

# **CORIO**<sup>™</sup>



**ENGLISH** 







#### CORIO<sup>™</sup> – the new laboratory circulators

Refrigerated Circulators	. 08
Features at a glance	. 10
Refrigerated/Heating C irculators	. 14
Accessories	. 16



Heating Circulators	. 22
Features at a glance	. 24
Immersion Circulators	. 28
Open Heating Bath Circulators	. 30
Heating Circulators	. 38
Accessories	. 40

#### 'Do not seek to foresee the future,

but enable it to happen.'

Antoine de Saint-Exupéry

#### NEW. CORIO<sup>™</sup>.

#### Powerful. Robust.

CORIO<sup>™</sup> is derived from the word 'Core'. Because the core characteristics of these newly developed laboratory circulators are exact temperature, absolute precision, and a wide working temperature range. In addition CORIO<sup>™</sup> is equipped with all the core functions required in your laboratory for the temperature control of a wide variety of applications and samples.

#### Everything you need. Inside and out.

Precise, robust, and easy to operate units have proven their value in research and industry. That is all you really need. CORIO<sup>™</sup> fulfills the highest demands for precision, reliability and handling. And that's not all. CORIO<sup>™</sup> offers numerous additional advantages which will facilitate your daily work. An added value which will pay off.

#### Modern. Ambitious.

CORIO<sup>TM</sup> accentuates JULABO's ambition to create forward-looking technologies for modern laboratories. Outstanding functionality, ergonomics, easy operation, and a modern design. That is the core. That is CORIO<sup>TM</sup>.

#### **Ergonomic. Elegant.**

CORIO<sup>™</sup> makes day-to-day laboratory tasks easier. With a user-friendly operation. A bright and clear display. Easy start-up. Exceptional core functions - you will be able to master the new CORIO<sup>™</sup> in no time at all.

#### New. Different.

It is the multitude of innovative details which make CORIO<sup>™</sup> products unique. Discover the many advantages for yourself.





## Julabo

#### **CORIO**<sup>™</sup>. The best for your laboratory!

#### Made in Germany!

CORIO<sup>™</sup> is produced according to the highest German quality standards. They utilize reliable and robust core equipment. They feature platinum sensors, proven motor technology,

and CAN-Bus communication. Product development consistently applied environmentally friendly materials and technologies.

#### More comfort in your laboratory!

Switch on. And off you go. With the intelligent operating concept you will be able to set the new CORIO<sup>™</sup> quickly and safely. All operating controls and safety functions can be accessed easily from the front. Not only do the new CORIO<sup>™</sup> look good, they include integrated handles for superior ergonomics. The elegant, rounded design makes cleaning a breeze.

#### Safety for users and their processes!

CORIO<sup>™</sup> is safe. The circulator and the refrigeration unit are operated via one common switch. The outstanding design of the bath lid and insulation prevent direct contact with hot surfaces. Rubber feet allow for a secured footing. A lockable power plug provides a secure connection which cannot be disconnected by accident. And the best: a stable and reliable perfomance of the CORIO<sup>™</sup> at ambient temperatures of up to +40 °C.

#### Maximum benefit for your laboratory!

The new drain tap permits easy draining of your CORIO<sup>™</sup> without tools – a clever and handy solution. The integrated USB interface of all CORIO<sup>™</sup> CD models allows remote control. And only JULABO offers temperature control units with closed side panels. This saves laboratory space as you can place your CORIO<sup>™</sup> right next to other units and applications.

# **Refrigerated Circulators**



**The Refrigerated / Heating Circulators** of the new generation CORIO<sup>™</sup> provide more robustness, more reliability, and more advantages. They are ideal for all standard tasks and routine work in your laboratory.

# CORIO<sup>™</sup>. Everything you need. The advantages at a glance.



Brilliant.

Bright display with strong illumination can be viewed easily from a long distance.



#### Touching permitted.

Optimum safety. The ergonomic plastic handle protects your fingers from hot surfaces.



#### Switch on. And off you go.

Intelligent operating concept. Ready for operation with just a few quick and easy steps.



Specially designed pyramids ensure that the condensed liquid drips directly back into the bath.



#### Click.

One for all. Control the circulator and the refrigeration unit with only one power switch.



#### More bath.

Designed for more comfort. Thanks to the recessed cooling coil, the internal bath provides more space.



#### Everything at the front.

All operating controls and safety functions are accessed easily and comfortably from the front.



#### Space saving. Free up space.

Place your CORIO<sup>™</sup> right next to an application, another unit, or wall. That saves space. This is made possible by eliminating vents and connections on the sides.



#### Internal. External.

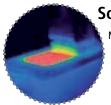
The pump is controlled via a lever located directly below the display. Easily change between internal and external circulation.



#### Handle with ease.

Makes day-to-day work easy. Comfortably move your CORIO<sup>™</sup> around by using the ergonomic handles (front and rear).





#### Solid. Minimized energy loss through high-quality insulation.



#### Soft. Quiet.

 $\mathsf{CORIO}^{\mathsf{TM}}$  circulators are cushion mounted. Protects the electronics. Reduces operating noise and vibration.



#### Mobile.

Extra easy handling. Integrated castors for easy repositioning of refrigerated circulators. (CD-600F)



#### Cleaning. Easy.

Not only do the new units look good. The functional design makes cleaning a breeze.



#### Saves energy.

As you desire. Various modes for the refrigeration unit: permanently on, permanently off, or on as refrigeration is needed.



Absolute Temperature Calibration, 1-point calibration (CD).



#### Safety.

CORIO<sup>™</sup> CD complies with Class III (FL) according to DIN 12876-1 and switches off automatically in case of high temperature or low liquid level alarm.



#### Condensation protection.

Superb design solution. Integrated ventilation directs air over the bath lid and minimizes condensation.



#### Stable.

Rubber feet allow for a secured footing of your CORIO™ to prevent damage to your laboratory equipment.



#### Exact.

You can rely on it. PID1 control and 'Active Cooling Control' make the new CORIO<sup>™</sup> precise and perfect.



USB.

Remote control made easy. CORIO<sup>™</sup> CD circulators feature a USB connection.



Locked in.

The lockable power plug guarantees safe connection. More process safety.



#### **Connection.** Easy.

Inclined pump connections (M16x1) facilitate the connection of applications. Each unit includes 2 barbed fittings of 8/12 mm diameter each.



#### Tidy.

The special drain tap for easy draining of bath fluids without tools.



#### Maintenance. Friendly.

The front magnetic grid can be removed easily for user-friendly cleaning and maintenance. Without tools.



#### JULABO. Quality.

Highest standards of quality for a long product life.



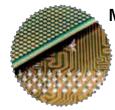
#### 100% Checked.

100% testing. 100% quality. Each CORIO<sup>™</sup> undergoes thorough quality testing before leaving the factory.



#### No sweat.

CORIO<sup>TM</sup> works robust and reliable – even at ambient temperatures of up to +40 °C.



#### Modern. Reliable.

High-grade components in every CORIO<sup>™ −</sup> platinum sensors, proven motor technology, CAN-Bus communication and much more.



#### Green technology.

Development consistently applied environmentally friendly materials and technologies.



#### Quick start.

Individual JULABO consultation and comprehensive manuals at your disposal.



#### Satisfied customers.

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



#### Services 24/7.

Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.com.



