



**Actively manage  
normothermia throughout  
the perioperative journey.**

**3M™ Ranger™**  
Blood and Fluid Warming Systems

**3M™ Bair Hugger™**  
Temperature Management Systems

## 3M™ Bair Hugger™ Normothermia Solutions

3M science helps change people's lives for the better. By applying our knowledge to clinicians' needs, we have developed a broad configuration of temperature management solutions. The 3M™ Bair Hugger™ Normothermia System and 3M™ Ranger™ Blood and Fluid Warming System aim to standardise temperature management worldwide, helping deliver positive patient experiences and outcomes.

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### 3M™ Bair Hugger™ Temperature Management System

*Warming Units / Warming Gowns / Warming Blankets*



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### 3M™ Bair Hugger™ Temperature Monitoring System

*Control Unit / Sensor*

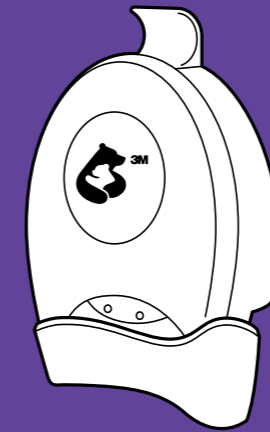
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### 3M™ Ranger™ blood and fluid warming systems

*Warming Units / Warming Sets*



## 3M™ Bair Hugger™ warming units



Model 87503



Model 77503

### 3M™ Bair Hugger™ warming unit

Model 87503

For use in preoperative and postoperative settings only.

- Personalised comfort as patients can control the unit's airflow and temperature — ambient to 43°C
- Flexibility in mounting the unit on the wall, a bedrail or an IV pole; the unit can also be placed on a flat surface
- Built-in hose storage
- Compatible with 3M™ Bair Hugger Flex Warming Gown, 3M™ Bair Hugger™ Plus Warming Gown



Model 875	
Dimensions	Height: 33cm Width: 19.6cm Depth: 10.2cm
Weight	3.2 kg
Operating Temperatures	User adjustable ambient to 43°C ±3°C
Filter	Dust filter
Device Ratings	220-240 VAC: 50/60 Hz, 2.8 Amps
Compatibility	Use only with 3M Bair Hugger Gowns
Accessories	Controller, Controller Holder, IV Pole Mount, Mounting Brackets, Suction Mount Adapter, Temperature Test Unit, Wall Mount, Wall to Rail Mount

### 3M™ Bair Hugger™ warming unit

Model 77503

For use in all clinical settings.

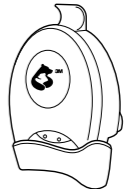
- Four temperature settings including an ambient setting
- Two airflow settings
- Hose-end temperature sensing
- Tracks and reports therapy duration and cumulative hours used (via built-in meter), displays over-temperature and fault codes
- Unit use information available via the front panel
- Unit can be used on a hard surface, or with accessories to mount on an IV pole, bed rail or rolling cart
- Compatible with all 3M™ Bair Hugger™ warming blankets and gowns — paediatric to adult










Model 775	
Dimensions	Height: 33cm Width: 35cm Depth: 33cm
Weight	7.3 kg
Operating Temperatures	High: 43°C ± 1.5°C Med: 38°C ± 1.5°C Low: 32°C ± 1.5°C Ambient Room Temperature Audible and Visual Alarms, High Temperature Limit ≤56°C, 53°C ±3°C
Filter	MERV 14*
Device Ratings	220-240 VAC: 50/60 Hz, 7.2 Amps
Compatibility	Use only with 3M Bair Hugger Blankets and Gowns
Accessories	Rolling Cart, Bed Rail Mount, Accessory Handle, Tethered Sheet Clip, Temperature Test Unit

\*See the Operator's Manual for Frequently Asked Questions on Filtration.

# Accessories and Replacement Parts



## 3M™ Bair Hugger™ Warming Unit — Model 87503

Accessories and Replacement Parts		
Catalog No.		
90082	Replacement Controller	
90073	Control Holder	
90076	Warming Unit IV Pole Mount	
90079	Warming Unit Bedrail Mount	
90122	Suction Mount Adapter	
90074	Wall to Rail Mount*	
90055	Temperature Test Kit	

\*Available in Australia only.



