



Anti-decubitus systems for decubitus prophylaxis and therapy

It started with decubiflow® 100 in the late 1980s. The company founder, Kamil Sarisen, developed the small-cell alternating pressure system which quickly established itself on the German medical appliances market. The product range has been gradually extended and adapted to current research results and market requirements.

As an internationally operating company, aks GmbH today provides an extensive range of small-cell to high-cell alternating pressure systems for the corresponding decubitus grade. And this includes every conceivable variant of anti-decubitus mattresses made of foam: from the low-cost cube mattress to the highend version with viscoelastic foams.

Furthermore, the demand for solutions for adipose patients is satisfied with the aks samson and the aks HD 85 in the aks bariatric range.

The aks decu side lateral positioning system is particularly suitable for patients in pain. You can rely on a certified manufacturer with know-how and absolute dealer loyalty.

Useful information

EPUAP

Decubitus grades are currently stated with the note "according to EPUAP".

EPUAP (European Pressure Ulcer Advisory Panel) is the European advisory body for decubitus. Medical specialists and scientists further develop decubitus research here.

Grade I according to EPUAP

Non-blanchable, localised reddening of intact skin, usually above a bony projection. Fading may not be visible for darkly pigmented skin; however, the colour can be different from the surrounding skin. The area may be tender, hardened, soft, warmer or colder than the surrounding tissue. These symptoms can indicate a (decubitus) risk.

Grade II according to EPUAP

Partial destruction of the skin (as far as the dermis/sciera), which appears as a flat, open ulcer with a red- to pink-coloured wound bed without covering. It can also present itself as an intact or open/ruptured, serum-filled blister. It manifests itself as shiny or dry, flat ulcer without necrotic tissue or bruising*. This category should not be used to describe skin tears (tissue ruptures), skin damage caused by bandages or plasters, lesions due to humidity, macerations or grazes.

Grade III according to EPUAP

Destruction of all skin layers. Subcutaneous fat can be visible; however, no bones, muscles or tendons. There can be a covering; however, this does not conceal the depth of the tissue damage. Tunnels or undermining can be present. The depth of the decubitus of Category/ Stage/Grade III varies according to anatomical localisation. The bridge of the nose, the ear, the back of the head and the auditory ossicle have no subcutaneous tissue; therefore, Category III wounds there can also be very superficial. In contrast, extremely deep Category III wounds may occur at particularly adipose parts of the body. Bones and tendons are not visible or palpable.

Grade IV according to EPUAP

Total tissue loss with exposed bones, tendons or muscles. Covering and scab can be present. Tunnels or undermining are often present. The depth of the Category IV decubitus depends on the anatomical localisation. The bridge of the nose, the ear, the back of the head and the bone prominence on the ankle have no subcutaneous tissue; therefore, wounds there may also be very superficial. Category IV wounds can spread into muscles or supporting structures (fascia, tendons or joint capsules) and can easily cause osteomyelitis or osteitis in doing so. Bones and tendons are visible or palpable.

Source: Decubitus Prevention guideline, prepared by EPUAP and NPUAP

^{*} Bruises indicate deep tissue damage.