#### CORIO<sup>™</sup> CD Series

for working temperatures from -30 °C to +150 °C

Refrigerated / Heating Circulators of the new CORIO<sup>™</sup> series distinguish themselves with a great price-to-performance ratio. They are ideal for all standard tasks and routine work in laboratories and industry.

- Models for internal and external applications
- Bright, white, easy to read display
- Very quiet
- Easy change-over from internal to external circulation and vice versa
- External pump connections (M16x1)
- USB interface
- Space-saving cooling coil design yields more usable space in the bath tank
- Bath lid and drain tap included
- Removable ventilation grid
- Refrigeration unit without side vents
- Class III (FL) according to DIN 12876-1

To adapt the CORIO<sup>™</sup> Refrigerated / Heating Circulator to your individual application, we offer a comprehensive range of accessories (bath fluid, tubing, adapter, and more).

#### Applications

Temperature control of samples in a circulator bath or temperature control of an external application. For example: measuring cells, refractometers, polarimeters, photometers, viscometers, fermenters, electrophoresis chambers, chromatography columns, rotary evaporators, rheometers, and more.

	<b>D-200F</b> 9 012 701
Model	CD-200F
Working temperature range °C	-20 +150
Temperature stability °C	± 0.03
Heating capacity kW	2
Cooling capacity kW (Bath fluid: Ethanol)	<b>+20 °C 0 °C -20 °C</b> 0.22 0.17 0.06
Pump capacity Flow rate / Pressure	l/min bar 15 0.35
Bath opening / Bath depth	W x L / D cm 13 x 15 / 15
Filling volume liters	3 4
Dimensions	W x L x H cm 23 x 39 x 65



Powerful. Robust. CORIO<sup>™</sup> features all core functions for the temperature control of a wide variety of applications and samples.

Everything you need. Inside and out. All that is needed for daily routine tasks in laboratories and industry.

Ergonomic. Elegant. CORIO<sup>™</sup> incorporates forward-looking technologies with highest demands for precision, reliability, economy and operation.

New. Different. Discover the numerous advantages of the CORIO<sup>m</sup> generation.







 6 6 6 6 6 6 6 6 6 6 6 6			1	•
				, • • • •
 COR	210™	CD-	600F	

.

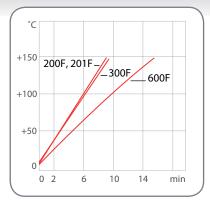
	D-201F
Order No.	9 012 702
Model	CD-201F
Working temperature range °C	-20 +150
Temperature stability °C	± 0.03
Heating capacity kW	2
Cooling capacity kW (Bath fluid: Ethanol)	<b>+20 °C 0 °C -20 °C</b> 0.2 0.16 0.06
Pump capacity Flow rate / Pressure	l/min bar 15 0.35
Bath opening / Bath depth	W x L / D cm 13 x 15 / 15
Filling volume liters	3 4
Dimensions	W x L x H cm 44 x 41 x 44

	CORIO <sup>™</sup> (I	D-300F	
	Order No.	9 012 703	-
	Model	CD-300F	I
	Working temperature range °C	-25 +150	۱ ۱
	Temperature stability °C	± 0.03	-
	Heating capacity kW	2	ł
	Cooling capacity kW (Bath fluid: Ethanol)	<b>+20 °C 0 °C -20 °C</b> 0.31 0.28 0.11	(
	Pump capacity Flow rate / Pressure	l/min bar 15 0.35	F
	Bath opening / Bath depth	W x L / D cm 13 x 15 / 15	E
	Filling volume liters	34	I
	Dimensions	W x L x H cm 24 x 42 x 66	[
,			

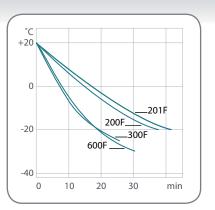
	J-600F
Order No.	9 012 704
Model	CD-600F
Working temperature range °C	-30 +150
Temperature stability °C	± 0.03
Heating capacity kW	2
Cooling capacity kW (Bath fluid: Ethanol)	<b>+20 °C 0 °C -20 °C</b> 0.6 0.53 0.22
Pump capacity Flow rate / Pressure	l/min bar 15 0.35
Bath opening / Bath depth	W x L / D cm 22 x 15 / 15
Filling volume liters	5 7.5
Dimensions	W x L x H cm 33 x 47 x 69

Heat-up time Bath fluid: Thermal

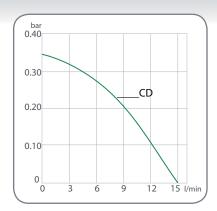
:



#### Cool-down time Bath fluid: Ethanol



## Pump capacity Bath fluid: Water



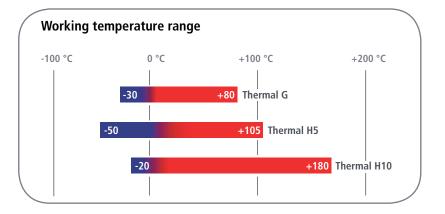
#### **JULABO Thermal Bath Fluids**

JULABO Thermal bath fluids have been carefully chosen after long-term testing. They are highly suitable for all of your temperature control applications guaranteeing safe and reliable operation.

Choosing the proper bath fluid is critical for high performance temperature control. The viscosity, oxidation and heat transfer characteristics of the Thermal fluids are specifically selected for use with JULABO temperature control instruments.

#### Advantages

- Wide temperature ranges
- Low viscosity
- High stability
- Good heat conductivity
- Minimum odor
- Low corrosion tendency
- Low toxicity
- Long fluid life





#### Makes routine laboratory work easier.

JULABO Thermal bath fluids are delivered in containers with a handy drain tap.



**Tidy.** The special drain tap for easy draining of bath fluids without tools.







Thermal G	A Barton
Order No. 5 liters	8 940 125
Order No. 10 liters	8 940 124
Working temperature range °C	-30 +80
Flash point °C	not applicable
Fire point °C	not applicable
Viscosity, (kinematic at +20 °C) mm²/s	4.07
Density ( at +20 °C ) g/cm <sup>3</sup>	1.08
Pour point °C	-70
Boiling point °C	+108
Ignition temperature °C	+430
Color	light yellow

:.

Thermal H5	a start
Order No. 5 liters	8 940 107
Order No. 10 liters	8 940 106
Working temperature range °C	-50 +105
Flash point °C	+124
Fire point °C	+142
Viscosity, (kinematic at +20 °C) mm <sup>2</sup> /s	5.66
Density ( at +20 $^{\circ}\text{C}$ ) g/cm³	0.92
Pour point °C	-100
Boiling point °C	+288
Ignition temperature °C	+350
Color	clear



Thermal H10		
Order No. 5 liters	8 940 115	
Order No. 10 liters	8 940 114	
Working temperature range °C	-20 +180	
Flash point °C	>+170	
Fire point °C	+220	
Viscosity, (kinematic at +20 °C) mm <sup>2</sup> /s	10.8	
Density ( at +20 °C ) g/cm <sup>3</sup>	0.94	
Pour point °C	<-60	
Boiling point °C	+288	
Ignition temperature °C	+370	
Color	clear	

#### JULABO Thermal bath fluids based on silicone ...

... are chemically inert substances which do not affect metals like iron, copper, zinc, aluminum, chrome or nickel. Compared to other fluids, JULABO Thermal fluids have an extraordinarily high dielectric strength. When properly stored, the fluids will last for 12 months and longer as they are not susceptible to climatic influences.

