

# LAUDA HEATING THERMOSTATS



## Specific application examples

- Sample preparation for chemical and pharmaceutical analysis
- Medical serology
- Biotechnology
- Material testing



Heating thermostats

Cooling thermostats

Circulation and process thermostats

Circulation chillers

Calibration thermostats

Deep-freezers

Shakers

Stills

Accessories

# LAUDA Alpha

Heating thermostats from 25 to 100 °C for cost-effective temperature control thermostating in the lab

25°C  100°C

## Cost-effective thermostats with reliable technology incorporated into a modern design

LAUDA Alpha is the most cost-effective choice when it comes to premium-quality LAUDA thermostats. These reliable and user-friendly thermostats, with features optimized for essential use, can be operated with non-flammable liquids and are suitable for both internal and external temperature control tasks.



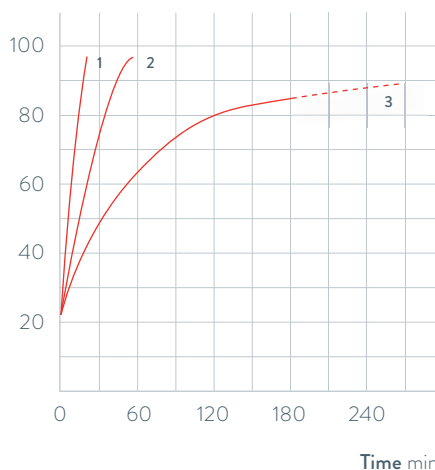
Simple and intuitive menu navigation with three-button operation using a large, clearly legible LED display



Screw clamp allows easy change to different bath vessels with a maximum wall thickness of 30 mm

## HEATING PERFORMANCE Water, bath closed

Bath temperature °C



1 A6  
2 A12  
3 A24

## Important functions

- Deep-drawn stainless steel bath vessels
- Integrated timer function allows automatic device shutdown (Standby)
- Low-level and overtemperature protection for operation with non-flammable liquids

## Included accessories

Screw clamp, attachment nozzle in two sizes

## Further accessories

Pump circulation set, cooling coil, bath cover set

All technical data and power supply variants can be found in the ›Technical data‹ section.

More at [www.lauda.de/1724](http://www.lauda.de/1724)



### LAUDA Alpha

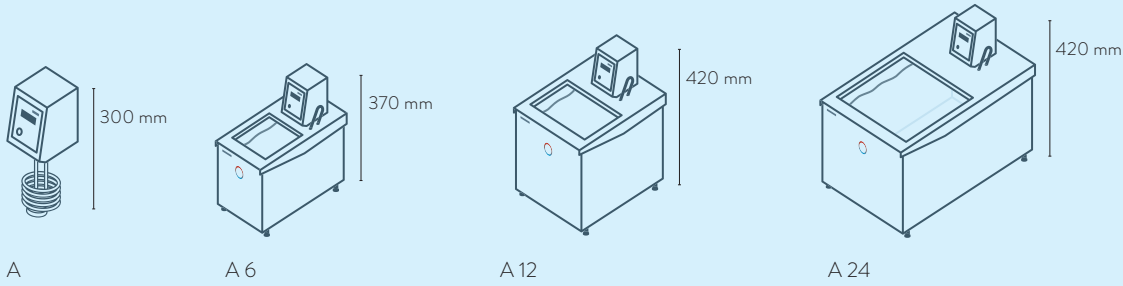
Heating thermostats A6, A12 and A24 work in the temperature range between 25 and 100 °C. Cooling coil, pump circulation set and bath cover set are available as accessories for all thermostats.



