

# LAUDA CALIBRATION THERMOSTATS

## Specific application examples

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- Calibration of thermometers
- Validation of temperature sensors
- Quality testing heat meter



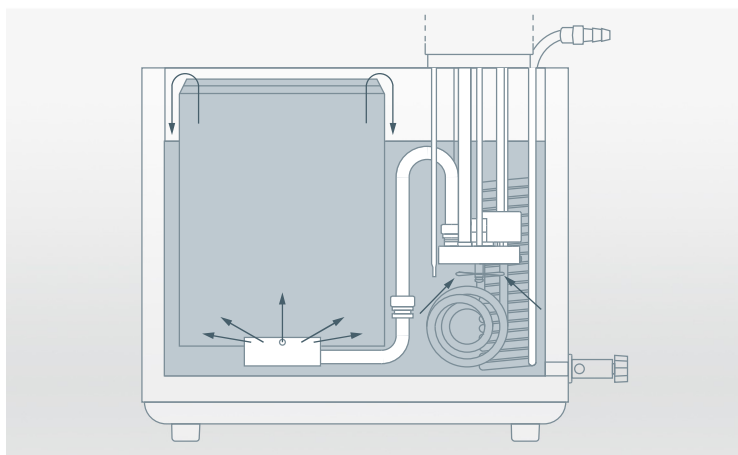
# LAUDA ECO

## Calibration and adjustment of temperatures from -25 to 200 °C with LAUDA calibration thermostats



### High-performance comprehensive solution for calibration and adjustment

LAUDA calibration thermostats provide constant temperature and homogeneity in calibration and adjustment in the test chamber. Depending on the desired size, bath opening and usable depth, different types are available to choose from – each having variable testing chambers, as well as a comprehensive range of products and accessories. The ability of the thermostat to transfer heat through its heat transfer liquid 40 to 60 times better than through air makes it the perfect solution, especially in comparison to heating cabinets and metal block thermostats.



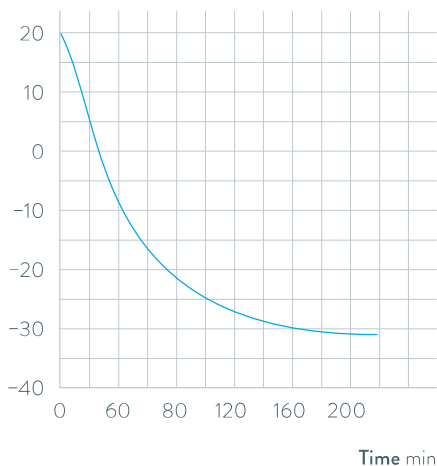
Constant immersion depth thanks to a calibration chamber with overflow principle



Simple operation via TFT display

### COOLING PERFORMANCE Heat transfer liquid: Ethanol, bath closed

Bath temperature °C



REJ1225 G

### Important functions

- LAUDA Vario pump with six selectable output levels
- Vertical adjustment of the temperature chamber possible
- Stainless steel bath vessel (insulated, with handles and drain tap)
- USB interface as standard
- Programmer

### Included accessories

Nipples, screw caps, bath cover

### Further accessories

Calibration racks

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

More at [www.lauda.de/1772](http://www.lauda.de/1772)



### LAUDA ECO

Temperature stabilities up to  $\pm 0.02\text{K}$  at temperatures up to  $-25\text{ }^\circ\text{C}$  are achieved with the LAUDA ECO calibration thermostats.



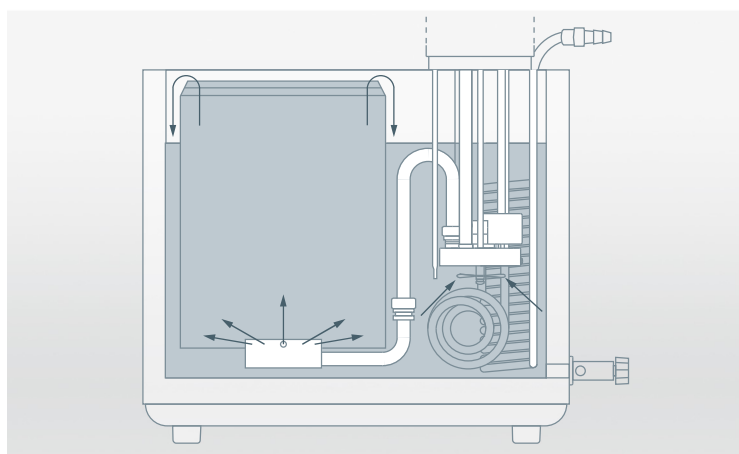
# LAUDA Proline

## Calibration and adjustment of temperatures from -40 to 300 °C with LAUDA calibration thermostats



### High-performance comprehensive solution for calibration and adjustment

LAUDA calibration thermostats provide constant temperature and homogeneity in calibration and adjustment in the test chamber. Depending on the desired size, bath opening and usable depth, different types are available to choose from – each having variable testing chambers, as well as a comprehensive range of products and accessories.



