



Installation Qualification Procedures

VERITY® 4020 Single, VERITY® 4120 Dual with Tee, and VERITY® 4220 Dual Syringe Pumps

The Installation Qualification (IQ) procedures are aimed at end users who are implementing GLP-type requirements and can be readily incorporated into proprietary Standard Operating Procedures (SOPs).

1. Instrument Identification

Manufacturer

Gilson, Inc.
3000 Parmenter Street
PO Box 620027
Middleton, WI 53562-0027 USA

<i>Instrument Name</i>	<i>Serial Number*</i>	<i>Firmware Version*</i>
VERITY® 4020 Syringe Pump		
VERITY® 4120 Syringe Pump		
VERITY® 4220 Syringe Pump		
VERITY® 4220 Syringe Pump		

*Refer to the shipping label located on each shipping container for the serial number. Refer to the QC Checklist for the firmware version.

Supplier

Organization

Address

Phone Number

Fax Number

Service Technician





User

Organization _____

Department _____

Site (Room) _____

Primary Contact

Name _____

Phone _____

E-Mail _____

Date of Installation _____

2. Pre-Installation

Instrument Description

The VERITY® 4020 Single, VERITY® 4120 Dual with Tee, and VERITY® 4220 Dual Syringe Pumps, when paired with a Gilson liquid handler, can automate liquid handling procedures.

- The VERITY® 4020 Single Syringe Pump is equipped with a user-selectable, small- or large-capacity syringe and a valve for directing liquid from reservoir or probe.
- The VERITY® 4120 Dual with Tee Syringe Pump is equipped with two syringes that are user-selectable. The capacity of the left syringe must be greater than or equal to the right syringe. The instrument includes one valve to direct liquid from reservoir or probe (on the left) and a tee connected via junction tubing (on the right).
- The VERITY® 4220 Dual Syringe Pump is equipped with up to two syringes that are user-selectable, can be the same or different, and can be a small- or large-capacity. Two valves direct liquid from reservoirs or up to two probes. When two VERITY® 4220 Dual Syringe Pumps are used with a GX-274 Liquid Handler, up to four fluid paths can be controlled independently, which allows for a high throughput configuration capable of processing up to four samples in parallel.

The VERITY® 4020 Single, VERITY® 4120 Dual with Tee, and VERITY® 4220 Dual Syringe Pumps assure accuracy in sample transfers, dilutions, reagent additions, mixing, and other liquid handling tasks. They offer speed and reliability for liquid handling tasks.

For technical specifications, refer to the *VERITY® 4020 Single, VERITY® 4120 Dual with Tee, and VERITY® 4220 Dual Syringe Pumps User's Guide*.



Unpacking

When unpacking the instrument, check the contents against the information listed under the **Unpacking** heading in the *VERITY® 4020 Single, VERITY® 4120 Dual with Tee, and VERITY® 4220 Dual Syringe Pumps User's Guide*.

Retain all packing material so the instrument may be shipped safely in the future.

Installation Site Requirements

Power Requirements	VERITY® 4020 Single Syringe Pump Voltage: 24V DC Current Rating: 1A, 24W
	VERITY® 4220 Dual Syringe Pump VERITY® 4120 Dual with Tee Syringe Pump Voltage: 24V DC Current Rating: 2A, 48W
	External Power Supply Voltage Input Frequency: 50 to 60 Hz Voltage: 100–240V AC Voltage Output Voltage: 24V DC Current Rating: 2.5A, 60W
Temperature Range	5°C–40°C
Dimensions (W x D x H)	VERITY® 4020 Single Syringe Pump 14.6 x 17.1 x 26.9 cm (5.8 x 6.7 x 10.6 in.)
	VERITY® 4120 Dual with Tee Syringe Pump and VERITY® 4220 Dual Syringe Pump 22.6 x 17.1 x 26.9 cm (8.9 x 6.7 x 10.6 in.)



Documents

In addition to this document, the following are provided. For reference purposes, specify the storage location for each.

Doc CD, 4X20 Syringe Pumps

4000-Series Syringe Pumps Declaration of Conformity

QC Checklist 4020/4120/4220

Items Included Checklist

4000-Series Syringe Pumps China RoHS

3. Installation

Setup

When setting up the syringe pump, follow the instructions provided in the *VERITY® 4020 Single, VERITY® 4120 Dual with Tee, and VERITY® 4220 Dual Syringe Pumps User's Guide*.

4. Acceptance

If no installation problems were detected or installation problems that were detected were resolved, have the local Gilson representative who installed the syringe pump provide the information requested below.

Name _____

Organization _____

Signature _____

Date _____

End user was provided with a copy of this document.