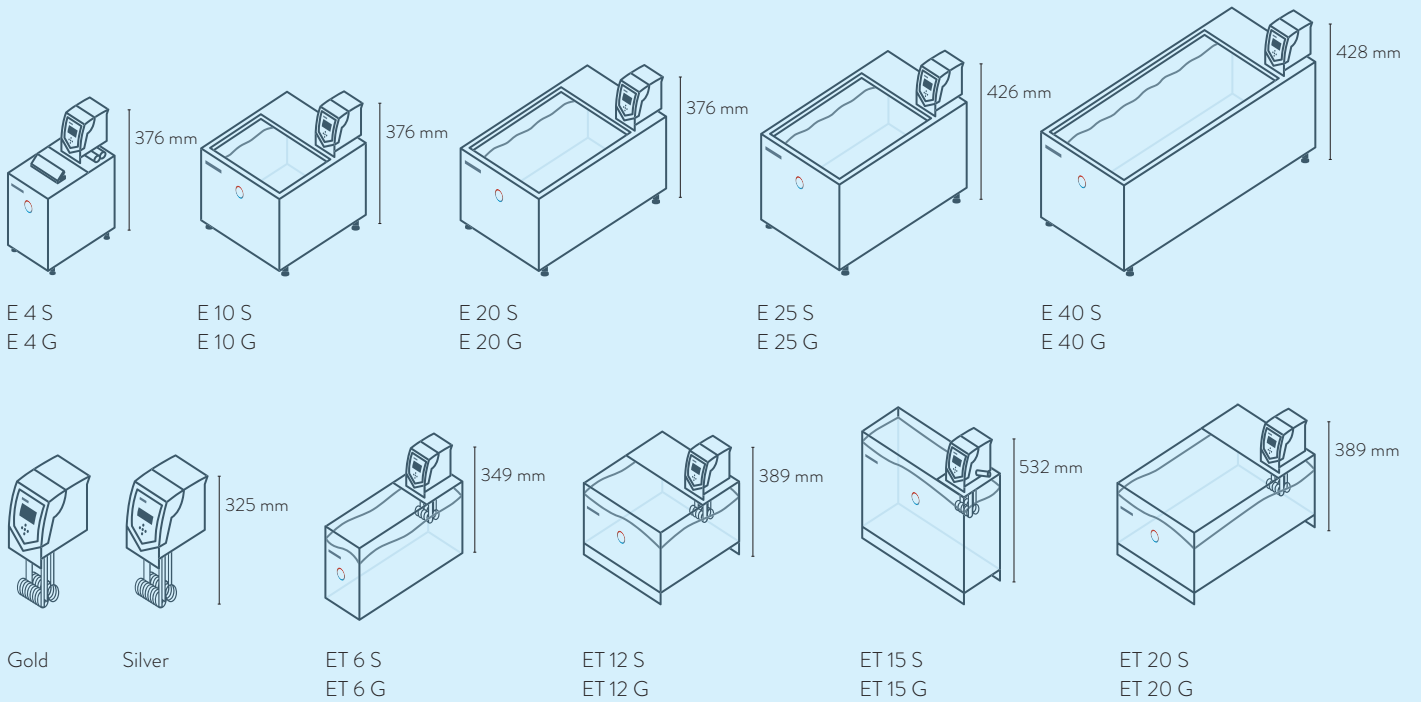
# LAUDA Heating thermostats

## Device type overview

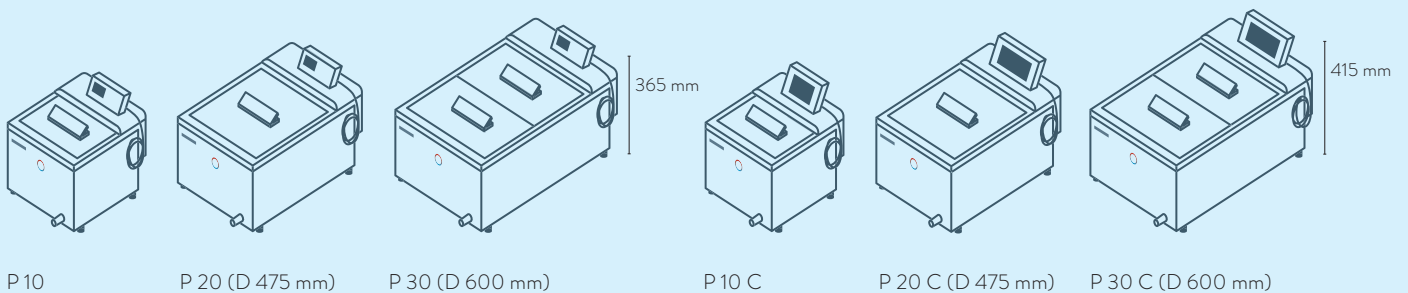
LAUDA Alpha / Page 36



LAUDA ECO / Page 38



LAUDA PRO / Page 40



# LAUDA Heating thermostats

## Function overview

Operating element	Alpha	ECO S	ECO G	PRO Base	PRO Command Touch	Proline Master	Proline Command
Display	7-Segment	LCD mono	TFT	OLED	TFT	7-Segment	LCD mono
Mode of operation	3-button	3-button softkey	Cursor softkey	Cursor softkey	Multi-touch	4-button	Cursor softkey
Removable control	-	-	-	✓	✓	-	✓
User management	-	-	-	-	✓	-	-
Data logging, export to USB stick	-	-	-	-	✓	-	-
1-point calibration	✓	✓	✓	✓	✓	✓	✓
2-point calibration	-	-	-	✓	✓	-	-
Programmer, programs/segments	-	1 / 20	5 / 150	1 / 20	100 / 5000	-	5 / 150
Programmer, tolerance range function	-	✓	✓	✓	✓	-	✓
Ramp function	-	-	-	-	✓	-	✓
Timer function	-	-	-	-	✓	-	✓
Countdown function	✓	-	-	-	✓	-	✓
Graphic temperature profile display	-	-	✓	-	✓	-	✓
Adjustable bypass	-	-	-	-	-	✓	✓
Level indicator (digital)	-	-	-	✓	✓	✓	✓
Standby timer	-	✓	✓	✓	✓	✓	✓
Low-level alarm	✓	✓	✓	✓	✓	✓	✓
Drain tap	-	✓	✓	✓	✓	✓	✓
Drain screw	✓	-	-	-	-	-	-

# LAUDA Heating thermostats

Technical data according to DIN 12876 standard

Device type	Working temperature range °C	Working temperature range with water cooling °C	Operating temperature range °C	Temperature stability ±K	Safety fittings	Heater power max. kW	Pump type	Pump pressure max. bar	Pump suction max. bar	Pump flow max. pressure L./min	Pump flow max. suction L./min	Pump connection thread mm	Nipples Øe	Bath volume min. L
<b>LAUDA Alpha / Page 36</b>														
A	25 ... 100	20 ... 100	-25 ... 100	0.05	I, NFL	1.5	D	0.2	-	15.0	-	N/A	-	-
A 6	25 ... 100	20 ... 100	-25 ... 100	0.05	I, NFL	1.5	D	0.2	-	15.0	-	N/A	-	2.5
A 12	25 ... 100	20 ... 100	-25 ... 100	0.05	I, NFL	1.5	D	0.2	-	15.0	-	N/A	-	8.0
