



## Ranger® Blood and Fluid Warming Systems Product Specifications

### Warming Unit / Model 24500

Setpoint temperature: 41°C

Flow rates: KVO to 30,000 mL/hr

Alarms (audible & visible):

- Over-temperature primary setpoint = 43°C
- Over-temperature secondary setpoint = 46°C

Device rating: 110-120 VAC / 220-240 VAC

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

Weight: 7.7 lb (3.4 kg)

Leakage current: Meets UL 60601-1 and IEC 60601-1 requirements



### DISPOSABLE SETS

#### Pediatric/Neonate Disposable Set / Model 24400

Flow rates: KVO to 6,000 mL/hr

Priming volume: 20 mL

Components: Heat exchanger, bubble trap with air aspiration port, 24 in. patient line

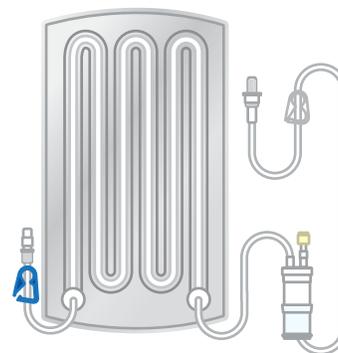
Pressure infusion: Up to 300 mmHg

Material: Latex-free, DEHP-free

Case quantity: 10 disposable sets/case

Sterile: EtO

Use: Single use only



#### Pediatric/Neonate Disposable Set / Model 24450

Flow rates: KVO to 6,000 mL/hr

Priming volume: 20 mL

Components: Heat exchanger, bubble trap with air aspiration port, fluid aspiration port, 24 in. patient line

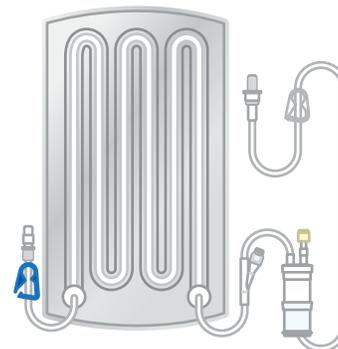
Pressure infusion: Up to 300 mmHg

Material: Latex-free, DEHP-free

Case quantity: 10 disposable sets/case

Sterile: EtO

Use: Single use only





## Ranger® Blood and Fluid Warming Systems Product Specifications

### Standard Flow Disposable Set / Model 24200

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Flow rates: KVO to 9,000 mL/hr

Priming volume: 39 mL

Components: Heat exchanger, IV injection port, bubble trap, 30 in. patient line

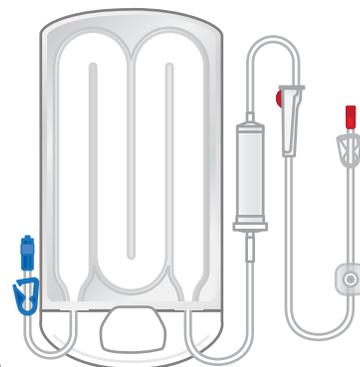
Pressure infusion: Up to 300 mmHg

Material: Latex-free

Case quantity: 10 disposable sets/case

Sterile: EtO

Use: Single use only



### Standard Flow Disposable Set with Needleless Air Aspiration Port / Model 24240

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Flow rates: KVO to 9,000 mL/hr

Priming volume: 44 mL

Components: Heat exchanger, bubble trap with air aspiration port, 60 in. patient line

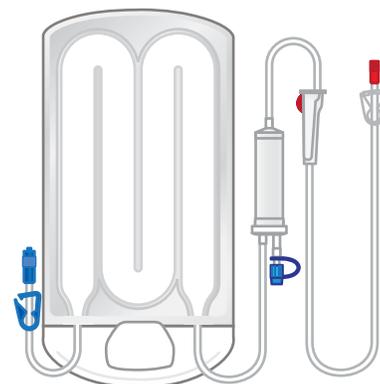
Pressure infusion: Up to 300 mmHg

Material: Latex-free

Case quantity: 10 disposable sets/case

Sterile: EtO

Use: Single use only



### Standard Flow Disposable Set with Extension / Model 24250

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Flow rates: KVO to 9,000 mL/hr

