

## General catalogue IVF



**Certified laboratory equipment and  
medical devices**

**Quality – Made in Germany**



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**committed  
to human progress**

**bound  
to nature**

**[www.labotect.com](http://www.labotect.com)**

## Innovation, experience and expertise for more than 50 years

### Quality – Made in Germany

**Labotect Labor-Technik-Göttingen GmbH** – located in the centre of Germany – develops, produces and distributes a wide range of products for use in assisted reproduction and life-science laboratories.

Outstanding quality and close contact to the customers have been two important pillars of the company's philosophy for more than 50 years. It is the aim to fulfill customers' demands and highest standards with most innovative developments. Labotect was founded in 1971 as a dealer for laboratory equipment. A few years later, at the same time the first test-tube-baby worldwide was born, Labotect established its own research and development division with main focus on assisted reproduction techniques (ART). Today, the company is represented worldwide by a strong network of reliable and well-trained distributors in over 60 countries.

As manufacturer of medical devices, Labotect is certified according to ISO13485 for development, production, distribution and service of devices and instruments for assisted reproduction, gynecology, surgery and tissue culture.

### Optimized culture conditions for your cells!

Incubation technique is one of the key competence areas of Labotect. The benefit of the CO<sub>2</sub> incubators is perfect control of parameters by most modern technical solution. They combine high safety standards with convenient design. Very fast recovery times for all adjustable parameters are basic features in all Labotect CO<sub>2</sub>-Incubators.

In addition to incubation technique, the wide product range of the company includes devices and consumables for assisted reproduction, lab equipment and sterile products for gynecological and general surgery.

Labotect offers **Embryo Transfer Catheters** in three lengths - 150mm, 190mm and 230mm:

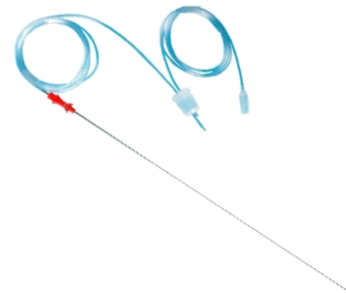
1. The sterile catheter set consists of a precurved guiding catheter and smooth transfer catheter with a reinforced metal shaft.
2. Both parts incorporate a cm-marking to control the penetration depth.
3. Using a slide ring, the penetration depth and the direction can be adjusted.
4. The ball tip of the guiding catheter secures an atraumatic penetration.



For aspiration of oocytes and follicles, we offer **puncture needles** and an **aspiration pump**:

- **Needles and Sets for follicular puncture:**

1. Facet bevel
2. Ergonomic hub
3. Grinded or corroded echo marking
4. Medical device
5. Customized sets on request



- **Aspirator 3:**

1. Easy handling/electrical pedal
2. Long durability, high reliability and very silent
3. Constant control of negative pressure
4. Overflow protection
5. Medical device



Furthermore, CO<sub>2</sub> Incubators with sizes of 16, 60 and 200 litres are in our product range.

These are the main advantages of our incubators **C60** and **C200**:

### 1. Active sterile humidity

To minimise the contamination risk, these incubators feature an active sterile humidity supply with a vaporizing module operating at 120 °C and an external water supply container. This means there is no need of an internal water reservoir. Aqua bidest is provided over a pump into a vaporiser (heated up to 120°C) in very fine drops. This sterile water steam provides the incubator with humidity that can be regulated over a humidity sensor. With this active humidification recovery times can be reduced extremely.

### 2. Double beam IR sensor:

This sensor assures an exact measuring and short recovery times of the CO<sub>2</sub> value as all external effects are eliminated.

### 3. Direct heating system:

The intelligent temperature control system and the panel heated interior chamber and door care for a dry inner chamber and assure a very homogeneous temperature distribution in the interior.

### 4. Medical device

### 5. Optional: LaboDat+ software

This software provides the possibility to measure and save the data of all CO<sub>2</sub> incubators, the Labo C-Top, Labo Gas Mixer and the Gasmonitor over a specific period of time.



## Advantages of our newest incubator C201:

1. 7" colour touch screen
2. UV decontamination (option)
3. Particle filter (P3) within airflow
4. Display of measured values for 2 h or 24 h (T, CO<sub>2</sub>, rH, O<sub>2</sub>)
5. Access control via numerical electronic code on touch screen with mechanical emergency lock (option)
6. Access port
7. RS485 or ethernet interface



## Main advantages of our incubator C16:

1. Very compact and space-saving construction
2. Over-all heating of interior and door
3. Dual beam infrared sensor
4. Approved medical device



## Main advantages of our benchtop incubator Labo C-Top:

1. Two separate chambers with identical functions; to be used individually (humidity, premixed gas, temperature)
2. Optimized temperature distribution and gas flow
3. Direct heating of top and bottom
4. Optimized gassing with premixed gas
5. Reliable humidity system
6. Convenient glass control panel
7. Very fast heating up and recovery times





We offer the **SAFE Sens® pH-Monitoring system** for our large format incubators **C60**, **C200** and **C201**, as well as an integrated SAFE Sens® system in our benchtop incubator **Labo C-Top**:

1. Continuous, non-invasive, independent monitoring of the pH value
2. Real time data of the pH-value every minute or every 30 minutes for up to 7 days
3. Accurate measurements:  $\pm 0.05$  in a range of pH 7.00 to 7.60
4. Monitoring of up to 8 chambers or incubators with one TrakStation™
5. TrakPods integrated in Labo C-Top, without use of a valuable dish space



### Main advantages of our **Gasmixer**:

1. Provides mixed gas (CO<sub>2</sub>, N<sub>2</sub> and O<sub>2</sub>) for up to 3 benchtop incubators
2. Individual setting of gas concentration
3. Connection of CO<sub>2</sub> and N<sub>2</sub> gas bottles only, O<sub>2</sub> is obtained from ambient air
4. Bypass for mixed gas supply of other external devices:
  - incubation chambers used with microscopes
  - External control of parameters by use of Labotect InControl



### Main advantages of our **InControl**:

1. °C-measurement; range: 0 -100°C
2. CO<sub>2</sub>-measurement; range: 0 - 10%
3. O<sub>2</sub>-measurement with optional sensor; range: 0 - 100%
4. Real-time data logging



5. Measurement and documentation of multiple incubators
6. Data-Download via USB
7. PC-Software DataVISUAL`09 included
8. Powered by rechargeable Li-ion battery or mains adapter
9. No separate charging station

The following laboratory equipment completes the wide product range of Labotect:

### Transport Incubators:

We offer our **Thermo-Cell-Transporter 3018** and **CellTrans 2018** for safe and Versatile use and for a secure and mobile preservation of cell material, specimen, culture media etc.



We also offer a transport incubator with the possibility for humidification and to control temperature and CO<sub>2</sub> level, the **CellTrans+**, which is also suitable as back-up for your cells in case of power outage as it has a very long battery life.



### HotPlates 100, A3 and A4:

For laboratory and scientific use.



## Blockthermostat:

For homogeneous temperature distribution.



## Active Vibration Isolator:

With active vibration isolation system for vibration cancellation even in the low frequency range.



...and more: [www.labotect.com](http://www.labotect.com) !



# The Labotect Quality Assurance System

Quality Assurance or QA is seen by Labotect as an integral part of our Quality Management System. Every employee and staff member is made aware of the delicate environment our products are used in and need to accept these high standards set forth in our quality policy.

## Approach

When developing our products we seek out the feedback and cooperation of renowned specialists in their respective field of work. Raw materials are chosen carefully to suit the purpose they are going to be used for. Mostly, this means they have to pass a test about biocompatibility, among others. Also, suppliers are chosen according to their proficiency at what they do. Each supplier must agree that he can be audited by us, our Notified Body and foreign authorities who might request this. The great majority of our suppliers come from Germany.

It is our believe that quality must be produced. It cannot be tested into a product later on.

## Various Tests

Before a batch of disposables is released it needs to pass a Mouse Embryo Assay and a LAL-Endotoxin test. Pass criteria are > 80 % blastocysts hatching in the Mouse Embryo Assay and an endotoxin value of < 20 EU/ml. You will find these criteria to be one of the strictest in the industry. The tests are performed by an independent and accredited laboratory (Embryotech Inc.). Certificates from the independent laboratory are available on request.

Our CO<sub>2</sub> incubators play a vital role in different cell culture applications. To ensure their performance every unit has to pass a cell growth-test before it is released for sale.

## Standards

Everything evolving around the design, development, manufacture and sale of our product conforms to at least the ISO 13485 standard with its already exacting demands. Additionally, we do fulfil requirements of many countries around the world, where our products are registered, e.g. Egypt, China, India, USA, Brazil, Croatia, Israel, to name but a few.

## Reviews

Our quality management system is audited once a year and every three years we have to undergo re-certification. That means that at least two auditors turn our quality management system up-side down for 2-3 days. Furthermore, we now face the possibility of un-announced audits by our Notified Body once every three or five years.

Additionally, our Notified Body (TÜV SÜD Product Service GmbH) has long since implemented a policy to re-view the technical documentation for the products. It is compulsory for Notified Bodies since 2010 to prepare and implement an algorithm after which all products of a manufacturer in Class IIa and above are reviewed once a year.

Labotect has three product groups in Class IIa: our incubators, the Aspirator and our ovarian biopsy sets and needles. So, within the validity of our ISO-certificate (three years) each product group is reviewed fully and within the validity of our EC certificate (five years) the relevant product groups are reviewed one and a half times.

**Upholding these high standards takes a lot of time and effort but we feel that you and your customers deserve nothing less.**



# Background about Labotect Certificates

In 1998, Labotect implemented a Quality Management System according to ISO 9002. In 2003, as one of the first medical device manufacturers in Germany, Labotect was certified according to DIN EN ISO 13485:2003.

## ISO 13485

Contrary to the ISO 9001, the ISO 13485 certificate refers to many other rules, regulations and laws to be fulfilled (i.e. ISO/TR14969 Guidance on the application of ISO 13485, ISO 14971 Application of Risk Management for Medical devices). Its key features are the following:

- Defined product specifications
- Defined production process including suppliers
- Risk Analyses
- Biological and Clinical data for design validation
- Product identification and traceability
- Traceability of components

## Directive 93/42/EEC

Furthermore, Labotect is certified according to the Medical Device Directive (MDD) or Directive 93/42/EEC, which is the most important regulatory instrument for the detection of safety and medical-technical performance of medical devices in the European Economic Area. The key features of Council Directive 93/42 EEC are as follows:

- Essential requirements (13 named in the Directive, including sub clauses they are 84: safety, functionality, design, materials etc.)
- Conformity to harmonized standards
- Classification
- Conformity assessment procedures
- Registration of responsible persons
- Unannounced audits by the Notified Body with min. 2 Auditors for one day (at least once in a three year period)

## CE-label

All our products have a CE-label, which claims, that this device conforms to the correspondent EC regulation and all essential requirements are met. The CE-label is mandatory for all medical devices and allows the access to the complete EC market. Moreover, the label stands for:

- Equivalent market clearance in all member states
- Improved patient and customer protection
- Decentralized market control
- Explicit responsibility of the manufacturer
- National law enforcement

## **Scope of ISO certificates**

As many users do not have in focus, the scope of the ISO certificate is defined by the manufacturer before the certification process, and therefore makes a big difference.

