

BeneFusion VP5/VP5 Ex Infusion Pump  
BeneFusion SP5/SP5 Ex/SP5 TIVA Syringe Pump  
Experience every drop of care

## Experience every drop of care

The launch of BeneFusion pump series represents a milestone for Mindray as it moves into the the high-end infusion pump market. BeneFusion pumps deliver the answer to user requirements in terms of safety, accuracy and intuitive use. The sophisticated design of BeneFusion pump is ready to achieve IT, HIS,CIS connection in the near future and to facilitate one stop service for infusion management for all users.

Mindray is pleased to offer the pump: BeneFusion VP5 & SP5 Series.



## Accuracy

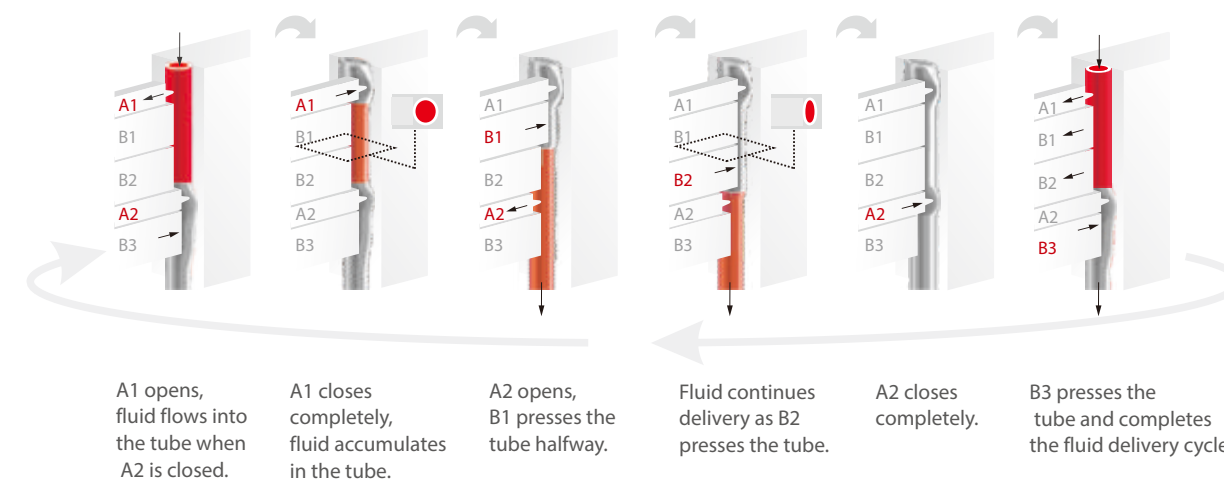


### High accuracy performance ensures precise delivery

- High flow rate accuracy is achieved: within  $\pm 2\%$  for the syringe pump and  $\pm 3\%$  for the infusion pump.
- Dedicated Mindray infusion sets be used delivering high accuracy over long periods.

### Advanced SEMI-PRESS system

High accuracy is maintained by pressing the tube only halfway closed rather than completely closed, minimising infusion deviation caused by deformation of the tube(BeneFusion VP5 Series).

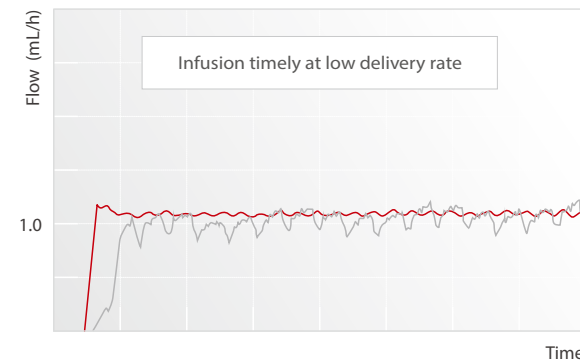




## Accuracy

### Fast start function

BeneFusion SP5 quickly overcomes the resistance of syringe, extension line and needle, supporting a timely injection even at a very low delivery rate. This function is especially useful during special clinical treatments, involving some pressor or paediatric drugs.



### DPS --Dynamic Pressure System

- Occlusion pressure is monitored in real time. Any change is accurately displayed both graphically and numerically, allowing the clinician to easily observe.
- Up to 11 levels of pressure settings to match clinical requirements. For earlier alarm notification during occlusion, the pressure can be set to the lowest setting to ensure patient safety.
- Four pressure units ( mmHg, kPa, bar ,psi ) can be converted to meet different user habit.



