



Evolution and Evolution PSV™

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

Therapists recommend the Evolution 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'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.

The Evolution is available with a traditional valve or a Pressure Setting Valve (PSV^{TM})



Evolution and Evolution PSV™

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 even better, taking the guesswork out of cushion adjustment.

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

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 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 No1 impact and vibration dampening technology (RESNA 2000 see inside back cover).

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.

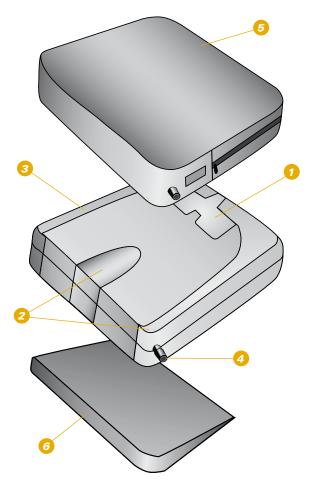
3. Two-way-stretch Fabric

Evolution foam is bonded to two-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 Pressure Setting Valve (patent pending). 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 is available as an alternative with a traditional two-way *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, or when two thirds of the air has been released.



5. Cover

The Evolution is available with a mesh or incontinence cover with breathable two-way-stretch material. Reticulated foam underneath promotes air and water vapour exchange and improves pressure distribution. The bottom of the cushion has 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 supplied with each standard Evolution for improved pressure distribution (see pp36 and 38).

Evolution and Evolution PSV

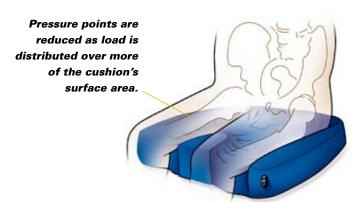
VARILITE air-foam floatation combines the best characteristics of air and foam.

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.





VARILITE's PSV (Pressure Setting Valve) takes guesswork out of cushion adjustment and makes it automatic!

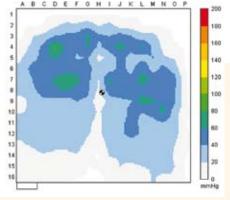
The PSV works by sensing the amount of internal cushion pressure. As air is released, internal pressure decreases and the user is immersed in the cushion for effective pressure distribution.

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.)

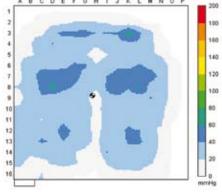
Sitting on a fully inflated Evolution PSV, the client simply opens the PSV to the appropriate position. When the PSV senses that enough air has been released, it automatically shuts off the flow. The client closes the PSV. Adjustment is simple and consistent.

As a 'rule of thumb' the PSV valve setting is set to 1 for a person with a bony backside, and 3 for a well covered rear.

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.



FSA pressure map without Wedge



FSA pressure map with Wedge

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.

Evolution™ £285+VAT (includes cushion, cover and wedge)

	12 x 14	14 x 14	14 x 16	14 x 18	14 x 20	15 x 15	15 x 17	16 x 14	16 x 16
	(30 x 35 cm)	(35 x 35 cm)	(35 x 40 cm)	(35 x 45 cm)	(35 x 50 cm)	(38 x 38 cm)	(38 x 43 cm)	(40 x 35 cm)	(40 x 40 cm)
With Mesh Cover	72410	74410	74610	74810	74010	75510	75710	76410	76610
With Incontinence Cover	72420	74420	74620	74820	74020	75520	75720	76420	76620
	16 x 18 (40 x 45 cm)	16 x 20 (40 x 50 cm)	17 x 17 (43 x 43 cm)	18 x 16 (45 x 40 cm)	18 x 18 (45 x 45 cm)	18 x 20 (45 x 50 cm)	20 x 16 (50 x 40 cm)	20 x 18 (50 x 45 cm)	20 x 20 (50 x 50 cm)
With Mesh Cover	76810	76010	77710	78610	78810	78010	70610	70810	70010
With Incontinence Cover	76820	76020	77720	78620	78820	78020	70620	70820	70020

