3M Infection Prevention
Patient Warming Product Brochure

Warm Every Patient

3M Infection Prevention Solutions
Innovation on a Mission
For 50 years, 3M has contributed innovative solutions to the worldwide campaign against healthcare-associated infections. Reducing inadvertent perioperative hypothermia is a proven step in helping reduce surgical-site infections along with a range of other serious complications. That’s why we’re proud to offer patient warming solutions that have set the standard for innovation and quality:

- 3M™ Bair Hugger™ therapy
- 3M™ Ranger™ blood and fluid warming
- 3M™ Bair Paws™ patient adjustable warming gowns

Since forced-air warming was introduced more than 20 years ago, it has safely and effectively maintained normothermia in over 135 million surgical patients, worldwide. This technology has been researched extensively, with more than 100 published studies documenting the clinical benefits of forced-air warming and maintaining normothermia.

Because forced-air warming is both economical and easy to use, all surgical patients can enjoy the comfort and clinical benefits a Bair Hugger blanket or the Bair Paws patient adjustable warming gown can provide. When comparing the minimal cost associated with forced-air warming to the estimated £2,391 per patient cost of treating complications of hypothermia, warming just makes sense.

With 25 Bair Hugger blanket styles, including seven underbody series blankets, three Bair Paws warming gown sizes (Small, Standard, XL) and seven different Ranger blood and fluid warming cassettes that cover your fluid warming needs from paediatric to high flow, we offer a warming tool for virtually any surgical procedure.

3M will continue to define patient warming with next-generation products in an effort to expand forced-air warming and fluid warming to every patient and every surgical procedure. Our customers can be confident that they have access to the best products and the most comprehensive product portfolio in the industry.

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Some of the products set forth herein may not be available for sale in your country. Please contact customer service or a local 3M representative for product availability.
In 1987, Bair Hugger therapy became the world’s first forced-air warming system. Today, with healthcare improvement organizations around the world recognizing the risks of unintended hypothermia, 3M patient warming products warm more than 20 million patients each year.

As the global call for normothermia maintenance continues to grow, we look forward to partnering with you on the mission to improve patient outcomes through effective patient warming.

**Maintaining normothermia: a global movement**

<table>
<thead>
<tr>
<th>Country</th>
<th>Organization</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Canadian Patient Safety Institute</td>
<td><a href="http://www.saferhealthcarenow.ca">www.saferhealthcarenow.ca</a></td>
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<td>Germany</td>
<td>Robert Koch Institute</td>
<td><a href="http://www.rki.de">www.rki.de</a></td>
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<tr>
<td>Sweden</td>
<td>Swedish Association of Local Authorities and Regions: National Initiative for Improved Patient Safety</td>
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<td>Institute for Healthcare Improvement (IHI)</td>
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<td></td>
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<td>American Society of Anesthesiologists (ASA)</td>
<td><a href="http://www.asahq.org">www.asahq.org</a></td>
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<tr>
<td></td>
<td>American Society of Per-Anesthesia Nurses (ASPA)</td>
<td><a href="http://www.aspan.org">www.aspan.org</a></td>
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</tbody>
</table>

Enhancing the quality of care
Versatility provides more warming options

The 3M™ Bair Paws™ system adds a new dimension to patient warming – a single patient gown that provides both comfort and clinical warming options throughout the perioperative process.

With just one Bair Paws gown, your surgical patients can enjoy both the comfort and clinical benefits of forced-air warming, before, during and after surgery.* The wrap-around design provides enough coverage for even the most modest individuals. Plus, a simple turn of the dial on the Bair Paws handheld controller allows patients to adjust the temperature of the air flowing through the gown to a level that is right for them.

*A clinical warming in Operating Theatres / Recovery provided with 3M™ Bair Hugger™ 500 or 700 series warming units.

Warm patients.
Happy patients.
A win-win for patients and the facility.

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www.bairpaws.com
Pre-warming

Stop unintended hypothermia before it begins

Unintended perioperative hypothermia is largely the result of anaesthesia-induced redistribution of body heat that occurs during the first hour after anaesthesia induction. Fortunately unintended hypothermia can be prevented, and prevention is most effective when the warming begins pre-operatively.

Actively warming surgical patients before the induction of anaesthesia – known as pre-warming – is an effective way to help prevent intraoperative hypothermia. True pre-warming requires an active warming modality, such as forced-air warming.

Thermoregulation

Under normal circumstances, the body controls its temperature within a very tight tolerance, with the core being 2-4°C warmer than the periphery. However, research shows that in the first 60 minutes of anaesthesia, unwarmed surgical patients can lose up to 1.6°C as anaesthesia-induced vasodilation allows the core’s warmer blood to flow freely through the cooler periphery. As the blood circulates, it continues to cool before returning to the heart and reducing the core temperature. This decline in temperature is known as Redistribution Temperature Drop (RTD).


Under normal circumstances, the body controls its temperature within a very tight tolerance, with the core being 2-4°C warmer than the periphery. This temperature gradient is caused by normal thermoregulatory vasoconstriction.

Anaesthesia causes vasodilation, which allows the warmer blood of the core to mix with the cooler blood from the periphery. As the blood circulates, it cools until returning back to the heart where it causes a drop in core temperature. This drop in temperature is called redistribution temperature drop.

Pre-warming with the 3M™ Bair Paws™ system can increase the temperature of peripheral tissues, limiting the amount of heat lost from the core through redistribution hypothermia. The warmer periphery limits the blood’s rate of cooling and allows the blood to return to the core at a higher temperature.
Prevention is the best solution...

Pre-warming with the 3M™ Bair Paws™ system can reduce core temperature drop by decreasing the core-to-periphery temperature gradient. By increasing the total heat content of the periphery, pre-warming limits the blood’s rate of cooling and allows the blood to return to the core at a higher temperature. Unintended hypothermia can be prevented in longer procedures by combining pre-warming with intraoperative warming. The Bair Paws gown is fully compatible with 3M™ Bair Hugger™ therapy 500 and 700 series warming units and provides an effective clinical warming solution for the operating theatre.

...and an ideal solution

Easily incorporated into the pre-surgical routine, pre-warming can begin as soon as the patient is admitted to the pre-surgical area. For this very reason, the Bair Paws system’s capabilities make it an excellent pre-warming solution.

- Gown and pre-warm patients in one easy step.
- Provide patients control over their own thermal comfort.
- Pre-op use of forced-air warming may result in a reduction of perioperative anxiety.
- Gown travels with the patient to the operating theatre and PACU, allowing continuous warming.

