From Eye to Insight

Leica MICROSYSTEMS

LIVE ON STAGE

Live Cell Microscopy

Environmental Equipment for

Leica Inverted and Upright Microscopes

November 2016

LIVE ON STAGE

A STAGES

STAGES WITHOUT TEMPERATURE CONTROL (A1-A11)

A1 – Fixed Stage Plate **11522078**
(248 mm x 204 mm) for DMi8 (compatible with DMI- and DMIR-series)

- high-quality aluminum
- ceramic-coated
- extremely scratchproof
- precisely plane-parallel
- three point mounting

guarantee long-term stability regardless of environmental conditions. The Fixed Stage Plate is supplied with a round 88 mm insert with a 10 mm opening (for additional inserts with different openings see "A3 – 88 mm Round Inserts")

Fixed Stage Plate

• Material:	Aluminum, black anodized
• Inserts:	"A3 – 88 mm Round Inserts"
• Options:	attachable object guide
• Dimensions:	(L x W x H) in mm: 248 x 204 x 20
• Includes:	88 mm insert ring with an opening of 10 mm
• Compatible:	"B5 – Object guide for fixed stages" "A3 – 88 mm Round Inserts"
• Weight:	1.45 kg

A1
Fixed Stage Plate (248 mm x 204 mm)
for DMI-Series
Art.-No.: **11522078**

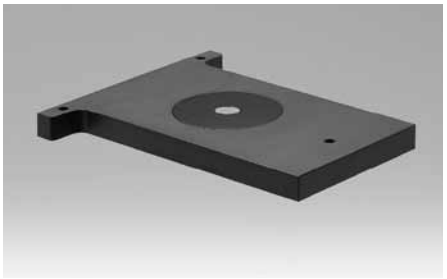
A2 – Slim Fixed Stage Plate **11522015**
(248 mm x 112 mm) for DMi8 (compatible with DMI- and DMIR-series)

- for micromanipulation
- high-quality aluminum
- ceramic-coated
- extremely scratchproof
- precisely plane-parallel
- three point mounting

guarantee long-term stability regardless of environmental conditions. The Slim Fixed Stage Plate is supplied with a round 88 mm insert with a 10 mm opening (for additional inserts with different openings see "A3 – 88 mm Round Inserts").

Slim Fixed Stage Plate

• Material:	Aluminum, black anodized
• Inserts:	"A3 – 88 mm Round Inserts"
• Options:	attachable object guide
• Dimensions:	(L x W x H) in mm: 248 x 112 x 20
• Includes:	88 mm insert ring with an opening of 10 mm
• Compatible:	"B1 – Object guide for slim fixed stages" "A3 – 88 mm Round Inserts"
• Weight:	0.90 kg



A2
Slim Fixed Stage Plate (248 mm x 112 mm)
for DMI-Series
Art.-No.: **11522015**

A3
88 mm Round Inserts with different opening
Art.-No.: **11522083-86**

A4
Manual 3-Plate Stage 127mm x 83 mm
Art.-No.: **11522076**

A3 – 88 mm Round Inserts
with different openings for fixed stage plates, slim 3-plates stages and 160 x 110 mm plates

Insert with 5 mm opening	11522083
Insert with 10 mm opening	11522084
Insert with 20 mm opening	11522085
Insert with 40 mm opening	11522086

88 mm Round Openings

• Material:	Aluminum, black anodized; steel
• Dimensions:	88 mm diameter
• Weight:	0.15 kg
• Compatible:	"A1 – Fixed Stage Plate" "A2 – Slim Fixed Stage Plate" "A5 – Slim Manual 3-plate-stage 40 mm x 40 mm" "A7 – Slim Motorized 3-Plate-Stage 35 x 35 mm" "C4 – Metal Plate lowered by 4 mm" "C7 – Plane stage insert"

A4 – Manual 3-Plate-Stage 127 mm x 83 mm **11522076**
for DMi8 (compatible with DMI- and DMIR-series)
Fast and accurate access to interesting areas of the sample is achieved by the adaptation of the manual 3-plate-stage onto a Leica DMi8 Microscope. It allows rapid and vibration free scanning even at highest microscope magnifications.

- positioning range 127 mm x 83 mm
- for 160 mm x 110 mm inserts
- high-quality aluminum
- extremely scratchproof
- precisely plane-parallel
- three point mounting

guarantee long-term stability regardless of environmental conditions. The ergonomic operating handle with low position coaxial x/y controls does not interfere with microscope controls or camera ports. The manual 3-plate-stage comes without an insert. Inserts for different vessels and applications (see Chapter: C).

Manual 3-plate-stage

• Material:	Aluminum, black anodized
• Compatible Inserts:	Rectangular 160 x 110 mm (see Chapter: C)
• Positioning range:	127 mm x 83 mm
• Dimensions:	(L x W x H) in mm: 365 x 335 x 27
• Requirements:	Insert
• Weight:	1.90 kg

A5 – Slim Manual 3-plate-stage 40 mm x 40 mm **11522077**
for DMi8 (compatible with DMI- and DMIR-series)
Fast and accurate access to interesting areas of the sample is achieved by the adaptation of the slim manual 3-plate-stage onto a Leica DMi8-Microscope. It allows rapid and vibration free scanning even in combination with micromanipulation.

- positioning range 40 mm x 40 mm
- including an 88 mm round insert (10 mm opening)
- extremely scratchproof
- precisely plane-parallel

guarantee long-term stability regardless of environmental conditions. The ergonomic operating handle with low position coaxial x/y controls does not interfere with microscope controls or camera ports. The slim manual 3-plate-stage is supplied with a round 88 mm insert with a 10 mm opening. Additional inserts with different openings see "A3 – 88 mm Round Inserts".

Slim manual 3-plate-stage

• Material:	Aluminum, black anodized
• Compatible Inserts:	"A3 – 88 mm Round Inserts"
• Positioning range:	40 x 40 mm
• Dimensions:	(L x W x H) in mm: 235 x 325 x 27
• Includes:	88 mm insert ring with an opening of 10 mm
• Weight:	1.40 kg

A5
Slim Manual 3-Plate Stage 40 mm x 40 mm
Art.-No.: **11522077**

A6 – Motorized 3-Plate-Stage 127 mm x 83 mm **11525225**
for DMi8 (not compatible with DMI- and DMIR-series)
Fast and accurate access to interesting areas of the sample is achieved by the adaptation of the regular motorized 3-plate-stage onto a Leica DMi8-Microscope. It allows a predefined vibration free scanning even at highest microscope magnifications.

- positioning range 127 x 83 mm
- for 160 x 110 mm inserts
- extremely scratchproof
- precisely plane-parallel

guarantee long-term stability regardless of environmental conditions. The motorized 3-plate-stage comes without insert. Inserts for different vessels and applications (see Chapter: C).

Motorized 3-plate stage

• Material:	Aluminum, black anodized
• Compatible Inserts:	Rectangular 160 x 110 mm (see Chapter: C)
• Positioning range:	127 x 83 mm
• Resolution:	0,7 µm
• Accuracy:	< 20 µm
• Repeatability:	< 3 µm
• Dimensions:	(L x W x H) in mm: 375 x 330 x 27
• Requirements:	Leica CTR advanced 11525207-11525209 Leica CTR board XY-Basic 11525210 SmartMove 11525115 or STP8000 11525113 Insert
• Weight:	2.90 kg

A6
Motorized 3-Plate Stage 127 mm x 83 mm
Art.-No.: **11525225**

A7
Slim Motorized 3-Plate Stage 40 mm x 40 mm
Art.-No.: **11522069**

A7 – Slim Motorized 3-Plate-Stage 35 x 35 mm **11522069**
for DMi8 (not compatible with DMI- and DMIR-series)
Fast and accurate access to interesting areas of the sample is achieved by the adaptation of the slim motorized 3-plate-stage onto a Leica DMi8-Microscope. It allows vibration free scanning even in combination with micromanipulation.

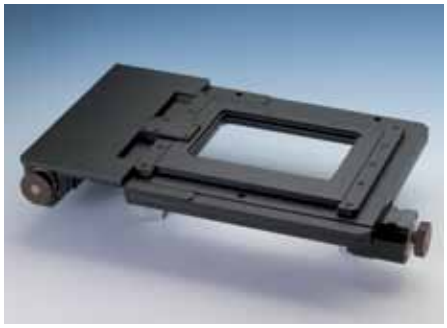
- positioning range 35 x 35 mm
- including an 88 mm round insert (10 mm opening)
- high-quality aluminum
- extremely scratchproof
- precisely plane-parallel
- three point mounting

guarantee long-term stability regardless of environmental conditions. The slim motorized 3-plate-stage is supplied with a round 88 mm insert with a 10 mm opening. Additional inserts with different openings see "A3 – 88 mm Round Inserts".

Slim motorized 3-plate-stage

• Material:	Aluminum, black anodized
• Compatible Inserts:	Round 88 mm inserts (see "A3 – 88 mm Round Inserts")
• Positioning range:	35 x 35 mm
• Resolution:	0,7 µm
• Accuracy:	< 20 µm
• Repeatability:	< 3 µm
• Dimensions:	(L x W x H) in mm: 240 x 330 x 27
• Includes:	88 mm insert ring with an opening of 10 mm
• Requirements:	Leica CTR advanced 11525207-11525209 Leica CTR board XY-Basic 11525210 SmartMove 11525115 or STP8000 11525113
• Weight:	2.40 kg

Motorized scanning stages have been designed for applications where high stage accuracy and repeatability is required in combination with smooth and quiet running. The use of top quality materials and manufacturing with tight tolerances guarantees the optimum performance even after long periods of operation. Depending on the application, scanning stages with different lead screw pitches (1 mm, 2 mm or 4 mm) and thus different travel speed are utilized (smaller lead screw pitch ensures higher precision and lower speed). Leica offers the 1 mm lead screw pitch as standard.



A8
Leica Scanning Stage 127 x 83
Art.-No.: **11522100**

A8 – Leica Scanning Stage 127x83 **11522100**
for DMi8 (compatible with DMI- and DMIR-series)

- positioning range 127 mm x 83 mm
- for 160 x 110 mm inserts
- high-quality aluminum
- extremely scratchproof
- precisely plane-parallel
- three point mounting
- both motors on the bottom

guarantee long-term stability regardless of environmental conditions. A new safety concept ensures no clamping and minimizes the risk of injury. The Leica Scanning stage 127 x 83 is delivered without insert. Inserts for different vessels and applications (see Chapter: C).

Leica Scanning stage 127x83

- Material: Aluminum, black anodized
- Compatible Inserts: Rectangular 160 x 110 mm (see Chapter: C)
- Positioning range: 127 x 83 mm
- Max. Travel speed: 60 mm/sec
- Resolution: 0.02 µm
- Accuracy: +/– 3 µm
- Repeatability < 1 µm
- Dimensions: (L x W x H) in mm: 450 x 270 x 20
- Requirements: Insert (see Chapter: C)
  Leica CTR advanced 11525207-11525209
  Leica CTR board XY-advanced 11525211
  SmartMove 11525115 or STP8000 11525113
- Compatible with: Water Immersion Micros Dispenser 11640019
  SuperZ 11640260, all i8 Incubator Series
- Weight: 4.90 kg

A9 – SCAN^{plus} IM 130x85 **11525407**

for DMi8 (compatible with DMI- and DMIR-series)

Scanning stage IM with encoder for inverted microscopes Leica DMI3000-6000 B, Tango 2 Desktop-Control, 2-Axis, 1,25 A, ROHS-conform, including documentation and software, with USB interface.

- positioning range 130 mm x 85 mm
- for 160 x 110 mm inserts
- high-quality aluminum
- extremely scratchproof
- precisely plane-parallel
- three point mounting
- both motors on the bottom
- with USB cable, stage cables, SmartMove-Y-cable

The SCAN^{plus} IM 130x85 is delivered without insert. Inserts for different vessels and applications (see Chapter: C).

A9
SCAN^{plus} IM 130x85
Art.-No.: **11525407**

SCAN^{plus} IM 130x85

- Material: Aluminum, black anodized
- Compatible Inserts: Rectangular 160 x 110 mm (see Chapter: C)
- Spindle lead: 2 mm
- Positioning range: 130 x 85 mm
- Max. Travel speed: 120 mm/sec
- Resolution: 0.01 µm
- Accuracy: +/– 1 µm
- Repeatability < 0,5 µm
- Dimensions: (L x W x H) in mm: 450 x 270 x 20
- Requirements: Insert (see Chapter: C)
- Compatible with: Water Immersion Micro Dispenser 11640019
  SuperZ 11640260, all i8 Incubator Series
- Weight: 4.90 kg

Tango 2 Desktop-Control
2-Axis, 1,25 A
ROKS-conform, incl. documentation and software with

- USB2.0 interface
- Ergodrive 2
- stage and USB2.0 cables

Note:
Always connect the Tango controller to an completely empty USB-bank.

A11 – LMT200 high precision scanning stage V3 **11525406**
incl. SP Box
for DMi8 (compatible with DMI- and DMIR-series)

- direct positioning in 2 axes with 2 linear motors
- absolute measuring of the position, no referencing necessary
- Hydra controller with Ethernet, RS-232 and USB communication
- positioning range 120 x 80 mm, for 160 x 110 mm inserts
- extremely scratchproof
- precisely plane-parallel, three point mounting
- both motors on the bottom

guarantee long-term stability regardless of environmental conditions. The LMT200 linear motor stage combines practical design with high precision and stability. The flat top design facilitates the use of micromanipulators as well as environmental chambers.
It also allows easy, unrestricted access to the specimen. The LMT200 is delivered without insert. Inserts for different vessels and applications (see Chapter: C).
A unique safety concept ensures no clamping, motor stops, and can be started again without rebooting the system. Unique feature: User can position the stage directly by hand for quicker multi position setup.

ITK LMT200

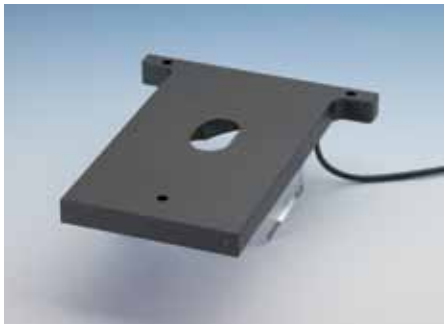
• Material:	Aluminum, black anodized
• Compatible Inserts:	Rectangular 160 x 110 mm (see Chapter: C) for 11522151: no plane inserts
• Positioning range:	120 x 80 mm
• Max. Travel speed:	500 mm/sec
• Resolution:	5 nm
• Accuracy:	+/– 0.5 µm
• Repeatability	< 0.25 µm
• Dimensions:	(L x W x H) in mm: 492 x 270 x 20
• Includes:	Hydra control unit and hand-wheel
• Requirements:	Insert
• Compatible with:	SuperZ 11640260, all i8 Incubator series
• Weight:	3.50 kg

A11
ITK IMT200 stage V3 120 x 80, incl. Hydra controller and multifunctional hand-wheel
Art.-No.: **11525406**

A11
Hydra controller

A11
Multifunctional hand-wheel

STAGES WITH TEMPERATURE CONTROL – HEATING (A22)



A22
Slim Fixed Heating Stage
(248 mm x112mm) for Leica DMi8-Series
Art.-No.: **11533026**

The heating stages are one solid piece with high thermal capacity which guarantees homogeneous temperature distribution. The object guide (see "B1 – Object guide for slim fixed stages"/"B5 – Object guide for fixed stages") and/or other accessories can be attached. All commonly used cultivation vessels can be put onto this stage. The opening for the objective is as small as possible to optimize the heat transfer. Temperature control is carried out with the "F1 – TempController 2000-1" or "F2 – TempController 2000-2".

- extremely scratchproof
- precisely plane-parallel

guarantee long-term stability regardless of environmental conditions.

A22 – Slim Fixed Heating Stage 248 mm x 112 mm **11533026**
for DMi8 (compatible with DMI- and DMIR-series)
The slim fixed heating stage is prepared for the right-handed adaptation of a mechanical object guide. (see "B1 – Object guide for slim fixed stages")

Slim Fixed Stage	
• Material:	Aluminum, black anodized
• Options:	attachable object guide
• Dimensions:	(L x W x H) in mm: 248 x 112 x 20
• Oval stage opening:	20 x 30 mm
• Voltage/power:	20 V DC, 2.2 A max
• Heating:	Transistor lost heat
• T-Control accuracy:	+/- 0,1°C
• Control Range:	3°C above ambient temperature up to 60°C
• Requirements:	F1–TempController 2000-1/F2–TempController 2000-2
• Compatible:	"B1 – Object guide for slim fixed stages"
• Weight:	1.60 kg

STAGES WITH TEMPERATURE CONTROL – COOLING (A31-A32)

The cooling stages are one solid piece with high thermal capacity which guarantees homogeneous temperature distribution. The object guide (see "B1 – Object guide for slim fixed stages"/"B5 – Object guide for fixed stages") and/or other accessories can be attached. All commonly used cultivation vessels can be put onto this stage.
The opening for the objective is as small as possible to optimize the temperature transfer. In case of temperatures below approx. +10°C the use of a dehumidifier and/or of dried air (to prevent condensation) is recommended. Temperature control is carried out with the cooling thermostat.

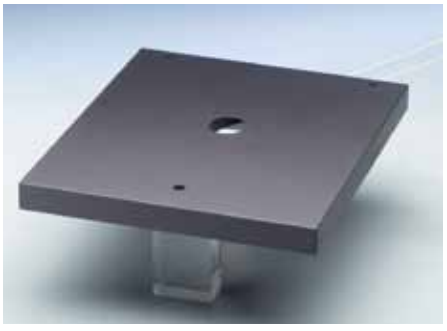
- extremely scratchproof
- precisely plane-parallel

guarantee long-term stability regardless of environmental conditions.

A31 – Fixed Cooling Stage 248 mm x 212 mm **11522013**
for DMi8 (compatible with DMI- and DMIR-series)
The fixed cooling stage is prepared for the right-handed adaptation of a mechanical object guide (see "B5 – Object guide for fixed stages").

Fixed cooling Stage

• Material:	Aluminum, black anodized
• Options:	attachable object guide
• Dimensions:	(L x W x H) in mm: 248 x 212 x 20
• Oval stage opening:	20 x 30 mm
• Cooling:	Inlet and outlet openings for liquids
• Control Range:	see specification of thermostat
• Requirements:	"D5 – Thermostat"
• Compatible:	"B5 – Object guide for fixed stages"
• Weight:	2.30 kg

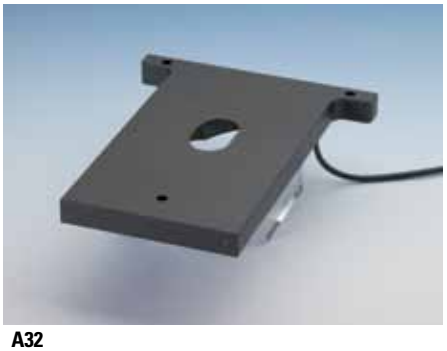


A31
Fixed Cooling Stage
(248 mm x 212 mm) for Leica DMi8-Series
Art.-No.: **11522013**

A32 – Slim Fixed Cooling Stage 248 mm x 112 mm **11522017**
for DMi8 (compatible with DMI- and DMIR-series)
The slim fixed cooling stage is prepared for the right-handed adaptation of a mechanical object guide. (see "B1 – Object guide for slim fixed stages")

Slim Fixed cooling Stage

• Material:	Aluminum, black anodized
• Options:	attachable object guide
• Dimensions:	(L x W x H) in mm: 248 x 112 x 20
• Oval stage opening:	20 x 30 mm
• Control Range:	see specification of thermostat
• Requirements:	"D5 – Thermostat"
• Compatible:	"B1 – Object guide for slim fixed stages"
• Weight:	1.60 kg



A32
Slim Fixed Cooling Stage
(248 mm x 112 mm) for Leica DMi8-Series
Art.-No.: **11522017**

FAST Z-MOVEMENT – (A41)

A42/A43
SuperZ widefield with insert universal
for Leica DMi8-Series
Art.-No.: **11640260/11640410**

High precision and fast z-positioner for widefield systems with inverted microscopes. Objective independent z-movement. 250 microns travel range. 61nm step size. Includes insert for SuperZ fix. High-speed controlled by Extension board 7000.

A42 – SuperZ widefield **11640260**
for DMi8 (compatible with DMI- and DMIR-series) **for 3 plate- and scanning stage**
Requires Sequenzer Board 11525213

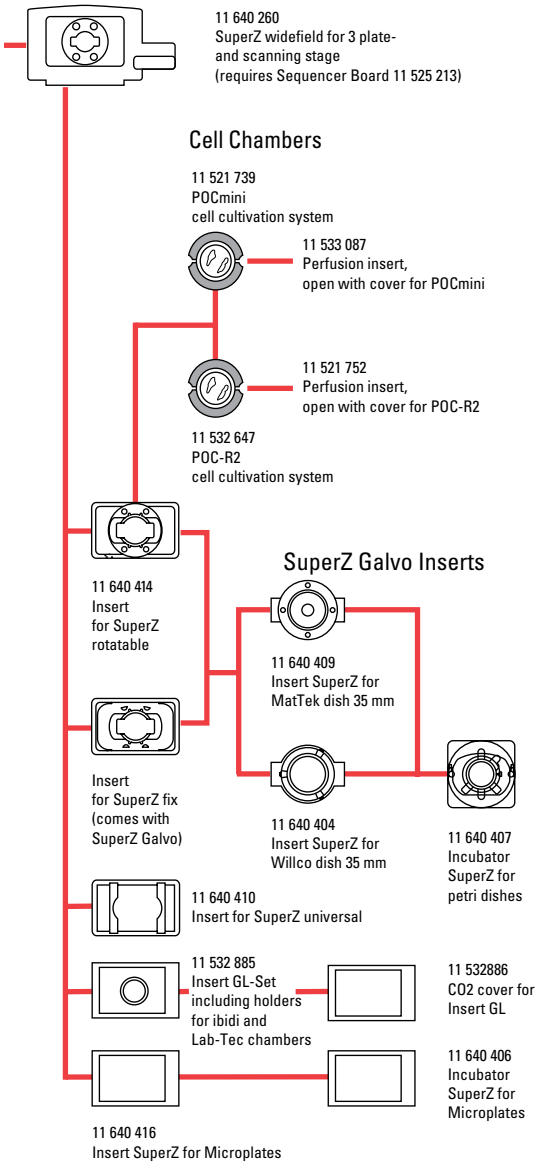
Inserts

A43 – Insert for SuperZ rotatable **11640414**

A44 – Insert for SuperZ universal **11640410**

C22 – Insert GL-Set **11532885**
including holders for ibidi and Lab-Tec chambers

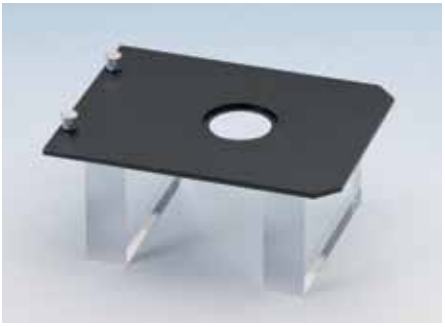
A45 – Insert SuperZ for microplates **11640416**



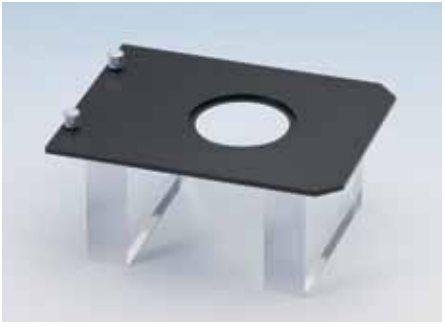
A45
Insert SuperZ for microplates
Art.-No.: **11640416**

B OBJECT GUIDES AND HOLDING FRAMES FOR INVERTED MICROSCOPES

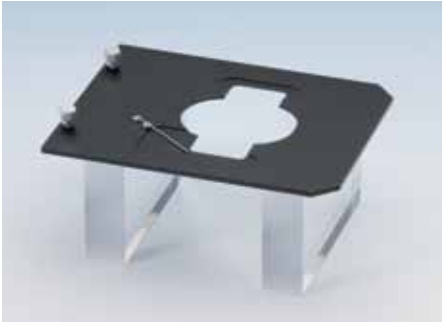
B1
Object guide for Slim Fixed Stages
Art.-No.: **11522018**



B2
Holding frame for Petri dishes Ø 30
Art.-No.: **11522042**



B3
Holding frame for Petri dishes Ø 50
Art.-No.: **11522043**



B4
Holding frame for glass slides 76 x 26
Art.-No.: **11522044**

OBJECT GUIDES AND HOLDING FRAMES FOR SLIM FIXED STAGES

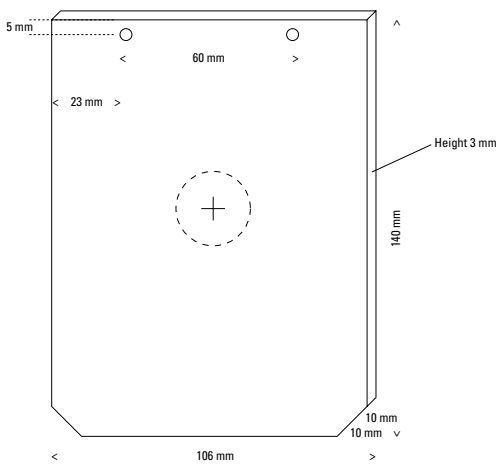
Object guides are an ideal adaptation for fixed, heated or even cooled stages. With only 2 fixing screws the object guide can be easily and securely adapted to the fixed stage for right-handed or in case of regular sized stages even for left-handed use. The ergonomic, low-lying coaxial control drives with universal joint is extremely accurate and sensitive. For precise positioning measurement, different measuring inserts can be fixed onto the objective guide.

