

NEW

Julabo
THE TEMPERATURE CONTROL COMPANY

VIGORO™

Recirculating Coolers

High-performance chillers
for demanding process applications



**with natural
refrigerants**

ENGLISH

VIGORO Recirculating Coolers

High-performance chillers for demanding process applications

With VIGORO, JULABO expands its product portfolio with a new product brand for high-performance, energy-efficient recirculating coolers. Specifically engineered for the requirements of process industries, VIGORO systems combine powerful performance with maximum flexibility.

VIGORO recirculating coolers are not off-the-shelf units. An application-oriented options concept enables each chiller to be precisely configured during the specification phase – aligned with your process requirements, required performance level, and existing infrastructure. We build exactly the chiller your application demands.

Thanks to high dynamics, fast heat-up and cool-down times, and precise temperature control with stability up to ± 0.1 °C, VIGORO systems cover a wide range of applications. The standard working temperature range of -30 °C to +40 °C can optionally be extended up to +120 °C – ideal for test benches, material testing, and industrial production processes.



Interfaces

A wide range of available analog and digital interfaces ensures seamless integration into higher-level control and process systems. The integrated Pt100 connection allows temperature measurement in external applications; optional external temperature control is also available.



Heating options

Depending on the application, heating capacities of 4, 8, or 12 kW are available. Selecting a heating option automatically extends the working temperature range to -30 °C up to +120 °C – providing maximum flexibility for changing process requirements.



The VIGORO Options Concept – Your configuration. Your chiller.

A key feature of the VIGORO series is its modular, application-oriented options concept. It enables each unit to be specified precisely according to individual process requirements. Another advantage: you only invest in the features you really need.

Various heating and pump options are available depending on the application, ensuring reliable temperature control across different performance demands. A range of interface modules and special options can also be integrated. The result is a robust recirculating cooler perfectly matched to your process.

Interfaces

- ✓ Pt100 (external control)
- ✓ Modbus TCP/IP
- ✓ Stakei
- ✓ Pressure / Flow
- ✓ Profinet
- ✓ Profibus
- ✓ EtherCAT
- ✓ CANOpen
- ✓ OPC-UA
- ✓ Analog (Accessory)

Heating options

- ✓ Heating option 4 kW
- ✓ Heating option 8 kW
- ✓ Heating option 12 kW

Pump options

- ✓ centrifugal pump 4.5 bar, 100 l/min, adjustable in percentage steps
- ✓ centrifugal pump 4.5 bar, 100 l/min, frequency-controlled with active pressure control in 0.01 bar steps

Additional options

- ✓ Freeze protection
- ✓ Gas warning sensor
- ✓ Emergency stop category 0
- ✓ Emergency stop category 1



Pump options

High-performance centrifugal pumps with pressures up to 4.5 bar and flow rates up to 100 l/min ensure reliable temperature control of external applications. Pump output can be adjusted in percentage steps and is clearly displayed on the control panel. An optional frequency-controlled pump enables precise active pressure control in 0.01 bar steps.



Additional options

Further equipment options allow targeted adaptation to specific customer requirements. These include freeze protection for water as medium, integrated gas warning sensors, and emergency stop functions (category 0 or category 1).

High-performance chillers, tailored to your application

Key features of VIGORO recirculating coolers at a glance

Environmentally friendly with natural refrigerants

By using environmentally friendly natural refrigerants, JULABO focuses on sustainability without compromising performance and reliability. VIGORO chillers remain powerful and future-proof with regard to regulatory requirements.

Lower operating costs through energy efficiency

Frequency-controlled compressors and fans automatically adjust their output to the current demand. This reduces energy consumption, lowers operating costs, and ensures quiet, efficient, and long-lasting operation.

Powerful temperature control

Thanks to high cooling and heating capacities, VIGORO systems enable extremely fast temperature changes and immediately compensate exothermic and endothermic reactions – ensuring precise, stable processes with temperature stability up to ± 0.1 °C. This allows even demanding external applications to be controlled reliably and reproducibly.



Application-oriented option concept

The application-oriented options concept enables each VIGORO recirculating cooler to be precisely specified during the configuration phase. Equipment, performance features, and interfaces are defined in advance according to individual process requirements. The result is a tailor-made cooling solution perfectly matched to your application.



Wide working temperature range

Compared to conventional chillers, VIGORO recirculating coolers cover an exceptionally wide working temperature range from -30 °C to $+40$ °C. With an optional heating module, this range can be flexibly extended up to $+120$ °C – ideal for test benches, material testing, and reactor temperature control.



Maximum user convenience

The large 7" color touch display offers outstanding operating comfort. All relevant operating parameters are clearly structured and easy to access thanks to an intuitive user interface and logically organized menu navigation.



Flexible temperature control fluids

Depending on the application, various bath fluids can be used – including water-glycol mixtures or silicone oils. Operation with water is also possible upon request, optionally with integrated freeze protection.