The scope of Labotects ISO-certificate:

“Design and development, production, sale and service of sterile medical devices (intrauterine catheters, biopsy needles and sets for ultrasonic aspiration, micropipettes) and medical devices for assisted reproduction and for cell and tissue cultures; Installation, maintenance and repair of laboratory equipment and active medical products in addition to logistics services”

You may compare this to the scope of competitor's ISO-certificates.



Product Service

# EC Certificate

## Full Quality Assurance System

Directive 93/42/EEC on Medical Devices (MDD), Annex II excluding (4)  
(Devices in Class IIa, IIb or III)

No. G1 18 04 70354 009

**Manufacturer:** Labotect Labor-Technik-Göttingen GmbH

Kampweg 12  
37124 Rosdorf  
GERMANY



**Facility(ies):**

Labotect Labor-Technik-Göttingen GmbH  
Kampweg 12, 37124 Rosdorf, GERMANY

BeLoTec GmbH  
Kampweg 12, 37124 Rosdorf, GERMANY

**Product  
Category(ies):**

Sterile medical products and medical products  
for assisted reproduction, consisting of biopsy  
needles and sets for follicle aspiration, suction pumps,  
cell and tissue culture systems

The Certification Body of TÜV SÜD Product Service GmbH declares that the aforementioned manufacturer has implemented a quality assurance system for design, manufacture and final inspection of the respective devices / device categories in accordance with MDD Annex II. This quality assurance system conforms to the requirements of this Directive and is subject to periodical surveillance. For marketing of class III devices an additional Annex II (4) certificate is mandatory. See also notes overleaf.

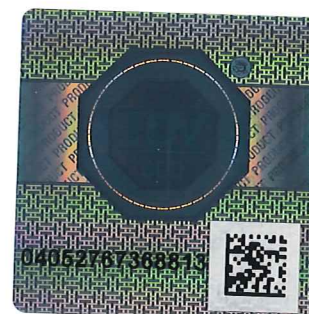
**Report No.:** 713132064

**Valid from:** 2018-07-11

**Valid until:** 2023-07-10

**Date,** 2018-07-11

Stefan Preiß



TÜV SÜD Product Service GmbH is Notified Body with identification no. 0123

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Product Service

# EC Certificate

## Production Quality Assurance System

Directive 93/42/EEC on Medical Devices (MDD), Annex V

(Devices in class I in sterile conditions, sterilised systems or procedure packs)

No. G2S 17 05 70354 008

**Manufacturer:**
**Labotect Labor-Technik-Göttingen GmbH**

 Kampweg 12  
 37124 Rosdorf  
 GERMANY

**Facility(ies):**

 Labotect Labor-Technik-Göttingen GmbH  
 Kampweg 12, 37124 Rosdorf, GERMANY

**Product**
**Category(ies):**
**Sterile medical devices for assisted  
 reproduction techniques**

The Certification Body of TÜV SÜD Product Service GmbH declares that the aforementioned manufacturer has implemented a quality assurance system for manufacture in accordance with MDD Annex V. This quality assurance system covers those aspects of manufacture concerned with securing and maintaining sterile conditions of the respective devices / device categories and conforms to the requirements of this Directive. It is subject to periodical surveillance. See also notes overleaf.

**Report No.:**

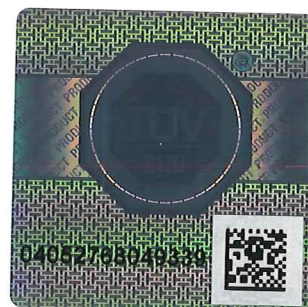
713108748

**Valid from:**

2017-08-28

**Valid until:**

2022-08-27



Date, 2017-07-07

Stefan Preiß

TÜV SÜD Product Service GmbH is Notified Body with identification no. 0123

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## Aspirator 3

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### Precise aspiration pump for follicular puncture

#### Advantages of Aspirator 3:

- Approved medical device
- Easy handling by electrical pedal
- Long durability
- High reliability
- Very silent
- Constant control of negative pressure
- Safe by overflow protection

#### Basic equipment:

- Aspirator 3
- Foot pedal
- Mains adapter
- 2 x overflow bottle, 2 x blocking filter and tubing

REF 14193 (without hotplate)

REF 13907 (with integrated hotplate)

Picture shows device with integrated hotplate (optional), heating block and puncture set from Labotect

### Optional accessory:

- Integrated hotplate

REF 13907 (Aspirator 3 with hotplate)

- Movable support stand

REF 14287

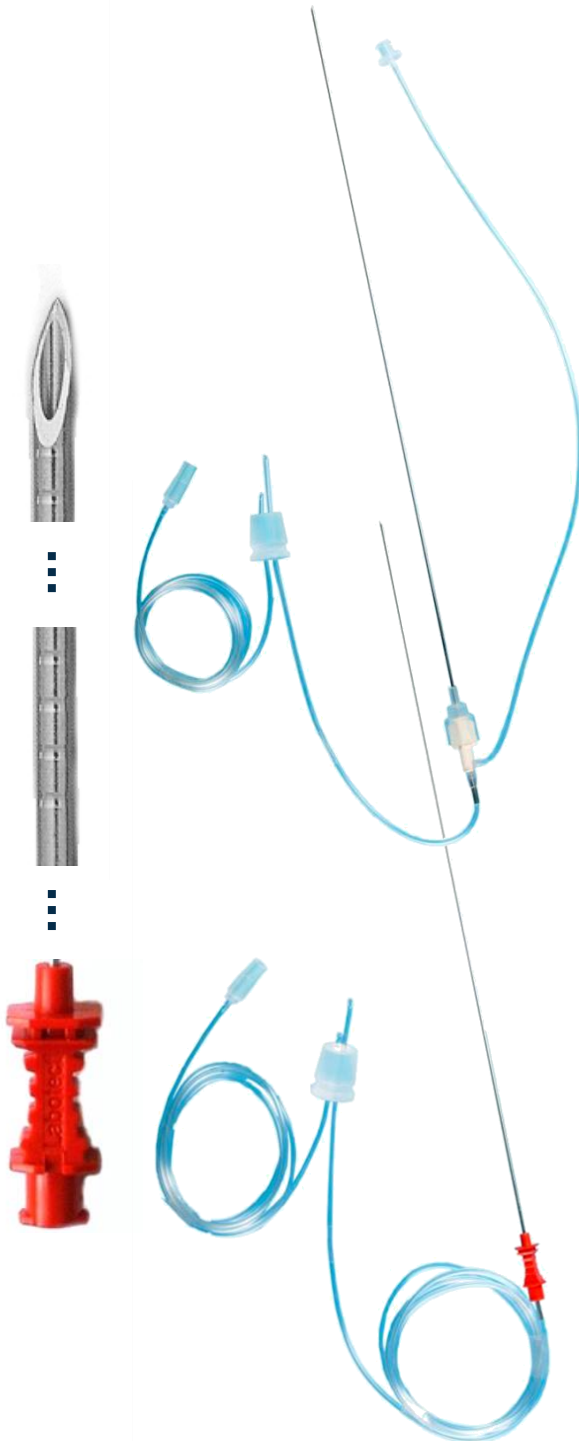


### Technical data:

- According to Directive 93/42/EEC: Class IIa
- EN 10079 conform: high vacuum, low flow
- Negative pressure:  
0 – 500 mmHg  $\pm$  0 – 666 mbar
- Volume of overflow vessel: 100 ml
- Dimensions:  
~ 408 x 130 x 250 (w x h x d in mm)
- Weight: ~ 7.6 kg
- Connection for aspiration tubing: Ø 2 to 4 mm
- Power supply: 230 V AC, 50/60 Hz or  
115 V AC, 50/60 Hz, 85 VA
- Safety class: I
- Device type: BF
- Hotplate (optional):
  - Temperature range: 30 °C – 45 °C
  - Heating up time: < 10 min.
- Connection for potential compensation

## Puncture needles and -sets

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Labotect ovarian biopsy needles and sets are developed for medical use in the field of assisted reproduction

### Product features:

- Needles and sets for follicular puncture
- Facet bevel
- Ergonomic handle
- Grinded or corroded echo marking
- Validated ETO-sterilization
- MEA/LAL tested
- Medical device class IIa

## Single lumen puncture sets

with **corroded echo marking, without flushing tube:**

REF	Needle length (mm)	Outer diameter of the needle (mm / G)	Plug for tubes with ... ml	Length of tubing from needle to plug (mm)	Length of tubing from plug to aspirator (mm)	Luer connection on plug
13441	300	1.4 / 17	14	1300	1000	yes
13444	300	1.4 / 17	26	1300	1000	no
15138	330	1.0 / 19	14	1300	1000	yes
16783	300	1.4 / 17	14	800	800	yes
16785	330	1.0 / 19	14	800	800	yes

with **corroded echo marking and flushing tube:**

REF	Needle length (mm)	Outer diameter of the needle (mm / G)	Plug for tubes with ... ml	Length of tubing from needle to plug (mm)	Length of tubing from plug to aspirator (mm)	Luer connection on flushing tube
13443	300	1.4 / 17	14	1300	1000	yes

Length of tubing for flushing: 1000

16445	300	1.4 / 17	14	750	30	yes
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Length of tubing for flushing: 750

with **grinded echo marking, without flushing tube:**

REF	Needle length (mm)	Outer diameter of the needle (mm / G)	Plug for tubes with ... ml	Length of tubing from needle to plug (mm)	Length of tubing from plug to aspirator (mm)	Luer connection on plug
13438	300	1.4 / 17	14	1300	1000	yes
13440	300	1.4 / 17	26	1300	1000	no
13450	300	1.4 / 17	14	500	1800	no
13451*	300	1.4 / 17	14	1300	1000	no
13452*	300	1.4 / 17	14	500	1000	no
13452L*	300	1.4 / 17	14	1000	1000	no

\*with firm tubing

## Double lumen puncture sets

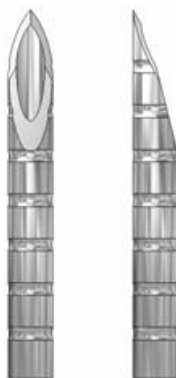
with **grinded echo marking and flushing tube:**

REF	Needle length (mm)	Outer diameter of the needle (mm / G)	Plug for tubes with ... ml	Length of tubing from needle to plug (mm)	Length of tubing from plug to aspirator (mm)	Luer connection on flushing tube
13463	330	1.6 / 16	14	390	1000	yes

Length of tubing for flushing: 350 mm

16784	330	1.6 / 16	14	800	800	yes
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Length of tubing for flushing: 800 mm



Grinded echo marking



Corroded echo marking



## Labo C-Top

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Table top incubator for up to date, individual cell cultivation

### Advantages of Labo C-Top:

- Approved medical device
- Two independent and separate incubation chambers
- Parameters (gas flow, temperature) can be adjusted individually
- Optimized gassing with premixed gas
- Optimized temperature distribution by double heated chamber from top and bottom
- Reliable humidity system
- Current value of relative humidity is displayed (% rH)
- Very fast heating up and recovery times
- Convenient glass control panel
- Space saving

### Technical data:

#### Exterior:

- Dimensions 403 x 225 x 155 mm (w x d x h)
- Weight 8.8 kg

#### Interior:

- Two chambers with 0.5 liters each
- Mixed load possible

#### Temperature:

- Overall heating from top and bottom of each chamber
- Range 30 °C – 42 °C from 7 °C above ambient temperature
- Stability / uniformity  $\pm 0.1 / 0.3$  °C