#### JULABO Thermal bath fluids based on water-glycol ...

... (monoethyleneglycol with anti-corrosion additives) have excellent thermal characteristics and a low viscosity. In addition, they provide anti-freeze protection, i.e. they can be applied at temperatures below the freezing point of water.

#### More information on JULABO Thermal fluids ...

... in our brochure 'Thermal Bath Fluids' at www.julabo.com.

#### **Refrigerated Circulators Accessories**



Aqua Stabil Water protective media to prevent formation of algae and bacteria

Order No.	Description	Suitable for
8 940 006	6 bottles 100 ml each	CD
8 940 012	12 bottles 100 ml each	CD

#### Hollow balls to reduce heat loss, evaporation, oxygen input, odors, action of light

Order No.	Description	Suitable for
8 970 010	Hollow balls, Polypropylen $^{\circ}$ , 20 mm Ø, 1000 pcs. (up to +100 °C, for water only)	CD

#### Heat exchangers / Cooling installations

Order No.	Description	Suitable for
9 970 240	Bath cover with built-in heat exchanger	200F, 201F, 300F
9 970 242	Bath cover with built-in heat exchanger	600F

#### **CR®Tubing** (-30 ... +120 °C)

Order No.	Description	Suitable for
8 930 008	1 m, 8 mm inner dia.	CD
8 930 010	1 m, 10 mm inner dia.	CD
8 930 012	1 m, 12 mm inner dia.	CD

#### **Viton<sup>®</sup>Tubing** (-35 ... +200 °C)

Order No.	Description	Suitable for
8 930 108	1 m, 8 mm inner dia.	CD
8 930 110	1 m, 10 mm inner dia.	CD
8 930 112	1 m, 12 mm inner dia.	CD



#### Tubing insulation (-50...+100 °C)

	Order No.	Description	Suitable for
	8 930 410	1 m, for tubing 8 - 10 mm inner dia.	CR <sup>®</sup> / Viton <sup>®</sup> Tubing
-	8 930 412	1 m, for tubing 12 mm inner dia.	CR <sup>®</sup> /Viton <sup>®</sup> Tubing

#### Tube clamps

Order No.	Description	Suitable for
8 970 480	2 Tube clamps, size 1	CR <sup>®</sup> / Vito n <sup>®</sup> Tubing 8 mm inner dia.
8 970 481	2 Tube clamps, size 2	CR®/Viton® Tubing 10 - 12 mm inner dia.







Metal tubing flexible, insulated, -50 ... +200 °C

Order No.	Description	Suitable for
8 930 220	0.5 m Metal tubing, 2 fittings M16x1 female	CD
8 930 221	1.0 m Metal tubing, 2 fittings M16x1 female	CD
8 930 222	1.5 m Metal tubing, 2 fittings M16x1 female	CD
8 930 223	3.0 m Metal tubing, 2 fittings M16x1 female	CD

#### Adapters and connectors

Order No.	Description	Suitable for
8 970 446	2 Barbed fittings for tubing 8 mm inner dia.	CD
8 970 447	2 Barbed fittings for tubing 10 mm inner dia.	CD
8 970 445	2 Barbed fittings for tubing 12 mm inner dia.	CD
8 970 443	1 Adapter M16x1 male to M16x1 male	CD
8 970 490	2 Collar nuts M16x1 female	CD
8 970 442	2 Elbow fittings 90°, M16x1 female/male	CD
8 890 004	2 Adapters M16x1 female to NPT 1/4" male	CD
8 890 005	2 Adapters M16x1 female to NPT 1/4" female	CD
8 890 006	2 Adapters M16x1 female to NPT 3/8" male	CD
8 890 007	2 Adapters M16x1 female to NPT 3/8" female	CD
8 890 008	2 Adapters M16x1 female to NPT 1/2" male	CD
8 890 009	2 Adapters M16x1 female to NPT 1/2" female	CD
8 890 010	2 Adapters M16x1 male to NPT 1/4" female	CD
8 891 008	1 Adapter M16x1 male to BSP 1/2" female	CD
8 891 009	1 Adapter M16x1 male to BSP 3/4" female	CD
8 890 011	2 Adapters M16x1 female to tube 1/4" male	CD
8 890 012	2 Adapters M16x1 female to tube 3/8" male	CD
8 890 013	2 Adapters M16x1 female to tube 1/2" male	CD
8 890 024	2 Adapters M16x1 female to M16x1 female	CD

#### Shut-off valves for loop circuit

Order No.	Description	Suitable for
8 970 457	Shut-off valve (-30 °C +200 °C), M16x1	CD
8 970 456	Shut-off valve (-10 °C +100 °C), M16x1	CD

# TATA

#### Twin distributing adapters with barbed fittings

Order No.	Description	Suitable for
8 970 470	Twin distributing adapter with barbed fittings	Tubing 8 mm inner dia.
8 970 471	Twin distributing adapter with barbed fittings	Tubing 12 mm inner dia.
8 970 472	Twin distributing adapter with barbed fittings	Tubing 10 mm inner dia.
8 970 473	Twin distributing adapter M16x1 female to 2 x M16x1 male	CD

#### **Refrigerated Circulators Accessories**



EasyTEMP Software Software for instrument control, data recording and visualization

Order No.	Description	Suitable for
8 901 102	EasyTEMP Software (free of charge at www.julabo.com)	CD
8 901 105	EasyTEMP Professional Software, incl. USB-Dongle	CD
9 900 110	USB interface cable 2m type A-B	CD

#### Calibration and manufacturer's certificates

Order No.	Description	Suitable for
8 902 901	1-Point manufacturer's calibration certificate	CD
8 902 903	3-Point manufacturer's calibration certificate	CD
8 902 905	5-Point manufacturer's calibration certificate	CD
8 903 025	Manufacturer's Certificate for JULABO units with up to 1 kW cooling capacity (at +20 $^{\circ}\mathrm{C})$	Refrigerated Circulators



#### IQ/OQ Documentation for Equipment Qualification

Order No.	Description	Suitable for
2 310 110	IQ/OQ Documentation, Category 1	CD

#### **Preventative Maintenance Contracts**

Order No.	Description	Suitable for
2 350 100	Preventative Maintenance Contract Standard includes the following ser- vices: Visual inspection, technical diagnostics, data analysis, BlackBox, testing of tube connections and bath fluid, thorough cleaning of conden- ser and other components, testing of temperature stability and sensor ca- libration, testing/measuring of pump and cooling capacity (depending on model) and firmware update (if no hardware adjustment is required)	CD
2 350 110	Preventative Maintenance Contract Premium includes all services listed above as well as spare parts and labor required for installation or repla- cement	CD





CORIO<sup>™</sup> **Heating Circulators** feature professional technology for routine laboratory tasks. The portfolio permits a wide range of applications and includes immersion circulators, open heating bath circulators, and heating circulators.



# **Heating Circulators**

# CORIO<sup>™</sup>. Everything you need. The advantages at a glance.



Brilliant.

Bright display with strong illumination can be viewed easily from a long distance.



#### Touching permitted.

Optimum safety. The ergonomic plastic handle protects your fingers from hot surfaces.



#### Switch on. And off you go.

Intelligent operating concept. Ready for operation with just a few quick and easy steps.



Specially designed pyramids ensure that the condensed liquid drips directly back into the bath.



#### Click.

One for all. Control the circulator and the refrigeration unit with only one power switch.



#### Universal.

Universal bath attachment clamp. For straight containers. For round containers. For laboratory stands.



#### Everything at the front.

All operating controls and safety functions are accessed easily and comfortably from the front.