	22 x 18	22 x 20	24 x 18	24 x 20
	(55 x 45 cm)	(55 x 50 cm)	(60 x 45 cm)	(60 x 50 cm
With Mesh Cover	7281B	7201B	7481B	7401B
With Incontinence Cover	7282B	7202B	7482B	7402B

Evolution PSV™ £285+VAT (includes cushion, cover, and wedge)

	12 x 14	14 x 14	14 x 16	14 x 18	14 x 20	15 x 15	15 x 17	16 x 14	16 x 16
	(30 x 35 cm)	(35 x 45 cm)	(35 x 40 cm)	(35 x 45 cm)	(35 x 50 cm)	(38 x 38 cm)	(38 x 43 cm)	(40 x 35 cm)	(40 x 40 cm)
With Mesh Cover	72415	74415	74615	74816	74016	75515	75715	76415	76615
With Incontinence Cover	72425	74425	74625	74826	74026	75525	75725	76425	76625
	16 x 18	16 x 20	17 x 17	18 x 16	18 x 18	18 x 20	20 x 16	20 x 18	20 x 20
	(40 x 45 cm)	(40 x 50 cm)	(43 x 43 cm)	(45 x 40 cm)	(45 x 45 cm)	(45 x 50 cm)	(50 x 40 cm)	(50 x 45 cm)	(50 x 50 cm)
With Mesh Cover	76815	76015	77715	78615	78815	78015	70615	70815	70015
With Incontinence Cover	76825	76025	77725	78625	78825	78025	70625	70825	70025

Bariatric sizes £310+VAT

	22 x 18	22 x 20	24 x 18	24 x 20
	(55 x 45 cm)	(55 x 50 cm)	(60 x 45 cm)	(60 x 50 cm)
With Mesh Cover	72815	72015	74815	74015
With Incontinence Cover	72825	72025	74825	74025

Evolution and Evolution PSV™, Evolution Wave and Evolution PSV Wave Spare Covers £95+VAT

	12 x 14 (30 x 35 cm)	14 x 14 (35 x 35 cm)	14 x 16 (35 x 40 cm)	14 x 18 (35 x 45 cm)	14 x 20 (35 x 50 cm)	15 x 15 (38 x 38 cm)	15 x 17 (38 x 43 cm)	16 x 14 (40 x 35 cm)	16 x 16 (40 x 40 cm)
Mesh	(22.1.22.21)	(2211222111)	(221112	(22.11.12.21.1)	(22.1.22.2,	(2211222111,	(00.11.10.01.1,	(1011000111,	(,
Standard and CPW Wave	04623	04643	04645	04681	04682	04683	04684	04689	04665
LPB and CPB Wave Incontinence	05700	05701	05702	05735	05736	05737	05738	05739	05703
Standard and CPW Wave	04624	04644	04646	04690	04691	04692	04695	04696	04666
LPB and CPB Wave	05717	05718	05719	05740	05741	05742	05743	05720	04665 05703 04666 05720 20 x 20 (50 x 50 cm) 04599
	16 x 18 (40 x 45 cm)	16 x 20 (40 x 50 cm)	17 x 17 (43 x 43 cm)	18 x 16 (45 x 40 cm)	18 x 18 (45 x 45cm)	18 x 20 (45 x 50cm)	20 x 16 (50 x 40cm)	20 x 18 (50 x 45cm)	
Mesh									
Mesh Standard and CPW Wave									(50 x 50 cm)
	(40 x 45 cm)	(40 x 50 cm)	(43 x 43 cm)	(45 x 40 cm)	(45 x 45cm)	(45 x 50cm)	(50 x 40cm)	(50 x 45cm)	(50 x 50 cm)
Standard and CPW Wave LPB and CPB Wave	(40 x 45 cm) 04667	(40 x 50 cm) 04601	(43 x 43 cm) 04640	(45 x 40 cm) 04685	(45 x 45cm) 04687	(45 x 50cm) 04679	(50 x 40cm) 04605	(50 x 45cm) 04607	(50 x 50 cm) 04599

