller central gap\* < 60 mm

- Targeted compliance with the new standard IEC 60601-2-52
- · Safety in working position, i.e. also with raised backrest or legrest
- Safety without using an additional central gap protector as accessory for restraint with an abdominal belt in accordance with the BfArM\*\* (German Federal Institute for Drugs and Medical Devices)



# 3 bed lengths

without central gap > 318 mm and without middle post

All standard wissner-bosserhoff nursing home beds are equipped with an integrated bed extension. With the express bed extension (see image below/option), sentida - with divided side guards - can be adjusted flexibly and without tools to different bed lengths.

The requirements of the new standard IEC 60601-2-52 are complied with in each configuration.





Bed extension with express release (option)

# 200 cm Bed length of 200 cm: The divided side guards offer protection without a central gap > 318 mm\* and without a protector 220 cm Bed extension to 220 cm: is temporarily adjustable with divided side guards for sentida - complete protection through foot-end protector (accessory) is guaranteed 210 cm Alternative bed length of 210 cm: Protection with longer side guards at the foot end without accessories and without a gap > 318 mm\*\*

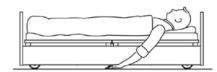
# 3-stop strategy

safe sleep, mobilization and care

The IVS intelligent verticalization system not only features a great height adjustment range of 27 to 80 cm, but due to its integrated control sensors also prevents collisions when setting the bed to the comfort seating position. This becomes an indispensable advantage, especially when combined with the bed extension to 220 cm.

27 cm

Fall prevention during sleeping phases



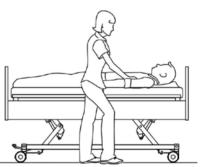
41 cm

Safe mobilization at chair height



80 cm

Optimal nursing position





#### IVS - intelligent verticalization system

- Comfortable adjustment range from 27 to 80 cm
- First automatic stop at 41 cm at chair height for bed egress
- · Collision protection when adjusting the bed from the low position and when using a bed extension



wissner-bosserhoff | sentida 7-i wissner-bosserhoff | sentida 7-i \*Central gap (gap between the divided side guards) < 60 mm \*\*gaps between the divided side guards as well as between the side guards at the head and foot end < 60 mm

# BiNetic patient surface

#### Patient surface ergonomics

The ergonomic division of the patient surface helps prevent pressure and therefore contributes to bedsore reduction. The dimensions of the 4-part patient surface of wissner-bosser-hoff nursing home beds are based on findings from anthropometrics, i.e. on the average size and height of a person. On the basis of professor Eigler's findings, it can be seen that the backrest area should be at least 80 cm long in

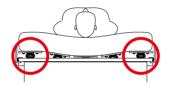
order to effectively support the cervical spine. An additional reduction of pressure can be reached with the BiNetic patient surface for patients with above-average height due to its integrated bed extension. The patient surface can be extended to 220 cm either temporarily and without tools using the express bed extension, or permanently with the bed extension set, preventing the legs from bumping on the foot end.



Anthropometry according to Prof. Eigler \*



BiNetic patient surface 200 cm (long backrest)



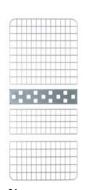
Comfort patient surface with 55 spring elements

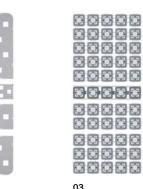
#### Patient surface modularity

You can choose between 3 different patient surface options:

- 01 The wire mesh patient surface Aero ensures good aeration.
- 02 The synthetic mats of the Easyclean patient surface are especially easy to clean.
- **03** The **comfort patient surface** with its 55 spring elements not only promotes bedding comfort but also makes a valuable contribution to bedsore prevention.

In general, the patient surface partitions can be easily removed and cleaned.







Detail comfort patient surface

### with double retraction

#### Effectiveness of double retraction confirmed

For years now, wissner-bosserhoff has been pursuing a practicable concept for reducing the risk of bedsores: The double retraction as a component of the BiNetic patient surface. With the double retraction, not only the backrest but also the legrest is located further apart from the seat section, so that

the surface is enlarged. In the meantime, there are results from pressure measurements which clearly show that there is less pressure with double retraction (image 1b) than with single retraction and significantly less pressure than with the standard patient surface (image 2b).