#### Gassing:

- Premixed gas
- Gas flow adjustable between 20 ml/min and 30 ml/min
- Flow rate after opening the lid (automatic gas purge): 250 ml/min for 3 minutes

#### Connection values:

- 110 – 230 V AC, 50/60 Hz, 100 VA
- Primary pressure for gas 0.8 bar
- Ambient temperature 18 °C – 30 °C

#### Classification:

- Safety class I
- Class IIa for every usage according to EC Directive 93/42/EEC
- Device is compliant to EN 61010

REF 14876



### Additional equipment:

- Labo Gas Mixer provides mixed gas (CO<sub>2</sub>, N<sub>2</sub> and atmospheric oxygen)

REF 15583



## Product features:

### Incubation chambers:

- Aluminum milled and eloxated
- In the lower part:
  - Slots provide full contact to culture dishes
  - Adaption for humidity block
  - Gas inlet
- Easy cleaning
- Independent, for use with (per chamber):
  - 4 x IVF 4-well dishes 66 x 66 mm
  - 4 x Petri dishes Ø 60 mm
  - 10 x Petri dishes Ø 35 mm

### Temperature:

- Overall heating from top and bottom
- Very homogeneous temperature distribution

### Humidity:

- Humidification by means of humidity block
- Reservoir sufficient for 4 days (when gassing with 20 ml/min)
- Humidity block autoclavable
- Humidity alarm disengageable
- Current value of relative humidity is displayed (% rH)

### Gassing:

- Connection of premixed gas ( $\text{CO}_2$ ,  $\text{O}_2 < 21\%$ ,  $\text{N}_2$ )
- Separate measuring and regulation of gas flow for each chamber
- Automatic gas purge when closing the chamber

### Recovery times:

- Short recovery times for all adjustable parameters through microprocessor controlled regulation

### Use of glass panel:

- Homogeneous glass cover
- Sensoric buttons integrated in glass
- Image of placements for marking inserted dishes at the glass cover
- Easy operation and menu navigation
- Lit LCD at working place height

### Trouble check system:

- Optical and acoustic alarm in case of set point deviation and defective sensor
- Independent over-temperature protection
- Remote alarm

### Options:

- PC software LaboDat+ for documentation of incubator's parameters
- Second gas inlet for use of different gas mixtures for each chamber
- Lockable lids

### Interfaces:

- Remote alarm (potential free)
- RS485 interface for data logging with optional available PC software LaboDat+



For Labo C-Top we offer the following options:



### Labo C-Top with lockable lids:

- Higher security for your cultures
- Limited access to the cultures

REF 15070



### Labo C-Top with second gas inlet:

- Every chamber to be gassed with different mixtures at the same time!

REF 15069



## Labo C-Top with SAFE Sens® pH monitoring



**Benchtop incubator with integrated SAFE Sens® technology for continuous, non-invasive pH monitoring**

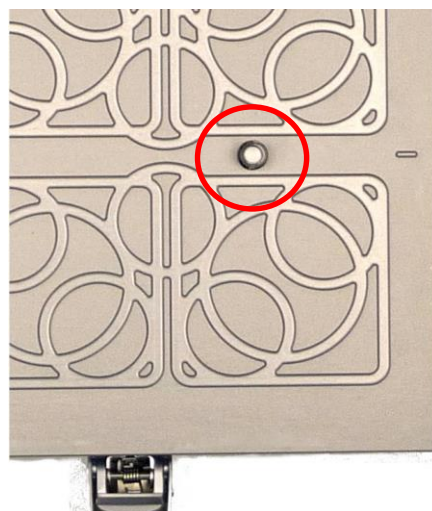
### Advantages of Labo C-Top with SAFE Sens® pH monitoring:

- All advantages and options of Labo C-Top combined with state-of-the-art pH monitoring system
- Independent monitoring of the pH-value in Labo C-Top chambers
- TrakPods™ integrated in surface of Labo C-Top without use of valuable dish space
- Real time monitoring of the pH-value every minute or every 30 minutes for up to 7 days
- Accurate measurements:  $\pm 0.05$  in a range of pH 7.00 to 7.60
- SAFE Sens® measurement technology utilizes a patented and proven LED-based optical fluorescent system
- Included Software for data recording capabilities and automatic alerts (by e-mail)
- Monitoring of up to 8 chambers with one TrakStation™

REF 16377

## Product features of Labo C-Top with SAFE Sens® pH monitoring:

- Changes in pH immediately visible due to continuous monitoring
- Monitoring without staff intervention and lid opening
- No petri-dish required (non-invasive)
- No costly, time consuming calibration required:
  - One qc<sup>2</sup> alignment tool needed per laboratory
  - Automatically adjusts fluorescent signal to restore to factory settings
  - No outside calibration services required, no incubator down time



Open Labo C-Top with SAFE Sens® sv<sup>2</sup>-sensor (red marking)



## Options for Labo C-Top with SAFE Sens® pH monitoring system

- Integrated SAFE Sens® TrakPod™ either on both sides or side of choice
- With or without SAFE Sens® TrakStation™
- Labo C-Top with lockable lids
- Labo C-Top with second gas inlet

## Technical data of Labo C-Top:

### Exterior:

- Dimensions 403 x 225 x 155 mm (w x d x h)
- Weight 8.8 kgs

### Interior:

- Two chambers with 0.5 liters each
- Mixed load possible

### Temperature:

- Overall heating from top and bottom of each chamber
- Range 30 °C – 42 °C from 7 °C above ambient temperature
- Stability / uniformity ± 0.1 °C / 0.3 °C

### Gassing:

- Premixed gas
- Gas flow adjustable between 20 ml/min and 30 ml/min
- Flow rate after opening the lid (automatic gas purge):  
250 ml/min for 3 minutes

### Connection values:

- 110 – 230 V AC, 50/60 Hz, 100 VA
- Primary pressure for gas 0.8 bar
- Ambient temperature 18 °C – 30 °C

### Classification:

- Safety class I
- Class IIa for every usage according to EC Directive 93/42/EEC
- Device is compliant to EN 61010

## Incubation technique

### Product features of Labo C-Top:

#### Incubation chambers:

- Aluminum milled and eloxated
- In the lower part:
  - Slots provide full contact to culture dishes
  - Adaption for humidity block
  - Gas inlet
- Easy cleaning
- Independent, for use with (per chamber):
  - 4x IVF 4-well dishes 66x66 mm
  - 4x Petri dishes Ø 60 mm
  - 10x Petri dishes Ø 35 mm

#### Temperature:

- Overall heating from top and bottom
- Very homogeneous temperature distribution

#### Humidity:

- Humidification by means of humidity block
- Reservoir sufficient for 4 days (when gassing with 20 ml/min)
- Humidity block autoclavable
- Humidity alarm disengageable
- Current value of relative humidity is displayed (% rH)

#### Gassing:

- Connection of premixed gas ( $\text{CO}_2$ ,  $\text{O}_2 < 21\%$ ,  $\text{N}_2$ )
- Separate measuring and regulation of gas flow for each chamber
- Automatic gas purge when closing the chamber

#### Recovery times:

- Short recovery times for all adjustable parameters through microprocessor controlled regulation

#### Use of glass panel:

- Homogeneous glass cover
- Sensoric buttons integrated in glass
- Image of placements for marking inserted dishes at the glass cover
- Easy operation and menu navigation
- Lit LCD at working place height

#### Trouble check system:

- Optical and acoustic alarm in case of set point deviation and defective sensor
- Independent over-temperature protection
- Remote alarm

#### Options:

- PC software LaboDat+ for documentation of incubator's parameters
- Second gas inlet for use of different gas mixtures for each chamber
- Lockable lids

#### Interfaces:

- Remote alarm (potential free)
- RS485 interface for data logging with optional available PC software LaboDat+



SAFE Sens® qc<sup>2</sup> alignment tool on TrakPod™'s sv<sup>2</sup> sensor in Labo C-Top

### Additional equipment:

- Labo Gas Mixer provides mixed gas ( $\text{CO}_2$ ,  $\text{N}_2$  and atmospheric oxygen)

REF 15583

### Accessories:

SAFE Sens® sterile sv<sup>2</sup>-sensor (10 pieces)

REF 16370

SAFE Sens® qc<sup>2</sup> alignment tool

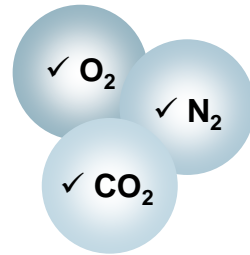
REF 16371

The SAFE Sens® pH-monitoring technology is also available for large format incubators.



## Labo Gas Mixer

Quality – Made in Germany



### Features:

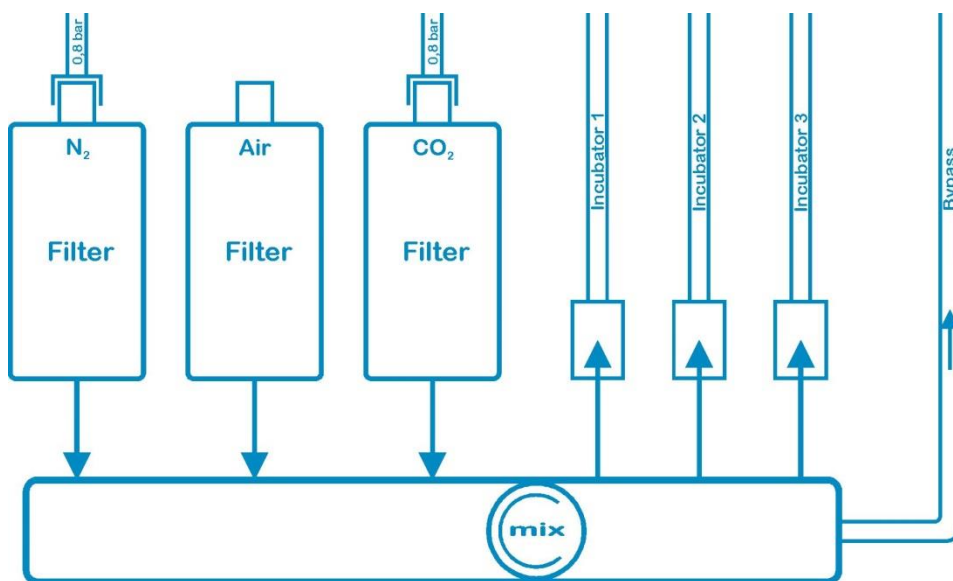
- Provides mixed gas (CO<sub>2</sub>, N<sub>2</sub> and atmospheric oxygen) for incubators
- Individual setting of CO<sub>2</sub> and O<sub>2</sub> concentration
- Connection for CO<sub>2</sub> & N<sub>2</sub> gas bottles, O<sub>2</sub> will be retrieved from ambient air
- Integrated In-Line-Filters (exchangeable)
- Mixed gas supply for up to three Labo C-Tops
- Bypass for other external devices:
  - Mixed gas supply of incubation chambers used with microscopes
  - External control of CO<sub>2</sub> concentration by use of Labotect InControl
- Anytime adjustable concentration of required mixture of gases
- Convenient glass control panel

REF 15583



## Technical data:

- Dimensions: 21.0 x 27.5 x 15.5 cm (w x d x h) incl. filter
- CO<sub>2</sub> control:
  - Range 0 – 10 % / stability  $\pm 0.3$  % CO<sub>2</sub>
  - Dual beam IR sensor
- O<sub>2</sub> control < 21 %:
  - Range 5 – 21 % / stability  $\pm 0.3$  % O<sub>2</sub>
  - Nernst cell
- Removable gas quantity max. 1000 ml/min
- Pressure range gas port: 0.8 – 1.5 bar
- Gas flow bypass: 50 – 300 ml/min
- RS485 interface for connection to *LaboDat+*
- Remote alarm
- Power supply: 110 – 240 V AC, 50/60 Hz, 45 W
- Safety class I



