Agilia® VP MC
Agilia® VP MC WiFi

Advanced volumetric infusion pumps

Dose rate programmation for less risk of errors in prescription computation

Wide flow rate ranging from 0.1-1500 mL/h and an accuracy of ± 5%

Adaptable to all protocols

Up to 19 drug libraries embeded

Easy and intuitive to use

Stand alone or rack mounted infusion pump with alarm

2 pressure modes and Dynamic Pressure System (DPS)

Agilia® VP MC & Agilia® VP MC WiFi

Infusion

Flow rate range
0,1 - 1500 mL/h.
0,01 minimum increments instead of 0,1 mL/h is activated when the max patient weight is set to 20 kg in the drug library.
Flow rate can be limited according to drug name (soft and hard limits) with Agilia Vigilant Drug'Lib, IV Medication Safety System.

Flow rate accuracy
± 5% and even better in most clinical situations.

Volume to infuse
0,1 - 9999 mL.

Infusion Modes
mL/h modes: Volume + Flow rate, Volume + Time, Flow rate + Time, Volume + Time + Rate, Ramp-up / Ramp down, Sequential / Intermittent, Secondary / Piggyback, Drop/min.

Dose rate modes: ng/h, ng/kg/min, ng/kg/h, microg/min, microg/h, microg/kg/min,
microg/kg/h, mg/min, mg/h, mg/24h, mg/kg/min, mg/kg/h, mg/kg/24h, mg/m²/h, mg/m²/24h, g/h, g/kg/min, g/kg/h, g/kg/24h, mmol/h, mmol/kg/h, mmol/kg/24h, mU/min, mU/kg/min, mU/kg/h, U/min, U/h, U/kg/min, U/kg/h, kcal/h, kcal/24h, kcal/kg/h, mEq/min, mEq/h, mEq/kg/min, mEq/kg/h.

Dilution setting: -- units / mL or -- units / -- mL. With or without loading dose.

Times of infusion
0 h 01 min - 168 h 00 min.
Warning function: a warning message can be activated and adjusted from 0 h 01 min to 96h00min.

Priming
Manual or by using the purge/prime function of the pump.

Bolus
1500 mL/h, adjustable from 50 mL/h to 1500 mL/h by 50 mL/h increments. Direct or programmable.

KVO
Automatic Keep Vein Open rate of 1 mL/h (adjustable from 1 to 20 mL/h) when volume limit is reached.

Pause
Programmable from 1 minute to 24 hours, increments 1 minute.

Data logo event
Up to 1500 data log events in real time.

Graphical history
flow rates, pressure.

Night mode
The night mode decreases the brightness of the screen and the green lights. The key beep can eventually be turned off.
The night mode can be programmed manually or automatically in a variable time range.

Profiles
Basic profil: infusion without any display of the drug names.
19 Custom profiles configurable with Agilia Vigilant Drug'Lib:
Drug library to be created with Agilia Vigilant Drug'Lib.
Configuration only: Custom pump configuration without Drug Name.

Volumat lines administration sets

Free-flow protection
All sets integrate the SafeClip* that automatically clamps the line to avoid any risk of free-flow when the door is opened and when the set is disengaged.

Auto-test function: The patented** OCS (Occlusivity Check System) checks the correct working order of the pump in association with its tubing set, thus preventing any risk of free-flow.

* French Patent FR2908176 / ** European Patent EP1031358

Pumping segment
The silicone pumping segment allows a tight flow rate accuracy as well as long term performances.

Material
All Volumat Lines infusion sets are DEHP-free & Latex-free.
PVC-free and opaque materials are available.

Needle-free access
Some sets integrate a needle-free Y injection site to protect the medical staff against the risk of needle-stick injuries.

Pressure management

Pressure modes
2 modes available: variable or 3 pre-set levels - Range from 50 to 750 mmHg. (25 mmHg increment from 50 to 250 mmHg / 50 mmHg increment from 250 to 750 mmHg).

DPS
The Dynamic Pressure System - DPS - warns of pressure variations.
A risk of obstruction or a possible leak in the infusion line can thus be anticipated.

Pressure monitoring
Graphic representation of the pressure in the infusion line and of the pressure limit thanks to the pictogram.

Anti-bolus system
Reduces significantly bolus after occlusion release (0,35 mL max.).

Alarms / Pre-alarms / Security

Pump status
GREEN for infusion in progress, ORANGE for Low and Medium priority, RED for High priority - Visibility at 4 meters minimum.
All alarms are expressed by means of light indicators, written words, pictograms and sound beeps.

Set installation control
Door's closing, set positioning, SafeClip control, OCS test.

Infusion control
End of infusion, imminent end of infusion, downstream occlusion, upstream occlusion, line disconnection, air in line, under flow rate, over flow rate, empty container, unconfirmed setting, end of pause, unauthorised flow rate (hard or soft), keypad manual locking or keypad autolock, autorestart if false occlusion detected, start infusion at pause end.

Device control
Motor rotation check, power source indication, mains power disconnection, low battery, discharged battery, technical fault, watchdog check, communication connection failure, auto-lock/lock code (on Keypad).

Maintenance
Preventive maintenance warning.

Technical specifications

Pumping mechanism
2nd generation linear peristaltic pumping system with software adjustments and compensations.

Display
Blue graphic LCD monochrome, size 66 mm x 33 mm
(256 x 128 pixels).

Swinglock clamp
Versatile clamp that allows the fixation on a rail or a pole
(Pole: 20-40 mm max. / Rail: 25-35 x 10 mm)

Stackability
Up to 3 devices self-stackable on a pole.

Dimensions (H/W/D) / Weight
135 x 190 x 170 mm / Approximately 2kg.

Battery
Characteristics: 7.2 V 2.2 Ah - Li-ion Smart battery, remaining battery life and battery charge level available on the display.

Battery Life (when fully charged):
- Agilia VP MC and Agilia VP MC WiFi (WiFi disabled / not used):
> 8 h at 25 mL/h
> 5 h at 1500 mL/h

- Agilia VP MC WiFi (WiFi enabled):
> 5 h at 25 mL/h
> 4 h at 1500 mL/h

Battery recharge:
- Pump OFF: < 6 h.
- Pump ON: < 20 h.

Waterproofness
IP22.

Power supply
100 V - 240 V ~ / 50 / 60 Hz with functional earth.

Compliance

Electromagnetic compatibility EMC
IEC 60601-1-2, IEC 60601-2-24

Medical Device Directive
CE 0123 marking in compliance with the Concil Directive 93/42/EEC

Electrical Compliance
Protection against leakage current: Defibrillation-proof type CF
Protection against electric shocks: class II in accordance with IEC 60601-1

Alarm system
IEC 60601-1-8

Home healthcare Environment
IEC 60601-1-11

Usuability Engineering
IEC 60601-1-6 and IEC 62366

Wireless LAN (For Agilia VP MC WiFi only)

Technology
IEEE 802.11 a/b/g/n.
Frequency Band: 2.400 -> 2.500 GHz (2.4 GHz is ISM band) / 4.900 -> 5.850 GHz (High Band).

Modulation
OFDM with BPSK, QPSK, 16-QAM, and 64-QAM 802.11b with CCK and DSSS.

Wireless Security
WPA/WPA2-Entreprise, WPA/WPA2-PSK.

Network Protocol
TCP, IPv4, DHCP, HTTP.
CE, FCC and IC compliant.

FRESENIUS KABI

caring for life