



Agilia
Intuitive generation

Injectomat Agilia

Syringe Pump
Instructions for Use



MEDICAL DEVICES



**FRESENIUS
KABI**
caring for life

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1. Introduction

Injectomat® Agilia is the first syringe pump of the Agilia range, our new generation of infusion pump.

It is simple to use and training is fast thanks to its ergonomics and interactive screens.

Very intuitive, Injectomat® Agilia was also developed to promote safety. The pusher protection "Push-guard" offers a maximum safety in case the pump falls.

The monitoring of pressure as well as many safety features optimize the operation of Injectomat® Agilia.

Robust and adaptable thanks to a wide choice of options, Injectomat® Agilia makes it possible to answer the whole of your needs.

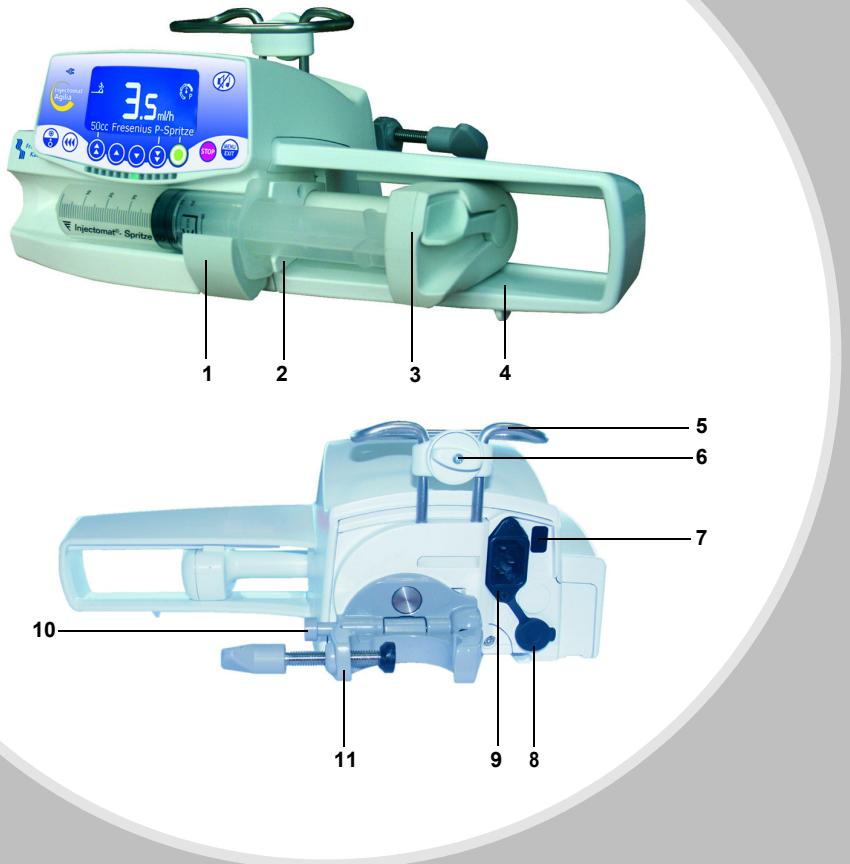
Intended use

- Injectomat® Agilia is a syringe pump for intravenous drug infusion.
- This pump must be used by professionals working in hospitals.

Precautions to be taken

- The symbol  visible on the device, recommends this user guide should be completely read.
- Injectomat® Agilia was tested in accordance with the applicable standards of electromagnetic compatibility of the medical devices. Its immunity makes it possible to ensure correct operation. The limitation of the emitted radiations avoids the undesirable interference with other equipments such EEG, ECG, ... If Injectomat® Agilia is placed near devices like surgical equipment HF, X-rays, NMR, mobile phones, Wifi points..., minimal distances between equipment are essential (see page 33).
- The device must not be used in presence of inflammable anaesthetic agents due to a risk of explosion. It should always be used away from all risk areas.
- The device can be disturbed by pressure or pressure variations, mechanical shocks, heat ignition sources, etc. If you wish to use the devices in a specific condition, please contact our After-Sales Department. The pump must be used in a horizontal and stable position to work correctly.
- The physiological effects of medicine can be influenced by the characteristics of the device and disposable syringe. Check that they are compatible with prescriptions, the characteristics of trumpet curves and occlusion alarm setting times in relation to the programmed flow rate.
- In case of unexpected situation in the pump controls or environment, the state of the art safe-design is to alarm, to stop infusion and to display an error code. The user is invited to be aware of those alarms (see Chapter 6). In case where the device is used to deliver life sustaining therapies, like short half-life medications, the user should consider adequate provisions for back-up therapy delivery solutions.

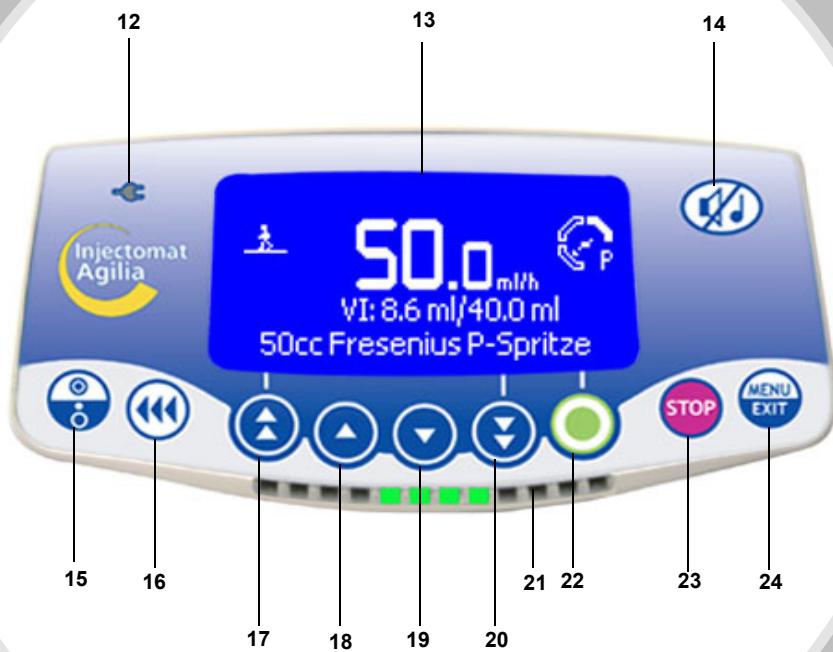
2. Description of Injectomat® Agilia



- 1 -** Syringe barrel clasp
2 - Syringe flange cradle
3 - Pusher
4 - "Push-guard"

- 5 -** Handle
6 - Assembly bolt
7 - Infrared cell
8 - Communication port and DC power input-output

- 9 -** Mains connection
10 - Fixing button
11 - "Swinglock clamp"



12 - Mains warning
13 - Screen
14 - Silence Alarm
15 - ON/OFF
16 - Bolus or Prime

17 -
to Value selection
20 -
21 - Functioning, pre-alarm
 and alarm warnings

22 - Validation
23 - Stop: infusion stop
24 - Menu / Exit

3. Operations for use

Installation of Injectomat® Agilia

Injectomat® Agilia can be used on a table, pole or rail.



On table



On pole



On rail

Two " Injectomat® Agilia " maximum can be assembled together during infusion

Three devices maximum can be assembled on a pole or during transportation



When the devices are assembled, the assembly bolts must be in closed position.

