

INSTALLATION QUALIFICATION

321 and 322 Pumps

1. IDENTIFICATION OF THE INSTRUMENT

Gilson SAS
 19 avenue des Entrepreneurs, BP 145
 95400 Villiers-le-Bel, France

MANUFACTURER

	Model	Serial number	Firmware version
Pump 1 (32X)			
Head R (solvent A)			
Head L (solvent B)			
Pressure module			
Dynamic mixer			
Valve block			
Pump 2 (if 32X)			
Head R (solvent C)			
Head L (solvent D)			
Pressure module			
Dynamic mixer			
Valve block			
Pump 2 (if 30X)			
Head (solvent C)			
Pump 3 (if 30X)			
Head (solvent D)			
Injection pump 4 (30X)			
Head (sample)			
Degasser			

SUPPLIER

Company

Address

Name of service technician

Telephone: Fax: e-mail:

.....

USER	Company
	Department
	Site (room)
	Date of installation Date of first use
	Identification of the instrument
	System including the instrument
	Technician:
	Name Phone
Fax e-mail	

2. PRE-INSTALLATION

Instrument description

All Gilson multi-solvent pumps described in this IQ Procedure are models 321-H1, 322-H1, 321-H2 and 322-H2, collectively referred to as 32X Pumps. No distinction is made between the four models at the hydraulic level.

H1 and H2 are interchangeable pump heads. 321 Pumps are master models with a control panel. 322 Pumps are remote controlled models without a control panel.

In its simplest configuration, a 32X Pump is capable of mixing two solvents (A and B). By adding up to two pumps, you can mix up to four solvents (A-D), or inject a sample or both.

Typically, solvents C and D are delivered by a second 32X Pump, and sample is always injected by a 30X Pump (305, 306 or 307, fitted with the appropriate pump head, nine models available from 5SC to 200WTi). Alternatively, the second 32X Pump may be replaced with two 30X Pumps. Section 1 reflects these options.

Both the 32X and 30X Pumps conform to the European directive 89/336/EEC, refer to the leaflet LT801354 'Declaration of Conformity'.

Multi-pump systems are controlled either by a 321 Pump or from a computer (via a Gilson 506 interface) by means of UniPoint software.

Detailed technical data are given in Chapter 6 of the 32X User's Guide and in the appropriate Appendix of the 30X User's Guide.

2	<p>Unpacking</p> <p>32X Pumps are supplied in a carton including their standard accessory package.</p> <p>Read the unpacking notice (reference LT801397).</p> <p>Check the contents of the carton against the appropriate list in Chapter 6 of the 32X User’s Guide.</p>												
3	<p>Available documents</p> <p>To perform the installation of your pumping system properly, you need to define a specific location for the following documents:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">32X User’s Guide</td> <td style="width: 50%;">Unpacking Notice (32X)</td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>30X User’s Guide (if used)</td> <td>Unpacking Notice (30X)</td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>Installation Qualification (IQ)</td> <td>Operational Qualification (OQ)</td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </table>	32X User’s Guide	Unpacking Notice (32X)	<input type="text"/>	<input type="text"/>	30X User’s Guide (if used)	Unpacking Notice (30X)	<input type="text"/>	<input type="text"/>	Installation Qualification (IQ)	Operational Qualification (OQ)	<input type="text"/>	<input type="text"/>
32X User’s Guide	Unpacking Notice (32X)												
<input type="text"/>	<input type="text"/>												
30X User’s Guide (if used)	Unpacking Notice (30X)												
<input type="text"/>	<input type="text"/>												
Installation Qualification (IQ)	Operational Qualification (OQ)												
<input type="text"/>	<input type="text"/>												
4	<p>Installation site requirements</p> <p>Electrical: 110/120 V and 220/240 V ± 10 %, 50 and 60 Hz. (Automatic selection on the power supply board.) Power requirement: 150 W.</p> <p>Operating Temperature: 10 to 40°C for a 321 Pump, 4 - 40 °C for a 322 Pump.</p> <p>Minimum bench space: 260 (W) x 410 (D) x 510 mm (H).</p> <p>Access: Hydraulics are connected at the front panel. Electrical connections are made to the rear panel.</p>												

3. INSTALLATION QUALIFICATION

Safety Instructions

The safety instructions given in the 32X Pump User's Guide must be read carefully before installing and operating your pump(s).

Electrical setup

1

1. Check that the male plug of the power cord, provided with the 32X Pump, corresponds to the female socket of the power supply in your laboratory, and that it satisfies your country's safety requirements; otherwise contact your Gilson representative.
2. Install the fuses as detailed in the 32X Pump User's Guide (Chapter 3).
3. Check that the On/Off switch is in the Off position (I = On, O = Off).
4. Connect one end of the power cord to the pump's power socket and the other end to the power supply socket.
5. If you have a multi-pump system, repeat steps 1 to 4 for each 32X pump.

Communications

GSIOC setup

Up to two pumps (one 32X and one 30X, or two 30X) and one 15X detector may be controlled from a 32X Pump. Use only the type of cable supplied with the pump.

2

1. For the first slave pump controlled by the master 32X Pump, connect a GSIOC cable between the socket marked "GSIOC from controller" on the slave to the socket marked "GSIOC to slave" on the rear panel of the master. Then connect a second GSIOC cable between the second slave and the male connector of the first cable. With additional cables, other devices may be connected in the same way.
2. For a pumping system controlled by a computer, you must use an interface module (typically a Gilson model 506C) between the first device in the system and the computer. Connect a GSIOC cable between the socket marked "GSIOC from controller" on the pump to the 506C socket marked "GSIOC", then connect a suitable cable between the RS232 socket on the 506C and a serial port on the computer.

Coordination with External Equipment

A 32X Pump coordinates with other equipment (e.g. a chart recorder) by means of contact closure signals. A 32X Pump can send (output) and receive such signals. You must connect a single wire between the appropriate terminal on the pump and the external equipment for each required signal or function (see 32X User's Guide - Chapter 3).

3

Hydraulic setup

- 1. 32X Pumps are supplied with the key hydraulic components pre-installed, including the pump-head. For other pump types refer to the documentation that accompanies them.
- 2. Connect the inlet and outlet tubing, provided with the 32X Pump, to the inlet and outlet of the pump, as described in the 32X Pump User’s Guide (Chapter 3).
- 3. Immerse the inlet filters into the solvent reservoirs. This solvent is HPLC grade and degassed water (solvent A) and water plus 0.3% acetone (solvent B) to implement the OQ procedure.
- 4. Prime the channels, as described in the 32X Pump User’s Guide (Chapter 4).

Technician

Name: _____ Signature: _____



LT804030B - February 2002
Printed in France

World Headquarters

Gilson, Inc., 3000 W. Beltline Hwy., P.O. Box 620027, Middleton, WI 53562-0027, U.S.A.
Tel: 1+608-836-1551, Fax: 1+608-831-4451, Email: sales@gilson.com, service@gilson.com, Web: www.gilson.com

Gilson SAS, 19 avenue des Entrepreneurs, B.P. 145, 95400 Villiers-le-Bel, France
Tel: 33+ (0)1-34-29-50-00, Fax: 33+ (0)1-34-29-50-20, Web: www.gilson.com