A 24	25 ... 100	20 ... 100	-25 ... 100	0.05	I, NFL	1.5	D	0.2	-	15.0	-	N/A	-	18.0
<b>LAUDA ECO / Page 38</b>														
Silver	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	-	-
ET 6 S	20 ... 100	20 ... 100	-20 ... 100	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	-	5.0
ET 12 S	20 ... 100	20 ... 100	-20 ... 100	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	-	9.5
ET 15 S	20 ... 100	20 ... 100	-20 ... 100	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	13	13.5
ET 20 S	20 ... 100	20 ... 100	-20 ... 100	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	-	15.0
E 4 S	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	13	3.0
E 10 S	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	-	7.5
E 20 S	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	-	13.0
E 25 S	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	-	16.0
E 40 S	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.0	V	0.55	-	22.0	-	N/A	-	32.0
Gold	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.6	V	0.55	-	22.0	-	N/A	-	-
ET 6 G	20 ... 100	20 ... 100	-20 ... 100	0.01	III, FL	2.6	V	0.55	-	22.0	-	N/A	-	5.0
ET 12 G	20 ... 100	20 ... 100	-20 ... 100	0.01	III, FL	2.6	V	0.55	-	22.0	-	N/A	-	9.5
ET 15 G	20 ... 100	20 ... 100	-20 ... 100	0.01	III, FL	2.6	V	0.55	-	22.0	-	M16×1	-	13.5
ET 20 G	20 ... 100	20 ... 100	-20 ... 100	0.01	III, FL	2.6	V	0.55	-	22.0	-	N/A	-	15.0
E 4 G	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.6	V	0.55	-	22.0	-	M16×1	-	3.0
E 10 G	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.6	V	0.55	-	22.0	-	N/A	-	7.5
E 20 G	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.6	V	0.55	-	22.0	-	N/A	-	13.0
E 25 G	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.6	V	0.55	-	22.0	-	N/A	-	16.0
E 40 G	20 ... 200	20 ... 200	-20 ... 200	0.01	III, FL	2.6	V	0.55	-	22.0	-	N/A	-	32.0