Rev. 6\_02/2020



## Labo Gas Regulator

Quality – Made in Germany



**For two different adjustable gas outlet pressures out of one gas supply**

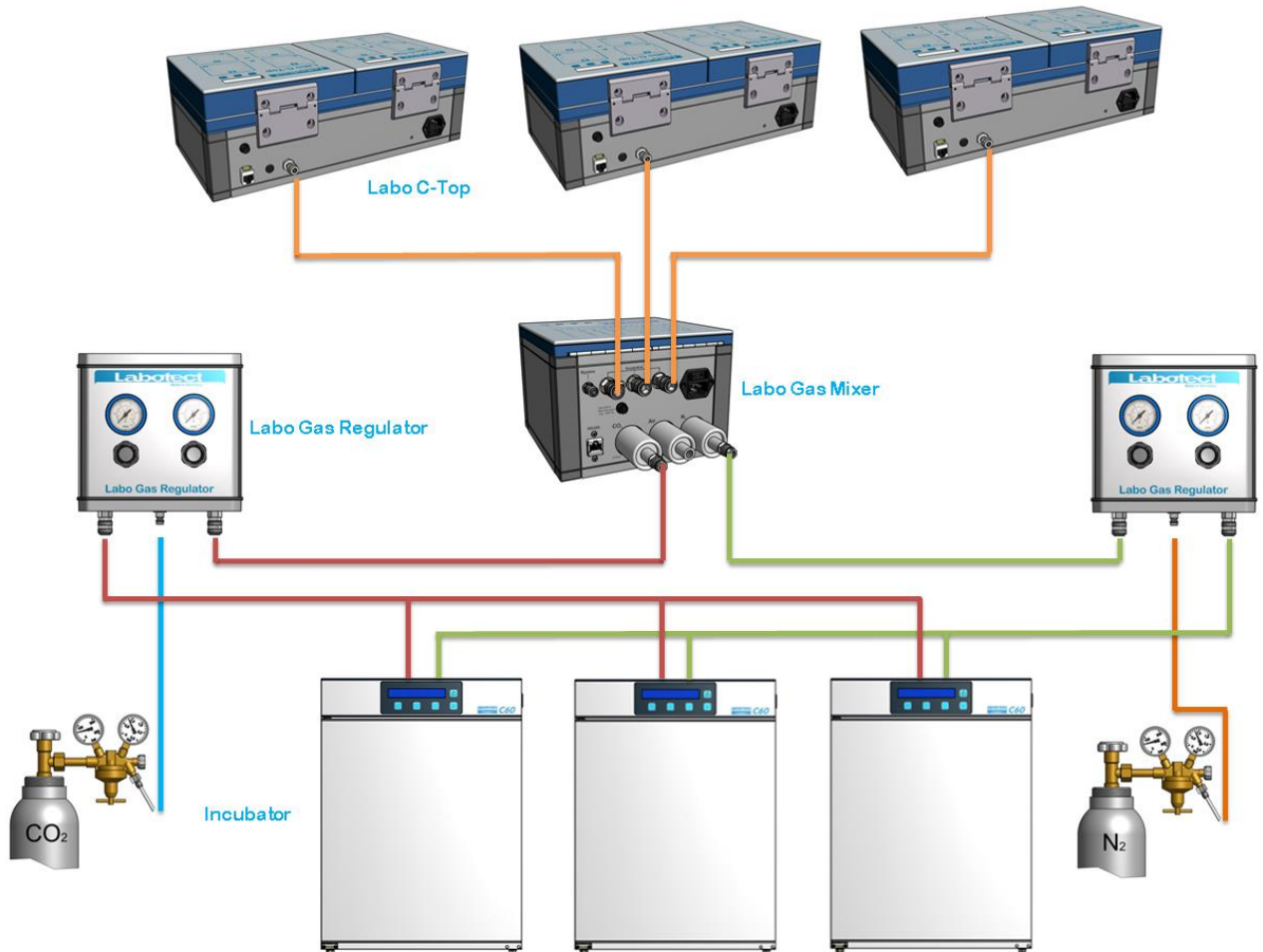
### Technical data:

- Outer dimensions:  
191 x 88 x 208 mm (w x d x h)
- Weight: 2.2 kg
- Gas inlet pressure: max. 3.0 bar
- Gas outlet pressure: 0 – 2.5 bar
- Use with CO<sub>2</sub>, N<sub>2</sub>
- Wall mounting possible (opening at the back)

REF 15971

### Characteristics:

- Necessary for the fluctuation-free operation of the Labo Gas Mixer (continuous gas consumption) if the same gas source is used to provide gas for CO<sub>2</sub> incubators (pulsed gas consumption)
- Adapted for gas supply by gas bottle with gas pressure reducer or facility installed gas supply
- Suitable for operation in various environments where different gas pressures need to be generated from one supply source



Picture: Application example of Labo Gas Regulator with Labo Gas Mixer, 3 x Labo C-Top and 3 x C60 incubators

## CO<sub>2</sub> Incubator C16

Quality – Made in Germany

Your first choice for  
excellent cell cultivation



REF 14209 (without O<sub>2</sub> control)

REF 14452 (with O<sub>2</sub> control)

Small incubator with an inner  
volume of 16 liters

### Advantages of C16:

- Approved medical device
- CO<sub>2</sub> sensor:
  - Dual beam infrared sensor
  - Very precise measurement
  - Very short recovery times
  - Long-term stable
- Direct heating:
  - Independent over-all heating of inner walls and door
  - Homogeneous temperature distribution in the interior
  - Very short recovery times
- Very compact and space saving construction
- Optional:
  - O<sub>2</sub> control
  - PC software LaboDat+

## Product features:

### Interior:

- Electro-polished stainless steel with coved corners
- Shelves and ductwork easily removable for cleaning purposes

### Temperature:

- Panel heated interior chamber and door

### Humidity supply:

- Via an internal water reservoir

### CO<sub>2</sub>:

- Dual beam infrared sensor
- Measurements independent from temperature and humidity

### Very short recovery times:

- For all adjustable parameters through optimized microprocessor control

### Easy handling:

- Menu-driven
- Backlit LCD display
- Membrane keypad

### Diagnostic system:

- Optical and acoustical alarm if set point deviation or sensor defect occurs
- Door monitoring
- Air monitoring
- Hardware self-test
- Remote alarm

### Options:

- O<sub>2</sub> control: connection for N<sub>2</sub>

### Interfaces:

- Remote alarm (potential free)
- RS485-interface for data-logging with optional PC software LaboDat+

## Technical data:

### Exterior:

- Dimensions 290 x 330 x 480 mm (w x d x h)

### Interior:

- Volume 16 l
- Electro-polished stainless steel
- 2 shelves 205 x 230 mm (w x d)

### Temperature:

- Panel heated interior chamber and door
- Range 27 °C – 42 °C starting 5 °C above ambient temperature
- Stability / uniformity: ± 0.1 °C / 0.3 °C

### CO<sub>2</sub> control:

- Dual beam infrared sensor
- Range 0 – 10 % CO<sub>2</sub>
- Stability 0.1 % CO<sub>2</sub>

### O<sub>2</sub> control < 21 % (optional):

- Measurement with galvanic sensor
- Connection of N<sub>2</sub>
- Range 1 – 21 % O<sub>2</sub>

### Connection values:

- 110 – 230 V AC, 50/60 Hz, 60 W
- Inlet pressure for gas 0.8 bar
- Ambient temperature 18 °C – 30 °C

### Classification:

- Safety class I
- Class IIa for every usage according to EC Directive 93/42/EEC
- Device is compliant to EN 61010

## CO<sub>2</sub> Incubator C60

Quality – Made in Germany

Your first choice for excellent cell cultivation



Incubator with 60 liter chamber capacity

REF 14093

### Advantages of C60:

- Approved medical device
- Active sterile humidity:
  - External water reservoir
  - Distilled water is vaporized at 120 °C
  - Minimized risk of contamination
  - Humidity sensor (rH)
  - Very fast recovery
- CO<sub>2</sub>-sensor:
  - Dual beam infrared sensor
  - Very precise measurement
  - Very fast recovery
  - Long-term stable
- Heating:
  - Independent six-sided direct heating
  - Homogeneous temperature distribution in incubation chamber
  - Very fast recovery
- Optional:
  - O<sub>2</sub>-control
  - Subdivided inner glass door with 4 small doors
  - Lockable front door
  - Access port
  - PC software LaboDat+



## Product features:

### Interior chamber:

- Electro-polished stainless steel with rounded corners
- No tools required for quick assembly and disassembly of interior components

### Temperature:

- Panel heated chamber and door
- Intelligent temperature control system avoids condensation in inner chamber

### Active sterile Humidity supply:

- External water supply container

### CO<sub>2</sub>-control:

- Dual beam infrared sensor
- Measurement independent from temperature and humidity

### Fast recovery:

- For all adjustable parameters through optimized microprocessor control

### Easy handling:

- Menu guided
- Large, backlit LCD
- Foil keyboard

### Diagnostic system:

- Visual and acoustic alarm if set point deviation or sensor defect occurs
- Door monitoring
- Remote alarm

### Options:

- O<sub>2</sub>-control: connection of N<sub>2</sub>
- Subdivided inner glass door with 4 small doors
- Lockable front door
- Access port Ø 30 mm

### Interfaces:

- Alarm contact (potential free)
- RS485 interface for connection of optional available PC software LaboDat+

## Technical data:

### Exterior chamber:

- Dimensions 510 x 540 x 720 mm (w x d x h)

### Interior chamber:

- Chamber volume 60 l
- Electro-polished stainless steel
- Shelves height adjustable

### Temperature:

- Panel heated interior chamber and door
- Adjustable range 27-42 °C starting 5 °C above ambient temperature
- Stability / uniformity: ±0.1 °C / ±0.3 °C
- Over-temperature alarm: 32-47 °C

### CO<sub>2</sub>-control:

- Dual beam infrared sensor
- Adjustable range 0-10 % CO<sub>2</sub>
- Stability ±0.1 % CO<sub>2</sub>

### O<sub>2</sub>-control < 21 % (optional):

- Measurement with galvanic sensor
- Connection of N<sub>2</sub>
- Adjustable range 1-21 % O<sub>2</sub>

### Humidity:

- Active sterile humidity generated by vaporization module at 120 °C
- Measuring range 0-98 % rH, adjustable range 60-95 % rH

### Supply:

- 230 V AC, 50/60 Hz or 115 V AC, 50/60 Hz, 160 W
- Inlet pressure 0.8 bar
- Ambient temperature 18-30 °C

### Classification:

- Safety class I
- Class IIa for all usage according to EC-Directive 93/42/EEC
- Conform to EN 61010

## Accessories & options:



### Subdivided inner glass door – for even faster recovery

- 4 small inner doors
- Even faster recovery of all parameters
- Even lower gas consumption
- Easy cleaning of inner doors



### Access port

- Ø 30 mm
- Located in the upper right corner of the incubation chamber
- Sealing plug in scope of supply



