

Heating Circulators



Heating Circulators

DYNEO DD heating immersion circulators and heating circulators

for working temperatures from +20 °C to +200 °C

DYNEO heating circulators feature professional technology for demanding applications. These instruments facilitate internal temperature control in the bath or control of externally connected applications. The closed bath tanks are high-quality insulated.

- Models for internal and external applications from 3 to 26 liters
- Continuously adjustable, powerful pressure pump
- Flow rate 27 l/min, supply pressure 0.7 bar
- Easy change-over from internal to external circulation and vice versa
- Large color TFT display, multi-lingual user interface
- Ease of use via central rotary dial
- Integrated programmer
- External Pt100 sensor connection
- USB data port
- RS232 interface or analog interface (optional)
- Built-in drain tap for easy and safe drainage
- High-quality thermal insulation of the bath tank
- To adapt the DYNEO heating circulators to your individual application, we offer a comprehensive range of accessories (racks, bath lids, tubing, adapters, and more).



DYNEO™ DD

Order No. 9 021 000

Working temperature range °C¹⁾ +20 ... +200

Temperature stability °C ±0.01

Heating capacity kW 2

Circulation capacity l/min bar
Flow rate / Pressure 8 ... 27 0.1 ... 0.7

Dimensions cm W × L × H
13.2 × 16 × 35.5



Applications

External temperature applications, e.g., in combination with jacketed reaction vessels, distillation apparatuses, mini-plant applications, photometers, refractometers, and more. Temperature control applications of samples and objects in the internal bath.



DYNEO™ DD-BC4

Order No.	9 021 504		
Working temperature range °C ¹⁾	+20 ... +200		
Temperature stability °C	± 0.01		
Heating capacity kW	2		
Pump capacity	l/min	bar	
Flow rate / Pressure	8 ... 27	0.1 ... 0.7	
Bath opening / Bath depth cm	W × L / D	13 × 15 / 15	
Filling volume liters	3 ... 4.5		
Dimensions cm	W × L × H	23 × 41 × 42	



DYNEO™ DD-BC6

Order No.	9 021 506		
Working temperature range °C ¹⁾	+20 ... +200		
Temperature stability °C	± 0.01		
Heating capacity kW	2		
Pump capacity	l/min	bar	
Flow rate / Pressure	8 ... 27	0.1 ... 0.7	
Bath opening / Bath depth cm	W × L / D	13 × 15 / 20	
Filling volume liters	4.5 ... 6		
Dimensions cm	W × L × H	24 × 44 × 47	



DYNEO™ DD-BC12

Order No.	9 021 512		
Working temperature range °C ¹⁾	+20 ... +200		
Temperature stability °C	± 0.01		
Heating capacity kW	2		
Pump capacity	l/min	bar	
Flow rate / Pressure	8 ... 27	0.1 ... 0.7	
Bath opening / Bath depth cm	W × L / D	22 × 15 / 20	
Filling volume liters	8.5 ... 12		
Dimensions cm	W × L × H	33 × 49 × 47	

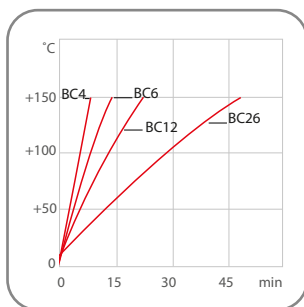


DYNEO™ DD-BC26

Order No.	9 021 526		
Working temperature range °C ¹⁾	+20 ... +200		
Temperature stability °C	± 0.01		
Heating capacity kW	2		
Pump capacity	l/min	bar	
Flow rate / Pressure	8 ... 27	0.1 ... 0.7	
Bath opening / Bath depth cm	W × L / D	26 × 35 / 20	
Filling volume liters	19 ... 26		
Dimensions cm	W × L × H	39 × 62 × 48	

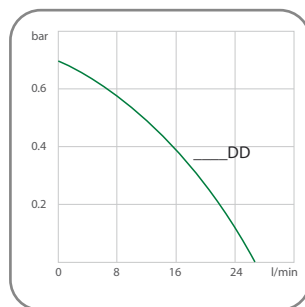
Heat-up time

Bath fluid: Thermal



Pump capacity

Bath fluid: Water



¹⁾ For temperature applications near or below ambient temperature: use a cooling coil or JULABO immersion cooler.

