

# °LAUDA



## STILLS

Ultra-pure, reliable, ergonomic. GFL Technology.

°FAHRENHEIT. °CELSIUS. °LAUDA.

# LAUDA Stills



## **Reliable and robust**

Thanks to their extremely long service life, LAUDA Puridest stills are among the world's most reliable and robust water treatment systems for laboratory use. The perfection of a centuries-old process guarantees high distillate quality on a long-term basis.



## **Low-maintenance**

LAUDA Puridest stills are known for their ergonomic handling. Servicing can be carried out without technical personnel and is limited to removing the pollutants deposited in the evaporator chamber. Glass stills do this fully automatically and are therefore maintenance-free.



## **High distillate quality**

LAUDA Puridest stills also distill raw water of lower quality, separate pollutants, and kill germs, such as bacteria. Distillation systems, optionally with one or two distillation stages, provide excellent conductivities. Glass stills produce water that is virtually free of metal ions.



## **Without consumables**

LAUDA Puridest stills only require power and raw water. Dispensing with expensive cartridges, adsorbents and the regular regeneration of ion exchangers makes LAUDA Puridest stills the ideal solution for your laboratory.



## **Easy to install and use**

LAUDA Puridest stills do not require any specialists for commissioning and maintenance, and do not place any high demands on the raw water supply. Ultra-pure water is produced at the touch of a button.

**LAUDA Puridest stills with the ›GFL Technology‹ quality mark**

Decades of experience and technical development have set the standard: LAUDA Puridest stills are offered worldwide in four high-performance product lines with 14 model variants. LAUDA Puridest stills are developed and manufactured by LAUDA-GFL. The company has been a member of the LAUDA group since December 31st, 2018 and is known throughout the world as a premium manufacturer of reliable laboratory technology. The use of the ›GFL Technology‹ quality mark means that LAUDA is continuing the tradition of the GFL brand, which has been renowned for its quality and reliability in laboratories worldwide for more than 50 years.





# LAUDA Puridest stills

## Applications and product features

### High-quality distillates

LAUDA Puridest stills provide ultra-pure, low-gas, sterile and pyrogen-free distillate for the dilution of reagents, sets of samples and more. LAUDA Puridests purify any raw water to produce a distillate with conductivities down to below 1.6  $\mu\text{S}/\text{cm}$ . It complies with DAB regulations and the international pharmacopeia requirements.



### Typical areas of application

- Bacteriological and medical sample preparation
- Preparation of cell and tissue cultures
- Cleaning and sterilization processes
- Production of buffer solutions in quality, development and research laboratories
- Microbiological and analytical applications



### Variants to meet any need

LAUDA Puridest stills are available in a large number of versions – from two to twelve liters of distillate per hour, with or without an internal storage tank. Whether they are single-stage stainless steel stills, two-stage stainless steel/glass stills or pure glass stills, with manual cleaning or a fully automated cleaning cycle – LAUDA Puridest are the perfect solution for any application.



Equipped for any application: Puridest PD 4 R with an internal storage tank and PD 2 for direct distillate extraction

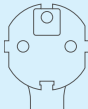
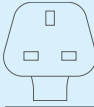


### Ergonomics in continuous operation

Commissioning and operation of the stills are extremely simple. Ultra-pure water can be extracted directly after connection to the raw water and power supply. The only maintenance required is removing pollutants from the still. Dispensing with complex service work and cleaning as well as the repeated procurement of consumables makes LAUDA Puridest a simple and reliable solution that can be used anywhere in the world.



Our maxim is simplicity: LED indicators for operating status and cleaning requirement are equipped as standard