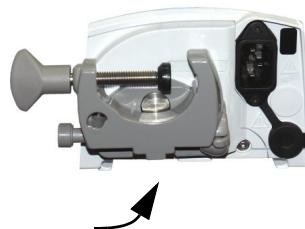
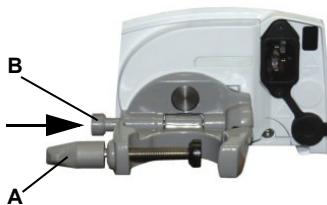
3 pumps on a pole: at least 2 fixing clamps must be locked.

Using the fixing clamp

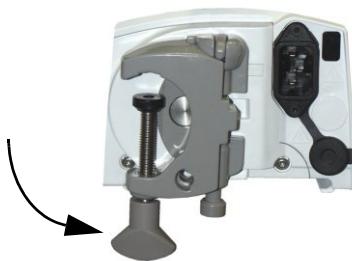
The swinglock clamp is only orientable when closed against the pump. It is maintained in its vertical or horizontal position with the fixing button.

The following images show how to modify the pump installation, from a pole to a rail position.

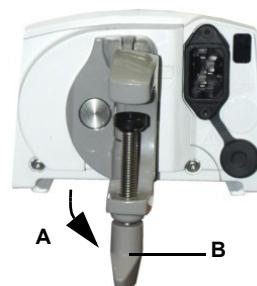
- ① Unscrew the clamp screw (A) and disengage the device from the pole. Push the fixing button (B).
- ② Fold the fixing clamp against the pump. This is the recommended position for the swinglock clamp when the device is placed on a flat surface.



- ③ Rotate the fixing clamp downward through 90 degrees.



- ④ Move the fixing clamp outward (A). The fixing button is released automatically. Engage the device on the rail and use the clamp screw (B) to secure it.

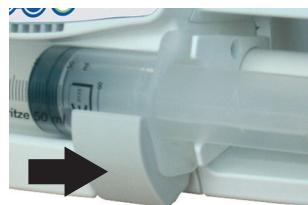


Installing a syringe (patient not connected)

- ① Connect the extension set to the syringe according to proper practices.
Check that there is no air bubble left in the syringe.



- ② Place the syringe in its cradle, the flanges correctly inserted in the provided slot . Secure the syringe with the syringe barrel clasp.



- ③ Move the pusher forward to the syringe head.



- ④ Check the general installation.



1 - Operations for use



- Check Injectomat® Agilia is not damaged.
- Connect the power supply cord to the main source and to the syringe pump: the mains warning lights up.
- Press the <ON> key to turn the pump ON.
- For the first startup, refer on page 35: Use of the internal battery.
- Press the <OFF> key continuously to turn the pump OFF. To disconnect the device from mains supply, disconnect mains-wise plug first before unplugging the device power inlet.

3 - Prime



- Connect the extension set to the syringe.
- Check the patient is not connected.
- To start the prime, press the <PRIME> key twice: one short press, then one continuous press until all air bubbles are eliminated from the line.
- To stop the prime, release the <PRIME> key.
- Connect the patient.

Note: During priming, the occlusion pressure level is set to its maximum value (900 mmHg).

2 - Syringe selection



- The installed syringe must correspond to the syringe displayed.
- OK: to confirm syringe, or,
- C: to change syringe selection then confirm.

4 - Flow rate selection/start



- Select flow rate.
- Check the infusion parameters (syringe, flow rate, ...).
- Start: press the <VALIDATION> key to start infusion.

Silence alarm



Press the <SILENCE ALARM> key to silence the audible signal.

Preventive silence: to change a syringe without any audible signal, stop infusion pressing the <STOP> key. Press the <SILENCE ALARM> keys and change the syringe.

Access to the menu



Press the <MENU/EXIT> key to have access to the following functions:

- Infused volume, Pressure, Battery life, Pause, Locking, ...
- Other functions are described page 16.

Bolus



- Press the <bolus> key twice to start bolus (1 short press + 1 continuous press).
- Bolus stop: release the key.

Selection of a bolus rate

- Press the <bolus> key until the flow rate flashes.
- Select the bolus rate (ml/h) and confirm.

Note: During bolus, the occlusion pressure level is set to its maximum value (900 mmHg).

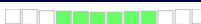
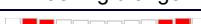
Pause

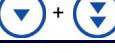


- Press the <STOP> key: the infusion stops.
- Start infusion pressing the <VALIDATION> key.
- Pause programming: press the <STOP> key twice. Select the pause duration.
- The pause can also be programmed from the menu.
- When the pause duration is finished, press the <VALIDATION> key to start infusion.

4. Display and symbols

Injectomat® Agilia displays the infusion parameters in progress through specific symbols.

Continuous display	Infusion in progress	 or 	Main indicator lights provide information on status of the infusion in progress.
	Pause		The symbol flashes when activated.
	Battery life		Appears when the device is operating on battery. Three different levels of charge are symbolized.
Indicator lights	Mains	 constant yellow	Main indicator lights provide information on status of the infusion in progress.
	Infusion in progress	 flashing green	
	Pre-alarm	 flashing orange	
	Alarm	 flashing red	
Help	Start		These symbols help the user in programming the pump.
	Validation		
	Access to function		
	Previous screen		
	Cancel		
	Change syringe selection		
	Selected		
	Not selected		
Alarms and safeties features	Mains disconnection alarm		Main symbols for alarm and safety features.
	Pressure increase		
	Pressure drop		

Selection keys			Keys for selection of flow rate (ml/h), volume limit (ml), ... values.
	Fast increment key		
	Increment key		
	Decrement key		
	Fast decrement key		
	Fast access to maximum values		
	Fast access to minimum values		
MENU	Infused volume		The menu is dedicated to infusion options that are selected by the user.
	Battery life		
	Keyboard locking		
	Maintenance		
	Date/Hour		
	Data event log		
	Syringe		
	Sound level		
	Volume limit		
	Volume/Time		
	Pause		
	Pressure		
	Night mode		

5. Alarm and safety features

Injectomat® Agilia has a continuous inspection system that functions as soon as the pump is in use. Visual messages are displayed to understand the alarm cause. Press on  to silence alarm according to table below.

Control	Visual message	Infusion stop	Silence alarm 	Activation
Battery	BATTERY PRE-ALARM	NO	YES	Low battery. Note: Battery alarm activated when at least 30 minutes battery life remaining. (If the battery has previously been charged).
	BATTERY ALARM	YES	YES (2 min)	Discharged battery. Note: The pump will turn OFF automatically within 5 minutes. Connect the pump to the mains.
Mains	POWER DISCONNECTION	NO	YES	Mains disconnection. (Alarm Selection : refer [Par 13], page 19).
Installed syringe	SYRINGE INSTALLATION	YES	YES (2 min)	Pusher or syringe barrel clasp or flange detection.
		YES	YES (2 min)	Syringe not correctly installed. Note: The alarm goes OFF as soon as the installation is correct. A silence alarm of 2 min is automatically activated when the pump is switched on.
Infusion	END OF INFUSION PRE-ALARM	NO	YES	The pre-alarm is triggered when the time before end of infusion is less than 5 min and the remaining volume in the syringe is less than 10% of the syringe capacity.
	END OF INFUSION ALARM	YES	YES	Empty syringe.
Volume Limit	END OF LIMIT VOLUME PREALARM	NO	YES	The pre-alarm is triggered when the time before end of volume limit is less than 5 min and the remaining volume in the syringe is less than 10% of the syringe capacity.
	END OF LIMIT VOLUME ALARM	Stop/KVO/continuous	YES (*)	Limit volume reached. (*) Silence duration for KVO: page 18
	The maximum volume that may be infused under single fault condition is 1 ml.			

