

# LAUDA Calibration thermostats

Calibration and adjustment with LAUDA calibration thermostats at temperatures from -40 up to 300 °C



## Application examples

- Industrial production
- Testing institutes
- Calibration of thermometers
- Quality assurance in the production of temperature probes

High temperature stability, variable sample vessels, extensive range of devices and accessories

**LAUDA calibration thermostats** are the first choice when it comes to temperature stability, greatest reliability, and homogeneity during calibration and adjustment. The high performance complete solutions for individual requirements are available in the Ecoline Staredition

and Proline models. They differ in terms of size, bath-opening, and usable depth. Thermostats, in particular, are superior to heating cabinets and metal block thermostats as the heat transfer into the heat transfer liquid is 40 to 60 times better than through the air.

# Your advantages at a glance

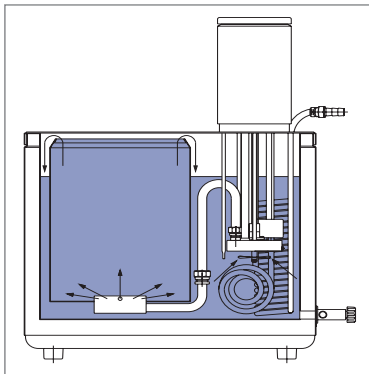


## The Calibration thermostats advantages

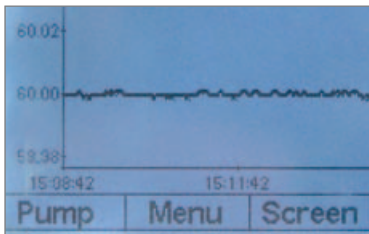
## Your benefits



- Calibration thermostats available from two different product lines
- The ideal solution for any calibration task



- Specifically constructed internal calibration chamber based on the overflow principle
- Outstanding spatial temperature distribution and high temperature stability
- Consistent immersion depths
- Specially insulated low-temperature thermostats available
- Operation at low temperatures without formation of condensation on the outside of the devices
- Operate reliably even at high ambient temperatures



- Temperature stability of  $\pm 0.005$  K
- Allows reliable and accurate calibration of temperature measuring instruments



- Temperatures down to  $-40$  °C achievable in conjunction with LAUDA cooling units
- Optimized adaptation to the application can be achieved by selection of the appropriate cooling unit

# LAUDA Calibration thermostats

## Calibration thermostats Ecoline Staredition and Proline

The calibration thermostats of the LAUDA Ecoline Staredition range offer you temperature stabilities to  $\pm 0.01$  K at temperatures down to  $-30$  °C. The RE 212 J model with its two-line display, digital interface and basic programmer is convincing. The even more user-friendly RE 312 J offers the possibility of external control for even better accuracy and the PC software LAUDA Wintherm Plus. In the heating range, the compact Proline PJ 12 C models reach maximum temperatures up to  $300$  °C. The PJJ 12/PJL 12 C were designed especially for operation with the LAUDA DLK 45 through-flow cooler and reach temperatures down to  $-40$  °C.



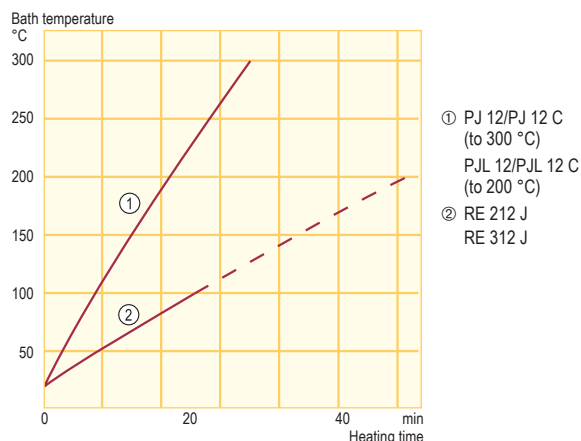
Ecoline Staredition RE 312 J



Proline PJ 12 C



### Heating curves Heat transfer liquid: Ultra 300, bath closed



### Temperature range

$-40 \dots 300$  °C

### Included accessories

Nipples · screw caps · pump link  
(only RE 212 J and RE 312 J) · bath cover (PJ/PJL)

### Additional accessories

Bath cover (RE 212 J, RE 312 J) · calibration racks



All technical data on page 84 and following  
Other power supply variants on page 95

Technical features		RE 212 J	RE 312 J
Working temperature range*	°C	$-30 \dots 200$	$-30 \dots 200$
Temperature stability	$\pm K$	0.01	0.01
Resolution of indication	°C	0.05	0.05/0.01
Heater power	kW	2.25	2.25
Cooling output at 20 °C	kW	0.30	0.30
Pump pressure max.	bar	0.40	0.40
Pump flow (pressure) max.	L/min	17	17
Bath volume	L	9...12	9...12
Bath opening/usable depth	mm	Ø 150/180	Ø 150/180
Cat. No. 230 V; 50 Hz		LCK 1879	LCK 1880

Technical features		PJ 12	PJ 12 C	PJL 12	PJL 12 C
Working temperature range	°C	$30 \dots 300$	$30 \dots 300$	$30 \dots 200$	$30 \dots 200$
Operating temperature range	°C	$0 \dots 300$	$0 \dots 300$	$-40^{**} \dots 200$	$-40^{**} \dots 200$
Temperature stability	$\pm K$	0.01	0.01	0.01	0.01
Resolution of indication	°C	0.1	0.1/0.01/0.001	0.1	0.1/0.01/0.001
Heater power	kW	3.5	3.5	3.5	3.5
Pump pressure max.	bar	0.8	0.8	0.8	0.8
Pump flow (pressure) max.	L/min	25	25	25	25
Bath volume	L	8.5...13.5	8.5...13.5	8.5...13.5	8.5...13.5
Bath opening/depth	mm	Ø 120/320	Ø 120/320	Ø 120/320	Ø 120/320
Usable depth	mm	300	300	300	300
Cat. No. 230 V; 50/60 Hz		LCB 0720	LCB 0721	LCB 0718	LCB 0719

\* Working temperature range is equal to the ACC range.

\*\*At  $-40$  °C in conjunction with LAUDA through-flow cooler DLK 45 (see page 78)