\* D: Pressure pump (for circulation of the heat transfer liquid)

V: Variopump (pressure pump, with different performance levels)

Bath volume max. L	Bath opening (W x D) mm	Bath depth mm	Usable depth mm	Height top of bath mm	Dimensions (W x D x H) mm	Weight kg	Power supply V; Hz	Loading max. kW	Part Number	Device type
50.0	-	150	100	-	125×150×300	3.6	230 V; 50 Hz & 220 V; 60 Hz	1.5	L000618	A
5.5	181×332	150	130	212	181×332×370	6.5	230 V; 50 Hz & 220 V; 60 Hz	1.5	L000619	A 6
12.0	270×332	200	180	262	270×332×420	7.7	230 V; 50 Hz & 220 V; 60 Hz	1.5	L000620	A 12
25.0	332×535	200	180	262	332×535×420	10.5	230 V; 50 Hz & 220 V; 60 Hz	1.5	L000621	A 24
-	-	150	-	-	130×135×325	3.2	230 V; 50/60 Hz	2.1	L001076	SILVER
6.0	130×285	160	140	169	143×433×349	4.5	230 V; 50/60 Hz	2.1	L001096	ET 6 S
12.0	300×175	160	140	208	322×331×389	7.1	230 V; 50/60 Hz	2.1	L001097	ET 12 S
15.0	275×130	310	290	356	428×148×532	6.5	230 V; 50/60 Hz	2.1	L001098	ET 15 S
20.0	300×350	160	140	208	322×506×389	9.5	230 V; 50/60 Hz	2.1	L001099	ET 20 S
3.5	168×272	150	130	196	168×272×376	6.5	230 V; 50/60 Hz	2.1	L001084	E 4 S
11.0	331×361	150	130	196	331×361×376	8.5	230 V; 50/60 Hz	2.1	L001085	E 10 S
19.0	331×537	150	130	196	331×537×376	10.0	230 V; 50/60 Hz	2.1	L001087	E 20 S
25.0	331×537	200	180	246	331×537×426	13.5	230 V; 50/60 Hz	2.1	L001088	E 25 S
40.0	350×803	200	180	248	350×803×428	25.5	230 V; 50/60 Hz	2.1	L001089	E 40 S
-	-	150	-	-	130×135×325	3.4	230 V; 50/60 Hz	2.7	L001077	GOLD
6.0	130×285	160	140	169	143×433×349	5.0	230 V; 50/60 Hz	2.7	L001100	ET 6 G
12.0	300×175	160	140	208	322×331×389	8.0	230 V; 50/60 Hz	2.7	L001101	ET 12 G
15.0	275×130	310	290	356	428×148×532	6.7	230 V; 50/60 Hz	2.7	L001102	ET 15 G
20.0	300×350	160	140	208	322×506×389	10.0	230 V; 50/60 Hz	2.7	L001103	ET 20 G
3.5	168×272	150	130	196	168×272×376	6.5	230 V; 50/60 Hz	2.7	L001090	E 4 G
11.0	331×361	150	130	196	331×361×376	9.0	230 V; 50/60 Hz	2.7	L001091	E 10 G
19.0	331×537	150	130	196	331×537×376	10.0	230 V; 50/60 Hz	2.7	L001093	E 20 G
25.0	331×537	200	180	246	331×537×426	12.5	230 V; 50/60 Hz	2.7	L001094	E 25 G
40.0	350×803	200	180	248	350×803×428	19.5	230 V; 50/60 Hz	2.7	L001095	E 40 G



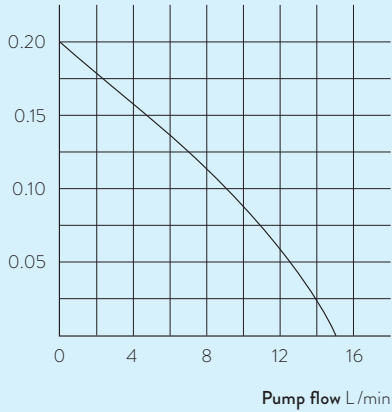
# LAUDA Heating thermostats

## More characteristics

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### PUMP CHARACTERISTIC Water