The physiological effects of anaesthesia cannot be prevented; however, the associated negative effects of RTD can be overcome through pre-warming. Warming your patients with the Bair Paws system gives them the best of both worlds—comfort and the clinical benefits of pre-warming.
3M™ Bair Paws™ Warming Unit

Model 875

The 3M™ Bair Paws™ warming unit (model 875) provides the air flow necessary for effective pre-warming while maintaining quiet operation. It is lightweight, simple to use, and can be easily placed on the wall, bedrail, IV pole or table.

The Bair Paws warming unit provides:
- The ability to pre-warm patients, assisting in the prevention of unintended hypothermia
- Personalised comfort as patients control the unit’s airflow and temperature (ambient to 43°C)
- Easy “snap-fit” flexibility in mounting the unit on the wall, a bedrail or an IV pole; the unit can also be placed on a flat surface
- Convenient, built-in hose storage
- Small, lightweight design

Specifications

| Dimensions | 33h x 19.6w x 10.2d cm (13h x 7.7w x 4d in) |
| Weight     | 3.2 kg (7.0 lb) |

Operating Temperatures
User adjustable from ambient to 43°C ± 3°C

Filter
Dust filter

Device Ratings
110-120 VAC, 50/60 Hz, 4.6 Amperes
220-240 VAC, 50/60 Hz, 2.8 Amperes

www.bairpaws.co.uk
3M™ Bair Paws™ Warming Gown
Model 81002

The 3M™ Bair Paws™ warming gown offers comfort or clinical warming versatility through conveniently located Bair Paws and 3M™ Bair Hugger™ hose ports. A clinical hose port in the lower portion of the gown eliminates the need to re-position the gown when a procedure requires lower body warming. The gown is available in small, standard and X-large sizes.

Bair Paws gown benefits:

- Additional flexibility for lower body warming needs
- Two clinical hose ports eliminate the need to re-position the gown
- Both clinical ports include a hose port card, making operation effortless
- Pre-induction warming in the operating theatre is easy through the gown’s lower clinical port
- Patient-friendly post-operative clinical warming; the Bair Hugger warming unit can be conveniently positioned for use in the lower clinical port

Specifications

Model 81002 Sizes
Small: 111 cm long; 140 cm sweep (44 in +/- 1 in long; 55 in +/- 1 in sweep)
Standard: 130 cm long; 163 cm sweep (51 in +/- 1 in long; 64 in +/- 1 in sweep)
X-Large: 130 cm long; 310 cm sweep (51 in +/- 1 in long; 122 in +/- 1 in sweep)
3M™ Bair Paws™ Warming Gown
Model 81002

Full Body Warming Position

Lower Body Warming Position

*Pre-operative warming provided with Bair Paws model 875 warming unit; clinical operating theatre/recovery warming provided with 3M™ Bair Hugger™ 500 or 700 series warming units.

www.bairpaws.co.uk
The 3M™ Bair Paws™ warming gown is designed to be worn by patients before, during and after surgery.

- Soft, thick, and natural latex-free material for greater patient comfort
- Small, standard and X-large sizes offer greater coverage and help maintain patient modesty

**Bair Paws Warming Gown Kit**

**Model 84002**

The Bair Paws kit offers the following in one convenient package:

- Warming Gown
- Socks
- Bonnet
- Personal Belongings Bag
- Shoe Bag

The kit eliminates the need to locate patient gowning accessories.

**Bair Paws Gown with Socks**

**Model 83002**

Lower extremities are often cold before and after surgery.

Socks, in conjunction with the Bair Paws gown, can help keep the patient comfortable.

**Bair Paws Warming Gown Only**

**Model 81002**

**Bair Paws Socks Only**

**Models 90065 & 90091**

Available in 30/case

### Specifications

**Model 81002 Sizes**

<table>
<thead>
<tr>
<th>Size</th>
<th>Length (cm)</th>
<th>Sweep (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>111</td>
<td>140 +/- 1</td>
</tr>
<tr>
<td>Standard</td>
<td>130</td>
<td>163 +/- 1</td>
</tr>
<tr>
<td>X-Large</td>
<td>130</td>
<td>310 +/- 1</td>
</tr>
</tbody>
</table>

**Sock Sizes**

- Standard: 90065
- X-Large: 90091

www.bairpaws.co.uk
Bair Paws Warming Unit Wall Mount
Model 90080

The warming unit may be wall mounted in pre-op and post-op areas.

Bair Paws Warming Unit IV Pole Mount
Model 90076

Flexibility in the perioperative environment is important. Because of this, the 3M™ Bair Paws™ warming unit can also be mounted on an IV pole.

Bair Paws Warming Unit Rail Mount
Model 90079

Ideal for warming units that need to be mounted on a patient trolley or bedrail.

Warming unit may also be placed on a flat surface, such as a table.

www.bairpaws.co.uk
In 1987, we introduced forced-air warming to the healthcare industry with the launch of 3M™ Bair Hugger™ therapy. Today, the world’s first forced-air warming system continues to define patient warming through exceptional product quality and performance.

Bair Hugger therapy offers more blanket styles than anyone in the industry and has warmed more than 135 million patients to date. More than 130,000 Bair Hugger warming units are currently in use around the world.

Bair Hugger therapy is designed for one primary purpose – the treatment or prevention of unintended hypothermia and its associated complications. As a Bair Hugger therapy customer, you can be confident in our commitment to the continuous development of meaningful, innovative temperature management products.

Expanding patient warming to virtually any procedure.

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www.bairhugger.com
Anaesthetised patients can’t regulate their temperature

The body’s physiological response to anaesthesia places virtually every anaesthetised surgical patient at risk for unintended hypothermia, regardless of age, sex or physical condition. Research shows that core body temperature drops rapidly (up to 1.6°C in the first hour alone) following the induction of anaesthesia.

Unfortunately, unintended hypothermia remains an all-too common and costly complication of surgery despite its association with higher mortality rates, longer hospital stays and an increased rate of wound infection.

The good news: unintended hypothermia is easily preventable

Studies show that warming patients to maintain a core temperature of 36.0°C or higher helps improve outcomes by reducing the frequency of complications often associated with unintended hypothermia. Forced-air warming offers a safe, simple, cost-effective method to prevent unintended hypothermia and its complications.

Numerous healthcare organisations globally have published temperature management recommendations or guidelines for healthcare providers. These organisations not only emphasise the importance of maintaining normothermia, but also identify forced-air warming as a preferred warming method.

Characteristic patterns of general anaesthesia induced hypothermia

Hypothermia can develop in the hour immediately following the induction of anaesthesia


www.bairhugger.com
The 3M™ Bair Hugger™ underbody series offers a warming solution for virtually any need. For routine procedures to complex surgeries, underbody series blankets provide full, unrestricted access to the patient.

