Needlestick Safety – it’s that simple!

The B. Braun shielded IV catheters protect you and your healthcare team against needlestick injuries and related infections like hepatitis B and C or HIV.

Safety features

- Self-activating clip technology – no extra action needed
- Safety system covers needle tip immediately after use
- Safety mechanism cannot be bypassed

B. Braun Melsungen AG | 34209 Melsungen | Germany | Tel. +49 5661 71-0 | www.bbraun.com
Infusomat® Space Overview

Yellow LED: Pre-alarm, reminder alarm
Green/Red LED: Infusion running, device alarm, operating alarm
Blue LED: Currently connected to SpaceControl

Press to reset single values to zero and switch back to the previous screen/menu level.
Press to initiate bolus.
Press to turn pump on/off.
Press to open pump door.
Press to Start/Stop infusion.
Press to link the pump to SpaceControl.
Open certain functions and press to confirm values/settings/alarms.

Press to switch on the pump and wait until self test is finished.
Press to open the door and confirm with “Yes”. Insert the infusion line from right (container) to the left (patient). Insert the two-hole clip of the IV Set in the line guide fixation which is only possible in one direction.
Route the line straight to the finger pump element and click in the clips. Make sure, that you do not twist the line.
Insert the green free-flow-protection clamp of the IV Set into the opened aperture, until the opening lever locks in and the Anti-free-flow clamp closes the line (flashing free-flow warning LED goes off).
Push the line into the up-stream pressure sensor, the down-stream pressure sensor and the air sensor. Make sure the line has good contact to the surface of the sensor.
Guide the line through the line outlets of the housing at both ends of the line. Close the door by pressing in the middle of the operating unit.

Unload the set
Open the door with and press the opening lever to unload the set.
Perfusor® Space

Insert a syringe in a 45° angle of the wings and turn it up. Syringe must be fixed with wings upright in the slot between the green axial fixation and the housing of the pump.

If the display shows the message “Invalid syringe” the wings of the syringe are not properly fixed by the green axial fixation.

Keep the syringe fixed with your left hand and close the syringe holder with the right hand. The piston brake prevents unintended boluses.

Select the correct syringe brand and type from the list. Confirm the syringe type.

The fixation of the syringe plunger is fully automatic. Herewith unintended boluses are prevented and an excellent start-up characteristic is reached user independently. After the safe fixation of the syringe plunger the piston brake releases. Close the door.
Space drug library

Answer the Question "Use drug library" with "Yes".

Select a category with and . If you use the categories as drug groups like "Colloids" or "Cardiac" you can use the item "All" to get an index of all drugs in alphabetic order.

Use the ABC-, DEF- jump marks for a fast navigation within the drug library.

If the cursor highlights a jump mark e.g. PQRS use to jump to the next jump mark.

Use or to select a dilution.

Optionally a warning hint may appear. Confirm this message with or .

If you use patient specific concentration e.g. in the paediatrics ward, the pump asks for the total amount of drug and volume.

If the dose rate for this drug is defined as patient weight related dosage, e.g. mcg/kg/min, the pump asks for the patient weight in kg.

Edit the dosage parameter with the arrow buttons and and press to start the infusion.

Navigation

Navigation in the menu structure

The main menu is visible until the user presses the first time. If the pump is delivering press to enter the main menu. Use the cursor buttons to select a parameter or sub menu item.

Edit the parameter or the sub menu with or .

Parameter Edit Screens

To change a parameter like flow-rate, dose-rate or volume-to-be-infused (VTBI) select the item with the cursor and press or .

Select the digits with and set the digit with .

The symbol indicates, that you select a usual dosage.

The or symbol indicates, that dosage is outside of the soft limits as defined in the drug library.
To prevent over dosages it’s possible to set drug specific warning limits.

When the dosage is beyond the normal range a warning hint appears. Correct your input with “No” or confirm your setting with “Yes”.

It’s also possible to configure a drug specific maximum dosage, that a user can not exceed.

Sub Menus:
Special Functions Menu
Depending on the pump configuration and drug database setting one or more of the special functions “Dose rate calculation”, “Drug library”, “Continuous profile”, “PCA profile” or “PiggyBack” are selectable.

Options Menu
Here many parameters e.g. the sensibility of the pressure sensor or the bolus rate are adjustable.

Status Menu
In this menu all therapy status parameters are visible. E.g. the continuous counting of the infused volume or amount of drug can be seen.

For volume balancing use \( \text{V} \) to reset the counter. Press “Yes” \( \text{A} \) to reset the counter or “No” \( \text{A} \).

RUN Screen Menu
The RUN screen appears when an operator starts the drug delivery with \( \text{V} \).

Depending on the drug setting the primary dose setting is the flow rate in \( \text{ml/h} \) or the dose rate e.g. in \( \text{IE/h} \).

With \( \text{v} \) the user can fade in different information e.g. remaining time until syringe is empty, in the bottom line of the display.

Bolus on demand
Press \( \text{V} \) then press \( \text{A} \) and hold button. Fluid is administered as long as the button is held down. The infused bolus volume or amount of drug is displayed.

The max. bolus time is limited to 10 sec. Reaching this limit is indicated by an acoustic signal. Repeat the key press if necessary.

Bolus with volume pre-selection
Press \( \text{V} \). Then press \( \text{A} \) and set bolus dose using the arrow buttons.

Press \( \text{A} \) to confirm and start bolus. An acoustic signal will sound after finishing the bolus volume.

Standby Mode
Hold the \( \text{V} \) button pressed for 3 seconds to activate the standby mode.

It is possible to adjust the standby time with \( \text{V} \).