Control	Visual message	Infusion stop	Silence alarm 	Activation
V/T	END OF VOL./TIME PREALARM	NO	YES	5 minutes before V/T alarm or 10% of the total syringe capacity.
	END OF VOL./TIME ALARM	Stop/KVO/continuous mode	YES (*)	V/T limit reached. (*) Silence duration for KVO: page 18
Pressure	OCCLUSION PRE-ALARM	NO	YES	- 50 mmHg from the programmed limit.
	OCCLUSION ALARM	YES	YES (2 min)	Programmed limit reached.
	PRESSURE DROP	NO	YES	Pressure drop in the infusion line. (This alarm can be selected in options).
	PRESSURE INCREASE	NO	YES	Pressure increase in the infusion line. (This alarm can be selected in options).
Other alarms	PLUNGER HEAD ALARM	YES	YES	Pusher incorrectly inserted.
	DISENGAGEMENT MECHANISM ALARM	YES	YES	Disengaged mechanism.
	FLASHING FLOW RATE	NO	---	Flashing starts 3 seconds after no confirmation of selection. An audible alarm is activated 15 seconds afterwards.
	NO VALIDATION	NO	YES	Flashing starts 3 seconds after no confirmation of selection. An audible alarm is activated 15 seconds afterwards.
	Audible signal	---	---	No syringe selection > 2 minutes.
		---	---	Unauthorized key.
	STOP message	---	---	End of pause duration.
	Er - message (Er01, Er02...)	YES	---	Technical alarm. Press the <OFF> key.
	In case of malfunction alarm, note the error message (ErXX). Disconnect from the mains and stop the device by pressing the OFF key (10 - 15 seconds can be necessary). If the alarm persists when the device is switched on again, without use on patient, contact the qualified technicians in your establishment or our After-Sales Department.			

6. Menu

Operation	Key
Access menu/previous menu:	
Select with:	
Confirm with:	
Selected <input checked="" type="checkbox"/> / Not selected <input type="checkbox"/>	

Permanent menu

Function	Description	Operation	Symbol
Infused volume	Display of infused volume and total infused volume reset	■ Clear the infused volume	
Pressure	Pressure limit adjustment and DPS mode activation	■ Pressure limit ■ DPS mode activation	
Battery life	Battery life display	■ Display in hour and minute for a selected rate	
Pause	Pause duration adjustment	■ Hours and minutes adjustment	
Locking	Keyboard locking and unlocking	■ Locking The <STOP> and <VALIDATION> keys are never locked.	
Syringe Display only if [Par 15] "syringe display" not selected	Brand capacity and type of the used syringe	■ Syringe used	

Menu to be selected in option mode

Function	Description	Operation		Symbol
Volume/Time Function accessible in STOP mode only	Volume/time programming	<input type="checkbox"/> Volume <input type="checkbox"/> Time <input type="checkbox"/> End VTI (stop, KVO, continuous)		
Maintenance	Information on maintenance, version, functioning duration, etc.	<input type="checkbox"/> Maintenance date <input type="checkbox"/> SN (serial number) <input type="checkbox"/> Software version...		
Data Event log Function accessible in STOP mode only	Up to 1500 events recorded	<input type="checkbox"/> Syringe <input type="checkbox"/> Pressure limit <input type="checkbox"/> Flow rate...		
Sound level	Audible level adjustment	<input type="checkbox"/> 7 accessible levels		
Volume limit Function accessible in STOP mode	Volume limit programming	<input type="checkbox"/> Select VL or OFF <input type="checkbox"/> End VL (stop, KVO, continuous)		
Date/hour	Date and hour	<input type="checkbox"/> dd/mm/yyyy	<input type="checkbox"/> h/min	
Night mode Only if "Manual mode" selected in Ward option [Par 18]	Manual Mode change: night/day or day/night	<input type="checkbox"/> Manual mode interrupts auto-mode. Night mode is re-activated on next defined night cycle [Par 18]		

CAUTION: the menu can change depending on the selected infusion options.

7. Option

Operation	Key
Options access:	+ when device is turned off
Option selection:	
Confirm by:	
Previous menu	
Selected <input checked="" type="checkbox"/> / Not selected <input type="checkbox"/>	

Selected values on use are memorized when the device is turned OFF at end of programming.

Option	Function	Choice	Description <input checked="" type="checkbox"/> / <input type="checkbox"/>
User	[Util 1] Screen options Display of the different symbols	<input type="checkbox"/> Battery	Permanent display of battery symbol
		<input type="checkbox"/> Pressure	Display of pressure symbol
		<input type="checkbox"/> Volume info. (or)	Display of infused volume
		<input type="checkbox"/> Time info. (or)	Display of remaining time of infusion
		<input type="checkbox"/> Battery life info. (or)	Display of battery life
		<input type="checkbox"/> Man	Choice of symbol "infusion in progress"
		<input type="checkbox"/> Moon	
	[Util 2] Menu options Insertion of the different options in the menu	<input type="checkbox"/> Volume limit	Volume limit selection
		<input type="checkbox"/> Volume/time	V/T selection
		<input type="checkbox"/> Sound level	Audible signal selection
		<input type="checkbox"/> Maintenance	Maintenance selection
		<input type="checkbox"/> Data event log	Display of event log
		<input type="checkbox"/> Date/hour	Date/hour selection
	[Util 3] Contrast	<input type="checkbox"/> Screen contrast adjustment	
	[Util 4] Pressure Pressure mode	<input type="checkbox"/> Variable mode (with maximum and limit)	<input type="checkbox"/> 3 level mode (with thresholds and limit)
		<input type="checkbox"/> Dynamic Pressure System	<input type="checkbox"/> No DPS mode activation
	[Util 5] KVO (Keep Vein Open)	<input type="checkbox"/> DPS with drop threshold and pressure increase threshold	
		<input type="checkbox"/> KVO1: OFF, 0.1 to 5 ml/h <input type="checkbox"/> KVO2: OFF, 0.1 to 5 ml/h <input type="checkbox"/> Continuous: YES/NO <input type="checkbox"/> Continuous mode: at the end of V/T or VL mode, infusion continues at the current selected rate.	<input type="checkbox"/> Silence duration: delay for end of V/T or end of VL re-activation alarm (60 minutes maximum)
	[Util 7] Date/hour	<input type="checkbox"/> Date selection: dd/mm/yyyy	<input type="checkbox"/> Hour selection: h/min
	[Util 8] Language	<input type="checkbox"/> Français / English...	