### Lockable front door - higher security for your cultures



### Stacking kit – for safe positioning

- Safe, easy and space-saving positioning of the devices in the laboratory

REF 10789 High frame stand, 105 cm height, white coated steel

Our C60 incubators are available with O<sub>2</sub>-control (O<sub>2</sub> < 21 %)



## Recommended Accessories for active sterile humidity supply:



### AEROpart® HUM

- sterile and pyrogen-free water 1000 ml

REF 16150



### Magnetic hook

- diameter 48 mm

REF 15595



### Intrafix® Air (B. Braun)

- I.V. administration set tubing length 150 cm

REF 15417

## CO<sub>2</sub> Incubator C200

Quality – Made in Germany

Your first choice for excellent cell cultivation



Incubator with 200 liter chamber capacity

REF 13946

### Advantages of C200:

- Approved medical device
- Active sterile humidity:
  - External water reservoir
  - Distilled water is vaporized at 120 °C
  - Minimized risk of contamination
  - Humidity sensor (rH)
  - Very fast recovery
- CO<sub>2</sub>-sensor:
  - Dual beam infrared sensor
  - Very precise measurement
  - Very fast recovery
  - Long-term stable
- Direct heating:
  - Independent six-sided direct heating
  - Homogeneous temperature distribution in incubation chamber
  - Very fast recovery
- Optional:
  - O<sub>2</sub>-control
  - Subdivided inner glass door with 6 small doors
  - Lockable front door
  - Access port
  - PC software LaboDat+

## Product features:

### Interior chamber:

- Electro-polished stainless steel with rounded corners
- No tools required for quick disassembly and assembly of interior components

### Temperature:

- Panel heated chamber and door
- Intelligent temperature control system avoids condensation in inner chamber

### Active sterile Humidity supply:

- External water supply container

### CO<sub>2</sub>-control:

- Dual beam infrared sensor
- Measurement independent from temperature and humidity

### Fast recovery :

- For all adjustable parameters through optimized microprocessor control

### Easy handling:

- Menu guided
- Large, backlit LCD
- Foil keyboard

### Diagnostic system:

- Visual and acoustic alarm if set point deviation or sensor defect occurs
- Door monitoring
- Remote alarm

### Options:

- O<sub>2</sub>-control: connection of N<sub>2</sub>
- Subdivided inner glass door with 6 small doors
- Lockable front door
- Access port Ø 30 mm

### Interfaces:

- Alarm contact (potential free)
- RS485 interface for connection of optional available PC software LaboDat+

## Technical data:

### Exterior chamber:

- Dimensions 680 x 690 x 930 mm (w x d x h)

### Interior chamber:

- Chamber volume 200 l
- Electro-polished stainless steel
- Shelves height adjustable

### Temperature:

- Panel heated interior chamber and door
- Adjustable range 27-42 °C starting 5 °C above ambient temperature
- Stability / uniformity: ±0.1 °C / ±0.3 °C
- Over-temperature alarm: 32-47 °C

### CO<sub>2</sub>-control:

- Dual beam infrared sensor
- Adjustable range 0-10 % CO<sub>2</sub>
- Stability ±0.1 % CO<sub>2</sub>

### O<sub>2</sub>-control < 21 % (optional):

- Measurement with galvanic sensor
- Connection of N<sub>2</sub>
- Adjustable range 1-21 % O<sub>2</sub>

### Humidity:

- Active sterile humidity generated by vaporization module at 120 °C
- Measuring range 0-98 % rH, adjustable range 60-95 % rH

### Supply:

- 230 V AC, 50/60 Hz or 115 V AC, 50/60 Hz, 200 W
- Inlet pressure 0.8 bar
- Ambient temperature 18-30 °C

### Classification:

- Safety class I
- Class IIa for all usage according to EC-Directive 93/42/EEC
- Conform to EN 61010

## Incubation technique

### Accessories & options:



#### Subdivided inner glass door - for even faster recovery

- 6 small inner doors
- Even faster recovery of all parameters
- Even lower gas consumption
- Easy cleaning of inner doors
- Scope of supply
  - 6 split shelves 500 x 222 mm (d x w) each
  - 3 shelves 502 x 481 mm (d x w) each



#### Access port

- Ø 30 mm
- Located in the upper left corner inside the incubation chamber
- Sealing plug in scope of supply



#### Lockable front door - higher security for your cultures



#### Stacking kit – for safe positioning

- Safe, easy and space-saving positioning of the devices in the laboratory

- |     |   |
|-----|---|
| REF | 10649 Underframe, 15 cm height, white coated steel        |
| REF | 10681 High frame stand, 115 cm height, white coated steel |



#### Roller base

- For mobile positioning of the devices in the laboratory, on lockable wheels, preventing roller base movement

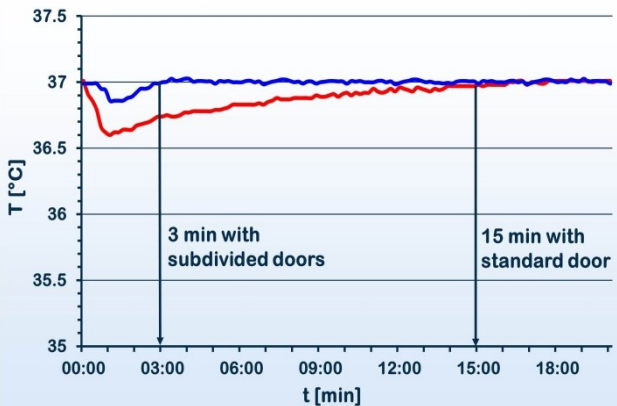
- |     |   |
|-----|---|
| REF | 14411 Roller base, 15 cm height, on lockable wheels |
|-----|---|

**Our C200 incubators are available with O<sub>2</sub>-control (O<sub>2</sub> < 21 %)**

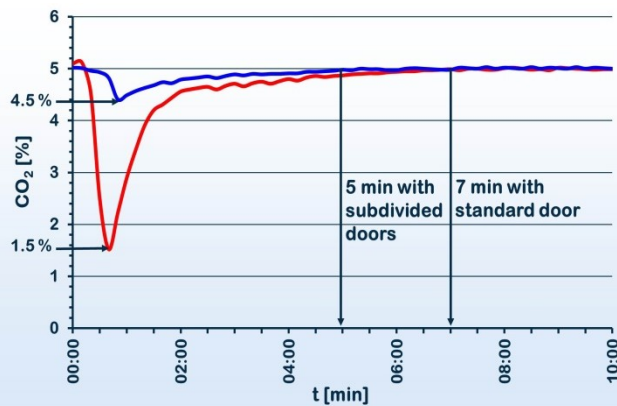
## Recovery rates following 30 s door opening:

- Subdivided inner door
- Standard inner door

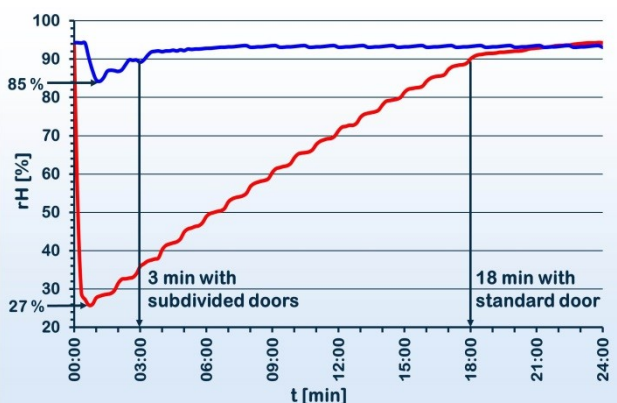
### Temperature



### CO<sub>2</sub>



### Relative Humidity





## Recommended Accessories for active sterile humidity supply:



### AEROpart® HUM

- sterile and pyrogen-free water  
1000 ml

REF 16150



### Magnetic hook

- diameter 48 mm

REF 15595



### Intrafix® Air (B. Braun)

- I.V. administration set  
tubing length 150 cm

REF 15417





# CO<sub>2</sub> Incubator Labo C201

Quality – Made in Germany

**Your first choice for  
excellent cell cultivation  
with optional  
UV decontamination**



**Incubator with 200 liter  
chamber capacity**

REF 15245

## Advantages of Labo C201:

- 7" colour touch screen
- UV decontamination (optional)
- Particle filter (P3) within airflow
- Graphical display of recorded parameters of the past 2 h or 24 h (T, CO<sub>2</sub>, rH, and O<sub>2</sub>)
- Access control via number code (optional)
- RS485 or ethernet interface
- Active sterile humidity supply:
  - External water reservoir
  - Distilled water is vaporized at 120 °C
  - Minimized risk of contamination
  - Humidity sensor
  - Very fast recovery
- CO<sub>2</sub>-sensor:
  - Dual beam infrared sensor
  - Very precise measurement
  - Very fast recovery
  - Long-term stable
- Direct heating:
  - Independent six-sided direct heating
  - Homogeneous temperature distribution in incubation chamber
  - Very fast recovery
- Further options:
  - O<sub>2</sub>-control
  - Subdivided inner glass door with 6 small doors
  - PC software LaboDat+

## Product features:

### Interior:

- Electro-polished stainless steel with rounded corners
- Shelves and ductwork easily removable for cleaning
- Access port Ø 30 mm

### Temperature:

- Intelligent temperature control system avoids condensation in inner chamber

### Humidity supply:

- Active sterile humidity via external water supply container

### CO<sub>2</sub>-control:

- Dual beam infrared sensor
- Measurement independent from temperature and humidity

### Fast recovery:

- For all adjustable parameters

### Easy handling:

- Menu guided 7" colour touch display
- Graphical display of recorded parameters of the past 2 h or 24 h

### Diagnostic system:

- Visual and acoustic alarm if set point deviation or sensor defect occurs
- Door monitoring
- Remote alarm

### Options:

- O<sub>2</sub>-control: connection of N<sub>2</sub>
- Subdivided inner glass door with 6 small doors
- UV decontamination routine
- Access control via numerical code
- PC software LaboDat+

### Interfaces:

- Alarm contact (potential free)
- RS485 or Ethernet interface

## Technical data:

### Exterior:

- Dimensions 720 x 700 x 870 mm (w x d x h)

### Interior:

- Chamber volume 200 l
- Electro-polished stainless steel
- Shelves height adjustable

### Temperature:

- Panel heated interior chamber and door
- Range 27-42 °C starting 5 °C above ambient temperature
- Stability / uniformity: ±0.1 °C / ±0.3 °C
- Over-temperature alarm: 32-47 °C

### CO<sub>2</sub>-control:

- Dual beam infrared sensor
- Adjustable range 0-10 % CO<sub>2</sub>
- Stability ±0.1 % CO<sub>2</sub>

### O<sub>2</sub>-control < 21 % (optional):

- Measurement with galvanic sensor
- Connection of N<sub>2</sub>
- Adjustable range 1-21 % O<sub>2</sub>

### Humidity:

- Active sterile humidity generated by vaporization module at 120 °C
- Measuring range 0-98 % rH, adjustment range 60-95 % rH

### Access port:

- Ø 30 mm

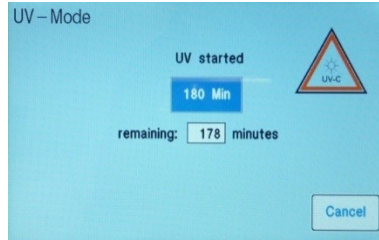
### Supply:

- 230 V AC, 50/60 Hz or 115 V AC, 50/60 Hz, 250 VA
- Inlet pressure 0.8 bar
- Ambient temperature 18-30 °C