Heating Circulators Accessories

JULABO Thermal Bath Fluids

JULABO Thermal bath fluids have been carefully chosen following 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 and heat transfer characteristics of the Thermal fluids are specifically selected for use with JULABO CORIO temperature control instruments.

Advantages

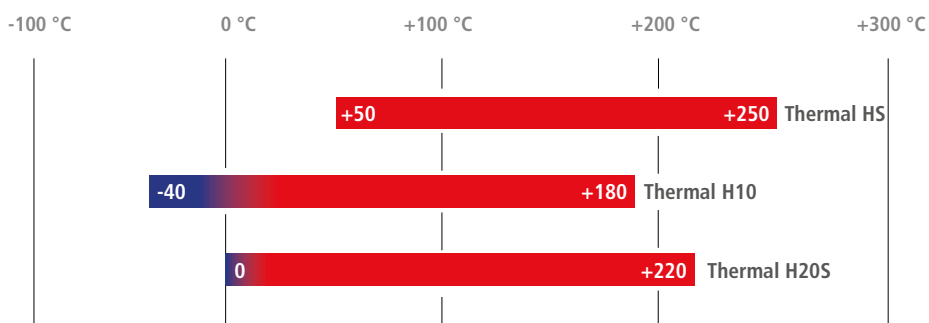
- Wide temperature ranges
- Low viscosity
- High stability
- Good heat conductivity
- Minimum odor
- Long fluid life



Makes routine laboratory work easier.

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

Working temperature ranges





Thermal HS

Order No. 5 liters	8 940 103
Order No. 10 liters	8 940 102
Working temperature range °C	+50 ... +250
Flash point °C	>+250
Fire point °C	+360
Viscosity, (kinematic at +20 °C) mm ² /s	50 mm ² /s
Density (at +20 °C) g/cm ³	0.97 g/cm ³
Pour point °C	<-60
Boiling point °C	-
Ignition temperature °C	>+400
Color	light brown

Thermal H10

Order No. 5 liters	8 940 115
Order No. 10 liters	8 940 114
Working temperature range °C	-40 ... +180
Flash point °C	>+165
Fire point °C	+220
Viscosity, (kinematic at +20 °C) mm ² /s	10
Density (at +20 °C) g/cm ³	0.93
Pour point °C	<-60
Boiling point °C	+288
Ignition temperature °C	+370
Color	clear

Thermal H20S

Order No. 5 liters	8 940 109
Order No. 10 liters	8 940 108
Working temperature range °C	0 ... +220
Flash point °C	>+200
Fire point °C	+264
Viscosity, (kinematic at +20 °C) mm ² /s	20
Density (at +20 °C) g/cm ³	0.95
Pour point °C	-70
Boiling point °C	+424
Ignition temperature °C	+385
Color	light brown

JULABO Thermal bath fluids based on silicone ...