Bariatric Sizes £99 + VAT

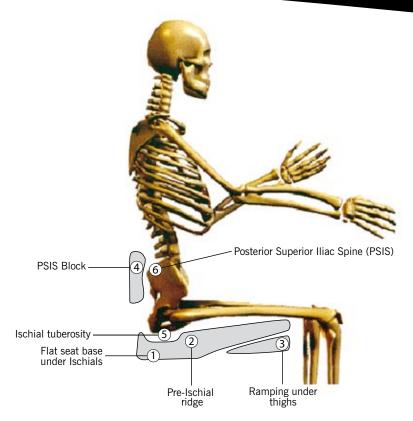
	22 x 18 (55 x 45 cm)	22 x 20 (55 x 50 cm)	24 x 18 (60 x 45 cm)	24 x 20 (60 x 50 cm)
Mesh	(,	(22.1.22.2,	(221112	(00.0000000)
Standard and CPW Wave	04620	04622	04626	04628
LPB and CPB Wave	05713	05714	05715	05716
Incontinence				
Standard and CPW Wave	04621	04625	04627	04629
LPB & CPB Wave	05730	05731	05732	05733

SEATING SYSTEMS



Meridian[™] and Evolution[™] Wave[™]

Adjustable Air-Foam Floatation skin protection cushions with a solid positioning base — available in three styles.



The standard Meridian and Evolution range of cushions provides:

Flat seat base (1) under ischials (5) which encourages neutral pelvis and lordotic spine (cf an angled base which encourages posterior tilt and balancing kyphotic spine).

Pre-ischial ridge (2) reduces risk of pelvis sliding forward and rotating into pelvic tilt.

Ramp under thighs (3) takes pressure away from boney prominences and under safer weight bearing tissues (for pressure maps see p36).

A PSIS block (4) behind the pelvis will work with the pre-ischial ridge, and appropriately positioned postural support device (belt) across the thighs, to control pelvic posterior tilt.

The Meridian™ and Evolution™ Wave™

With our Wave Series, a family of contoured bases for positioning support, clinicians can now combine Meridian, Evolution, and Evolution PSV™ adjustable Air-Foam Floatation skin protection cushions with a solid 'enhanced positioning' base.

Three different Wave designs are available: CPW (Contoured Positioning Wedge), LPB (Lateral Positioning Base), or CPB (Contoured Positioning Base).

These bases enhance the Meridian's and Evolution's natural positioning benefits in the sagittal (anterior - posterior) plane and provide further lateral and medial positioning support (as viewed in the frontal plane) for both the pelvis and the legs, at the same time permitting greater envelopment of soft tissues, and thereby providing wider pressure distribution away from the bony prominences, such as the ischial tuberosities (see pp40-41).

Meridian and Evolution Wave



- lateral thigh support to control thigh abduction
- medial thigh support to control thigh adduction
- Posterior pelvic support to offload pressure from ischials
- lateral pelvic support to maintain pelvis in centre of seat
- lateral thigh support to control thigh abduction
- solid base of support for postural stability
- lateral thigh support to control thigh abduction
- medial thigh support to control thigh adduction
- solid base of support for postural stability

VARILITE Wave Positioning Support Comparison Chart

CPW

	Lateral Pelvic Support	Posterior Pelvic Support	Lateral Thigh Support	Medial Thigh Support	Firm Base of Support
CPW (Contoured Positioning Wedge)					
LPB (Lateral Positioning Base)					
CPB (Contoured Positioning Base)					

Each Wave positioning support fits securely beneath the Meridian or Evolution cushion and inside the tailored Meridian or Evolution cover. Further adjustments can be made using Cheat Sheets and or cut aways (see examples in ProForm NX section pp26, 28-29).