#### Space saving. Free up space.

Place your CORIO<sup>™</sup> right next to an application, another unit, or wall. That saves space. This is made possible by eliminating vents and connections on the sides.



#### Internal. External.

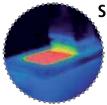
The pump is controlled via a lever located directly below the display. Easily change between internal and external circulation.



#### Handle with ease.

Makes day-to-day work easy. Comfortably move your CORIO<sup>™</sup> around using the ergonomic handles (front and rear).





#### Solid.

Heat protected sides with high-quality mineral wool insulation. (BC baths)



#### Cleaning. Easy.

Not only do the new units look good. The functional design makes cleaning a breeze.



#### Clever.

A clean solution. The cleverly integrated drip off design. (B and BT baths)



#### Flexibility.

The jet nozzle permits continuous adjustment of the pump stream in your bath.



#### Stable.

Rubber feet allow for a secured footing of your CORIO<sup>™</sup> to prevent damage to your laboratory equipment.



#### Locked in.

The lockable power plug guarantees safe power connection. More process safety.



USB.

Remote control made easy. CORIO<sup>™</sup> CD circulators featurea USB connection.



#### Soft. Quiet.

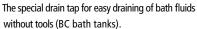
 $\mathsf{CORIO}^{\text{\tiny TM}}$  circulators are cushion mounted. Protects the electronics. Reduces operating noise and vibration.



#### Connection. Easy.

Inclined pump connections (M16x1) facilitate the connection of applications. Each unit includes 2 barbed fittings of 8/12 mm diameter each (CD models).







Absolute Temperature Calibration, 1-point calibration (CD).



#### Safety.

CORIO<sup>™</sup> C models comply with protection class I (NFL) according to DIN 12816-1. CORIO<sup>™</sup> CD models comply with protection class III (FL).



#### JULABO. Quality.

Highest standards of quality for a long product life.



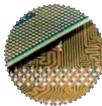
#### 100% Checked.

100% testing. 100% quality. Each CORIO<sup>™</sup> undergoes thorough quality testing before leaving the factory.



#### No sweat.

CORIO<sup>TM</sup> works robust and reliable – even at ambient temperatures of up to +40 °C.



#### Modern. Reliable.

High-grade components in every CORIO<sup>™</sup> – platinum sensors, proven motor technology, CAN-Bus communication and much more.



#### Green technology.

Deliberately engineered with environmentally friendly materials and technologies.



#### Quick start.

Individual JULABO consultation and comprehensive manuals at your disposal.



#### Satisfied customers.

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



#### Services 24/7.

Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.com.









The CORIO<sup>™</sup> C Immersion Circulator is the basic model of the CORIO<sup>™</sup> circulator portfolio. The bath attachment clamp is included in delivery and facilitates mounting of the circulator on any bath tank up to 30 liters.

- Precise temperature control
- For internal standard applications
- For bath tanks with a max. filling volume of 30 liters
- Bright, white, easy to read display
- Whisper quiet
- Easy operation
- Class I (NFL) according to DIN 12876-1

To adapt the CORIO<sup>™</sup> Immersion Circulator to your individual application we offer a comprehensive range of accessories (racks, bath lids, and more).



#### Option I

The universal bath attachment clamp permits mounting the CORIO<sup>™</sup> Immersion Circulator on rectangular as well as round bath tanks.



**Option II** 

Just a few simple steps and the bath attachment clamp is transformed into a mount for laboratory stands.



**Option III** 

The Immersion Circulator can be attached directly to the rim of an open JULABO bath.

#### Applications (CORIO<sup>™</sup> C and CD)

Flexible applications, for example when changing bath tanks. For a large variety of applications in chemistry, pharmaceutics, medicine, e.g. temperature applications for samples, analytics, or material testing, and more.



Order No.	9 011 000	
Model	C	
Working temperature range °C	+20 +100	
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Circulation capacity Flow rate / Pressure	l/min bar 6 0.1	
Dimensions	W x L x H cm 13.2 x 16 x 36.2	



# CORIO<sup>™</sup> CD Immersion Circulator for working temperatures from +20 °C to +150 °C

In addition to the advantages of the CORIO<sup>™</sup> C Circulator, the CORIO<sup>™</sup> CD Immersion Circulator can be equipped with an optional pump set for temperature control of external applications.

- Precise temperature control
- For internal and external applications (accessories required)
- For bath tanks with a max. filling volume of 50 liters
- Bright, white, easy to read display
- Very quiet
- Easy handling
- Pump change-over between internal and external circulation
- USB interface
- Class III (FL) according to DIN 12876-1

To adapt the CORIO<sup>™</sup> Immersion Circulator to your individual application we offer a comprehensive range of accessories (racks, bath lids, tubing, adapters, and more).



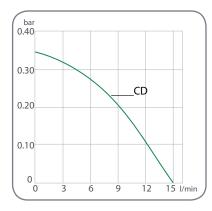
CORIO™ CD	
Order No.	9 012 000
Model	CD
Working temperature range °C	+20 +150
Temperature stability °C	± 0.03
Heating capacity kW	2
Pump capacity Flow rate / Pressure	l/min bar 15 0.35
Dimensions	W x L x H cm 13.2 x 16 x 36.2



#### Optional pump set

With a few simple steps you can install a pump set onto the CORIO™ CD Immersion Circulator. In no time at all, your circulator is ready for temperature control of an external application.

**Pump capacity** Bath fluid: Water





CORIO<sup>™</sup> C Open Heating Bath Circulators for internal temperature applications with transparent bath tanks for working temperatures from +20 °C to +100 °C

The Open Heating Bath Circulators of the new  $\mathsf{CORIO}^{\scriptscriptstyle\mathsf{TM}}$  series feature durable, high-quality transparent bath tanks.

- For internal applications
- Bright, white, easy to read display
- Whisper quiet

To adapt the  $\mathsf{CORIO}^{\scriptscriptstyle\mathsf{M}}$  Open Heating Bath Circulator to your individual application we offer a comprehensive range of accessories (racks, bath lids, and more).

	-BT5
Order No.	9 011 305
Model	C-BT5
Working temperature range °C	+20 +100
Temperature stability °C	± 0.03
Heating capacity kW	2
Circulation capacity Flow rate / Pressure	l/min bar 6 0.1
Bath opening / Bath depth	W x L /D cm 15 x 15 / 15
Filling volume liters	3.5 5
Dimensions	W x L x H cm 23 x 38 x 38









******	, • • • • • • • • •		• • • • •
	4	Ŧ	
•••	•••••••		• •

<b>BT9</b> 20 +100 0.03
0.02
0.05
nin bar 0.1
x L /D cm 3 x 15 / 15
9
3

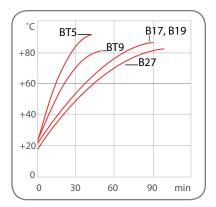
	BT19	
Order No.	9 011 319	)
Model	C-BT19	
Working temperature range °C	+20 +1	00
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Circulation capacity Flow rate / Pressure	l/min 6	bar 0.1
Bath opening / Bath depth	W x L /D cn 30 x 35 / 1	
Filling volume liters	14 19	
Dimensions	W x L x H c 38 x 58 x 3	

	-BT27
Order No.	9 011 327
Model	C-BT27
Working temperature range °C	+20 +100
Temperature stability °C	± 0.03
Heating capacity kW	2
Circulation capacity Flow rate / Pressure	l/min bar 6 0.1
Bath opening / Bath depth	W x L /D cm 30 x 35 / 20
Filling volume liters	20 27
Dimensions	W x L x H cm 38 x 58 x 43

#### Applications

Temperature control of samples, preparation of samples for serology and clinical chemistry, analysis, material testing, and more.