Underbody series blanket benefits

**Simplified operating theatre prep:**
Placing the underbody series blankets on the table before the patient arrives in the operating theatre allows immediate warming and more time for other pre-surgical tasks.

**Designed for flexibility:**
The unique design of the underbody series blankets offers clinicians full, unrestricted access and flexible positioning for virtually any procedure.

**Innovation:**
Unique fluid outlets minimise the pooling of fluids while the patient’s natural pressure points compress the blanket, preventing warm air from reaching potentially ischemic tissue. Consistent perforations in the soft, radiolucent materials ensure uniform convective warming.

**Proven performance:**
Millions of patients have experienced the benefits of the Bair Hugger underbody series blankets.

All Bair Hugger blankets are constructed of durable, soft, radiolucent, latex-free materials.
3M™ Bair Hugger™ Therapy
Full Access Underbody Blanket
Models 635 & 637

The versatile 3M™ Bair Hugger™ full access underbody blanket is positioned on the table prior to the patient’s arrival in theatre. The blanket can be used during cardiac, complex or routine surgeries where the patient is in the supine, lateral or prone positions. The sterile model of this blanket (model 637) is ideal for procedures including a standing surgical prep.

- Unique fluid outlets minimise pooling of fluids on the surface of the blanket
- Pass-through slits allow flexible patient positioning and the use of a drawsheet
- Adhesive strips and tuck flaps secure the blanket to the operating theatre table
- Two resealable hose ports at either end of the blanket provide options for hose placement
- One clear plastic drape (included) helps retain warm air around the head of the patient

Specifications

<table>
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<tr>
<th>Size</th>
<th>Weight</th>
<th>Drape</th>
<th>Non-Sterile</th>
<th>Sterile</th>
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<tbody>
<tr>
<td>221 x 91 cm (84 x 36 in)</td>
<td>198 g (7 oz)</td>
<td>61 x 122 cm (24 x 48 in)</td>
<td>Model 635</td>
<td>Model 637</td>
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www.bairhugger.co.uk
Positioned on the procedure table prior to the patient’s arrival into theatre, the 3M™ Bair Hugger™ lithotomy underbody blanket delivers full, unrestricted patient access and flexibility for procedures involving the lower extremities, and abdominal, peritoneal and pelvic cavities.

- Unique fluid outlets minimise pooling of fluids on the surface of the blanket
- Pass-through slits allow flexible patient positioning and the use of a drawsheet
- Generous peritoneal cut-out at the base of the blanket provides the clinician unobstructed access to the patient
- Integrated tie strips can be used to secure the blanket to the stirrups / leg supports
- Adhesive strips and tuck flaps secure the blanket to the operating table
- One clear patient drape (included) helps retain warm air around the head of the patient

**Specifications**

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<tbody>
<tr>
<td><strong>Size</strong></td>
<td><strong>Weight</strong></td>
<td><strong>Drape</strong></td>
</tr>
<tr>
<td>188 x 91 cm (74 x 36 in)</td>
<td>142 g (5 oz)</td>
<td>61 x 61 cm (24 x 24 in)</td>
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</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Spinal Underbody Blanket
Model 575

The unique design of the 3M™ Bair Hugger™ spinal underbody blanket works with the open frame of the spinal surgery cradle, yet will not interfere with the adjustment of the support pads. Clinicians will appreciate full patient visualisation and unrestricted patient access.

- Perforations on the sides of blanket allow the table frame to pass through the blanket
- A removable head section allows visualisation of the patient’s face throughout the procedure
- Integrated tie strips secure the blanket to the table frame
- Blanket design allows it to draw up near the patient when inflated
- Compatible with the foot boards, leg sling, Wilson® frame or head support modalities
- One clear plastic drape (included) helps retain warm air around the head of the patient

* Wilson is a trademark of Getinge USA, Inc.

Specifications

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<tr>
<th>Size</th>
<th>Weight</th>
<th>Drape</th>
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<tbody>
<tr>
<td>188 x 91 cm (74 x 36 in)</td>
<td>142 g (5 oz)</td>
<td>61 x 122 cm (24 x 48 in)</td>
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</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Large Paediatric Underbody Blanket
Model 550

The 3M™ Bair Hugger™ large paediatric underbody blanket conveniently warms a large child or a small adult patient from below while allowing clinicians full access to the patient.

- Fluid outlets minimise pooling of fluids on the surface of the blanket
- Two resealable hose ports located at either end of the blanket provide options for hose placement
- Tape and tuck flaps secure the blanket to the operating theatre table
- Two drapes (included) help retain the warm air that surrounds the patient

Specifications

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<tr>
<th>Size</th>
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<td>152 x 81 cm (60 x 32 in)</td>
<td>136 g (4.8 oz)</td>
<td>61 x 61 cm (24 x 24 in)</td>
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www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Paediatric Underbody Blanket
Model 555

The under-patient design of the 3M™ Bair Hugger™ paediatric underbody blanket warms even the smallest patients while providing clinicians with full, unrestricted access.

- Unique fluid outlets minimise pooling of fluids on the surface of the blanket
- Consistent, even perforations across the entire blanket ensure uniform warming
- Two resealable hose ports located at either end of the blanket provide options for hose placement
- Tape and tuck flaps under the blanket secure the blanket to the operating theatre table
- Two clear plastic drapes (included) form a “tent” of warm air that surrounds the patient

Specifications

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<th>Size</th>
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<td>85 g (3 oz)</td>
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www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Adult Underbody Blanket
Model 545

The 3M™ Bair Hugger™ adult underbody blanket is conveniently positioned on the table prior to the patient’s arrival so it’s ready when you are.

- Unique fluid outlets minimise pooling of fluids on the surface of the blanket
- Ideal for patient warming during diagnostic and interventional procedures in the cardiac cath lab and the radiology suite
- Two adhesive strips under the blanket secure the blanket to the operating theatre table
- Radiolucent materials

Specifications

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<th>Size</th>
<th>Weight</th>
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<tbody>
<tr>
<td>188 x 91 cm (74 x 36 in)</td>
<td>142 g (5 oz)</td>
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</table>

www.bairhugger.co.uk
Challenging clinical scenarios require unique solutions. 3M™ Bair Hugger™ therapy offers seven styles of speciality and cardiac blankets to help you reach your warming goals.