B1 – Object guide for slim fixed stages **11522018**
A flexible mechanical device with coaxial drive for x and y for the fixed slim stages to accommodate 3 different inserts (B2-B4) . The ergonomic operating arm is angled forward in low position not interfering with microscope controls or camera ports.

• Material:	Aluminum, black anodized
• Positioning range:	35 x 35 mm.
• Requirements:	"A2 – Slim Fixed Stage Plate" or "A22 – Slim Fixed Heating Stage 248 mm x 112 mm" or "A32 – Slim Fixed Cooling Stage 248 mm x 112 mm"
• Weight:	0.70 kg

B2 – Holding frame for Petri dishes with Ø 30 mm **11522042**
B3 – Holding frame for Petri dishes with Ø 50 mm **11522043**
B4 – Holding frame for glass slides 76 mm x 26 mm **11522044**
The holding frames for the object guide for slim stages are positioned and held by 2 locking screws.

• Material:	Aluminum, black anodized
• Dimensions.	(L x W x H) in mm: 140 x 106 x 3
• Requirements:	"B1 – Object guide for slim fixed stages"
• Compatible:	"A2 – Slim Fixed Stage Plate" or "A22 – Slim Fixed Heating Stage 248 mm x 112 mm" or "A32 – Slim Fixed Cooling Stage 248 mm x 112 mm"
• Weight:	0.10 kg



OBJECT GUIDES AND HOLDING FRAMES FOR FIXED STAGES

B5 – Object guide for fixed stages **11522014**

A flexible mechanical device with coaxial drive for x and y for the fixed stages to accommodate a variety of different inserts (B6-B6ff). The precise snap-in mechanism for the inserts ensures precise fixing of each of the inserts. The ergonomic operating arm in low position not interfering with microscope controls or camera ports. The object guide for fixed stages is compatible with the “Incubator i8” series.

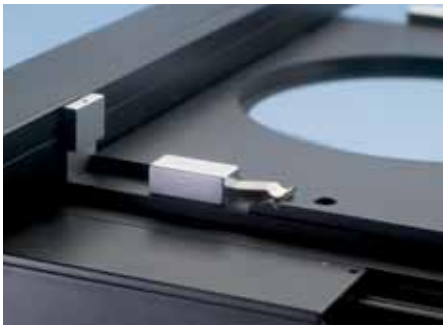
- Material: Aluminum, black anodized
- Positioning range: 127 x 83 mm.
- Requirements: "A1 – Fixed Stage Plate" or "A31 – Fixed Cooling Stage 248 mm x 212 mm"
- Weight: 0.90 kg

B5
Object guide for Fixed Stages
Art.-No.: **11522014**

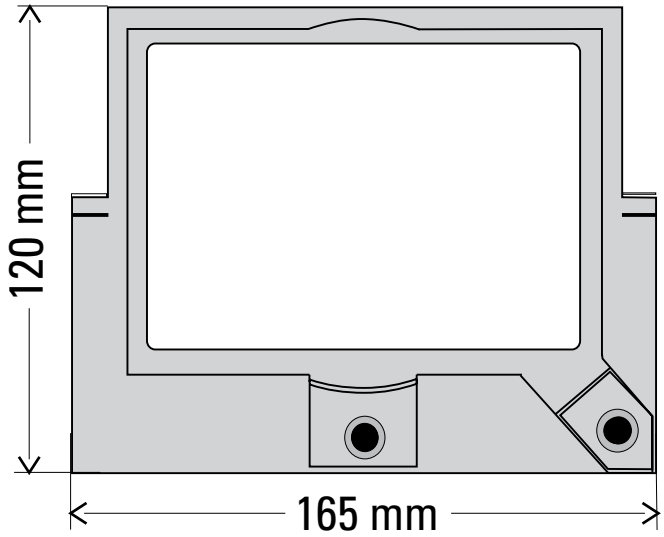
NON HEATED HOLDING FRAMES FOR OBJECT GUIDE FOR REGULAR STAGE

The holding frames for this object guide are fixed with a precise snap-in mechanism. The outer dimensions are: 165 x 100 x 5 mm. There are holders for special vessels available, as well as universal holders with 2 or 4 smooth running moveable brackets with a variable clamping range allowing an easy an quick fixation of different sized dishes or slides. Universal holders are available in heated and non-heated versions.

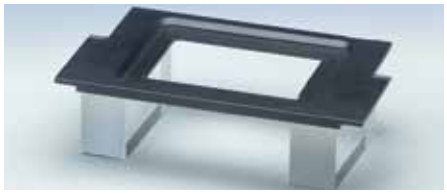
- Material: Aluminum, black anodized



“Snap-in” mechanism

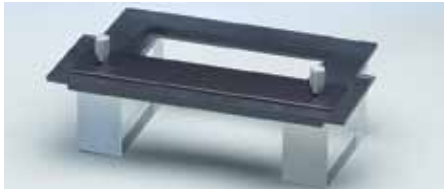


B6 Holder for tissue culture plates(24)
Art.-No.: **11520584**



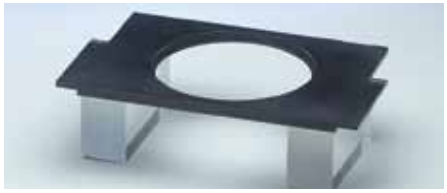
B7 Holder for Terasaki Plates
Art.-No.: **11520585**

B8 Holder for flasks, bottles, plankton chambers (1)
Art.-No.: **11520586**



B9 Holder for flasks, bottles, plankton chambers (2)
Art.-No.: **11520587**

B10 Holder for Micro-Titer Trays
Art.-No.: **11520589**



B11a
Holder for Petri dishes 100”
Art.-No.: **11520590**

B6 – Holder for tissue culture plates (e.g. 24 wells) **11520584**

The one-piece holder for culture plates and trays clicks into the object guide.

- For vessel size: 133.5 x 88.5 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.09 kg
- Type of vessels: Trays, culture chambers, flasks

B7 – Holder for Terasaki Plates **11520585**

The one-piece holder for Terasaki 60 well or 72 well plates with a footprint of 82 mm x 56 mm.

- For vessel size: 56 x 82 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.10 kg
- Type of vessels: Terasaki Trays

B8 – Holder for flasks, bottles or plankton chambers Type1 **11520586**

The one-piece holder for different types of flasks, bottles or plankton chambers.

- For vessel size: 125 x 77 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.09 kg
- Type of vessels: Flasks, bottles, plankton chambers

B9 – Holder for flasks, bottles or plankton chambers Type2 **11520587**

The one-piece holder for different types of flasks, bottles or plankton chambers.

- For vessel size: 104 x 29.5 – 52 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.10 kg
- Type of vessels: Flasks, bottles, plankton chambers

B10 – Holder for Micro-Titer Trays **11520589**

The one-piece insert for 96-well or 120-well Micro-Titer Trays with a common footprint of 127 x 85 mm. X and Y scaling bars are part of the holder and can be fixed onto the object guide. Easy finding of desired well is ensured.

- For vessel size: 127 x 85 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.09 kg
- Type of vessels: Micro-Titer Trays

B11a – Holder for Petri Dish Ø 88 mm **11520590**

The one-piece holder for Petri dishes 100”.

- For vessel size: Ø 88 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.12 kg
- Type of vessels: 100” Petri dishes

B11b – Holder for Petri Dish Ø 54 mm **11520591**

The one-piece holder for Petri dishes 60”.

- For vessel size: Ø 54 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.12 kg
- Type of vessels: 60” Petri dishes

B11c – Holder for Petri Dish Ø 36 mm **11520592**

The one-piece holder for Petri dishes 35".

- For vessel size: Ø 36 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.12 kg
- Type of vessels: 35" Petri dishes

B12 – Holder for slides **11520593**

The one-piece holder for glass slides with max. dimension up to 76 x 26 mm. Two clamps will hold and fix the slides in this frame.

- For vessel size: 76 x 26 mm (3 x 1 inches)
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.13 kg
- Type of vessels: Glass slides

B13 – Universal Holding frame M **11533041**

Frame to fix different Petri dishes, cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel.

- For vessel size: 24-26 x 76-120 mm or Ø 24–68 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.10 kg
- Type of vessels: Petri dishes "35" & "60",
  Glass slides,
  POC-R or POCmini cell cultivation systems,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer)

B14 – Universal Holding frame M-Uthermol™ **11532494**

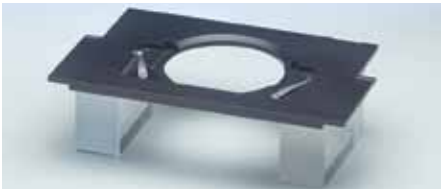
Frame to fix Uthermol™ counting chambers. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the chamber.

- For vessel size: 121 x 43 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.10 kg
- Type of vessels: Uthermol™ counting chambers

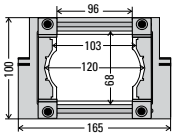
B15 – Universal Holding frame M-Duo **11531798**

Frame to fix 1 or 2 Petri dishes and/or 1 glass slide. This enables the microscopic controlled transfer of selected cells from a Petri dish to a slide.

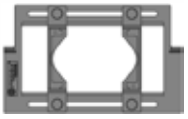
- For vessel size: 1 vessel: 26 x 90 mm or Ø 24–68 mm
  2 dishes: Ø 24–56 mm
  1 slide 1 dish: 76 x 26 mm / Ø 24–40 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.14 kg
- Type of vessels: Petri dishes "35" & "60",
  Glass slides,
  POC-R or POCmini cell cultivation systems,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer)



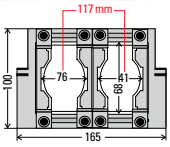
B12
Holder for glass slides
Art.-No.: **11520593**



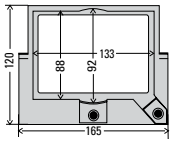
B13
Universal Holding Frame M
Art.-No.: **11533041**



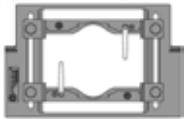
B14
Universal Holding frame
M-Uthermol™
Art.-No.: **11532494**



B15
Universal Holding Frame
M-Duo
Art.-No.: **11531798**



B16
Universal Holding Frame MX
Art.-No.: **11520689**



B17
Universal Holding frame M100
Art.-No.: **11533081**

B16 – Universal Holding frame MX **11520689**

Frame to fix large Petri dishes (87-92 mm) and multiwells. Two lateral clamps allow an easy and quick fixation.

- For vessel size: 125-133 x 82–88 mm or Ø 87–92 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.10 kg
- Type of vessels: Multiwell plates, Petri dishes or "D4 – Cooling/Heating Insert X"

B17 – Universal Holding frame M100 **11533081**

Frame to fix different cultivation vessels (e.g. dishes, flasks or slides, also turned by 90°). Specifically designed for large Petri dishes with a max. Ø of 92 mm. Two smooth running, moveable bridges with a variable clamping range allow an easy and quick fixation of the cell cultivation vessel. The Universal Holding Frame M100 is equipped with two spring clips to provide a firm fit of the vessel and keep it in place, especially when using oil or water immersion objectives. The spring clips can be mounted to a higher when bigger cell cultivation vessels (e. g. Petri dishes "100") are used. The spring clips are easy to assemble or disassemble.

- For vessel size: 24-86 x 24-76 mm or Ø 24–92 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.14 kg
- Type of vessels: Petri dishes "35", "60" & "100",
  Glass slides,
  POC-R2 or POCmini-2 cell cultivation systems,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer),
  Cell Culture Flasks (25 - 40 ml)

HEATABLE HOLDING FRAMES FOR OBJECT GUIDE FOR FIXED STAGE PLATE

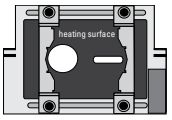
with "B5 – Object guide for fixed stages"

Frame to fix different cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The aluminum frame has a heated aluminum base plate with laminated printed circuit board. The base plate has a circular and/or a rectangular opening. Temperature control is carried out with the "F1 – TempController 2000-1" or "F2 – TempController 2000-2". Experiments with CO_2 -incubation the following frames could be used together with "G5 – CO2-Cover MH" inside the Incubator i8. Non-used opening in the frames must be covered with tape to prevent the loss of CO_2.

B18 – Heatable Universal Holding frame MH 2000 **11533045**

Frame to fix different Petri dishes, cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The base plate of the frame has a circular and a rectangular opening. The spring clips can be mounted to a higher when bigger cell cultivation vessels (e. g. Petri dishes "100") are used. The spring clips are easy to assemble or disassemble.

- For vessel size: 24-26 x 76-120 mm or Ø 24–68 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.2 kg
- Temperature stability: ± 0.1°
- Control range: 3°C above ambient up to 60°C
- Observation Opening: Ø 30 mm and 30 x 10 mm
- Type of vessels: Petri dishes "35" & "60",
  Glass slides,
  POC-R2 or POCmini-2 cell cultivation systems,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer)
- Requirements: "F1 – TempController 2000-1"/"F2 – TempController 2000-2"
- Compatible: "G5 – CO2-Cover MH"

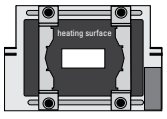


B18
Heatable Universal Holding frame MH 2000
Art.-No.: **115333045**

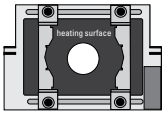
B19 – Heatable Universal Holding frame MH-L 2000 **11533046**

Frame to fix different cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The base plate of the frame has a rectangular opening. The spring clips can be mounted to a higher when bigger cell cultivation vessels (e. g. Petri dishes "100") are used. The spring clips are easy to assemble or disassemble.

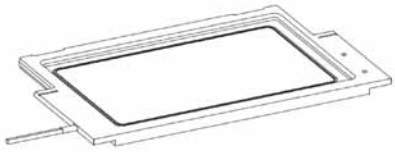
- For vessel size: 24-26 x 76-120 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.2 kg
- Temperature stability: ± 0.1°
- Control range: 3°C above ambient up to 60°C
- Observation Opening: 47 x 21 mm
- Type of vessels: Glass slides,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer)
- Requirements: "F1 – TempController 2000-1"/"F2 – TempController 2000-2"
- Compatible: "G5 – CO2-Cover MH"



B19
Heatable Universal Holding frame MH-L 2000
Art.-No.: **115333046**



B20
Heatable Universal Holding frame MH-R 2000
Art.-No.: **11533047**



B21
Tokaihit, Leica TPX Heating Frame Glass
Art.-No.: **11533257**

B20 – Heatable Universal Holding frame MH-R 2000 **11533047**

Frame to fix different Petri dishes, cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The base plate of the frame has a circular and a rectangular opening. The spring clips can be mounted to a higher when bigger cell cultivation vessels (e. g. Petri dishes "100") are used. The spring clips are easy to assemble or disassemble.

- For vessel size: Ø 24–68 mm
- Requirements: "B5 – Object guide for fixed stages"
- Weight: 0.2 kg
- Temperature stability: ± 0.1°
- Control range: 3°C above ambient up to 60°C
- Observation Opening: Ø 30 mm
- Type of vessels: Petri dishes "35" & "60", POC-R or POCmini cell cultivation systems
- Requirements: "F1 – TempController 2000-1"/"F2 – TempController 2000-2"
- Compatible: "G5 – CO_2-Cover MH"

B21 – Tokaihit, Leica TPX Heating Frame Glass Type F **11533257**

Frame with clear strengthen heated glass. The strengthen glass is applied to glassware to prevent glass breakage caused by objective interference, dish/plate dropping, etc.

When Leica TPX is installed to the microscope stage, the heating plate becomes flush with the stage surface to ensure the easy handling of the specimens and easy operation of the manipulator. This model features a thin are (0.5 mm), which allows its application with Differential Interference Contrast, Modulation Contrast and high magnification objective lenses.

Additional feature of quality control and new temperature regulation of continuous control are included in the system. External sensor and data logging software allows on-site calibration and off-set of plate and/or external sensor. With calibration and data logging feature allows to keep system performance quality high at end. Continuous current control minimizes focus drift/changing light intensity caused by regular on/off control.

Main uses: Temperature control of the specimen in short-term imaging, cell engineering, neuroscience, and genetic engineering under research use.

- For vessel size: No limitation (within 150 x 100 mm)
- Requirements: Objective guide for regular stage, power supply and external sensor (already included)
- Weight: 0.39 kg (+1.3 kg power supply)
- Temperature stability: ± 0.3°C
- Temperature regulation: Continuous current control
- Control range: 5°C above ambient up to 60°C (Controllable temperature setting is less than 50°C)
- Observation opening: 120 x 73.5 mm, whole glass thickness is 0.5 mm
- Type of vessels: All types
- Compatible: "G16 – CO2-Cover TH"

C 160 X 110 MM INSERTS FOR 3-PLATE STAGES AND SCANNING STAGES

The inserts or holders are fixed with a spring snap-in mechanism into the rectangular opening. The outer dimensions of the inserts are: 160 x 110 mm. There are inserts for special vessels available and universal inserts with smooth running moveable brackets with variable clamping ranges, allowing easy and quick fixation of different sized dishes or slides. Alignment screws guarantee plan-parallel adjustment in z-direction.
Material: aluminum, black anodized.
Universal inserts are available in heated and non-heated versions.

NON HEATABLE INSERTS

C1 – Holder for slides **11531433**

The one-piece holder for glass slides with max. dimension up to 76 x 26 mm. Two clamps will hold and fix the slides in this frame.

- For vessel size: 76 x 47 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.18 kg
- Type of vessels: Glass slides (76 x 26 mm or 3 x 1 inches)
- Compatible: No CO_2-Cover

C2 – Holder for Micro-Titer trays **11531434**

The one-piece insert for 96-well or 120-well Micro-Titer Trays with a common footprint of 126 x 85 mm. Firm and secure clamping of the trays is achieved with an integrated clamping device at the right hand side of the insert.

- For vessel size: 127 x 85 mm
- Requirements: 3-plate-stage / Scanning-stage for 160x110 mm inserts
- Weight: 0.13 kg
- Type of vessels: Micro-Titer Trays, T75-flasks
- Compatible: No CO_2-Cover

C3a – Holder for Petri Dish Ø 88.5 mm **11531440**

The one-piece holder for different sizes of Petri dishes.

- For vessel size: Ø 88.5 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.11 kg
- Type of vessels: Large Petri dishes
- Compatible: No CO_2-Cover

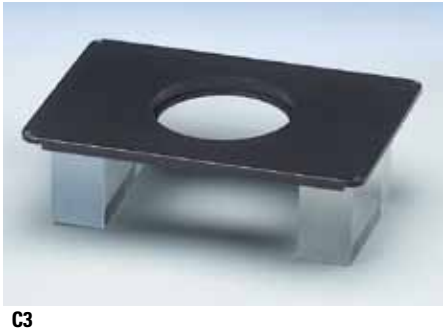
C3b – Holder for Petri Dish Ø 36 mm **11531437**

The one-piece holder for different sizes of Petri dishes.

- For vessel size: Ø 36 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.1 kg
- Type of vessels: Large Petri dishes
- Compatible: No CO_2-Cover

C1
Holder for slides
Art.-No.: **11531433**

C2
Holder for Micro-Titer Tray
Art.-No.: **11531434**



C3
Holder for Petri dish Ø 88.5
Art.-No.: **11531440**

C4
Metal Plate for 88 mm Inserts lowered by 4 mm
Art.-No.: **11600237**

C4 – Metal Plate lowered by 4 mm — 11600237

The one-piece aluminum plate with a round opening for the 88 mm inserts with different holes 5 mm, 10 mm, 20 mm, 40 mm ("A3 – 88 mm Round Inserts"). The plate comes without inserts.

- For vessel size: 20-76 x 20-120 mm or Ø 20–60 mm
- Requirements: 3-plate-stage / Scanning-stage for 160x110 mm inserts "A3 – 88 mm Round Inserts".
- Weight: 0.11 kg
- Type of vessels: No specific, different types
- Compatible: No CO_2-Cover

C5 – Insert for slides, rotatable — 11533265

The one-piece holder for glass slides with max. dimension up to 76 x 26 mm. The slide bracket is rotatable.

- For vessel size: 76 x 47 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.18 kg
- Type of vessels: Glass slides (76 x 26 mm or 3 x 1 inches)
- Compatible: No CO_2-Cover

C6
Glass stage plate
Art.-No.: **11522045**

C6 – Glass stage plate — 11522045

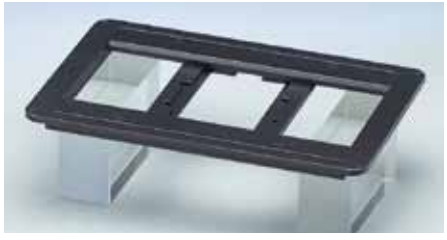
The one-piece glass plate with a round opening (Ø 20 mm) for all sizes of dishes and slides.

- For vessel size: All kind of vessels
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.10 kg
- Type of vessels: No specific, different types
- Compatible: No CO_2-Cover, not for scanning-stages

C7 – Plane stage insert — 11522063

The one-piece holder with a round opening for 88 mm round inserts.

