



Operating Instructions

Hydro Tissue Float Bath

H 2 P



The LAUDA Hydro Tissue Float Bath H 2 P is a special bath for histological, pathological, clinical and bacteriological laboratories, for stretching and drying of cut tissue samples. The outer housing is made of powder-coated aluminium, the bath body as well as the rims of the bath to dry the cut tissues are made of black anodised aluminium.

The units' temperature can be set via an electro-mechanical temperature controller with capillary tube sensor in a temperature range of 5 K above ambient to approx. 80 °C and is protected by a temperature cut-out in case of dry running of the heating element. The Bath is heated indirectly, heating plate, sensor of the thermostat and temperature cut-out are situated below the bath.

Before installation, please check whether contents of package are in good order and complete.

Should you note any damages or have any reasons for complaint, please contact your supplier or directly:

LAUDA-GFL Gesellschaft für Labortechnik mbH
Schulze-Delitzsch-Str. 4+5
30938 Burgwedel - Germany
Telefon: +49 (0)5139 9958 0
Fax: +49 (0)5139 9958 21
E-Mail: info@lauda-gfl.de
Internet: www.gfl.de

Contents

Operating Instructions.....	1
1 Use of the Tissue Float Bath.....	7
1.1 Intended Use.....	7
1.2 Improper Use.....	7
2 Warranty.....	7
3 Before installation.....	8
4 Set-Up and Location of the Tissue Float Bath.....	8
5 Operating Voltage.....	8
6 Thermometer.....	9
7 Filling Water into the Tissue Float Bath.....	9
8 Installation, Temperature Regulation and Shutdown.....	9
9 Temperature Monitoring in Case of an Error.....	9
10 Maintenance, Support and Repair.....	10
11 Disposal of Old Appliances.....	10
12 Technical Data.....	11
13 Circuit diagram.....	12
14 Examples for connection to the mains supply.....	13
14.1 Electrical fuses.....	13
14.2 Examples for connection to the mains.....	14
15 List of spare parts.....	15
16 Accessories.....	16

1 Use of the Tissue Float Bath

1.1 Intended Use

LAUDA Hydro Tissue Float Baths are used to heat up distilled or desalinated water in a temperature range of 5 K above ambient to approx. 80 °C, in order to flatten cut tissues to prepare them for further studies, to transfer them to microscope slides and to dry them on the indirectly heated rim of the bath.

The information contained in these operating instruction must be read and observed by all means. Only then a perfect operation of the LAUDA Hydro Evaporation Water Bath can be guaranteed. The units may only be installed and operated by persons who have made themselves familiar with these operating instructions.



Caution:

Hot surfaces at temperatures above 50 °C. Danger of burns and danger of scaldings through steam released when opening the lid of the Tissue Float Bath. It is recommended to wear suitable safety gloves.

1.2 Improper Use

Do not use tap water as lime deposits on the black anodised bottom of the bath will prevent clear visibility of the cut tissues. Only use water in the bath; other media, e. g. oils or acids, will lead to damages and might even cause total unit failure. The temperature work must not create an explosive atmosphere nearby of the unit. LAUDA Hydro Tissue Float Baths are not suitable for direct temperature work of foodstuffs, drinks and tobacco or for medical-technical and pharmaceutical products. Direct temperature work means unprotected contact of the substances with the bath filling. It is not permissible to either heat up or vaporise aggressive media, e. g. hydrochloric acid, in the unit itself or in the vicinity. LAUDA Hydro Tissue Float Baths operated in a laboratory are no medical devices. They neither fall under national nor international Medical Device Directives nor have to be used and applied accordingly.

2 Warranty

For all laboratory apparatus and their accessories from LAUDA-GFL Gesellschaft für Labortechnik mbH, there is a warranty claim, as well for spare parts, repairs and modifications, carried out by LAUDA-GFL. In order to identify defective units, we require both model and serial number on the nameplate at the back, left-hand side of the Evaporation Water Bath and, if applicable, a copy of the invoice.

3 Before installation

The information given in the present manual must by all means be carefully read and observed. Only then can a perfect functioning of the Evaporation Water Bath be guaranteed. Safety precautions are additionally marked with the following symbols.



