

Refrigerated Circulators

DYNEO DD refrigerated circulators

for working temperatures from -50 °C to +200 °C

The DYNEO circulator range focuses on your needs and offers innovative temperature control technology as well as functional solutions for demanding internal and external temperature applications. Either in basic research, in material testing or in technical systems – the DYNEO refrigerated circulators offer functional solutions for every requirement and budget.

- Models suitable for internal and external applications
- Optimized cooling coil design provides more space in the bath
- 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 knob
- Integrated programmer
- External Pt100 sensor connection
- USB data port
- RS232 interface or analog interfaces (optional)
- Built-in drain tap for easy and safe drainage



DYNEO™ DD-200F

| | | |
|--|------------------|---------------|
| Order No. | 9 021 701 | |
| Working temperature range °C | -20 ... +200 | |
| Temperature stability °C | ± 0.01 | |
| Heating capacity kW | 2 | |
| Cooling capacity kW (Bath fluid: Ethanol) | +20 °C | 0 °C |
| | 0.2 | 0.15 |
| | -10 °C | -20 °C |
| | 0.1 | 0.02 |
| 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 | |
| Dimensions cm | W × L × H | |
| | 23 × 39 × 65 | |



DYNEO™ DD-201F

| | | |
|--|------------------|---------------|
| Order No. | 9 021 702 | |
| Working temperature range °C | -20 ... +200 | |
| Temperature stability °C | ± 0.01 | |
| Heating capacity kW | 2 | |
| Cooling capacity kW (Bath fluid: Ethanol) | +20 °C | 0 °C |
| | 0.2 | 0.15 |
| | -10 °C | -20 °C |
| | 0.1 | 0.02 |
| 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 | |
| Dimensions cm | W × L × H | |
| | 44 × 41 × 44 | |

DYNEO. Intelligent, simple control.

The DYNEO series offers a simple, modern control option with the unique rotary knob. The entire menu, all functions and settings are controlled directly via the central rotary knob on the front of the circulator.

The user receives tactile feedback on his inputs via the rotary knob. DYNEO's new, sophisticated operating concept allows easier, faster and more convenient access to all functions.





DYNEO™ DD-300F

| | | | |
|--|---------------------------|---------------|--|
| Order No. | 9 021 703 | | |
| Working temperature range °C | -25 ... +200 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| Cooling capacity kW (Bath fluid: Ethanol) | +20 °C | 0 °C | |
| | 0.3 | 0.27 | |
| | -10 °C | -20 °C | |
| | 0.19 | 0.08 | |
| 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 | | |
| Dimensions cm | W × L × H 24 × 42 × 66 | | |



DYNEO™ DD-310F

| | | | |
|--|---------------------------|---------------|--|
| Order No. | 9 021 713.N1* | | |
| Working temperature range °C | -30 ... +200 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| Cooling capacity kW (Bath fluid: Ethanol) | +20 °C | 0 °C | |
| | 0.3 | 0.27 | |
| | -10 °C | -20 °C | |
| | 0.21 | 0.12 | |
| 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 | | |
| Dimensions cm | W × L × H 23 × 40 × 65 | | |



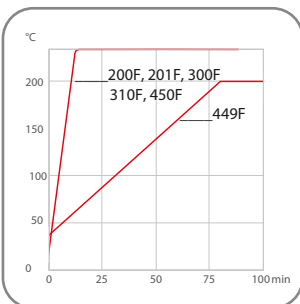
DYNEO™ DD-450F

| | | | |
|--|---------------------------|---------------|--|
| Order No. | 9 021 714.N1* | | |
| Working temperature range °C | -30 ... +200 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| Cooling capacity kW (Bath fluid: Ethanol) | +20 °C | 0 °C | |
| | 0.44 | 0.37 | |
| | -10 °C | -20 °C | |
| | 0.27 | 0.16 | |
| 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 | | |
| Dimensions cm | W × L × H 23 × 40 × 65 | | |

*also available with synthetic refrigerant (replace .N1 with .S1 in order number)