Speciality & Cardiac blankets feature:

- Flexible, easy-to-use designs
- Uniform perforation pattern across the blanket surface to ensure even convective warming
- Durable, soft, radiolucent, latex-free materials

Outpatient with Socks
Model 110

Outpatient
Model 111

Cath Lab
Model 560

Surgical Access
Model 570

Full Body Surgical
Model 610

Sterile Cardiac
Model 630

Sterile Cardiac Access
Model 645
3M™ Bair Hugger™ Therapy
Preoperative & Outpatient Care Blankets
Models 110 & 111

Provide your patients the benefits of pre-warming. As little as 15 minutes of pre-induction forced-air warming can add to the total heat content of the body, decrease redistribution temperature drop and enhance patient comfort.

- Conforms to the patient in seated, semi-reclined, supine or lateral positions
- 3M™ Bair Hugger™ socks cover the patient’s feet (model 110 only)
- Ample draping tucks around the shoulders, torso, and legs for easy positioning
- Blanket can follow patient into recovery for additional thermal comfort when inflated
- Foot drape minimises risk of thermal injury to the feet and lower leg areas

Specifications

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<tr>
<td>134 g (4.8 oz)</td>
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www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Cath Lab Blanket
Model 560

Designed specifically for use in the cath lab and interventional suites, the cath lab blanket surrounds patients with warmth while allowing clinicians full, unrestricted access.

- Radiolucent materials
- Foot pad protects feet from thermal injury
- Integrated tie strips keep the blanket securely positioned around the patient

Specifications

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<th>Size</th>
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<td>23 x 335 cm (9 x 132 in)</td>
<td>85 g (3 oz)</td>
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www.bairhugger.co.uk
**3M™ Bair Hugger™ Therapy**

**Surgical Access Blanket**

**Model 570**

The flexible design of the 3M™ Bair Hugger™ surgical access blanket includes two resealable hose ports for versatile positioning of the warming unit, making the blanket adaptable to a variety of procedures such as spinal, abdominal, hip and pelvic surgeries.

- Attached clear head drape retains warm air around the intubated patient’s head and allows observation by the clinician
- Large surgical access window provides patient access for the surgeon
- Integrated adhesive secures the surgical access window to the patient
- Foot drape minimises risk of thermal injury to the feet and lower leg area

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**Specifications**

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<th>Size</th>
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<th>Head Drape</th>
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www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Full Body Surgical Blanket
Model 610

The 3M™ Bair Hugger™ full body surgical blanket tapes across the patient’s chest, away from surgical sites involving the head or neck. Six convenient access panels allow for quick access to the patient’s chest, arms and lower body.

- The blanket’s generous size maximises heat transfer
- Foot drape minimises risk of thermal injury to the feet and lower leg area
- Integrated adhesive strip secures the blanket to the patient
- Integrated tuck flaps at shoulders help maintain blanket position

Specifications

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<tr>
<th>Size</th>
<th>Weight</th>
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<tbody>
<tr>
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<td>134 g (4.8 oz)</td>
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www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Sterile Cardiac Blanket
Model 630

The 3M™ Bair Hugger™ sterile cardiac blanket’s “cumberbund” design is pre-positioned at the waist during prep, unrolled upon closure of the saphenous vein graft incision, and inflated post-bypass.

- 36-inch sterile hose allows the placement of the temperature management unit away from sterile field
- Warms the lower body to reduce core-to-periphery heat loss
- Positions easily in the sterile field
- Clear groin/femoral access window allows access to the femoral artery

Specifications

<table>
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<tr>
<th>Size</th>
<th>Weight</th>
<th>Hose</th>
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<tr>
<td>152 x 91 cm (60 x 36 in)</td>
<td>227 g (8 oz)</td>
<td>91 cm (36 in)</td>
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</tbody>
</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Sterile Access Cardiac Blanket
Model 645

The 3M™ Bair Hugger™ sterile access cardiac blanket tapes securely to the patient so the blanket can provide localised warming throughout the cardiothoracic surgical procedure.

- Warms the lower body to reduce core-to-periphery heat loss
- Allows full access to both legs
- Radiolucent materials will not interfere with imaging requirements
- Insulated foot pouch protects the feet from thermal injury

**Specifications**

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<thead>
<tr>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 x 274 cm (9 x 108 in)</td>
<td>113 g (4 oz)</td>
</tr>
</tbody>
</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Small Lower Body Blanket
Model 537

The 3M™ Bair Hugger™ small lower body blanket is a more compact version of the adult-size lower body blanket (model 525). Developed with younger patients in mind, the model 537 is ideal for warming a large child or a small adult during upper body surgery. It can be used in the supine, lateral, or prone positions.

- Can also be used as a full body blanket on smaller patients
- Foot drape minimises risk of thermal injury to the feet and lower leg area

Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>89 x 61 cm (35 x 24 in)</td>
<td>43 g (1.5 oz)</td>
</tr>
</tbody>
</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Paediatric Long Blanket
Model 530

The 3M™ Bair Hugger™ paediatric long blanket gently surrounds a child with 3M™ Bair Hugger™ forced-air warming therapy. Use one or both of the enclosed clear plastic drapes to keep warmed air near the skin.

• Tube shape surrounds the patient with warm air
• Two clear plastic drapes (included) help retain warm air around the patient
• Adhesive strip along blanket provides stable positioning

Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Size</th>
<th>Weight</th>
<th>Drape (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>188 x 22 cm (74 x 8.5 in)</td>
<td>28 g (1 oz)</td>
<td>61 x 46 cm (24 x 18 in)</td>
</tr>
</tbody>
</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Upper Body Blanket
Models 522 & 523

The 3M™ Bair Hugger™ upper body blanket is designed for use during surgical procedures on the lower half of the body while covering the upper torso, arms, neck and head of the patient. The model 523 XL upper body blanket is wider and longer to facilitate proper placement on a larger torso.

- Can be used in the supine, prone, lithotomy and other patient positions
- Two resealable hose ports provide flexibility in positioning the temperature management unit
- Attached clear head drape and two neck vents keep warm air around an intubated patient’s head and allow observation by the clinician
- Integrated tie strips and continuous adhesive strip secure the blanket once placed

Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Head Drape</th>
</tr>
</thead>
<tbody>
<tr>
<td>522</td>
<td>99 g (3.5 oz)</td>
<td>61 x 61 cm (24 x 24 in)</td>
</tr>
<tr>
<td>523</td>
<td>153.1 g (5.4 oz)</td>
<td>61 x 61 cm (24 x 24 in)</td>
</tr>
</tbody>
</table>
3M™ Bair Hugger™ Therapy
Lower Body Blanket
Model 525

Designed for use during surgical procedures on the upper half of the body.