## Heat-up time Bath fluid: Water



CORIO<sup>™</sup> C Open Heating Bath Circulators for internal temperature applications with stainless steel bath tanks

for working temperatures from +20 °C to +100 °C

The Open Heating Bath Circulators of the new  $\mathsf{CORIO}^{\scriptscriptstyle\mathsf{M}}$  series feature high-quality bath tanks made of stainless steel.

- For internal applications
- Bright, white, easy to read display
- Whisper quiet
- High-quality bath tanks made of stainless steel
- Integrated drain screw (except for B5)

To adapt the CORIO<sup>™</sup> Open Heating Bath Circulator to your individual application we offer a comprehensive range of accessories (racks, bath lids, and more).

Applications

Temperature control of samples, preparation of samples for serology and clinical chemistry, analysis, material testing, and more.



Order No.	9 011 4	05
Model	C-B5	
Working temperature range °C	+20	+100
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Circulation capacity Flow rate / Pressure	l/min 6	bar 0.1
Bath opening / Bath depth	W x L /D 15 x 15	
Filling volume liters	3.5 5	5
Dimensions	W x L x 23 x 38	







***************	•
•••••••••	 

.......



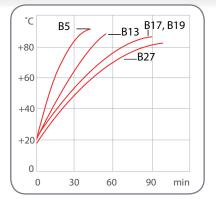
Order No.	9 011 4	13
Model	C-B13	
Working temperature range °C	+20	+100
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Circulation capacity Flow rate / Pressure	l/min 6	bar 0.1
Bath opening / Bath depth	W x L /D 30 x 18	
Filling volume liters	9 13	
Dimensions	W x L x I 38 x 40	

CORIO <sup>™</sup> C	-B17		•
Order No.	9 011 4	17	
Model	C-B17		•
Working temperature range °C	+20	+100	•
Temperature stability °C	± 0.03		•
Heating capacity kW	2		:
Circulation capacity Flow rate / Pressure	l/min 6	bar 0.1	•
Bath opening / Bath depth	W x L /D cm 30 x 18 / 20		•
Filling volume liters	13 17	7	•
Dimensions		W x L x H cm 38 x 40 x 47	

	-B19
Order No.	9 011 419
Model	C-B19
Working temperature range °C	+20 +100
Temperature stability °C	± 0.03
Heating capacity kW	2
Circulation capacity Flow rate / Pressure	l/min bar 6 0.1
Bath opening / Bath depth	W x L /D cm 30 x 35 / 15
Filling volume liters	14 19
Dimensions	W x L x H cm 38 x 58 x 42



# Heat-up time Bath fluid: Water



CORIO <sup>™</sup> (	-B27	
Order No.	9 011 427	
Model	С-В27	
Working temperature range °C	+20 +100	
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Circulation capacity Flow rate / Pressure	l/min bar 6 0.1	
Bath opening / Bath depth	W x L /D cm 30 x 35 / 20	
Filling volume liters	17 27	
Dimensions	W x L x H cm 38 x 58 x 47	

# **CORIO<sup>™</sup> CD Open Heating Bath Circulators** for internal and external temperature applications with transparent bath tanks

for working temperatures from +20 °C to +100 °C

The Open Heating Bath Circulator of the new CORIO<sup>™</sup> series feature durable, high-quality transparent bath tanks and pump connections.

- For internal and external applications
- Bright, white, easy to read display
- Very quiet
- Pump change-over between internal and external circulation
- USB connection
- Class III (FL) according to DIN 12876-1

To adapt the CORIO<sup>™</sup> Open Heating Bath Circulator to your individual application we offer a comprehensive range of accessories (racks, bath lids, tubing, adapters and more).

#### Applications

Temperature control of samples, preparation of samples for serology and clinical chemistry, analysis, material testing, and more. External temperature control applications in combination with measuring instruments, measuring cells, photometers, refractometers, polarimeters, and more.









CORIO <sup>™</sup> (	D-BT	5	
Order No.	9 012 30	)5	•
Model	CD-BT5		•
Working temperature range °C	+20 +	⊦100	•
Temperature stability °C	± 0.03		•
Heating capacity kW	2		•
Pump capacity Flow rate / Pressure	l/min 15	bar 0.35	•
Bath opening / Bath depth	W x L / D 15 x 15 /		0 0 0
Filling volume liters	3.5 5		•
Dimensions	W x L x H 23 x 38 x		•

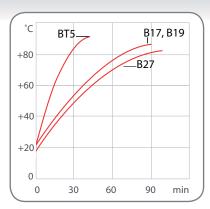
CORIO <sup>™</sup> (I	D-BT1	9
Order No.	9 012 319	
Model	CD-BT19	
Working temperature range °C	+20 +1	00
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Pump capacity Flow rate / Pressure	l/min 15	bar 0.35
Bath opening / Bath depth	W x L / D ci 30 x 35 / 1	
Filling volume liters	14 19	
Dimensions	W x L x H c 38 x 58 x 3	

CORIO <sup>™</sup> C	D-BT27
Order No.	9 012 327
Model	CD-BT27
Working temperature range °C	+20 +100
Temperature stability °C	± 0.03
Heating capacity kW	2
Pump capacity Flow rate / Pressure	l/min bar 15 0.35
Bath opening / Bath depth	W x L / D cm 30 x 35 / 20
Filling volume liters	20 27
Dimensions	W x L x H cm 38 x 58 x 43

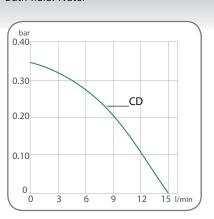
# Heat-up time Bath fluid: Water

\* \* \*

• • • • •



# Pump capacity Bath fluid: Water



# **CORIO<sup>™</sup> CD Open Heating Bath Circulators** for internal and external temperature applications with stainless steel bath tanks

for working temperatures from +20 °C to +150 °C

The Open Heating Bath Circulators of the new CORIO<sup>™</sup> series feature high-quality bath tanks made of stainless steel and with pump connections.

- For internal and external applications
- Bright, white, easy to read display
- Very quiet
- Pump change-over between internal and external circulation
- USB connection
- High-quality bath tanks made of stainless steel
- Integrated drain screw (except for B5)

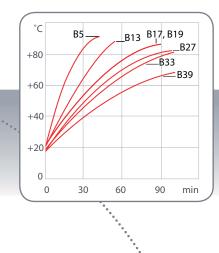
To adapt the CORIO<sup>™</sup> Open Heating Bath Circulator to your individual application we offer a comprehensive range of accessories (racks, bath lids, tubing, adapters, and more).

# with bath lid (accessory)

Order No.	9 012 405
Model	CD-B5
Working temperature range °C	+20 +150
Temperature stability °C	± 0.03
Heating capacity kW	2
Pump capacity Flow rate / Pressure	l/min bar 15 0.35
Bath opening / Bath depth	W x L / D cm 15 x 15 / 15
Filling volume liters	3.5 5
Dimensions	W x L x H cm 23 x 38 x 41

#### Heat-up time Bath fluid: Water

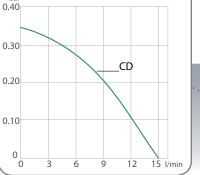




#### bar 0.40

Pump capacity

Bath fluid: Water



#### Applications

Temperature control of samples, preparation of samples for serology and clinical chemistry, analysis, material testing, and more. External temperature control applications in combination with measuring instruments, measuring cells, photometers, refractometers, polarimeters, and more.