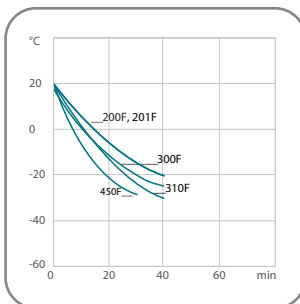
Heat-up time

Bath fluid: Thermal



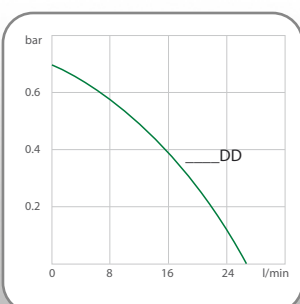
Cool-down time

Bath fluid: Ethanol



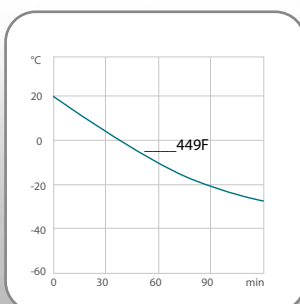
Pump capacity

Bath fluid: Water



Cool-down time

Bath fluid: Ethanol



DYNEO™ DD-449F

| | | | |
|--|---------------------------|---------------|--|
| Order No. | 9 021 716.N1 | | |
| Working temperature range °C | -32 ... +200 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| Cooling capacity kW (Bath fluid: Ethanol) | +20 °C | 0 °C | |
| | 0.44 | 0.27 | |
| | -10 °C | -20 °C | |
| | 0.35 | 0.2 | |
| Pump capacity | l/min | bar | |
| Flow rate / Pressure | 8 ... 27 | 0.1 ... 0.7 | |
| Bath opening / Bath depth cm | W × L / D 28 × 35 / 20 | | |
| Filling volume liters | 21 ... 30 | | |
| Dimensions cm | W × L × H 37 × 59 × 69 | | |

Refrigerated Circulators



DYNEO™ DD-600F

| | | | |
|---|---------------------------|---------------|---------------|
| Order No. | 9 021 704 | | |
| Working temperature range °C | -35 ... +200 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| | +20 °C | 0 °C | -10 °C |
| Cooling capacity kW (Bath fluid: Ethanol) | 0.6 | 0.44 | 0.27 |
| | -20 °C | -30 °C | -40 °C |
| | 0.16 | 0.04 | - |
| Pump capacity | l/min | bar | |
| Flow rate / Pressure | 8 ... 27 | 0.1 ... 0.7 | |
| Bath opening / Bath depth cm | W × L / D 22 × 15 / 15 | | |
| Filling volume liters | 5 ... 7.5 | | |
| Dimensions cm | W × L × H 33 × 47 × 69 | | |



DYNEO™ DD-601F

| | | | |
|---|---------------------------|---------------|---------------|
| Order No. | 9 021 705 | | |
| Working temperature range °C | -35 ... +200 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| | +20 °C | 0 °C | -10 °C |
| Cooling capacity kW (Bath fluid: Ethanol) | 0.6 | 0.44 | 0.27 |
| | -20 °C | -30 °C | -40 °C |
| | 0.16 | 0.04 | - |
| 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 ... 10 | | |
| Dimensions cm | W × L × H 33 × 47 × 74 | | |



DYNEO™ DD-900F

| | | | |
|---|---------------------------|---------------|---------------|
| Order No. | 9 021 706 | | |
| Working temperature range °C | -38 ... +200 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| | +20 °C | 0 °C | -10 °C |
| Cooling capacity kW (Bath fluid: Ethanol) | 0.9 | 0.8 | 0.52 |
| | -20 °C | -30 °C | -40 °C |
| | 0.31 | 0.11 | - |
| 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 | 21 ... 30 | | |
| Dimensions cm | W × L × H 39 × 62 × 75 | | |



Applications

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



DYNEO™ DD-1000F

| | | | |
|--|---------------------------|---------------|---------------|
| Order No. | 9 021 707 | | |
| Working temperature range °C | -50 ... +200 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| Cooling capacity kW (Bath fluid: Ethanol) | +20 °C | 0 °C | -10 °C |
| | 1 | 0.96 | 0.73 |
| | -20 °C | -30 °C | -40 °C |
| | 0.51 | 0.25 | 0.11 |
| Pump capacity | l/min | bar | |
| Flow rate / Pressure | 8 ... 27 | 0.1 ... 0.7 | |
| Bath opening / Bath depth cm | W × L / D 18 × 13 / 15 | | |
| Filling volume liters | 5 ... 7.5 | | |
| Dimensions cm | W × L × H 42 × 49 × 74 | | |



DYNEO™ DD-1000FW

| | | | |
|--|---------------------------|---------------|---------------|
| Order No. | 9 021 727 | | |
| Working temperature range °C | -50 ... +200 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| Cooling capacity kW (Bath fluid: Ethanol) | +20 °C | 0 °C | -10 °C |
| | 1 | 0.96 | 0.73 |
| | -20 °C | -30 °C | -40 °C |
| | 0.51 | 0.25 | 0.11 |
| Pump capacity | l/min | bar | |
| Flow rate / Pressure | 8 ... 27 | 0.1 ... 0.7 | |
| Bath opening / Bath depth cm | W × L / D 18 × 13 / 15 | | |
| Filling volume liters | 5 ... 7.5 | | |
| Dimensions cm | W × L × H 42 × 49 × 74 | | |