# Technical data

Device type	Ambient temperature °C	Distillate type	Condenser material	Production output l/h	Conductivity stage 1* approx. µS/cm	Conductivity stage 2* approx. µS/cm	Tank volume l	Cooling water consumption l/min	Dimensions (W x D x H) mm	Weight kg	Mains voltage	Max. power consumption kW	Part Number
	CEE7/7 plug, angled, "Schuko" type												
PD 2	10 ... 40	Mono	Stainless steel	2	2.3	-	-	0.33	280×250×490	7.5	230 V; 50/60 Hz	2.00	L003011
PD 4	10 ... 40	Mono	Stainless steel	4	2.3	-	-	0.67	280×250×490	7.5	230 V; 50/60 Hz	3.00	L003012
PD 2 R	10 ... 40	Mono	Stainless steel	2	2.3	-	4	0.5	540×290×420	15.4	230 V; 50/60 Hz	1.50	L003013
PD 4 R	10 ... 40	Mono	Stainless steel	4	2.3	-	8	0.8	620×330×460	21.4	230 V; 50/60 Hz	3.00	L003014
PD 2 G	10 ... 40	Mono	Glass	2	2.2	-	-	0.8	650×200×390	16.0	230 V; 50/60 Hz	1.50	L003017
PD 4 G	10 ... 40	Mono	Glass	4	2.2	-	-	1.2	650×200×390	17.0	230 V; 50/60 Hz	3.00	L003018
PD 2 D	10 ... 40	Double	Stainless steel/Glass	2	2.2	1.6	-	1.2	500×260×470	21.0	230 V; 50/60 Hz	3.50	L003020
PD 2 DG	10 ... 40	Double	Glass	2	2.2	1.6	-	1.2	650×365×390	24.0	230 V; 50/60 Hz	2.90	L003023
	BS1363 plug, angled (UK)												
PD 2	10 ... 40	Mono	Stainless steel	2	2.3	-	-	0.33	280×250×490	7.5	230 V; 50/60 Hz	2.00	L003219
PD 2 R	10 ... 40	Mono	Stainless steel	2	2.3	-	4	0.5	540×290×420	15.4	230 V; 50/60 Hz	1.50	L003220
PD 2 G	10 ... 40	Mono	Glass	2	2.2	-	-	0.8	650×200×390	16.0	230 V; 50/60 Hz	1.50	L003221
	IEC 60309 plug, 5-pole, CEE, red, 16 A												
PD 8 R	10 ... 40	Mono	Stainless steel	8	2.3	-	16	1.2	780×410×540	35.3	400 V; 3/N/PE; 50/60 Hz	6.00	L003015
PD 12 R	10 ... 40	Mono	Stainless steel	12	2.3	-	24	3.3	780×410×670	40.5	400 V; 3/N/PE; 50/60 Hz	9.00	L003016
PD 8 G	10 ... 40	Mono	Glass	8	2.2	-	-	2.4	650×365×390	24.0	400 V; 3/N/PE; 50/60 Hz	6.00	L003019
PD 4 D	10 ... 40	Double	Stainless steel/Glass	4	2.2	1.6	-	2	550×280×570	27.5	400 V; 3/N/PE; 50/60 Hz	7.00	L003021
PD 8 D	10 ... 40	Double	Stainless steel/Glass	8	2.2	1.6	-	3.3	700×390×700	45.0	400 V; 3/N/PE; 50/60 Hz	11.50	L003022
PD 4 DG	10 ... 40	Double	Glass	4	2.2	1.6	-	2.4	650×365×390	24.0	400 V; 3/N/PE; 50/60 Hz	5.80	L003024
	Cable without plug												
PD 8 R	10 ... 40	Mono	Stainless steel	8	2.3	-	16	1.2	780×410×540	35.3	220 V; 3/PE; 50/60 Hz	6.00	L003115
PD 12 R	10 ... 40	Mono	Stainless steel	12	2.3	-	24	3.3	780×410×670	40.5	220 V; 3/PE; 50/60 Hz	9.00	L003116
PD 8 G	10 ... 40	Mono	Glass	8	2.2	-	-	2.4	650×365×390	24.0	220 V; 3/PE; 50/60 Hz	6.00	L003117
PD 4 D	10 ... 40	Double	Stainless steel/Glass	4	2.2	1.6	-	2	550×280×570	27.5	220 V; 3/PE; 50/60 Hz	7.00	L003118
PD 8 D	10 ... 40	Double	Stainless steel/Glass	8	2.2	1.6	-	3.3	700×390×700	45.0	220 V; 3/PE; 50/60 Hz	11.50	L003119
PD 4 DG	10 ... 40	Double	Glass	4	2.2	1.6	-	2.4	650×365×390	24.0	220 V; 3/PE; 50/60 Hz	5.80	L003120

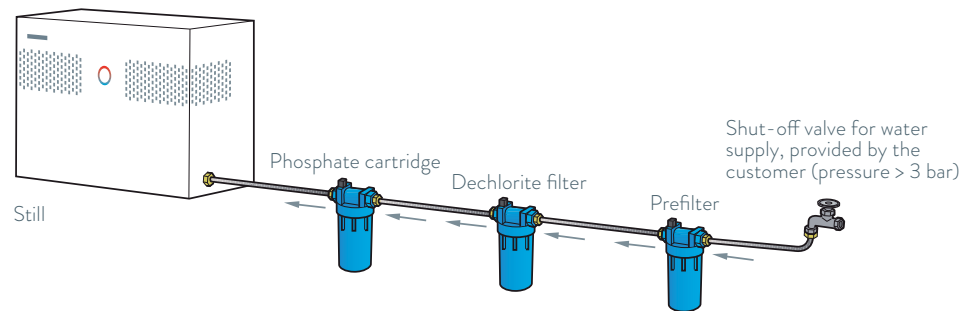
\*The quality of the conductivity depends on the selected model and raw water quality.