- For vessel size: All kind of vessels
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.10 kg
- Type of vessels: No specific, different types
- Compatible: No CO_2-Cover, not for scanning-stages



C8
Adjustable Universal Holder
Art.-No.: **11531441**

C8 – Adjustable Universal Holder — 11531441

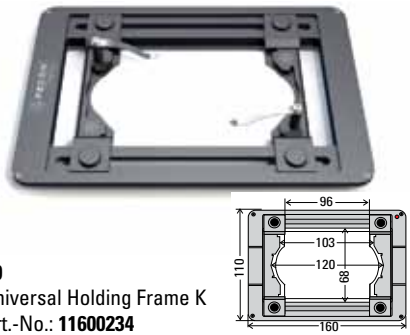
Frame to fix different sized Petri dishes or slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel.

- For vessel size: 26 x 76 mm or Ø 20–68 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.10 kg
- Type of vessels: Petri dishes, glass slides
- Compatible: No CO_2-Cover

C9 – Universal Holding frame K **11600234**

Frame to fix different cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel.
The sides of the frame are depressed for better use in micromanipulation for a flat injection angle.

- For vessel size: 24-26 x 76-120 mm or Ø 24–68 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.10 kg
- Type of vessels: Petri dishes “35” & “60”,
  Glass slides,
  POC-R2 or POCmini-2 cell cultivation systems,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer)
- Compatible: No CO_2-Cover

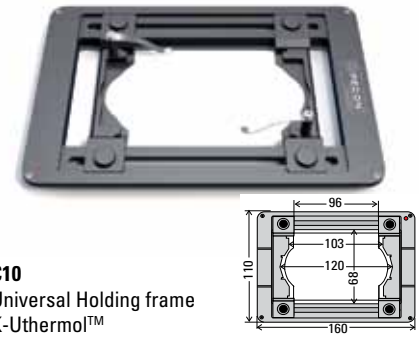


C9
Universal Holding Frame K
Art.-No.: **11600234**

C10 – Universal Holding frame K-Uthermol™ **11532775**

Frame to fix Uthermol™ counting chambers and other cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The sides of the frame are depressed for better use in micromanipulation and a flat injection angle.

- For vessel size: 121 x 43 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.10 kg
- Type of vessels: Uthermol™ counting chambers (121 x 43 mm)
- Compatible: No CO_2-Cover

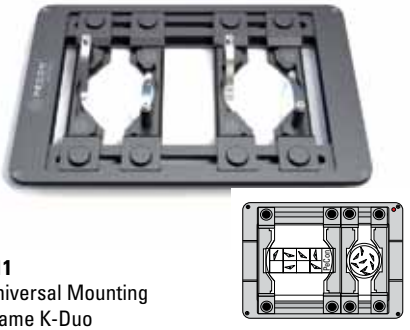


C10
Universal Holding frame
K-Uthermol™
Art.-No.: **11532775**

C11 – Universal Holding frame K-Duo **11532514**

Frame to fix 1 or 2 Petri dishes and/or 1 glass slide. This enables the microscopic controlled transfer of selected cells from a Petri dish to a slide Four smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel.

- For vessel size: 1 vessel: 26 x 90 mm or Ø 24–68 mm
  2 dishes: Ø 24–56 mm
  1 slide 1 dish: 76 x 26 mm / Ø 24–40 mm
- Requirements: 3-plate-stage / Scanning-stage for 160x110 mm inserts
- Weight: 0.14 kg
- Type of vessels: Petri dishes “35” & “60”,
  Glass slides,
  POC-R2 or POCmini-2 cell cultivation systems,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer)
- Compatible: No CO_2-Cover



C11
Universal Mounting
Frame K-Duo
Art.-No.: **11532514**

C13
Universal Holding
frame K100
Art.-No.: **11533042**

C13 – Universal Holding frame K100 **11533042**

Frame to fix different cultivation vessels (e.g. dishes, flasks or slides, also turned by 90°). Specifically designed for large Petri dishes with a max. Ø of 92 mm. Two smooth running, moveable bridges with a variable clamping range allow an easy and quick fixation of the cell cultivation vessel. The Universal Holding Frame K100 is equipped with two spring clips to provide a firm fit of the vessel and keep it in place, especially when using oil or water immersion objectives. The spring clips can be mounted to a higher when bigger cell cultivation vessels (e. g. Petri dishes "100") are used. The spring clips are easy to assemble or disassemble.

• For vessel size:	24-86 x 24-76 mm or Ø 24–92 mm
• Requirements:	3-plate-stage / Scanning-stage for 160 x 110 mm inserts
• Weight:	0.14 kg
• Type of vessels:	Petri dishes "35", "60" & "100", Glass slides, POC-R2 or POCmini-2 cell cultivation systems, Chamber Slide Systems (different manufacturer), Chambered Coverglass Systems (different manufacturer), Cell Culture Flasks (25 – 40 ml), Terasaki-Plate, 4-Well Multiplates
• Compatible:	No CO_2-Cover

NON HEATABLE INSERTS SUITED TO CONTROL CO_2-CONCENTRATION

The following frames are especially suited to control CO_2-concentration in combination with the Incubator i8 2000, a CO_2-Cover and the CO_2-Controller-2000.

The inserts or holders are fixed with a spring snap-in mechanism into the rectangular opening. The outer dimensions of the inserts are: 160 x 110 mm. There are inserts for special vessels available and universal inserts with smooth running moveable brackets with variable clamping ranges, allowing easy and quick fixation of different sized dishes or slides. Alignment screws guarantee plan-parallel adjustment in z-direction. Material: aluminum, black anodized.

Universal Holding frame KM see C115 page 28

C16 – Holding frame Slide Holder(quad) **11532983**

The Slide Holder (quad) for the insertion of 4 slides has been especially designed for chambered slides (besides conventional slides). It features horizontal handling of slides when they are filled with a solution. It is not necessary to insert the slides in a tilted way with the danger of spilling some of the liquid. The slides are fixed in the holder and need not to be touched directly during transport, medium exchange, incubation etc.

- For vessel size: 4 x 76 x 26 mm (3 x 1“)
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.18 kg
- Type of vessels: Glass or chambered slides of approx. 76 x 26 mm (3 x 1”), µ-slides (ibidi®), Lab-Tek™ (Nunc™), Chambered slides (BD Falcon™)
- Compatible: "G14 – CO_2-Cover Quad"

C16
Mounting Frame Slide Holder (quad)
Art.-No.: **11532983**

C17 – Holding frame 6 Petri dishes **11533039**

Frame to hold 6 small (“35”) Petri dishes which can be fixed with pressure springs. Particularly suitable for Petri dishes with glass bottom and the use of objectives with oil immersion. When working with a CO_2-gassing unused openings in which there are no Petri dishes during the observation, have to be covered, covers (6 pcs.) are included.

- For vessel size: 6 x “35” Petri dishes
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.22 kg
- Type of vessels: 1 to 6 “35” Petri dishes
- Compatible: "G13 – CO_2-Cover 6xPetri"

C17
Holding frame 6 Petri dishes
Art.-No.: **11533039**

C18
Universal Holding
Frame KP-Set
Art.-No.: **11532635**

C18 – Universal Holding frame KP-Set 11532635

Frame (with 4 bottom covers for Petri dishes, ibidi®-plates and Lab-Tek™ slides) for different cultivation vessels or slides. The set includes the frame and 4 exchangeable not heated bottom plates either for Petri dishes (35,60), Lab-Tek™ Chambers and Slides, ibidi®-Chambers.

• For vessel size:	24–80 mm length or Ø 24–68 mm
• Requirements:	3-plate-stage / Scanning-stage for 160 x 110 mm inserts
• Weight:	0.20 kg
• Observation Opening:	Ø 30 mm, Ø 55 mm, 47 x 21 mm, 75 x 50 mm
• Type of vessels:	Petri dishes “35” & “60”, Glass slides, POC-R2 or POCmini-2 cell cultivation systems, Chamber Slide Systems (different manufacturer), Chambered Coverglass Systems (different manufacturer)
• Compatible:	"G9 – CO_2-Cover KP" "G2 – CO_2-Cover HP" "G10 – CO_2-Cover MM KP" "G3 – CO_2-Cover HP-MG" "C21 – Top Frame KP-Set"

C21
Top Frame KP-Set
Art.-No.: **11532981**

C21 – Top Frame KP-Set 11532981

Top frame for Universal Holding Frame K100 to accomplish perfusion experiments. Easy access for thin cables and perfusion tubes to the interior through silicon sealed openings.

• For vessel size:	24–80 mm length or Ø 24–68 mm, height 20 mm
• Requirements:	"C18 – Universal Holding frame KP-Set" or "C19 – Universal Holding frame K100-Set"
• Weight:	0.20 kg
• Compatible:	"G2 – CO_2-Cover HP" "G3 – CO_2-Cover HP-MG"

C19
Universal Holding frame
K100-Set
Art.-No.: **11532998**

C19 – Universal Holding frame K100-Set 11532998

Advancement of Universal Holding frame KP-Set. Frame (with 4 bottom covers for Petri dishes, Terasaki Trays, ibidi®-plates and Lab-Tek™-slides and cell culture flasks) to fix different cultivation vessels or slides with special horizontal clamps. The set includes the frame and 4 exchangeable not heated bottom plates either for Petri dishes (35,60), Lab-Tek™-Chambers and Slides, ibidi®-Chambers and flasks.
Optional cover for “100” is available.

• For vessel size:	24–80 mm length or Ø 24–92 mm
• Requirements:	3-plate-stage / Scanning-stage for 160 x 110 mm inserts
• Weight:	0.20 kg
• Observation Opening:	Ø 30 mm, Ø 55 mm, 47 x 21 mm, 75 x 50
• Type of vessels:	Petri dishes “35”, “60” & “100”, Glass slides, POC-R2 or POCmini-2 cell cultivation systems, Chamber Slide Systems (different manufacturer), Chambered Coverglass Systems (different manufacturer),
• Compatible:	"G15 – CO_2-Cover K100-Set" "G2 – CO_2-Cover HP" "G3 – CO_2-Cover HP-MG" "C21 – Top Frame KP-Set" "C20 – Baseplate “100” for K100-Set"

C20 – Baseplate "100" for K100-Set **11533000**
(large Petri dishes)
Optional exchangeable not heated bottom plate for "100" Petri dishes for the Universal Holding frame K100-Set.

- For vessel size: Ø 87-92 mm
- Requirements: "C19 – Universal Holding frame K100-Set"
- Weight: 0.20 kg
- Type of vessels: large Petri dishes (87-92 mm)
- Compatible: Universal Holding Frame K100-Set equipment

C20
Baseplate "100" for K100-Set
Art.-No.: **11533000**

C22 – Insert GL-Set **11532885**
Frame with 5 bottom covers. The set includes the frame and 5 exchangeable not heated baseplates either for Petri dishes ("35", "60"), Lab-Tek™-Chambers slides, ibidi®-Chambers and cell culture flasks

- For vessel size: 24–80 mm length or Ø 24–68 mm
- Requirements: SuperZ widefield (for 3-plate-stage / Scanning-stage for 160 x 110 mm inserts)
- Weight: 0.10 kg
- Observation Opening: Ø 30 mm, Ø 55 mm, 47 x 21 mm, 75 x 50 mm
- Type of vessels: Petri dishes "35" & "60",
  Glass slides,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer),
  Cell Culture Flasks
- Compatible: "G12 – CO_2-Cover GL"
  "G20 – CO_2-Cover GL-A"

C22
Insert GL-Set
Art.-No.: **11532885**

C23 – Insert N for Lab-Tek™ **11533037**
The massive insert N is fixed with a spring snap-in mechanism into the rectangular opening of the stage. Alignment screws guarantee plan-parallel adjustment in z-direction.
Material: aluminum, black anodized. Insert N have been developed to get a temperature inert system. Best solution for work with high magnification, precise positioning, Laser-Scanning-Microscopy applications and live cell imaging. An rectangular observation opening ensure access for objectives.

- For vessel size: 76 x 26 fixed with clip clamping
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.7 kg
- Observation Opening: 46 x 21 mm
- Type of vessels: Nunc™ Lab-Tek™ (II) Chamber Slide System,
  Nunc™ Lab-Tek™ (II) Chambered Coverglass System,
  Glass slides,
  µ-Slides by ibidi®
- Compatible: "G2 – CO_2-Cover HP"
  "G3 – CO_2-Cover HP-MG"

C23
Insert N for Lab-Tek™
Art.-No.: **11533037**

NON HEATABLE CLICK-IN INSERTS SUITED TO CONTROL CO_2-CONCENTRATION

Multifunctional and flexible system for the fixation of cell culture vessels on xy-stages and scanning stages with a cut-out of 160 x 110 mm at inverse microscopes.
The system combines a wide range of application with a simple handling. It provides for a firm fixation and a stable position of the cell culture vessels during the observation under the microscope.
The Universal Mounting Frame KM Click-In serves as base frames into which multiplates and different insert plates can be clicked in.

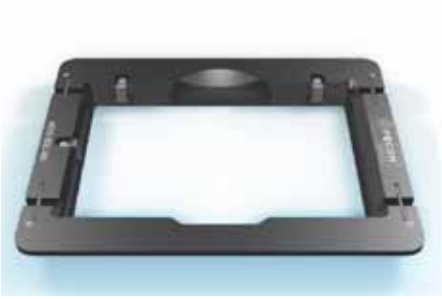
Advantages:

- Various different types of cell culture vessels can be used.
- A quick change of the cell culture vessels, which can also be inserted and taken out together with the insert plate, is possible.
- A firm position of the cell culture vessel by clamping springs in the frame and in the Z-direction by means of spring clips (easy to assemble or disassemble) is ensured.
- With a CO_2-Cover and a CO_2-Controller, the pH-value in the nutrition medium can be controlled.

- Requirements: Inverse microscope with mechanical stage or scanning stage (opening 160×110 mm)
  Universal Mounting Frame KM Click-In

C115 – Universal Holding frame KM Click-In **11533187**
Frame to fix multi-wells with or without glass bottom. Adjustable spring clips allow an Adaptation to several multiwell sizes.

- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
- Weight: 0.20 kg
- Type of vessels: Click-In
- Compatible: "G11 – CO_2-Cover KM","G1 – CO_2-Cover PM"



C115
Universal Holding frame KM Click-In
Art.-No.: **11533187**

Click-In System Premium

The **Click-In System Premium** consists of a 6 mm thick black anodized aluminium plate. The different cell culture vessels are laterally fixed by clamping springs and can be additionally fixed in Z-direction from above by spring clips.

CLICK-IN P "35" Petri dishes **11533199**
for Petri dishes 30-40 mm

CLICK-IN P "60" Petri dishes **11533200**
for Petri dishes 47-56 mm

CLICK-IN P 2x "35" Petri dishes **11533201**
for Petri dishes 2x30-40 mm

CLICK-IN P 1x "35",1x "60" Petri dish **11533202**
for Petri dishes 1x30-40 mm + 1x 47-56 mm

CLICK-IN P POC-R2 cell cultivation **11533203**
for POC-R cultivation chambers by LaCon

CLICK-IN P all Chambered systems **11533204**
for all glass slides and chamber systems of different manufactures

CLICK-IN P "100" Petri dishes **11533205**
for Petri dishes 78-90 mm

CLICK-IN P "35" Petri dishes
Art.-No.: **11533199**

CLICK-IN P "60" Petri dishes
Art.-No.: **11533200**

CLICK-IN P 2x "35" Petri dishes
Art.-No.: **11533201**

CLICK-IN P 1x "35",1x "60" Petri dish
Art.-No.: **11533202**

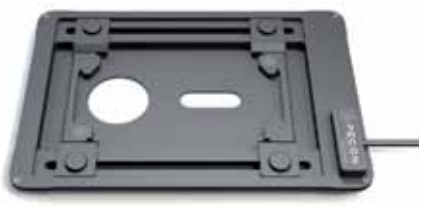
CLICK-IN P all Chambered systems
Art.-No.: **11533203**

CLICK-IN P all Chambered systems
Art.-No.: **11533204**

CLICK-IN P "100" Petri dishes
Art.-No.: **11533205**

HEATABLE INSERTS SUITED TO CONTROL CO_2-CONCENTRATION

The following frames are especially suited to control CO_2-concentration in combination with the Incubator i8, a CO_2-Cover and the CO_2-Controller-2000.
The inserts or holders are fixed with a spring snap-in mechanism into the rectangular opening of the stage. The outer dimensions of the inserts are: 160 x 110 mm. There are inserts for special vessels available and universal inserts with smooth running moveable brackets with variable clamping ranges, allowing easy and quick fixation of different sized dishes or slides.
Alignment screws guarantee plan-parallel adjustment in z-direction.
Material: aluminum, black anodized.



C31
Heatable Univ. Holding Frame KH 2000
Art.-No.: **11533048**

C31 – Heatable Universal Holding frame KH 2000 **11533048**
Frame to fix different Petri dishes, cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The base plate of the frame has a circular and a rectangular opening.

- For vessel size: 24-26 x 76-120 mm or Ø 24–68 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
  "F1 – TempController 2000-1" or
  "F2 – TempController 2000-2"
- Weight: 0.2 kg
- Temperature stability: ± 0.1°C
- Control range: 3°C above ambient up to 60°C
- Observation Opening: Ø 30 mm and 30 x 10 mm
- Type of vessels: Petri dishes “35” & “60”,
  Glass slides,
  POC-R2 or POCmini-2 cell cultivation systems,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer)
- Compatible: "G6 – CO_2-Cover KH"
  "G8 – CO_2-Cover MM K"

C32
Heatable Univ. Holding Frame KH-L 2000
Art.-No.: **11533049**

C32 – Heatable Universal Holding frame KH-L 2000 **11533049**
Frame to fix different cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The base plate of the frame has a rectangular opening.

- For vessel size: 24-26 x 76-120 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
  "F1 – TempController 2000-1" or
  "F2 – TempController 2000-2"
- Weight: 0.2 kg
- Temperature stability: ± 0.1°C
- Control range: 3°C above ambient up to 60°C
- Observation Opening: 47 x 21 mm
- Type of vessels: Glass slides,
  Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer)
- Compatible: "G6 – CO_2-Cover KH"
  "G8 – CO_2-Cover MM K"

C33 – Heatable Universal Holding frame KH-R 2000 **11533050**

Frame to fix different Petri dishes, cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The base plate of the frame has a circular opening.

- For vessel size: Ø 24–68 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
  "F1 – TempController 2000-1" / "F2 – TempController 2000-2"
- Weight: 0.2 kg
- Temperature stability: ± 0.1°C
- Control range: 3°C above ambient up to 60°C
- Observation Opening: Ø 30 mm
- Type of vessels: Petri dishes "35" & "60",
  POC-R2 or POCmini-2 cell cultivation systems,
- Compatible: "G6 – CO_2-Cover KH"
  "G8 – CO_2-Cover MM K"

C33
Heatable Univ. Holding Frame KH-R 2000
Art.-No.: **11533050**

C34 – Tokaihit, Leica TPX Type HF Heating Frame, Glass **11533258**

Frame with clear strengthen heated glass. The strengthen glass is applied to glassware to prevent glass breakage caused by objective interference, dish/plate dropping, etc.

When Leica TPX is installed to the microscope stage, the heating plate becomes flush with the stage surface to ensure the easy handling of the specimens and easy operation of the manipulator. This model features a thin are (0.5 mm), which allows its application with Differential Interference Contrast, Modulation Contrast and high magnification objective lenses.

Additional feature of quality control and new temperature regulation of continuous control are included in the system. External sensor and data logging software allows on-site calibration and off-set of plate and/or external sensor. With calibration and data logging feature allows to keep system performance quality high at end. Continuous current control minimizes focus drift/changing light intensity caused by regular on/off control.

Main uses: Temperature control of the specimen in short-term imaging, cell engineering, neuroscience, and genetic engineering under research use.

- Including: Power Supply, External Sensor,
  Data logging installation CD
- For vessel size: no limitation (within 150 x 100 mm)
- Requirements: "A4 – Manual 3-Plate-Stage 127 mm x 83 mm"
  "A6 – Motorized 3-Plate-Stage 127 mm x 83 mm"
- Weight: 0.33 kg (+ 1.3 kg Power supply)
- Temperature stability: ± 0.3°C
- Temperature regulation: Continues current control
- Control range: 5°C above ambient up to 60°C
- Observation Opening: 122 x 84 mm, whole glass thickness 0.5 mm
- Type of vessels: all types
- Compatible: "G16 – CO_2-Cover TH"

C34
Leica TPX Type HF
Art.-No.: **11533258**

C36
Tokaihit, Leica TPX Type NF Heating Frame 26, Metal
Art.-No.: **11533256**

C37
Tokaihit, Leica TPX Type I2 Heating Frame 26, Metal
Art.-No.: **11533255**

C38
Tokaihit, Dish fixing block
Art.-No.: **11532371**

C36 – Tokaihit, Leica TPX Type NF Heating Frame 26, Metal **11533256**

Metal heating frame. When TPX is installed to microscope stage, the heating plate becomes flush with the stage surface to ensure the easy handling of the specimens and easy operation of manipulator. This model features a round 25 mm opening in the plate center.
Additional feature of quality control and new temperature regulation of continuous control are included in the system. External sensor and data logging software allows on-site calibration and off-set of plate and/or external sensor. With calibration and data logging feature allows to keep system performance quality high at end. Continuous current control minimizes focus drift/changing light intensity caused by regular on/off control.
Main uses: Temperature control of the specimen in short-term imaging, cell engineering, neuroscience, and genetic engineering under research use.

• Including:	Power Supply, External Sensor, Data logging installation CD
• For vessel size:	no limitation (within 150 x 100 mm)
• Requirements:	"A4 – Manual 3-Plate-Stage 127 mm x 83 mm" "A6 – Motorized 3-Plate-Stage 127 mm x 83 mm", only
• Weight:	0.7 kg (+ 1.3 kg Power supply)
• Temperature stability:	± 0.3°C
• Temperature regulation:	Continuous current control
• Control range:	5°C above ambient up to 60°C
• Observation Opening:	Ø 25 mm
• Type of vessels:	all types
• Compatible:	"G16 – CO_2-Cover TH"

C37 – Tokaihit, Leica TPX Type I2 Heating Frame 26, Metal **11533255**

Frame with clear strengthen glass and metal heating frame. The strengthen glass is applied to glassware to prevent glass breakage caused by objective interference, dish/plate dropping, etc. When TPX is installed to microscope stage, the heating plate becomes flush with the stage surface to ensure the easy handling of the specimens and easy operation of manipulator.
The left side provides a glass heating insert (0.5 mm thickness for objective magnification up to 40x DIC, the right side is equipped with a metal heating insert with a hole (Ø 25 mm) for the objectives up to 100x oil DIC.
Additional feature of temperature regulation of continuous control is included in the system. Continuous current control minimizes focus drift/changing light intensity caused by regular on/off control.
Main uses: Temperature control of the specimen in short-term imaging, cell engineering, neuroscience, and genetic engineering under research use.

• Including:	Power Supply, External Sensor, Data logging installation CD
• For vessel size:	no limitation (within 150 x 100 mm)
• Requirements:	"A4 – Manual 3-Plate-Stage 127 mm x 83 mm" "A6 – Motorized 3-Plate-Stage 127 mm x 83 mm", only
• Weight:	0.75 kg (+ 3.0 kg Power supply)
• Temperature stability:	± 0.3°C
• Temperature regulation:	Continuous current control
• Control range:	5°C above ambient up to 60°C
• Observation Opening:	54 x 82 mm, whole glass thickness 0.5 mm or Ø 25 mm
• Type of vessels:	all types
• Compatible:	"G16 – CO_2-Cover TH"

C38 – Tokaihit, MATS Dish fixing block **11532371**
To fix the sample on the MATS-Glass or MATS-Metal, the accessory dish fixing block (DFB-3550) is recommended.