#### Double retraction



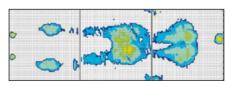
1a) BiNetic patient surface with double retraction

#### No retraction



2a) Standard patient surface

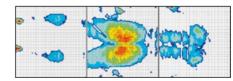
#### BiNetic patient surface



1b) with BiNetic patient surface with double retraction

Double retraction is not to be considered as the only means of bedsore prevention, it can however effectively support existing op-

#### Standard patient surface



2b) with standard patient surface

tions and, above all, it demonstrates that we should make use of all technical means at hand to improve bedsore prevention.

# 1.5

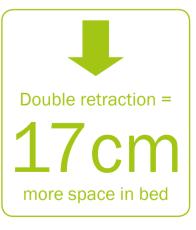
people suffer from bedsores: In Germany alone, there are an estimated 750.000 to 1.5 million bedsore patients. Immobile, ill and eldery people are affected particularly. The annual costs of treating bedsores in Germany amount to 1 to 4 billion euros. Due to the increasingly aging population and the increase in chronic diseases, the number of people treated for bedsores will keep rising. According to the "Gesundheitsbericht des Bundes" (German federal health report) (issue 12 on bedsores, December 2002), corresponding

half of these costs.

Source: www.deutsche-dekubitusliga.de/das-problei

preventive measures and

optimized therapy could cut



\*cf. Eigler, F.W.: "Arzt und Krankenhaus" (doctor and hospital) 7, 1989

wissner-bosserhoff | sentida 7-i

wissner-bosserhoff | sentida 7-i

wissner-bosserhoff | sentida 7-i

# 2 automatic positions

The automatic positions of sentida, adjustable at the push of a button, increase comfort when lying in bed and support bedsore prevention for the benefit of the resident while reducing the strain on nursing staff.

#### Automatic comfort seating

The automatic comfort seating brings the bed into a pre-selected seating position for watching TV and reading comfortably, for eating or communicating at eye level.

Mobilization using the lifter is effectively supported in this position. In addition, this position facilitates breathing and digestion. It trains spatial orientation and stimulates circulation for residents confined to bed. The double retraction provides additional relief of pressure in the sacral area.



#### Automatic positioning

The preset legs up position promotes decongestion with venous diseases and at the same time supports bedsore prevention. The 1/2 Fowler 30° position with knee lifting guarantees a reduced bedsore risk\* thanks to a favorable weight distribution in the sacral region, which is especially at risk of developing bedsores.





## 2 models to choose from

#### The cozy one



Movability At every bed height

Four 50 mm double castors

#### Castors

Completely covered by homely undercarriage



Braking capacity One pedal brake for each axle with 2-castor central braking system