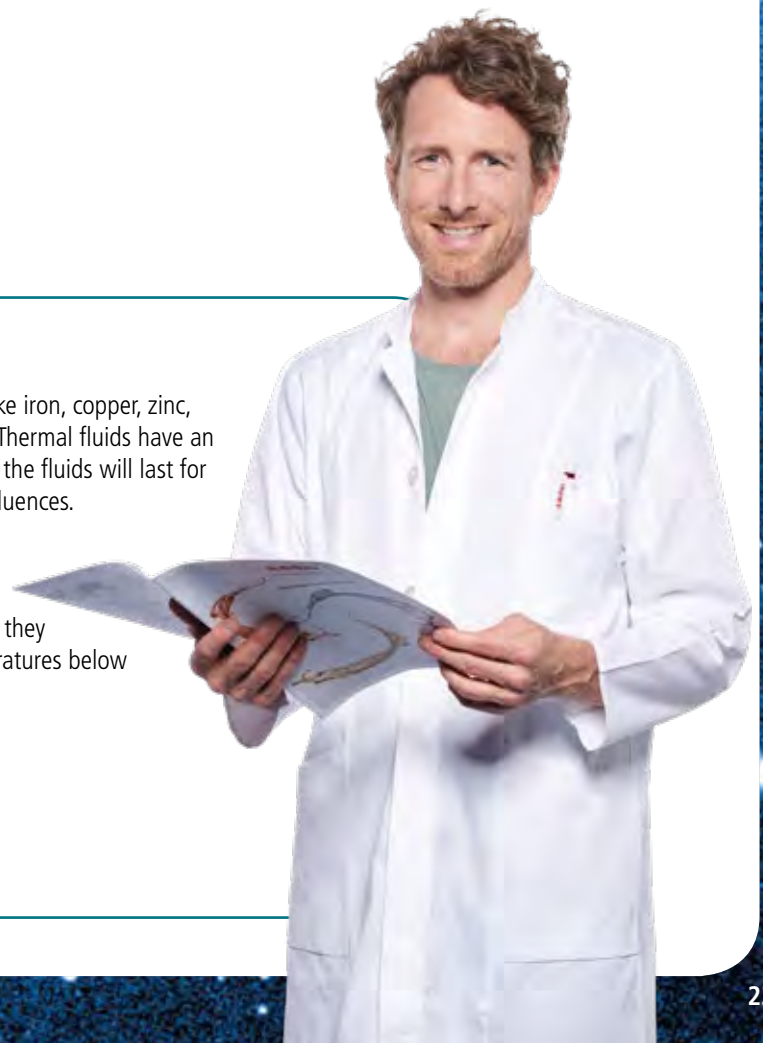
... are chemically inert substances which do not affect metals like iron, copper, zinc, aluminum, chrome or nickel. Compared to other fluids, JULABO Thermal fluids have an extraordinarily low electrical conductivity. When properly stored, the fluids will last for 12 months and longer as they are not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

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

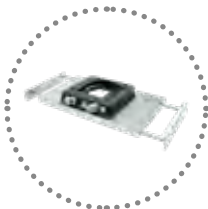


Heating Circulator Accessories



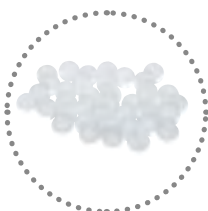
Water bath protective media to prevent the formation of algae and bacteria and **descaling agent**

Order no.	Description	Suitable for
8 940 006	Aqua Stabil, 6 bottles, 100 ml each	DYNEO
8 940 012	Aqua Stabil, 12 bottles, 100 ml each	DYNEO
9 940 200	Descaling agent, 1 liter	DYNEO



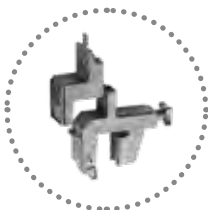
Extendable bridge

Order no.	Description	Suitable for
9 970 202	Extendable bridge, extendable from 330 mm to 680 mm with assembly frame	DYNEO



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

Order no.	Description	Suitable for
8 970 010	Hollow balls, Polypropylene®, 20 mm dia., 1000 pcs (up to +100 °C, for water only)	DYNEO



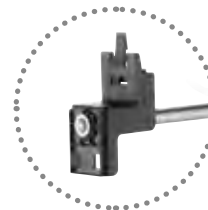
Universal bath attachment clamp

Order no.	Description	Suitable for
9 970 420	Bath attachment clamp for wall thickness up to 30 mm	DYNEO



Pump set for external temperature applications

Order no.	Description	Suitable for
9 970 141	Pump set (pump connections M16×1)	DYNEO



Stand attachment for laboratory stands

Order no.	Description	Suitable for
9 970 022	Stand attachment with rod 200x12 mm dia.	DYNEO



Heat exchangers / Cooling installations

Order no.	Description	Suitable for
9 970 240	Bath lid with built-in heat exchanger	DD-BC4, DD-BC6
9 970 242	Bath lid with built-in heat exchanger	DD-BC12
9 970 100	Installation cooling coil for counter-cooling with cooling water for installation into the existing assembly frame	DYNEO
9 970 101	Add-on cooling coil for counter-cooling with cooling water for mounting on circulator head and use with the universal bath attachment clamp (without assembly frame)	DYNEO



Lockable bath cover

Order No.	Description	Suitable for
9 970 243	Lockable bath cover	DD-BC12



CR® tubing (-30 °C ... +120 °C)