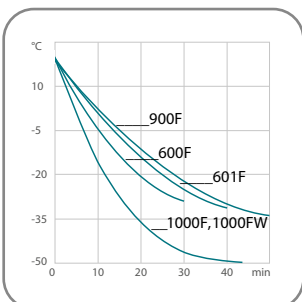


DYNEO™ DD-1001F

| | | | |
|--|---------------------------|---------------|---------------|
| Order No. | 9 021 708 | | |
| Working temperature range °C | -38 ... +100 | | |
| Temperature stability °C | ±0.01 | | |
| Heating capacity kW | 2 | | |
| Cooling capacity kW (Bath fluid: Ethanol) | +20 °C | 0 °C | -10 °C |
| | 1 | 0.85 | 0.6 |
| | -20 °C | -30 °C | -40 °C |
| | 0.32 | 0.12 | - |
| Pump capacity | l/min | bar | |
| Flow rate / Pressure | 8 ... 27 | 0.1 ... 0.7 | |
| Bath opening / Bath depth cm | W × L / D 35 × 41 / 30 | | |
| Filling volume liters | 42 ... 56 | | |
| Dimensions cm | W × L × H 45 × 64 × 95 | | |

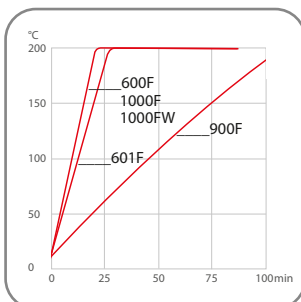
Cool-down time

Bath fluid: Ethanol



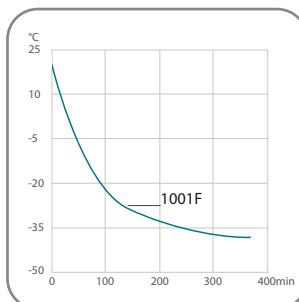
Heat-up time

Bath fluid: Thermal



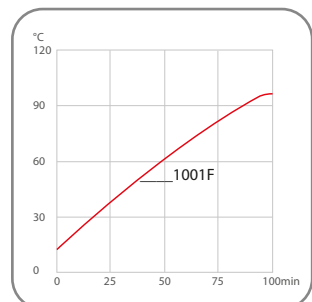
Cool-down time

Bath fluid: Ethanol



Heat-up time

Bath fluid: Thermal



Refrigerated Circulator Accessories

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 and heat conductivity of the Thermal fluids are specifically selected for use with JULABO DYNEO 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.



Thermal G

Order No. 5 liters 8 940 125

Order No. 10 liters 8 940 124

Working temperature range °C -30 ... +80

Flash point °C -

Fire point °C -

Viscosity, (kinematic at +20 °C) mm²/s 4.13 mPas

Density (at +20 °C) g/cm³ 1.0681 g/cm³

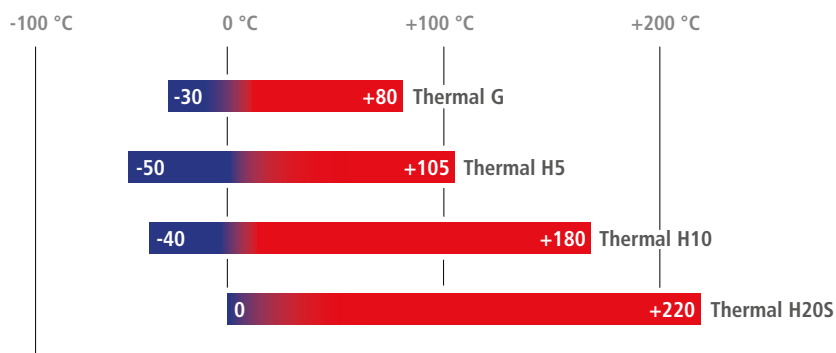
Pour point °C -44

Boiling point °C +109

Ignition temperature °C +410

Color light yellow

Working temperature ranges





Thermal H5

| | |
|---|--------------|
| Order No. 5 liters | 8 940 107 |
| Order No. 10 liters | 8 940 106 |
| Working temperature range °C | -50 ... +105 |
| Flash point °C | >+120 |
| Fire point °C | +142 |
| Viscosity, (kinematic at +20 °C) mm ² /s | 5.66 |
| Density (at +20 °C) g/cm ³ | 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 | -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 ...