3M™ Bair Hugger™ Warming Unit — Model 77503

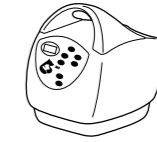


Accessories and Replacement Parts



Catalog No.		
90090	Rolling Cart	
90094	Rolling Cart Handle	
90063	Bair Hugger Sheet Clip	
90064	Bair Hugger Hose Clip*	
90046	Replacement Hose with Sensor Assembly	
90047	Replacement Filter for Bair Hugger 77503 Warming Unit	

\*Available in Australia only.

3M™ Bair Hugger™ Warming Unit — Model 77503



Accessories and Replacement Parts

Catalog No.		
22110	Temperature Test Kit	
90038	Power Cord 240V-I, ANZ*	

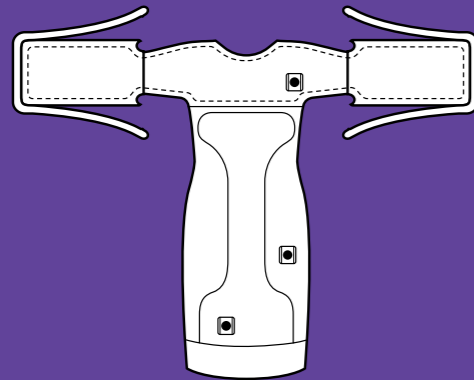
\*Available in Australia only.

## 3M™ Bair Hugger™ warming gowns

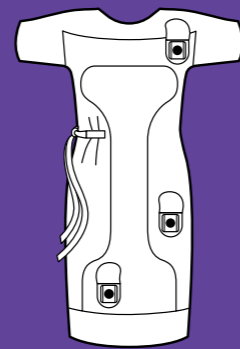
Designed to be worn by patients before, during and after surgery

Not made with natural rubber latex

Small, standard and X-large sizes offer greater coverage and help maintain patient modesty



