



Versaflo™200 Syringe Pump

User's Manual

For Veterinary Use Only



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Versaflo™ 200 High-Volume Syringe Pump Features

- ✓ **Capability to Load 100ml Syringe**
With 100ml syringe, you can treat larger animals with larger volumes continuously without changing syringes
- ✓ **Broad Infusion Capability**
Delivers general fluids, blood, fluid nutritionals
- ✓ **Alarms/Message Light**
4 alarms via bright light indicators and sound

Table of Contents

General Information	2
Precautions.....	2
Specifications.....	3
Keypad Description	4
Operation Procedures.....	5
Storage.....	6

General Information

This high-volume syringe pump is a conventional device for specialty practices, universities, and general practices. A wide variety of clinical departments, such as internal medicine, cardiology, and oncology require being equipped with this type of syringe pump. This pump is mainly used for intravenous/arterial infusion, anesthetic injection, IV antibiotics, etc. This syringe pump offers a reliable alternative for fluid control, especially suitable for short-term, high speed thick fluid and precise injections.

Precautions

SAVE THIS MANUAL FOR YOUR FUTURE REFERENCE!

WARNINGS:

- DO NOT USE A PUMP, SYRINGE, OR ACCESSORY THAT SHOWS ANY SIGN OF DAMAGE.
- ONLY AUTHORIZED SERVICE PERSONNEL SHOULD REPAIR THIS PUMP. MANUFACTURER ASSUMES NO RESPONSIBILITY FOR INCIDENTS THAT OCCUR IF THE PUMP IS NOT REPAIRED ACCORDING TO MANUFACTURER-AUTHORIZED PROCEDURES.
- BEFORE CONNECTING THE SYRINGE TO THE PATIENT, USER MUST PRIME THE SYRINGE AND EXTENSION TUBE TO PREVENT AIR TO THE PATIENT.
- TO CLEAN THE PUMP, USE A DAMP (NOT WET) CLOTH OR SPONGE. DO NOT IMMERSE PUMP OR POWER CABLE INTO WATER OR OTHER CLEANING SOLUTIONS.
- ONLY USE THE THREE-PRONGE POWER CORD INCLUDED IN THE PACKAGE TO CONNECT THE PUMP TO AN AC WALL OUTLET.
- OPERATE AWAY FROM STRONG MAGNETIC FIELD (LARGE EQUIPMENT OR BIG MOTOR).

Specifications

Protection Against Electric Shock	 Type BF
Mode of Operation	Continuous
Degree of Protection Against Ingress of Fluids	Drip-Proof IPX1
Acceptable syringe sizes	20ml, 50 / 60 ml, 100ml
Pre-set infusion times	4, 8, 12, 16 and 20 minutes, +/- 20 seconds
Battery operation at a flow rate of 50 ml/hr, assuming fully charged battery: 4 hours	

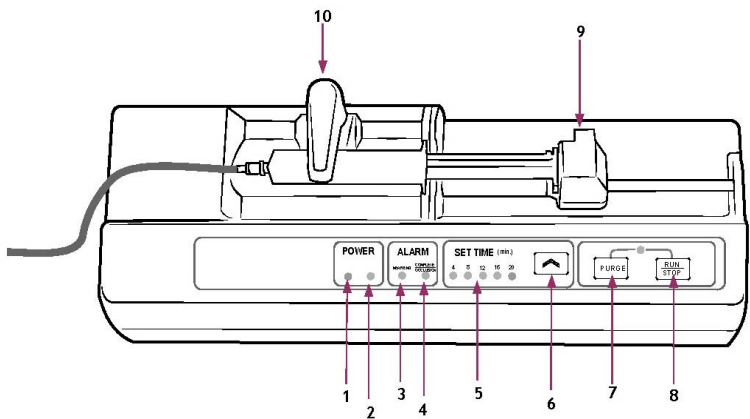
Operating Temperature	41°F-104°F (5 - 40°C)
Relative Humidity	80%, max
Power Requirements	120VAC 60Hz 6VA
Dimensions	13" x 4 1/2" x 4 1/2"
Weight	4.4 lbs (2 kg)

This Micro-Infusion Syringe Pump uses a propulsive force to inject medication and desired fluids into the patient. Among the features provided by this pump are:

- Audible and Visual Alarms of “Near Empty”, “Complete/Occlusion”, and “Low Batt”
- Wide range of compatible syringe: 20ml, 50 / 60ml, 100ml
- Waterproof ergonomic touch control panel

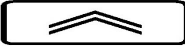
Keypad Description

A. Control Panel



1	AC power indicator
2	Built-in battery indicator
3	Near end alarm
4	COMPLETE/OCCLUSION alarm
5	SET TIME indicator
6	SET TIME button
7	PURGE
8	RUN/STOP
9	Syringe driver head
10	Syringe securing bar

B. Keypad Description

	SET TIME - activated only in STOP mode. When pressed, sets the desired infusion time. 'SET TIME' indicator should illuminate
	PURGE - Only functions in STOP mode. When pressed, starts purging tubing set
	RUN/STOP - Press to start or stop the pump. 'MODE' indicator should illuminate.

