

FK31-SL Calibration Bath

The calibration baths in this category feature an integrated refrigeration unit and are suitable for calibration applications to -30 °C. The bath cover with openings and Viton® sleeves is already included in delivery for all models.

Your advantages

- VFD COMFORT DISPLAY
- LCD DIALOG DISPLAY backlit for convenient interactive operation
- Keypad for setpoints, warning/safety values and menu functions
- ICC (Intelligent Cascade Control), self-optimizing temperature control
- TCF Temperature Control Features to optimize the control behavior
- ATC3 3-Point-Calibration
- Pt100 External sensor connection for measurement and control
- SMART PUMP, electronically adjustable pump stages
- Adjustable high temperature cut-out, visible via display
- Integrated programmer for 6 x 60 program steps
- Highest temperature stability to ± 0.005 °C (± 0.02 °C at +200 °C)
- Temperature uniformity better than ± 0.01 °C
- Optional Pt100 sensor for reference temperature measurements
- Temperature chamber with overflow at maximum liquid level
- Active Cooling Control



Technical data

Available voltage versions		Bath	
Order No.	9 352 628	Bath tank	Stainless steel
Available voltage versions:		Bath cover	integrated
9 352 628.02		Usable bath opening cm (W x L / D)	12 x 31 /
9 352 628.03			
9 352 628.04			
Cooling		Other	
Cooling coil	not available	Classification	Classification III (FL)
Cooling of compressor	1-stage Air	IP Code	IP 21
		Pump type	Immersion Pump
Electronics		Dimensions and volumes	
Digital interface	Profibus optional	Usable immersion depth cm	31
External pt100 sensor connection	integrated	Weight kg	51
Integrated programmer	6x60 steps	Dimensions cm (W x L x H)	32 x 45 x 91
Temperature control	ICC	Filling volume l	24
Absolute temperature calibration	3 Point Calibration		
Temperature display	VFD		
Temperature setting	Keypad		
Temperature values			
Working temperature range °C			
	-30 ... +200		

Temperature stability °C	±0.005
Ambient temperature °C	5 ... 40
Temperature display resolution °C	0.01

Performance values

115V/60Hz (Nema N5-15 Plug)

115V/60Hz				
Heating capacity kW			1	
Cooling capacity (Ethanol)				
°C	20	0	-20	
kW	0.46	0.34	0.15	
Viscosity max. cST			70	
Refrigerant			R134a	
Filling volume g			163	
Global Warming Potential for R134a			1430	
Carbon dioxide equivalent t			0.233	
Pump capacity flow rate l/min			22 ... 26	
Pump capacity flow pressure bar			0.4 ... 0.7	
Maximum suction bar			0.2 ... 0.4	

230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)

230V/50Hz				
Heating capacity kW		2		
Cooling capacity (Ethanol)				
°C	20	0	-20	
kW	0.46	0.34	0.15	
Viscosity max. cST		70		
Refrigerant		R134a		
Filling volume g		163		
Global Warming Potential for R134a		1430		
Carbon dioxide equivalent t		0.233		
Pump capacity flow rate l/min		22 ... 26		
Pump capacity flow pressure bar		0.4 ... 0.7		
Maximum suction bar		0.2 ... 0.4		

230V/50Hz (UK Plug Type BS1363A)

230V/50Hz				
Heating capacity kW		2		
Cooling capacity (Ethanol)				
°C	20	0	-20	
kW	0.46	0.34	0.15	
Viscosity max. cST		70		
Refrigerant		R134a		

Filling volume g	163
Global Warming Potential for R134a	1430
Carbon dioxide equivalent t	0.233
Pump capacity flow rate l/min	22 ... 26
Pump capacity flow pressure bar	0.4 ... 0.7
Maximum suction bar	0.2 ... 0.4

All Benefits



JULABO. Quality.
Highest standards of quality for a long product life.



Green technology.
Development consistently applied environmentally friendly materials and technologies.



Satisfied customers.
11 subsidiaries and more than 100 partners worldwide guarantee fast and qualified JULABO support.



100% Checked.
100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.



Quick start.
Individual JULABO consultation and comprehensive manuals at your disposal.



Services 24/7.
Around the clock availability. You can find suitable accessories, data sheets, manuals.



Connection of additional equipment
Stakei connections for solenoid valve, HSP booster pump and HST booster heater



Early warning system for high/low temperature limits
Maximum safety for applications, optical and audible alarm, convertible to automated cut-off function



Clever pump system
Reliable and consistent pump capacity, electronically adjustable pump stages



Control from the external application
External Pt100 sensor connection for precise measurement and control directly in the external application



For flammable bath fluid
Classification III (FL) according to DIN 12876-1



ATC3. Calibration.
'Absolute Temperature Calibration' for compensating a physically caused temperature difference, 3-point calibration.



Process. Under control.
Full regulation of the dynamics control, access to all important control parameters for individual process optimization.



100 % Cooling capacity
'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures



Energy saving cooling
Proportional cooling control for automatic adjustment of cooling power or temporary switch-off of compressor as needed to save up to 90 % energy in comparison to unregulated



Condensation and ice protection
A heated cover plate prevents condensation or ice build-up in the bath

cooling machines