Option	Functions	Option choice		
Ward	Ward code	<input checked="" type="checkbox"/> Code: 0000 (default code: 0200).		
	[Par 1] Beep level	<input checked="" type="checkbox"/> 1 tonality	<input checked="" type="checkbox"/> 2 tonalities	<input checked="" type="checkbox"/> Key Bip
		<input checked="" type="checkbox"/> Preventive silence : refer page 11 "Silence alarm"		
		<input checked="" type="checkbox"/> Silence duration : between 2 alarm bips (0 to 5 seconds)		
	[Par 2] Sound level	<input checked="" type="checkbox"/> 7 available audible levels.		
	[Par 3] Initial rate	<input checked="" type="checkbox"/> If option selected: on turning on the pump, the initial rate will be the last selected during the last infusion. <input checked="" type="checkbox"/> If option not selected : 0.00 ml/h display.		
	[Par 4] Maximum rate	<input checked="" type="checkbox"/> Per syringe capacity (50cc / 30cc ...)		
	[Par 5] Syringe selection	<input checked="" type="checkbox"/> Auto confirmation of the syringe or not (available only with a single syringe selected - refer to [Par 6])		
	[Par 6] Syringes	<input checked="" type="checkbox"/> Available syringe list (activation/disactivation).		
	[Par 7] Infusion start	<input checked="" type="checkbox"/> Mandatory prime or advised prime		
	[Par 8] Empty syringe	<input checked="" type="checkbox"/> "OK" flashes at end of infusion pre-alarm or alarm. If confirmed the infusion goes on until the syringe is empty		
	[Par 9] Bolus rates	<input checked="" type="checkbox"/> Per syringe capacity (50cc / 30cc ...).		
	[Par 10] Ward name	<input checked="" type="checkbox"/> Ward name (press OK for each letter or - until reaching the last position).		
	[Par 11] Bio name	<input checked="" type="checkbox"/> Biomedical name (press OK for each letter or - until reaching the last position).		
	[Par 12] User code	<input checked="" type="checkbox"/> User code: mandatory code to modify user options		
	[Par 13] Mains supply disconnection alarm	<input checked="" type="checkbox"/> Warning beep and message "device operating on battery" when the pump is turned on.		
	[Par 14] Battery life	<input checked="" type="checkbox"/> Maximum battery life mode: allow the increase of the battery autonomy.		
	[Par 15] Syringe/ward display	<input checked="" type="checkbox"/> Syringe brand and capacity or ward name display.		
Maint.	[Par 18] Night mode ! manual mode has priority on auto-mode. Auto-mode re-activated next night cycle	<input checked="" type="checkbox"/> Screen brightness low	<input checked="" type="checkbox"/> Green lights low	<input checked="" type="checkbox"/> Key beep off
		<input checked="" type="checkbox"/> Manual mode: manual switch from one mode to another <input checked="" type="checkbox"/> Auto mode: automatic switch from one mode to another according to the time range settings		
Maint.	Maintenance	<input checked="" type="checkbox"/> Code: please contact our technical team.		

8. Drugs

Introduction

- The "drug" function makes the infusion safe, incorporating the drug parameters.
- The drug library can be created with our Vigilant® Drug'Lib system which makes drug administration safe. Vigilant® Drug'Lib in particular allows the drug concentration, default flow rate, "hard" flow rate limits (limits which cannot be exceeded during the infusion) and "soft" flow rates limits (limits which can be exceeded during the infusion after a user warning message) the permitted infusion modes (Ml/h, V/T) and the bolus parameter setting to be added.

Start-up: Start-up procedures 1 and 2 page 10.

3 - No drug selection



No drug :

- Select "no drug"
- Ok: Press <VALIDATION>.
- Follow the standard set up procedure (page 10)

Or select drug



Select drug

- Select the drug.
- Ok: Press <VALIDATION> to confirm the choice of drug.

4 - Prime (optional)



- Connect the extension to the syringe.
- Check that the patient is not connected.
- To start the prime, press the <PRIME> key twice: one short press, then one continuous press until all air bubbles are eliminated from the line.
- To stop the prime, release the <PRIME> key.
- Connect the patient.

Note: During priming, the occlusion pressure level is set to its maximum value (900 mmHg).

5 - Select flow rate/start



- Select the flow rate with the increment keys.
- Check the infusion parameters (syringe drug name and parameters, flow rate etc.)
- Start Press <VALIDATION> to start the infusion.

Infusion mode: Volume/time and limit volume

The infusion with a drug name and associated parameters can also be programmed in Mode/Time or Limit Volume mode.

Start-up: Start-up procedures 1 and 2 page 10.

3 - Drug selection



Select drug :

- Select the drug.
- Ok: Press <VALIDATION> to confirm the choice of drug.

4 - Prime (optional)



- Connect the extension to the syringe,
- Check that the patient is not connected,
- To start the prime, press the <PRIME> key twice: one short press, then one continuous press until all air bubbles are eliminated from the line.
- To stop the prime, release the <PRIME> key.
- Connect the patient.

Note: During priming, the occlusion pressure level is set to its maximum value (900 mmHg).

5 - Access to the V/T and VL modes



Press <MENU/EXIT> to access the functions.

- Volume/time or Limit volume.
- See "Menu to be selected in option mode" page 17.
- **Enter:** Press <VALIDATION> to access and modify the infusion parameters.
- **Ok:** Press <VALIDATION> to confirm the infusion parameters.

6 - Starting the infusion



- Check the infusion parameters (syringe, drug name and parameters, flow rate etc.)
- **Start:** Press <VALIDATION> to start the infusion.

Access to information in the drug library



Drug library

- Press <MENU/EXIT> and select the 'Drug library' icon to access information on the drug library: Name of drug library, author, and drug number.
- Press <VALIDATION> to access the drug list.



Drug list

- Select the desired drug using the navigation keys.

Access to drug information

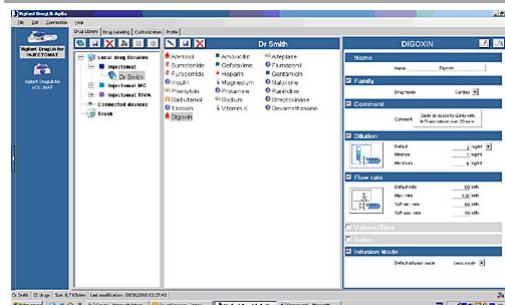


Eye: Press < FAST DECREMENT KEY> to access information on the drugs.

The information, which can be displayed, is:

- The name of the drug and its concentration.
- The "comments on the drug" which can be implemented using the Vigilant® Drug'Lib.

Vigilant® Drug'Lib Parameter Setting Screen



- All drug individual parameters and drug libraries settings can be configured using Vigilant Drug' Lib, the Dose Error Reduction Software from Fresenius Kabi.
- Refer to page 24 for details about adjustable parameters.

Display and symbols

Menu	Access to the drug library		Access to the drug library.
Drug information	"EYE": Access to the drug information		Access to drug name, concentration and drug comments which are modifiable with Vigilant® Drug'Lib.

Safety features and warnings

Soft limit	Flow rate limit that is allowed to be exceeded after a warning and being validated by the user.		
	Upper soft limit exceeded	High flow rate	Warning message that upper soft limit has been exceeded.
	Lower soft limit exceeded	Low flow rate	Warning message that lower soft limit has been exceeded.
	Confirmation that the soft limits have been passed	WARNING	The user must confirm that he/she is authorizing passing the soft limit.
Reset of Volume Infused and V/T and VL Parameters	Warning message	WARNING Drug changed CLEAR: VI and VL	If a drug or concentration of drug is changed, the volume infused and V/T and VL parameters are reset.