### Classification:

- Safety class I
- Conform to EN 61010

## Accessories & options:



### UV decontamination

- Individual start by user
- Duration: 180 minutes
- Short-wave UV radiation (UV-C radiation, < 280 nm)
- UV mode is terminated immediately when the door is opened



**Each Labotect CO<sub>2</sub> incubator passes an individual cell-growth test prior to delivery!**

### Subdivided inner glass door - for even faster recovery

- 6 small inner doors
- Even faster recovery of all parameters
- Even lower gas consumption
- Easy cleaning of inner doors
- Scope of supply
  - 6 split shelves 474 x 222 mm (d x w) each
  - 3 shelves each 485 x 454 mm (d x w) each



### Access control - higher security for your cultures

- Access control via touch screen
- Mechanical unlocking in case of power failure (emergency release)

**Our Labo C201 incubators are available with O<sub>2</sub>-control (O<sub>2</sub> < 21 %)**



Rev. 4\_02/2018

## Incubation technique

### Accessories & options:



#### Stacking kit - for safe positioning

- Safe, easy and space-saving positioning of the devices in the laboratory

REF 10649 Floor stand, 15 cm height, white coated steel

REF 10681 High frame stand, 115 cm height, white coated steel



#### Roller base

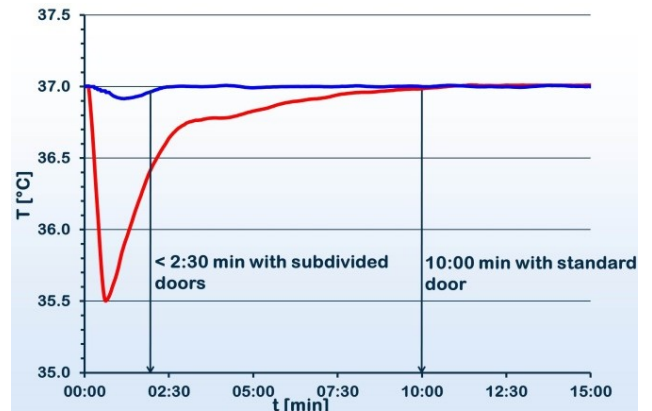
- For mobile positioning of the devices in the laboratory, on lockable wheels, preventing roller base movement

REF 14411 Roller base, 15 cm height, on lockable wheels

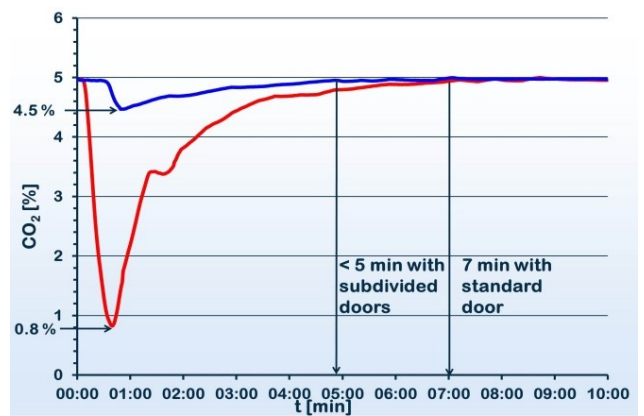
### Recovery rates following 30 s door opening:

- Subdivided inner door
- Standard inner door

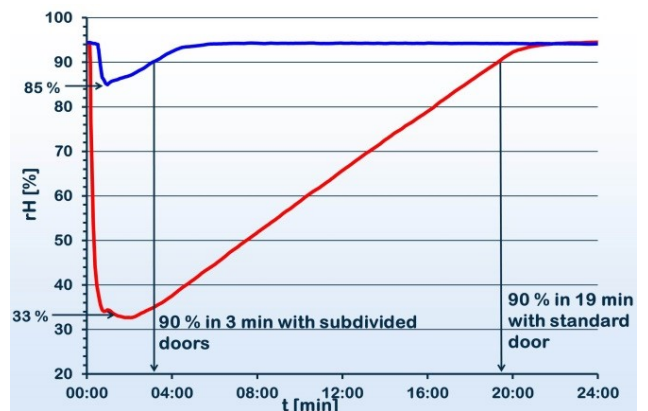
#### Temperature



#### CO<sub>2</sub>



#### Relative Humidity



## Recommended Accessories for active sterile humidity supply:



### AEROpart® HUM

- sterile and pyrogen-free water 1000 ml

REF 16150



### Magnetic hook

- diameter 48 mm

REF 15595



### Intrafix® Air (B. Braun)

- I.V. administration set tubing length 150 cm

REF 15417





## SAFE Sens® pH monitoring



SAFE Sens® TrakStation™ with USB-Hub

### Continuous pH monitoring of media during embryo culture within large format incubators

#### Advantages of the SAFE Sens® pH monitoring system:

- Independent, non-invasive monitoring of pH-value throughout the entire embryo cultivation
- Real time data of the pH-value every minute or every 30 minutes for up to 7 days
- Accurate measurements:  $\pm 0.05$  in a range of pH 7.00 to 7.60
- Monitoring of up to 8 chambers or incubators with one TrakStation™
- Installation in  $\leq 10$  minutes
- Intuitive and easy to use; easy to install by user



SAFE Sens® sv2-sensor in large format incubator

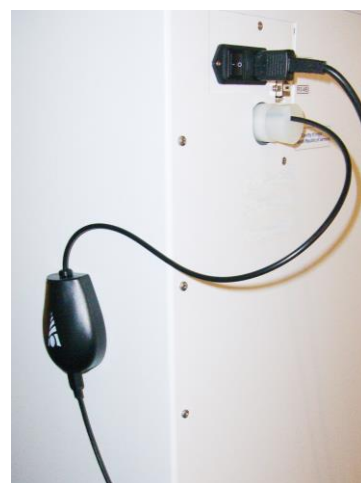


SAFE Sens® TrakPod™



## Product features:

- SAFE Sens® measurement technology utilizes a patented and proven LED-based optical fluorescent system
- Included software for data recording capabilities and automatic alerts by e-mail
- Monitoring without staff intervention and door opening
- No petri-dish used (non-invasive)
- No costly, time consuming calibration required:
  - One qc<sup>2</sup> alignment tool needed per laboratory
  - Automatically adjusts fluorescent signal to restore to factory settings
  - No outside calibration services required, no incubator down time



SAFE Sens® TrakPod™ installed in 200 l incubator Labo C201 via access port

**SAFE Sens® TrakStation™**

REF 16374

**SAFE Sens® TrakPod™**

REF 16457

**SAFE Sens® sterile sv<sup>2</sup>-sensor**  
(10 pieces)

REF 16370

*Sv<sup>2</sup>-sensors obtained from Labotect will only work with Labotect incubators*

**SAFE Sens® qc<sup>2</sup> alignment tool**

REF 16371

**Benchtop incubator Labo C-Top with integrated SAFE Sens® pH monitoring**

REF 16377



SAFE Sens® qc<sup>2</sup> alignment tool on TrakPod™'s sv<sup>2</sup>-sensor in benchtop incubator Labo C-Top

## Gasmonitor

Quality – Made in Germany



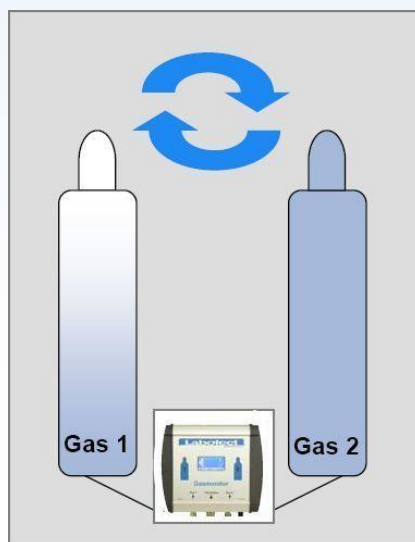
### Automatic changeover unit

#### Features:

- Gas monitoring for CO<sub>2</sub>, N<sub>2</sub> and mixed gas (max. 21% O<sub>2</sub>)
- Monitors the gas supply and switches over automatically to second cylinder if supply is exhausted
- Ensures continuous gas supply without interruption
- Monitoring of gas pressures
- Optical and acoustical alarm if pressure is too low or too high
- Graphic display with touch screen

#### Technical data:

- Dimensions: 195 x 53 x 181 mm (w x d x h)
- Pressure range: 0.8 to max. 1.5 bar
- Alarm threshold and LOW switching point: P < 0.3 bar
- Alarm threshold HIGH: P ≥ 2.0 bar
- Maximum permitted connection pressure: P = 2 bar
- Remote alarm
- RS485 interface for data logging with optional available PC software LaboDat+
- Power supply: 12 V by Plug-in power supply 100 – 240 V AC, 60 W



REF 14782

## Scope of supply:

- Gasmonitor
- Quick couplers and further connectors
- Holder for installation at the wall
- Mains adapter
- Magnetic signs for labeling of gas cylinders

## Optional accessory:



Support stand for Gasmonitor

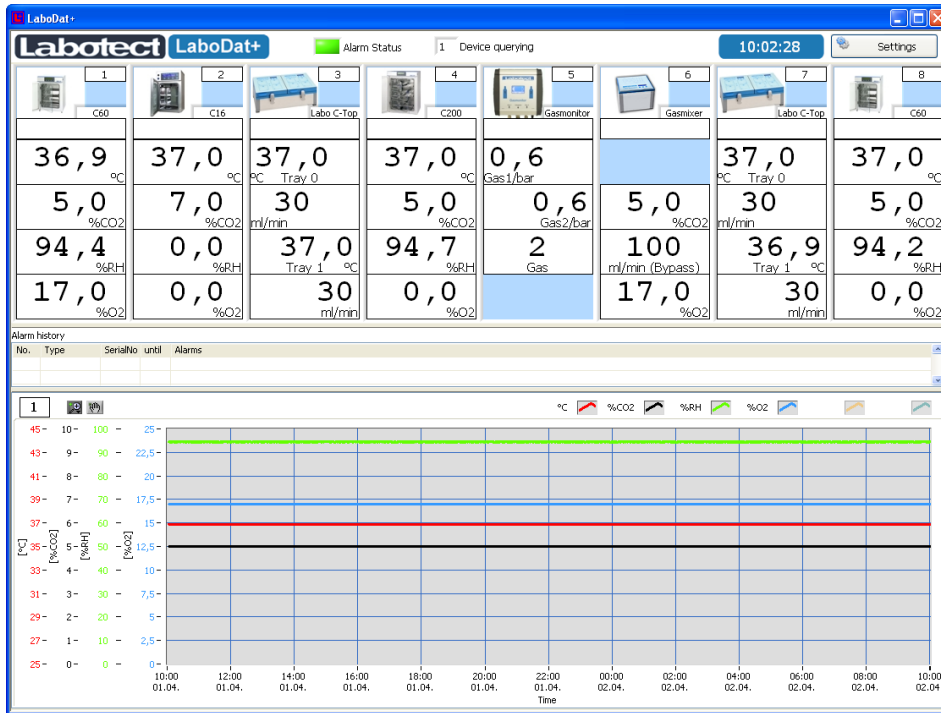
REF 14943



Rev. 8\_02/2020

## LaboDat+

Quality – Made in Germany



Software for  
documentation of  
incubation  
processes

Figure: Main window LaboDat+

### Features:

- Display of actual and stored values
- Protected record of all measurements and alarms
- Visualization in diagrams or numerical values
- Compatible to Labotect devices with RS485 interface\*
- Data export possible
- Language selection English / German
- Compatible up to Windows 10

