



GEMINI spin

viscoelastic foam cushion



GEMINI SPIN® VSC



Czech product by KURY.

High density viscoelastic memory foam

3D symmetrical protrusions breathable technology

Outlast® technology textile cover



KURY

 **GEMINI**
seating technology



WHAT IS THE SEATING CUSHION OF GEMINI SPIN?

The seating cushions of GEMINI SPIN (type VS and VSC) are designed as a medical aid to prevent the consequences of long-term sitting (e.g. on a wheelchair) in the first place, but primarily they prevent the creation of decubitus and pressure sores in the seating parts of the body. Using a unique construction technology and thanks to the materials applied, the cushions of GEMINI SPIN provide:

- ideal distribution of user's weight when sitting
- body temperature collection and its optimal regulation in the area of seating
- adapting to the shape of the body seating parts with absorption of body and clothes contour irregularities when sitting
- air flow in horizontal and vertical directions

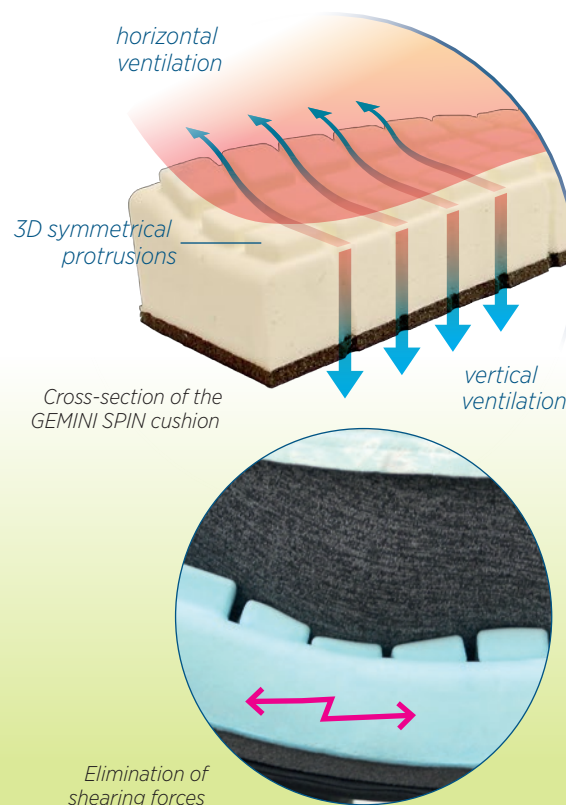
The seating cushions of GEMINI SPIN are manufactured in 2 profiles. The profile of GEMINI SPIN VS cushion is flat. The GEMINI SPIN VSC cushions have an anatomically contoured profile and enable a specific correction of the seating (abduction in the front part and a concave shape in the back part).

HOW DOES IT WORK?

First of all, the seating cushion of GEMINI SPIN creates the core (filling) made of visco-elastic foam with memory effect; the upper layer is made of a unique net of so called 3D symmetrical protrusions. Visco-elastic memory foam gradually softens after it is loaded by the user, and thanks to the influence of the human body pressure and temperature, the cushion shapes according to the proportions of the seating body parts. At the same time, thanks to the natural deformation and adaptation to the body contour, the 3D symmetrical protrusions improve the comfort of seating in the way that they **distribute the user's body weight in a larger area**, which ensures a reduced pressure in the critical spots. Between the individual protrusions, there is still the air gap ensuring that the air flows in the horizontal level. The 3D symmetrical protrusions also **eliminate the shearing forces** (the movements of the body in the horizontal direction - shuffling here and there), therefore, they minimize the chafing caused by the movement of the user on the seat, which prevents the negative effect of the pressure on the skin and subcutaneous tissues and their stress.

The bottom base of the cushion is created from a 5mm hardened perforated foam polyethylene (PE).

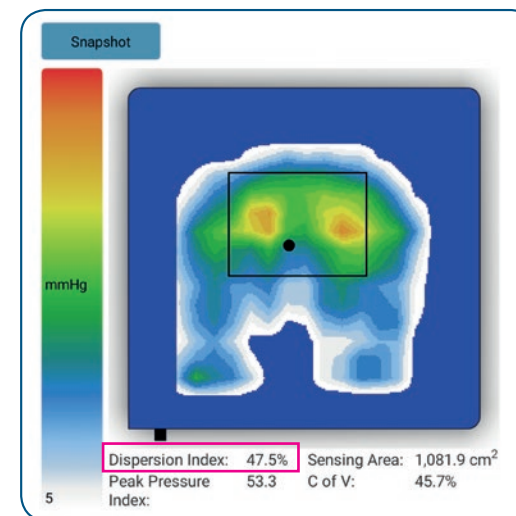
The filling of the cushion is **vertically perforated including the bottom PE base**, which made the vertical air flow possible.



