

DISPOSABLE INFUSION PUMP



The usage of this product can be apply on postoperative analgesia, child delivery, and therapy of chronic pain, as well as therapies that has application of self administration analgesic infusion for instance malicious tumor.

At present, there are 39 models available to meet requirements of different medication purposes, including basal series pumps and basal + PCA bolus series pumps. The basal series pumps are not fitted with PCA administration set that it only allows continuous infusion. The basal + PCA bolus series pumps allow the standard continuous infusion and PCA bolus infusion.

The disposable infusion pump is a safe, effective, durable and portable infusion device, which is driven by balanced contraction of the elastic reservoir made of medical silicone rubber, with the flow rate controlled by the controlling tubing. The PCA (Patient Controlled Analgesia) administration set allows patients to administer additional analgesic doses by pressing the button on the PCA set when necessary.

Models	Capacity of Reservoir (ml)	Basal Rate (ml/hr)	Continually Infusion time (hrs)
WZ-6522-02	275ml	2ml/hr	138 hours
WZ-6522-03	275ml	3ml/hr	92 hours
WZ-6522-04	275ml	4ml/hr	69 hours
WZ-6522-05	275ml	5ml/hr	55 hours
WZ-6522-06	275ml	6ml/hr	46 hours
WZ-6522-07	275ml	7ml/hr	39 hours
WZ-6522-08	275ml	8ml/hr	34 hours
WZ-6522-09	275ml	9ml/hr	31 hours
WZ-6522-010	275ml	10ml/hr	28 hours
WZ-6522-013	275ml	13ml/hr	21 hours
WZ-6522-016	275ml	16ml/hr	17 hours

Models	Capacity of Reservoir (ml)	Basal Rate (ml/hr)	Continually Infusion time (hrs)
WZ-6522-2	100ml	2ml/hr	50 hours
WZ-6522-3	100ml	3ml/hr	33 hours
WZ-6522-4	100ml	4ml/hr	25 hours
WZ-6522-5	100ml	5ml/hr	20 hours
WZ-6522-6	100ml	6ml/hr	17 hours
WZ-6522-7	100ml	7ml/hr	14 hours
WZ-6522-8	100ml	8ml/hr	13 hours
WZ-6522-9	100ml	9ml/hr	11 hours
WZ-6522-10	100ml	10ml/hr	10 hours

Models	Capacity of Reservoir(ml)	Basal Rate (ml/hr)	PCA Bolus (ml/min)	Infusion Time (hrs)	
				When patients use PCA set on time	When patients do not use PCA set
WZ-6523C-2	100ml	1.0ml/hr	0.5ml/30min	50 hours	100 hours
WZ-6523C-3	100ml	1.0ml/hr	0.5ml/15min	33 hours	100 hours
WZ-6523C-4	100ml	2.0ml/hr	0.5ml/15min	25 hours	50 hours
WZ-6523C-4.25	100ml	0.5ml/hr	0.5ml/8min	24 hours	200 hours
WZ-6523C-5	100ml	1.0ml/hr	1.0ml/15min	20 hours	100 hours
WZ-6523C-6	100ml	2.0ml/hr	1.0ml/15min	17 hours	50 hours
WZ-6523C-7	100ml	3.0ml/hr	1.0ml/15min	14 hours	33 hours
WZ-6523C-8	100ml	4.0ml/hr	1.0ml/15min	13 hours	25 hours
WZ-6523C-9	100ml	5.0ml/hr	1.0ml/15min	11 hours	20 hours
WZ-6523C-10	100ml	2.0ml/hr	2.0ml/15min	10 hours	50 hours
WZ-6523C-13	100ml	5.0ml/hr	2.0ml/15min	8 hours	20 hours

Models	Capacity of Reservoir(ml)	Basal Rate (ml/hr)	PCA Bolus (ml/min)	Infusion Time (hrs)	
				When patients use PCA set on time	When patients do not use PCA set
WZ-6523C-02	275ml	1.0ml/hr	0.5ml/30min	138 hours	275 hours
WZ-6523C-04	275ml	2.0ml/hr	0.5ml/15min	69 hours	138 hours
WZ-6523C-05	275ml	3.0ml/hr	0.5ml/15min	55 hours	92 hours
WZ-6523C-09	275ml	5.0ml/hr	1.0ml/15min	31 hours	55 hours
WZ-6523C-013	275ml	5.0ml/hr	2.0ml/15min	21 hours	55 hours
WZ-6523C-016	275ml	8.0ml/hr	2.0ml/15min	17 hours	34 hours

Easy to operate

Multiplicity models of Fornia infusion pumps are designed for physicians to choose for adequate medications upon individual requirement. The PCA administration set allows patients to administer additional doses when necessary, besides the standard continuous infusion.