Priming volume: 44 mL

Components: Heat exchanger, needleless and standard IV injection port, bubble trap

Extension: Luer connected 30 in. extension set on patient line

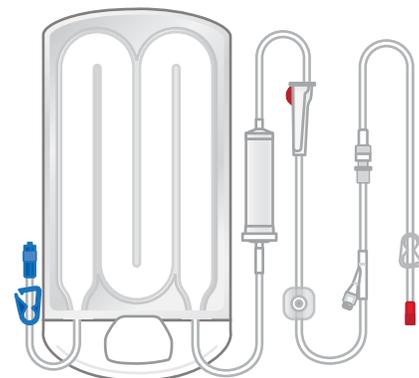
Pressure infusion: Up to 300 mmHg

Material: Latex-free

Case quantity: 10 disposable sets/case

Sterile: EtO

Use: Single use only





## Ranger® Blood and Fluid Warming Systems Product Specifications

### High Flow Disposable Set / Model 24350

Flow rates: KVO to 30,000 mL/hr

Priming volume: 150 mL

Components: Heat exchanger, 2 IV spikes, drip chamber with 150 micron filter, needleless and standard IV injection port, 60 in. patient line, auto-venting bubble trap

Filter: Replaceable 150 micron filter

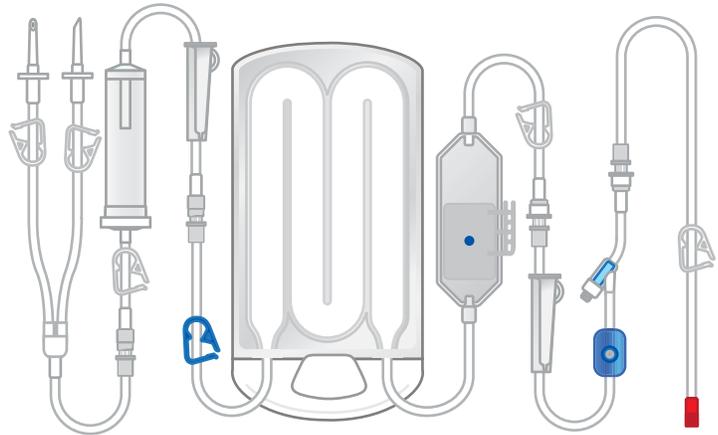
Pressure infusion: Up to 300 mmHg

Material: Latex-free

Case quantity: 10 disposable sets/case

Sterile: EtO

Use: Single use only



### High Flow Disposable Set / Model 24365

Flow rates: KVO to 30,000 mL/hr

Priming volume: 65 mL

Components: Heat exchanger, auto-venting bubble trap

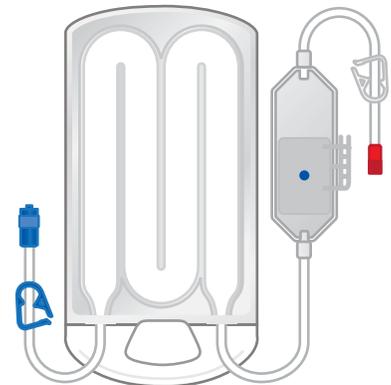
Pressure infusion: Up to 300 mmHg

Material: Latex-free

Case quantity: 10 disposable sets/case

Sterile: EtO

Use: Single use only



### High Flow Disposable Set / Model 24370

Flow rates: KVO to 30,000 mL/hr

Priming volume: 89 mL

Components: Heat exchanger, auto-venting bubble trap, 48 in. patient line

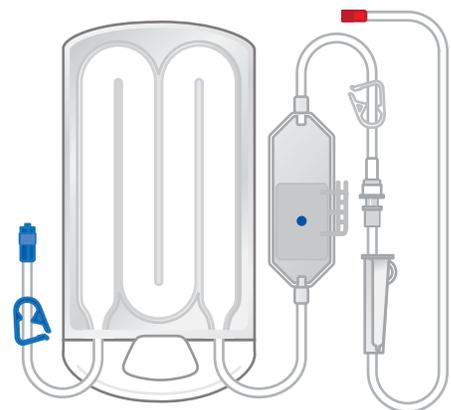
Pressure infusion: Up to 300 mmHg

Material: Latex-free

Case quantity: 10 disposable sets/case

Sterile: EtO

Use: Single use only





## Ranger® Blood and Fluid Warming Systems Product Specifications

### Irrigation Warming Unit / Model 24700

Setpoint temperature: 41°C

Device rating: 110-120 VAC / 220-240 VAC

Alarms (audible & visible):

- Over temperature primary setpoint = 48°C
- Over temperature secondary setpoint = 50°C
- Under temperature setpoint = 33°C

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

Weight: 7.7 lb (3.4 kg)

Leakage current: Meets UL 60601-1 and IEC 60601-1 requirements