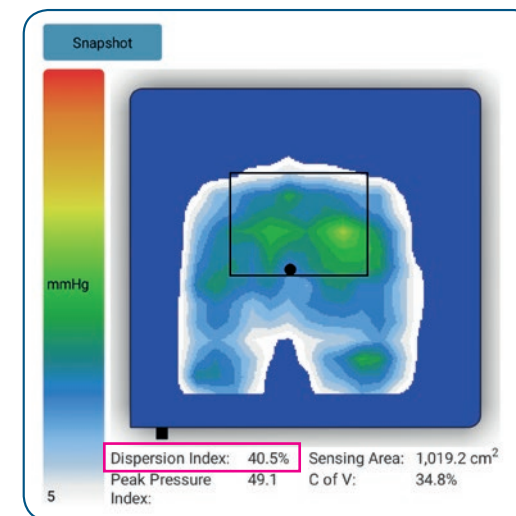
WHAT ARE THE RESULTS?

The comparison of outcomes from a special measurement, so called BODY PRESSURE MAPPING - measurement of the pressure distribution between human body and supporting spots, such as seats and cushions, mats, pillows, and backrests.

a standard cushion
visco-elastic foam



A GEMINI SPIN seating cushion
visco-elastic foam with protrusions and vertical perforation



Compared to a standard cushion from visco-elastic foam, the GEMINI SPIN cushion has a better pressure distribution of 15 %.*

The value of **Dispersion Index** is much better for the GEMINI SPIN type cushions with 3D protrusion technology than for common cushions from visco-elastic foam (Figure on the left)

* It is only the value of a particular single measurement.

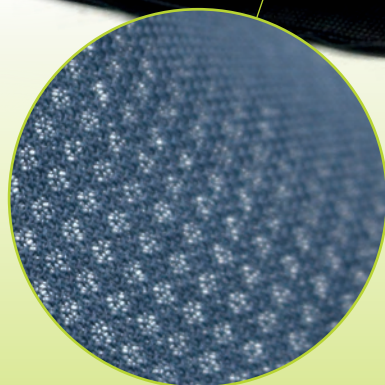
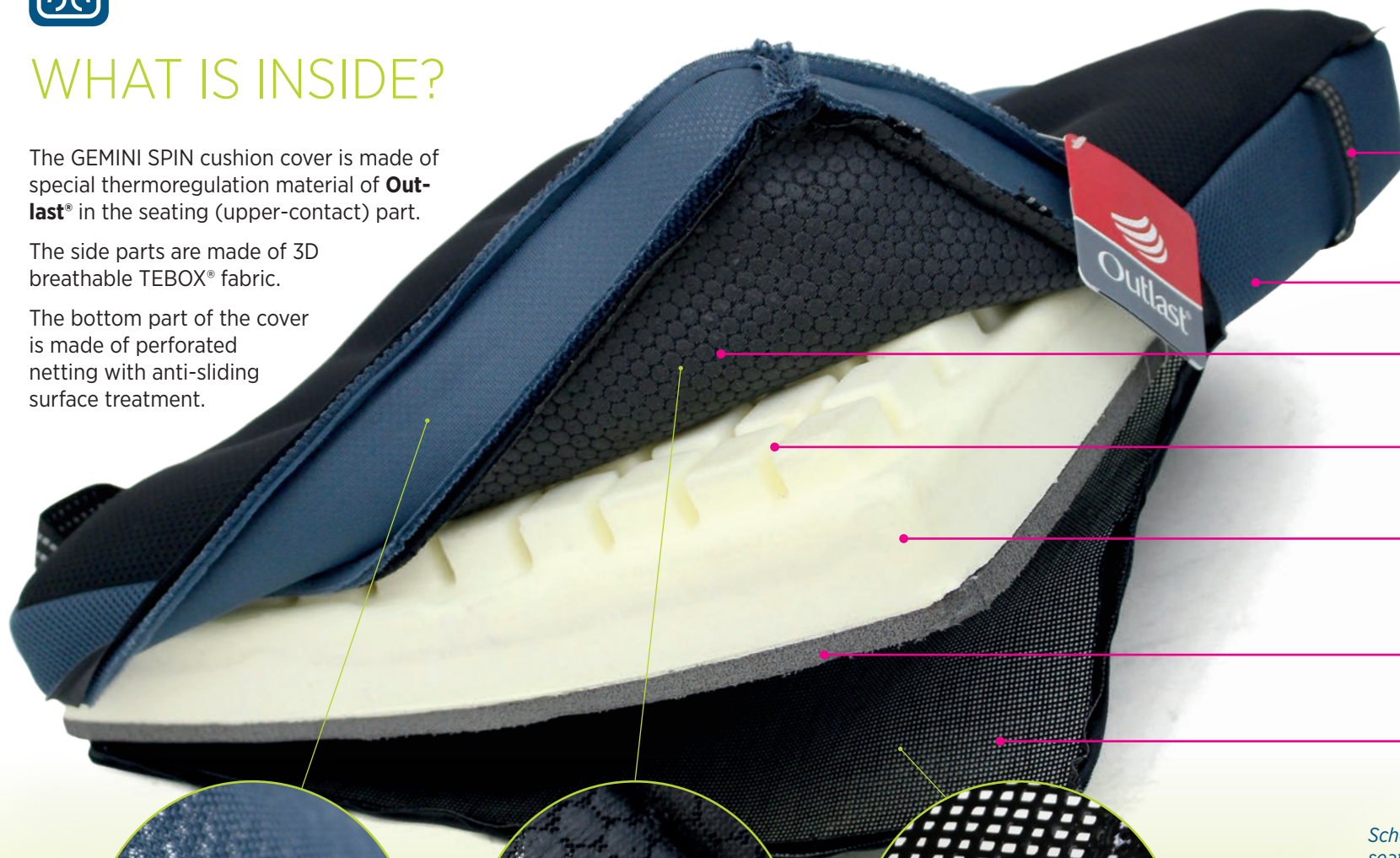