### Hardware:

- USB interface converter

### Advantages:

- Documented record of incubation conditions
- Connection for up to 16 devices
- USB interface
- Report generation
- Data storage on server possible

### Compatible devices:

- ➔ C16
- ➔ C60
- ➔ C200
- ➔ Labo C201
- ➔ Labo C-Top
- ➔ Labo Gas Mixer
- ➔ Gasmonitor

REF 15125

\*depending on software version of the main board

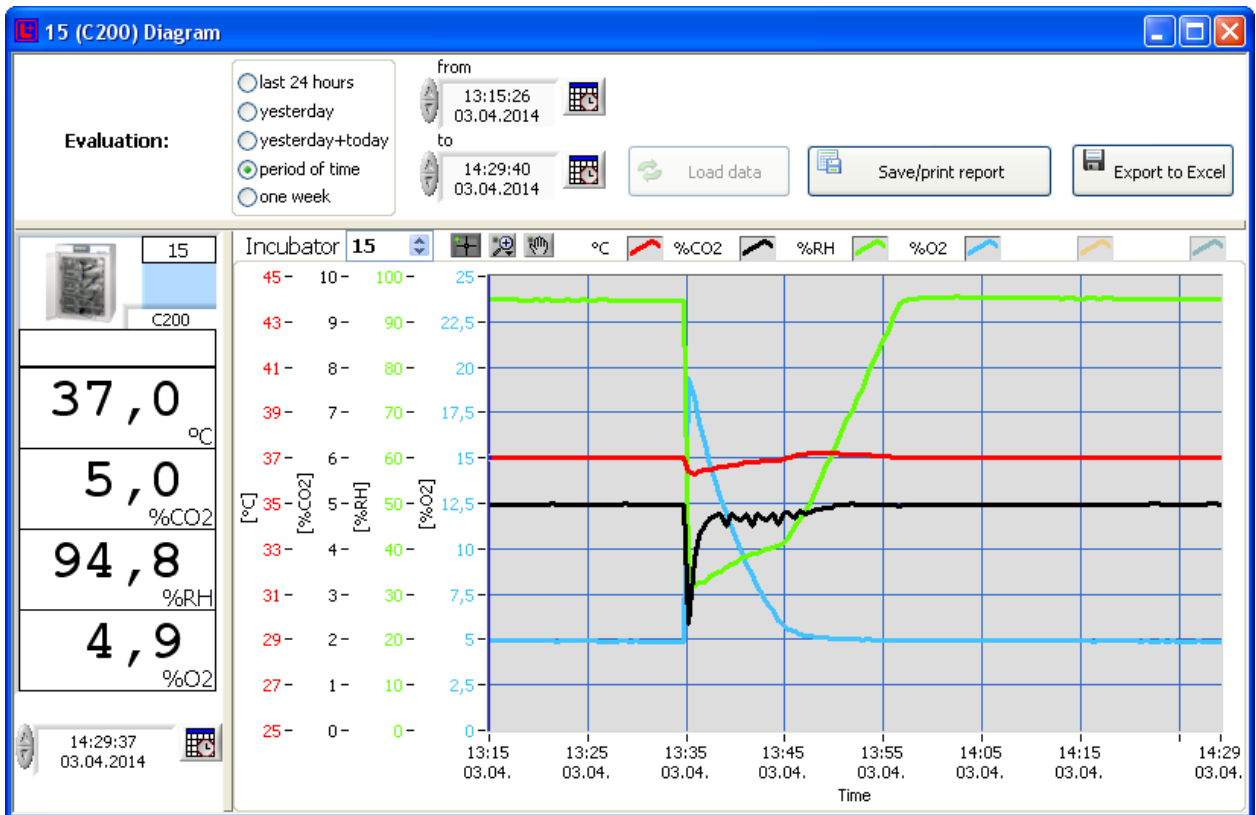


Figure: LaboDat+ evaluation of single device

## Fermacidal D2®



- Without alcohol
- Fast acting
- MEA and HSSA tested

### Product:

Spray bottle 50 ml	REF	13045
Spray bottle 250 ml	REF	13048
Bottle (screw cap) 500 ml	REF	15213
Spray bottle 1 l	REF	13044
Canister 5 l	REF	13043
Canister 10 l	REF	15101
Disinfectant wipes, 120 pieces	REF	13046

### Advantages:

- Ready-to-use disinfectant for surfaces and instruments
- Cleaning effect
- Long-term effective
- Smell-removal and neutralisation of odour-causing bacteria
- Also suitable for disinfection of CO<sub>2</sub> incubators

### Microbiological efficacy:

- Bactericidal, e.g.: *Salmonella*, *Mycobacterium tuberculosis*
- Fungicidal, e.g.: *Trichophyton mentagrophytes*
- Selective virucidal, e.g.: *Hepatitis B*, *HIV*, *Rotavirus*, *Influenza A*, *Corona viruses*

(as specified by the manufacturer)



## Features:

- Quaternary ammonium compounds
- Without alcohol and aldehyde
- Odourless
- Non-volatile
- Does not irritate the skin
- Does not stain
- Dissolves dried blood stains
- Good compatibility of materials like metal, rubber and plastic
- VAH listet and BauA registered

(as specified by the manufacturer)



Rev. 6\_06/2020



## Manoform®



### Product:

Spray bottle 50 ml	REF 17665
Spray bottle 250 ml	REF 14684
Bottle 500 ml	REF 15648
Bottle with dosing head 500ml	REF 17708
Spray bottle 1 l	REF 17664
Canister 5 l	REF 17709
Canister 10 l	REF 17710

### Advantages:

- Ready-to-use gentle disinfectant for hands and skin hygiene
- Free of alcohol and aldehydes
- Neutralisation of odour-producing bacteria
- Does not cause skin irritation, also suitable for sensitive skin

### Microbiological efficiency:

- Bactericidal, e.g.: *E. Coli*
- Fungicidal, e.g.: *Candida*
- Effective against influenza and corona viruses, among others

(as specified by the manufacturer)

## Features:

- Quaternary ammonium compounds
- Free of alcohol and aldehydes
- Odourless
- Non-volatile
- Does not irritate the skin
- Also suitable for sensitive skin with frequent use
- Leaves no stains
- BauA registered

(as specified by the manufacturer)



Rev. 0\_05/2020

## Icepur®



- **Disinfectant cleaner concentrate**
- **Free of alcohol**
- **Free of aldehydes**

### Product:

Grip bottle 2 l

REF 15422

Canister 10 l

REF 15421

### Advantages:

- For combined wipe disinfection and cleaning of surfaces and inventory
- For mask disinfection and cleaning in case of epidemics as well
- Free of any toxic or volatile components
- Protein and fat dissolving, neutralizes odour-producing bacteria

### Microbiological efficiency:

- Bactericidal,  
e.g.: *Salmonella*, *Mycobacterium tuberculosis*
- Fungicidal,  
e.g.: *Trichophyton mentagrophytes*
- Selectively virucidal,  
e.g.: Hepatitis B, HIV, Rotavirus

(as specified by the manufacturer)

## Features:

- Quaternary ammonium compounds
- Without alcohol and aldehydes
- Odourless, neutralizes odour-producing bacteria
- Non-volatile
- Cleans and disinfects in one step
- Dissolves dried blood stains
- Leaves no stains
- Protein and fat dissolving
- Good compatibility with metals, rubber and plastics
- BauA registered

(as specified by the manufacturer)



Rev. 0\_05/2020

## Incubator-Filter-Box

Quality – Made in Germany



### Seperate unit for filtering the atmosphere in incubators

#### Features:

- Suitable for all cell culture incubators with minimum 60 l volume
- Eliminates particles, VOCs and other impurities in a very short time
- External controller outside the incubator
- No negative influence on the atmosphere inside the incubator
- Flexible use

#### Optional filters:

Gas filter A1 REF 14548

Composite filter A2-P3D REF 15415

#### Control unit Incubator-Filter-Box



Rev. 8\_02/2020

#### Technical data:

- Composite filter is preinstalled = standard filter (to be replaced every 3 months)
- Operation under regular incubator atmosphere
- Dimensions: diameter 10 cm / height 12 cm
- Weight: approx. 600 g (when using composite filter)
- Switches on automatically for 5 - 6 minutes; starts again after a break of 40 minutes

REF 14526





## Gas In-Line-Filter

Quality – Made in Germany

**Provides effective protection for your embryos and cells**  
**Removes VOCs and particles from gas before it enters your incubator**

### Advantages:

- Can be used with any CO<sub>2</sub> incubator
- For CO<sub>2</sub>, N<sub>2</sub>, and premixed gas ( $\leq 21\%$  O<sub>2</sub>)
- Connection for quick coupling - fast and safe installation
- Removes volatile organic compounds (VOCs) from gas
- Additional PE-layer removes particulates



### Characteristics:

- Activated carbon filter formed by sintering
- Removes VOCs (e.g. oil vapours, aldehydes, furans, odorous substances, aromatic compounds, ketones, pyridines, and CHC) from gases entering the incubator
- Excellent adsorption capacity and very low pressure loss
- For pressures up to 2 bar (Labotect CO<sub>2</sub> incubators: 0.8 bar)
- For tubing 6/4x1 (other diameters upon request)
- For best results, we recommend to change the filter every 3 months (the maximum recommended useful life is up to 6 months)



REF 16586 Gas In-Line-Filter with integrated connection for quick coupling

REF 16587 Coupling body for tubing 6/4x1 (other diameters upon request)

CE Rev. 4\_02/2018



## InControl 1050

Quality – Made in Germany



**Independent measuring device  
for control and evaluation of  
CO<sub>2</sub>, temperature and O<sub>2</sub>**

### Features:

- Accurate measuring of CO<sub>2</sub>, temperature and optional O<sub>2</sub>
- Single or continuous measurement in arbitrary intervals
- Measurement and documentation of multiple incubators
- Documentation of measurements with date, time and incubator number
- Easy menu navigation
- Continuous operation by Li-Ion battery or mains adapter possible
- Data-Download via USB; PC software DataVISUAL`19 incl.
- Compatible with Windows up to and including Windows 10

### Scope of supply:

- InControl 1050 including Transport case
- Mains adapter
- Tubing, adapter and condensation trap
- PC software: DataVISUAL`19 (on USB-Stick)
- USB data cable

REF 14709



## Technical data

### Case:

- Plastic (ABS)

### CO<sub>2</sub> measurement:

- Dual beam IR sensor
- Range: 0 – 10 % CO<sub>2</sub>
- Display definition: 0.1 % CO<sub>2</sub>
- Accuracy:
  - 0 – 6 % CO<sub>2</sub> ± 0.2 % CO<sub>2</sub>
  - 6 – 10 % CO<sub>2</sub> ± 0.3 % CO<sub>2</sub>
- Sample volume per measurement (2 min.): approx. 0.8 l

### Temperatur measurement:

- Platinum temperature sensor PT1000
- Range: 0 – 100 °C
- Display definition: 0.1 °C
- Accuracy:
  - 20 – 50 °C ± 0.2 °C
  - 50 – 100 °C ± 0.3 °C

### O<sub>2</sub> measurement:

- Galvanic sensor
- Range: 0 – 100 % O<sub>2</sub>
- Display definition: 0.1 % O<sub>2</sub>
- O<sub>2</sub> sensor not included