The following frames are especially suited for long time lapse series experiments to control CO_2-concentration in combination with the Incubator i82000, a CO_2-Cover and the CO_2-Controller-2000 or in a special stage top incubator.

The massive inserts are fixed with a spring snap-in mechanism into the rectangular opening of the stage. The outer dimensions of the inserts are: 160 x 110 mm. Alignment screws guarantee plan-parallel adjustment in z-direction. Material: aluminum, black anodized.

C41 – Heating Insert P 2000 **11533027**
C42 – Heating Insert P Lab-Tek™ 2000 **11533080**
The solid heating element is made of one piece of aluminum with uniform heat distribution and a high thermal conductivity. Best solution for work with high magnification, precise positioning, Laser-Scanning-Microscopy applications and live cell imaging. An oval observation opening ensure both access for objectives and maximum heat transfer. Lateral ducts on the left and right side through the inserts permit the installation of perfusion tubes, for example with the POCmini or POC-R cambers "C41 – Heating Insert P 2000", or with Lab-Tek™ or chambered Slides "C42 – Heating Insert P Lab-Tek™ 2000".

Heating Insert P 2000 11533027

• For vessel size:	Ø 35 mm type fixed with an annular insert Ø 60 mm type fixed with clip clamping
• Requirements:	3-plate-stage / Scanning-stage for 160 x 110 mm inserts "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.8 kg
• Temperature stability:	± 0.1°C
• Control range:	3°C above ambient up to 60°C
• Observation Opening:	oval 32 x 30 mm
• Type of vessels:	Petri dishes “35” & “60”, POC-R2 or POCmini-2 cell cultivation systems
• Compatible:	"G1 – CO_2-Cover PM" "G4 – CO_2-Cover HP-MG-L" "G31 – Incubator PM 2000 RBT"

C41
Heating Insert P 2000
Art.-No.: **11533027**

Heating Insert P Lab-Tek™ 2000 11533080

• For vessel size:	76 x 26 mm fixed with clip clamping
• Requirements:	3-plate-stage / Scanning-stage for 160 x 110 mm inserts "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.8 kg
• Temperature stability:	± 0.1°C
• Control range:	3°C above ambient up to 60°C
• Observation Opening:	46x21 mm
• Type of vessels:	Nunc™ Lab-Tek™ (II) Chamber Slide System, Nunc™ Lab-Tek™ (II) Chambered Coverglass System, Glass slides
• Compatible:	"G1 – CO_2-Cover PM" "G4 – CO_2-Cover HP-MG-L" "G31 – Incubator PM 2000 RBT"

C42
Heating Insert P Lab-Tek™ 2000
Art.-No.: **11533080**

C43
Heating Insert M06 2000 EC
Art.-No.: **11533272**

C44
Heating Insert M12 2000 EC
Art.-No.: **11533273**

C45
Heating Insert M24 2000 EC
Art.-No.: **11533274**

C46
Heating Insert M96 2000 EC
Art.-No.: **11533275**

C43 – Heating Insert M06 2000 EC **11533272**
C44 – Heating Insert M12 2000 EC **11533273**
C45 – Heating Insert M24 2000 EC **11533274**
C46 – Heating Insert M96 2000 EC **11533275**

The heating inserts in combination with the Incubator PM 2000 or CO_2-Cover PM and Incubator i8 Series are used for simultaneous monitoring, imaging or capturing time-lapse sequences. Due to the high precision of scanning stages the configuration is ideal for computer controlled observation using multi-well dishes. The heating inserts are positioned into the 160 x 110 mm rectangular opening of the stages where they are held by a special clamping device.

Solid aluminum frame with an aluminum base plate with laminated printed circuit board with circular openings of defined diameter. Optimized thermal contact between the heated aluminum plate and the multiwell plate, therefore only compatible to specific multiwell dishes. A large lateral PA-screw allows the fixation of the multiwell dish.

CO_2 control is possible with the "G31 – Incubator PM 2000 RBT" or with the "Incubator i8" in combination with the "G1 – CO_2-Cover PM". Temperature control is carried out with the "F1 – TempController 2000-1" or "F2 – TempController 2000-2".

• For vessel size:	Insert M06: e.g. BD Falcon™ 06-well multiplate Insert M12: e.g. BD Falcon™ 12-well multiplate Insert M24: e.g. BD Falcon™ 24-well multiplate Insert M96: e.g. BD Falcon™ 96-well multiplate
• Requirements:	3-plate-stage / Scanning-stage for 160 x 110 mm inserts "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.4 kg
• Temperature stability:	± 0.1°C
• Control range:	3°C above ambient up to 60°C
• Observation Opening:	M06: = 22.0 mm, M12: = 22.0 mm M24: = 15.5 mm, M96: = 6.0 mm
• Type of vessels:	Multiwell plates by Corning™ & Falcon™ with flat polysterene bottom, POC-R or POCmini cell cultivation systems
• Compatible:	"G1 – CO_2-Cover PM" "G31 – Incubator PM 2000 RBT" "G4 – CO_2-Cover HP-MG-L"

C50 – Heatable Incubation Insert P-Set 2000 **11533035**

The incubation insert is supplied with 4 exchangeable baseplates with different observation openings. According to the mounted baseplate, Petri dishes and POC-Systems, Lab-Tek™ chambers, object slides, chamber slides, CultureSlides, ibidi® chambers as well as Imaging Chambers can be observed. The incubation insert is equipped with two spring clips. This provides for a firm fit of the cell cultivation vessel and keeps it in place. The slidable cover enables a direct access to the cell cultivation system without removing the cover. The Heatable Incubation Insert P-Set 2000 is also applicable with large incubators.

Because of its design, the incubation insert has a high temperature constancy and thermal conductivity. Therefore, it is also suited for laser scanning microscopy. The heating is achieved by transistor stray power without disturbing switching pulses. Thereby, the incubation insert without the cover can be used for electrophysiological experiments. If necessary, it is also possible to control the temperature of the cover and body separately.

Temperature control is carried out with the "F2 – TempController 2000-2".

• For vessel size:	24-50 x 40-80 mm or Ø 24–68 mm
• Requirements:	3-plate-stage / Scanning-stage for 160 x 110 mm inserts "F2 – TempController 2000-2"
• Weight:	0.6 kg
• Temperature stability:	± 0.1°C
• Control range:	3°C above ambient up to 60°C
• Observation Opening:	Ø 30 mm, Ø 55 mm, 47 x 21 mm, 75 x 50
• Type of vessels:	Petri dishes “35” & “60”, Glass slides, Chamber Slide Systems (different manufacturer), Chambered Coverglass Systems (different manufacturer), POC-R or POCmini cell cultivation systems, Lab-Tek™ (Nunc™), Chambered slides (BD Falcon™)
• Compatible:	"F4 – CO_2-Controller 2000" "F5 – CO_2-O_2-Controller 2000"

C50
Heatable Incubation Insert P-Set 2000
Art.-No.: **11533035**

COOLING AND HEATING INSERTS SUITED TO CONTROL CO_2-CONCENTRATION

The inserts or holders are fixed with a spring snap-in mechanism into the rectangular opening. The outer dimensions of the inserts are: 160 x 110 mm. There are inserts for special vessels available and universal inserts with smooth running moveable brackets with variable clamping ranges, allowing easy and quick fixation of different sized dishes or slides. Alignment screws guarantee plan-parallel adjustment in z-direction. The solid cooling/heating element is made of one piece of aluminium with uniform heat distribution and a high thermal conductivity. Tubes (1 m and 2 m) can be connected with self sealing couplings. Experiments with CO_2 -incubation the frames could be used together with different small incubators or CO_2-Covers inside the Incubator i8. The following frames are especially suited to control CO_2-concentration in combination with the Incubator i8, a CO_2-Cover and the CO_2-Controller.

D1
Cooling/Heating Insert P
Art.-No.: **11533083**

D2
Cooling/Heating Insert P Lab-Tek™ type
Art.-No.: **11533033**

D1 – Cooling/Heating Insert P **11533083**
D2 – Cooling/Heating Insert P Lab-Tek™ **11533033**

The solid temperable element is made of one piece of aluminum with uniform temperature distribution and a high thermal conductivity. Best solution for work with high magnification, precise positioning, Laser-Scanning-Microscopy applications and live cell imaging. Specimens are firmly seated in the Cooling Insert P Lab-Tek™. An oval or rectangular observation opening ensures both access for objectives and maximum temperature transfer. Ideal for electrophysiological experiments, because no disturbing switching pulses are emitted. Compatible to many different cell cultivation vessels or chambered slides. A cover with a glass insert ensures full DIC compatibility. Temperature control is carried out with circulating water or other liquids and is regulated at the circulator, cooling thermostat (e.g. Lauda RE 106).

11533083

• For vessel size:	Ø 35 mm type fixed with an annular insert Ø 60 mm type fixed with clip clamping
• Requirements:	3-plate-stage / Scanning-stage for 160 x 110 mm inserts Thermostat or pump as liquid circulator
• Weight:	0.8 kg
• Control range:	Liquid, temperature control by Thermostat
• Observation Opening:	Oval 32 x 30 mm
• Type of vessels:	Petri dishes “35” & “60”, POC-R2 or POCmini-2 cell cultivation systems
• Compatible:	"G2 – CO_2-Cover HP" "G3 – CO_2-Cover HP-MG" "G30 – Incubator P 2000"

11533033

• For vessel size:	76 x 26 mm fixed with clip clamping
• Requirements:	3-plate-stage / Scanning-stage for 160 x 110 mm inserts Thermostat or pump as liquid circulator
• Weight:	0.8 kg
• Control range:	Liquid, temperature control by Thermostat
• Observation Opening:	46 x 21 mm
• Type of vessels:	Nunc™ Lab-Tek™ (II) Chamber Slide System, Nunc™ Lab-Tek™ (II) Chambered Coverglass System, Glass slides
• Requirements:	Thermostat
• Compatible:	"G2 – CO_2-Cover HP" "G3 – CO_2-Cover HP-MG" "G30 – Incubator P 2000"

D3 – Cooling/Heating Incubation Insert P-Set 2000 **11533036**

The incubation insert is supplied with 4 exchangeable baseplates with different observation openings. According to the mounted baseplate, Petri dishes and POC-Systems, Lab-Tek™ chambers, object slides, chamber slides, CultureSlides, ibidi® chambers as well as Imaging Chambers can be observed. The incubation insert is equipped with two spring clips. This provides for a firm fit of the cell cultivation vessel and keeps it in place. The slidable cover enables a direct access to the cell cultivation system without removing the cover. The temperable Incubation Insert P-Set 2000 is also applicable with large incubators. Because of its design, the incubation insert has a high temperature constancy and thermal conductivity. Therefore, it is also suited for laser scanning microscopy. The temperature is achieved by liquid fluid. Thereby, the incubation insert without the cover can be used for electrophysiological experiments. Temperature control is carried out with circulating water or other liquids and is regulated at the circulator, cooling thermostat (e.g. Lauda RE 106).

- For vessel size: 24-50 x 40-80 mm or Ø 24–68 mm
- Requirements: 3-plate-stage / Scanning-stage for 160 x 110 mm inserts
  Thermostat or pump as liquid circulator and
  "F1 – TempController 2000-1" / "F2 – TempController 2000-2"
- Weight: 0.6 kg
- Control range: Liquid, temperature control by Thermostat
- Observation Opening: Ø 30 mm, Ø 55 mm, 47 x 21 mm, 75 x 50
- Type of vessels: Petri dishes “35” & “60”, Glass slides, Chamber Slide Systems (different manufacturer),
  Chambered Coverglass Systems (different manufacturer)
- Compatible: "F4 – CO_2-Controller 2000" / "F5 – CO_2-O_2-Controller 2000"

D3
Cooling/Heating Incubation Insert P-Set 2000
Art.-No.: **11533036**

D4 – Cooling/Heating Insert X **11532510**

The solid cooling (resp. temperable) element is made of one piece of aluminum with uniform temperature distribution and a high thermal conductivity. Because of its low mass it allows a rapid temperature change. A circular observation opening (Ø 8 mm) ensures both access for objectives and maximum temperature transfer. The outer dimensions are like a multi-plate. Due to its low profile it is especially suited for micromanipulation with a flat angle. Recommended for electrophysiological experiments, because no disturbing switching pulses are emitted.

- For vessel size: Ø 35 mm or 76 x 26 mm
- Outer dimension: 127 x 86 mm
- Requirements: "B16 – Universal Holding frame MX" or "C115 – Universal Holding frame KM Click-In", Thermostat or pump as liquid circulator and "F1 – TempController 2000-1" / "F2 – TempController 2000-2"
- Weight: 0.2 kg
- Control range: Liquid, temperature control by Thermostat
- Observation Opening: Ø 8 mm
- Type of vessels: 35” Petri dishes, glass slides,
  Lab-Tek™ (Nunc™),
  Chambered slides (BD Falcon™)
- Compatible: No CO_2-Cover

D4
Cooling Insert X
Art.-No.: **11532510**

D5 – Cooling Thermostat

For the precise control of the cooling for temperable stages or temperable inserts we recommend Cooling thermostats from Lauda or Julabo.
Several models are available, see www.lauda.de or www.julabo.com.
You will get the latest information, specifications and curves.

E HOLDING FRAMES AND INSERTS 160 X 116 MM FOR UPRIGHT MICROSCOPES (DM4-6 B)

E1
Universal Holding frame AK
Art.-No.: **11501270**

E2
Universal Holding frame A
Art.-No.: **11501268**

E4
Universal Holding frame AK-Set
Art.-No.: **11533044**

E1 – Universal Holding frame AK **11501270**

Flexible device with easy installation for the fixation of different objects on the Scanning Stage 100x100 at upright microscopes.

- For vessel size: 24-26 x 76-120 mm or Ø 24–68 mm
- Requirements: Scanning Stage for 160 x 116 mm inserts
- Weight: 0.15 kg
- Type of vessels: Petri dishes “35” & “60”, POC-R2 or POCmini-2 cell cultivation systems, Glass slides
- Compatible: No CO_2-Cover

E2 – Universal Holding frame A **11501268**

Frame to fix different cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel.

- For vessel size: 24-26 x 76-120 mm or Ø 24–68 mm
- Requirements: Mechanical stage (11501257 or 11501233)
- Weight: 0.10 kg
- Type of vessels: Petri dishes “35” & “60”, POC-R2 or POCmini-2 cell cultivation systems, Glass slides
- Compatible: No CO_2-Cover

E4 – Universal Holding frame AK-Set **11533044**

Frame (with 3 baseplates for Petri dishes, POC-R2, POCmini-2 and glass slides) for different cultivation vessels or slides. The set includes the frame and 3 exchangeable not heated bottom plates either for Petri dishes (“35”, “60”), POC-R2 or POCmini-2 cell cultivation systems, glass slides.

- For vessel size: 24–80 mm length or Ø 24–68 mm
- Requirements: Scanning Stage for 160 x 116 mm inserts
- Weight: 0.20 kg
- Observation Opening: Ø 30 mm, Ø 55 mm, 47 x 21 mm, 75 x 50 mm
- Type of vessels: Petri dishes “35” & “60”, POC-R2 or POCmini-2 cell cultivation systems, Glass slides
- Compatible: "G22 – CO_2-Cover AK-Set"

E5 – Heatable Universal Holding frame AKH 2000 **11533051**

Frame to fix different Petri dishes, cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The base plate of the frame has a circular and a rectangular opening.

- For vessel size: 24-26 x 76-120 mm or Ø 24–68 mm
- Requirements: Scanning Stage for 160 x 116 mm inserts
  "F1 – TempController 2000-1" or
  "F2 – TempController 2000-2"
- Weight: 0.2 kg
- Temperature stability: ± 0.1°C
- Control range: 3°C above ambient up to 60°C
- Observation Opening: Ø 30 mm and 30 x 10 mm
- Type of vessels: Petri dishes “35” & “60”,
  POC-R2 or POCmini-2 cell cultivation systems,
  Glass slides
- Compatible: "G21 – CO_2-Cover AKH"

E5
Heatable Universal Holding frame AKH 2000
Art.-No.: **11533051**

E6 – Heatable Universal Holding frame AKH-L 2000 **11533052**

Frame to fix different cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The base plate of the frame has a rectangular opening.

- For vessel size: 24-26 x 76-120 mm
- Requirements: Scanning Stage for 160 x 116 mm inserts
  "F1 – TempController 2000-1" or
  "F2 – TempController 2000-2"
- Weight: 0.2 kg
- Temperature stability: ± 0.1°C
- Control range: 3°C above ambient up to 60°C
- Observation Opening: 47 x 21 mm
- Type of vessels: Glass slides
- Compatible: "G21 – CO_2-Cover AKH"

E6
Heatable Universal Holding frame AKH-L 2000
Art.-No.: **11533052**

E7 – Heatable Universal Holding frame AKH-R 2000 **11533053**

Frame to fix different Petri dishes, cultivation vessels and slides. Two smooth running moveable brackets with a variable clamping range allow an easy and quick fixation of the vessel. The base plate of the frame has a circular and a rectangular opening.

- For vessel size: Ø 24–68 mm
- Requirements: Scanning Stage for 160 x 116 mm inserts
  "F1 – TempController 2000-1" or
  "F2 – TempController 2000-2"
- Weight: 0.2 kg
- Temperature stability: ± 0.1°C
- Control range: 3°C above ambient up to 60°C
- Observation Opening: Ø 30 mm
- Type of vessels: Petri dishes “35” & “60”,
  POC-R2 or POCmini-2 cell cultivation systems,
  Glass slides
- Compatible: "G21 – CO_2-Cover AKH"

E7
Heatable Universal Holding frame AKH-R 2000
Art.-No.: **11533053**

E8
Heating Insert UP-Set 2000
Art.-No.: **11533032**

E8 – Heating Insert UP-Set 2000 **11533032**

The Heating Insert UP-Set 2000 is designed for the stable heating of cell cultivation systems above ambient temperature up to 60°C. It is equipped as standard with a slidable cover with a heatable glass plate. Because of its solid design, it has a high temperature constancy and thermal conductivity.

- With the CO_2-Cover UP-Set and the Humidifier, the CO_2 concentration and the humidity can be locally (around the cultivation chamber) increased when working inside large incubators.
- For the control of temperature, the TempController 2000 is required. For a controlled CO_2-atmosphere, the CO_2-Controller 2000 is necessary.
- Currently, we offer three exchangeable baseplates which can be attached to the insert with the enclosed screws. According to the mounted baseplate Petri dishes of different sizes, POC-Systems and object slides (max. 80 x 27 mm) can be used.
- A constant focus across the whole observation area is provided for because the insert can be adjusted correctly with the four adjusting screws.
- Two channels allow the routing of tubes, e.g. for perfusion applications.

• For vessel size:	27-50 x 40-80 mm or Ø 24–68 mm
• Requirements:	Scanning Stage for 160 x 116 mm inserts "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.6 kg
• Temperature stability:	± 0.1°C
• Control range:	3°C above ambient up to 60°C
• Observation Opening:	Ø 30 mm, Ø 55 mm, 47 x 21 mm, 75 x 50
• Type of vessels:	Petri dishes “35” & “60”, POC-R2 or POCmini-2 cell cultivation systems, Glass slides
• Compatible:	"G23 – CO_2-Cover UP-Set"

E9 – Cooling/Heating Insert UP-Set 2000 **11533034**

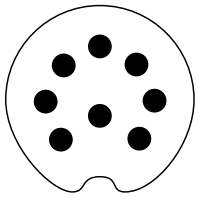
The Cooling/Heating Insert UP-Set 2000 is designed for the stable cooling and heating of cell cultivation systems. The insert is made of aluminum with a uniform heat distribution and a high thermal conductivity. Exchangeable baseplates enable the use of different sizes of Petri dishes and POC-Systems. The Cooling/Heating Insert UP-Set 2000 is suitable for scanning stages with a cut-out of 160 x 116 mm on upright microscopes.

- Three exchangeable baseplates with different observation openings for Petri dishes “35” and “60” as well as for POC Systems ensures both access to the objectives and maximum heat transfer.
- For perfusion applications, the tubes can be routed through the lateral openings or inserted into the channels for a preheating of the perfusion media.
- The insert can be levelled in the stage by 4 screws.
- The tubes (1 m and 2 m) can be connected with self sealing couplings. The temperature range depends on the circulating water or other liquids and is regulated at the circulator.
- For temperature control, the temperature sensor of the Insert can be connected to the TempController 2000

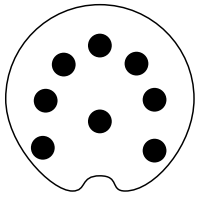
• For vessel size:	Ø 35 mm type fixed with an annular insert Ø 60 mm type fixed with clip clamping
• Requirements:	Scanning Stage for 160 x 116 mm inserts Thermostat or pump as liquid circulator Optional: "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.8 kg
• Control range:	Liquid, temperature control by Thermostat
• Observation Opening:	Oval 32x30 mm
• Type of vessels:	Petri dishes “35” & “60”, POC-R2 or POCmini-2 cell cultivation systems, Glass slides
• Compatible:	"G23 – CO_2-Cover UP-Set"

E9
Cooling/Heating Insert UP-Set 2000
Art.-No.: **11533034**

Example:
Connector system of heated components



New 8-pin connector
TempController 2000-1



Old 8-pin connector
Tempcontrol 37-2 digital/Tempcontrol 37/
Tempcontrol mini

Description

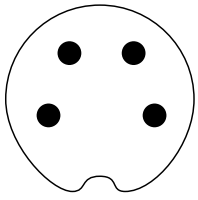
The Incubation System 2000 is a follow-on version of our present incubation solutions which are based on the controlling devices Tempcontrol 37-2 digital, CTI-Controller 3700 digital, CO_2-Controller and O_2-Controller. The components of the Incubation System 2000 can also be combined to various incubation solutions and can partly be rediscovered in the established heatable components and incubators of the present incubation solutions. Those have been electrically modified in a way that makes them compatible to the new controlling devices. For easier configuration, the compatible components and controlling devices are marked with the labeling "2000". Listed below are the major improvements:

- Use of highly precise temperature sensors for experiments that are better comparable to each other.
- Controlling devices with an advanced LCD-dot matrix display and an easy-to-clean foil keypad.
- Possibility of connecting the controlling devices to a Windows-PC via USB; parallel operation of many devices (also such of similar type) at the same PC is possible.
- Controlling devices are equipped with a configurable digital PID-control; firmware, control parameters and further device parameters can be upgraded via USB.

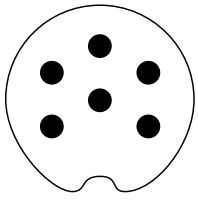
Compatibility to the previous incubation system

Because of the use of a different temperature sensor (Pt100 with 4-wire technology) and further technical improvements, the previous incubation system components cannot be used with the new incubation system components. To prevent hybrid configurations, a new connector system (changed pin layout) at all connectors is used.

Example:
Connector system of incubator temperature sensors



New 4-pin connector
temperature sensors



Old 5-pin connector
temperature sensors

CONTROLLER 2000

F1 – TempController 2000-1 **11533018**

Temperature control unit with one channel to electrically heat various components of Leica Live on Stage components. The TempController 2000-1 can only be used together with components of the Incubation System 2000 and can be operated with the buttons at the front side as well as externally via USB.

