

# **Product Data Sheet**

## FP51-SL Ultra-Low Refrigerated Circulators

**Print Data Sheet** 

## Product Image



## **Order Information**

Model: FP51-SL Order no.: 9350751 Available mains power:

400V / 3 Ph. / 50Hz 230V / 3 Ph. / 60Hz

## **Downloads**

EasyTemp Software

#### **Similar Models**

These models could also be interesting for you:

FP52-SL FPW52-SL FP55-SL

### Sales & Support:

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Monday to Friday 7:30 am - 17:00 pm

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## Description

Ultra-low Refrigerated Circulator with proportional cooling control

JULABO Ultra-Low Refrigerated Circulators for heating and cooling are suitable for external temperature tasks. Powerful circulating pump systems and high heating and cooling capacities guarantee short heat-up and cool-down times. ACC 'Active Cooling Control' provides active cooling control across the whole temperature range. An energy saving feature with only minor loss of heat is provided by the proportional cooling capacity control in the 'FP refrigeration units. The inevitable dust accumulation that occurs in refrigeration systems is solved by means of an easily removed venting grill, which allows for easy cleaning. The units are equipped with handles or castors for an easy transportation. All models have a drain tap on the front allowing the fluid to be drained easily. Additionally the instruments are equipped with an improved insulation to help avoid ice-formation, and have a visual liquid level display.

#### **Advantages**

- o VFD COMFORT DISPLAY, resolution 0.01 °C
- o LCD DIALOG DISPLAY backlit for convenient interactive operation
- o Keypad for setpoints, warning/safety values and menu functions
- o ICC (Intelligent Cascade Control), self-optimizing temperature control
- o TCF Temperature Control Features to optimize the control behaviour
- o ATC3 3-Point-Calibration
- o Pt100 External sensor connection for measurement and control
- o SMART PUMP, electronically adjustable pump stages
- o Early warning system for low liquid level (DBGM 203 06 059.8)
- o Adjustable high temperature cut-out, visible via display
- o RS232/RS485 interface for online communication
- o Integrated programmer for 6 x 60 program steps
- o Connections for solenoid valve and HSP booster pump
- o Proportional cooling control
- o Active Cooling Control

## **Technical Specifications**

Working temperature range	-51 200 °C
Temperature control	ICC
Temperature stability	±0.05 °C
Display	VFD + LCD
Display resolution	0.01 °C
Integrated programmer	available
Heater capacity	3000 W
Cooling capacity	20 0 -20 -40 °C 2000 1500 1000 260 W
Refrigerant	R507
Pump capacity	Pressure: 700 mbar Suction: 400 mbar Flow rate: 22-26 l/min
Digital interfaces	RS232, RS485, optional Profibus
External Pt100 sensor connection	available
Bath opening / bath depth (W x L / D)	18 x 12 / 20 cm
Filling volume	11 Liters
Dimensions (W x L x H)	46 x 55 x 89 cm
Weight	90 kg
Ambient temperature	540 °C
Classification according to DIN 12876-1	3 (FL)

#### **Miscellaneous**

Optional: Electronic module with analog connections for external programming, temperature recorder, standby, alarm (Order no. 8 900 100)