

## TECHNICAL DATA

Type of unit	Infusion Syringe Pump
Classification (acc. to IEC/EN 60601-1)	<input checked="" type="checkbox"/> Defibrillator-proof; CF equipment <input type="checkbox"/> Protective Class II; Protective Class I in combination with SpaceStation
Class (acc. to Directive 93/42 EEC)	IIb
Moisture protection	IP 22 (fluid protected for horizontal usage)
External power supply:	
■ Rated voltage	Via B. Braun SpaceStation or optional mains adaptor (rated voltage 100 ... 240 V AC~, 50/60 Hz) for stand alone operation
■ External low voltage	11 ... 16 V DC --- via Connection Lead SP 12 V or via SpaceStation
Staff call	Max. 24 V / 0,5 A / 24 VA (VDE 0834)
EMC	IEC/EN 60601-1-2 / 60601-2-24
Time of operation	100 % (continuous operation)
Operating conditions:	
■ Relative humidity	30 % ... 90 % (without condensation)
■ Temperature	+5° C ... +40° C (+41° F ... +105° F)
■ Atmospheric pressure	500 ... 1060 mbar
Storage conditions:	
■ Relative humidity	20 % ... 90 % (without condensation)
■ Temperature	-20° C ... +55° C (-4° F ... +131° F)
■ Atmospheric pressure	500 ... 1060 mbar
Type of battery pack (rechargeable)	Li-Ion NiMH
Operating time of rechargeable battery	Li-Ion Wireless active Perfusor® at 5ml/h typ. 3 hours Wireless active Perfusor® at 25ml/h typ. 2.5 hours Wireless inactive Perfusor® at 5ml/h typ. 17 hours Wireless inactive Perfusor® at 25ml/h typ. 10 hours NiMH at 5ml/h typ. 19 hours at 25ml/h typ. 10 hours
Recharging time	Approx. 6 hours
Weight	Approx. 1.4 kg
Dimensions (W x H x D)	249 x 68 x 152 mm

Volume preselection	0.1 - 99.99 ml in increments of 0.01 ml 100.0 - 999.0 ml in increments 0.1 ml 1000 - 9999 ml in increments 1 ml																								
Time preselection	00:01 - 99:59 h																								
Accuracy of set delivery rate	± 2 % according to IEC/EN 60601-2-24																								
Occlusion alarm pressure	9 levels from 0.1 bar up to 1.2 bar																								
Max. Volume in case of single fault condition	For incorrect dosages of 0.1 ml due to malfunctions of the device the pump will automatically shut off.																								
Technical inspection (safety check)	Every 2 years																								
Multiple lines connected to one patient port	Connecting multiple infusion lines with different flow rates may affect the rate for all infusions past the point of connection.																								
Selectable delivery rates	Continuous infusion rate range / bolus rates in dependence on syringe sizes:																								
	<table border="1"> <thead> <tr> <th>Syringe sizes</th> <th>Cont. rates*</th> <th>Bolus rates</th> </tr> </thead> <tbody> <tr> <td>[ml]</td> <td>[ml/h]</td> <td>[ml/h]</td> </tr> <tr> <td>50/60</td> <td>0.01 - 200 optional 0.01 - 999.9</td> <td>1 - 1800</td> </tr> <tr> <td>30/35</td> <td>0.01 -100</td> <td>1 - 1200</td> </tr> <tr> <td>20</td> <td>0.01 -100</td> <td>1 - 800</td> </tr> <tr> <td>10/12</td> <td>0.01 -50</td> <td>1- 500</td> </tr> <tr> <td>5/6</td> <td>0.01 -50</td> <td>1 - 300</td> </tr> <tr> <td>2/3</td> <td>0.01 -25</td> <td>1 - 150</td> </tr> </tbody> </table>	Syringe sizes	Cont. rates*	Bolus rates	[ml]	[ml/h]	[ml/h]	50/60	0.01 - 200 optional 0.01 - 999.9	1 - 1800	30/35	0.01 -100	1 - 1200	20	0.01 -100	1 - 800	10/12	0.01 -50	1- 500	5/6	0.01 -50	1 - 300	2/3	0.01 -25	1 - 150
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Rate increments	0.01 - 99.99 ml/h in increments of 0.01 ml/h 100.0 - 999.9 ml/h in increments of 0.1 ml/h																								
Accuracy of bolus infusion	typ. ± 2 %																								
Max. bolus after bolus reduction	≤ 0.2 ml																								
KVO-rate	Delivery rate > 10 ml/h: KVO-rate 3 ml/h Delivery rate < 10 ml/h: KVO-rate 1 ml/h Delivery rate < 1 ml/h: KVO-rate = set rate (default setting 0.1 ml/h)																								
Computer connection	USB connection in combination with B. Braun interface lead CAN SP (8713230) including electrical insulation. Please pay attention to safety notices.																								

History protocol	< 3000 last history entries. 100 events for system diagnose. Refer to separate documents of the History Viewer for closer information.
Alarm volume	9 levels from 1 (59dBA) to 9 (74dBA)

- Use only pressure proof and compatible disposable items (min. 2 bar/1500 mm Hg) to avoid influencing performance data - which would result in impairing patient safety.
- Only use combined with approved devices/accessories by the manufacturer, otherwise this may lead to higher emission or reduced immunity.
- Use only compatible combinations of equipment, accessories, working parts and disposables with luer lock connectors.

#### Essential Performance for Infusion pumps:

- Infusion of liquids without variation of infusion rate
- Pressure limitation as protection from the bursting of the infusion line
- Protection from air-infusion
- Protection against unintended bolus volumes and occlusion (added by IEC 60601-2-24)
- Alarm signal of high priority (added by IEC 60601-2-24)