Service Options

Option	Function	Choice	
Service (code 0200)	Vigilant Druglib [Par16]	■ Selection	Activation of drug functions and parameters.
		■ Storage	Memorize last drug used when device was switched on.
	Drug library [Par17]	■ Library stored in the device and modifiable with Vigilant® Drug 'Lib.	

Drug library

Option	Function	Type of option
Loaded library	Loading of a library is acknowledged when the instrument is switched on or a syringe is changed*	 <ul style="list-style-type: none"> ■ Ok: Press <VALIDATE> to confirm change of new drug library. <p>(*) WARNING: The library must be changed after disconnecting the device from the patient.</p>
Vigilant® Drug'Lib	Library parameters which are modifiable with Vigilant® Drug 'Lib	<ul style="list-style-type: none"> ■ The drug library must be created using Vigilant Drug'Lib, the IV Medication Safety Solution by Fresenius Kabi. This software allows you to adjust the dilution, the authorised and default infusion modes, the flow rate and bolus limits (in ml/h) and can manage up to 50 drugs.
Error messages	The device will display "Error message" if the drug library is not compatible with the device	<p>These messages should not appear during normal operation. They allow the instrument to self-check consistency between the Vigilant® Drug' Lib parameters and the instrument infusion parameters. For example: If the instrument incorporates a flow rate limit of 1500 ml/h, which is not compatible with its maximum performance (1200 ml/h), the instrument will display an error message.</p>

9. User test

This protocol allows a quick check of pump functionality.

Injectomat® Agilia serial number (ID/N): _____	Name: _____ Ward: _____ Date: _____
---	---

Actions	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
❶ Check the state of the device: absence of impact marks and noises (turn the device upside down), presence of all labels as well as their legibility, mains lead.	<input type="checkbox"/>
❷ Connect the device to the mains and press the <ON> key: - check the good functionality of the display and luminous indicators. - functioning on mains signaled by:	 <input type="checkbox"/>
❸ Open the syringe barrel clasp (do not install the syringe).	 <input type="checkbox"/>
❹ Install a 50cc syringe - syringe barrel clasp and pusher in infusion position. Confirm the syringe and select a flow rate of 0.1 ml/h. - the infusion in progress is signaled by man or moon.	 <input type="checkbox"/>
❺ Open the syringe barrel clasp: syringe installation alarm activated.	 <input type="checkbox"/>
❻ Close the syringe barrel clasp. Disengage and move pusher backward. Disengagement and plunger head alarms activated (visible on schemes). Return pusher to infusion.	 <input type="checkbox"/>
❼ Note the stopper position/syringe volume and start a 5 ml bolus: Check the syringe stopper has moved to 5 ml ± 0.5 ml.	BOLUS <input type="checkbox"/>
❽ Disconnect mains lead, the mains indicator turns OFF. The battery symbol indicates a functioning on battery.	 <input type="checkbox"/>
The device is operational when all the controls are OK.	
Signature	Test OK <input type="checkbox"/>

10.Performances

Rates range

	Syringes (ml)					Infusion rate Infusion rate increment: 0.1 ml/h. Indicated value corresponds to the initial device configuration and can be changed.
	50/60	30	20	10	5	
Infusion rate (ml/h)	0.1 to 200	0.1 to 120	0.1 to 120	0.1 to 60	0.1 to 60	
Bolus rate (ml/h)	50 to 1200	50 to 600	50 to 600	50 to 350	50 to 250	
Prime rate (ml/h)	1200	600	600	350	250	

Volume Limit

	Syringes (ml)					0.1 ml increments. KVO (keep vein open) rate: from 0.1 ml/h to 5 ml/h, stop or selected flow rate (continuous) depending on the device configuration. Note: if KVO rate exceeds the selected flow rate the device infuses at the selected flow rate.
	50/60	30	20	10	5	
Volume Limit (ml)	From 0.1 to 999.9					

Volume/Time

Flow rate calculation at volume/time programming: displayed flow rate = programmed volume to infuse / programmed infusion duration, the flow rate is displayed rounded off at ± 0.05 ml/h. The real flow rate is calculated at ± 0.00001 ml/h.

	Syringes (ml)					0.1 ml increments. KVO (keep vein open) rate: from 0.1 ml/h to 5 ml/h, stop or selected flow rate (continuous) depending on the device configuration. Note: if KVO rate exceeds the selected flow rate the device infuses at the selected flow rate.
	50/60	30	20	10	5	
Volume to infuse	From 0.1 to 99.9 (with 0.1 ml increments)					
Infusion duration	From 0h01 to 96h00 (with 0h01 increments)					

Syringe list

Injectomat® Agilia offers maximum 50 syringes of different types, brands and sizes.

Brand and type	Syringe capacity (ml)				
	50/60	30	20	10	5
BD PLASTIPAK	■	■	■	■	■
BD PLASTIPAK WWD	■		■		
BD PERfusion	■				
BRAUN OMNIFIX	■	■	■	■	■
BRAUN PERfusOR	■		■		
FRESENIUS INJECTOMAT	■			■	
FRESENIUS MED. CARE		■			
FRESENIUS P-SPRITZE	■				
MONOJECT	■	■	■	■	■
TERUMO	■	■	■	■	■

This syringe list is indicative of most current product codes. To know the exact list of your product code, please contact our Sales Department. This information can be checked directly in Ward Option [Par 6], page 19.

CAUTION: *Fresenius Kabi* cannot accept any responsibility for errors in flow due to modifications of the specifications of the syringes introduced by the manufacturer.

Accuracy

Flow rate accuracy (*)	± 3 %	(*) with selectable syringes, following NF EN/IEC 60601-2-24 standard.
Device accuracy	± 1 %	
Syringe accuracy	± 2 %	
Accuracy with back pressure of ±13.33 kPa	± 3 %	

Programmable pause

Programmable pause	From 1 minute to 24 h	1 minute increments.
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Pressure management

(refer to user option [Util 4])

Variable mode	Maximum pressure	From 500 to 900 mmHg	50 mmHg increments. Defines the authorized maximum pressure during infusion.	
	Limit	From 100 to maximum	- - - : memorization of the pressure limit at the device switch OFF.	
3 levels mode	High	From 250 to 900 mmHg	- - - : memorization of the limit (high/middle/low) at the device switch OFF.	
	Middle	From 150 to 700 mmHg		
	Low	From 50 to 300 mmHg		
	Limit	Low, middle, high determined level values		
DPS (Dynamic Pressure System)	Pressure increase	Anticipates an occlusion during infusion.		
	Pressure decrease	A pressure decrease indication may be a warning of disconnection.		
	Drop threshold	From 100 to 500 mmHg	Threshold - - -: Deactivation of pressure decrease management.	
	Increase threshold	From 100 to 200 mmHg		
	Accuracy: the accuracy on the pressure threshold activation is 75 mmHg or \pm 15%.			
Note: 1 bar = 750 mmHg = 1000 hPa.				

Occlusion alarm response time and Bolus volume at occlusion release

Device accuracy is linked to the syringe used. Values are representative of used syringes during trials and are given as indicators.

Syringes used: B-D Plastipak® Luer Lok®.

B-D Plastipak and Luer Lok® are registered trademarks of Becton Dickinson.

Extension sets used: type SE1400S

Note: No other pressure measuring device was connected.