Flex Warming Gown

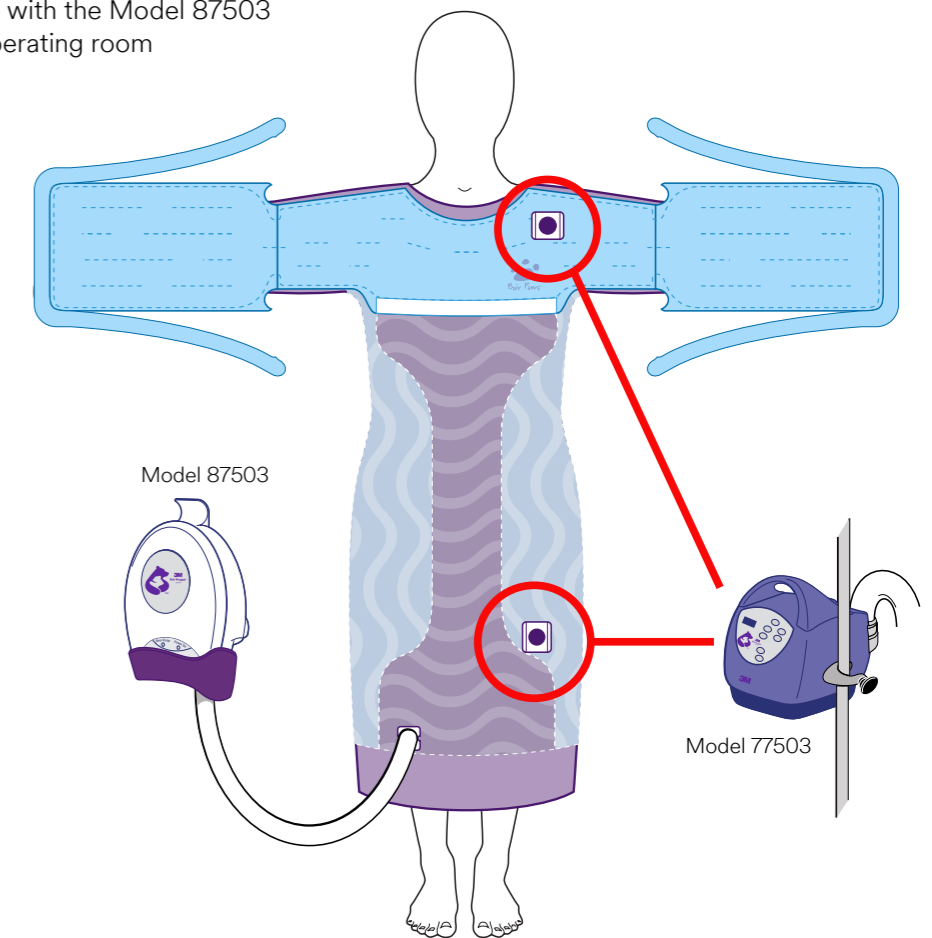


Plus Warming Gown

### 3M™ Bair Hugger™ Flex warming gowns

#### Flex Model

- Warming capabilities before, during, and after surgery in a single patient gown
- Has separate upper- and lower-body inserts
- Includes a head drape, tie strips, adhesive strip for better positioning
- Includes two hose ports for use with Model 77503 warming units inside and outside operating room
- Includes one hose port for use with the Model 87503 warming unit outside of the operating room



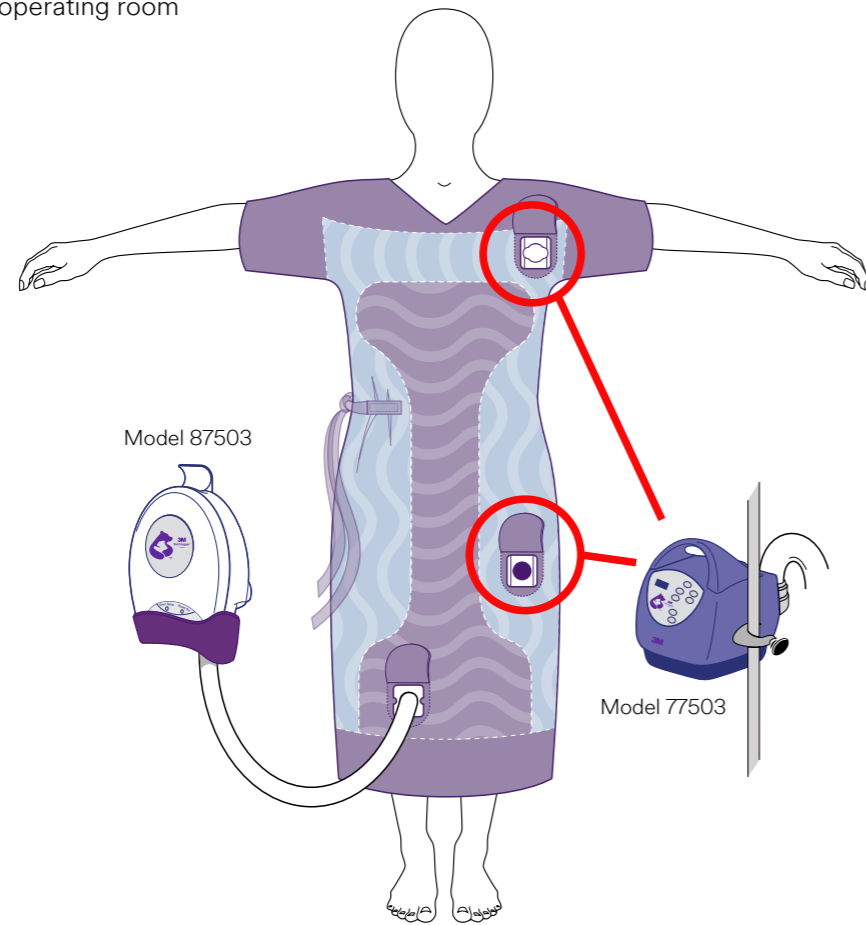
#### Flex Warming Gowns

Catalog No.			
81003	Standard	Long: 130cm	Sweep: 163cm
81203	X-Large	Long: 130cm	Sweep: 310cm

3M™ Bair Hugger™ Plus warming gowns

Plus Model

- Warming capabilities before, during, and after surgery in a single patient gown
- Includes two hose ports for use with Model 77503 warming units inside and outside operating room
- Includes one hose port for use with the Model 87503 series warming unit outside of the operating room



Plus Warming Gowns			
Catalog No.			
81002	Standard	Long: 130cm	Sweep: 163cm
81202	X-Large	Long: 130cm	Sweep: 310cm

3M™ Bair Hugger™ warming gown  
Positioning Examples



Plus or Flex warming gown  
Upper body warming, supine position



Plus or Flex warming gown  
Lower body warming, lateral position



Plus or Flex warming gown  
Lower body warming, prone position



Plus or Flex warming gown  
Full body warming, supine



Flex warming gown  
Full body warming, supine/arms out



Flex warming gown  
Upper body warming, supine position



Flex warming gown  
Upper body warming, supine/arms tucked

### Patient Booties

- Lower extremities are often cold before and after surgery
- Booties, in conjunction with the Bair Hugger warming gown, can help keep the patient comfortable