Read and observe the operating instructions



Warning of hot liquids and vapour



Warning of hot surfaces



Warning of dangerous electrical voltage



General warning



Before maintenance and repair disconnect the unit all-pole from the electrical mains (pull the plug from the socket).

4 Set-Up and Location of the Tissue Float Bath



Place on solid, even and level surfaces inside buildings only. Make sure to place the unit only on a water-tight, temperature-resistant and non-flammable surface. The unit is not suitable for use in potentially explosive surroundings.

5 Operating Voltage



The main switch of the Tissue Float Bath must be off (position O). The operating voltage on the name-plate (at the back of the unit) must be the same as the mains voltage. The supplied connection cable disposes of a high-temperature coupling on one end, which is to be plugged into the unit's socket at the back of the unit, and a shock-proof plug that serves as the mains plug and is to be connected to the mains socket. The Water Bath must be connected to a correctly installed shock-proof socket. The bath is a protection class I electrical appliance, a connection to the earth conductor (PE) must be ensured. For information on the required mains fuse please view the technical data, chapter 11 of this manual. The electrical connection must ensure an all-pole separation from the mains supply at any time. The mains cable must not touch hot surfaces of the unit anywhere. It may not be led underneath the unit. In case of compliance, connect the unit to the mains.

6 Thermometer

Fix the thermometer holder to the bath rim, opposite the control panel, and place the glass thermometer into the holder. The thermometer must not touch the bottom of the bath.

7 Filling Water into the Tissue Float Bath



Before initiation, fill either distilled or desalinated water up to approx. 1 - 2 cm beneath the rim of the bath. The maximum filling quantity can be found in the technical data, chapter 11 of these instructions.

8 Installation, Temperature Regulation and Shutdown

Switch on the main switch. The green pilot lamp to the left above the main switch will light up. Set the required temperature on the turning knob of the temperature regulator. The temperature range of the bath is between approx. 5 K above ambient to maximum approx. 80 °C. After setting the required temperature, the heating element is powered. The yellow pilot lamp to the left above the temperature regulator lights up. The thermometer shows the current temperature. For safe heating up to the maximum temperature cover the bath with a lid (accessory).

Caution, please observe by all means.

To turn off for longer shut-down periods switch the main switch to position O and disconnect the unit from the mains. Empty the Evaporation Water Bath and dry the cabinet interior to prevent bacterial contamination.



Caution:

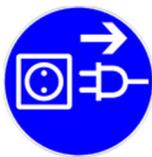
Hot surfaces at temperatures above 50 °C. Danger of burns. Take extreme care when handling the unit because of the high operating temperatures.

9 Temperature Monitoring in Case of an Error

The Tissue Float Bath is protected against destruction by running dry or defective temperature controller by a temperature cut-out (non readjustable, temperature-dependent cut-out). The cut-out cuts the power to the heating. A defective temperature cut-out must be exchanged against an identical cut-out.

10 Maintenance, Support and Repair

The LAUDA Hydro Tissue Float Bath is constructed to withstand even rough service conditions. Nevertheless, the unit should only be subjected to increased strain within sensible limits.



Make sure to prevent liquids coming into contact with cable connections or the inside of the electrical appliance.
Before opening and/or cleaning the unit, pull the plug from the socket.
Danger of electrical shock!



The black anodised bath as well as the off-white powder-coated surfaces may be cleaned with mild, non-abrasive and pH neutral detergents. Never use detergents containing solvents.
It is advisable to exchange the water in the bath in regular intervals in order to prevent bacterial contamination.

For technical support concerning LAUDA Hydro Tissue Float Baths, please do not hesitate to contact our Service Department. Please contact your dealer or us before returning a defective unit and do not return it before consulting us. A defective unit may only be returned thoroughly cleaned, decontaminated, if necessary, and carefully packed, accompanied by a detailed description of the defect, to

LAUDA-GFL Gesellschaft für Labortechnik mbH
Schulze-Delitzsch-Straße 4
30938 Burgwedel – Germany

Servicings, repairs and modifications must be carried out according to the General Technical Rules and Regulations (§2, chapter 2, DGUV regulation 3) by a trained electrician (§2, chapter 3, DGUV regulation 3).

Only original spare parts may be used. Always demand a confirmation (company, date, signature) on the kind and extent of the service(s) carried out.