## Safety

### Reliable alarms

- Three levels of alarm for all security alarms (H, M and L) ,8 levels of adjustable alarm volume providing nursing staff with more flexibility depending on the clinical demands.
- Alarm light is large and intuitive,clearly visible over long distance to maximize patient safety;

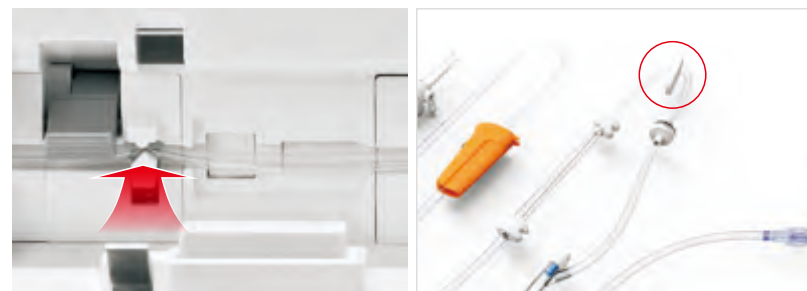
### Anti-Siphonage design

When a full syringe is loaded onto the pump, liquid might flow from the syringe even when the pump is on standby and the infusion has not been started. The anti-siphonage design automatically locks the lead screw, preventing unintentional circulation of liquids and avoiding any harm to the patient.



### Anti free-flow

- Special clamp design on the pump ensures that the clamp grips the infusion tube automatically when the door is opened, avoiding large amounts of liquids harming the patient.(BeneFusion VP5 Series)
- Dedicated infusion set has a clip to clamp the line when the set is removed. The risk of an unclosed roller clamp is eliminated.



### Anti-bolus function

If an occlusion alarm occurs, the motor rotates back some volume to reduce large volume hurting the patient significantly after occlusion sudden release.







## Safety

### Powerful battery

More than 10 hours(BeneFusion SP5 Series) and 9 hours(BeneFusion VP5 Series) of battery operating time with only 6 hours charging time;

### 6 levels of air bubble detection

- Sensitive ultrasound sensor detects air bubbles to a minimum size of 20ul(Array VP5), preventing air bubbles from entering the body causing blood coagulation.
- Six levels of bubble detection can be adjusted according to the actual needs of the clinical setting.

### History function

Up to 2000 pieces of infusion information will be stored automatically, the latest records are listed on the top with specific date and time, helping care givers analyse patients clinical conditions and provide good treatment references.







## Ease of use

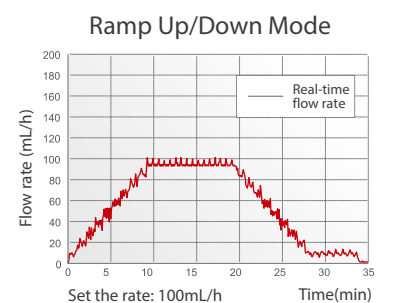
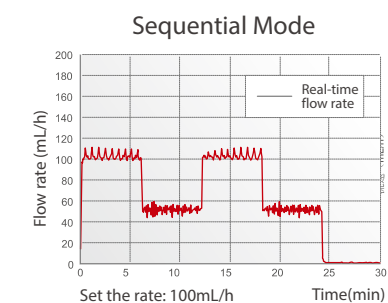
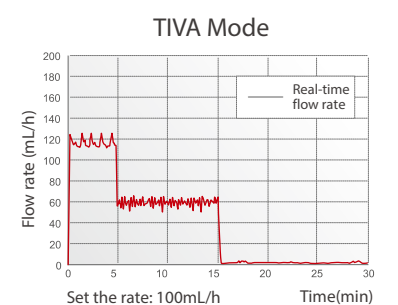
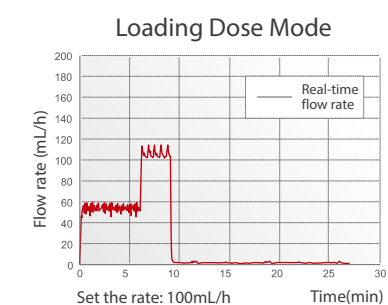
### Compact design

- Horizontal design allows the pump to be easily stacked and inserted into the Dock. The slim height saves much bedside space.
- Both the VP5 and SP5 have the same design, interface and menu structure. This means less training for users and a reduced risk of incorrect operation.



### Up to 8 infusion modes

- Eight application modes: Rate, Time, Body Weight, Ramp up/Ramp down, Sequential, Micro-infusion, Loading Dose, and TIVA mode.
- Various programming modes provide flexible options for clinical applications in different departments.
- TIVA mode, BeneFusion SP5 Series setting makes an anesthesia infusion simple with precise delivery (manual and automatic bolus)







## Ease of use

### Start-reminder function

Pump remembers last infusion parameters. Repeat settings are not required when pump is turned on again, saving operators much time and workload.

### Titration function

Titration makes it possible to change flow rate during operation without stopping the pump, guaranteeing continuous infusion.

### Syringes recognition

BeneFusion SP5 Series pump can recognise various syringe brands and sizes from 5ml up to 60ml automatically.



## Intuitive display

- 3.5" large colour display allows infusion status to be viewed easily without having to enter various menu layers.
- All important parameters can be viewed from over 5 meters away, making hospital monitoring efficient and convenient.
- User selectable eight levels of screen brightness, providing optimum view.



# Ease of use



## BeneFusion VP5 Series infusion line

This kind of IV set is perfectly matched to the pump and its integrated safety system.

As a result, the outstanding performance characteristics of the pump ensure high delivery accuracy and consistency, most importantly, the great accuracy over long time.

### Benefits

Longer usage	DEHP-free	High accuracy	Wide flow rate range	Ease of use
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