- Effectively used for patients in the supine, lateral, or prone positions
- Foot drape minimises risk of thermal injury to the feet and lower leg area
- Continuous adhesive strip secures blanket to the patient

Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>152 x 91 cm (60 x 36 in)</td>
<td>113 g (4 oz)</td>
</tr>
</tbody>
</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Dual Port Torso Blanket
Model 542

Designed to affix to the lower abdominal area and cover the upper half of the body. The 3M™ Bair Hugger™ 542 dual port torso blanket features two convenient, resealable hose ports.

- Effectively used for patients in the supine, lateral and other positions
- Pre-attached clear head drape retains warm air around the intubated patient’s head and allows observation by the clinician
- Integrated tuck flaps at shoulders help maintain blanket position

**Specifications**

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Head Drape</th>
</tr>
</thead>
<tbody>
<tr>
<td>107 x 91 cm (42 x 36 in)</td>
<td>90 g (3.2 oz)</td>
<td>61 x 41 cm (24 x 16 in)</td>
</tr>
</tbody>
</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Full Body Blanket
Model 300

The 3M™ Bair Hugger™ full body blanket provides coverage to the entire patient, maximising thermal transfer.

- Foot drape minimises the risk of thermal injury to the feet and lower leg area
- Integrated tuck flaps at shoulders help maintain blanket position

Paediatric Full Body Blanket
Model 310

The paediatric full body blanket is a smaller version of the adult blanket to warm smaller patients during recovery.

- Foot drape minimises the risk of thermal injury to the feet and lower leg area

Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>145 g</td>
<td>5.1 oz</td>
<td>310</td>
</tr>
</tbody>
</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Chest Access Blanket
Model 305

The 3M™ Bair Hugger™ chest access blanket is designed specifically for the postoperative warming of thoracic surgery patients.

- Chest drapes retain warmth while providing clear, easy observation of the chest area
- Foot drape minimises risk of thermal injury to the feet and lower leg area

Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
<th>Chest Drapes (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>183 x 91 cm (72 x 36 in)</td>
<td>133 g (4.7 oz)</td>
<td>61 x 61 cm (24 x 24 in)</td>
</tr>
</tbody>
</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Multi-Access Blanket
Model 315

The 3M™ Bair Hugger™ multi-access blanket offers clinicians easy access to any part of the patient’s body while providing full patient coverage, maximising thermal transfer.

- Six convenient panels allow quick access to the patient’s chest, arms, torso, and lower body
- Foot drape minimises risk of thermal injury to the feet and lower leg area
- Integrated tuck flaps at the shoulders help maintain blanket position

Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>213 x 91 cm (84 x 36 in)</td>
<td>150 g (5.3 oz)</td>
</tr>
</tbody>
</table>

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Temperature Management Units

3M™ Bair Hugger™ therapy's temperature management units have become the standard of excellence in forced-air warming. Both the model 505 and model 750 temperature management units are small, lightweight and easy to use. More importantly, each unit is designed to provide clinically effective patient warming at safe air delivery temperatures. In addition, Bair Hugger temperature management units are the only forced-air warming systems that can be used with an integrated, cost-effective method of fluid warming - the 3M™ Bair Hugger 241™ blood/fluid warming set.

Temperature Management Unit
Model 775

The 3M™ Bair Hugger™ model 775 unit combines performance, precision and ease-of-use into a single compact unit.

- Quiet, easy to use unit
- Safe, quick temperature response
- Two airflow settings and hose-end temperature sensing for precise temperature delivery
- Compatible with all Bair Hugger blanket styles - paediatric to adult
- Tracks and reports therapy duration, over-temperature information, calibration, hours used (via built-in meter), fault codes
- Unit use information available via the front panel - no need to open the unit
- Compatible with Bair Hugger 241 blood/fluid warming set

Specifications

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>33h x 36w x 33d cm (13h x 14w x 13d in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>7.3 kg (16 lb)</td>
</tr>
</tbody>
</table>

Operating Temperatures
- High: 43° ± 1.5° C (109.4°± 2.7° F)
- Med: 38° ± 1.5° C (100.4°± 2.7° F)
- Low: 32° ± 1.5° C (89.6°± 2.7° F)

Leakage Current
Meets UL 60601-1 and IEC 60601-1 requirements

Filter
High-efficiency 0.2 μm air filter

Device Ratings
- 110-120 VAC, 50/60 Hz, 11.7 Amperes
- 220-240 VAC, 50/60 Hz, 7.2 Amperes
- 100 VAC, 50/60 Hz, 15 Amperes

www.bairhugger.co.uk
3M™ Bair Hugger™ Therapy
Temperature Management Unit
Model 750

The 3M™ Bair Hugger™ model 750 unit combines performance, precision and ease-of-use into a single compact unit.

- Hose-end temperature sensing ensures accurate air temperature delivery
- High airflow for greater heat transfer to the patient
- Three independent sensors continuously monitor system performance
- Built-in hour meter makes it easy to monitor usage for preventative maintenance

Specifications

Dimensions
30h x 25w x 34d cm (12h x 10w x 13.5d in)

Weight
7 kg (15.5 lb)

Operating Temperatures
High: 43° ± 1.5° C (109.4°± 2.7° F)
Med: 38° ± 1.5° C (100.4°± 2.7° F)
Low: 32° ± 1.5° C (89.6°± 2.7° F)

Leakage Current
Meets regulatory standards for leakage current

Filter
High-efficiency 0.2 μm air filter

Device Ratings
110-120 VAC, 50/60 Hz, 11.7 Amperes
220-240 VAC, 50/60 Hz, 7.2 Amperes
100 VAC, 50/60 Hz, 14.5 Amperes
The 3M™ Bair Hugger™ model 505 provides safe, quiet and effective warming to patients around the world.

- Small size frees up more usable workspace
- Light weight makes transport and set-up a breeze
- Freestanding or easily attached to an IV pole bedrail or optional rolling cart
- Built-in hour meter makes it easy to monitor usage for preventative maintenance
- Unique snap-fit hose swivels at three points for easy blanket attachment and positioning

**Specifications**

**Dimensions**
33h x 25w x 28d cm (13h x 10w x 11d in)

**Weight**
6.2 kg (13.6 lb)

**Operating Temperatures**
- High: 43° ± 3°C (109.4° ± 5.4°F)
- Med: 38° ± 3°C (100.4° ± 5.4°F)
- Low: 32° ± 3°C (89.6° ± 5.4°F)

**Leakage Current**
Meets regulatory standards for leakage current

**Filter**
High-efficiency 0.2 μm air filter

**Device Ratings**
- 110-120 VAC, 60 Hz, 9.5 Amperes
- 220-240 VAC, 50 Hz, 4.5 Amperes
- 100 VAC, 50/60 Hz, 10 Amperes

www.bairhugger.co.uk
The 3M™ Ranger™ blood and fluid warming systems with dry heat technology adapt to virtually any fluid warming need from KVO to 30,000mL/hr. In the operating theatre, a routine procedure can quickly turn into a trauma situation. When it does, you have more important things to worry about than whether or not your fluid warmer is up to the task.