- For: all heated components of 2000 series
- Outer dimension: 190 x 130 x 255 mm
- Weight: 4.25 kg
- Voltage/Power: 90-260V AC, 50…60Hz
- Power Consumption: 200 W max.
- Output: 24 VDC; max 4A
- Display: 0.0 to 99.9°C
- Resolution of display: 0.1°C
- Internal Resolution: 0.01°C
- Setpoint values: from 0.0 up to 60.0°C

F1
TempController 2000-1
Art.-No.: **11533018**

F2 – TempController 2000-2 **11533019**

Temperature control unit with 2 equal, independent channels to electrically heat various components of Leica Live on Stage components. The TempController 2000-2 can only be used together with components of the Incubation System 2000 and can be operated with the buttons at the front side as well as externally via USB. For easier identification, both channels are set up with the name of the connected component on the operator interface.

- For: all heated components of 2000 series
- Outer dimension: 190 x 130 x 255 mm
- Weight: 4.25 kg
- Voltage/Power: 90-260V AC, 50…60Hz
- Power Consumption: 200 W max.
- Output: 24 V DC; max 4A per channel
  max. 4.2A combined power
- Display: 0.0 to 99.9°C
- Resolution of display: 0.1°C.
- Internal Resolution: 0.01°C
- Setpoint values: 0.0 up to 60.0°C.

F2
TempController 2000-2
Art.-No.: **11533019**

CONTROLLER 2000 – WARM AIR

F3
Heating Unit 2000
Art.-No.: **11533020**

F3 – Heating Unit 2000 **11533020**

The Heating Unit 2000 supplies the large Leica incubators BLX 2000-series with heated air. For the control of the air temperature the TempController 2000-2 is required. The Heating Unit 2000 automatically adapts to the impressed line voltage. The speed of the fan is permanently monitored. If it falls below a threshold, the heater will be switched off.

• For:	"G34-41 – Incubator i8 "G33 – Incubator i8 for TIRF" "G42 – Incubator DM IL LED 2000" "G43 – Incubator 2000 f. DM4-6 B/LMD"
• Requirements:	"F2 – TempController 2000-2"
• Temperature range:	+5°C up to 40°C
• Outer dimension:	190 x 154 x 215 mm
• Weight:	3.7 kg
• Voltage/Power:	100..115/230V AC, 50…60Hz
• Power Consumption:	615 VA max. 250mA max.
• Output:	24 V DC from TempController 2000-2

CONTROLLER 2000 – CO_2 / PH-VALUE

F4 – CO_2-Controller 2000 **11533021**

The CO_2-Controller 2000 has been developed for the generation of a defined CO_2-concentration and a subsequent pressure-less supply of closed chambers with a low volume ("incubators") via the gassing principle "small gas flows".
With this control unit, the percentage of CO_2 in relation to the concentration in the ambient air can be increased. In order to increase the CO_2 amount, CO_2 coming from a CO_2 gas cylinder is added to the ambient air. A built-in CO_2 sensor permanently measures the CO_2 concentration of the effluent gas mix and reports the value to the control unit. This control unit operates a proportional valve and regulates the amount of CO_2 which is added to the air flow. A pump (controlled by the control unit) pumps in ambient air into the combined metering chamber of the gas measuring sensors in addition to the controlled gas inflow of CO_2.

F4
CO_2-Controller 2000
Art.-No.: **11533021**

Recommended range for the: CO_2 setpoint value from 0.0 Vol-% up to 20.0 Vol-%:

Accessories:
- Humidification Bottle 250 ml
- Filter set
- Sound absorber with sterile filter
- PU-tube, blue, 4x0,75, 6.0 m
- Tygon tube, clear, 2.0 m
- USB cable

• For:	"G30 – Incubator P 2000" "G31 – Incubator PM 2000 RBT" "G32 – Incubator MMK 2000" "C50 – Heatable Incubation Insert P-Set 2000" "D3 – Cooling/Heating Incubation Insert P-Set 2000" all CO_2 Cover (G1 –G20)
• Requirements:	CO_2 supply
• Outer dimension:	190 x 130 x 255 mm
• Weight:	5.25 kg
• Voltage/Power:	90-260 V AC, 50…60Hz
• Power Consumption:	45 W max.
• CO_2 supply:	1-2 bar (15-29 psi) technical CO_2 , purity >=99%
• CO_2 Display:	0.0 to 100.0 Vol-%
• CO_2 Res. of display:	0.1 Vol-%
• CO_2 Internal Res.:	0.01 Vol-%
• CO_2 Setpoint values:	0.0 up to 20.0 Vol-%
• Optional accessories:	Humidification Bottle 500 ml, Heating Device Humidity 2000

CONTROLLER 2000 – CO_2 / PH-VALUE PLUS O_2

F5
CO_2-O_2-Controller 2000
Art.-No.: **11533022**

F5 – CO_2-O_2-Controller 2000 **11533022**

The CO_2-O_2-Controller 2000 has been developed for the generation of a defined CO_2- and O_2-concentration and a subsequent pressure-less supply of closed chambers with a low volume ("incubators") via the gassing principle "small gas flows".
With this control unit, the percentage of CO_2 in relation to the concentration in the ambient air can be increased. Additionally, the percentage of O_2 in this air-gas-mixture which averages approx. 20.8 Vol-% in the ambient air can be decreased with the O_2 mode of operation.
In order to increase the CO_2 amount, CO_2 coming from a CO_2 gas cylinder is added to the ambient air. A built-in CO_2 sensor permanently measures the CO_2 concentration of the effluent gas mix and reports the value to the control unit. This control unit operates a proportional valve and regulates the amount of CO_2 which is added to the air flow.
In order to decrease the amount of oxygen (O_2), nitrogen coming from a N_2 gas cylinder is added to the ambient air, so that it is diluted with nitrogen until the preset oxygen content is reached. A built-in O_2 sensor permanently measures the O_2 concentration of the effluent gas mix and reports the value to the control unit. This control unit operates a proportional valve and regulates the amount of nitrogen which is added to the air flow. A pump (controlled by the control unit) pumps in ambient air into the combined metering chamber of the gas measuring sensors in addition to the controlled gas inflow of CO_2 and N_2

Recommended range for the: CO_2 setpoint value from 0.0 Vol-% up to 20.0 Vol-%:
Recommended range for the: O_2 setpoint value from 0.0 Vol-% up to 21.0 Vol-%:

Accessories:
- Humidification Bottle 500 ml
- Filter set
- Sound absorber with sterile filter
- PU-tube, blue 4x0.75 6.0 m
- PU-tube, black 4x0.75 4.0 m
- Tygon tube, clear 2.0 m
- USB cable

• For:	"G30 – Incubator P 2000" "G31 – Incubator PM 2000 RBT" "G32 – Incubator MMK 2000" "C50 – Heatable Incubation Insert P-Set 2000" "D3 – Cooling/Heating Incubation Insert P-Set 2000" all CO_2 Cover (G1 –G20)
• Requirements:	N_2 supply
• Outer dimension:	190 x 130 x 255 mm
• Weight:	5.75 kg
• Voltage/Power:	90-260V AC, 50…60Hz
• Power Consumption:	50W max.
• CO_2 supply:	1-2 bar (15-29 psi) technical CO_2, purity >=99%
• CO_2 Display:	0.0 to 100.0 Vol-%
• CO_2 Res. of display:	0.1 Vol-%
• CO_2 Internal Res.:	0.01 Vol-%
• CO_2 Setpoint values:	0.0 up to 20.0 Vol-%
• N_2 supply:	1-2 bar (15-29 psi) technical N_2, purity >=99%
• O_2 Display:	0.0 to 25.0 Vol-%
• O_2 Res. of display:	0.1 Vol-%
• O_2 Internal Res.:	0.05 Vol-%
• O_2 Setpoint values:	0.0 up to 21.0 Vol-%
• Optional accessories:	Humidification Bottle 250 ml, Heating Device Humidity 2000

CONTROL SENSOR 2000

F6 – Control Sensor T 2000 **11533024**

The Control Sensor T 2000 is a small-sized control device for the measurement of temperature in different cell cultivation vessels, especially “35” and “60” Petri dishes.

- With the help of the sensor, the medium temperature can be measured in pre-experiments. Due to its small shape and the supplied accessories, the Control Sensor T 2000 measures the temperature under realistic incubation conditions as they exist in later experiments without control sensor.
- For power supply, the sensor has to be connected to a TempController.

• For:	Cell cultivation vessels, especially “35” and “60” Petri dishes
• Requirements:	"F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Outer dimension:	Diameter 40/65 mm, height 18 mm
• Weight:	0.2 kg

F6
Control Sensor T 2000
Art.-No.: **11533024**

HUMIDIFICATION BOTTLES

F7
Humidification Bottle 250 ml
Art.-No.: **11533085**

F8
Humidification Bottle 500 ml
Art.-No.: **11533084**

F7 – Humidification Bottle 250 ml **11533085**
F8 – Humidification Bottle 500 ml **11533084**

A problem when heating up air inside an incubation system is that it can take up more water. This results in a decrease of relative humidity, which subsequently will cause an increase of evaporation from the media, mainly because most of the lids of multi-well plates have a small gap to let CO_2 pass. Less water in the media means a higher ion concentration, which will influence cell biological processes and finally leads to cell death. To reduce the evaporation rate the air inside the incubation system must be humidified.

To humidify the air in the
- "G30 – Incubator P 2000"
- "G31 – Incubator PM 2000 RBT"
- "G32 – Incubator MMK 2000"
- "C50 – Heatable Incubation Insert P-Set 2000"
- "D3 – Cooling/Heating Incubation Insert P-Set 2000"
- or any CO_2-Covers

the humidifier is used. This humidifier has a volume of 250 ml or 500 ml and is connected to with the Controller. Using CO_2 covers it could be placed inside the Incubator i8 for best performance and enriches the air-CO_2 mixture going to the CO_2-Cover with water.

11533085

• For:	"G30 – Incubator P 2000" "G31 – Incubator PM 2000 RBT" "G32 – Incubator MMK 2000" "C50 – Heatable Incubation Insert P-Set 2000" "D3 – Cooling/Heating Incubation Insert P-Set 2000" all CO_2 Cover (G1 –G20) in Incubator i8
• Outer dimension:	70 x 170 mm
• Material:	Glass, transparent
• Volume:	250 ml
• Weight:	0.3 kg

11533084

• For:	"G30 – Incubator P 2000" "G31 – Incubator PM 2000 RBT" "G32 – Incubator MMK 2000" "C50 – Heatable Incubation Insert P-Set 2000" "D3 – Cooling/Heating Incubation Insert P-Set 2000" all CO_2 Cover (G1 –G20) in Incubator i8
• Outer dimension:	85 x 210 mm
• Material:	Glass, transparent
• Volume:	500 ml
• Weight:	0.4 kg

F9 – Heating Device Humidity 2000 **11533023**

The Heating Device Humidity 2000 is designed for the stable heating of the Humidification Bottle 250 ml and the Humidification Bottle 500 ml. The Heating Device Humidity 2000 warms up the water inside the bottles when no large incubator is used. The Heating Device Humidity 2000 is compatible to both Humidifier due to the special design. The additional aluminum insert for the use with the smaller bottle can be removed when the larger bottle is used. The gas-air-mixture is routed through the "Humidification Bottle" and enters the incubator or CO_2-Cover in a warmed-up state, thus providing for a stable temperature and increased humidity around the cell cultivation vessel. For power supply and control of temperature the Heating Device Humidity 2000 has to be connected to the TempController 2000-1 or 2000-2.

Accessories:

- Insulation tube

• For:	Humidification Bottle 250 ml and Humidification Bottle 500 ml
• Requirements:	"F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Operating voltage:	24V DC
• Power consumption:	max. 2.1A
• Control range:	ambient temperature up to 60°
• Outer dimension:	Ø 100 x 124 mm (DxH)
• Weight:	approx. 1.5 kg

F9
Heating Device Humidity 2000
Art.-Nr.: **11533023**

COVERS FOR STAGE INSERTS (INVERTED MICROSCOPES)

G1
CO_2 Cover PM with Heating Insert M06
Art.-No.: **11533061**

G1 – CO_2-Cover PM **11533061**

This CO_2-Cover PM fits onto different inserts and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass. Holes at the bottom side distribute the CO_2-gas-mixture uniformly in the incubation room. The cover provides a relative humidity of approx. 90%.

• For Inserts:	"C41 – Heating Insert P 2000" "C42 – Heating Insert P Lab-Tek™ 2000" "C43 – Heating Insert M06 2000 EC" "C44 – Heating Insert M12 2000 EC" "C45 – Heating Insert M24 2000 EC" "C46 – Heating Insert M96 2000 EC"
• Requirements:	"F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
• Observation Opening:	115 x 80 mm
• Applicable:	for DIC in Incubator i8 series
• Provided humidity:	90%
• Weight:	0.15 kg

G2
CO_2 Cover HP with Heating Insert P
Art.-No.: **11533054**

G2 – CO_2-Cover HP **11533054**

This CO_2-Cover HP fits onto different inserts and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of opaque acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

• For Inserts:	"C23 – Insert N for Lab-Tek™" "D1 – Cooling/Heating Insert P" "D2 – Cooling/Heating Insert P Lab-Tek™" "C18 – Universal Holding frame KP-Set" + "C21 – Top Frame KP-Set" "C19 – Universal Holding frame K100-Set" + "C21 – Top Frame KP-Set"
• Requirements:	"F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
• Applicable:	for DIC in Incubator i8 series
• Provided humidity:	90%
• Weight:	0.15 kg

G3 – CO_2-Cover HP-MG **11532982**

This CO_2-Cover HP-MG fits onto different inserts and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of opaque acrylic glass with a glass insert to permit DIC.
The slidable glass insert permits an easy access to the cell cultivation vessel. Cover with 2 openings with silicone seals for the tubes (for perfusion applications).The cover provides a relative humidity of approx. 90%.

G3
CO_2 Cover HP-MG
Art.-No.: **11532982**

• For Inserts:	"C23 – Insert N for Lab-Tek™"
	"D1 – Cooling/Heating Insert P"
	"D2 – Cooling/Heating Insert P Lab-Tek™"
	"C18 – Universal Holding frame KP-Set"
	+ "C21 – Top Frame KP-Set"
	"C19 – Universal Holding frame K100-Set"
	+ "C21 – Top Frame KP-Set"
• Requirements:	"F4 – CO_2-Controller 2000" or
	"F5 – CO_2-O_2-Controller 2000"
• Observation Opening:	78 x 100 mm
• Applicable:	for DIC
	in Incubator i8 series
• Provided humidity:	90%
• Weight:	0.15 kg

G4 – CO_2-Cover HP-MG-L **11533082**

This CO_2-Cover HP-MG-L fits onto different inserts and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of opaque acrylic glass with a glass insert to permit DIC.
The slidable glass insert permits an easy access to the cell cultivation vessel. The cover provides a relative humidity of approx. 90%.

G4
CO_2 Cover HP-MG-L
Art.-No.: **11533082**

• For Inserts:	"C41 – Heating Insert P 2000"
	"C42 – Heating Insert P Lab-Tek™ 2000"
	"C43 – Heating Insert M06 2000 EC"
	"C44 – Heating Insert M12 2000 EC"
	"C45 – Heating Insert M24 2000 EC"
	"C46 – Heating Insert M96 2000 EC"
• Requirements:	"F4 – CO_2-Controller 2000" or
	"F5 – CO_2-O_2-Controller 2000"
• Observation Opening:	78 x 100 mm
• Applicable:	for DIC
	in Incubator i8 series
• Provided humidity:	90%
• Weight:	0.15 kg

G5
CO_2-Cover MH
Art.-No.: **11533056**

G5 – CO_2-Cover MH — 11533056

The CO_2-Cover MH fits on the Universal Mounting Frames MH 2000, MH-L 2000 and MH-R 2000 and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

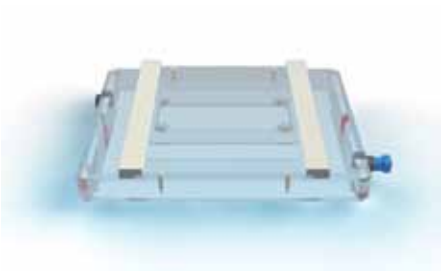
- For Inserts: "B18 – Heatable Universal Holding frame MH 2000"
  "B19 – Heatable Universal Holding frame MH-L 2000"
  "B20 – Heatable Universal Holding frame MH-R 2000"
- Requirements: "F4 – CO_2-Controller 2000" or
  "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: 62 x 92 mm
- Applicable: for DIC
  in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.1 kg

G6
CO_2-Cover KH
Art.-No.: **11533057**

G6 – CO_2-Cover KH — 11533057

The CO_2-Cover KH fits on the Universal Mounting Frames KH 2000, KH-L 2000 and KH-R 2000 and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

- For Inserts: "C31 – Heatable Universal Holding frame KH 2000"
  "C32 – Heatable Universal Holding frame KH-L 2000"
  "C33 – Heatable Universal Holding frame KH-R 2000"
- Requirements: "F4 – CO_2-Controller 2000" or
  "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: 62 x 92 mm
- Applicable: for DIC
  in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.1 kg



G7
CO_2 Cover MM M
Art.-No.: **11533058**

G7 – CO_2-Cover MM M — 11533058

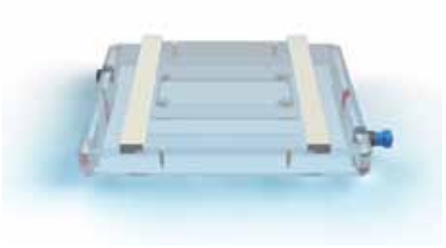
The CO_2-Cover MM M fits on the Universal Mounting Frames MH 2000, MH-L 2000 and MH-R 2000 and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The slidable glass insert permits an easy access for Micromanipulation. The two glass sliders can be opened and closed by 25 x 65 mm. As tested, the pH-value of the nutrient medium in dishes and chambers is stable during micromanipulation at an open space of up to 5 mm between the two glass sliders. It is sufficient to adjust a very soft CO_2 /air stream The cover provides a relative humidity of approx. 90%.

- For Inserts: "B18 – Heatable Universal Holding frame MH 2000"
  "B19 – Heatable Universal Holding frame MH-L 2000"
  "B20 – Heatable Universal Holding frame MH-R 2000"
- Requirements: "F4 – CO_2-Controller 2000" or
  "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: 62 x 92 mm
- Applicable: for DIC
  in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.1 kg

G8 – CO_2-Cover MM K **11532553**

The CO_2-Cover MM K fits on the Universal Mounting Frames KH 2000, KH-L 2000 and KH-R 2000 and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The slidable glass insert permits an easy access for Micromanipulation. The two glass sliders can be opened and closed by 25 x 65 mm. As tested, the pH-value of the nutrient medium in dishes and chambers is stable during micromanipulation at an open space of up to 5 mm between the two glass sliders. It is sufficient to adjust a very soft CO_2/air stream The cover provides a relative humidity of approx. 90%.

- For Inserts: "C31 – Heatable Universal Holding frame KH 2000"
  "C32 – Heatable Universal Holding frame KH-L 2000"
  "C33 – Heatable Universal Holding frame KH-R 2000"
- Requirements: "F4 – CO_2-Controller 2000" or
  "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: 62 x 92 mm
- Applicable: for DIC
  in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.1 kg

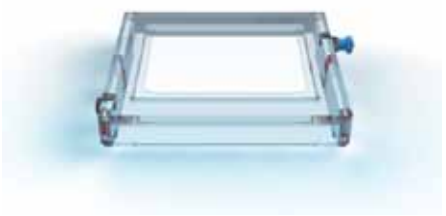


G8
CO_2-Cover MM K
Art.-No.: **11532553**

G9 – CO_2-Cover KP **11533059**

The CO_2-Cover KP fits on the Universal Mounting Frame KP-Set and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

- For Inserts: "C18 – Universal Holding frame KP-Set"
- Requirements: "F4 – CO_2-Controller 2000" or
  "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: 62 x 92 mm
- Applicable: for DIC
  in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.1 kg

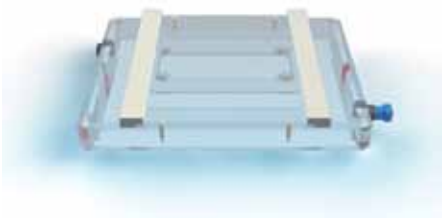


G9
CO_2-Cover KP
Art.-No.: **11533059**

G10 – CO_2-Cover MM KP **11533060**

The CO_2-Cover MM KP fits on the Universal Mounting Frame KP-Set and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

- For Inserts: "C18 – Universal Holding frame KP-Set"
- Requirements: "F4 – CO_2-Controller 2000" or
  "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: 25 x 65 mm
- Applicable: for DIC
  in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.1 kg



G10
CO_2-Cover MM KP
Art.-No.: **11533060**

G11
CO_2-Cover KM
Art.-No.: **11532971**

G12
CO_2-Cover GL
Art.-No.: **11532886**

G13
CO_2-Cover 6xPetri
Art.-No.: **11533065**

G11 – CO_2-Cover KM 11532971

The CO_2-Cover KM fits on the Universal Mounting Frames KM and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

- For Inserts: "C115 – Universal Holding frame KM Click-In"
- Requirements: "F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: 120 x 90 mm
- Applicable: for DIC in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.2 kg

G12 – CO_2-Cover GL 11532886

The CO_2-Cover GL fits on the Insert GL-Set and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

- For Inserts: "C22 – Insert GL-Set"
- Requirements: "F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: 75 x 50 mm
- Applicable: for DIC in Incubator i8 series
- Provided humidity: 90%
- Weight: < 0.1 kg

G13 – CO_2-Cover 6xPetri 11533065

The CO_2-Cover 6xPetri fits on the Holding Frame for 6 Petri dishes and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

- For Inserts: "C17 – Holding frame 6 Petri dishes"
- Requirements: "F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: for 6 x 35 mm Petri dishes
- Applicable: for DIC in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.1 kg

G14 – CO_2-Cover Quad **11533067**

The CO_2-Cover quad fits on the Holding Frame Slide Holder (Quad) and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

- For Inserts: "C16 – Holding frame Slide Holder(quad)"
- Requirements: "F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: for 4 x slides
- Applicable: for DIC in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.1 kg

G14
CO_2-Cover Quad
Art.-No.: **11533067**

G15 – CO_2-Cover K100-Set **11532999**

The CO_2-Cover K100-Set fits on the Universal Mounting Frame K100-Set and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

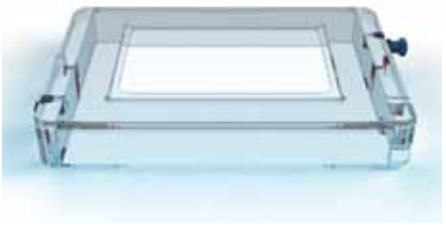
- For Inserts: "C19 – Universal Holding frame K100-Set"
- Requirements: "F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: for 4 x slides
- Applicable: for DIC in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.1 kg

G15
CO_2-Cover K100-Set
Art.-No.: **11532999**

G16 – CO_2-Cover TH **11532841**

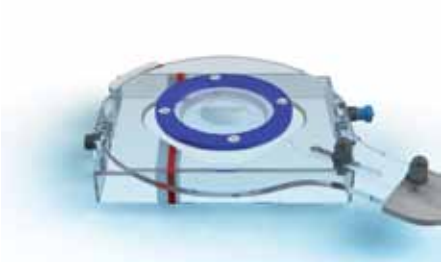
The CO_2-Cover TH fits on the Tokaihit Thermoplates TPX and permits local CO_2-control in a completely closed environment in the large Incubator i8. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover provides a relative humidity of approx. 90%.

