

Evolution PSV[™]

The cushion of choice for wheelchair users with a high risk of tissue breakdown and symmetric positioning needs.

SEATING **SYSTEMS**

Evolution

Therapists recommend the Evolution PSV for individuals with motor and neurological dysfunction due to spinal-cord injury, stroke, multiple sclerosis, cerebral palsy, and traumatic brain injury. Therapists value the Evolution PSV's outstanding pressure distribution and postural support.

Users and caregivers value its low weight, comfort, and ease of use. No pumps or accessories. No kneading or manipulation.



VARILITE air-foam floatation combines the best characteristics of air and foam.

Air acts like a fluid and displaces under load. However, air does not provide any support unless it is confined. Foam, on the other hand, provides support and conformation, acting like a spring and compressing under load. For effective support, foam must be firm enough to prevent bottoming out. The firmer the foam, the more it pushes back on the object it is supporting.

Air in a VARILITE cushion supports the load, while foam keeps the air where it is needed, preserves the cushion shape, and prevents bottoming out. Because air supports most of the load, low-density soft foam can be used. This results in a lightweight cushion with less "push back" or interface pressure.

Air-foam floatation works because of immersion.

VARILITE air-foam cushions use multi-stiffness foams to provide support and conformation under different areas of the user. A valve releases air to immerse the user in the foam, and the different foams conform to the user's shape. As immersion increases, the load is distributed over more of the cushion's surface area and pressure points are reduced. Optimal pressure distribution is achieved when the load is distributed over the largest area.



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Pressure points are distributed over more

Sitting on a fully inflated Evolution PSV, the client simply opens the PSV to the appropriate position. When the PSV senses that enough air has been released, it automatically shuts off the flow. The client closes the PSV. Adjustment is simple and consistent.

Ease of use improves user compliance. A therapist can select the Evolution PSV with confidence, knowing that a client or caregiver can adjust the Evolution PSV easily for optimal pressure distribution. The first time. Every time.



VARILITE's PSV takes guesswork out of cushion adjustment and makes it automatic!

The PSV works by sensing the amount of internal cushion pressure. As air is released, internal pressure decreases and the user is immersed in the cushion for effective pressure distribution.

The PSV is marked with three pre-set positions, which provide the best range of immersion for most users. The therapist determines the PSV position that results in optimal pressure distribution for a client. (A therapist can mark a different position on the PSV if the user falls outside the pre-determined range.)

> Authorized EU Representative: Cascade Designs, Limited Dwyer Road, Midleton, Co. Cork Republic of Ireland



Evolution PSVTM

Superior pressure distribution, positioning stability, comfort and simplicity have made the Evolution our most popular wheelchair cushion. By adding VARILITE's innovative PSV (Pressure Setting Valve) we've made the Evolution PSV even better, taking the guesswork out of cushion adjustment.

VARILITE air-foam floatation makes the Evolution PSV ultralight, without compromising pressure distribution and support. Evolution PSV is E0192 approved.

1. Air-Foam Floatation

Functional areas of the cushion are created by three types of foam: soft foam for the decubitus-sensitive area of the ITs; medium foam for the thigh trough, pelvic bucketing and pre-ischial bar; and firm foam for the perimeter and the medial thigh separator.

Bonding Evolution foam to coated fabric makes the cushion hold air. A valve releases air to immerse the user in the foam, the foam conforms to the user, and the user's weight is distributed over the surface of the cushion.

Independent research has shown VARILITE air-foam floatation to be the #1 impact and vibration dampening technology (RESNA 2000).

2. Positioning Supports

Positioning supports improve stability, which is important for users with compromised sitting balance or who transfer frequently. Multi-stiffness foam provides support as the user is immersed in the cushion. Medial and lateral supports minimize internal and external lower extremity rotation. Pelvic bucketing and a pre-ischial ridge help maintain pelvic position, and thigh troughs promote a neutral femoral position.

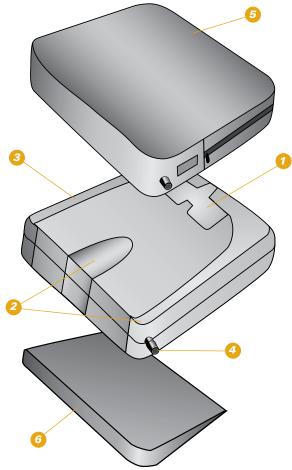
3. Four-way-stretch Fabric

Evolution foam is bonded to four-way-stretch knit fabric for maximum conformity during immersion. The fabric is puncture and water resistant.

4. Valve for Adjusting Air Volume

Evolution PSV uses VARILITE's revolutionary new, patented Pressure Setting Valve. Sitting on a fully inflated cushion, the user or caregiver opens the PSV to a pre-set position. When the PSV senses that the desired level of immersion has been reached, it stops releasing air. The user closes the PSV.

The Evolution also is available with a traditional twoway VARILITE valve. Sitting on a fully inflated cushion, the user opens the valve and releases air, closing the valve when sitting on approximately 1/2 inch (13 mm) of air and foam.



5. Cover

The Evolution is available with a mesh or incontinence cover with breathable four-way-stretch material. Reticulated foam inside promotes air exchange and improves pressure distribution. The underside is a rugged nonslip material with hook and loop for added security. Evolution cover meets ISO 7176-16 ignition resistance standards for upholstered wheelchair components. Machine washable.

6. Wedge

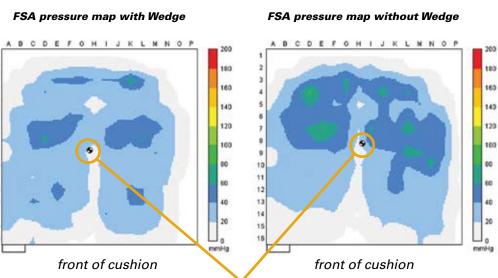
A modifiable closed-cell foam wedge is available as a no-charge option with each Evolution.

Why have three different foam firmnesses?

- Stiffer foam is used around the perimeter and at the medial thigh separator to provide posture support.
- Medium foam is used for the thigh trough to create a pre-ischial bar, allow for conformation and increase surface area contact.
- Soft foam in the sacralischial area provides pressure displacement at peak points.

Comparison Pressure Mapping

Our VARILITE Wedge reduces the seat-to-back angle, which increases the weight-bearing load on the back of the thighs and decreases the load on the buttocks. The 2 inch (5 cm) tapered wedge trims easily for custom fitting to meet individual needs.



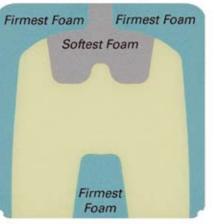
center of pressure

Evolution **PSV**[™] and Evolution[™] are available with the following options:

Cover:	Mesh or Incontinence
Wave™ positioning bases:	CPW (Contoured Positioning Wedge), LP
	or CPB (Contoured Positioning Base)

See price list for size availability HCPCS Code K0734/K0735





Front of Cushion



PB (Lateral Positioning Base)