Booties	
<b>Catalog No.</b>	
90065	Standard

## 3M™ Bair Hugger™ warming blankets

### Full body



**Full Body**  
Model 30000-12



**Multi-Access**  
Model 31500-12



**Surgical Access**  
Model 57000-10

### Lower body

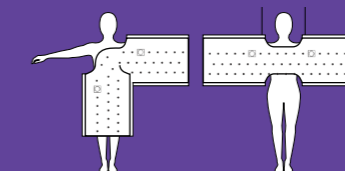


**Lower Body**  
Model 52500-14

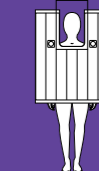


**Sterile Cardiac**  
Model 63000

### Upper body

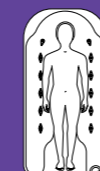


**Multi-Position Upper Body**  
Model 62200-14

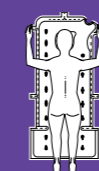


**Dual Port Torso**  
Model 54200-14

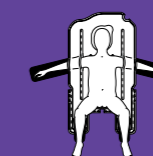
### Underbody



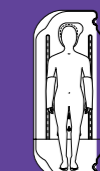
**Adult Underbody**  
Model 54500



**Spinal Underbody**  
Model 57501



**Lithotomy Underbody**  
Model 58501



**Full Access Underbody**  
Model 63500

### Paediatric



**Paediatric Small Lower Body**  
Model 53700



**Large Paediatric Underbody**  
Model 55000



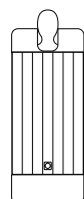
**Paediatric Underbody**  
Model 55501



### 3M™ Bair Hugger™ Full Body Warming Blanket

30000-12

- 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



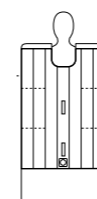
#### Full Body Warming Blanket 30000-12

Size	Drape	Blankets per box	Hose Ports
213 x 91 cm	N/A	12	1

### 3M™ Bair Hugger™ Multi-Access Warming Blanket

31500-12

- 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



#### Multi-Access Warming Blanket 31500-12

Size	Drape	Blankets per box	Hose Ports
213 x 91 cm	N/A	12	1



**3M™ Bair Hugger™ Lower Body Warming Blanket**

52500-14

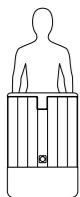
- For use during surgical procedures on the upper half of the body
- Effectively used for patients in the supine, lateral, or prone positions
- Foot drape minimises risk of thermal injury to the feet and lower leg area
- Continuous adhesive strip secures blanket to the patient



**3M™ Bair Hugger™ Multi-position Upper Body Warming Blanket**

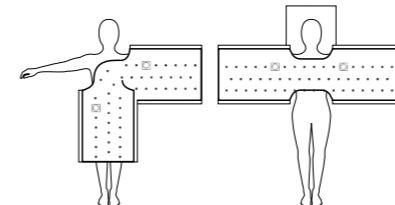
62200-14

- Maximise patient coverage to help maintain normothermia
- Adapts to multiple surgical positions and procedures



**Lower Body Warming Blanket 52500-14**

Size	Drape	Blankets per box	Hose Ports
152 x 91 cm	N/A	14	1



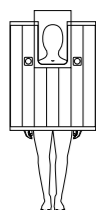
**Multi-position Upper Body Warming Blanket 62200-14**

Size	Drape	Blankets per box	Hose Ports
198 x 61 cm	61 x 61 cm	14	2

### 3M™ Bair Hugger™ Dual Port Torso Warming Blanket

54200-14

- Affix to the lower abdominal area and cover the upper half of the body
- 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



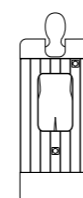
Dual Port Torso Warming Blanket 54200-14

Size	Drape	Blankets per box	Hose Ports
107 x 91 cm	61 x 41 cm	14	2

### 3M™ Bair Hugger™ Surgical Access Warming Blanket

57000-10

- Two resealable hose ports for versatile positioning of the warming unit
- 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 (34 cm x 56 cm) 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