- For Inserts: "C34 – Tokaihit, Leica TPX Type HF Heating Frame, Glass"
  "C36 – Tokaihit, Leica TPX Type NF Heating Frame 26, Metal"
  "C37 – Tokaihit, Leica TPX Type I2 Heating Frame 26, Metal"
- Requirements: "F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
- Observation Opening: 75 x 50 mm
- Applicable: for DIC in Incubator i8 series
- Provided humidity: 90%
- Weight: 0.2 kg



G16
CO_2-Cover TH
Art.-No.: **11532841**

COVERS FOR STAGE INSERTS (UPRIGHT MICROSCOPES)

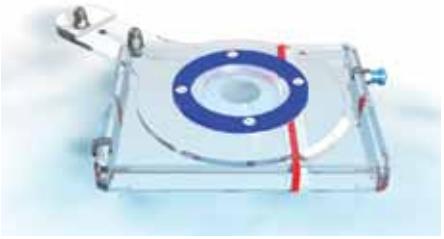


G20
CO_2-Cover GL-A
Art.-No.: **11533062**

G20 – CO_2-Cover GL-A **11533062**

The swiveling CO_2-Cover GL-A fits on the Insert GL-Set (in combination with an upright microscope), Universal Mounting Frame AK and on the 3 different Heatable Universal Mounting Frames AKH 2000 and permits local CO_2-control in a completely closed environment in the large Incubator 2000 f. DM4-6 B/LMD. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover has an opening with a silicone seal for different objectives (upright microscopes).The cover provides a relative humidity of approx. 90%.

• For Inserts:	"C22 – Insert GL-Set"
• Requirements:	"F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
• Applicable:	for DIC in Incubator 2000 f. DM4-6 B/LMD
• Provided humidity:	90%
• Weight:	0.2 kg



G21
CO_2-Cover AKH
Art.-No.: **11533063**

G21 – CO_2-Cover AKH **11533063**

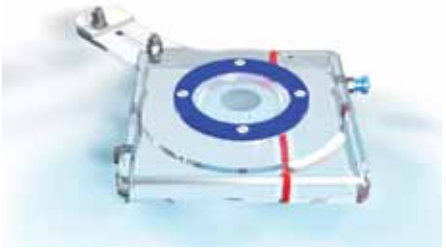
The CO_2-Cover AKH fits on the Universal Mounting Frame AK and on the 3 different Heatable Universal Mounting Frames AKH 2000 and permits local CO_2-control in a completely closed environment in the Incubator 2000 f. DM4-6 B/LMD. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover has an opening with a silicone seal for different objectives. The cover provides a relative humidity of approx. 90%.

• For Inserts:	"E5 – Heatable Universal Holding frame AKH 2000" "E6 – Heatable Universal Holding frame AKH-L 2000" "E7 – Heatable Universal Holding frame AKH-R 2000"
• Requirements:	"F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
• Applicable:	for DIC in Incubator 2000 f. DM4-6 B/LMD
• Provided humidity:	90%
• Weight:	0.2 kg

G22 – CO_2-Cover AK-Set **11533064**

The CO_2-Cover AK fits on the Universal Mounting Frame AK-set and permits local CO2-control in a completely closed environment in the Incubator 2000 f. DM4-6 B/LMD. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover has an opening with a silicone seal for different objectives. The cover provides a relative humidity of approx. 90%.

• For Inserts:	"E4 – Universal Holding frame AK-Set"
• Requirements:	"F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
• Applicable:	for DIC in Incubator 2000 f. DM4-6 B/LMD
• Provided humidity:	90%
• Weight:	0.2 kg

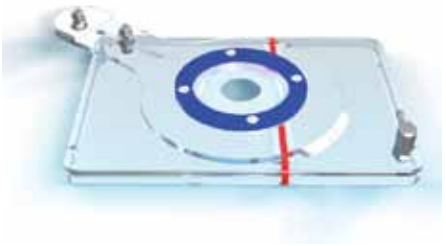


G22
CO_2-Cover AK-set
Art.-No.: **11533064**

G23 – CO_2-Cover UP-Set **11533066**

The CO_2-Cover UP-Set fits on the Heating Insert UP-set 2000 and Cooling/Heating Insert UP-Set 2000 and permits local CO_2-control in a completely closed environment in the Incubator 2000 f. DM4-6 B/LMD. The cover is made out of transparent acrylic glass with a glass insert to permit DIC. The cover has an opening with a silicone seal for different objectives. The cover provides a relative humidity of approx. 90%.

• For Inserts:	"E8 – Heating Insert UP-Set 2000" "E9 – Cooling/Heating Insert UP-Set 2000"
• Requirements:	"F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
• Applicable:	for DIC in Incubator 2000 f. DM4-6 B/LMD
• Provided humidity:	90%
• Weight:	0.2 kg



G21
CO_2-Cover UP-Set
Art.-No.: **11533066**

CO_2-Covers for Ludl Piezo Inserts **on request**
CO_2-Covers for Prior Piezo Inserts **on request**

G30
Incubator P 2000
Art.-No.: **11533007**

G30 – Incubator P 2000 **11533007**

The small size Incubator P 2000 with low-volume for warm air incubation and/or CO_2-control mounted on top of the Cooling/Heating Insert is used for the stabilization of In vitro conditions for cell and tissue culture. This incubator is designed for homogenous heat, CO_2 and O_2 distribution.
The heatable glass warms up the incubation chamber from the top. This avoids the condensation of water on the cover of the cell cultivation vessel. The heatable glass of the incubator is translucent to about 90% in the visible light range. The incubator is DIC Compatible. The incubator is compatible to the condensers S23, S28, S50 and S70. For CO_2-control the CO_2-Controller 2000 and for O_2-control the CO_2-O_2-Controller 2000 are mandatory. Temperature control is carried out with the TempController 2000-2.

• Material:	Aluminum, black anodized; heated glass
• Operating voltage:	DC 24V protective low voltage
• Power consumption:	max . 0.5 A
• Heating range::	3°C above ambient up to 40°C
• Output:	24V DC from TempController 2000-2
• Compatible Inserts:	"D1 – Cooling/Heating Insert P" "D2 – Cooling/Heating Insert P Lab-Tek™"
• Observation area:	120 x 77 mm
• Height of observation area:	> 21 mm
• Dimensions:	189 x 115 x 14 mm (L x W x H)
• Requirements:	"F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000" "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.30 kg

G31 – Incubator PM 2000 RBT **11533139**

Small incubator for warm air incubation, CO_2- and O_2-control in combination with a Heating Insert.

- Small incubator for the stabilization of in vitro conditions for cell- and tissue cultures during microscopic examination. The abbreviation RBT stands for Rapid Balanced Temperature. Incubator PM 2000 RBT replaces Incubator PM 2000.
- The heated glass of the incubator is permeable to 90% of light in the visible wavelength range.
- The heated glass warms up the incubation chamber from the top. This avoids the condensation of water on the cover of the cell cultivation vessel.
- The incubator is suitable for high-resolution microscopy. It is designed for the LD-condensors S23, S28, S40 and S70.

The incubator is DIC Compatible. For CO_2-control the CO_2-Controller 2000 and for O_2-control the CO_2-O_2-Controller 2000 are mandatory. Temperature control is carried out with the TempController 2000-2.

• Material:	Aluminum, black anodized; heated glass
• Operating voltage:	DC 24 V protective low voltage
• Power consumption:	max . 0.5 A
• Heating range::	3°C above ambient up to 40°C
• Output:	24 V DC from TempController 2000-2
• Compatible Inserts:	"C41 – Heating Insert P 2000" "C42 – Heating Insert P Lab-Tek™ 2000" "C43 – Heating Insert M06 2000 EC" "C44 – Heating Insert M12 2000 EC" "C45 – Heating Insert M24 2000 EC" "C46 – Heating Insert M96 2000 EC"
• Observation area:	120 x 77 mm
• Height of observation area:	> 21 mm
• Dimensions:	205 x 132 x 18 mm (L x W x H)
• Requirements:	"F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000" "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.30 kg

G31
Incubator PM 2000
Art.-No.: **11533139**

G32
Incubator MMK 2000
Art.-No.: **11533011**

G32 – Incubator MMK 2000 **11533011**

The small size Incubator MMK 2000 with low-volume for warm air incubation and/or CO_2- control mounted on top of the 3 different Heatable Universal Mounting Frames is used for the stabilization of In vitro conditions for cell and tissue culture. This incubator is designed for homogenous heat, CO_2 and O_2 distribution.
The main feature of this incubator is the possibility of moving the 2 heatable glass sides for micromanipulation. The heatable glass warms up the incubation chamber from the top. This avoids the condensation of water on the cover of the cell cultivation vessel. The heatable glass of the incubator is translucent to about 90% in the visible light range. The incubator is DIC Compatible. The incubator is compatible to the condensers S23, S28, S50 and S70. For CO_2-control the CO_2-Controller 2000 and for O_2-control the CO_2-O_2-Controller 2000 are mandatory. Temperature control is carried out with the TempController 2000-2.

• Material:	POM frame; heated glass
• Operating voltage:	DC 24 V protective low voltage
• Power consumption:	max . 0.6 A
• Heating range:	3°C above ambient up to 40°C
• Output:	24 V DC from TempController 2000-2
• Compatible Inserts:	"C31 – Heatable Universal Holding frame KH 2000" "C32 – Heatable Universal Holding frame KH-L 2000" "C33 – Heatable Universal Holding frame KH-R 2000"
• Observation area:	114 x 84 mm
• Height of observation area:	> 21 mm
• Dimensions:	143 x 137 x 18 mm (L x W x H)
• Requirements:	"F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000" "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.25 kg

LARGE VOLUME INCUBATORS FOR INVERTED MICROSCOPES

Incubator i8
The large incubator for Leica DMi8 Series for the stabilization of temperature and CO_2-concentration.

The incubator
- has two large sliding doors in the front panel on the left and right hand side, and has an integrated LED illumination.
- has two slide-in modules on the left and the right hand side.
- heats both the cell cultivation vessel (prevention of condensation) and the objectives.
- is compatible to all condensers and stages.
- is easy to install by just one person. No tools are required.
- will not filled-up with CO_2. A local CO_2-incubation is possible with specific Heating Inserts and non-heatable CO_2-Covers in combination with the CO_2-Controller 2000

A temperature sensor to adapt to different setups can be freely positioned inside the incubator.
Temperature control is carried out with the "F2 – TempController 2000-2". One channel of this controller is used for Heating Stage or Insert, the second channel is directly connected to the "F3 – Heating Unit 2000". In case of long-term experiments an increasing amount of water will be extracted and the ion concentration in the nutrition medium may rise. Using FoilCovers (see H) or in case of CO_2-control by the humidifier which is part of the "F4 – CO_2-Controller 2000" will reduce this effect.

• For microscopes:	Leica DMi8-series
• Material:	Acrylic glass, black
• Control range:	3°C above ambient up to 50°C
• Requirements:	"F3 – Heating Unit 2000"
	"F2 – TempController 2000-2"
• Weight:	15 kg

G33 – Incubator i8 for TIRF **11533812**
Same as Incubator i8 but
- Material: Acrylic glass, black

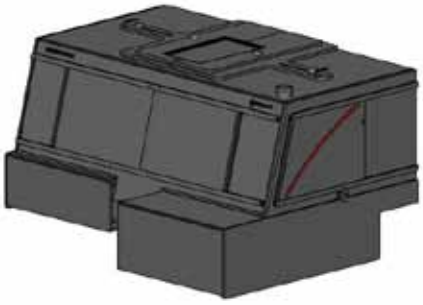
The TIRF incubator is specially designed to match all laser safety issues in combination with standard incubator performance. Based on the regular large incubator the TIRF incubator is featuring interlock doors, which will attenuate the laser power to class I system after opening the doors.

G33
Incubator i8 for TIRF
Art.-Nr.: **11533812**

Do not use transparent door set when coupling a laser.
Danger of serious and irreversible eye damage from laser radiation!
Radiation of the eye or skin from direct or indirect laser radiation has to be avoided by all means! The laser light can cause serious eye damage and skin damage!

Incubator i8, special base plate left **11533398**
Special base plate for the left side of the Incubator i8 which is compatible with the CSU-W1 spinning disk. **For all Incubator i8..**

VARIANT 1 DMI8

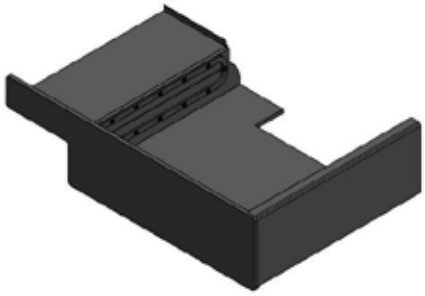


G34
Incubator i8, Variant 1, standard
Art.-Nr.: **11533811**

G34 – Incubator i8, Variant 1, standard **11533811**
Remark:
Standard box. The standard right drawer is designed for all dedicated stages, in particular for Leica 3-plate stage

- LED Illumination,
- Temperature sensor, hose and mounting plate
- Standard drawer left
- Standard drawer right
- Standard black door set

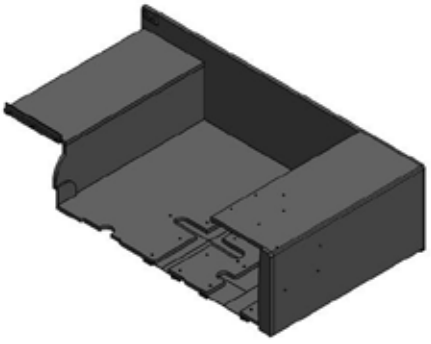
Incubator i8, Variant 1, standard consist of



Incubator i8, standard drawer left
Art.-Nr.: **11533276**

Incubator i8, standard drawer left **11533276**

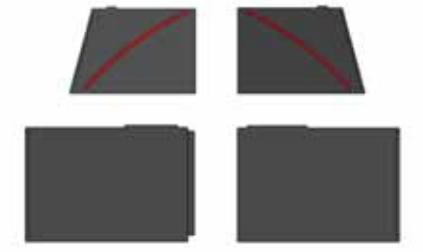
Remark:
Used for standard sized cameras. Not compatible with SPE, Spinning Disk or bigger camera systems (ask for confimation).
Can be ordered separately for replacement/upgrade



Incubator i8, standard drawer right
Art.-Nr.: **11533277**

Incubator i8, standard drawer right **11533277**

Remark:
The standard right drawer is designed for all dedicated stages, in particular for Leica 3-plate stage. Can be ordered separately for replacement/upgrade



Incubator i8, standard black door set
Art.-Nr.: **11533278**

Incubator i8, standard black door set **11533278**

Remark:
Could be used as alteration for all variants

VARIANT 2 DMI8

G35 – Incubator i8, Variant 2 **11533279**
Remark:
Same standard box, but with transparent doors
on both sides (right/left) and 2 transparent doors in the front area

- LED Illumination,
- Temperature sensor, hose and mounting plate
- Standard drawer left
- Standard drawer right
- Transparent door set

Incubator i8, Variant 2, consist of

Incubator i8, standard drawer left **11533276**

Remark:
Used for standard sized cameras. Not compatible with SPE, Spinning Disk or bigger camera systems (ask for confirmation).
Can be ordered separately for replacement/upgrade

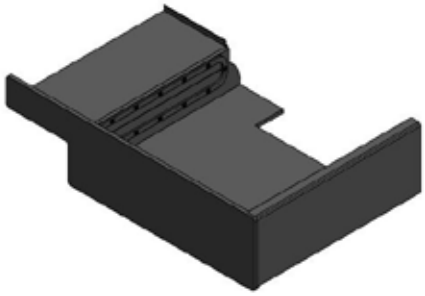
Incubator i8, standard drawer right **11533277**

Remark:
The standard right drawer is designed for all dedicated stages, in particular for Leica 3-plate stage. Can be ordered separately for replacement/upgrade

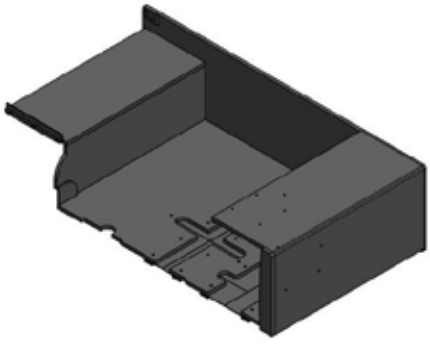
Incubator i8, transparent door set **11533814**

Remark:
Could be used as alteration for all variants

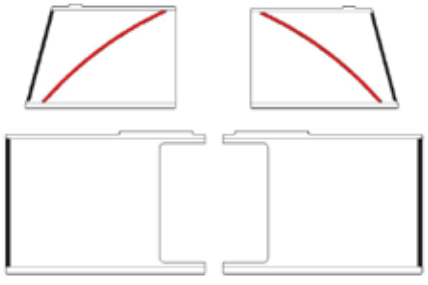
G35
Incubator i8, Variant 2
Art.-Nr.: **11533279**



Incubator i8, standard drawer left
Art.-Nr.: **11533276**

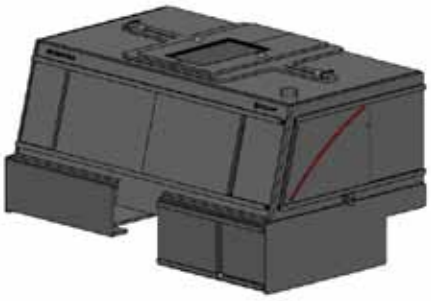


Incubator i8, standard drawer right
Art.-Nr.: **11533277**



Incubator i8, transparent door set
Art.-Nr.: **11533814**

VARIANT 3 DMI8

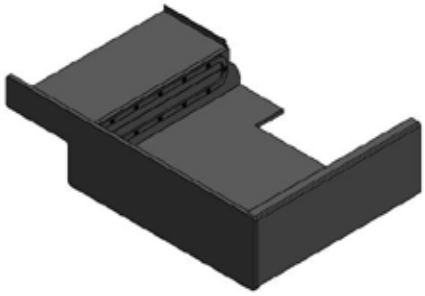


G36
Incubator i8, Variant 3
Art.-Nr.: **11533280**

G36 – Incubator i8, Variant 3, **11533280**
Remark:
Variant 3 comes with an additional door on the right hand side.
Not compatible with Leica 3-plate stages!

- LED Illumination,
- Temperature sensor, hose and mounting plate
- Standard drawer left
- Drawer with door right
- Standard black door set

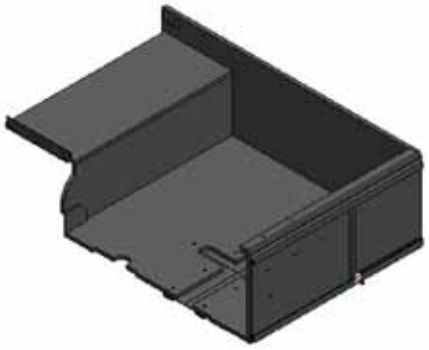
Incubator i8, Variant 3, consist of



Incubator i8, standard drawer left
Art.-Nr.: **11533276**

Incubator i8, standard drawer left **11533276**

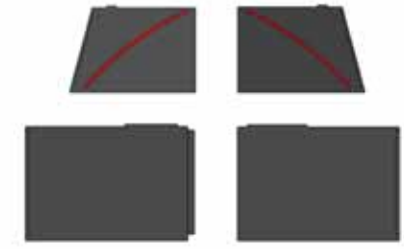
Remark:
Used for standard sized cameras. Not compatible with SPE, Spinning Disk or bigger camera systems (ask for confimation).
Can be ordered separately for replacement/upgrade



Incubator i8, drawer right with door
Art.-Nr.: **11533281**

Incubator i8, drawer right with door **11533281**

Remark:
Special drawer on right-hand side for Incubator i8 with an additional integrated door.
Not compatible with 3-plate stages!
Can be ordered separately for replacement/upgrade



Incubator i8, standard black door set
Art.-Nr.: **11533278**

Incubator i8, standard black door set **11533278**

Remark:
Could be used as alteration for all variants

VARIANT 4 DMI8

G37 – Incubator i8, Variant 4 **11533282**
Remark:
Variant 4 comes with an additional door on the right hand side.
Not compatible with Leica 3-plate stages!

- LED Illumination,
- Temperature sensor, hose and mounting plate
- Standard drawer left
- Drawer with door right
- Transparent door set

Incubator i8, Variant 4, consist of

Incubator i8, standard drawer left **11533276**

Remark:
Used for standard sized cameras. Not compatible with SPE, Spinning Disk or bigger camera systems (ask for confirmation).
Can be ordered separately for replacement/upgrade

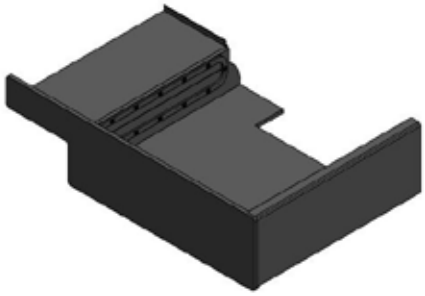
Incubator i8, drawer right with door **11533281**

Remark:
Special drawer on right-hand side for Incubator i8 with an additional integrated door.
Not compatible with 3-plate stages!
Can be ordered separately for replacement/upgrade

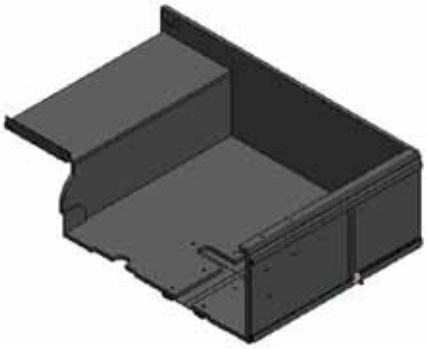
Incubator i8, transparent door set **11533814**

Remark:
Could be used as alteration for all variants

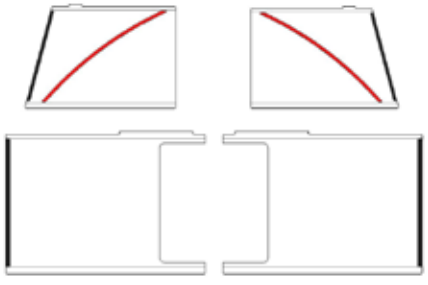
G37
Incubator i8, Variant 4
Art.-Nr.: **11533282**



Incubator i8, standard drawer left
Art.-Nr.: **11533276**

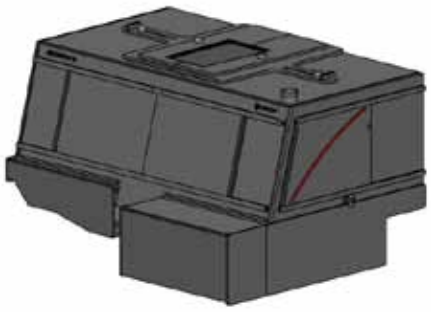


Incubator i8, drawer right with door
Art.-Nr.: **11533281**



Incubator i8, transparent door set
Art.-Nr.: **11533814**

VARIANT 5 DMI8

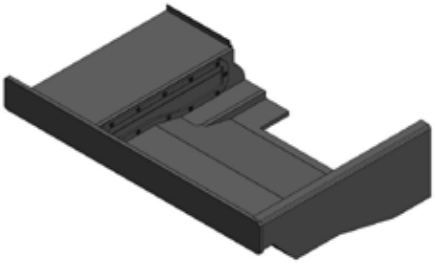


G38
Incubator i8, Variant 5
Art.-Nr.: **11533283**

G38 – Incubator i8, Variant 5, **11533283**
Remark:
Variant 5 comes with a modified left-hand drawer with max. clearance for bigger cameras or detection devices.
Could be used as alteration for all variants

- LED Illumination,
- Temperature sensor, hose and mounting plate
- Drawer left with maximum clearance
- Standard drawer right
- Standard black door set

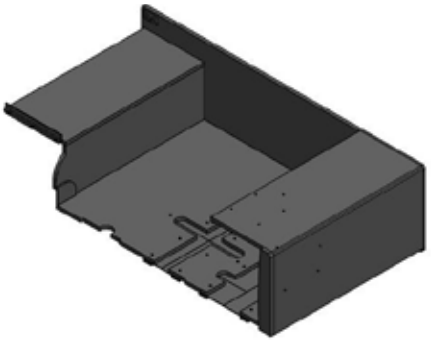
Incubator i8, Variant 5, consist of



Incubator i8, drawer left max. clearance
Art.-Nr.: **11533284**

Incubator i8, drawer left max. clearance **11533284**
Special drawer on left-hand side for Incubator i8
with maximum clearance for using larger cameras/detectors on the left imaging port.