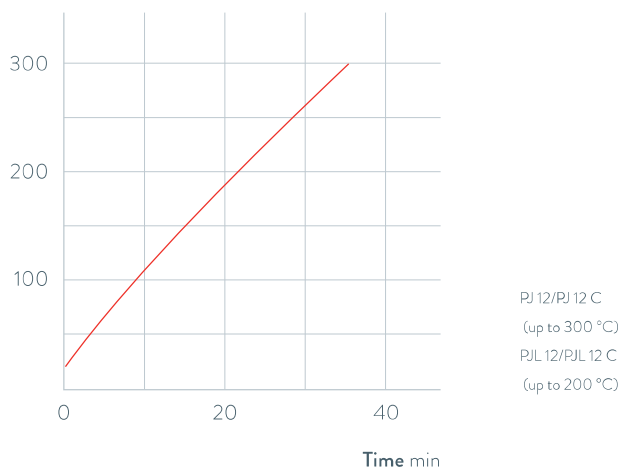
Constant immersion depth thanks to a calibration chamber with overflow principle



Removable remote control "Command" for easy and intuitive operation

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

Bath temperature °C



### Important functions

- Stainless steel bath vessel (insulated, with handles and drain tap)
- Selectable Master control head with LED display or detachable Command operating unit with graphic LCD display
- LAUDA Vario Flex pump (pressure pump) with eight selectable output levels
- PowerAdapt system for optimally adapted max. heating output without influencing the mains power supply

### Included accessories

Nipples, screw caps, bath cover

### Further accessories

Calibration racks

All technical data and power supply variants can be found in the [Technical data](#) section.

More at [www.lauda.de/1774](http://www.lauda.de/1774)





### LAUDA Proline

For maximum temperatures up to 300 °C, the compact models of the LAUDA Proline PJ12 and PJ12 C can be used.

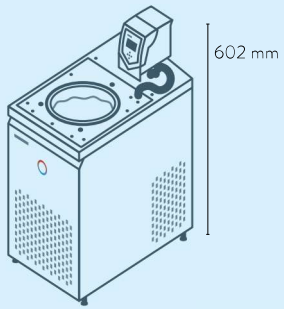


# LAUDA Calibration thermostats

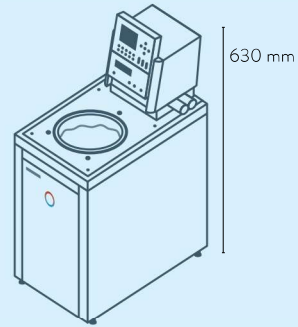
## Device type overview

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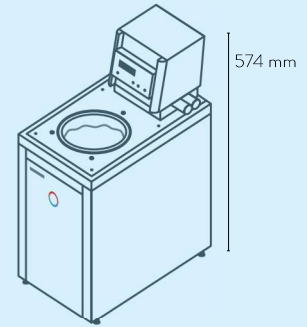
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REJ 1225 G



PJ 12 C  
PJL 12 C



PJ 12  
PJL 12

# LAUDA Calibration thermostats

## Interfaces

	Pt 100 (1)	Pt 100 (2)	USB	Ethernet	RS 232 / 485	Analog	Namur contact	Sub-D contact	Profibus	EtherCat M8	EtherCat RJ 45	Malfunction contact	Number of module slots, large	Number of module slots, small
LAUDA ECO REJ 1225 G / Page 138	Z	-	S	Z	Z	Z	Z	-	Z	Z	Z	Z	1	1
LAUDA Proline Master / Page 140	S	-	-	Z	Z	Z	Z	Z	Z	Z	Z	-	2	-
LAUDA Proline Command / Page 140	S	-	-	Z	S	Z	Z	Z	Z	Z	Z	-	2	-

S = Series standard

Z = Available as an accessory



LRZ 912  
Analog module



LRZ 913  
RS 232/485 interface



LRZ 914  
Contact module with single input and single output (NAMUR)