Both the Ranger blood and fluid warming system and the Ranger irrigation system offer intuitive, simple solutions to the most complex fluid warming needs.

Covering the spectrum

Some of the products set forth herein may not be available for sale in your country. Please contact customer service or a local 3M representative for product availability.
The 3M™ Ranger™ system with dry heat technology covers the entire spectrum of fluid warming – from KVO to 30,000 mL/hr – with one warming unit.

Sophisticated, highly responsive aluminium heating plates disperse heat quickly, responding to flow changes with even, consistent heat. Plate temperature is monitored four times per second and is accurate within 1°C.

The Ranger Blood and Fluid Warming System:
- Safely and effectively warms fluids from KVO to 30,000 mL/hr
- Quickly reacts to changes in flow rate
- Uses economical, easy-to-use disposable warming sets
- Eliminates the potential risk of nosocomial pathogens associated with waterbath-based fluid warmers
- Meets all American Association of Blood Bank (AABB) guidelines for warming blood
- Virtually eliminates maintenance

The Ranger system offers high performance, economy, flexibility, ease of use, and low maintenance.
Dry heat: a smart alternative

Healthcare facilities are working hard to identify and remove the sources of nosocomial pathogens and the resulting hospital-acquired infections. One potential source of nosocomial pathogens has garnered considerable attention – water bath fluid warmers. Warm water has long been identified as a potential source of gram-negative bacilli. More specifically, if not properly maintained, water bath fluid warmers are a potential source of nosocomial pathogens.

Traditional operating theatre water baths caused several outbreaks of serious nosocomial infection. Endocarditis, bacteremia and peritonitis with Pseudomonas or Acinetobacter have also been traced to contaminated 37°C water baths. Smart alternatives to water bath technology exist. Dry heat fluid warming devices like the 3M™ Ranger™ blood and fluid warming systems use metal plates within the warming unit. IV fluid flows through disposable sets and is warmed prior to reaching the patient. No water. No risk of water-related infection.

Specifications

Set Point Temperature
41°C

Flow Rates
KVO to 30,000 mL/hr

Alarms (audible and visual)
Over-temperature primary setpoint: 43°C
Over-temperature secondary setpoint: 44°C

Device Rating
110 VAC / 220-240 VAC

Dimensions
19w x 11h x 25d cm (7.5w x 4.5h x 10d in)

Weight
3.3 kg (7.4 lb)

Leakage Current
Meets regulatory standards for leakage current
## 3M™ Ranger™ Blood and Fluid Warming Systems

### Paediatric/Neonate Disposable Set with fluid aspiration port

**Model 24450**

<table>
<thead>
<tr>
<th>Flow rates:</th>
<th>KVO - 6,000 mL/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priming volume:</td>
<td>20 mL</td>
</tr>
<tr>
<td>Components:</td>
<td>Heat exchanger, bubble trap with air aspiration port, fluid aspiration port, 24 in. patient line</td>
</tr>
<tr>
<td>Pressure infusion:</td>
<td>Up to 300 mmHg</td>
</tr>
<tr>
<td>Material:</td>
<td>Latex-free</td>
</tr>
<tr>
<td>Case quantity:</td>
<td>10 disposable sets/case</td>
</tr>
<tr>
<td>Sterile:</td>
<td>EtO</td>
</tr>
<tr>
<td>Use:</td>
<td>Single use only</td>
</tr>
</tbody>
</table>

### Standard Flow Disposable Set

**Model 24200**

<table>
<thead>
<tr>
<th>Flow rates:</th>
<th>KVO - 9,000 mL/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priming volume:</td>
<td>39 mL</td>
</tr>
<tr>
<td>Components:</td>
<td>Heat exchanger, needleless injection port, bubble trap, 30 in. patient line</td>
</tr>
<tr>
<td>Pressure infusion:</td>
<td>Up to 300 mmHg</td>
</tr>
<tr>
<td>Material:</td>
<td>Latex-free</td>
</tr>
<tr>
<td>Case quantity:</td>
<td>10 disposable sets/case</td>
</tr>
<tr>
<td>Sterile:</td>
<td>EtO</td>
</tr>
<tr>
<td>Use:</td>
<td>Single use only</td>
</tr>
</tbody>
</table>

### Standard Flow Disposable Set with needleless air aspiration port

**Model 24240**

<table>
<thead>
<tr>
<th>Flow rates:</th>
<th>KVO - 9,000 mL/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priming volume:</td>
<td>44 mL</td>
</tr>
<tr>
<td>Components:</td>
<td>Heat exchanger, bubble trap with air aspiration port, fluid aspiration port, 24 in. patient line</td>
</tr>
<tr>
<td>Pressure infusion:</td>
<td>Up to 300 mmHg</td>
</tr>
<tr>
<td>Material:</td>
<td>Latex-free</td>
</tr>
<tr>
<td>Case quantity:</td>
<td>10 disposable sets/case</td>
</tr>
<tr>
<td>Sterile:</td>
<td>EtO</td>
</tr>
<tr>
<td>Use:</td>
<td>Single use only</td>
</tr>
</tbody>
</table>
The 3M™ Ranger™ irrigation fluid warming system is an intuitive, easy-to-use solution for high-volume surgical irrigation. Unlike traditional warming cabinets where active warming ends when fluid is removed, the Ranger irrigation system warms fluid as it is being delivered to the patient. There is no risk of overheating the fluid because the Ranger system’s technology monitors plate temperature four times each second, adjusting as needed to maintain a 41°C set point. The result is fast, accurate heat control.

The Ranger irrigation fluid warming system can deliver optimum fluid performance and eliminate potential sources of noscomial pathogens associated with water bath-based warmers.