Meridian, Evolution, and Evolution PSV Wave Bases (for Spare Covers see p37)

	12 x 14	14 x 14	14 x 16	14x18	14 x 20	15 x 15	15 x 17	16 x 14	16 x 16	16 x 18	16 x 20	
	(30 x 35 cm)	(35 x 35 cm)	(35 x 40 cm)	(35 x 45cm)	(35 x 50cm)	(38 x 38cm)	(38 x 43cm)	(40 x 35cm)	(40 x 40 cm)	(40 x 45 cm)	(40 x 50 cm)	Price*
CPW	05410	05411	05412	05400	05401	05402	05403	05404	05413	05414	05415	£7
LPB	05427	05428	05429	05405	05406	05407	05408	05409	05430	05431	05432	£11
СРВ	05444	05445	05446	05461	05462	05463	05464	05465	05447	05448	05449	£11
	17 x 17	18 x 16	18 x18	18 x 20	20 x 16	20 x 18	20 x 20					
	(42.5 x 42.5 cm	n)(45 x 40 cm)	(45 x 45 cm)	(45 x 50 cm)	(50 x 40 cm)	(50 x 45 cm)	(50 x 50 cm)	Price*				
CPW	05416	05417	05418	05419	05420	05421	05422	£70				
LPB	05433	05434	05435	05436	05437	05438	05439	£110				
СРВ	05450	05451	05452	05453	05454	05455	05456	£110				
	22 x 18	22 x 20	24 x 18	24 x 20								
	(55 x 45 cm)	(55 x 50 cm)	(60 x 45 cm)	(60 x 50 cm)	Price*							
CPW	05423	05424	05425	05426	£85							
LPB	05440	05441	05442	05443	£125							
СРВ	05457	05458	05459	05460	£125							

Meridian a

Each Wave Design Enhanc

Meridian and Evolution Wave CPW (Contoured Positioning Wedge)

Meridian and Evolution Wave CPW provides exceptional positioning of the lower extremities for enhanced sitting posture.



1. Wave Contoured Positioning Wedge

Lateral thigh supports position the lower extremities and control abduction of the thighs. Medial thigh support provides the correct amount of abduction and controls adduction of the thighs. The Wave CPW increases the weight-bearing load on the lower surface of the thighs and decreases the load on the buttocks, without changing the seat-to-back angle. The closed-cell foam CPW will not absorb fluid and is resistant to bacteria. The Wave CPW can also be used in conjunction with a normal Evolution wedge for increased thigh support.

- 2. Air-Foam Floatation Cushion
- 3. Cover

Meridian and Evolution Wave LPB (Lateral Positioning Base)

Meridian and Evolution Wave LPB provides a solid base of support and a high degree of pelvic and lower extremity lateral positioning.



1. Wave Lateral Positioning Base

Posterior pelvic supports help to keep the pelvis positioned in the anterior posterior line, and transfers pressure from the ischial tuberosities to gluteal tissues. Lateral pelvic supports, located under the trochanters, provide lateral stability that maintains the pelvis in the centre of the seat. Lateral thigh supports position the lower extremities and control abduction of the thighs. The Wave LPB provides a firm foundation for postural stability and discourages chair upholstery from slinging. The closed-cell foam LPB will not absorb fluid and is resistant to bacteria. The Wave LPB can also be used in conjunction with a normal Evolution wedge for increased thigh support.

- 2. Air-Foam Floatation Cushion
- 3. Cover

Meridian and Evolution Wave CPB (Contoured Positioning Base)

Meridian and Evolution Wave CPB provides a solid base of support and a high degree of pelvic and lower extremity lateral and medial positioning.



1. Wave Contoured Positioning Base

Posterior pelvic supports help to keep the pelvis positioned in the anterior posterior line, and transfers pressure from the ischial tuberosities to gluteal tissues. Lateral pelvic supports, located under the trochanters, provide lateral stability that maintain the pelvis in the centre of the seat. Lateral thigh supports position the lower extremities and control abduction of the thighs. Medial thigh support provides the correct amount of abduction and controls adduction of the thighs. The Wave CPB provides a firm foundation for postural stability and discourages chair upholstery from slinging. The closed-cell foam CPB will not absorb fluid and is resistant to bacteria. The Wave CPB can also be used in conjunction with a normal Evolution wedge for increased thigh support.

- 2. Air-Foam Floatation Cushion
- 3. Cover

and Evolution[™] Wave[™] Series

nces the Multi-Stiffness Foam of the Meridian and Evolution