Alarms and Indicator Lights

NEAR END	NEAR END - When there is approximately one minute of infusion time remaining, this indicator flashes and the alarm buzzer sounds. To silence the alarm, press the 'RUN/STOP' button.
COMPLETE OCCLUSION	COMPLETE/OCCLUSION - When infusion is complete, the indicator is illuminated in red and the alarm buzzer sounds. When the device senses an occlusion by not being able to drive with a force of 6.5kg +/- 1kg, the indicator is illuminated in red and the alarm buzzer sounds. To silence the alarm, press the 'RUN/STOP' button.
	The battery indicator light (orange) indicates the driver is using built-in battery power. This light and AC power light (green) will blink together if battery is low.
	AC power light (green) indicates the pump is connected to mains AC power and is charging the battery.

Operation Procedures

1. Load the syringe with the desired fluid therapy, supplement, or medication. Lift up the Syringe Securing Knob and rotate towards the right 90°. Place the syringe into the bed. Be sure to insert the nozzle into the syringe slot. Then, press and hold the secure button on the driver to bring the driver block into such a position that the extremity of the syringe plunger can be placed into the driver slot. Turn the Securing Knob to the left 90°, and secure the syringe.
2. The ON/OFF switch at the left side of the pump is a power switch. Connect the power cable to a wall outlet and turn the pump on. Press and hold the "PURGE" button to purge the syringe and the set tubing.
3. Press the "SET TIME" button to preset the desired infusion time, while the light (green) indicates a corresponding number is on.
4. Press the "RUN/STOP" button to start infusion; the running green light will be on. During the infusion, the "SET TIME" and "RAPID" buttons are locked. If you need to

adjust the infusion time setting, press “RUN/STOP” followed by “SET TIME” button to reset the infusion time. To continue operation, press “RUN/STOP” again.

5. During the infusion, when “RUN/STOP” is pressed, the pump stops operation and goes into a HOLD mode with Operation Indicator (green) on. To continue the rest of infusion with the original setting, simply press “RUN/STOP” again.

NOTE:

- a) If there is an adjustment on the syringe or a resetting of the infusion time, the pump will begin infusion with the new settings. Otherwise, when “RUN/STOP” is pressed, the pump will continue the rest of infusion with the original settings.
- b) If the syringe or the set tubing becomes occluded beyond the pump’s capability to pump, the alarm will activate and the OCCLUSION indicator (red) will come on. The pump will stop operating.
- c) To remove the syringe, lift up the Syringe Securing Knob and rotate right 90°. The RUN indicator goes off when the syringe is removed.

Storage

This product should be stored in an environment with ambient temperature range of 14°F-131°F, (-10°C-55°C) relative humidity below 93%, and air pressure 500hpa-1060hpa. Do not store close to corrosive vapour and/or harmful impurities.

LIMITED WARRANTY

The Syringe Pump has been carefully manufactured from the highest quality components. The pump is guaranteed against defects in material and workmanship for two (2) years from date of purchase by the original purchaser. Manufacturer's obligation, or that of its designated representative under this Limited Warranty, shall be limited, at our option, to repairing or replacing the pump, which upon examination, is found to be defective in material or workmanship. The repair or replacement of any product under this Limited Warranty shall not extend the above mentioned Warranty period.

All repairs under this Limited Warranty should be undertaken only by qualified, trained service personnel. In the event that a pump is found to be defective during the warranty period, the purchaser shall notify manufacturer or its designated representative within thirty (30) days after such defect is discovered. The defective pump should be sent immediately to manufacturer or its designated representative for inspection, repair or replacement.

Material returned should be properly packaged to avoid severe pump damage.

This Limited Warranty shall not apply to defects or damage caused, wholly or in part, by negligence, spilt fluids, dropping of the pump, misuse, abuse, improper installation or alteration by anyone other than qualified, trained personnel; or to damage resulting from inadequate packaging in returning the pump.

This Limited Warranty is the sole and entire warranty pertaining to manufacturer's products and is in lieu of and excludes all other warranties of any nature whatsoever, whether stated, or implied or arising by operation of law, trade, usage or course of dealing, including buy not limited to, warranties of merchantability and warranties of fitness for a particular purpose. Purchaser expressly agrees that the remedies granted to it under this limited warranty are purchaser's sole and exclusive remedies with respect to any claim of the purchaser arising under this Limited Warranty.