



Ranger® Irrigation Fluid Warming System Frequently Asked Questions

What flow rates can I expect with your set?

0 to 865 mL/minute under gravity pressure.

Can I use a pressure infusion device with your set?

Yes, up to 300 mmHg.

Is the Ranger irrigation set sterile within the fluid pathway and on the outside of the set?

Yes. The fluid pathway and the outside of the tubing are sterile. The patient line is packaged within its own pouch so that it can be placed into the sterile field. The packaging has a STERILE EtO symbol, which means it is sterilized using ethylene oxide gas.

Can the Ranger irrigation warming unit be mounted in a vertical position?

Yes. The Ranger irrigation fluid warming system is not for use with IV fluids so the warming unit does not include a bubble trap and can be mounted vertically or horizontally depending on the IV pole or other pole mounting options available.

Does the Ranger irrigation set accommodate continuous bladder irrigation?

Yes. The set is designed to accommodate continuous bladder irrigation post-surgically after a TURP. The patient line and spike set can be sent with the patient for this. The flexible scope tubing is removed and the cone shaped connector at the end of the patient line can be connected to a Foley catheter.

Why doesn't the set have an air elimination mechanism on it? Won't I get a lot of air bubbles?

Urologists with whom we consulted when developing our irrigation fluid warming set stated that air elimination was not a concern because the set incorporates a flow chamber, which also serves as a bubble trap. In addition, the surgeon has the ability to adjust suction, which can improve surgical site visibility.

What is the purpose of the flow chamber?

The flow chamber can be partially filled for flow visualization. It also provides negative pressure during the priming process so that the set primes properly.

Can the flow chamber be filled completely?

Yes. The flow chamber can be completely filled. Some practitioners prefer to fill the flow chamber full because they feel like it reduces turbulence and the introduction of micro-bubbles into the surgical site.

Why warm irrigation fluids with the Ranger irrigation system?

- Unlike traditional warming cabinets where active warming ends when fluid is removed, the Ranger system initiates warming as the fluid is being delivered to the patient.
- There is no risk of overheating the fluid because the Ranger system's SmartHeat® technology monitors heater plate temperature four times each second, adjusting as needed to maintain a 41°C set point. The result: fast, accurate heat control.
- The Ranger irrigation fluid warming system delivers this optimum fluid warming performance while eliminating a potential source of nosocomial pathogens associated with water bath-based warmers.

Are there any specific types of irrigation fluids that I should warm with your set?

Whether using normal saline, lactated ringers, or glycine, you can use the Ranger system to warm your irrigation fluids.