. . . . . . . . . . . . . .

.....

• • • • • • •

CORI	⊃ <sup>™</sup> CD-B1	3
Order No.	9 012 4	13
Model	CD-B13	
Mar. 1.1		450

	Working temperature range °C	+20 +1	50	•	۱ ۲
	Temperature stability °C	± 0.03		•	T
	Heating capacity kW	2		•	ŀ
	Pump capacity Flow rate / Pressure	l/min 15	bar 0.35	•	P F
	Bath opening / Bath depth	W x L / D c 30 x 18 / 1		•	E
	Filling volume liters	9 13			F
	Dimensions	W x L x H c 38 x 40 x 4		•	[
0					• •



CORIO <sup>™</sup> C	D-B27	
Order No.	9 012 427	
Model	CD-B27	
Working temperature range °C	+20 +150	
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Pump capacity Flow rate / Pressure	l/min bar 15 0.35	
Bath opening / Bath depth	W x L / D cm 30 x 35 / 20	
Filling volume liters	17 27	
Dimensions	W x L x H cm 38 x 58 x 47	



CORIO <sup>™</sup> (	D-B17
Order No.	9 012 417
Model	CD-B17
Working temperature range °C	+20 +150
Temperature stability °C	± 0.03
Heating capacity kW	2
Pump capacity Flow rate / Pressure	l/min bar 15 0.35
Bath opening / Bath depth	W x L / D cm 30 x 18 / 20
Filling volume liters	13 17
Dimensions	W x L x H cm 38 x 40 x 47



		•
D-B33		•
9 012 433	3	: (
CD-B33		: 1
+20 +1	50	۱ r
± 0.03		
2		ł
l/min 15	bar 0.35	F
		• E
26 39		F
		[
	9 012 433 CD-B33 +20 +1 ± 0.03 2 l/min 15 W x L / D c 66 x 32 / 1 26 39 W x L x H c	+20 +150 ± 0.03 2 l/min bar 15 0.35 W x L / D cm 66 x 32 / 15



CORIO <sup>™</sup> C	D-B1	9
Order No.	9 012 4	19
Model	CD-B19	
Working temperature range °C	+20	+150
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Pump capacity Flow rate / Pressure	l/min 15	bar 0.35
Bath opening / Bath depth	W x L / D 30 x 35 /	
Filling volume liters	14 19	)
Dimensions	W x L x H 38 x 58 :	



CORIO <sup>™</sup> (	D-B39	
Order No.	9 012 439	)
Model	CD-B39	
Working temperature range °C	+20 +1	50
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Pump capacity Flow rate / Pressure	l/min 15	bar 0.35
Bath opening / Bath depth	W x L / D c 33 x 30 / 3	
Filling volume liters	35 41	
Dimensions	W x L x H o 54 x 34 x 5	

CORIO<sup>™</sup> CD Heating Circulators for internal and external temperature applications with stainless steel baths for working temperatures from +20 °C to +150 °C

CORIO<sup>™</sup> Heating Circulators feature professional technology for demanding applications. These units facilitate internal temperature control in the bath tank or control of externally connected applications.

- For internal and external applications
- Bright, white, easy to read display
- Very quiet
- Pump change-over between internal and external circulation
- USB connection
- High-quality bath tanks made of stainless steel with bath lid and drain tap
- Integrated cooling coil for counter-cooling

To adapt the CORIO<sup>™</sup> Heating Circulator to your individual application we offer a comprehensive range of accessories (racks, bath lids, tubing, adapters, and more).

#### Applications

External temperature applications in combination with jacketed reactors, distillation apparatus, mini-plant applications, photometers, refractometers and more, internal temperature applications of samples and small objects.



CORIO <sup>™</sup> (	D-BC4
Order No.	9 012 504
Model	CD-BC4
Working temperature range °C	+20 +150
Temperature stability °C	± 0.03
Heating capacity kW	2
Pump capacity Flow rate / Pressure	l/min bar 15 0.35
Bath opening / Bath depth	W x L / D cm 13 x 15 / 15
Filling volume liters	3 4.5
Dimensions	W x L x H cm 23 x 41 x 42

Optional Bath cover with built-in heat exchanger.





	*************	•
* *		••••••
0 0 0		•
•	-	•
•	13	
٠	• • • • • • • • • • • • • • • • • • •	• *



			÷
CORIO <sup>™</sup> (	D-BC	6	* *
Order No.	9 012 5	06	:
Model	CD-BC6		
Working temperature range °C	+20	+150	
Temperature stability °C	± 0.03		
Heating capacity kW	2		:
Pump capacity Flow rate / Pressure	l/min 15	bar 0.35	*
Bath opening / Bath depth	W x L / [ 13 x 15		*
Filling volume liters	4.5 6		:
Dimensions	W x L x I 24 x 44		•

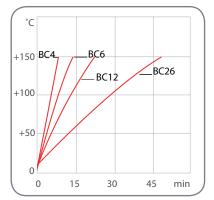
....

CORIO <sup>™</sup> (I	D-BC1	2
Order No.	9 012 512	
Model	CD-BC12	
Working temperature range °C	+20 +1	50
Temperature stability °C	± 0.03	
Heating capacity kW	2	
Pump capacity Flow rate / Pressure	l/min 15	bar 0.35
Bath opening / Bath depth	W x L / D c 22 x 15 / 2	
Filling volume liters	8.5 12	
Dimensions	W x L x H c 33 x 49 x 4	

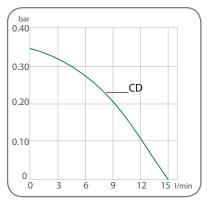
CORIO <sup>™</sup> C Order No.	<b>D-BC26</b> 9 012 526
Model	CD-BC26
Working temperature range °C	+20 +150
Temperature stability °C	± 0.03
Heating capacity kW	2
Pump capacity Flow rate / Pressure	l/min bar 15 0.35
Bath opening / Bath depth	W x L / D cm 22 x 30 / 20
Filling volume liters	19 26
Dimensions	W x L x H cm 39 x 62 x 48

**Heat-up time** Bath fluid: Thermal





# Pump capacity Bath fluid: Water



## JULABO Thermal Bath Fluids

JULABO Thermal bath fluids have been carefully chosen after long-term testing. They are highly suitable for all of your temperature control applications guaranteeing safe and reliable operation.

Choosing the proper bath fluid is critical for high performance temperature control. The viscosity, oxidation and heat transfer characteristics of the Thermal fluids are specifically selected for use with JULABO CORIO<sup>™</sup>CD temperature control instruments.