Sustainable and future-proof

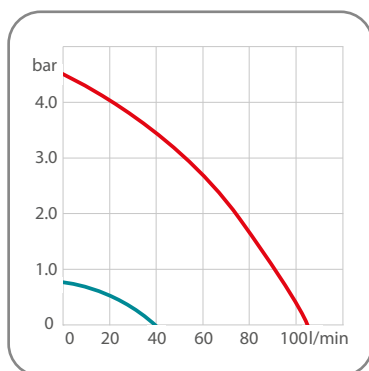
JULABO uses environmentally friendly natural refrigerants in all VIGORO recirculating coolers to actively support climate protection in laboratories and industrial environments.

VIGORO 5000

VIGORO 7500

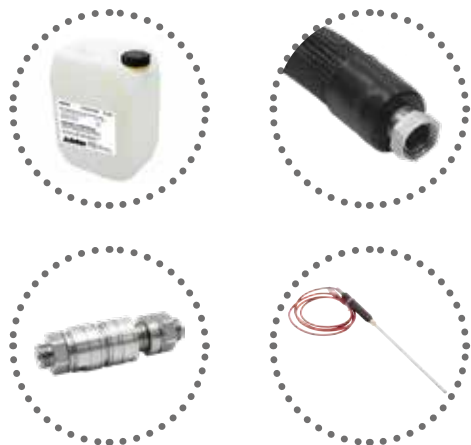
VIGORO 10000

Working temperature range °C	-30 ... +40																	
Extended working temperature range °C (with optional heating capacity)	-30 ... +120																	
Temperature stability °C	±0.1																	
Cooling capacity °C (Medium ethanol) kW	+20	10	0	-10	-20	-30	+20	10	0	-10	-20	-30	+20	10	0	-10	-20	-30
	5.6	5.4	4	2.7	1.4	0.4	8	7.4	5	3	1.6	0.5	11	8	5.4	3.5	2	0.8
Heating capacity kW (optional)	0/4/8/12																	
Minimum filling volume L	12																	
Usable expansion volume L	13.8																	
Refrigeration system	1-stage, air cooled																	
Refrigerant (Filling weight in g)	R290 (470)																	
Dimensions W × D × H cm	71 × 107 × 170																	
Classification according to DIN 12876-1	NFL (I) / NFL (III) with optional heating capacity																	
Available voltage versions	208-230V, 60Hz 400V 50Hz																	
Noise level db(A)	64																	
Interfaces (standard)	Ethernet, RS232, RS485, ext. Pt100-Sensor (external measurement), USB-C																	
Interfaces (optional)	ext. Pt100-Sensor (external control), Modbus TCP/IP, Pressure/Flow, Profinet, Profibus, EtherCAT, CANOpen, Stakei, OPC-UA, Analog (Accessory)																	
Permissible ambient temperature °C	+5 ... +40																	
Weight kg	285																	



Centrifugal pump
Bath fluid: Water (20 °C)

■ Pump stage max.
■ Pump stage min.



The perfect addition: JULABO accessories & services

With our wide range of accessories and comprehensive service offering, we work with you to develop the perfect solution for your requirements – ensuring maximum performance, safety, and long-term, trouble-free operation.



<https://www.julabo.com/en/products/accessories>

JULABO – The right place for high-quality, reliable, and powerful temperature control solutions

JULABO is one of the world's leading manufacturers of temperature control instruments for research, industry and science. For over five decades our premium products have always provided our customers with the exact temperature at the desired time.

Our highly qualified engineers and technicians apply their experience and know-how to constantly improve existing products and develop new, pioneering technologies of the future. Their goal is to always offer our customers the best possible solution. In line with our corporate vision >Superior Temperature Technology for a better Life<.



Maximum quality.

Durable, high-quality products thanks to JULABO's proven "Made in Germany" quality.



Worldwide presence.

Our 12 subsidiaries and over 100 sales and service partners around the world guarantee fast, expert support for all JULABO products.



Green technology.

Our products are deliberately engineered with environmentally-friendly materials and technologies.

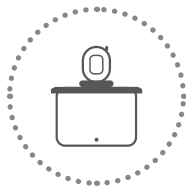


100% checked.

Every JULABO product made must first pass the quality inspection before leaving our manufacturing facilities.



Refrigerated circulators



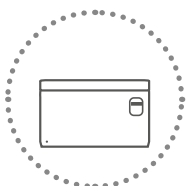
Heating circulators



Highly dynamic temperature control systems



Recirculating coolers



Water baths & shaking water baths



Products for special applications



Accessories



Services



Customized special solutions

Didn't find the right product? No problem!

Not all applications can be temperature controlled with a standard solution. Existing systems may need to be upgraded and expanded. Our Business Unit Solutions has its own in-house development team of engineers and designers and specializes in optimizing or modifying existing equipment in order to meet individual customer requirements.

Our many years of experience and our flexibility provide the perfect basis for meeting exceptional requirements. Together, in an in-depth exchange of ideas, our specialists develop and implement special, tailor-made solutions according to your needs and expectations. We look forward to making the impossible possible!



For more information on our special solutions, visit: www.julabo.com/en/customizedsolutions.



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