Order no.	Description	Suitable for
8 930 008	1 m, 8 mm ID	DYNEO
8 930 010	1 m, 10 mm ID	DYNEO
8 930 012	1 m, 12 mm ID	DYNEO



Viton® tubing (-35 °C ... +200 °C)

Order no.	Description	Suitable for
8 930 108	1 m, 8 mm ID	DYNEO
8 930 110	1 m, 10 mm ID	DYNEO
8 930 112	1 m, 12 mm ID	DYNEO



PTFE tubing (-60 °C ... +180 °C)

Order no.	Description	Suitable for
8 930 140	PTFE tubing 8 mm ID × 10 mm OD per meter	DYNEO
8 930 142	PTFE tubing 12 mm ID × 14 mm OD per meter	DYNEO



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

Order no.	Description	Suitable for
8 930 410	1 m, for tubing 8 - 10 mm ID	CR® / Viton® tubing
8 930 412	1 m, for tubing 12 mm ID	CR® / Viton® tubing



Tube clamps

Order no.	Description	Suitable for
8 970 480	2 Tube clamps, size 1	CR® / Viton® tubing 8 mm ID
8 970 481	2 Tube clamps, size 2	CR® / Viton® tubing 10 - 12 mm ID



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

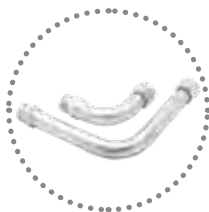
Order no.	Description	Suitable for
8 930 220	0.5 m metal tubing, 2 fittings M16×1 female	DYNEO
8 930 221	1 m metal tubing, 2 fittings M16×1 female	DYNEO
8 930 222	1.5 m metal tubing, 2 fittings M16×1 female	DYNEO
8 930 223	3 m metal tubing, 2 fittings M16×1 female	DYNEO
8 930 224	2 m metal tubing, 2 fittings M16×1 female	DYNEO

Heating Circulator Accessories



Adapters and connectors

Order no.	Description	Suitable for
8 970 446	2 Barbed fittings for tubing 8 mm ID	DYNEO
8 970 447	2 Barbed fittings for tubing 10 mm ID	DYNEO
8 970 445	2 Barbed fittings for tubing 12 mm ID	DYNEO
8 970 443	1 Adapter M16×1 male to M16×1 male	DYNEO
8 970 490	2 Collar nuts M16×1 female	DYNEO
8 970 442	2 Elbow fittings 90°, M16×1 female/male	DYNEO
8 970 448	2 Elbow fittings 90°, M16×1 male/female, side length 1 × 54 mm / 1 × 120 mm	DYNEO
8 890 004	2 Adapters M16×1 female to NPT 1/4" male	DYNEO
8 890 005	2 Adapters M16×1 female to NPT 1/4" female	DYNEO
8 890 006	2 Adapters M16×1 female to NPT 3/8" male	DYNEO
8 890 007	2 Adapters M16×1 female to NPT 3/8" female	DYNEO
8 890 008	2 Adapters M16×1 female to NPT 1/2" male	DYNEO
8 890 009	2 Adapters M16×1 female to NPT 1/2" female	DYNEO
8 890 010	2 Adapters M16×1 male to NPT 1/4" female	DYNEO
8 891 008	1 Adapter M16×1 male to BSP 1/2" female	DYNEO
8 891 009	1 Adapter M16×1 male to BSP 3/4" female	DYNEO
8 890 011	2 Adapters M16×1 female to tube 1/4" male	DYNEO
8 890 012	2 Adapters M16×1 female to tube 3/8" male	DYNEO
8 890 013	2 Adapters M16×1 female to tube 1/2" male	DYNEO
8 890 024	2 Adapters M16×1 female to M16×1 female	DYNEO



Shut-off valves for loop circuit



Order no.	Description	Suitable for
8 970 456	Shut-off valve (-10 °C ... +100 °C), M16×1	DYNEO
8 970 457	Shut-off valve (-30 °C ... +200 °C), M16×1	DYNEO
8 970 850	Shut-off valve (-60...+200°C), M16×1	DYNEO