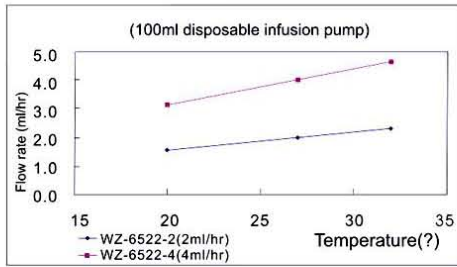
More options

Fornia disposable infusion pump can provide as much as five day infusion ranging from 0.2ml/hr to 16ml/hr. It can be used for intravenous or epidural infusion.

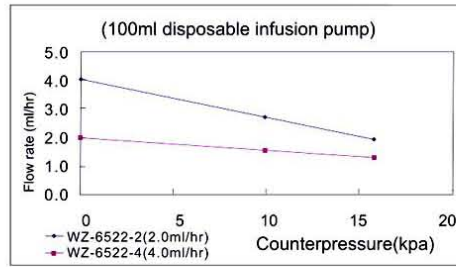
More reliable and precise

- The advanced technology in producing the controlling tubing is introduced from USA which enables the flow rates to be limited within $\pm 10\%$
- The catheter is made of medical plastic material and with the triangular interior made to resist pressure and bends that prevents blockage of doses.
- The filter can effectively screens off air bubbles, germs and particles of foreign substances.

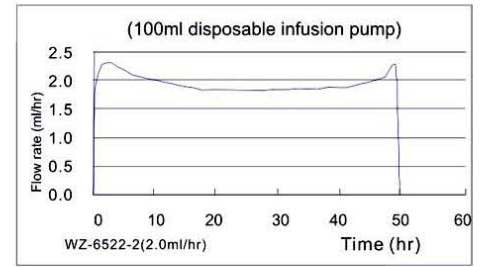
The following graph indicates the regulation of flow rate changes caused under different temperature.



The following graph indicates the regulation of flow rate changes under different pressure at 23°C.



The following graph indicates the flow rate changes during the infusion process.



- The labeled flow rate is based on 0.9% sodium chloride solution as medium, and is metered under the environmental condition of 23°C.
- The actual flow rate can have variations due to different categories and concentrations of medication under diverse room temperatures. Moreover, pressure from the artery can have slight effect on the flow rate as well.

1. What is the benefit of using the Fornia[®] Disposable Infusion Pump?

Doctors traditionally treated the pain control with intramuscular injections of analgesics. Doses of intramuscular analgesics were often inadequate and spaced far apart from enough so that the medication wore off before the patients received the next dose. Pain would usually build up before the next dose of pain reliever was given. If the patients use the Fornia[®] Disposable Infusion Pump to control their pain, it can continually micro inject the pain medication into the patients' body. Moreover, when the patients still feel pain or discomfort, they can self-control the additional doses by pressing the button of PCA administration set instead of having to call the nurse and waiting for the pain relief to be given to them.

2. Why is pain control so important?

In addition to keeping patients comfortable, pain control can help them recover faster and may reduce their risk of developing complications after surgery. If their pain is well controlled, they are likely to start walking and doing their breathing exercises sooner. These activities will help them get their strength back. They may also avoid some problems, such as pneumonia and blood clots, that can occur after surgery.

3. Is the basal +PCA bolus series infusion pump appropriate for children?

If a child is mature enough to understand that after pressing the button the pain is relieved, then he may be a candidate for the pump. There is no set age when a child can routinely be given the pump, but it has been successfully used for post-surgical pain control in children as young as 6 and 7.