# LAUDA Puridest stills

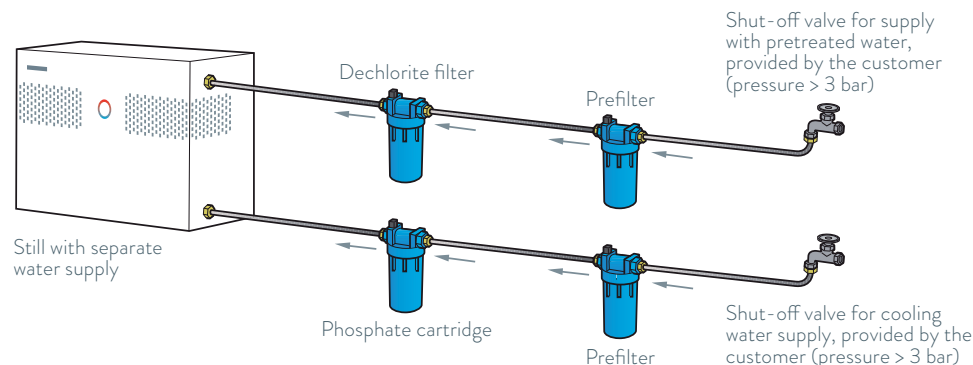
## Pretreatment, options, accessories

### Connection variants:

LAUDA Puridest with combined cooling and raw water inlet (standard)



LAUDA Puridest with separate cooling water inlet (optional)



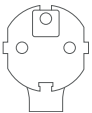
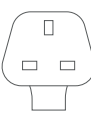

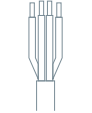
Individual filter elements can be eliminated, depending on the raw water quality. The connection sequence must be observed without fail.



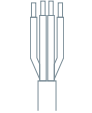
### Separate water supply with solenoid valve

for feeding the distillation flask with softened or demineralized water (pressure > 1 bar) and the cooling coil (pressure > 3 bar) with phosphated or normal tap water. The cooling and pretreated water feed is automatically controlled via the device. Max. performance reduction of the still 15 percent.

### External level control

Level control with adjustable level switch for an external storage tank for the disconnection of power and water if the external storage tank is full (not included in delivery).

	Part Number 230 V; 50/60 Hz	Part Number 230 V; 50/60 Hz	Part Number 400 V; 3/N/PE; 50/60 Hz	Part Number 220 V; 3/PE; 50/60 Hz
Device type				
PD 4 R	L003254	-	-	-
PD 8 R	-	-	L003255	L003265
PD 12 R	-	-	L003256	L003271
PD 2 G	L003257	L003270	-	-
PD 4 G	L003258	-	-	-
PD 8 G	-	-	L003259	L003266
PD 2 D	L003260	-	-	-
PD 4 D	-	-	L003261	L003267
PD 8 D	-	-	L003262	L003268
PD 2 DG	L003263	-	-	-
PD 4 DG	-	-	L003264	L003269

	Part Number 230 V; 50/60 Hz	Part Number 400 V; 3/N/PE; 50/60 Hz	Part Number 220 V; 3/PE; 50/60 Hz
Device type			
PD 4 G	L003245	-	-
PD 8 G	-	L003246	L003250
PD 4 D	-	L003247	L003251
PD 8 D	-	L003248	L003252
PD 4 DG	-	L003249	L003253

**Dechlorite filter** – A000129,  
**Refill** – A000130

Removes the chlorine added to the tap water by the waterworks. Complete with connections for 1/2 inch pressure hose (internal ø 12.7 mm), including initial filling. The filling should be exchanged every six months.

**Phosphate cartridge** – A000131,  
**Refill** – A000132

Prevents the crystallization of hardness components in the condenser through phosphating of the tap water. Can be used from 71 - 267 ppm. Complete with connections for 1/2 inch pressure hose (internal ø 12.7 mm), including initial filling. The filling should be supplemented according to consumption.

**Prefilter 1 µm** – A000133,  
**Replacement cartridge** – A000134

For precleaning the raw water and protecting the device from premature contamination. Suitable for foodstuffs according to FDA specifications. Complete with connections for 1/2 inch pressure hose (internal ø 12.7 mm), including filter cartridge. The cartridge should be exchanged every six months.

**Wall mounting** – A000136

For mounting any desired filter provided by the customer, with screws for attaching the filter to the wall mounting. The filter cartridge is not supplied.

**Wall mounting – preassembled with 3 filters** – A000135

For three filters, equipped in the factory with phosphate cartridge, dechlorite filter and prefilter, including initial filling, permanently connected to two connection sleeves and attached to the wall mounting with screws.

**Hose sets**

Part Number	Description	Suitable for device type
A000137	Hose set*	PD 2, PD 4
A000138	Hose set*	PD 2 R, PD 4 R, PD 8 R, PD 12 R, PD 2 D, PD 4 D, PD 8 D
A000141	Hose set*	<b>With separate water supply:</b> PD 4 R, PD 8 R, PD 12 R
A000142	Hose set*	<b>With separate water supply:</b> PD 2 D, PD 4 D, PD 8 D
A000139	Hose set**	PD 2 G, PD 4 G, PD 8 G
A000143	Hose set**	<b>With separate water supply:</b> PD 2 G, PD 4 G, PD 8 G
A000140	Hose set**	PD 2 DG, PD 4 DG
A000144	Hose set**	<b>With separate water supply:</b> PD 2 DG, PD 4 DG



\* Hose set, consisting of hoses for water inlet/outlet (1.5 m) and hose clamps

\*\* Hose set, consisting of hoses for water inlet/outlet (1.5/1.0 m), distillate extraction (0.5 m) and hose clamps