If the disposable was removed, it is possible to switch off \( \text{V} \) the Space pump.
**PCA**

**PCA Mode**

Space pumps cover the whole therapy spectrum. The \[ \text{PCA} \] symbol in the upper line of the display indicates, that the PCA mode is enabled for the selected drug, e.g. Morphin.

Start the PCA therapy with \[ \text{\textbullet} \]. Depending on the settings in the drug library the pump might lock the dosage settings and the syringe/drug full automatically.

If the "pain service screen" appears the patient can choose the external PCA button, or use \[ \text{\textbullet} \] at the pump to deliver a preconfigured PCA bolus. The volume of the confirmation beep can be adjusted via the option menu or with \[ \text{\textbullet} \].

If the Space DataLock function is in use, it’s necessary to identify yourself as nurse or doctor before you can release the syringe or, as member of the pain service team, to change dosage settings.

To get actual status parameter of the PCA treatment e.g. A/D radio press \[ \text{\textbullet} \].

The Space PCA-Chart (2x \[ \text{\textbullet} \]) offers you the trend of the PCA treatment at a glance. Above the 12hrs time axis you see the administered PCA boluses, below the denied PCA boluses. Changes of one or more of the treatment parameters are indicated by an \[ \text{\textbullet} \] at the bottom line of the screen.

**Operation alarms**

**Pre-Alarms**

They occur a few minutes prior to operating alarms. During pre-alarms an audible tone sounds, the yellow LED blinks.

The signal tone and the staff call are turned off with \[ \text{\textbullet} \]. Display and LED stay in pre-alarm until the operating alarm goes off \[ \text{\textbullet} \]. Pre-alarms don’t lead to an interruption of the infusion.

**Pressure Alarm (downstream to patient)**

The sensibility of the pressure sensor can be adjusted in the options menu.

The run screen displays the actual pressure alarm limits and the current pressure. The picture shows a current pressure of \( \sim 30\% \) of pressure level 5.

When a pressure alarm occurs up the pump stops and the red alarm indicator flashes.

Check the IV set and stopcocks and try to restart the delivery with \[ \text{\textbullet} \].

**Pressure Alarm (upstream to the container)**

Check the roller clamp or the fluid level of the burette and try to restart the delivery with \[ \text{\textbullet} \].

If that is not possible please follow the dialog on the screen.
Operation alarms

Air Bubble Alarm
If a single air bubble with a volume bigger than 0.3 ml appears the "Air bubble alarm" comes up.

If the counter "Accumulated air" reaches the level of 1.5 ml/h the "Accumulated air alarm" comes up.

To remove air bubbles please disconnect the line from the patient.

Start the automatic prime function with "Yes".

Connect the patient and press to start the infusion.

Space accessories & interfaces

Perfusor® Space / Infusomat® Space Accessories

PoleClamp Space (Code No. 8713130)

Power Supply Space

12V Lead for Ambulance/Helicopter (Code No. 8713231)

Combi Lead (Code No. 8713133)

Space PCA-Kit (Code No. 8713554)

Perfusor® Space / Infusomat® Space Interfaces

Port P3 for future options
Port P2 for Power Supply, SpaceStation, 12V Lead, Combi Lead and further accessory leads (staff call, service)
Port for dropsensor
Port P3 for future options
Port P2 for Power Supply, SpaceStation, 12V Lead, Combi Lead and further accessory leads (staff call, service)
Disposables for Infusomat® Space

<table>
<thead>
<tr>
<th>Infusomat® Space Line</th>
<th>Length (cm)</th>
<th>Latex free</th>
<th>PVC free</th>
<th>Sales unit</th>
<th>Code No. (REF)</th>
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<tr>
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<td>single packed with PrimeStop and AirStop</td>
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<td>Neutrapur® – with inline 2.0 μm Sterifix® Filter</td>
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Lines for advanced IV Therapy

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<td>Transfusion – with 200 μm blood filter</td>
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<td>Piggyback – with Safeflow injection port</td>
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<td>Dosifix® – 150 ml burette, with Safeflow injection port</td>
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Lines for Enteral Nutrition

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<td>with multi-connector for bottles and bags</td>
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</table>

B. Braun is a global supplier on the corporate healthcare market with a workforce of more than 37,000 employees in over 50 countries all over the world.

“Sharing Expertise” expresses the spirit of B. Braun’s corporate culture best: It is the promise to share medical knowledge and expertise with customers and colleagues alike.

B. Braun is committed to its close partnerships with physicians, nurses, hospital managers and researchers. The aim is to benefit the health of everybody, to use the knowledge gained effectively, to expand it logically, consistently and with determination – always in dialogue with its partners.

As one of the leading system providers, B. Braun develops services and pipeline products that provide optimum therapeutic benefits for patients in both clinical and outpatient settings.

The expertise of B. Braun is based on three supporting pillars: innovation, efficiency and sustainability. These corporate values help B. Braun deliver on its promise of “Sharing Expertise”.

Innovation

B. Braun has a long tradition of developing innovative products and services to simplify doctors’ and nurses’ workload and to improve therapies for patients – a key factor in our success. The ongoing dialog with our customers combined with the creative drive of our human resources feed the constant flow of new ideas systematically incorporated into every product and new advancement.

Efficiency

Today’s healthcare systems increasingly demand that the relationship between cost and benefit be a sensible one. It is in everybody’s self-interest to keep the social security systems functioning by raising the level of efficiency at corporations, hospitals and in outpatient sector. Almost two centuries of experience enable B. Braun to provide smart strategies, products, and services for more efficient operational processes.

Sustainability

As a corporate citizen in a global society, B. Braun feels responsible for its employees and for the geographical regions in which it is active. This responsibility obviously encompasses environmental protection, but also the commitment to create perspectives for future generations by promoting cultural and sporting events. In these times of constant change, sustainability means offering dependability and consistency not only to customers, but also to world’s other less fortunate.