WHAT IS INSIDE?

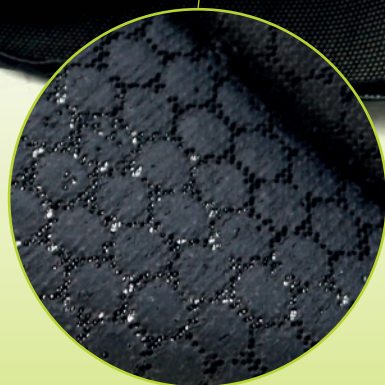
The GEMINI SPIN cushion cover is made of special thermoregulation material of **Outlast®** in the seating (upper-contact) part.

The side parts are made of 3D breathable **TEBOX®** fabric.

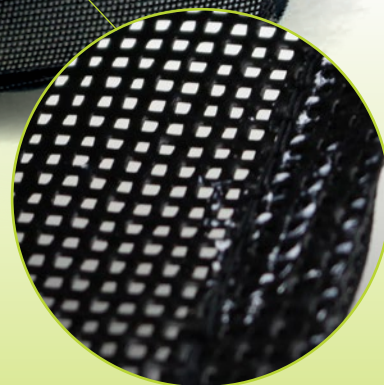
The bottom part of the cover is made of perforated netting with anti-sliding surface treatment.



Side cover
- 3D TEBOX® fabric



Upper (contact) part of cover
- Outlast® fabric



Bottom anti-sliding fabric
(breathable)

MAIN GRIP

- for easy cushion transport

HIGH-VISIBILITY LOOPS

- 4 high-visibility loops along the cushion perimeter for better gripping or lifting of a lying cushion

SIDE PARTS OF COVER

- 3D breathable **TEBOX®** fabric

UPPER (CONTACT) PART OF COVER

- Outlast® fabric

FUNCTIONAL LAYER OF CUSHION

- regular net of 3D symmetrical protrusions

CUSHION FILLING

- visco-elastic memory foam
(high-density foam of 80 kg/m²)

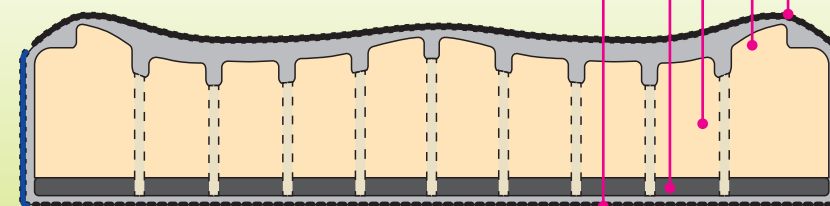
BOTTOM LAYER (CUSHION BASE)

- perforated foam polyethylene (PE)

BOTTOM COVER PART

- anti-sliding netting fabric

Schematic cross-section of GEMINI SPIN VSC seating cushion - front view



perforation ensuring vertical ventilation



WHY CAN YOU SEE THROUGH?