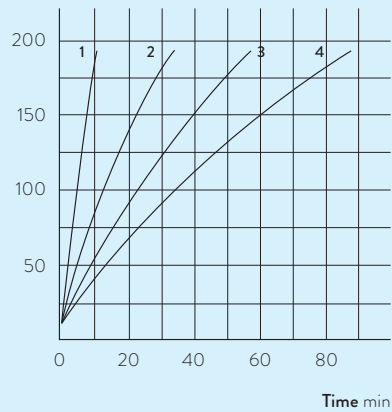
Pressure bar



LAUDA ECO / Page 38

### HEATING PERFORMANCE Heat transfer liquid: Therm 240, bath closed

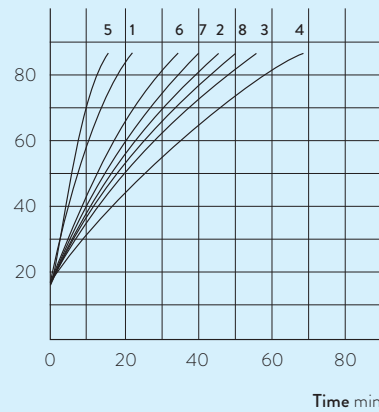
Bath temperature °C



- 1 E 4 S
- 2 E 10 S
- 3 E 20 S
- 4 E 25 S

### HEATING PERFORMANCE Heat transfer liquid: Water, bath closed

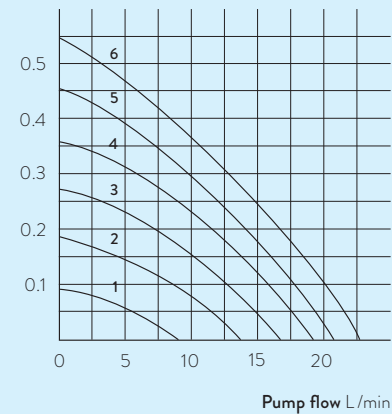
Bath temperature °C



- 1 ET 12 S
- 2 ET 12 S
- 3 ET 15 S
- 4 ET 20 S
- 5 ET 6 G
- 6 ET 12 G
- 7 ET 15 G
- 8 ET 20 G

### PUMP CHARACTERISTIC Water

Pressure bar



- 1 Step 1
- 2 Step 2
- 3 Step 3
- 4 Step 4
- 5 Step 5
- 6 Step 6

# LAUDA Heat transfer liquids

## For safe and reliable operation of your thermostats

**Highly accurate temperature control at extreme temperatures, reliability and long-term operational stability for a long service life of the thermostats.**

The right choice of heat transfer liquid is of critical importance for the safe and reliable operation of thermostats, circulation chillers or water baths. Thanks to our many decades of experience, we are able to offer optimum heat transfer liquids for LAUDA thermostats and other brands. Prices of heat transfer liquids can be found in our price list, which we will gladly send you on request.

Designation	Open / half-open systems °C						Closed systems with cold oil overlay (Integral XT) °C						Part Number 5L/10L/20L
	-100 °C	-50 °C	0 °C	100 °C	200 °C	300 °C	-100 °C	-50 °C	0 °C	100 °C	200 °C	300 °C	
Aqua 90			5 °C		90 °C								LZB 120/LZB 220/LZB 320
Kryo 95 Silicone oil	-95 °C				60 °C		-95 °C					160 °C	LZB 130/LZB 230/LZB 330
Kryo 70 Silicone oil							-70 °C					220 °C	LZB 127/LZB 227/LZB 327
Kryo 65							-65 °C					140 °C	LZB 118/LZB 218/LZB 318
Kryo 60 Silicone oil		-60 °C			60 °C								LZB 102/LZB 202/LZB 302
Kryo 51 Silicone oil		-50 °C											LZB 121/LZB 221/LZB 321
Kryo 30			-30 °C			90 °C			-30 °C			90 °C	LZB 109/LZB 209/LZB 309
Kryo 20 Silicone oil			-20 °C										LZB 116/LZB 216/LZB 316
Therm 160				60 °C									LZB 106/LZB 206/LZB 306
Therm 180 Silicone oil			0 °C										LZB 114/LZB 214/LZB 314
Therm 250 Silicone oil				50 °C									LZB 122/LZB 222/LZB 322
Ultra 350				30 °C					30 °C				LZB 107/-/-

Note: LAUDA Integral P may only be operated with non-combustible media (Kryo 30).  
The temperature range of Kryo 30 is extended from -40 to 140 °C here.