Evaluation of the decubitus risk according to Prof. Dr. Barbara Braden

	1 point	2 points	3 points	4 points		
Sensory per- ception Ability to per- ceive and react adequately to positional and artificial stimuli, e.g. pressure	Completely failed No reaction to pain stimuli (also no groaning, twitching, gripping) due to reduced (neural) perception as far as unconsciousness or sedation OR discomfort/ pain is not perceived over most of the body.	Severely limited Reaction only to strong pain stimuli; discomfort can only be communicated via twitching or restlessness OR sensory perception severely reduced. Discomfort/pain is not perceived over half of the body.	Slightly limited Reaction to stimuli, discomfort and the requirement for change of position cannot always be imparted OR sensory perception is reduced. Discomfort/pain is not perceived in one or two extremities.	Not limited Reaction to stimuli, discomfort OR pain are perceived and can be named.		
Moisture Extent to which the skin is exposed to moisture	Constantly moist The skin is constantly moist due to perspiration, urine etc. Wetness is discovered for every movement.	Often moist Skin is often moist, but not always. Bed linen must be changed at least once per shift.	Sometimes moist The skin is moist sometimes; the bed linen must also be changed once per day.	Seldom moist The skin is usually dry. Change of bed linen only routinely.		
Activity Degree of physi- cal activity	Confined to bed The patient cannot leave the bed.	Sits up Walking		Regular walking Leaves the room at least twice a day. Walks up and down in the room approx. every two hours during the day.		
Mobility Ability to maintain and change the body position	Complete immobility Even the smallest position change of the body or extremities requires assistance.	Severely limited A position change of the body or extremities is sometimes performed independently but not regularly.	Slightly limited Slight position changes of the body or extremities are performed regularly and independently.	Not limited Position changes are performed regularly and without assistance.		
Nutrition General nutri- tion	Poor nutrition Never finishes the portion. Seldom eats more than 1/3 of each meal. Eats two or less portions containing protein (meat or dairy products) per day. Drinks too little. Drinks no nutri- tional supplement OR does not take any food orally OR only clear liquids or IV substitution more than five days.	Probably insufficient nutrition Seldom finishes complete meal, usually only half. The protein supply is made only via three daily portions (dairy products, meat). Sometimes nutrition supplements are taken OR receives less than the required amount of liquid or special nutrition.	Sufficient nutrition Eats more than half of most meals with a total of four portions containing protein (dairy products, meat) daily. Declines a meal occasionally; however, takes nutrition supplement OR is fed via a tube and thus receives the most required nutrients.	Good nutrition Eats all meals; does not refuse any. Normally eats four portions containing protein (dairy products, meat), sometimes also a snack. Does not need any nutrition supplement.		
Friction and shear forces	Problem Moderate to significant support required for each position change. Raising (e.g. also in the head end direction) not possible without dragging over the underlay. Slips down regularly in the bed/chair and must be returned to the original position. Spasticity, contractions and restlessness cause almost constant friction.	Potential problem Moves a little and seldom needs assistance. The skin chafes less intensively during the movement on the underlay (the patient can raise himself a little). Remains relatively long in the optimum position in the bed (armchair/wheel- chair/reclining chair). Only slides down rarely.	No identifiable problem Moves independently and without assistance in bed and chair. Muscular force is sufficient to raise himself without friction. Maintains optimum position in bed or chair by himself.	Evaluation Add the points of the patient and evaluate the result according to the risk level from "no risk" to "very high risk". > 18 points No risk 18-15 points Low risk 14-12 points Medium risk 11-9 points High risk < 9 points Very high risk		

Source: BVA



saniflow® p

Small-cell anti-decubitus alternating pressure system with individual pressure adjustment

The advantages of the saniflow® p:

- Overlay mattress system
- Easy operation
- Continuous pressure adjustment according to the patient weight
- Use with a standard foam mattress (minimum height 10 cm)
- Cycle: 6 minutes
- Alternating two-chamber system for intermittent pressure relief
- 124 honeycombs (cells)
- Mains power switch with indicator lamp
- Cell height 6.35 cm
- 2 fold-over ends at the head and foot sides of the mattress for fastening to a foam underlay or foam mattress
- flow air® mattress with ventilation perforations
- Suitable for re-use
- Warranty: pump unit 2 years; mattress 6 months

Patient weight 45-120 kg Decubitus grade prophylaxis

Order numbers

saniflow® p – 22110 Replacement pump unit – 22111 Replacement mattress – 02101 Cover, aks inkocover – 04104



saniflow® II

Large-cell, standard class anti-decubitus alternating pressure system

The standard class already starts with a large-cell mattress overlay system which provides the patient with pleasant relief using alternating pressure.