Surgical Access Warming Blanket 57000-10

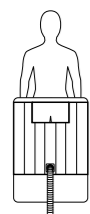
Size	Drape	Blankets per box	Hose Ports
213 x 91 cm	61 x 41 cm	10	1



### 3M™ Bair Hugger™ Sterile Cardiac Warming Blanket

63000

- “Cummerbund” design is pre-positioned at the waist during prep, unrolled upon closure of the saphenous vein graft incision, and inflated post-bypass
- 91cm 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
- Clear groin/femoral access window allows access to the femoral artery
- Positions easily in the sterile field



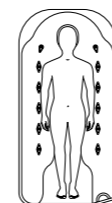
**Sterile Cardiac Warming Blanket 63000**

Size	Hose Length	Blankets per box	Hose Ports
152 x 91 cm	91 cm	5	1

### 3M™ Bair Hugger™ Adult Underbody Warming Blanket

54500

- Positioned on the table prior to the patient's arrival
- Unique fluid outlets minimises 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 table
- Radiolucent materials



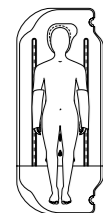
**Adult Underbody Warming Blanket 54500**

Size	Drape	Blankets per box	Hose Ports
188 x 91 cm	N/A	10	1

### 3M™ Bair Hugger™ Full Access Underbody Warming Blanket

63500

- Positioned on the table prior to the patient's arrival
- Ideal for cardiac, complex or routine surgeries where the patient is in the supine, lateral or prone positions
- Unique fluid outlets minimises 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 table
- Two resealable hose ports at either end of the blanket provide options for hose placement
- Included clear head drape retains warm air around the intubated patients head and allows observation by the clinician

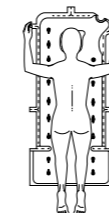


Full Access Underbody Warming Blanket 63500			
Size	Drape	Blankets per box	Hose Ports
221 x 91 cm	61 x 122 cm	5	2 (pre-sealed)

### 3M™ Bair Hugger™ Spinal Underbody Warming Blanket

57501

- Compatible with the open frame of the spinal surgery cradle
- Won't interfere with the adjustment of the support pads
- 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
- Included clear head drape retains warm air around the intubated patients head and allows observation by the clinician

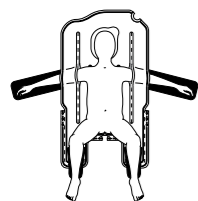


Spinal Underbody Warming Blanket 57501			
Size	Drape	Blankets per box	Hose Ports
188 x 91 cm	61 x 122 cm	5	1

### 3M™ Bair Hugger™ Lithotomy Underbody Warming Blanket

58501

- Positioned on the procedure table prior to the patient's arrival
- Full, unrestricted patient access and flexibility
- Ideal for procedures involving the lower extremities, and abdominal, peritoneal and pelvic cavities
- Unique fluid outlets minimises 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
- Included clear head drape retains warm air around the intubated patients head and allows observation by the clinician



Lithotomy Underbody Warming Blanket 58501

Size	Drape	Blankets per box	Hose Ports
188 x 91 cm	61 x 61 cm	10	1

### 3M™ Bair Hugger™ Small Lower Body Warming Blanket

53700

- Compact version of the adult-size lower body blanket (Model 52500)
- Ideal for warming a large child or a small adult during upper body surgery
- 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



Small Lower Body Warming Blanket 53700

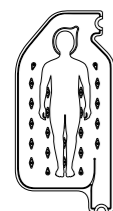
Size	Drape	Blankets per box	Hose Ports
89 x 61 cm	N/A	10	1



### 3M™ Bair Hugger™ Large Paediatric Underbody Warming Blanket

55000

- Positioned on table prior to the patient's arrival
- 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 table
- Included clear drapes (2) retain warm air around the patient and allows observation by the clinician



Large Paediatric Underbody Warming Blanket 55000

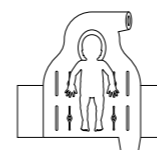
Size	Drape	Blankets per box	Hose Ports
152 x 81 cm	61 x 61 cm	10	1

### 3M™ Bair Hugger™ Paediatric Underbody Warming Blanket

55501

**For use in all clinical settings.**

- Warms even the smallest patient while providing clinicians full, unrestricted access to the patient
- Unique fluid outlets minimises 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 table
- Included clear drapes (2) retain warm air around the intubated patient and allows observation by the clinician



Paediatric Underbody Warming Blanket 55501

Size	Drape	Blankets per box	Hose Ports
91 x 84 cm	61 x 61 cm	10	1

## 3M™ Bair Hugger™ Temperature Monitoring System



**Model 37003**  
Control Unit



**Model 36000**  
Sensor

## 3M™ Bair Hugger™ Temperature Monitoring System

Non-invasive, accurate core temperature monitoring system measures patient temperature with an affordable single-use sensor. Provides standardisation and a consistent temperature monitoring method throughout the entire surgical journey.