Distributing adapters



Order no.	Description	Suitable for
8 970 470	Twin distributing adapter with barbed fittings	Tubing 8 mm ID
8 970 471	Twin distributing adapter with barbed fittings	Tubing 12 mm ID
8 970 472	Twin distributing adapter with barbed fittings	Tubing 10 mm ID
8 970 473	Twin distributing adapter M16×1 female to 2 × M16×1 male	DYNEO

Castor platform

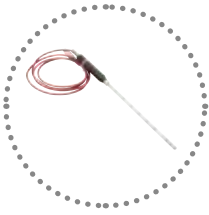


Order No.	Description	Suitable for
8 910 040	Castor platform	DYNEO

Connection plugs



Order no.	Description	Suitable for
8 980 131	External Pt100 sensor plug	DYNEO
8 980 133	STANDBY plug, 3-pin	DYNEO with analog interfaces (option)
8 980 135	Alarm plug, 5-pin	DYNEO with analog interfaces (option)
8 980 136	REG-EPROG plug 6-pin	DYNEO with analog interfaces (option)



External Pt100 sensors

Order no.	Description	Suitable for
8 981 003	External Pt100 sensor, 200 × 6 mm, diameter, st. steel, 1.5 m cable	DYNEO
8 981 006	External Pt100 sensor, 20 × 2 mm, st. steel, 1.5 m cable	DYNEO
8 981 010	External Pt100 sensor, 300 × 6 mm, diameter, st. steel, 1.5 m cable	DYNEO
8 981 013	External Pt100 sensor, 600 × 6 mm, st. steel/PTFE coated, 3 m cable	DYNEO
8 981 014	External Pt100 sensor, 1200 × 6 mm, st. steel/PTFE coated, 3 m cable	DYNEO
8 981 015	External Pt100 sensor, 300 × 6 mm, st. steel/PTFE coated, 3 m cable.	DYNEO
8 981 016	External Pt100 sensor, 900 × 6 mm, st. steel/PTFE coated, 3 m cable.	DYNEO
8 981 017	External Pt100 sensor 200 × 6 mm, st. steel/PTFE coated, 3 m cable.	DYNEO
8 981 020	M+R in-line Pt100 sensor, 1.5 m cable	DYNEO
8 981 103	3.5 m Extension cable for Pt100 sensor, Lemos-a-type.	DYNEO



Software and hardware for instrument control, data recording, and visualization, interfaces

Order no.	Description	Suitable for
8 901 102	EasyTEMP Software (free of charge at www.julabo.com)	DYNEO
8 901 105	EasyTEMP Professional Software, incl. USB Dongle	DYNEO
9 900 110	USB cable 2 m, type A-B	DYNEO
9 900 112	USB 2.0 repeater extension cable, length = 5 m	DYNEO
9 900 114	USB 2.0 repeater extension cable, length = 10 m	DYNEO
8 980 073	RS232 interface cable, length 2.5 m with 9-pin plug/9-pin socket	DYNEO with RS232 interface (option)
8 980 074	RS232 interface cable, length 5 m with 9-pin plug/9-pin socket	DYNEO with RS232 interface (option)
8 980 031	Ethernet / RS232 interface converter	DYNEO with RS232 interface (option)
8 980 032	Ethernet / RS232 interface converter for up to 4 JULABO instruments	DYNEO with RS232 interface (option)
8 980 033	Ethernet / RS232 interface converter for up to 8 JULABO instruments	DYNEO with RS232 interface (option)



Calibration and Manufacturer's Certificates

Order no.	Description	Suitable for
8 902 901	1-point manufacturer's calibration certificate	DYNEO
8 902 903	3-point manufacturer's calibration certificate	DYNEO
8 902 905	5-point manufacturer's calibration certificate	DYNEO
8 903 015	Manufacturer's Testing Certificate for JULABO Units, Category 1	DYNEO



IQ/OQ Documentation

Order no.	Description	Suitable for
2 310 110	IQ/OQ Documentation, Category 1	DYNEO



Maintenance

Order no.	Description	Suitable for
2 350 101	Maintenance JULABO Units, Category 1 Maintenance includes preventive measures that help to maintain functionality, to minimize downtime as well as costs. A JULABO maintenance comprises works such as visual inspection, cleaning, functional test and includes a maintenance report.	DYNEO