**Irrigation Warming Unit**

**Model 247**

- **Set point temperature:** 41°C
- **Device rating:** 110 VAC / 220-240VAC
- **Alarms**
  - Over-temperature primary setpoint: 48°C
  - Over-temperature secondary setpoint: 50°C
  - Under-temperature setpoint: 33°C
- **Dimensions:** 19w x 11h x 25d cm (7.5w x 4.5h x 10d in)
- **Weight:** 3 Kg 373 g (7 lbs 7 oz)
- **Leakage current:** Meets regulatory standards for leakage current

**Irrigation Fluid Warming Patient Line**

**Model 24795**

- **Flow rates:** 0-51.9 L/hr (0-865mL/min) (with Model 24760/24770/24780)
- **Priming volume:** 92 mL
- **Patient line length:** 213 cm
- **Components:** Patient line with check valve, flexible and male luer endoscope attachment, tubing cap.
- **Material:** Latex-free
- **Case quantity:** 10 sets/case
- **Sterile:** E10
- **Use:** Single use only

www.rangerfluidwarming.co.uk
### 3M™ Ranger™ Irrigation Disposable Sets

#### Vented Bottle Spike

**Model 24760**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow rates:</strong></td>
<td>0-51.9 L/hr (0-865 mL/min)</td>
</tr>
<tr>
<td><strong>Priming volume:</strong></td>
<td>216 mL</td>
</tr>
<tr>
<td><strong>Components:</strong></td>
<td>Double spike set, flow chamber, heat exchanger</td>
</tr>
<tr>
<td><strong>Pressure:</strong></td>
<td>Up to 300 mmHg</td>
</tr>
<tr>
<td><strong>Material:</strong></td>
<td>Latex-free</td>
</tr>
<tr>
<td><strong>Case quantity:</strong></td>
<td>10 disposable sets/case</td>
</tr>
<tr>
<td><strong>Sterile:</strong></td>
<td>EtO</td>
</tr>
<tr>
<td><strong>Use:</strong></td>
<td>Multiple uses</td>
</tr>
</tbody>
</table>

#### Standard Spike

**Model 24770**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow rates:</strong></td>
<td>0-51.9 L/hr (0-865 mL/min)</td>
</tr>
<tr>
<td><strong>Priming volume:</strong></td>
<td>216 mL</td>
</tr>
<tr>
<td><strong>Components:</strong></td>
<td>Double spike set, flow chamber, heat exchanger</td>
</tr>
<tr>
<td><strong>Pressure:</strong></td>
<td>Up to 300 mmHg</td>
</tr>
<tr>
<td><strong>Material:</strong></td>
<td>Latex-free</td>
</tr>
<tr>
<td><strong>Case quantity:</strong></td>
<td>10 disposable sets/case</td>
</tr>
<tr>
<td><strong>Sterile:</strong></td>
<td>EtO</td>
</tr>
<tr>
<td><strong>Use:</strong></td>
<td>Multiple uses</td>
</tr>
</tbody>
</table>

#### EASYFLOW* Spike

**Model 24780**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow rates:</strong></td>
<td>0-51.9 L/hr (0-865 mL/min)</td>
</tr>
<tr>
<td><strong>Priming volume:</strong></td>
<td>216 mL</td>
</tr>
<tr>
<td><strong>Components:</strong></td>
<td>Double spike set, flow chamber, heat exchanger</td>
</tr>
<tr>
<td><strong>Pressure:</strong></td>
<td>Up to 300 mmHg</td>
</tr>
<tr>
<td><strong>Material:</strong></td>
<td>Latex-free</td>
</tr>
<tr>
<td><strong>Case quantity:</strong></td>
<td>10 disposable sets/case</td>
</tr>
<tr>
<td><strong>Sterile:</strong></td>
<td>EtO</td>
</tr>
<tr>
<td><strong>Use:</strong></td>
<td>Multiple uses</td>
</tr>
</tbody>
</table>

*EASYFLOW is a trademark of Baxter International Inc.*

www.rangerfluidwarming.co.uk
### 3M™ Ranger™ Irrigation Fluid Warming Patient Line

#### Vented Bottle Spike

**Model 24765**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow rates:</strong></td>
<td>0-51.9 L/hr (0-865 mL/min) (with model 24760 cassette)</td>
</tr>
<tr>
<td><strong>Priming volume:</strong></td>
<td>109 mL</td>
</tr>
<tr>
<td><strong>Patient line length:</strong></td>
<td>213 cm</td>
</tr>
<tr>
<td><strong>Components:</strong></td>
<td>Patient line with check valve, flexible and male luer endoscope attachment, tubing cap, double spike set with flow chamber.</td>
</tr>
<tr>
<td><strong>Material:</strong></td>
<td>Latex-free</td>
</tr>
<tr>
<td><strong>Case quantity:</strong></td>
<td>10 sets/case</td>
</tr>
<tr>
<td><strong>Sterile:</strong></td>
<td>EtO</td>
</tr>
<tr>
<td><strong>Use:</strong></td>
<td>Single use only</td>
</tr>
</tbody>
</table>

**www.rangerfluidwarming.co.uk**

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### Standard Spike

**Model 24775**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow rates:</strong></td>
<td>0-51.9 L/hr (0-865 mL/min) (with model 24770 cassette)</td>
</tr>
<tr>
<td><strong>Priming volume:</strong></td>
<td>109 mL</td>
</tr>
<tr>
<td><strong>Patient line length:</strong></td>
<td>213 cm</td>
</tr>
<tr>
<td><strong>Components:</strong></td>
<td>Patient line with check valve, flexible and male luer endoscope attachment, tubing cap, double spike set with flow chamber.</td>
</tr>
<tr>
<td><strong>Material:</strong></td>
<td>Latex-free</td>
</tr>
<tr>
<td><strong>Case quantity:</strong></td>
<td>10 sets/case</td>
</tr>
<tr>
<td><strong>Sterile:</strong></td>
<td>EtO</td>
</tr>
<tr>
<td><strong>Use:</strong></td>
<td>Single use only</td>
</tr>
</tbody>
</table>

---

### EASYFLOW* Spike

**Model 24785**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow rates:</strong></td>
<td>0-51.9 L/hr (0-865 mL/min) (with model 24780 cassette)</td>
</tr>
<tr>
<td><strong>Priming volume:</strong></td>
<td>109 mL</td>
</tr>
<tr>
<td><strong>Patient line length:</strong></td>
<td>213 cm</td>
</tr>
<tr>
<td><strong>Components:</strong></td>
<td>Patient line with check valve, flexible and male luer endoscope attachment, tubing cap, double spike set with flow chamber.</td>
</tr>
<tr>
<td><strong>Material:</strong></td>
<td>Latex-free</td>
</tr>
<tr>
<td><strong>Case quantity:</strong></td>
<td>10 sets/case</td>
</tr>
<tr>
<td><strong>Sterile:</strong></td>
<td>EtO</td>
</tr>
<tr>
<td><strong>Use:</strong></td>
<td>Single use only</td>
</tr>
</tbody>
</table>

*EASYFLOW is a trademark of Baxter International Inc.*
The 3M™ Ranger™ pressure infusor system is designed to be used with the Ranger blood/fluid warming unit and Ranger standard and high flow disposable sets. The infusor accepts solution bags ranging from 500 mL to 1000 mL. The Ranger system pressure infusor includes a fitting that allows it to be connected to a Ranger power pack air compressor or the regulator of a compressed air, CO₂, or nitrogen tank to provide dynamic operating pressure of 300mmHg.