LRZ 915  
Contact module with 3 inputs and 3 outputs



LRZ 917  
Profibus module



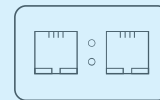
LRZ 918  
Pt100/Li bus module, small cover



LRZ 921  
Ethernet module



LRZ 922  
EtherCAT module with M8 connection



LRZ 923  
EtherCAT module with RJ45 connection



LRZ 925  
External Pt100/LiBus-module, large cover



# LAUDA Calibration thermostats

Technical data according to DIN 12876 standard

Device type	Working temperature range °C	Operating temperature range °C	Temperature stability ± K	Safety fittings	Heater power max. kW	Cooling output kW					Pump type	Pump pressure max. bar	Pump flow max. pressure L/min	Pump connection thread mm
						20 °C	10 °C	0 °C	-10 °C	-20 °C				
<b>LAUDA ECO / Page 138</b>														
REJ 1225 G	-25 ... 200	-25 ... 200	0.02	III, FL	2.6	0.30 <sup>1</sup>	-	0.24 <sup>1</sup>	-	0.09 <sup>1</sup>	V	0.6	22.0	M16 × 1
<b>LAUDA Proline / Page 140</b>														
PJ 12	30 ... 300	0 ... 300	0.01	III, FL	3.6	-	-	-	-	-	V	0.8	25.0	M16 × 1
PJ 12 C	30 ... 300	0 ... 300	0.01	III, FL	3.6	-	-	-	-	-	V	0.8	25.0	M16 × 1
PJL 12	30 ... 200	-40 ... 200	0.01	III, FL	3.6	-	-	-	-	-	V	0.8	25.0	M16 × 1
PJL 12 C	30 ... 200	-40 ... 200	0.01	III, FL	3.6	-	-	-	-	-	V	0.8	25.0	M16 × 1

# LAUDA Calibration thermostats

Power supply variants

Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Cat. No.	Device type	Power supply V; Hz	Heater power max. kW	Loading max. kW	Plug code*	Cat. No.
<b>LAUDA ECO / Page 138</b>											
REJ 1225 G	100 V; 50/60 Hz	1.0	1.3	14	L002851	REJ 1225 G	220 V; 60 Hz	2.4	2.7	3	L002852
REJ 1225 G	115 V; 60 Hz	1.3	1.4	14	L002849						
<b>LAUDA Proline / Page 140</b>											
PJ 12	100 V; 50/60 Hz	1.3	1.5	4	L001947	PJL 12	100 V; 50/60 Hz	1.3	1.5	4	L001949
PJ 12	115 V; 60 Hz	1.7	1.9	4	L001937	PJL 12	115 V; 60 Hz	1.7	1.9	4	L001939
PJ 12	200 V; 50/60 Hz	2.7	2.9	3	L001951	PJL 12	200 V; 50/60 Hz	2.7	2.9	3	L001953
PJ 12	208-220 V; 60 Hz	3.3	3.5	3	L001943	PJL 12	208-220 V; 60 Hz	3.3	3.5	3	L001945
PJ 12 C	100 V; 50/60 Hz	1.3	1.5	4	L001948	PJL 12 C	100 V; 50/60 Hz	1.3	1.5	4	L001950
PJ 12 C	115 V; 60 Hz	1.7	1.9	4	L001938	PJL 12 C	115 V; 60 Hz	1.7	1.9	4	L001940
PJ 12 C	200 V; 50/60 Hz	2.7	2.9	3	L001952	PJL 12 C	200 V; 50/60 Hz	2.7	2.9	3	L001954
PJ 12 C	208-220 V; 60 Hz	3.3	3.5	3	L001944	PJL 12 C	208-220 V; 60 Hz	3.3	3.5	3	L001946

<sup>1</sup>Pump output step 3

Nipples $\varnothing$ e	Bath volume min. L	Bath volume max. L	Bath opening $\varnothing$ 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	Cat. No.	Device type
13	9.3	12.0	150	200	180	443	250×435×624	30.4	230 V; 50 Hz	2.9	L002848	REJ 1225 G
13	8.5	13.5	120	320	300	374	220×360×574	17.0	230 V; 50/60 Hz	3.7	L001923	PJ 12
13	8.5	13.5	120	320	300	374	220×360×630	17.0	230 V; 50/60 Hz	3.7	L001924	PJ 12 C
13	8.5	13.5	120	320	300	374	220×360×574	17.0	230 V; 50/60 Hz	3.7	L001925	PJL 12
13	8.5	13.5	120	320	300	374	220×360×630	17.0	230 V; 50/60 Hz	3.7	L001926	PJL 12 C