### 3M™ Bair Hugger™ control unit

Model 37003

- Large numbers on display
- Temperature data transmitted to patient vital signs monitor via an optional monitor cable

### 3M™ Bair Hugger™ sensor

Model 36000

- Low-touch sensor placed on patient's forehead
- Thermal insulator allows for accurate core temperature reading from skin surface
- Can be disconnected and reconnected at each point of care



#### Model 37003

##### 3M™ Bair Hugger™ control unit

Includes: Sensor cable, control unit stand, power cord, YSI 400 6.35mm and 3.5mm cables

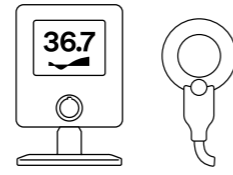
Dimensions	Height: 9.3cm    Width: 7.1cm    Depth: 4.3cm
Weight	128 kg

#### Model 36000

##### 3M™ Bair Hugger™ sensor

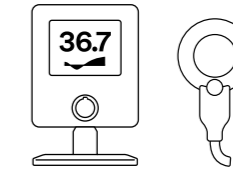
Dimensions	Diameter: 4.1cm    Thick: 0.5cm
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3M™ Bair Hugger™ Temperature Monitoring System



Accessories		
Catalog No.		
90106	Replacement Sensor Cable	
90111	Calibration Verification Stick (36C)	
90107	YSI 400 Cable — 6.35mm compatible	
90108	YSI 400 Cable — 3.5mm compatible	
90130	YSI 400 Cable — Philips compatible	
90131	YSI 400 Cable — GE compatible	
90132	YSI 400 Cable — Draeger compatible	
90133	YSI 400 Cable — Space Labs compatible	

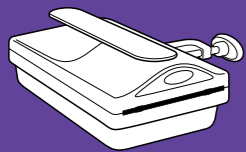
3M™ Bair Hugger™ Temperature Monitoring System



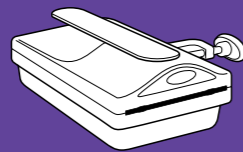
Accessories		
Catalog No.		
90126	Replacement Control Unit Stand	
90127	Hook and Loop Fastener	

## 3M™ Ranger™ blood and fluid warming systems

### Hardware



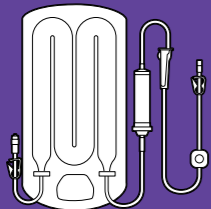
**Model 24703**  
Irrigation Fluid Warming Unit



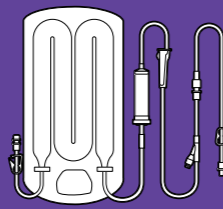
**Model 24503**  
Blood/Fluid Warming Unit

### Blood/Fluid Warming Standard Flow Sets

For use with Model 24503



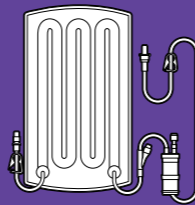
24200



24250

### Blood/Fluid Warming Paediatric Set

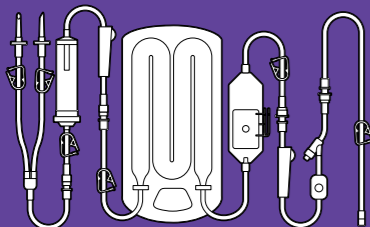
For use with Model 24503



24450

### Blood/Fluid Warming High Flow Sets

For use with Model 24503



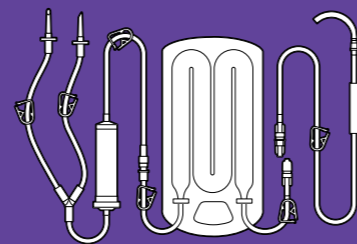
24355



**90029\***  
Replacement Filter

### Fluid Warming Irrigation Set

For use with Model 24703



24750

\*Available only in Australia

Hardware

### 3M™ Ranger™ Irrigation Fluid Warming Unit

Model 24703

- Use with 3M™ Ranger™ Fluid Warming Irrigation Sets
- Dry heat technology — no water reservoir
- Warms fluid as it is being delivered to the patient
- Quickly adapts to changes in flow rates: 0 to 870mL per minute when bag is hung 100cm above the scope
- Monitors plate temperature, adjusting to maintain a 41°C set point
- Audible/visible, over/under temperature alert indicators
- Cleaning tool allows cleaning the heating plates without disassembling the warming unit