Inermal G	1.1.1.1.1.1.1.1.1
Order No. 5 liters	8 940 125
Order No. 10 liters	8 940 124
Working temperature range °C	-30 +80
Flash point °C	not applicable
Fire point °C	not applicable
Viscosity, (kinematic at +20 °C) mm²/s	4.07
Density ( at +20 $^{\circ}$ C ) g/cm <sup>3</sup>	1.08
Pour point °C	-70
Boiling point °C	+108
Ignition temperature °C	+430
Color	light yellow



Thermal M	
Order No. 5 liters	8 940 101
Order No. 10 liters	8 940 100
Working temperature range °C	+70 +170
Flash point °C	+284
Fire point °C	+306
Viscosity, (kinematic at +20 °C) mm <sup>2</sup> /s	293
Density ( at +20 $^{\circ}\text{C}$ ) g/cm³	1.15
Pour point °C	-39
Boiling point °C	>+170
Ignition temperature °C	>+255
Color	clear

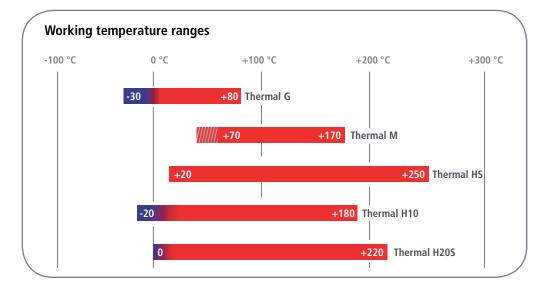
#### Advantages

- Wide temperature ranges
- Low viscosity
- High stability
- Good heat conductivity
- Minimum odor
- Low corrosion tendency
- Low toxicity
- Long fluid life



#### Makes laboratory work easier.

JULABO Thermal bath fluids are delivered in containers with a handy drain tap.







Density ( at -Pour point °C

Color

Boiling point °C

Ignition temperature °C

Thermal HS		The
Order No. 5 liters	8 940 103	Order N
Order No. 10 liters	8 940 102	Order N
Working temperature range °C	+20 +250	Working range °C
Flash point °C	+270	Flash po
Fire point °C	+360	Fire poin
Viscosity, (kinematic at +20 °C) mm <sup>2</sup> /s	55	Viscosity +20 °C)
Density ( at +20 °C ) g/cm <sup>3</sup>	0.96	Density (

<-60

+246

>+400

light brown



Thermal H1(	
Order No. 5 liters	8 940 115
Order No. 10 liters	8 940 114
Working temperature range °C	-20 +180
Flash point °C	>+170
Fire point °C	+220
Viscosity, (kinematic at +20 °C) mm <sup>2</sup> /s	10.8
Density ( at +20 $^{\circ}\text{C}$ ) g/cm³	0.94
Pour point °C	<-60
Boiling point °C	+288
Ignition temperature °C	+370
Color	clear



Thermal H20	)S
Order No. 5 liters	8 940 109
Order No. 10 liters	8 940 108
Working temperature range °C	0 +220
Flash point °C	+230
Fire point °C	+264
Viscosity, (kinematic at +20 °C) mm²/s	22.3
Density ( at +20 °C ) g/cm <sup>3</sup>	0.95
Pour point °C	-70
Boiling point °C	+424
Ignition temperature °C	+385
Color	light brown

#### JULABO Thermal bath fluids based on silicone ...

... are chemically inert substances which do not affect metals like iron, copper, zinc, aluminum, chrome or nickel. Compared to other fluids, JULABO Thermal fluids have an extraordinarily high dielectric strength. When properly stored, the fluids will last for 12 months and longer as they are not susceptible to climatic influences.

#### JULABO Thermal bath fluids based on water-glycol ...

... (monoethyleneglycol with anti-corrosion additives) have excellent thermal characteristics and a low viscosity. In addition they provide anti-freeze protection, i.e. they can be applied at temperatures below the freezing point of water.

#### More information on JULABO Thermal fluids ...

... in our brochure 'Thermal Bath Fluids' at www.julabo.com.

## Heating Circulators Accessories



Aqua Stabil Water protective media to prevent formation of algae and bacteria

Order No.	Description	Section Sec.	Suitable for	10.00
8 940 006	6 bottles 100 ml each		C, CD	
8 940 012	12 bottles 100 ml each		C, CD	

Transparent bath tanks up to +100 °C for heating immersion circulators

Order No.	Description	Suitable for
9 901 305	Bath tank BT5	C, CD
9 901 309	Bath tank BT9	C, CD
9 901 319	Bath tank BT19	C, CD
9 901 327	Bath tank BT27	C, CD



Stainless steel bath tanks up to +150 °C, insulated for heating immersion circulators

Order No.	Description	Suitable for
9 903 405	Bath tank B5	C, CD
9 903 413	Bath tank B13	C, CD
9 903 417	Bath tank B17	C, CD
9 903 419	Bath tank B19	C, CD
9 903 427	Bath tank B27	C, CD
9 903 433	Bath tank B33	C, CD
9 903 439	Bath tank B39	C, CD

#### Bath covers

Order No.	Description	Suitable for
9 970 296	Flat bath cover	В5
9 970 290	Flat bath cover	B13, B17
9 970 291	Flat bath cover	B19, B27
9 970 292	Flat bath cover	B33
9 970 293	Flat bath cover	B39
9 970 253	Lift-up gable bath cover made of stainless steel	B13, B17
9 970 254	Lift-up gable bath cover made of stainless steel	B19, B27, BT19, BT27
9 970 257	Lift-up gable bath cover made of stainless steel	B33



#### Assembly frames

Order No.	Description	Suitable for
9 970 229	Stainless steel bridge including assembly frame	C-BT5, C-B5
9 970 228	Stainless steel bridge including assembly frame	C-BT19/27, C-B13/17/19/27





 $\label{eq:hollow} \textbf{balls} \hspace{0.2cm} \text{to reduce heat loss, evaporation, oxygen input, odors, action of light}$ 

Order No.	Description	Suitable for
8 970 010	Hollow balls, Polypropylen $^{\circ}$ , 20 mm Ø, 1000 pcs. (up to +100 °C, for water only)	C, CD

Test tube racks made of stainless steel, up to +150 °C

Order No.	Description	Suitable for
9 970 320	Test tube rack for 30 tubes 100 x 17 mm dia.	B5, BT5
9 970 321	Test tube rack for 42 tubes 75 x 12/13 mm dia.	B5, BT5
9 970 322	Test tube rack for 42 tubes 40 x 10/11 mm dia.	B5, BT5
9 970 323	Test tube rack for 10 Falcon tubes 50 ml	B5, BT5

Test tube racks  $% \left( {{{\rm{Test}}}} \right) = {{\rm{Test}}} \left( {{{\rm{Test}}}} \right)$  made of high grade plastic, up to +100 °C

Order No.	Description	Suitable for
9 970 300	Test tube rack for 60 tubes 100 x 16/17 mm dia.	B13, B17, B19, B27, B33, BT19, BT27
9 970 301	Test tube rack for 90 tubes 75 x 12/13 mm dia.	B13, B17, B19, B27, B33, BT19, BT27
9 970 303	Test tube rack for 21 tubes 30 mm dia.	B13, B17, B19, B27, B33, BT19, BT27

	J.K	
	X	
		c
	10	
11		
6.4		
-		
100	- 6	
1	-	-
		-
		-

Order No.	BT5	BT9	BT19	BT27	B5	B13	B17	B19	B27	B33	B39
9 970 320	1	-	-	-	1	-	-	-	-	-	-
9 970 321	1	-	-	-	1	-	-	-	-	-	-
9 970 322	1	-	-	-	1	-	-	-	-	-	-
9 970 323	1	-	-	-	1	-	-	-	-	-	-
9 970 300	-	-	1	3	-	1	1	3	3	6	-
9 970 301	-	-	1	3	-	1	1	3	3	6	-

#### Immersion-height adjustable platforms

Order No.	Description	Suitable for
9 970 502	Immersion-height adjustable platform	B19, B27
9 970 503	Immersion-height adjustable platform	B13, B17