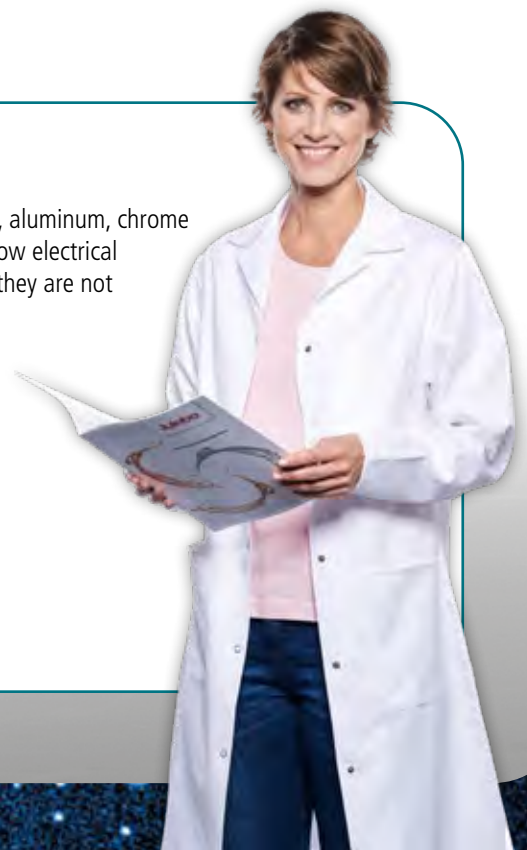
... are chemically inert substances which do not affect metals like iron, copper, zinc, aluminum, chrome or nickel. Compared to other fluids, JULABO Thermal fluids have an extraordinarily low electrical conductivity. When properly stored, the fluids will last for 12 months and longer as they are not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



Refrigerated 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 |



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 |



Heat exchangers / Cooling installations

| Order no. | Description | Suitable for |
|-----------|---------------------------------------|---|
| 9 970 240 | Bath lid with built-in heat exchanger | DD-200F, DD-201F, DD-300F, DD-310F, DD-450F |
| 9 970 242 | Bath lid with built-in heat exchanger | DD-600F, DD-601F, DD-1000F |



Lockable bath cover / Condensation trap

| Order No. | Description | Suitable for |
|-----------|---------------------------------|---|
| 9 970 243 | Lockable bath cover | DD-200F, DD-201F, DD-300F, DD-310F, DD-450F |
| 9 970 700 | Condensation trap with bath lid | DD-600F, DD-601F, DD-1000F, DD-1000FW |



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 |

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



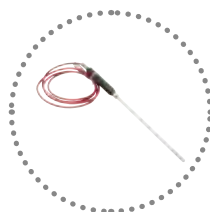
| Order no. | Description | Suitable for |
|-----------|--|--------------|
| 8 970 456 | Shut-off valve (-10 °C ... +100 °C), M16×1 | DYNEO |
| 8 970 457 | Shut-off valve (-30 °C ... +200 °C), M16×1 | DYNEO |
| 8 970 850 | Shut-off valve (-60...+200°C), M16×1 | DYNEO |

Refrigerated Circulator Accessories



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 |



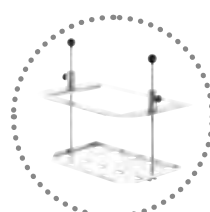
External Pt100 sensors

| 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. Usable for working temperatures from -75 °C to 250 °C. Without handle. | DYNEO |
| 8 981 016 | External Pt100 sensor, 900 × 6 mm, st. steel/PTFE coated, 3 m cable. Usable for working temperatures from -75 °C to 250 °C. Without handle. | DYNEO |
| 8 981 017 | External Pt100 sensor 200 × 6 mm, st. steel/PTFE coated, 3 m cable. Usable for working temperatures from -75 to +250 °C. Without handle | DYNEO |
| 8 981 020 | M+R in-line Pt100 sensor, 1.5 m cable (measurement and control in external system). | DYNEO |
| 8 981 103 | 3.5 m Extension cable for Pt100 sensor, Lemosa-type. | DYNEO |



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

| Order no. | Description | Suitable for |
|-----------|--|---|
| 9 970 320 | Test tube rack for 30 tubes 100 × 17 mm dia. | DD-200F, DD-201F, DD-300F, DD-310F, DD-450F |
| 9 970 321 | Test tube rack for 42 tubes 75 × 12/13 mm dia. | DD-200F, DD-201F, DD-300F, DD-310F, DD-450F |
| 9 970 322 | Test tube rack for 42 tubes 40 × 10/11 mm dia. | DD-200F, DD-201F, DD-300F, DD-310F, DD-450F |
| 9 970 323 | Test tube rack for 10 Falcon tubes 50 ml | DD-200F, DD-201F, DD-300F, DD-310F, DD-450F |



Immersion-height adjustable platforms

| Order no. | Description | Suitable for |
|-----------|--------------------------------------|------------------|
| 9 970 506 | Immersion-height adjustable platform | DD-449F, DD-900F |



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) |



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 |
| 8 903 025 | Manufacturer's Testing Certificate for JULABO Units, Category 2 | DYNEO |



IQ/OQ Documentation

| Order no. | Description | Suitable for |
|-----------|---------------------------------|--------------|
| 2 310 120 | IQ/OQ Documentation, Category 2 | DYNEO |



Maintenance

| Order no. | Description | Suitable for |
|-----------|---|--------------|
| 2 350 102 | Maintenance JULABO Units, Category 2 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 |