### Pressure Infusor
**Model 90083**

- **Pressure:** 300-350 mmHg maximum
- **Weight:** 7.0 kg (15.5 lb)
- **Dimensions:** 33w x 43h x 25d cm (13w x 17h x 10d in)
- **Case quantity:** 2 infusors on mounting bracket
- **Use:** With 500 to 1,000 mL solution containers
  - For use with power pack (#90031 or #90033), wall air or canned air IV pole mountable

### Power Pack
**Model 90031**

- **Device rating:** 220-240 VAC
- **Pressure setting:** 300-350 mmHg
- **Weight:** 2.7 kg (6 lb)
- **Dimensions:** 13w x 18h x 25d cm (5w x 7h x 10d in)
- **Case quantity:** 1 each
- **Use:**
  - With pressure infusor (#90083)
  - IV pole mountable

### Off-Set IV Pole & Base
**Model 90068 / 90069**

- **Height:** Adjustable from 186-279 cm (73.5 to 110 in)
- **Weight:** 15.8 kg (35 lbs)
- **Diameter:** 71cm (28 in) Base, 5 wheels
- **Case quantity:** 1 each
- **Use:**
  - For use with pressure infusor (#90083) and power pack (#90031)

www.rangerfluidwarming.co.uk
Fluid Warming Accessories

3M™ 241™ Blood Fluid Warming Set
Model 24110

The 3M™ 241™ blood/fluid warming set enables you to use two warming modalities with one piece of equipment. It’s ideal for low-flow situations (KVO to 3,000 mL/hr).

- Works with any 3M™ Bair Hugger™ 500 or 700 series temperature management unit
- Gives you more work space, less equipment clutter
- In-line liquid crystal temperature display on outlet tubing makes it easy to monitor temperature
- Meets all American Association of Blood Bank (AABB) guidelines for blood warming
- Natural latex-free fluid pathway
- Sterile, single use only
- Recommended for flow rates from KVO to 3,000 mL/hr
- Non-pyrogenic
- 34 mL priming volume
- In-line liquid crystal temperature display on outlet tubing

Reusable Hose Cap
Model 90026

Allows you to use the 241 blood/fluid warming set without a Bair Hugger blanket attached to the hose

Filter Accessory High-Flow Disposable Set
Model 90029

- Priming volume: 64 mL
- Filter: 150 micron filter
- Material: Latex-free
- Case quantity: 10 disposable sets/case
- Sterile: E10
- Use: Single-use only

Cleaning Tool Accessory
Model 90030

- Use: Disposable
- Case quantity: 12 cleaning tools/case

www.rangerfluidwarming.co.uk
A few words about safety

Our products are created to enhance patient health. Below are a few recommendations that will help you receive the most benefit from our products without compromising patient safety or well-being.

**Clinical Warming – 3M™ Bair Hugger™ Therapy and the 3M™ Bair Paws™ System**

- Change the filter on your 3M™ Bair Hugger™ temperature management unit to keep it running within calibrated temperature specifications. The filter should be changed according to service manual recommendations.
- Don’t reuse warming blankets. Reusing a warming blanket exposes your patient to unnecessary risk of infection.
- Don’t use Bair Hugger temperature management units without Bair Hugger blankets or 3M™ Bair Paws™ gowns. Using a Bair Hugger temperature management unit hose to blow hot air under cotton blankets is not only ineffective, it’s unsafe. Thermal injury has been known to occur when Bair Hugger temperature management units are used to warm patients without Bair Hugger blankets or Bair Paws gowns attached.
- Don’t use Bair Hugger temperature management units with other manufacturers’ forced-air warming disposables. The Bair Hugger system is calibrated to operate safely using Bair Hugger blankets and Bair Paws gowns. In addition, the performance and safety of Bair Hugger therapy are guaranteed as a complete system only. Using any other type of forced-air warming blanket or gown can reduce the effectiveness of patient warming – or expose your patient to unnecessary risk.

**Blood / Fluid Warming – 3M™ Ranger™ System and 3M™ 241™ Set**

- When using the 3M™ Ranger™ system or 3M™ 241™ blood and fluid warming disposable sets, do not exceed 300 mmHg.

**Patient Warming Gowns – Bair Paws System**

- To keep your Bair Paws warming unit running within calibrated temperature specifications, the filter should be changed every 6 months.
- The Bair Paws model 875 warming unit is not indicated for use in the operating theatre.
- Don’t use Bair Paws warming units without a Bair Paws gown. Using a Bair Paws warming unit hose to blow hot air under cotton blankets is ineffective and unsafe.
Customer Support

We are committed to improving patient outcomes. To that end, we offer a variety of customer support options to help you and your institution provide the best possible care. Please call customer service for more information on any of the following services.

On-Line Education

Our website is an excellent tool for clinicians to learn more about our products. In addition to general product information, this site contains clinical reference materials important to temperature management. The on-line video library serves as an excellent way for clinicians to access specific information about our technology or learn more about the science of temperature management.

On-going Research

We invest in research in two ways:

- We continue to fund research that explores ways to improve patient outcomes and lower treatment costs.
- Similarly, we also devote a substantial portion of revenue to researching and developing unique and useful new products and therapies.

In-Service Programme

- We provide comprehensive training on all of our products so you can use our products with full confidence.
- Our professionally designed in-service programmes help staff members learn quickly and effectively.

Product Warranties

We stand behind our products with strong product warranties. Contact customer service for full descriptions and information on warranties for the items below:

- Limited Warranty for 3M™ Bair Hugger™ temperature management units
- Limited Warranty for 3M™ Bair Paws™ warming units
- Limited Warranty for 3M™ Ranger™ blood and fluid warming units
- Limited Warranty for 3M™ Ranger™ pressure infusors
- Limited Warranty for 3M™ Polar Air™ II cooling units

Customer Service

Have a question or concern? Our customer service staff are ready to help you with ordering and technical support for all our patient warming products.

Customer Service tel: +44 (0) 1924 200 550
Customer Service fax: +44 (0) 1924 200 518
Customer Service email: customerservice@arizant.co.uk