90030

Model 24703	
Dimensions	Height: 11cm Width: 19cm Length: 25cm
Weight	3.4 kg
Set Point Temperature	41°C
Leakage Current	Meets leakage current requirements in accordance with IEC 60601-1
Alerts (audible and visual)	Over-Temperature Alert: 48°C Under-Temperature Alert: 33°C
Accessories	Cleaning Tool 90030



### 3M™ Ranger™ Blood/Fluid Warming Unit

Model 24503

- Use with 3M™ Ranger™ Blood/Fluid Warming Sets
- Dry heat technology—no water reservoir
- Warms blood/fluid as it is being delivered to the patient
- Quickly adapts to changes in flow rates: 0 to 500mL per minute
- Monitors plate temperature, adjusting to maintain a 41°C set point
- Audible/visible, over/under temperature alert indicators
- Cleaning tool allows cleaning the heating plates without disassembling the warming unit



90030

Model 245	
Dimensions	Height: 11cm Width: 19cm Length: 25cm
Weight	3.4 kg
Set Point Temperature	41°C
Leakage Current	Meets leakage current requirements in accordance with IEC 60601-1
Flow Rates	KVO to 500mL/hr
Alerts (audible and visual)	Over-Temperature Alert: 43°C Under-Temperature Alert: 33°C
Accessories	Cleaning Tool 90030

### 3M™ Ranger™ Blood/Fluid Warming Set

- Intravenous fluid flows through sets and is warmed prior to reaching the patient
- Sets are disposable and for single use
- EtO sterilised
- Not made with natural rubber latex
- Accommodates the entire spectrum of fluid warming from KVO to 30L/hr
- Use with the 3M™ Ranger Blood/Fluid Warming Unit Model 245 only

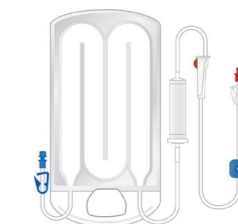


Colour fluid shown for illustrative purposes only.

#### Standard Flow

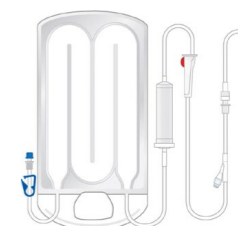
##### 24200

Flow rates	KVO – 150mL/min
Priming volume	39mL
Components	Fluid warming cassette, needle injection port, bubble trap, 76cm patient line
Pressure infusion	Up to 300 mmHg
Material	Not made with natural rubber latex
Sterile	EtO



##### 24250

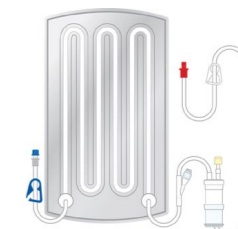
Flow rates	KVO – 150mL/min
Priming volume	44mL
Components	Fluid warming cassette, needleless injection port, bubble trap
Pressure infusion	Up to 300 mmHg
Material	Not made with natural rubber latex
Sterile	EtO
Extension	Luer connected 76cm extension set on patient line



#### Paediatric

##### 24450

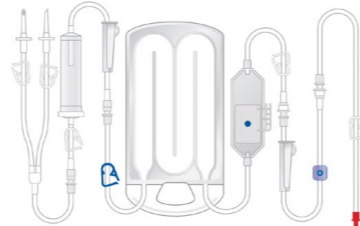
Flow rates	KVO – 100mL/min
Priming volume	20mL
Components	Fluid warming cassette, bubble trap with air aspiration port, needleless aspiration port, 60cm patient line
Pressure infusion	Do not use with pressure, use only gravity
Material	Not made with natural rubber latex
Sterile	EtO





**High Flow**

<b>24355</b>	
Flow rates	KVO – 500mL/min
Priming volume	150mL
Components	Fluid warming cassette, 2 I.V. spikes, drip chamber with 150 micron filter, drip rate 20dpm, needleless injection port, 152cm patient line, auto-venting bubble trap
Pressure infusion	Up to 300 mmHg
Material	Not made with natural rubber latex
Sterile	EtO