## Heating Circulators Accessories





### Universal bath attachment clamp

Order No.	Description	Suitable for
9 970 420	Bath attachment clamp for wall thickness up to 30 mm	C, CD
	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
Pump set	for external temperature applications	
Order No.	Description	Suitable for
9 970 140	Pump set (Pump connectors M16x1)	CD



#### Stand attachment for laboratory stands

Order No.	Description	Suitable for
9 970 022	Stand attachment with rod 200x12 mm dia.	C, CD



#### Heat exchangers / Cooling installations

Order No.	Description	Suitable for
9 970 240	Bath cover with built-in heat exchanger	BC4, BC6
9 970 242	Bath cover with built-in heat exchanger	BC12
9 970 100	Assembly cooling coil for counter-cooling with tap water	CD-BT5/19/27, CD-B5/13/17/19/27/33/39
9 970 101	Installation cooling coil for counter-cooling with tap water	C, C-BT5/9/19/27, C-B5/13/17/19/27, CD

### **CR®Tubing** (-30 ... +120 °C)

Order No.	Description	Suitable for
8 930 008	1 m, 8 mm inner dia.	CD
8 930 010	1 m, 10 mm inner dia.	CD
8 930 012	1 m, 12 mm inner dia.	CD

#### Viton<sup>®</sup>Tubing (-35 ... +200 °C)

Order No.	Description	Suitable for
8 930 108	1 m, 8 mm inner dia.	CD
8 930 110	1 m, 10 mm inner dia.	CD
8 930 112	1 m, 12 mm inner dia.	CD







Tubing insulation (-50...+100 °C)

Order No.	Description	Suitable for
8 930 410	1 m, for tubing 8 - 10 mm inner dia.	CR <sup>®</sup> / Viton <sup>®</sup> Tubing
8 930 412	1 m, for tubing 12 mm inner dia.	CR <sup>®</sup> / Viton <sup>®</sup> Tubing

### Tube clamps

Order No.	Description	Suitable for
8 970 480	2 Tube clamps, size 1	CR <sup>®</sup> / Viton <sup>®</sup> Tubing 8 mm inner dia.
8 970 481	2 Tube clamps, size 2	CR <sup>®</sup> / Viton <sup>®</sup> Tubing 10 - 12 mm inner dia.



Order No.	Description	Suitable for
8 930 220	0.5 m Metal tubing, 2 fittings M16x1 female	CD
8 930 221	1.0 m Metal tubing, 2 fittings M16x1 female	CD
8 930 222	1.5 m Metal tubing, 2 fittings M16x1 female	CD
8 930 223	3.0 m Metal tubing, 2 fittings M16x1 female	CD

### Adapters and connectors

Order No.	Description	Suitable for
8 970 446	2 Barbed fittings for tubing 8 mm inner dia.	CD
8 970 447	2 Barbed fittings for tubing 10 mm inner dia.	CD
8 970 445	2 Barbed fittings for tubing 12 mm inner dia.	CD
8 970 443	1 Adapter M16x1 male to M16x1 male	CD
8 970 490	2 Collar nuts M16x1 female	CD
8 970 442	2 Elbow fittings 90°, M16x1 female/male	CD
8 890 004	2 Adapters M16x1 female to NPT 1/4" male	CD
8 890 005	2 Adapters M16x1 female to NPT 1/4" female	CD
8 890 006	2 Adapters M16x1 female to NPT 3/8" male	CD
8 890 007	2 Adapters M16x1 female to NPT 3/8" female	CD
8 890 008	2 Adapters M16x1 female to NPT 1/2" male	CD
8 890 009	2 Adapters M16x1 female to NPT 1/2" female	CD
8 890 010	2 Adapters M16x1 male to NPT 1/4" female	CD
8 891 008	1 Adapter M16x1 male to BSP 1/2" female	CD
8 891 009	1 Adapter M16x1 male to BSP 3/4" female	CD
8 890 011	2 Adapters M16x1 female to tube 1/4" male	CD
8 890 012	2 Adapters M16x1 female to tube 3/8" male	CD
8 890 013	2 Adapters M16x1 female to tube 1/2" male	CD
8 890 024	2 Adapters M16x1 female to M16x1 female	CD

## Heating Circulators Accessories



#### Shut-off valves for loop circuit

Order No.	Description	Suitable for
8 970 457	Shut-off valve (-30 °C +200 °C), M16x1	CD
8 970 456	Shut-off valve (-10 °C +100 °C), M16x1	CD

#### Twin distributing adapters with barbed fittings

Order No.	Description	Suitable for
8 970 470	Twin distributing adapter with barbed fittings	Tubing 8 mm inner dia.
8 970 471	Twin distributing adapter with barbed fittings	Tubing 12 mm inner dia.
9 970 242	Bath cover with built-in heat exchanger	BC12
8 970 473	Twin distributing adapter M16x1 female to 2 x M16x1 male	CD



EasyTEMP Software Software for instrument control, data recording and visualization

Order No.	Description	Suitable for
8 901 102	EasyTEMP Software (free of charge at www.julabo.com)	CD
8 901 105	EasyTEMP Professional Software, incl. USB-Dongle	CD
9 900 110	USB interface cable 2m type A-B	CD



#### Calibration and manufacturer's certificates

Order No.	Description	Suitable for
8 902 901	1-Point manufacturer's calibration certificate	C, CD
8 902 903	3-Point manufacturer's calibration certificate	C, CD
8 902 905	5-Point manufacturer's calibration certificate	C, CD
8 903 015	Manufacturer's Testing Certificate for JULABO units w/o cooling units	C, CD

#### IQ/OQ Documentation for Equipment Qualification



Order No.	Description	Suitable for
2 310 110	IQ/OQ Documentation, Category 1	C, CD



#### Preventative Maintenance Contracts

Order No.	Description	Suitable for
2 350 100	Preventative Maintenance Contract Standard includes the following ser- vices: Visual inspection, technical diagnostics, data analysis, BlackBox, testing of tube connections and bath fluid, thorough cleaning of conden- ser and other components, testing of temperature stability and sensor ca- libration, testing/measuring of pump and cooling capacity (depending on model) and firmware update (if no hardware adjustment is required)	C, CD
2 350 110	Preventative Maintenance Contract Premium includes all services listed above as well as spare parts and labor required for installation or repla- cement	C, CD

Julata

adalut C.I.S.





## GERMANY Headquarters

JULABO GmbH Eisenbahnstraße 45 77960 Seelbach Germany Tel. +49 (0) 7823 51-0 Fax +49 (0) 7823 24 91 info.de@julabo.com www.julabo.com

ITALY JULABO Italia Srl. www.julaboitalia.it

#### UK JULABO UK, Ltd.

www.julabo.com

#### FRANCE JULABO France

www.julabo.com

NETHERLANDS JULABO Nederland B.V. www.julabo.com

#### NORTH AMERICA

JULABO USA, Inc. www.julabo.com

#### JAPAN JULABO Japan Co., Ltd. www.julabo-japan.co.jp

KOREA JULABO Korea Co., Ltd. www.julabo-korea.co.kr

CHINA JULABO Technology (Beijing) Co., Ltd. www.julabo.com.cn

#### LATIN AMERICA

JULABO Sudamérica www.julabo-latinamerica.com

#### SINGAPORE

JULABO Singapore Pte., Ltd. www.julabo.com

INDIA JULABO India www.julabo.com

Plus more than 100 partner distributors worldwide