TECHNICAL DATA

Type of unit	Volumetric infusion pump
Classification (acc. to IEC/EN 60601-1)	♥ defibrillator-proof; CF equipment ☐ 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 Infusomat® at 100 ml/h typ. 4 hours Wireless active Infusomat® at 1200 ml/h typ. 2.5 hours Wireless active Infusomat® at 25 ml/h typ. 4 hours Wireless inactive Infusomat® at 100 ml/h typ. 12 hours Wireless inactive Infusomat® at 1200 ml/h 5 hours Wireless inactive Infusomat® at 25 ml/h 15 hours NiMH at 100 ml/h typ. 13 hours at 1200 ml/h typ. 5 hours at 25 ml/h typ. 16 hours

Recharging time	Approx. 6 hours
Weight	Approx. 1.4 kg
Dimensions (W x H x D)	214 x 68 x 124 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 – 99999 ml in increments 1 ml
Time preselection	00:01 – 99:59 h
Accuracy of set delivery rate	± 5 % according to IEC/EN 60601-2-24
Max. Volume in case of single fault condition	For incorrect dosages of 1,4 ml due to malfunctions of the device the pump will automatically shut off
Technical inspection (safety check)	Every 2 years
Administration Set Change Interval	Pumping accuracy is maintained for a minimum of 96 hours.
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.
Rate increments	0.1 - 99.99 ml/h in increments of 0.01 ml/h 100.0 - 999.9 ml/h in increments of 0.1 ml/h 1000.0 - 1200 ml/h in increments of 1 ml/H
Accuracy of bolus infusion	typ. ± 5 % as of a bolus volume > 1 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.
Air detector	Technical sensitivity: Detection of air bubbles ≥ 0.01 ml Alarm triggering: Single bubble alarm: 0.02 – 0.3 ml

	(default 0.3 ml) Cumulative air alarm: 0.5 – 3.8 ml/h (default 1.5 ml/h) Resolution: 0.01 ml
Sensitivity upstream sensor	9 levels from -120 mbar to -200 mbar (pressure reduction)
Occlusion alarm pressures	9 levels up to 1.2 bar

Occlusion pressure		Time to occlusion alarm [min] at rate		
	[bar]	[1 ml/h]	[25 ml/h]	[100 ml/h]
Level 1	typ. 0.3	09:07	00:33	00:07
Level 5	typ. 0.7	25:53	01:14	00:15
Level 9	typ. 1.2	46:50	02:06	00:24

Note: At a rate of 0,01ml/h, the time of occlusion alarm is > 3 hours.

Max. bolus after bolus reduction	≤ 0.2 ml
Alarm volume	9 levels from 1 (59dBA) to 9 (74dBA)
Mechanical occlusion pressure limit under fault conditions	Occlusion alarm pressure max. 2.1 bar (210 kPa). Maximum posts occlusion bolus volume 2ml.
History protocol	> 3000 last history entries 100 events for system diagnose. Refer to separate documents of the History Viewer for closer information.

- 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)

Note: The technical data stated in this Instructions for Use manual were determined with the Infusomat® Space lines as of "Type Standard" (870 0036 SP). These technical data can change when using set configurations.