<b>90029 Replacement Filter*</b>	
Filter	150 micron filter
Material	Not made with DEHP
Sterile	EtO
Compatible	Use with 3M™ Ranger™ blood/fluid warming high flow sets 24355



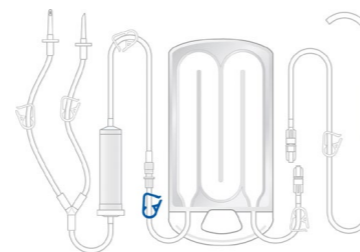
\*Available in Australia only.

**3M™ Ranger™ Irrigation Fluid Warming Set**

- High-volume surgical irrigation fluid flows through disposable sets and is warmed prior to reaching the patient
- Set is disposable and for single use
- EtO sterilised
- Not made with natural rubber latex
- Use with 3M™ Ranger™ Irrigation Fluid Warming Unit Model 247 only

**Irrigation**

<b>24750</b>	
Components	Standard double spike and 213cm patient line with scope attachment (patient line is contained within its own sterile packaging for use within the sterile field)
Pressure infusion	Up to 245 mmHg
Material	Not made with natural rubber latex
Sterile	EtO

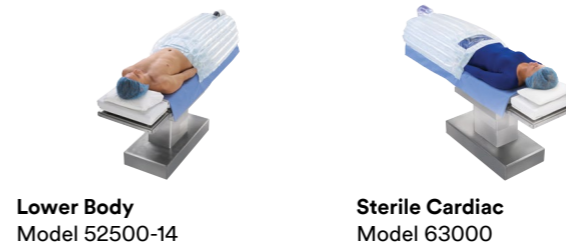


**3M™ Bair Hugger™ Normothermia Solutions**

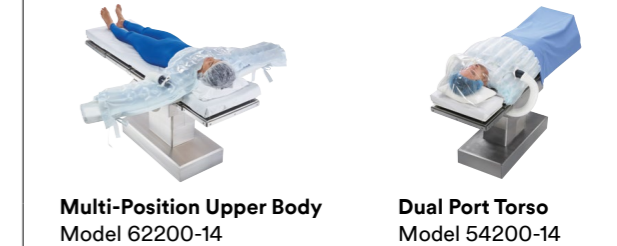
**Full Body Warming Blankets**



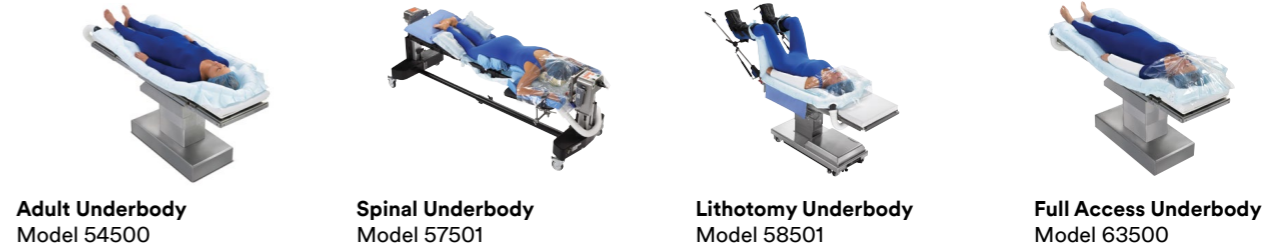
**Lower Body Warming Blankets**



**Upper Body Warming Blankets**



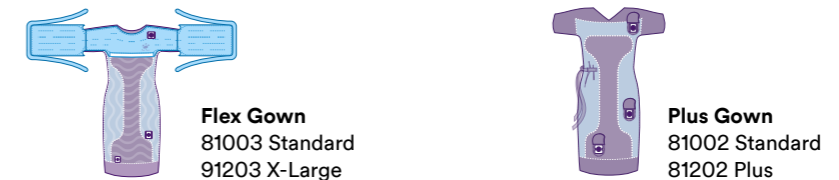
**Underbody Warming Blankets**



**Paediatric Warming Blankets**



**Warming Gowns**







**NOTE: Specific indications, limitations, contraindications, warnings, precautions and safety information exist for these products and therapies. Please consult a clinician and product instructions for use prior to application.**



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