Vertical perforations together with applied air-breathable materials ensure real air flow through the cushion.

Real cross-section of GEMINI SPIN VSC seating cushion - side view





OUTLAST - WHAT IS IT?

Upper-contact (seating) part of GEMINI SPIN cushion cover is made of special thermoregulation material of Outlast®.

- Outlast® technology, originally developed for NASA, utilizes phase change materials (PCM) that absorb, store and release heat for optimal thermal comfort. Outlast® technology is comparable to ice in a drink; as it changes from solid to liquid, it absorbs heat and cools the drink, keeping that drink at the desired temperature for longer. Outlast® phase change materials work in the same way, but are microencapsulated to be permanently enclosed and protected in a polymer shell. We call microencapsulated phase change materials Thermocules™.
- This encapsulation process makes the Thermocules™ exceptionally durable for many applications. These Thermocules™ can be incorporated into fabrics and fibers and have the capacity to absorb, store and release excess heat. This gives any product containing Outlast® technology the ability to continually regulate skin's microclimate. As the skin gets hot, the heat is absorbed, and as it cools, that heat is released.

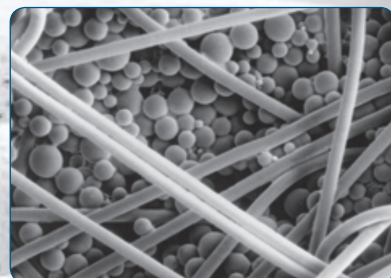


Outlast® technology is not wicking technology, which manages moisture by reacting to your sweat and pulling it away from the skin.

Outlast® technology will proactively manage heat while controlling the production of moisture before it begins.

Outlast® coated materials offer a higher capacity to store heat than any of other applications.

Outlast Thermocules™



Outlast® coated fabric material



Outlast® technology enhances textiles by providing the benefit of **proactive temperature regulation** that manages heat and moisture in many textiles. As a company committed to temperature regulation, Outlast can give you the technology to provide more comfortable solutions to everyday life. When you manage temperature, heat, and moisture your customers can feel „just right“.

...not too hot
...not too cold
...just right™



Registered trademark of the Space Foundation, an initiative of the aerospace industry and NASA. (Patented Outlast® Phase Change Technology is recognized by NASA as Certified Space Technology.™)

WHICH CUSHION TYPE IS SUITABLE?

The seating cushion is a medical aid designed to prevent the consequences of long-term sitting. It is very important to choose the correct type of the seating cushion, and it should be consulted with a professional in this branch (e.g. rehabilitation doctor, physio or ergotherapist, etc.). Part of the correct choice is also the assessment of patient's current state (weight, health conditions, body proportions) and their inclination to decubitus and pressure sore creation, or even the effort for the correction of their sitting position.

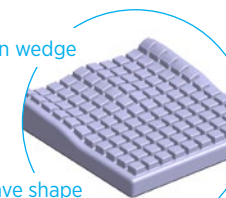
GEMINI SPIN seating cushions are available in 2 surface profiles:

GEMINI SPIN VSC



anatomically contoured seating profile

abduction wedge



concave shape of back part



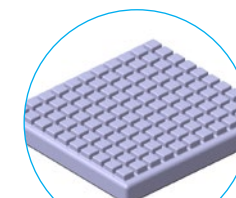
for wheelchair seat depth of (cm)
36 | 38 | 40 | 42 | 44

for wheelchair seat width of (cm)
38 | 40 | 42

GEMINI SPIN VS



flat profile of seating



for wheelchair seat depth of (cm)
28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44

for wheelchair seat width of (cm)
28 | 30 | 32 | 34 | 36 | 38 | 40 | 42

GEMINI SPIN seating cushions are offered in 4 types of visco-elastic memory foam firmnesses:

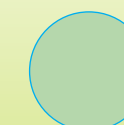
The choice of foam firmness corresponds to the weight of the patient and expected therapeutic effects of the seating cushion.



very soft



soft



medium



hard



viscoelastic foam cushion



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