11 Disposal of Old Appliances

LAUDA-GFL will take responsibility, within the scope of the legal directives, for an environmentally sound handling and disposal of all used LAUDA-GFL units as of the production year 1995 that are returned to us free of charge and will have them materially recycled. Before a unit is returned, a legally binding declaration must be provided from the sender confirming that the unit is free from harmful and/or hazardous contaminations as well as from hazardous substances caused by the previous use of the unit.

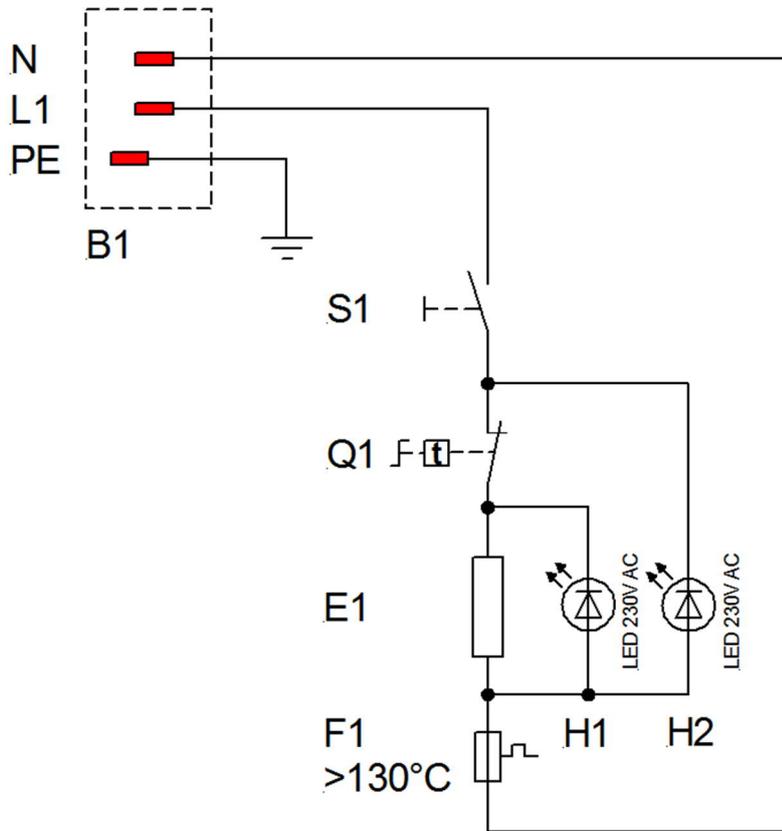
LAUDA-GFL laboratory apparatus are exclusively designed for industrial use and may not be disposed of through public waste disposal authorities.

EAR Registration Number WEEE-ID.NO 67770231

12 Technical Data

Exterior dimensions (diameter / height)	280 mm / 100 mm
Interior dimensions (diameter / height)	200 mm / 60 mm
Usable bath height	50 mm
max. filling quantity (in litres)	1.6 l
Temperature range	approx. 5 K above ambient to +80 °C
Temperature control	Capillary thermostat
Temperature setting	on the turning knob
Temperature constancy, temporal	approx. +/- 0,5 K
Over-temperature cut-out	Temperature cut-out, > 130 °C non readjustable
Electrical connection	230 V, 50 / 60 Hz or as a special make (see nameplate) 115 V, 50 / 60 Hz
Power	0,3 kW
Mains connection	Shock-proof plug
Mains fuse	min. 10 A – max. 16 A
Protection type / protection class	IP20 / I
Ambient conditions	Use only indoors (not in potentially explosive surroundings)
Height above sea level	up to 2000 m NN
Ambient temperature	+10 °C to +40 °C
Humidity	max. 80 % relative humidity up to 31 °C, decreasing to 50 % relative humidity at 40 °C
Weight	2 kg

13 Circuit diagram



- B1 Socket for unit
- E1 Heating element 300 W
- F1 Over-temperature cut-out > 130 °C
- H1 LED Pilot lamp operation, yellow
- H2 LED Pilot lamp mains, green
- S1 Main switch
- Q1 Temperature regulator

14 Examples for connection to the mains supply

Tissue Float Baths are supplied with a pre-assembled, cast-on shock-proof plug. Make sure to connect to a protective conductor terminal.