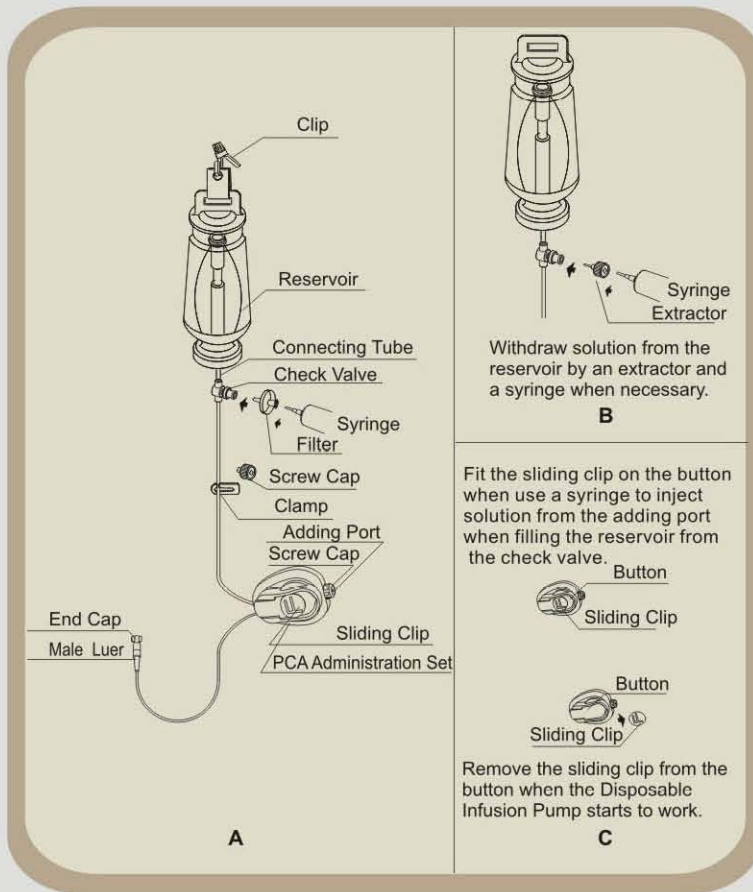
4. Can the patients become addicted?

No! Studies have shown that patients using the infusion pump often use less medication during their hospital stay. Usually a patient use the pump for only a few days, and then oral medication is enough to relieve his pain.

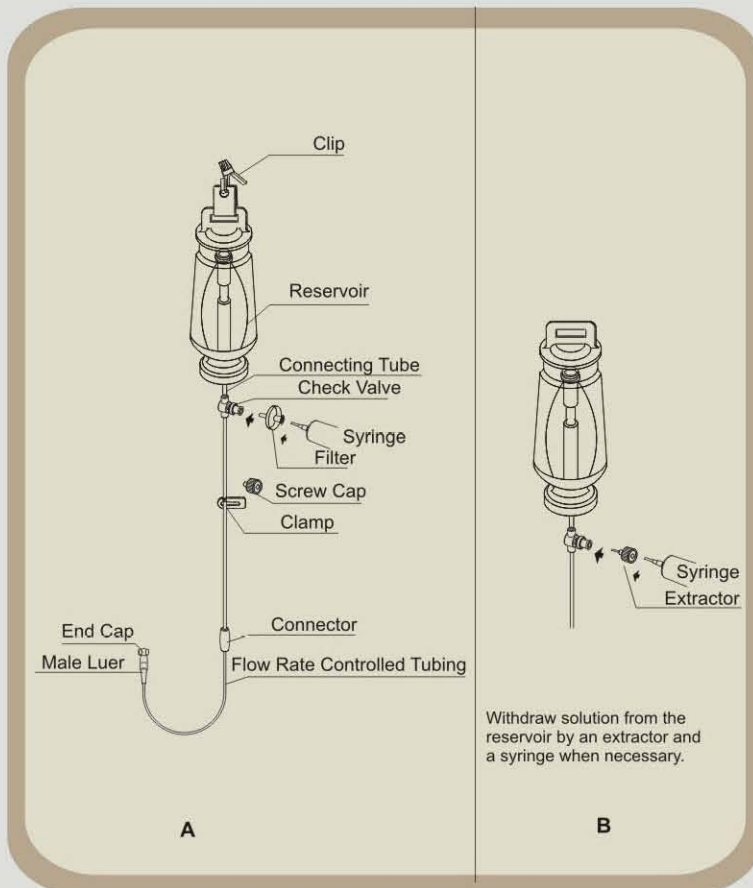
5. Are there any side effects?

As there is with any medication, patients may feel some side effects. A small number of people feel nauseated, have some itchiness, or have difficulty passing urine. If any of these symptoms occur, the patient should notify his nurse.

Basal+PCA Bolus Series



Basal Series



DISPOSABLE INFUSION PUMP



Multi-Flow Rate Regulator

- * Four flow rates ranging from 0.5ml/hr 30 ml/hr in a Multi-Flow Rate Regulator are available for option,
- * The flow rate can be adjusted by turning a regulator key while in infusion.
- * After setting a flow rate, the regulator key must be removed, and be kept by doctors or nurses

Caution: The regulator key must be kept by doctors or nurses.

Application in chemotherapy

- The Fornia infusion pumps can be used for chemotherapy which enables the tolerance of flow rate to be limited within 15%
- The labelled flow rate on the package is calibrated with 0.9% sodium chloride solution under temperature of $23 \pm 2^{\circ}\text{C}$ However, Owing to the concentrations of chemotherapy medicine are little different from that of 0.9% sodium chloride solution, the doctors shall adjust their choice of labelled flow rate when necessary.