The advantages of the saniflow® II:

- Overlay mattress system
- Easy operation: continuously variable pressure setting according to the patient weight, stable folding metal spreader bar for attachment to the bed, simple filter replacement
- Visual display for reaching the required pressure
- Visual alarm in the event of pressure loss (e.g. leak)
- Highly elastic foam strips on the rear side and soft feet for noise insulation
- Cycle time 12 minutes
- Alternating two-chamber system for intermittent pressure relief
- 17 cells, can be replaced individually
- · Cell height 13 cm
- Mattress cover made of nylon/PVC fastened to the mattress overlay at the head and foot ends with press studs, water-impermeable
- With fold-over ends for fastening to the foam mattress underlay

- Fast ventilation of the mattress using end plugs with pull ring
- Secure snap-in connection of the hoses on the pump unit
- Warranty: 2 years

Patient weight 40-120 kg Decubitus grade up to and incl. Grade II (according to EPUAP)

Order numbers

saniflow® II – 21230 Replacement pump unit – 21231 Replacement mattress incl. cover – 21232



saniflow® II S

In static mode, patients in pain can be supported gently.

Advantages; see description of the saniflow® II

Additional functions of the saniflow® II S

- Switch for static mode
- Visual and audible alarms in the event of pressure loss (e.g. leak)
- Switch for resetting the audible alarm

Patient weight 40-120 kg Decubitus grade up to and incl. Grade II (according to EPUAP)

Order numbers

saniflow® II S – 21239 Replacement pump unit – 21240 Replacement mattress incl. cover – 21232



saniflow® III

Large-cell, medium standard class anti-decubitus alternating pressure system with static function

This further developed version enables persons with up to 130 kg body weight and up to and including Decubitus Grade III according to EPUAP to use the advantages of a medium standard class alternating pressure system.

The advantages of the saniflow® III:

- Overlay mattress system
- With static function and thus suitable for patients in pain
- Easy operation: continuously variable pressure setting according to the patient weight; simple filter replacement
- Visual display for reaching the required pressure
- Visual and audible alarms in the event of pressure loss (e.g. leak)
- Switch for resetting the audible alarm
- Highly elastic foam strips on the rear side and soft feet for noise insulation
- Cycle time 12 minutes
- Alternating two-chamber system for intermittent pressure relief
- 17 cells, can be replaced individually

- Cell height 13 cm
- Mattress cover made of nylon/PVC fastened to the mattress with all-round zip; water-impermeable
- With diagonal rubber strips routed over the corners on the mattress underside for fixing to the foam mattress underlay
- Fast ventilation of the mattress using end plugs with pull ring
- Secure snap-in connection of the hoses on the pump unit
- Warranty: 2 years

Patient weight 40-130 kg Decubitus grade up to and incl. Grade III (according to EPUAP)

Order numbers

saniflow® III – 21233 Replacement pump unit – 21234 Replacement mattress incl. cover – 21235



saniflow® IV

Large-cell enhanced standard class anti-decubitus alternating pressure system with static and care function

As a mattress replacement system with a sophisticated range of functions, saniflow® IV meets the high requirements of the enhanced standard. Patients with decubitus up to and including Grade IV according to EPUAP receive the best standard care for decubitus therapy.

The advantages of the saniflow® IV:

- Mattress replacement system
- Care function enables a maximum filled static support surface with a time limit of 30 minutes and automatic changeover to the previously selected alternating pressure or static operating mode and the selected pressure level.
- 8-stage pressure setting according to the patient weight
- Visual display for reaching the required pressure
- Visual and audible alarms in the event of pressure loss (e.g. leak)
- Switch for resetting the audible alarm
- Cycle time can be set from 10-25 minutes
- Mattress replacement system with removable foam underlay (4 cm)
- Alternating two-chamber system for intermittent pressure relief
- 17 cells, can be replaced individually

- Cell height 13 cm
- Mattress cover made of nylon/PVC fastened to the mattress with all-round zip; water-impermeable
- With diagonal rubber strips routed over the corners on the mattress underside for fixing to the horizontal area
- Fast ventilation of the mattress using end plugs with pull ring
- Secure snap-in connection of the hoses on the pump unit
- · Warranty: 2 years

Patient weight 40-130 kg Decubitus grade up to and incl. Grade IV (according to EPUAP)

Order numbers

saniflow® IV – 21236 Replacement pump unit – 21237 Replacement mattress incl. cover – 21238