Colour coding of mains cable	Mains supply
ge/gr – yellow/green	PE (Protective earth)
bl – blue	N
sw – black	L1

All Tissue Float Baths supplied for 230 V (see information on the nameplate) can be connected to all power supplies of 220 V or 230 V. Maximum grid impedance $Z_{max} = 0,135 \Omega$. If necessary, this value should be requested from the responsible energy supply company.

14.1 Electrical fuses

Model	Power	Power consumption at mains voltage *	Mains fuse (F4, F5)
H 2 P	0,3 kW	1,3 A at 230 V	10 A / Amp (max. 16 A / Amp.)

14.2 Examples for connection to the mains

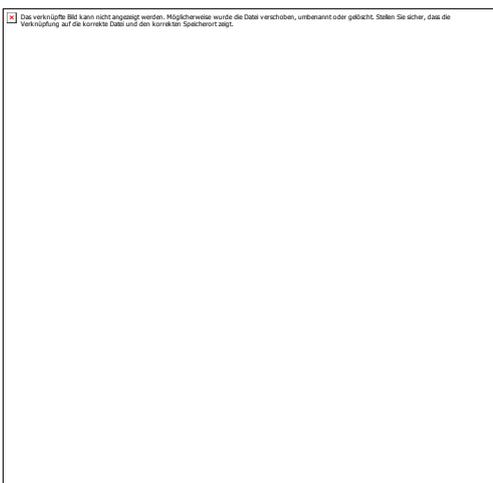
Components

- B1 Earthing contact socket (on-site)
- B2 Earthing contact plug (mounted on the unit)
- F4 Mains fuse (on-site)
- F5 Mains fuse (on-site)



H 2 P

for 230 V with power supply 230 V / N / PE / 50/60 Hz,
connected through 3-pole shock-proof (Schuko) plug system.



H 2 P

for 230 V with power supply 400 V / 3 / N / PE / 50/60 Hz,
connected through 3-pole shock-proof (Schuko) plug system.