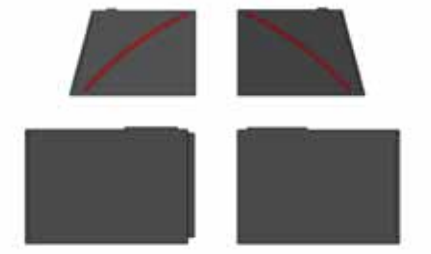
Remark:
The drawer with minimized form factor allowing the adaptation of bulky components on the left-hand side of the microscope. Could be used as alteration for all variants



Incubator i8, standard drawer right
Art.-Nr.: **11533277**

Incubator i8, standard drawer right **11533277**

Remark:
The standard right drawer is designed for all dedicated stages, in particular for Leica 3-plate stage. Can be ordered separately for replacement/upgrade



Incubator i8, standard black door set
Art.-Nr.: **11533278**

Incubator i8, standard black door set **11533278**

Remark:
Could be used as alteration for all variants

VARIANT 6 DMI8

G39 – Incubator i8, Variant 6 **11533285**
Remark:
Variant 6 comes with a modified left-hand drawer with max. clearance for bigger cameras or detection devices. Also comes with transparent doors.
Could be used as alteration for all variants

- LED Illumination,
- Temperature sensor, hose and mounting plate
- Drawer left with maximum clearance
- Standard drawer right
- Transparent door set

Incubator i8, Variant 6, consist of

Incubator i8, drawer left max. clearance **11533284**
Special drawer on left-hand side for Incubator i8
with maximum clearance for using larger cameras/detectors on the left imaging port.

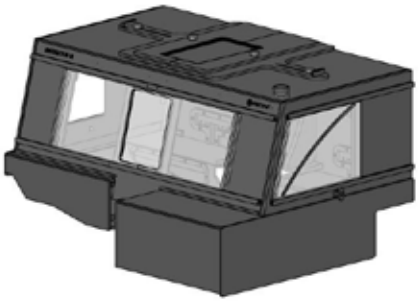
Remark:
The drawer with minimized form factor allowing the adaptation of bulky components on the left-hand side of the microscope. Could be used as alteration for all variants

Incubator i8, standard drawer right **11533277**

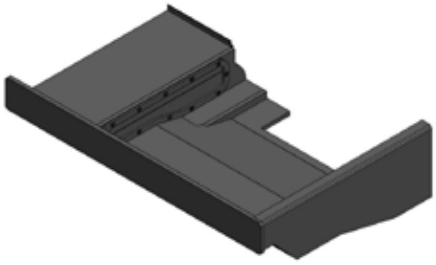
Remark:
The standard right drawer is designed for all dedicated stages, in particular for Leica 3-plate stage. Can be ordered separately for replacement/upgrade

Incubator i8, transparent door set **11533814**

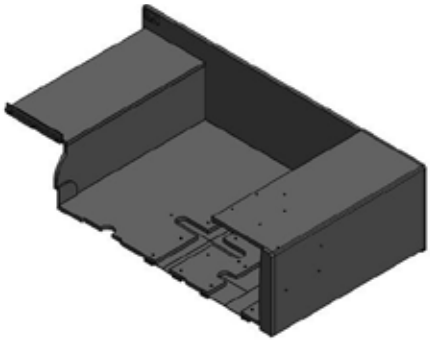
Remark:
Could be used as alteration for all variants



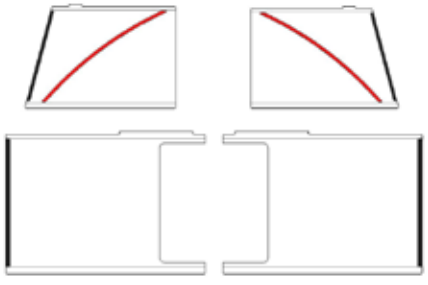
G39
Incubator i8, Variant 6
Art.-Nr.: **11533285**



Incubator i8, drawer left max. clearance
Art.-Nr.: **11533284**

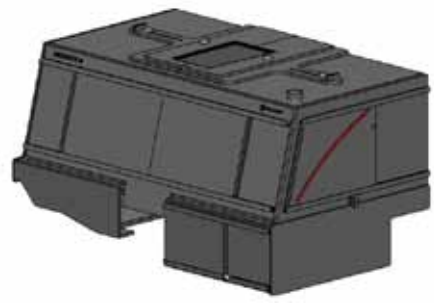


Incubator i8, standard drawer right
Art.-Nr.: **11533277**



Incubator i8, transparent door set
Art.-Nr.: **11533814**

VARIANT 7 DMI8

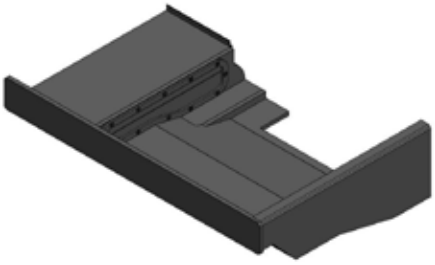


G40
Incubator i8, Variant 7
Art.-Nr.: **11533286**

G40 – Incubator i8, Variant 7, **11533286**
Remark:
Variant 7 comes with a modified left-hand drawer with max. clearance for bigger cameras or detection devices. Variant 7 comes with an additional door on the right hand side.
Not compatible with Leica 3-plate stages!

- LED Illumination,
- Temperature sensor, hose and mounting plate
- Drawer left with maximum clearance
- Drawer with door right
- Standard black door set

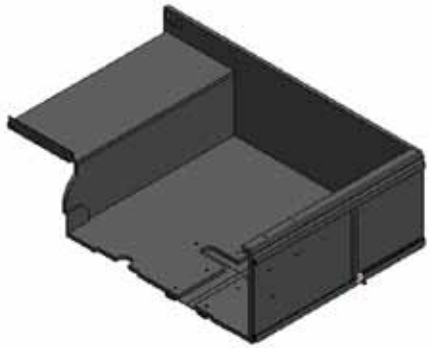
Incubator i8, Variant 7, consist of



Incubator i8, drawer left max. clearance
Art.-Nr.: **11533284**

Incubator i8, drawer left max. clearance **11533284**
Special drawer on left-hand side for Incubator i8
with maximum clearance for using larger cameras/detectors on the left imaging port.

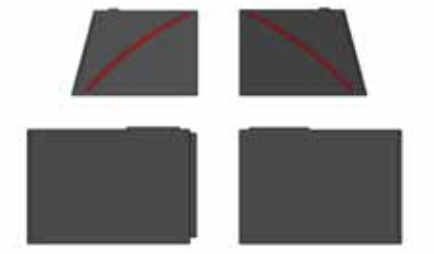
Remark:
The drawer with minimized form factor allowing the adaptation of bulky components on the left-hand side of the microscope. Could be used as alteration for all variants



Incubator i8, drawer right with door
Art.-Nr.: **11533281**

Incubator i8, drawer right with door **11533281**

Remark:
Special drawer on right-hand side for Incubator i8 with an additional integrated door.
Not compatible with 3-plate stages!
Can be ordered separately for replacement/upgrade



Incubator i8, standard black door set
Art.-Nr.: **11533278**

Incubator i8, standard black door set **11533278**

Remark:
Could be used as alteration for all variants

VARIANT 8 DMI8

G41 – Incubator i8, Variant 8 **11533287**
Remark:
Variant 8 comes with a modified left-hand drawer with max. clearance for bigger cameras or detection devices. Variant 8 comes with an additional door on the right hand side.
Not compatible with Leica 3-plate stages!

- LED Illumination,
- Temperature sensor, hose and mounting plate
- Drawer left with maximum clearance
- Drawer with door right
- Transparent door set

Incubator i8, Variant 8, consist of

Incubator i8, drawer left max. clearance **11533284**
Special drawer on left-hand side for Incubator i8
with maximum clearance for using larger cameras/detectors on the left imaging port.

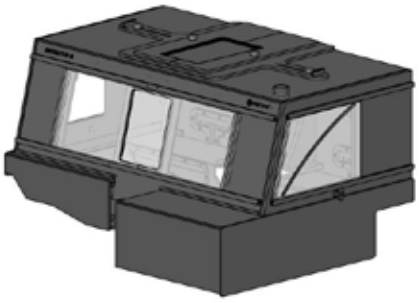
Remark:
The drawer with minimized form factor allowing the adaptation of bulky components on the left-hand side of the microscope. Could be used as alteration for all variants

Incubator i8, drawer right with door **11533281**

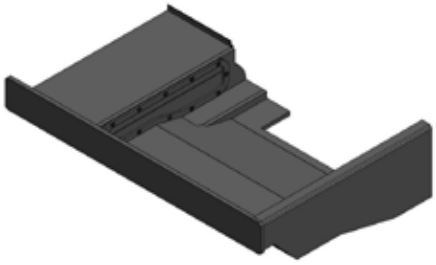
Remark:
Special drawer on right-hand side for Incubator i8 with an additional integrated door.
Not compatible with 3-plate stages!
Can be ordered separately for replacement/upgrade

Incubator i8, transparent door set **11533814**

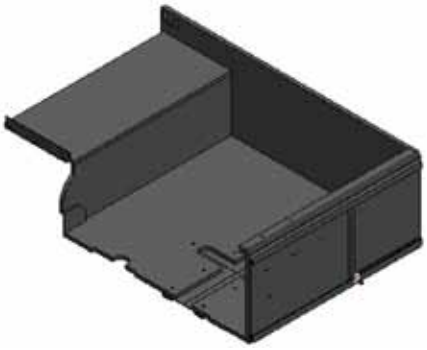
Remark:
Could be used as alteration for all variants



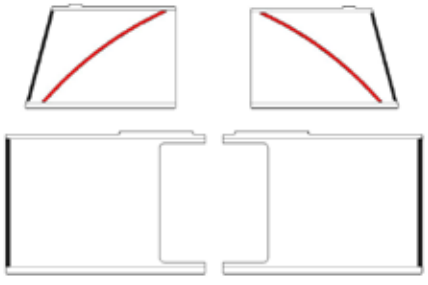
G41
Incubator i8, Variant 8
Art.-Nr.: **11533287**



Incubator i8, drawer left max. clearance
Art.-Nr.: **11533284**



Incubator i8, drawer right with door
Art.-Nr.: **11533281**



Incubator i8, transparent door set
Art.-Nr.: **11533814**

G42
Incubator DM IL LED 2000
Art.-Nr.: **11533016**

G42 – Incubator DM IL LED 2000 **11533016**

The large incubator for Leica DM IL LED for the stabilization of temperature and CO_2-concentration.
The incubator

- has a large sliding door in the front panel and one in the left side panel.
- heats both the cell cultivation vessel (prevention of condensation) and the objectives.
- is compatible to all condensers and manual stages.
- is easy to install by just one person. No tools are required.
- will not filled-up with CO_2. A local CO_2-incubation is possible with specific Heating Inserts and non-heatable CO_2-Covers in combination with the CO_2-Controller 2000

A temperature sensor to adapt to different setups can be freely positioned inside the incubator.
For operation, the use of further heated components (e.g. Heating Stage or Heating Inserts) are recommend.
Temperature control is carried out with the "F2 – TempController 2000-2". One channel of this controller is used for Heating Stage or Insert, the second channel is directly connected to the "G42 – Incubator DM IL LED 2000". In case of long-term experiments an increasing amount of water will be extracted and the ion concentration in the nutrition medium may rise. Using FoilCovers (see H) or in case of CO_2-control by the humidifier which is part of the "F4 – CO_2-Controller 2000" will reduce this effect.

• For microscope:	Leica DM IL LED
• Material:	Acrylic glass, optically clear
• Openings:	160 x 160 mm, 80 x 80 mm
• Control range:	3°C above ambient up to 50°C
• Dimension:	460 x 460 x 300 mm
• Requirements:	"F3 – Heating Unit 2000" "F2 – TempController 2000-2"
• Weight:	6.0 kg

INCUBATOR FOR UPRIGHT MICROSCOPES (DM4-6 B/LMD6-7)

G43 – Incubator 2000 f. DM4-6 B/LMD **11533015**

The large incubator for Leica DM4-6 B microscopes (including Leica LMD6/7) for the stabilization of temperature and CO_2-concentration.

The incubator

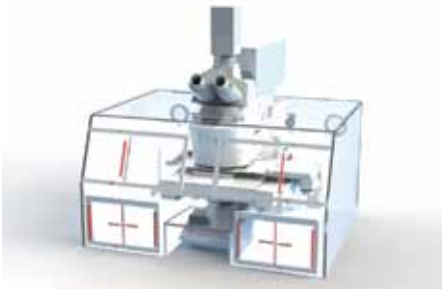
- has two large sliding doors in the front panel on the left and right hand side, below there are two smaller openings with sliding doors.
- heats both the cell cultivation vessel (prevention of condensation) and the objectives.
- is easy to install by just one person. No tools are required.
- will not filled-up with CO_2. A local CO_2-incubation is possible with specific Heating Inserts and non-heatable CO_2-Covers in combination with the CO_2-Controller 2000

A temperature sensor to adapt to different setups can be freely positioned inside the incubator.

For operation, the use of further heated components (e.g. Heating Inserts) are recommend.

Temperature control is carried out with the "F2 – TempController 2000-2". One channel of this controller is used for Heating Insert, the second channel is directly connected to the "F3 – Heating Unit 2000".

• For microscope:	Leica DM4-6 B, LMD6-7
• Material:	Acrylic glass, optically clear
• Openings:	150 x 150 mm, 90 x 115 mm
• Control range:	3°C above ambient up to 50°C
• Dimension:	680 x 530 x 360 mm (WxDxH)
• Requirements:	"F3 – Heating Unit 2000" "F2 – TempController 2000-2"
• Weight:	6.0 kg



G43
Incubator 2000 f. DM4-6 B/LMD
Art.-Nr.: **11533015**

H EVAPORATION REDUCTION

The relative humidity within an incubator depends on the temperature – the higher the temperature, the greater the volume of water that is absorbed. A problem when heating up air inside an incubation system is that it can take up more water. This results in a decrease of relative humidity, which subsequently will cause an increase of evaporation from the media, mainly because most of the lids of multi-well plates have a small gap to let CO_2 pass. For the experiment this means that as the temperature rises, more and more water is extracted from the nutrients in the cell cultures, which results in an increased ion concentration. Measurements have shown that with cells only 5–10 % water loss in the nutrient medium is tolerated. Less water respectively higher ion concentration will influence cell biological processes and finally leads to cell death. For the reduction of evaporation 2 different principles or a combination of both can be used: increasing the humidity of the surrounding environment or a reduction of the lost water from the cultivation vessel. Depending on the volume of liquid and the size of the surface, a Humidifying System (see F7-F9) and/or FoilCovers should be used when observing culture vessels. Both solutions are recommended for incubation periods of longer than 6 hours.

FOILCOVERS

In the case of long-term experiments of more than 12 hours in open cultivation the use of a FoilCover is recommended as protection against evaporation of water. The FoilCover consists of a stretching ring or rectangular frame and a base ring or rectangular frame, both made of stainless steel. Gas permeable CultFoil is fixed between the two rings.

CultFoil:

- For: FoilCover Rings and FoilCover Frames
- Material: Optically clear foil (CultFoil 25 µm), only permeable for gases

FoilCovers:

- Material: Stainless steel, V2A
- Preparation: Sterilizable with foil by autoclaving (121°C) or by dry heating (165–170°C)
- Weight: 0.1 kg

H01-04
FoilCover Ring

Circular FoilCovers are available in different sizes:

H01 – FoilCover ring frame Ø 22 mm for POCmini **11521741**
The FoilCover comes with Base Ring and stretching Ring as well as with a mounting plate and 20 pieces of CultFoil (FEP: fluor-ethylene-propylene). The Foil is not DIC compatible.

H11 – CultFoil 25 µm, 20 pieces for POCmini **11521742**
Spare for FoilCover ring frame Ø 22 mm for POCmini

H02 – FoilCover ring frame Ø 33 mm for POC-R and POC **11521753**
The FoilCover comes with Base Ring and stretching Ring as well as with a mounting plate and 20 pieces of CultFoil (FEP: fluor-ethylene-propylene). The Foil is not DIC compatible.

H12 – CultFoil 25 µm, 20 pieces for POC-R and POC **11521754**
Spare for FoilCover ring frame Ø 33 mm for POC-R and POC

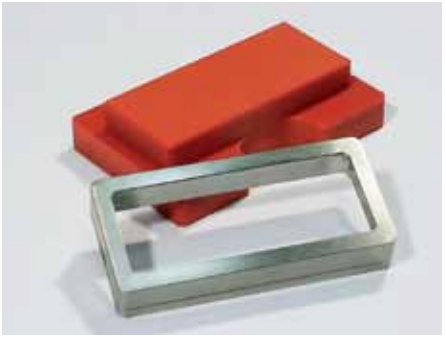
H03 – FoilCover ring frame Ø 35 mm for "35" Petri dishes **11521743**
The FoilCover comes with Base Ring and stretching Ring as well as with a mounting plate and 20 pieces of CultFoil (FEP: fluor-ethylene-propylene). The Foil is not DIC compatible.

H13 – CultFoil 25 µm, 20 pieces for "35" Petri dishes **11521744**
Spare for FoilCover ring frame Ø 35 mm for "35" Petri dishes

H04 – FoilCover ring frame Ø 56 mm for "60" Petri dishes **11521745**
The FoilCover comes with Base Ring and stretching Ring as well as with a mounting plate and 20 pieces of CultFoil (FEP: fluor-ethylene-propylene). The Foil is not DIC compatible.
H14 – CultFoil 25 µm, 20 pieces for "60" Petri dishes **11521746**
Spare for FoilCover ring frame Ø 56 mm for "60" Petri dishes

Rectangular FoilCovers are available in different sizes:

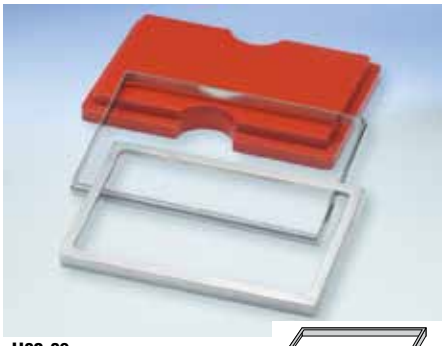
H07 – FoilCover frame 128 x 86 mm for Multiwell Plates (M06, M12, M24, M96) 11521747
The FoilCover comes with Base rectangular frame and stretching frame as well as with a mounting plate and 20 pieces of CultFoil (FEP: fluor-ethylenepropylene). The Foil is not DIC compatible.
H17 – CultFoil 25 µm, 20 pieces for 128 x 86 mm frame **11521748**
Spare for FoilCover rectangular frame 128 x 86 mm for Multiwell Plates.



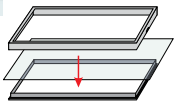
H07
FoilCover rectangular frame 128 x 86 mm
Art.-Nr.: **11521747**

H08 – FoilCover rectangular frame 52 x 26.0 mm for Lab-Tek™ **11532504**
The FoilCover comes with Base rectangular frame and stretching frame as well as with a mounting plate and 20 pieces of CultFoil (FEP: fluor-ethylenepropylene). The Foil is not DIC compatible.
H18 – CultFoil 25 µm, 20 pieces for 52 x 26.0 mm frame **11532548**
Spare for FoilCover rectangular frame 52 x 26 mm for Lab-Tek™.

H09 – FoilCover rectangular frame 57 x 27.5 mm for Lab-Tek™ II **11532542**
The FoilCover comes with Base rectangular frame and stretching frame as well as with a mounting plate and 20 pieces of CultFoil (FEP: fluor-ethylenepropylene). The Foil is not DIC compatible.
H19 – CultFoil 25 µm, 20 pieces for 57 x 27.5 mm frame **11532549**
Spare for FoilCover rectangular frame 57 x 27.5 mm for Lab-Tek™ II.



H08-09
FoilCover Rectangular



GLASSCOVERS

The GlassCovers come with Base Ring and Glass Insert. The GlassCovers are DIC compatible.

The Glass Covers are designed to fit on the Petri dish, micro-dish (ibidi®) and Imaging Dish CG. They reducing the evaporation of water from the nutrition media and are especially suited for high resolution microscopy and DIC applications in particular.

H21 – GlassCover frame Ø 35 mm for "35" Petri dishes **11532648**
H22 – GlassCover frame Ø 56 mm for "60" Petri dishes **11532649**
H23 – GlassCover frame Ø 35 mm for "35"microdish (ibidi®) **11533091**
H24 – GlassCover frame Ø 35 mm for "35" Imaging Dish CG **11533092**
H25 – GlassCover for 8 well ibidi® Chamber **11533093**
H26 – GlassCover for 8 well Lab-Tek™ Chamber **11533094**

I CELL CULTIVATION SYSTEMS

In order to meet the combined demands of live cell imaging and the use of all state-of-the-art contrasting techniques of the Leica microscope, versatile cell cultivation systems have been developed which allow both open and closed cultivation and open or closed perfusion.

Perfusion Open and Closed Systems

The POC Chamber System meets the demands of different microscopic methods in the observation and analysis of living cells. It is available with a round baseplate and an observation area of Ø 29-32 mm (POC-R2) and as miniature version (POC mini-2) for a smaller quantity of cell and tissue culture and an observation opening of Ø 17-22 mm.

- The POC-R2 Chamber System and POCmini-2 are systems for all microscope techniques.
- Suitable for short- and long-term cultivation.
- Open and closed cultivation as well as open and closed perfusion are possible.
- In the case of open cultivation, the chamber can be protected from evaporation by a FoilCover.
- In all POC-applications, the cells can be cultivated on glass.
- A pre-cultivation of cells on cover glasses in Petri dishes is possible. The assembling of the sterile POC Chamber occurs in a laminar air flow.
- All parts of the POC Chamber can be sterilized by autoclaving (121°C) or by dry heating (165-170°C).

For longer observations of cell and tissue cultures under the inverted microscope, the POC Chambers should be placed into the Heating Frame 2000 or the Heating Insert P 2000.