Technical Data Alternating pressure systems

Product	Pump unit			Mattress overlay/mattress replacement system				
	W x H x D (incl. feet)	Weight	Power consumption	Support	Replace- ment system	HxWxL	Weight	Cells/honeycombs *(static)
saniflow® p	11 x 23 x 8.1 cm	1.1 kg	12 W	Yes		6.35 x 90 x 192 cm	2.3 kg	124 honeycombs
Replacement mattress flow air®								
saniflow® II	28 x 20.5 x 10 cm	2.3 kg	12 W	Yes		13 x 90 x 200 cm	4.9 kg	17
Replacement mattress								
Replacement pump unit								
saniflow® II S	28 x 20.5 x 10 cm	2.3 kg	12 W	Yes		13 x 90 x 200 cm	4.9 kg	17
Replacement mattress								
Replacement pump unit								
saniflow® III	28 x 20.5 x 10 cm	2.3 kg	12 W	Yes		13 x 90 x 200 cm	4.9 kg	17
Replacement mattress								
Replacement pump unit								
saniflow® IV	28 x 20.5 x 10 cm	2.6 kg	12 W		Yes	17 x 90 x 200 cm	8.3 kg	17
Replacement mattress								
Replacement pump unit								
decubiflow® 23	28 x 19.5 x 11 cm	1.9 kg	9 W		Yes	17 x 90 x 200 cm	8.4 kg	18 *(3)
Replacement mattress incl. cover								
Replacement pump unit								
decubiflow® 23 A	28 x 19.5 x 11 cm	1.9 kg	9 W	Yes		13 x 90 x 200 cm	5.9 kg	18 *(3)
Replacement mattress incl. cover								
Replacement pump unit								
decubiflow® 400	29 x 26 x 11 cm	3 kg	15 W		Yes	17 x 90 x 200 cm	8.4 kg	18 *(3)
Replacement mattress incl. cover								
Replacement pump unit								
decubiflow® 500	29 x 26 x 11 cm	3 kg	15 W		Yes	24 x 90 x 200 cm	11 kg	20
Replacement mattress incl. cover								
Replacement pump unit								
aks decu side	29 x 26 x 11 cm	3 kg	15 W		Yes	16 x 90 x 200 cm	11 kg	2 lift tubes
aks samson	36.9 x 25 x 13.5 cm	-	12 W		Yes	25 x 90 x 200 cm	7.6 kg	20 double cells
Product description						25 x 100 x 200 cm	7.8 kg	
see bariatric range						25 x 120 x 200 cm	8.7 kg	
						25 x 140 x 200 cm	9.9 kg	
						25 x 90 x 220 cm 25 x 100 x 220 cm	7.9 kg 8.2 kg	
							8.2 kg 10.3 kg	
						25 x 140 x 220 cm	_	
							-	

Static mode	Micro perforation	Height of cells	Minimum patient weight	Maximum patient weight	Decubitus grade EPUAP	Pain therapy	Order No.
	30 honey- combs	6.35 cm	45 kg	125 kg	Prophylaxis		22112
							02101
		13 cm	40 kg	120 kg	Grade II		21230
							21232
							21231
Yes		13 cm	40 kg	120 kg	Grade II	Yes	21239
							21232
							21240
Yes		13 cm	40 kg	130 kg	Grade III	Yes	21233
							21235
							21234
Yes/care function		13 cm	40 kg	130 kg	Grade IV	Yes	21236
							21238
							21237
Yes	8 cells	13 cm	30 kg	130 kg	Grade IV	Yes	22303
							22311
							22304
Yes	8 cells	13 cm	30 kg	130 kg	Grade IV		22307
							21305
							21304
Yes	8 cells	13 cm	40 kg	130 kg	Grade IV	Yes	20401
							22311
							20403
Yes	8 cells	20 cm	40 kg	150 kg	Grade IV	Yes	25001
							25002
							25003
			40 kg	120 kg	Grade III	Yes	20301
Yes, seat/care		25 cm	30 kg	300 kg	Grade IV	Yes	27600
function							27605
							27610 27620
							27620
							27606
							2/000
							27611