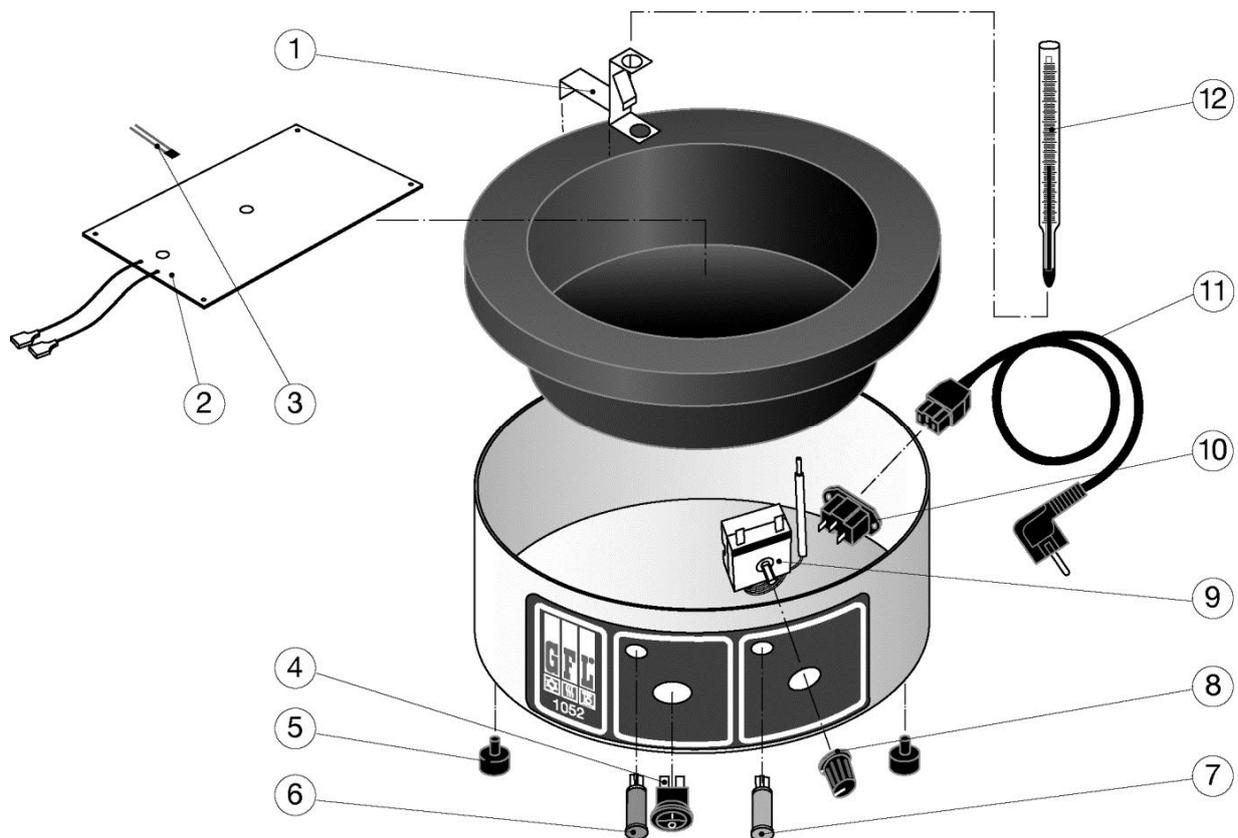


H 2 P

for 230 V with power supply 220 V / 3 / N / PE / 50/60 Hz,
connected through 3-pole shock-proof (Schuko) plug system.

15 List of spare parts

Pos.	Art.-No.	Article
1	P4-817	Holder for thermometer
2	0012252	Heating plate 300 W, 230 V
	0012278	Heating plate 300 W, 115 V
3	0012018	Over-temperature cut-out
4	0012440	Main switch
5	0014312	Stand
6	0012634	LED Pilot lamp, green
7	0012633	LED Pilot lamp, yellow
8	0014545	Turning knob
	0014547	Lid
	0014548	Cover
9	0013410	Temperature controller
10	0012988	Built-in plug
11	0012368	Mains connection cable, 230 V
	0030056	Mains connection cable, 115 V
12	0013104	Thermometer



When ordering spare parts, please always state model and serial numbers of the Tissue Float Bath in question (information see nameplate on the back of the unit).

16 Accessories



Lid, to cover the bath interior, made of black anodised aluminium, with ball handle.

Order no: A000040

EC DECLARATION OF CONFORMITY

Hereby we,

LAUDA-GFL Gesellschaft für Labortechnik mbH
Schulze-Delitzsch-Str. 4+5
30938 Burgwedel
Federal Republic of Germany

declare that the below stated **Hydro Tissue float bath** model:

H 2 P

with the technical data:

**230 V, 50 / 60 Hz
0.3 kW**

are in conformity with the following EC Directives:

I	2014/35/EU	(Low Voltage Directive)
II	2014/30/EU	(EMC Directive)
III	2011/65/EU + (EU) 2015/863	(RoHS Directive)

For conformity **with I** the following standards were applied:

**EN 61010-1:2010
EN 61010-2-010:2014**

For conformity **with II** the following standard was applied:

EN 61326-1:2013

Authorized representative for the compilation of the technical documentation:

Mr Florian Wunderling at LAUDA-GFL

LAUDA-GFL Ges. für Labortechnik mbH



Andreas Degmayr
Managing director

Burgwedel, 01 July 2020

LAUDA-GFL Gesellschaft für Labortechnik mbH
Schulze-Delitzsch-Str. 4/5 · 30938 Burgwedel · DE

WEEE-Reg-Nr.: DE 67770231
Amtsgericht Hannover · HRB 120071
VAT-ID.-No. DE 115042911

Commerzbank AG Hannover
IBAN DE61 2504 0066 0141 2089 00
BIC COBA DE FF XXX

T +49 (0) 5139 9958-0 · F +49 (0) 5139 9958-21
info@lauda-gfl.de · www.lauda-gfl.de

Geschäftsführer:
Andreas Degmayr

Sparkasse Hannover
IBAN DE88 2505 0180 1050 2062 65
BIC SPKH DE 2H XXX

LAUDA-GFL Gesellschaft für Labortechnik mbH
Schulze-Delitzsch-Straße 4+5 • 30938 Burgwedel • Germany
Tel.: +49 (0) 5139 9958-0 • Fax +49 (0) 5139 9958-21
E-Mail: info@lauda-gfl.de • Internet: www.GFL.de