### DISPOSABLE SET

### Irrigation Disposable Set / Model 24750

Flow rates: 0-865 mL/min (with bag hung 100 cm above scope under gravity flow)

Priming volume: 308 mL

Patient line length: 213 cm

Components: Double spike set, heat exchanger, patient line with scope attachment (patient line is contained within its own sterile packaging for use within the sterile field)

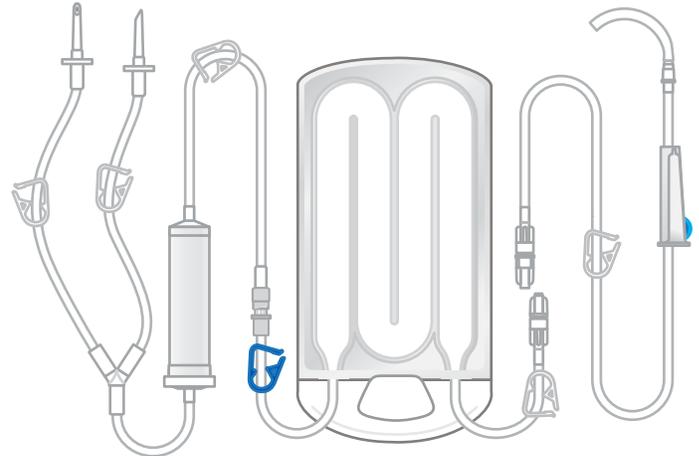
Pressure: Up to 300 mmHg

Material: Latex-free

Case quantity: 10 disposable sets/case

Sterile: EtO

Use: Single use only





## Ranger® Blood and Fluid Warming Systems Product Specifications

### PRESSURE INFUSION SYSTEM

#### Pressure Infusors / Model 90032

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Pressure: 300 mmHg maximum dynamic operating pressure

Weight: 15.5 lb (7.0 kg)

Dimensions: 13w x 17h x 10d in. (33w x 43h x 25d cm)

Case quantity: 2 infusors on mounting bracket

Use:

- With 500 to 1,000 mL solution containers
- For use with Power Pack (#90033), wall or canned air
- IV pole mountable



#### Power Pack / Model 90033

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Device rating: 110 - 120 VAC

Pressure setting: 300 mmHg maximum dynamic operating pressure

Weight: 6 lb (2.7 kg)

Dimensions: 5w x 7h x 10d in. (13w x 18h x 25d cm)

Case quantity: 1 each

Use:

- With Pressure Infusor (#90032)
- IV pole mountable



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

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Height: Adjustable from 73.5 to 110 in.

Weight: 35 lb (15.9 kg)

Diameter: 28 in. base, 5 wheels

Use: With Pressure Infusor (#90032) and Power Pack (#90033)





## Ranger® Blood and Fluid Warming Systems Product Specifications

### ACCESSORIES

#### 241® Blood/Fluid Warming Set / Model 24100

The 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 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
  - Non-pyrogenic
  - 34 mL priming volume



#### 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: EtO

Use: Single-use only



#### Cleaning Tool Accessory / Model 90030

Use: Disposable

Case quantity: 12 cleaning tools/case

