Nursing Administration Instructions | SMARTeZ® Elastomeric Infusion Pump

Product Diagram

- 1. Fill port
- 2. Outer soft cover
- 3. Multi-layered elastomeric membrane
- 4. ON / OFF clamp
- 5. Non DEHP PVC administration tubing
- 6. Air and particulate eliminating filter
- 7. Flow restrictor
- 8. Patient connector
- 9. Patient end cap
- 10. Sterile color-coded fill port cap
- 11. Labeling Fill volume & infusion duration
- 12. Labeling Flow rate

6

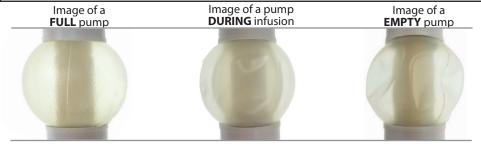
What To Expect

The SMARTeZ® elastomeric pump infuses medication at a fixed flow rate using pressure from the balloon-like drug reservoir against the fixed diameter taper of the administration tubing. Consult **pharmacy label** for pump fill volume and infusion duration.

After the pump is filled with medication, it will be connected to the patient access site and the ON/OFF clamp will be opened. Medication will begin infusing and the pump will deflate at the prescribed flow rate.

DO NOT DISCONNECT BEFORE PRESCRIBED DURATION HAS ELAPSED

Pump may appear empty with medication remaining. Expect minimal change in pump appearance during the last 25% of infusion.



At the beginning of infusion the inner membrane and soft outer cover will be taut, the pump will be round and firm.

During infusion the inner membrane will decrease in size and the outer soft cover will begin to form wrinkles.

At the end of the prescribed infusion time the inner membrane will completely deflate and the soft outer cover will collapse.

Precautions

- 1. Do not immerse the pump in water. Protect the filter from getting wet.
- 2. Avoid getting alcohol or detergents on the filter which may cause leakage from the filter.
- 3. Make sure the tubing is free of kinks and the clamp is in the ON/OPEN position for the full infusion time. If kinks are observed in the tubing, roll between your fingers to release.
- 4. Do not sleep on the device.
- 5. Do not exert pressure or play with filled device and take caution when used with immobilized patients. While the device is durable, forcible pressure may result in an increased flow rate, rupture, or breakage.
- 6. The pump is designed to operate accurately when worn close to the body. The section of tubing from the filter to the patient connector should be kept under clothing and in contact with the body.
- 7. Temperature will affect the flow rate. Higher temperatures result in slightly shorter delivery times, while lower temperatures result in slightly longer delivery times. Avoid prolonged periods of direct heat or cold.
- 8. Prior to starting infusion, allow the device to reach room temperature (\sim 23 deg C +/- 2 deg C). Prior to starting infusion, allow the pump to reach room temperature (\sim 23 deg C +/- 2 deg C). Estimated times below:

Nominal Fill Volume	Refrigerated Temperature	Estimated Time to Reach Room Temp
50ml - 100ml	+2 to +8 deg C	6 hours from refrigerator
50ml - 100ml	-18 deg C	12 hours from refrigerator
100ml+	+2 to +8 deg C	12 hours from refrigerator
100ml+	-18 deg C	18 hours from refrigerator

9. Consult your pharmacist, nurse or physician for the expected infusion duration.

Preparation

In a clean work area, assemble the following supplies:

- SMARTeZ® pump
- Alcohol wipe(s)
- Flush syringe(s)





- Wash your hands thoroughly as directed by facility policy.
- Be sure the SMARTeZ® pump includes patient name and that the medication name and dosage are correct.
- Review the expiration date and verify that it has not expired.
- Allow the SMARTeZ® pump to warm to room temperature before use, especially when it has been stored in the refrigerator.
- Check that the clamp on the tubing is in the Off/Closed position.



Closed position, pump is not infusing.

Connecting the Device

- Clean patient vascular catheter access site as directed by facility policy.
- Remove the patient end cap from the luer tip end of the SMARTeZ® tubing.
- Insert the luer tip end of the tubing into patient access site and turn the luer lock clockwise to secure the connection.
 - If facility is using CSTD, the nurse would connect those devices as directed.
- Verify the connection to the access site is secure.



Starting Infusion

- Once the patient connector is connected to the access site, you are ready to begin the infusion (make note of start time).
- Begin infusion by opening the ON/OFF clamp.
- Ensure the ON/OFF clamp remains in the ON/OPEN position and that the tubing remains free of kinks.
- If kinks are observed in the tubing, roll between your fingers to release.



Open position, infusion has started.

Ending Infusion

- After the prescribed infusion time has elapsed, close the clamp, and disconnect the luer tip from the patient access site.
- Flush the vascular catheter access site as directed by facility policy.
- · Dispose of supplies.