\bar{m} = Mean

σ = Standard deviation

Syringe	Rate	Occlusion alarm threshold			Values are calculated from 10 to 20 measures.
		100 mmHg	500 mmHg	900 mmHg	
50 ml	1 ml/h	$\bar{m} = 25'$ $\sigma = 4'$	$\bar{m} = 1h10'$ $\sigma = 5'$	$\bar{m} = 1h40'$ $\sigma = 10'$	
	5 ml/h	$\bar{m} = 4'15''$ $\sigma = 50''$	$\bar{m} = 12'$ $\sigma = 2'$	$\bar{m} = 20'$ $\sigma = 4'$	
	20 ml/h	$\bar{m} = 45''$ $\sigma = 15''$	$\bar{m} = 2'40''$ $\sigma = 20''$	$\bar{m} = 4'30''$ $\sigma = 40''$	
20 ml	1 ml/h	$\bar{m} = 12'$ $\sigma = 2'$	$\bar{m} = 25'$ $\sigma = 4'$	$\bar{m} = 40'$ $\sigma = 6'$	
	5 ml/h	$\bar{m} = 1'30''$ $\sigma = 20''$	$\bar{m} = 4'40''$ $\sigma = 50''$	$\bar{m} = 7'$ $\sigma = 1'$	
	20 ml/h	$\bar{m} = 20''$ $\sigma = 5''$	$\bar{m} = 50''$ $\sigma = 11''$	$\bar{m} = 1'30''$ $\sigma = 20''$	

Syringe	Rate	Bolus volume at occlusion release			Values are calculated from 20 measures after completion of the automatic anti-bolus function.
		100 mmHg	500 mmHg	900 mmHg	
50 ml	5 ml/h	$\bar{m} = 0.04 \text{ ml}$ $\sigma = 0.02 \text{ ml}$	$\bar{m} = 0.1 \text{ ml}$ $\sigma = 0.04 \text{ ml}$	$\bar{m} = 0.15 \text{ ml}$ $\sigma = 0.05 \text{ ml}$	
	20 ml/h	$\bar{m} = 0.04 \text{ ml}$ $\sigma = 0.016 \text{ ml}$	$\bar{m} = 0.11 \text{ ml}$ $\sigma = 0.04 \text{ ml}$	$\bar{m} = 0.15 \text{ ml}$ $\sigma = 0.07 \text{ ml}$	
20 ml	5 ml/h	$\bar{m} = 0.06 \text{ ml}$ $\sigma = 0.017 \text{ ml}$	$\bar{m} = 0.14 \text{ ml}$ $\sigma = 0.07 \text{ ml}$	$\bar{m} = 0.25 \text{ ml}$ $\sigma = 0.08 \text{ ml}$	
	20 ml/h	$\bar{m} = 0.05 \text{ ml}$ $\sigma = 0.015 \text{ ml}$	$\bar{m} = 0.12 \text{ ml}$ $\sigma = 0.06 \text{ ml}$	$\bar{m} = 0.16 \text{ ml}$ $\sigma = 0.07 \text{ ml}$	

11. Technical characteristics

Electrical powers

⚠ Use the main lead supplied with Injectomat® Agilia.

Mains power	Mains supply 	100 V - 240 V ~ / 50-60 Hz with functional earth.
	Maximum consumption:	180 mA
	Maximum power consumption:	15 VA
	Protective fuses:	T2AH 250 V included in power supply.
External power	9 Volts continuous  / Power > 15 Watts. Via a specific Fresenius Kabi accessory connected to an 8 pins connector.	

Battery

⚠ Disconnect battery before opening device. Avoid short circuits and excessive temperatures.

Parameters are stored in the device flash memory. If the battery is totally discharged, the date may be lost but this can be update by user following mains power connection.

Characteristics	6 V 1.8 Ah - NiMH battery.
Weight	Approximately 140 g
Battery life	Minimum 10 h at a rate of 5 ml/h. Minimum 5 h at a rate of 120 ml/h.
Battery recharge	Pump OFF: < 5 h. Pump ON: < 15 h.

Communication port

The connector situated at the back of the device allows different functions using the communication, mains power and nurse call cables.

Nurse call	Nurse call relay output command.
Serial cable	TTL output.
External power	9 V / 15 W input.
Power output	5 V / 150 mA to power Nurse Call or Serial Link accessories.

Infrared communication

Injectomat® Agilia is equipped with an infrared cell located at the back of the device. It permits exchange of information with the Agilia Link+ rack.

The information can then be transmitted by dedicated communication cables.

Compliance

 0459	Conform to the 93/42/CE Medical Directive.	IP22 Protection against splashing liquid.  Protection against leakage current: Defibrillation-proof type CF applied part.  Protection against electric shocks: class II.  Functional earth.
Safety of ElectroMedical Equipment	Conform to EN/IEC 60601-1 and EN/IEC 60601-2-24.	
EMC (ElectroMagnetic Compatibility)	Conform to EN/IEC 60601-1-2 and EN/IEC 60601-2-24.	

Dimensions - Weight

H / L / W	135 x 345 x 160 mm
Weight	around 2.1 Kg
Screen size	70 x 35 mm

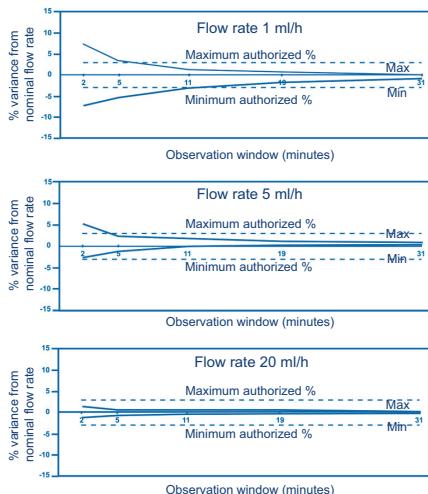
Trumpet curves

Trumpet curves demonstrate the evolution of the minimum and maximum variance of the Syringe/Syringe-Pump combination.

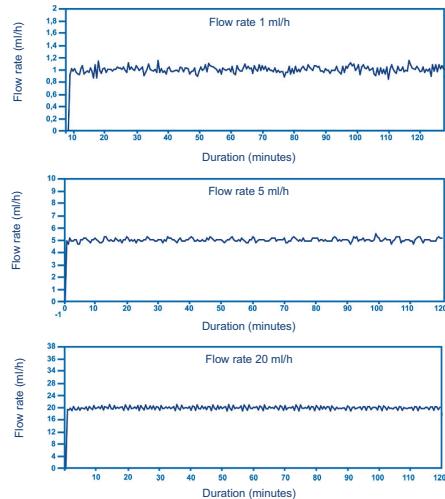
The test protocol used to obtain these results is described in the EN/IEC 60601-2-24. For further information, please refer to this publication.

This graph is therefore representative of syringes used during trials and serve as an indication only of the pump's overall performance.

Trumpet curves



Start-up and instantaneous nominate curves



Used syringes: B-D Plastipak® 50 ml Luer Lok®.

12. Guidance and manufacturer's declaration on EMC

Electromagnetic emissions - Table 201

Injectomat® Agilia is intended for use in the electromagnetic environment specified below. The user of Injectomat® Agilia should make sure it is used in such an environment.