Height adjustment 27-80 cm

#### The extra mobile one



At every bed height

100, 125 or 150 mm easy-roll castors or 125 mm double castors or design castors



Foot-end brake bar with 4-castor central braking system

27-80 cm with 100 mm easy-roll castor 29.5-82.5 cm with 125 mm easy-roll castor

with 125 mm double or design castors 28-81 cm

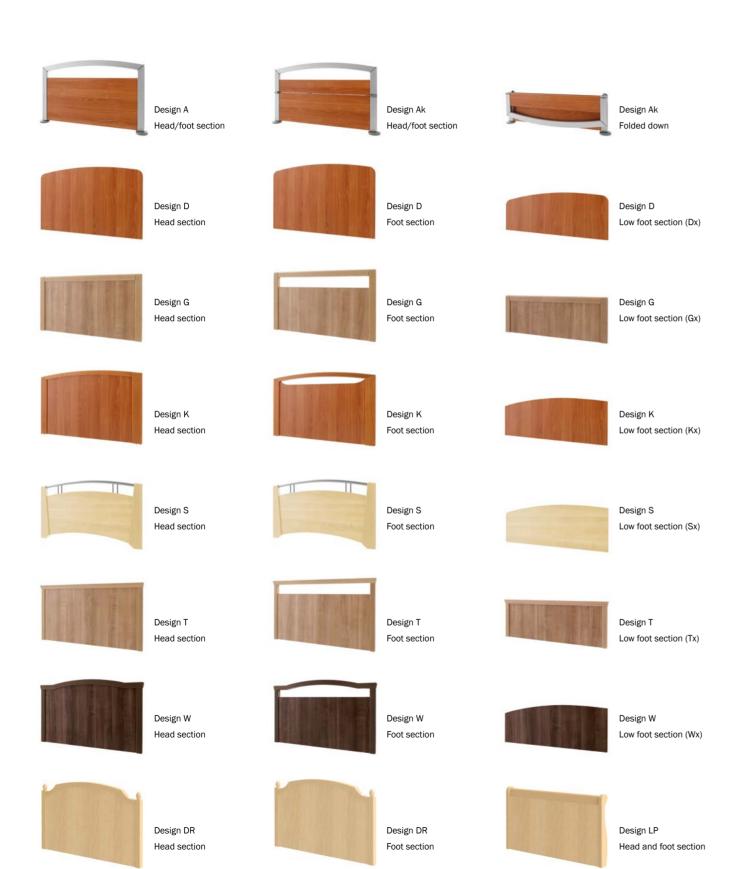
23

32-85 cm with 150 mm easy-roll castor

wissner-bosserhoff | sentida 7-i wissner-bosserhoff | sentida 7-i \*Compare study of Gent university at: www.decubitus.be

# Design | Head/foot sections

# Colors | Designs\*



























Lining in Cacao

Corpus maple Lining in Havana cherry

# Our certificates – your safety

protection certificate

wissner-bosserhoff voluntarily has its production processes and management regularly audited by the TÜV. The company is certified in accordance with the regulations of the standard DIN EN ISO 9001:2008 for quality management systems as well as DIN EN ISO 13485:2003+AC:2007 for the manufacture of medical devices.



wissner-bosserhoff | sentida 7-i







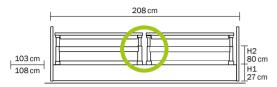
side guards



 ${\tt *Some \ designs \ available \ at \ extra \ charge \mid ** Matching \ furniture \ can \ also \ be \ found \ in \ the \ catalog \ "memoriana"}}$ 

# Furnishings and accessories

#### **Dimensions**



sentida 7-i with divided (10) side guards, without gaps Outer dimensions: L = 208 cm, W = 103/108 cm Mattress dimensions: L = 200 cm, W = 87 cm H1 27 cm (low position), H2 80 cm (highest position)

10-0697

sentida 7-i | The intelligent & cozy one

sentida 7-i | The intelligent & extra mobile one

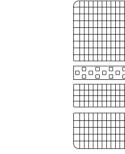
#### Patient surfaces





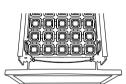


EasyClean



Standard | Aero

#### Bed extensions



Bed extension with express release (standard)



Permanent bed extension divided 10 side guard (optional)



10-0580 Protector for bed extension by 20 cm (optional)



Vertical wall stopper castors



castors, horizontal and vertical protection



Head-end cable connection with holder for wall mounting



Foot-end cable connection with holder at the foot section



Connection for humidity sensor mat

#### Accessories



50-0165 Urine bottle basket 50-0164 Urine bag holder (no picture) 10-0424

Accessory and handset holder for attachment to side panel



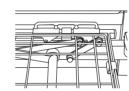
10-0534 Transport handle EasyMove



50-0206 Fall mat W 90 x L 200 cm, height approx. 4.5 cm



50-0174 Cushioning for divided side guards (10)



10-0563/10-0533/10-0521

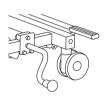
- Segufix holder
- for the thigh rest
- for the backrest - for the seat section



10-0719 compatible with all bed types



10-0707 Head-end wall spacers, short



10-0708 Side-mounted wall spacer, short



50-0583 Cotton humidity sensor mat; without cable



50-0624 Plastic humidity sensor mat; including cable



50-0623 Cable for cotton humidity sensor mat



02-000726 Funkempfänger nur für Funklösung



04-1508 Adapter cable with on/off switch and suitable plug for connection to the nurse call system (customer-specific) for cable and wireless version



04-1608 Adapter cable without on/off switch; with suitable plug for connection to the nurse call system (customer-specific) for cable and wireless version





Members of LINET Group

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