Request the comprehensive LAUDA heat transfer liquid brochure at [info@lauda.de](mailto:info@lauda.de)

More at [www.lauda.de/1782](http://www.lauda.de/1782)

# LAUDA Heating thermostats

## Power supply variants

Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Part Number	Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Part Number
<b>LAUDA Alpha / Page 36</b>											
A	100 V; 50/60 Hz	1.0	1.0	14	L000634	A 12	115 V; 60 Hz	1.2	1.2	14	L000632
A	115 V; 60 Hz	1.2	1.2	14	L000630	A 24	115 V; 60 Hz	1.2	1.2	14	L000633
A 6	100 V; 50/60 Hz	1.0	1.0	14	L000635						
A 6	115 V; 60 Hz	1.2	1.2	14	L000631						
<b>LAUDA ECO / Page 38</b>											
Silver	100 V; 50/60 Hz	1.0	1.1	14	L001082	E 40 S	100 V; 50/60 Hz	1.0	1.1	14	L001225
Silver	115 V; 60 Hz	1.3	1.4	14	L001080	E 40 S	115 V; 60 Hz	1.3	1.4	14	L001196
Silver	220 V; 60 Hz	1.9	2.0	3	L001078	E 40 S	220 V; 60 Hz	1.8	2.1	3	L001176
ET 6 S	100 V; 50/60 Hz	1.0	1.1	14	L001232	Gold	100 V; 50/60 Hz	1.0	1.1	14	L001083
ET 6 S	115 V; 60 Hz	1.3	1.4	14	L001203	Gold	115 V; 60 Hz	1.3	1.4	14	L001081
ET 6 S	220 V; 60 Hz	1.8	2.0	3	L001183	Gold	220 V; 60 Hz	2.4	2.5	3	L001079
ET 12 S	100 V; 50/60 Hz	1.0	1.1	14	L001233	ET 6 G	100 V; 50/60 Hz	1.0	1.1	14	L001236
ET 12 S	115 V; 60 Hz	1.3	1.4	14	L001204	ET 6 G	115 V; 60 Hz	1.3	1.4	14	L001207
ET 12 S	220 V; 60 Hz	1.8	2.7	3	L001184	ET 6 G	220 V; 60 Hz	2.4	2.5	3	L001187
ET 15 S	100 V; 50/60 Hz	1.0	1.1	14	L001234	ET 12 G	100 V; 50/60 Hz	1.0	1.1	14	L001237
ET 15 S	115 V; 60 Hz	1.3	1.4	14	L001205	ET 12 G	115 V; 60 Hz	1.3	1.4	14	L001208
ET 15 S	220 V; 60 Hz	1.8	2.7	3	L001185	ET 12 G	220 V; 60 Hz	2.4	2.5	3	L001188
ET 20 S	100 V; 50/60 Hz	1.0	1.1	14	L001235	ET 15 G	100 V; 50/60 Hz	1.0	1.1	14	L001238
ET 20 S	115 V; 60 Hz	1.3	1.4	14	L001206	ET 15 G	115 V; 60 Hz	1.3	1.4	14	L001209
ET 20 S	220 V; 60 Hz	1.8	2.7	3	L001186	ET 15 G	220 V; 60 Hz	2.4	2.5	3	L001189
E 4 S	100 V; 50/60 Hz	1.0	1.1	14	L001220	ET 20 G	100 V; 50/60 Hz	1.0	1.1	14	L001239
E 4 S	115 V; 60 Hz	1.3	1.4	14	L001191	ET 20 G	115 V; 60 Hz	1.3	1.4	14	L001210
E 4 S	220 V; 60 Hz	1.8	2.1	3	L001171	ET 20 G	220 V; 60 Hz	2.4	2.5	3	L001190
E 10 S	100 V; 50/60 Hz	1.0	1.1	14	L001221	E 4 G	100 V; 50/60 Hz	1.0	1.1	14	L001226
E 10 S	115 V; 60 Hz	1.3	1.4	14	L001192	E 4 G	115 V; 60 Hz	1.3	1.4	14	L001197
E 10 S	220 V; 60 Hz	1.8	2.1	3	L001172	E 4 G	220 V; 60 Hz	2.4	2.5	3	L001177
E 20 S	100 V; 50/60 Hz	1.0	1.1	14	L001223	E 10 G	100 V; 50/60 Hz	1.0	1.1	14	L001227
E 20 S	115 V; 60 Hz	1.3	1.4	14	L001194	E 10 G	115 V; 60 Hz	1.3	1.4	14	L001198
E 20 S	220 V; 60 Hz	1.8	2.1	3	L001174	E 10 G	220 V; 60 Hz	2.4	2.5	3	L001178
E 25 S	100 V; 50/60 Hz	1.0	1.1	14	L001224	E 10 G	100 V; 50/60 Hz	1.0	1.1	14	L001227
E 25 S	115 V; 60 Hz	1.3	1.4	14	L001195	E 10 G	115 V; 60 Hz	1.3	1.4	14	L001198
E 25 S	220 V; 60 Hz	1.8	2.1	3	L001175	E 10 G	220 V; 60 Hz	2.4	2.5	3	L001178