Emissions test	Compliance obtained by the device	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	Injectomat® Agilia uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	Injectomat® Agilia is suitable for use in all establishments, including domestic and hospital establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations Flicker emissions IEC 61000-3-3	Does not apply	

Electromagnetic immunity - Table 202

Injectomat® Agilia is intended for use in the electromagnetic environment specified below.

The user of Injectomat® Agilia should make sure it is used in such environment.

Immunity test	IEC 60601-1-2 IEC 60601-2-24 Test level	Compliance level obtained by the device	Electromagnetic environment - guidance
Electrostatic Discharge (ESD) IEC 61000-4-2	± 8 kV contact ± 15 kV air	± 8 kV contact ± 15 kV air	Coatings of the floors out of wooden, tiling, and concrete, with a relative humidity level at least 30 %, make it possible to guarantee the level of necessary conformity. If it is not possible to guarantee this environment, additional precautions must be taken, such as: anti-static material usage, preliminary user discharge and the wearing of anti-static clothing.
Electrical fast Transient / burst IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input output lines	± 2 kV for power supply lines ± 1 kV for input output lines	Mains power quality should be that of a typical domestic, commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV differential mode ± 2 kV common mode	± 1 kV differential mode ± 2 kV common mode	Mains power quality should be that of a typical domestic, commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5 % Ut (> 95 % dip in Ut) for 0.5 cycle	< 5 % Ut (> 95 % dip in Ut) for 0.5 cycle	Mains power quality should be that of a typical domestic, commercial or hospital environment.
	40 % Ut (60 % dip in Ut) for 5 cycles	40 % Ut (60 % dip in Ut) for 5 cycles	For short and long interruptions (< than battery life) of power mains, the internal battery provides the continuity of service.
	70 % Ut (30 % dip in Ut) for 25 cycles	70 % Ut (30 % dip in Ut) for 25 cycles	
	< 5 % Ut (> 95 % dip in Ut) for 5 sec	< 5 % Ut (> 95 % dip in Ut) for 5 sec	
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	400 A / m	400 A / m	If necessary, the power magnetic field should be measured in the intended installation location to assure that it is lower than compliance level. If the measured field in the location where the Injectomat® Agilia is used exceeds the applicable magnetic field compliance level above, the Injectomat® Agilia should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or re-locating Injectomat® Agilia, or install magnetic shielding.

Note: Ut is the a/c. main voltage prior to application of the test level.

Electromagnetic immunity - Table 204

Injectomat® Agilia is intended for use in the electromagnetic environment specified below. The user of Injectomat® Agilia should make sure it is used in such an environment.

Immunity test	IEC 60601-1-2 IEC 60601-2-24 Test level	Compliance level obtained by the device	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	10 Vrms 150 kHz to 80 MHz	10 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the Injectomat® Agilia including cables, than the recommended separation distance calculated from the equation applicable to the frequency of transmitter.
Radiated RF IEC 61000-4-3	10 V/m 80 MHz to 2.5 GHz	10 V/m	<p>Recommended separation distance: $D = 0.35 \sqrt{P}$, for a frequency of 150 kHz to 80 MHz $D = 0.35 \sqrt{P}$, for a frequency of 80 MHz to 800 MHz $D = 0.7 \sqrt{P}$, for a frequency of 800 MHz to 2.5 GHz</p> <p>Where P is the maximum output power rating of the transmitter in Watts (W) according to the transmitter manufacturer and D is the recommended separation distance in meter (m).</p>
			<p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey (a), should be less than compliance level. (b)</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 

Note 1: At 80 MHz and 800 MHz, the highest frequency range applies.

Note 2: these guidelines may not apply to all situations. Absorption and reflection from structures, objects and people affect electromagnetic propagation.

(a) Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To access the electromagnetic environment due to the fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location where Injectomat® Agilia is used exceeds the applicable RF compliance level above, Injectomat® Agilia should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or re-locating Injectomat® Agilia, or install magnetic shielding.

(b) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 10 V/m.

Recommended separation distances between portable and mobile RF communication equipment and Injectomat® Agilia - Table 206

Injectomat® Agilia is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The user of Injectomat® Agilia can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and Injectomat® Agilia as recommended below, according to the maximum output power of the communication equipment.

Rated maximum output power of transmitter (W)	Separation distance according to frequency of transmitter in meters (m)		
	150 kHz to 80 MHz $d = 0.35 \sqrt{P}$	80 MHz to 800 MHz $d = 0.35 \sqrt{P}$	800 MHz to 2.5 GHz $d = 0.7 \sqrt{P}$
0.01	0.04	0.04	0.07
0.1	0.11	0.11	0.22
1	0.3	0.3	0.7
10	1.1	1.1	2.2
100	3.5	3.5	7

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

Note 1: At 80 MHz and 800 MHz, the separation distance for the highest frequency range applies.

Note 2: These guidelines may not apply to all situations. Absorption and reflection from structures, objects and people affect electromagnetic propagation.

The use of accessories and cables, other than those specified, can result in increased emissions or decreased immunity of the device.

The device should not be used adjacent to other equipment. However, if adjacent use is necessary, the device should be monitored to verify normal operation in the configuration in which it will be used (pump with a mains cable, an RS232 cable).

13.Cleaning and use conditions

Cleaning and disinfecting

■ Injectomat® Agilia is part of the patient's immediate environment. It is advisable to clean and disinfect the device's external surfaces regularly and especially before connecting a new patient and before any maintenance operation in order to protect patient and staff.

1. Prepare the detergent-disinfectant solution.
 2. Disconnect the device from the power supply.
 3. Moisten the disposable cloth with the detergent-disinfectant solution, carefully wring out the cloth. Repeat at each stage of the cleaning process.
 4. Start by cleaning the bottom side of the device. Then carefully turn the device upside down without touching the mobile parts. Put down the device on a clean surface.
 5. Continue the cleaning on sides of the device without wetting the sockets.
 6. Clean the keyboard.
 7. Complete the cleaning of the most exposed surfaces, the most critical zones and the mains cord.
 8. Do not rinse, leave to dry.
 9. Protect and keep the device clean before reuse.
 10. Validate the maintenance protocol by simple bacteriological checking.
- Do not place in an AUTOCLAVE nor IMMERSE the device. Do not let liquids enter the device's casing.
- **Do not use:** TRICHLOROETHYLENE-DICHLOROETHYLENE - AMMONIA - AMMONIUM CHLORIDE - CHLORINE and AROMATIC HYDROCARBON - ETHYLENE DICHLORIDE-METHYLENE CHLORIDE - CETONE. These aggressive agents could damage the plastic parts and cause device malfunction.
- Take care also with ALCOHOL BASED SPRAYS (20% - 40% alcohol). They lead to tarnishing of and small cracks in the plastic, and do not provide the necessary cleaning prior to disinfecting. Disinfecting SPRAYS may be used, in accordance with the manufacturer recommendation, from a distance of 30 cm of the device, avoid the accumulation of the product in liquid form.
- Please contact the appropriate service, responsible for cleaning and disinfecting products, in your establishment for further details.

Environmental conditions

The device should be stored in a dry and cool place. In case of prolonged storage, the battery should be disconnected via the battery access flap situated underneath the device. This should be done by a qualified technician.

■ Storage conditions and carrying

Temperature: - 10°C to +60°C.

Pressure : 500 hPa to 1060 hPa.