I1/I2
POCmini-2
Art.-Nr.: **11521739**
Art.-Nr.: **11533087**
Art.-Nr.: **11533088**

I1 – POCmini-2 Set Cell Cultivation System	**11521739**
I2 – Open Perfusion Insert for POCmini	**11533087**
I3 – Closed Perfusion Insert for POCmini with 4 in/out	**11533088**
I4 – Closed Perfusion Insert for POCmini with 2 in/out	**11533409**

The POCmini chamber system is used for all microscope techniques, as the cells are cultivated on 0.17 mm thickness (Ø 30 mm) coverslips. The inserts for open or closed cultivation or for perfusion are fixed onto a base plate. This system has been designed for short- and long-term cultivation especially for experiments with low quantities of cells or test substances. Open and closed cultivation as well as perfusion are possible. The open POCmini Chamber system allows e.g. rapid entrance to the cells and easy medium exchange. If used in the "open"-mode the chamber can be protected against evaporation of water by a special FoilCover (see H).
For cell observation the POCmini Chamber is inserted into a Heating Insert P, a Temperable Insert P, a Heatable Universal Mounting Frame (H-UMF), or positioned onto a Heating or Temperable Stage. By autoclaving (121°C) or dry heating (165-170°C) the whole POCmini system can be sterilized.

• For objectives:	Heating Inserts or Heatable Universal Mounting Frames (see C, D and I)
• Material:	Glass, silicone, stainless steel and Teflon® (all non toxic) Aluminum black anodized base plate with high thermal conductivity
• Outer dimension:	Ø 58 m (6.5 mm in height)
• Cultivation area:	Cover Slip = 0.17 mm thickness
• Observation Area:	Ø 17 – 22 mm
• Volume:	Closed = 0.34 ml–0.8 ml; Open = up to 1.2 ml
• Weight:	0.1 kg

I5 – POC-R2 Set Cell Cultivation System **11532647**
I6 – Open Perfusion Insert for POC-R2 and POC-R **11521752**

The POC-R2 has been designed for short- and long-term cultivation with a larger volume for cultivation media and easier access to the cells, which are cultivated on 0.17 mm thickness (Ø 42 mm) coverslips.

• For objectives:	Heating Inserts or Heatable Universal Mounting Frames (see C, D and I)
• Material:	Glass, silicone, stainless steel and Teflon® (all non toxic) Aluminum black anodized base plate with high thermal conductivity
• Outer dimension:	Ø 58 m (6.5 mm in height)
• Cultivation area:	Cover Slip = 0.17 mm thickness
• Observation Area:	Ø 29 – 32 mm
• Volume:	Closed = 0.9 ml–1.8 ml; Open = up to 3.0 ml
• Weight:	0.1 kg

I7 – Perfusion set for 35 mm Petri dishes **11533095**

The cover is made of stainless steel with a glass insert. The observation area has a diameter of 25 mm. The height of the whole system (from the inside of the Petri dish to the top of the glass insert) is 17.5 mm. Sterilizable at 165°C in dry heat or at 121°C in the autoclave.

I8 – Perfusion set for 60 mm Petri dishes **11533096**

The cover is made of stainless steel with a glass insert. The observation area has a diameter of 46.5 mm. The height of the whole system (from the inside of the Petri dish to the top of the glass insert) is 17.5 mm. Sterilizable at 165°C in dry heat or at 121°C in the autoclave.

I5/I6
P0C-R2
Art.-Nr.: **11532647**
Art.-Nr.: **11521752**

I7/I8
Perfusion set for Petri dishes
Art.-Nr.: **11533095**
Art.-Nr.: **11533096**

I8
Heating Frame 2000
Art.-No.: **11533077**

I8 – Heating Frame 2000 — 11533077

The Heating Frame 2000 warms up various cell cultivation vessels (e.g. Petri dishes “35” and “60” and POC/POCmini chamber systems). The solid frame is made of aluminium and provides for heat distribution and a high thermal conductivity. The frame has a circular observation opening (Ø 30 mm) and can be covered with a cover glass (Ø 35 mm).
The frame could be place on the fixed stage or will fit into Universal Mounting Frame MX or Universal Mounting Frame KM.
For a local CO_2 and heating control in a closed environment the frame can be used in combination with the Incubator HF 2000 with Heatable Glass. Alternatively, the CO_2-Cover with GlassInsert in combination with a large incubator is also suitable.
For the regulation of temperature, the TempController 2000 (1- or 2-channel) is required. An integrated temperature sensor transfers the value to the electrical device.

- For vessel size: Petri dishes (“35” and “60”), POC, POC-R2, POCmini-2
- Requirements: "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
- Weight: 0.18 kg
- Temperature stability: ± 0.1°C
- Control range: 3°C above ambient up to 40°C
- Observation Opening: Ø 30 mm
- Compatible: "I9 – CO2-Cover with glass insert" "I10 – Incubator HF 2000" "B16 – Universal Holding frame MX" "C115 – Universal Holding frame KM Click-In"

I9
CO_2-Cover with glass insert
Art.-No.: **11533078**

I9 – CO_2-Cover with glass insert — 11533078

The CO_2-Cover with Glass Insert is designed to fit onto the Heating Frame 2000 and permits local CO_2-control in a completely closed environment – alone or in the large incubators. It is made of transparent acrylic glass with a glass insert to permit DIC. With 2 in/outlets for the air/CO_2-mixture and 2 lateral holes for the perfusion tubes The cover provides for a relative humidity of approx. 90%.

- For: "I8 – Heating Frame 2000"
- Requirements: "F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
- Applicable: for DIC, in large Incubator
- Provided humidity: 90%
- Weight: 0.15 kg

I10
Incubator HF
Art.-No.: **11533086**

I10 – Incubator HF 2000 — 11533086

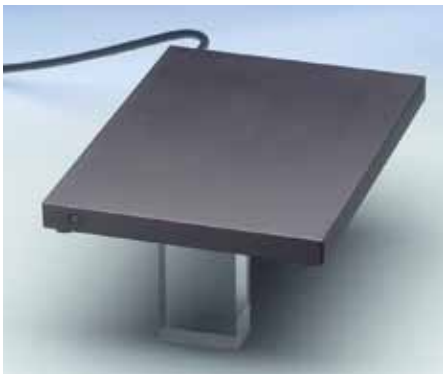
The Incubator HF 2000 is designed to fit onto the Heating Frame 2000 and permits a local CO_2- and temperature control of Petri dishes and POC Chamber systems in a completely closed environment. The cover has a rectangular observation window with heatable glass. Due to the heatable glass and the warmed up air stream, no condensation of water occurs at the cover or at the lid of the cell cultivation vessel. The air flow can be fed into the cover by the CO_2-Controller 2000.

- For: "I8 – Heating Frame 2000"
- Requirements: "F1 – TempController 2000-1" or "F2 – TempController 2000-2" "F4 – CO_2-Controller 2000" or "F5 – CO_2-O_2-Controller 2000"
- Applicable: for DIC
- Provided humidity: 90%
- Weight: 0.23 kg

Temperature Control of Specimens close to the microscope

Heatable Worktables

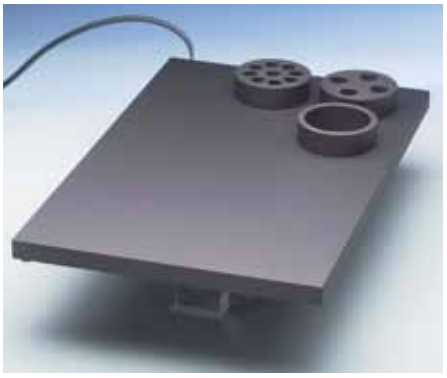
During experiments it is often necessary to put specimens in the direct vicinity of the microscope. However, even in this case the temperature of these specimens has to be controlled. For example if cell cultivation vessels must be observed sequentially the non-used vessels can be kept at optimal conditions (37°C) in the meantime.
For these requirements different Heatable Worktables are used: the Heatable Worktable S and the Heatable Worktable L.
Whilst the Heatable Worktable S 2000 has dimensions 240 x 150 mm, the Heatable Worktable L 2000 with its dimensions of 400 x 250 mm offers three different inserts (1 x 57, 4 x 16, 9 x 12 mm Ø) the possibility to heat up small bottles, centrifuge tubes and reaction vessels. Sensitive cells can also be kept at ideal temperature conditions during handling under the laminar airflow.
A pre-heating stage is a recommendable completion of every incubation system. Temperature control is carried out with the "F1 – TempController 2000-1" or "F2 – TempController 2000-2".



J1
Heatable Worktable S
Art.-No.: **11533068**

J1 – Heatable Worktable S 2000 **11533068**

- For vessel size: No limitation (within 240 x 150 mm)
- Requirements: "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
- Weight: 1.2 kg
- Temperature stability: ± 0.1°C
- Control range: 3°C above ambient up to 60°C
- Type of vessels: All types



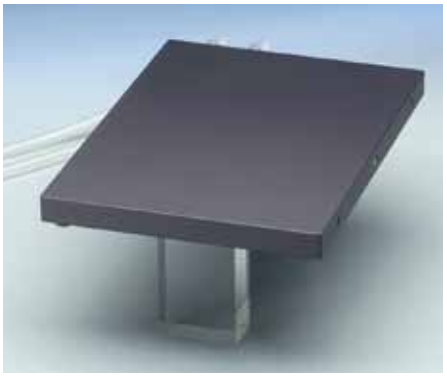
J2
Heatable Worktable L 2000
Art.-No.: **11533069**

J2 – Heatable Worktable L 2000 with 3 inserts **11533069**

- For vessel size: No limitation (within 400 x 250 mm)
- Requirements: "F1 – TempController 2000-1" or "F2 – TempController 2000-2"
- Weight: 4.0 kg
- Temperature stability: ± 0.1°C
- Control range: 3°C above ambient up to 60°C
- Type of vessels: All types

Cooling/Heating Worktables

The cooling/heating worktable is used for both cooling and heating of specimens, which must be kept at a specific constant temperature next to the microscope or under the laminar airflow. Keeps important reagents at cool temperature (e.g. 4°C) during experiments or liquid handling.
Temperature control is carried out with circulating water or other liquids and is regulated at the circulator, cooling thermostat, e.g. "D5 – Cooling Thermostat".



J3
Temperable Worktable S
Art.-No.: **11533070**

J3 – Temperable Worktable S **11533070**

- For vessel size: No limitation (within 240 x 150 mm)
- Requirements: Thermostat or pump as liquid circulator
- Weight: 1.3 kg
- Control range: Liquid, temperature control by Thermostat
- Type of vessels: All types
- Accessories: Fabric-tube, clear (Ø 5 mm) 2 m, 2 pieces
  Silicone-tube, clear (Ø 5 mm) 1 m, 2 pieces

K OBJECTIVE HEATING/COOLING

OBJECTIVE HEATING

- Especially with the use of oil immersion objectives, the direct contact between the cell cultivation vessel and the colder objective leads to a significant cooling in the area of the observed cells. The Objective Heater 2000 is designed for the stable heating of microscope objectives in order to improve temperature conditions in the observation area.
- The versions with an oil discharge channel have a circular duct around the objective that takes in abundant immersion oil and leads it through a flexible tube into a collecting vessel. The inserted O-ring provides for a better sealing.
- A slow and homogeneous heating of parts of the objective prevents adverse effects on the optical resolution.
- A built-in temperature sensor reliably monitors the objective temperature.
- For power supply and the control of temperature, the Objective Heater has to be connected to the TempController 2000-1 or 2000-2.
- D1 = diameter at the front area of the objective where to place the heater.
- D2 = maximum diameter of the objective (e.g. at the Corr-Ring or at threat area).

Heaters in several versions are available D1: 17.0 - 33,1 mm; D2: 27,5 - 38,0 mm.
The diameter D1 of the relevant objectives are documented in the internet:
http://www.leica-microsystems.com/products/objectives/
Following Objective Heaters are already provided with Leica order numbers.

K2
Objective Heater Ø 29.0 mm
Art.-No.: **11533072**

K3
Objective Heater Ø 30,5 mm
Art.-No.: **11533073**

K1 – Objective Heater 2000 Ø 33.1 mm **11533071**

• For objectives:	All objectives with a diameter D1: max 33,1 mm
• Material:	black anodized aluminum
• Control range:	3°C above ambient up to 40°C
• Requirements:	"F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.2 kg

K2 – Objective Heater 2000 Ø 29.0 mm **11533072**

• For objectives:	All objectives with a diameter D1: max 29,0 mm
• Material:	black anodized aluminum
• Control range:	3°C above ambient up to 40°C
• Requirements:	"F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.2 kg

K3 – Objective Heater 2000 Ø 30.5 mm **11533073**

• For objectives:	All objectives with a diameter D1: max 30,5 mm
• Material:	black anodized aluminum
• Control range:	3°C above ambient up to 40°C
• Requirements:	"F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.2 kg

K4 – Objective Heater 2000 Ø 19.0 mm **11533074**

• For objectives:	All objectives with a diameter D1: max 19,0 mm
• Material:	black anodized aluminum
• Control range:	3°C above ambient up to 40°C
• Requirements:	"F1 – TempController 2000-1" or "F2 – TempController 2000-2"
• Weight:	0.2 kg

OBJECTIVE COOLING

- Especially with the use of oil immersion objectives, the direct contact between the cell cultivation vessel and the colder objective leads to a significant cooling in the area of the observed cells. The Cooling/Heating Objective Ring is designed for the stable cooling or heating of microscope objectives in order to improve the temperature conditions in the observation area (better homogeneity).
- To supply the Cooling/Heating Objective Ring with cooling or heating liquids, it has to be connected to a circulator.
- D1 = diameter at the front area of the objective where to place the heater.
- D2 = maximum diameter of the objective (e.g. at the Corr-Ring or at threat area).

Cooling Rings in several versions are available on request.

The diameter D1 of the relevant objectives are documented in the internet:
http://www.leica-microsystems.com/products/objectives/
Following Objective Cooling Rings are already provided with Leica order numbers.

K11 – Cooling/Heating Objective Ring Ø 22.5 mm **11533075**

- For objectives: All objectives with a diameter D1: max 22,5 mm
- Material: black anodized aluminum
- Control range: liquid, temperature control by Thermostat
- Requirements: Thermostat or pump as liquid circulator
- Weight: 0.1 kg

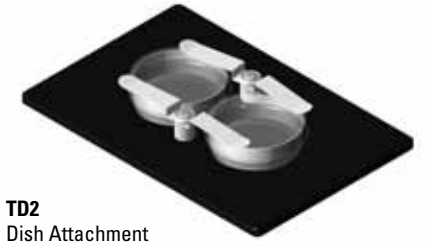
K12 – Cooling/Heating Objective Ring Ø 17.5 mm **11533076**

- For objectives: All objectives with a diameter D1: max 17,5 mm
- Material: black anodized aluminum
- Control range: liquid, temperature control by Thermostat
- Requirements: Thermostat or pump as liquid circulator
- Weight: 0.1 kg

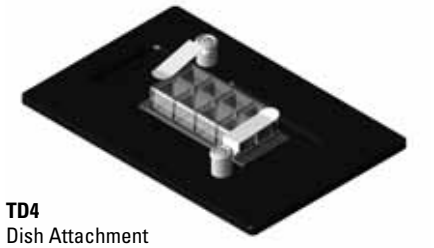
T TOKAI HIT INCUBATOR SYSTEM

T1
WKSM Chamber Unit

TD1
Dish Attachment
Art.-No.: **11532895**



TD2
Dish Attachment
Art.-No.: **11532896**



TD4
Dish Attachment
Art.-No.: **11532898**

TS1
Sensor Lid
Art.-No.: **11532899**

TS3
Sensor Lid
Art.-No.: **11532901**

The system offers precision temperature (30-40°C), high-humidity (95% humidity), CO_2 control for short / long term cell culture with the following features:

- Continuous current regulation to prevent focus drift by thermal regulation at minimum and great to work with High-magnification/super resolution application, highly sensitive camera and HyDdetector.
- Clear Glass Heater on Lid to prevent condensation

FOR REGULAR 3-PLATE STAGE AND XY MOTORIZED STAGES

T1 – WSKM **incl. in T2-T4**
Chamber unit

T2 – INUG2-WSKM-Set **11533173**

- WSKM Chamber Unit (T1)
- Temperature Controller with built-in digital gas mixer for 100%CO_2 gas use. Supply fixed 5%CO_2+95% Air. Dish Attachment UNIV2-D35(TD1)/UNIV2-CSG(TD4) and Sensor Lid D35-200F(TS1)/CSG-200F(TS3)/W-200F as standard

T3 – INUF1-WSKM-Set **11533172**

- WSKM Chamber Unit (T1)
- Temperature Controller with an analog flowmeter for premixed gas use. Dish Attachment UNIV2-D35(TD1)/UNIV2-CSG(TD4) and Sensor Lid D35-200F(TS1)/CSG-200F(TS3)/W-200F as standard

T4 – INU-WSKM-Set **11533171**

- WSKM Chamber Unit (T1)
- Temperature Controller only. No gas function. Dish Attachment UNIV2-D35(TD1)/UNIV2-CSG(TD4) and Sensor Lid D35-200F(TS1)/CSG-200F(TS3)/W-200F as standard

Dish Attachment for WSKM (T1)

TD1 – UNIV2-D35 included in T2-T4 **11532895**
Dish Attachment for 35mm dish x 1pc

TD2 – UNIV2-D35-2 **11532896**
Dish Attachment for 35mm dish x 2pc

TD3 – UNIV2-D56 **11532897**
Dish Attachment for 50/60mm dish

TD4 – UNIV2-CSG included in T2-T4 **11532898**
Dish Attachment for chambered coverglass, chamber slide and slide glass

Sensor Lid

Sensor Lid for 35mm (TS1) is included in the system as standard.

TS1 – D35-200F included in T2-T4 **11532899**
Sensor Lid for 35mm dish

TS2 – D56-200F **11532900**
Sensor Lid for 50mm dish

TS3 – CS-200F included in T2-T4 **11532901**
Sensor Lid for chamber slide and chambered coverglass

FOR Z-GALVO STAGE

T11 – GSI2 **incl. in T12-T14**
Incubator for Super Z Galvostage

T12 – INUG2-GSI2-Set **11533180**
- GSI2 Chamber Unit(T11)
- Temperature Controller with built-in digital gas mixer for 100%CO_2 gas use. Supply fixed 5%CO_2+95% Air
- Dish Attachment GSI2-D35(TD11)/GSI2-CGC(TD13)/GSI2-CS(TD14) and Sensor Lid D35-200F(TS1)/CSG-200F(TS3) as standard

T13 – INUF1-GSI2-Set **11533179**
- GSI2 Chamber Unit(T11)
- Temperature Controller with an analog flowmeter for premixed gas use.
- Dish Attachment GSI2-D35(TD11)/GSI2-CGC(TD13)/GSI2-CS(TD14) and Sensor Lid D35-200F(TS1)/CSG-200F(TS3) as standard

T14 – INU-GSI2-Set **11533178**
- GSI2 Chamber Unit(T11)
- Temperature Controller only. No gas function.
- Dish Attachment GSI2-D35(TD11)/GSI2-CGC(TD13)/GSI2-CS(TD14) and Sensor Lid D35-200F(TS1)/CSG-200F(TS3) as standard

Dish Attachment for for GSI2 (T11)

TD11 – GSI2-D35 included in T12-T14 **11533176**
Dish Attachment for 35mm dish x 1pc

TD12 – GSI2-D50 **11533177**
Dish Attachment for 50mm dish

TD13 – GSI2-CGC included in T12-T14 **11533174**
Dish Attachment for chambered coverglass

TD14 GSI2-CS included in T12-T14 **11533175**
Dish Attachment for chamber slide and slide glass

Sensor Lid

Sensor Lid for 35mm (TS1) is included in the system as standard.

TS1 – D35-200F included in T12-T14 **11532899**
Sensor Lid for 35mm dish

TS2 – D56-200F **11532900**
Sensor Lid for 50mm dish

TS14 – GSG-200F included in T12-T14 **11533170**
Sensor Lid for chamber slide and chambered coverglass

T11
GSI2 Chamber Unit

T2/T12
Temperature Controller

T3/T13
Temperature Controller

T4/T14
Temperature Controller

TD12
Dish Attachment
Art.-No.: **11533177**

TD14
Dish Attachment
Art.-No.: **11533175**

TIME LAPSE ENTRY KIT

T21
WELSX Chamber Unit
Art.-No.: **11533397**

T22/T23
Temperature Controller

Dish Attachment

Fixing Lid

T24 – WELSX-K
Art.-No.: **11533395**

T21 – WELSX included in T22 and T23
Incubator for well plate holder

T22 – STRG-WELSX-SET **11533397**
- WELSX Chamber Unit(T21)
- Temperature Controller with built-in digital gas mixer for 100%CO_2 gas use. Supply 5%CO_2 + 95% Air
- Dish Attachment & Fixing Lid for 35/50/60 mm dish, chambered coverglass, chamber slide and slide glass

T23 – STRF-WELSX-SET **11533396**
- WELSX Chamber Unit(T21)
- Temperature Controller with an analog flowmeter for premixed gas use
- Dish Attachment & Fixing Lid for 35/50/60 mm dish, chambered coverglass, chamber slide and slide glass

T24 – WELSX-K **11533395**
Stage Adapter for WELSX to install on XY motorized stage with 110x160 mm aperture

NOTICE:

www.leica-microsystems.com

Leica Microsystems operates globally in three divisions, where we rank with the market leaders.

LIFE SCIENCE DIVISION

The Leica Microsystems Life Science Division supports the imaging needs of the scientific community with advanced innovation and technical expertise for the visualization, measurement, and analysis of microstructures. Our strong focus on understanding scientific applications puts Leica Microsystems' customers at the leading edge of science.

INDUSTRY DIVISION

The Leica Microsystems Industry Division's focus is to support customers' pursuit of the highest quality end result. Leica Microsystems provide the best and most innovative imaging systems to see, measure, and analyze the microstructures in routine and research industrial applications, materials science, quality control, forensic science investigation, and educational applications.

MEDICAL DIVISION

The Leica Microsystems Medical Division's focus is to partner with and support surgeons and their care of patients with the highest-quality, most innovative surgical microscope technology today and into the future.

Leica Microsystems – an international company with a strong network of worldwide customer services:

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Belgium · Diegem	+32	2 790 98 50	2 790 98 68
Brazil · São Paulo	+55	11 2764-2411	11 2764-2400
Canada · Concord/Ontario	+1	800 248 0123	847 405 0164
Denmark · Ballerup	+45	4454 0101	4454 0111
France · Nanterre Cedex	+33	811 000 664	1 56 05 23 23
Germany · Wetzlar	+49	64 41 29 40 00	64 41 29 41 55
India · Mumbai	+91	226 1880 200	226 1880 333
Italy · Milan	+39	02 574 861	02 574 03392
Japan · Tokyo	+81	3 6758 5630	3 5155 4333
Korea · Seoul	+82	2 514 65 43	2 514 65 48
Netherlands · Rijswijk	+31	70 4132 100	70 4132 109
People's Rep. of China · Hong Kong · Shanghai	+852 +86	2564 6699 21 6039 6000	2564 4163 21 6387 6698
Portugal · Lisbon	+351	21 388 9112	21 385 4668
Singapore	+65	6550 5999	6564 5955
Spain · Barcelona	+34	93 494 95 30	93 494 95 32
Sweden · Bromma	+46	8 625 45 45	8 625 45 10
Switzerland · Heerbrugg	+41	71 726 34 34	71 726 34 44
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