# Power plugs

## Overview

Image	Plug code	Description	Image	Plug code	Description	Image	Plug code	Description
	2	CEE7/7 angled (EU, Schuko)		3	NEMA 6-20P (USA)		4	NEMA 5-20P (USA)
	5	GB2099 (CN)		6	BS1363 angled (UK)		7	IEC 60309, (blue), ›Caravan
	8	SEV 1011, SEV 5934/2 (CH, T23)		9	AS/NSZ 3112 (AUS)		10	NBR 14136 (BR)
	14	NEMA 5-15P (USA)		17	CEE7/7 straight (EU, Schuko)		21	IEC 60309, 5-pin, CEE, red, 16 A
	22	IEC 60309, 5-pin, CEE, red, 32 A		23	IEC 60309, 5-pin, CEE, red, 63 A		25	NEMA 5-15P (Japan)
	26	SEV 1011, SEV 5934/2 (CH, T12)		31	Mains cable without plug (HAR), Harmonized cable (DIN VDE 0281/DIN VDE 0282/DIN VDE 0292)		32	Mains cable without plug (AWG), American Wire Gauge, abbreviation AWG
	33	NEMA L16-30P twist lock; 30 A 480 V; 30 A, 3L+N+PE		34	NEMA L16-20P twist lock; 20 A 480 V; 20 A, 3L+N+PE		35	AS/NSZ 3112, SAA/3 (AUS) Australia, 250 V; 10 A
	36	NEMA 6-15P (USA) USA, 250 V; 15 A		37	NBR 14136, BR/3 (BR) Brazil, 250 V; 10 A		38	NEMA L15-30P twist lock; 30 A USA, 250 V; 30 A, 3L+PE
	40	NEMA L15-20P twist lock; 20 A USA, 250 V; 20 A, 3L+PE		42	Two mains cables with socket 6 and 8		43	Two mains cables with socket 6 and 17

# LAUDA Accessories

Individual solutions, down to the finest detail

## Tailored to your requirements

It makes no difference whether it concerns an optimized sample holder, improved handling or storage, mechanical accessories facilitate the daily temperature control, shaking or cultivating work. A wide variety of hose material in various cross-sections, optimized for the temperature range or also insulated as needed is the basis for the hydraulic connection of constant temperature equipment to applications. Adapters, distributors and taps provide flexibility. Remote controls, interfaces and through-flow control systems individually extend the connectivity, the range of functions and the operating convenience.

### Electrical and electronic accessories:

- Flow controllers
- Flow control instruments
- Remote controls
- Solenoid valves
- Interface modules
- Temperature sensors
- Connecting cables and sockets



### Hose material:

- Hose sets
- Polymer hoses
- Corrugated metal hoses
- Insulating hoses



### Hydraulic components:

- Shut-off valves
- Adapters and fittings
- Cooling coils and heat exchangers
- Filter systems
- Distributors



### Mechanical accessories:

- Bath covers
- Bath vessels
- Fastening components and mounts
- Boxes and baskets
- Racks
- Rising platforms
- Platforms
- Trays



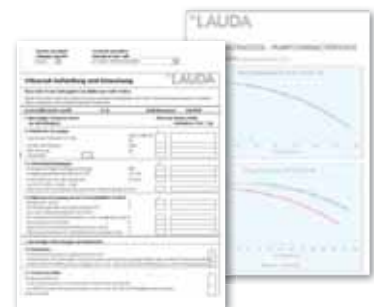
### Consumables:

- Filter cartridges



### Documentation:

- Certificates



Request the comprehensive LAUDA accessories brochure at [info@lauda.de](mailto:info@lauda.de)

More at [www.lauda.de/1784](http://www.lauda.de/1784)



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