Humidity : 10% to 90%, no condensation

■ Use conditions

Temperature: 5°C to 40°C.

Pressure : 700 hPa to 1060 hPa.

Humidity : 20% to 90%, no condensation.

Use of the internal battery

This device is provided with a NiMH battery. When the device is disconnected from the main, it automatically switches to battery mode.

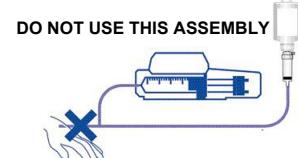
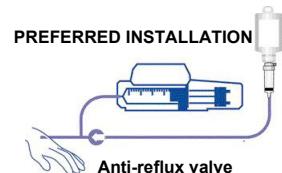
Before starting for the first time, charge the battery for approx. 5 hours by connecting the power supply cord without using the device.

The maximum life of the battery achieved after several charge/discharge cycles.

In case of frequent main operations, battery life may be decrease. To limit this risk, it is recommended to use the device on the battery mode, approximately every 4 weeks, until getting a PRE-ALARM BATTERY signal.

Recommendations

- **Fresenius Kabi** will not be liable for any damages or claims, medical or otherwise, of any nature whatsoever, whether direct or consequential, caused by improper use of this device.
- Use only 3 parts syringes from the preprogrammed syringes type list on the device, otherwise the specified accuracy and functioning level can not be guaranteed. Use only sterile catheter extensions, which can resist pressures of up to 2000 hPa. Use of certified syringes according to international standards avoid introduction of air in the syringe. Use of a syringe not corresponding to one selectable on the device means that accuracy levels cannot be guaranteed.
- The use of non-screwable extension lines or syringes may result in spillage if infusions are carried out at high flow rates and/or high pressure. Connect the infusion line in accordance with procedures in your establishment and good medical practices. **Fresenius Kabi** recommends the use of Luer Lok type infusion lines. Standard precaution should be taken to prevent contamination or injuries while discarding the associated disposable (e.g. syringes, extension sets, needles, etc.).
- While in use, negative pressure variation may occur in the syringe, by the relative height from the device to the injection site or by combined infusion devices such as blood pump, alternative clamp, etc.
- High depression may create syringe siphoning. In this situation, you must check the integrity of the syringe used (possible leakage), and if necessary insert anti-siphon valves.
- Pressure variation may generate flow discontinuity mainly noticeable at low flow rates and depending of the infusion system characteristics such as friction force, stickiness, compliance of syringes and mechanical backlash. Anti-siphon valves will also eliminate any risk of free flow during syringe changes. An air leakage in a syringe with a line not equipped with an anti-siphon valve may generate an uncontrolled flow delivery.
- Do not use in conjunction with positive pressure infusion devices that could generate back pressure higher than 2 000 hPa susceptible to damage infusion disposable and the device.
- **Fresenius Kabi** recommends the use of one way valves or positive pressure infusion devices for multi-line infusions.
- If there is no one way valve on a gravity infusion line during a multi-line infusion, this will make it impossible to detect occlusions on the patient side, and could result in accumulation of the drug being infused in the gravity line, which could later be infused in an uncontrolled manner when the occlusion is released.
- Place the connection between the feeder line and the syringe-driver line as near to the start of the catheter as possible in order to minimize the dead space and consequently the impact of any change in flow rate on the feeder line.
- When the device is placed higher than the injection site, please pay attention to correctly secure the syringe and manipulate the syringe only when the extension set is clamped or disconnected from patient side.
- In order to ensure all the safety features, the pump must always remain turned ON when connected to the patient. Should the pump not be used for a while, use the Pause function.



14. Services

Conditions of guarantee

Fresenius Kabi guarantees that this product is free from defects in material and workmanship **during the period defined by the accepted sales conditions**, except for the batteries and the accessories.

To benefit from the materials and workmanship guarantee from our After-Sales Service or agent authorized by **Fresenius Kabi**, the following conditions must be respected:

- The device must have been used according to the instructions in this Operator's Guide.
- The device must not have been damaged when in storage, at the time of repair, or show signs of improper handling.
- The device must not have been altered or repaired by non-qualified personnel.
- The serial number (ID/N°) must not have been altered, changed, or erased.
- In case of non-respect of these conditions, **Fresenius Kabi** will prepare an estimate for repair covering the parts and labor required.
- When return and repair of a device is necessary, please contact **Fresenius Kabi** Customer or After-Sales Department.

Quality control

Upon the hospital request, a control check of the device may be performed every 12 months.

A regular control check (not included in the guarantee) consists of various inspection operations listed in the Technical manual. These control checks must be performed by an experienced technician and are not covered by any contract or agreement provided by **Fresenius Kabi**.

Preventive maintenance

To ensure normal performance of the device, it is recommended that preventive maintenance is performed every 3 years. This includes battery replacement and it should be performed by a qualified technician.

The qualified technicians in your establishment or our After-Sales Service should be informed if the device is dropped or if any of malfunctions occurs. In this case, the device must not be used.

CAUTION: Failure to comply with these maintenance procedures can damage the device and lead to a functional failure. Internal inspection of the device requires the respect of particular procedures to void damages to the pump or user.

Servicing

For further information concerning the device servicing or use, please contact our After-Sales Service or our Customer service.

If a device is returned to our After-Sales Department, it is essential to clean and disinfect it, then, pack it very carefully, if possible in its original packaging, before sending it.

Fresenius Kabi is not liable for loss or damage to the device during transport to our After-Sales Department.

 At the end of the device life, return it to an organization competent in the treatment of the electrical and electronic equipment waste. Remove the battery from the device and return it to a competent recycling organization.



Data racks, accessories and maintenance tools

Injectomat® Agilia is compatible with the Agilia accessories range.

For further information, please contact our Commercial Department.

		Ref.
Duo Agilia	2 channels accessory for power supply centralisation	073495
Y Duo Agilia cable	2 channels cable for DC/DC power centralisation	073497
DC-DC converter Agilia	Cable for transportation (ambulances)	073494
Nurse call Agilia	Nurse call cable (4000 V isolated)	073496
Link 4 Agilia	Rack 4 slots for power centralisation	073480
Link 6 Agilia	Rack 6 slots for power centralisation	073481
Link 8 Agilia	Rack 8 slots for power centralisation	073498
Link 4 + Agilia	Rack 4 slots for power centralisation and communication capabilities	073482
Link 6 + Agilia	Rack 6 slots for power centralisation and communication capabilities	073483
Link 8 + Agilia	Rack 8 slots for power centralisation and communication capabilities	073499

Data management

RS 232 cable for Agilia	Communication cable for RS232 connection (4000V isolated)	073493
USB cable for Agilia	Communication cable for USB connection (4000V isolated)	073491
Vigilant Ethernet cable for Agilia	Communication cable for Ethernet connection (4000V isolated)	073490
Vigilant WIFI cable for Agilia	Communication cable for WIFI connection (4000V isolated)	073492

Maintenance CD & tools

Partner Agilia	Maintenance CD	067037
Maintenance kit Agilia	Maintenance tool box	178950

Vigilant®, the IV Medication Safety Solution

Vigilant® Drug 'Lib for Agilia	Software for drugs adjustment	073473
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This user guide may contain inaccuracies or typographical errors.
Modifications may thus be made and will be included in later editions.
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