### Data logger:

- Recording of measurement logging in arbitrary intervals
- Output of measurements via:
  - backlit LCD
  - PC software Data Visual'19 (via USB data cable)
- Interval for data logging: 15 – 120 min. adjustable in steps of 5 minutes
- storage of max. 1008 measurements with date and time

### Power supply:

- Rechargeable Li-Ion battery
- Power supply 100 – 240 V AC, 5 V DC 1.5 A

### Operation time:

- Use of rechargeable battery approx. 4 h
- Time to recharge battery approx. 4 h



## Optional accessories:



Sensor for O<sub>2</sub> measurement

REF 10556



Flat tape sensor PT1000 for temperature measurement inside Labo C-Top or other benchtop incubators

REF 15064



Surface sensor for temperature measurement

REF 10537



Tubing Set for CO<sub>2</sub> measurements for ESCO Miri®

REF 16440



Rev. 8\_05/2020

## Hot Plate 100

Quality – Made in Germany



**Hot Plate for laboratory and scientific use**

**Versatile use between 27 °C and 100 °C: Heating, drying, stretching**

### Features:

- Temperature control between 27 °C and 100 °C
- Homogeneous temperature distribution
- Planar surface for optimal heat transfer to heating blocks, culture dishes and slides
- Short heating up time
- Compact, flat, with carry handles
- Space saving due to separate control unit

### Technical data:

- Dimensions: 314 x 214 x 23 mm (w x d x h)
- Weight: 2.9 kg
- Heating up time (approx.):  
37 °C: 2 min., 100 °C: 9 min.
- Power supply:  
100 – 240 V AC, 50/60 Hz, 140 W
- Temperature adjustable between 27 °C and 100 °C
- Safety class I

### Scope of supply:

- Hot plate
- Controller with mains adapter

REF 15049



Rev. 4\_02/2020





## Hot Plate A3

Quality – Made in Germany



### Big hot plate for laboratory and scientific use

#### Features:

- Temperature control between 27 °C and 45 °C
- Homogeneous temperature distribution
- Planar surface for optimal heat transfer to heating blocks, culture dishes and slides
- Easy to clean glass surface
- Short heating up time
- Extremely flat with big work surface
- Space saving due to separate control unit

#### Technical data:

- Dimensions: 420 x 300 x 23 mm (w x d x h)
- Weight: 5.5 kg
- Heating up time: < 15 min.
- Power supply:  
100 – 240 V AC, 50/60 Hz, 140 W
- Temperature adjustable between 27 °C and 45 °C
- Protection class IPX1 (Hot Plate)
- Protection class IPX0 (Controller)
- Cable length between Controller and Hot Plate 1.5 m
- Safety class I

#### Scope of supply:

- Hot plate
- Controller with mains cable

REF 15668

#### Additional equipment:

- Retractor frame

REF 15942



Rev. 4\_02/2020



## Hot Plate A4

Quality – Made in Germany



### Hot Plate for laboratory and scientific use

#### Features:

- Robust and planar glass surface
- Homogeneous temperature distribution
- OLED display for intuitive and easy-to-use user menu
- Functional buttons with haptic feedback via vibration (disengageable)
- Integrated Power Switch
- Extremely flat and space saving
- Cleaning and disinfection with all common detergents

#### Scope of supply:

- Hot Plate with mains cable REF 16481

#### Additional equipment:

- Retractor frame REF 17958

#### Technical data:

- Dimensions: 300 x 210 x 15 mm (w x d x h)
- Usable surface area: 255 x 140 mm
- Temperature stability:  $\pm 0.2$  °C
- Temperature homogeneity:  $\pm 0.3$  °C
- Weight: 1050 g (w/o mains adapter)
- Heating up time: approx. 10 min
- Adjustable temperature range: 27 – 45 °C (starting at 2 °C above ambient temperature)
- Power supply: 100 – 240 V AC, 60 W
- Cable length:
  - Hot Plate to connection point on power supply unit 0.3 m
  - Power supply unit to plug 1.8 m

**CE** Rev. 4\_12/2021

(Specifications subject to change without notice.)



## Blockthermostat

Quality – Made in Germany



Designed to maintain the temperature of biological materials

### Features:

- Temperature adjustable between 27 °C and 45 °C
- Homogeneous temperature distribution
- Heating up time only approx. 40 min.
- Use of different heating blocks

### Technical data:

- Dimensions thermostat:  
290 mm x 175 mm x 110 mm  
(W x D x H)
- Power supply:  
100 – 240 V AC, 50/60 Hz, 60 W
- Temperature control between  
27 °C and 45 °C
- Accuracy:  $\pm 0.2$  °C
- Temperature distribution:  $\pm 0.2$  °C
- Heating up time from 22 °C to 37 °C:  
approx. 40 min.
- Safety class II

REF 10719 (without heating block)

REF 13855 (with heating block: REF 10264)

REF 13896 (with heating block: REF 10277)



Rev. 5\_02/2020





## CellTrans<sup>+</sup>

**Qualität – Made in Germany**



**CO<sub>2</sub> transport incubator for a secure and mobile preservation of biological material**

### Technical data:

#### Power supply:

- 100 V - 240 V, 60 W
- 12 V car cable
- Duration with completely charged accumulator:
  - At 2 °C ambient temperature approx. 4 h
  - At 10 °C ambient temperature approx. 6 h
  - At 23 °C ambient temperature approx. 10 h
- Charge time approx. 7 h

#### Dimensions:

- Exterior: 386 x 251 x 370 (l x w x h in mm)
- Interior: ø 160 mm, height 130 mm, volume approx. 2.6 l
- Empty weight approx. 8.5 kgs

#### Temperature control:

- Control range 30 °C – 42 °C at 3 °C above room temperature
- Temperature homogeneity ± 0.2 °C
- Temperature stability ± 0.1 °C

#### CO<sub>2</sub> regulation:

- Control range 0 – 10 % CO<sub>2</sub>
- Control accuracy 0.3 % CO<sub>2</sub>

#### CO<sub>2</sub> pressure tank:

- Capacity 0.4 l
- Pressure 8 bar

#### Classification:

- Safety class I
- Conform to EN 61010

### Advantages:

- Can also be used as back up in case of incubator or power outage
- Temperature adjustable between 30 °C and 42 °C
- CO<sub>2</sub> adjustable between 0 % and 10 %
- Reliable humidity system
- Easy handling and cleaning
- Compact Design
- Insert for 16 Falcon tubes of 5 ml and 13 ml each

REF 16529

(Specifications subject to change without notice.)

## Product features:

### Interior chamber:

- Anodized aluminium
- Insert: Stainless steel

### Temperature:

- Over-all heating of lateral surface, bottom and lid of incubation chamber
- Homogeneous temperature distribution

### Humidity:

- Via humidifying disc ø 50 mm

### CO<sub>2</sub>:

- Dual beam infrared sensor
- Measurements independent of temperature and humidity

### Recovery times:

- Short recovery times for all adjustable parameters through microprocessor controlled regulation

### Easy navigation:

- Menue guided
- Backlid LCD

### Interfaces:

- USB interface for data evaluation via PC Software DataVISUAL '19 (in scope of supply)  
(compatible up to Windows 10)

### Diagnostic system:

- Visual and acoustic signal for alarms
- Monitoring of temperature, CO<sub>2</sub>, pressure, humidity, battery and lid of interior chamber

## Scope of supply:

- Transport incubator CellTrans<sup>+</sup>
- Mains adapter
- Car voltage adapter cable
- Connection hose for CO<sub>2</sub> supply
- Disc for humidification
- USB data cable
- PC software DataVISUAL '19 (on USB stick) for data evaluation
- Insert for 16 Falcon tubes of 5 ml and 13 ml each

## Recovery times CO<sub>2</sub> after lid opening:

— for 5 seconds with setpoint of 7 % CO<sub>2</sub>



## Optional equipment:

- Pressure reducing valve for CO<sub>2</sub> 0 – 10 bar

REF 17441

- Inserts for CellTrans<sup>+</sup>



Insert for up to three shelves for various plates / dishes

REF 17662

- Shelves for inserts for CellTrans<sup>+</sup>



Shelf for one microtiter plate for insert REF 17662

REF 17540



Shelf for two 4-well dishes for insert REF 17662

REF 17554



Shelf for four round dishes (base diameter ~ 5 mm) for insert REF 17662

REF 17555



## CellTrans 2018

Quality – Made in Germany



**Transport incubator for a secure and mobile preservation of specimen, culture media etc.**

### Technical data:

#### Power supply:

- 115 V or 230 V AC, 50/60 Hz
- 12 V DC with car voltage via adapter cable

#### Dimensions:

- Outside: 385 x 245 x 305 (l x w x h in mm)
- Inside: approx. 312 x 167 x 140 mm (l x w x h in mm)
- Weight: approx. 4.7 kg

#### Temperature:

- Available between 32 °C and 39 °C (to be advised before order)
- Accuracy of regulation  $\pm 0.3$  °C (measured with heating block REF 10264)

#### Heating up time:

- approx. 2 h

#### CO<sub>2</sub> concentration:

- 5 % (different concentrations possible)
- Heating block inside necessary
- Connection to CO<sub>2</sub> supply with pre-pressure of 0.8 bar necessary
- CO<sub>2</sub> accuracy  $\pm 0.3$  % CO<sub>2</sub> (when supplied with CO<sub>2</sub> with pre-pressure of 0.8 bar  $\pm 0.05$  bar)

(Specifications subject to change without notice.)

### Features:

- Secure transport of cells without electric mains and CO<sub>2</sub> connection
- Factory-aligned parameters: 37 °C and 5 % CO<sub>2</sub>
- Different temperature or CO<sub>2</sub> concentration possible (to be advised before order)
- Operation at 12 V car voltage possible
- Use of different heating blocks
- Easy handling and cleaning
- Compact Design

Parameters\* during transport without connection to electric mains:

Transport time	0 min	10 min	30 min	60 min
Temperature	37.0 °C	36.6 °C	35.5 °C	34.0 °C
CO <sub>2</sub> concentration	5.0 %	4.9 %	4.8 %	4.7 %

\*The measurements relate to an ambient temperature of 23 °C .

REF 16666 (without heating block)



Rev. 3\_03/2021





## Thermo Cell Transporter 3018

Quality – Made in Germany



**Transport incubator for safe and versatile use**

### Features:

- Factory-aligned temperature at 37 °C
- Different temperature possible (to be advised before order)
- Continuous operation with power supply, car voltage or integrated accumulator during transport
- Operation with batteries up to 5 h\*
- Compact design

\* at 22 °C ambient temperature

### Technical data:

- Dimensions: 111 x 111 x 215 (w x d x h in mm)
- Weight: 2.4 kg
- Power supply: 100 – 240 V AC, 50/60 Hz, 60 W  
12 V DC, 1.5 A car connection cable
- Temperature: between 32 °C and 42 °C available (to be advised before order)
- Accuracy of regulation:  $\pm 0.3$  °C
- Operation time:
  - with power supply or 12 V car voltage continuously
  - with accumulator approx. 5 h\*
- Heating up time 22 °C to 37 °C: approx. 1 h\*
- Charging time of accumulator: approx. 3 h
- For use with 8 x 13 ml Falcon tubes (REF 13881) or 2 x 13 ml and 8 x 5 ml Falcon tubes (REF 16518)
- Safety class II

### Scope of supply:

- Basic unit
- Power supply unit
- Car connection cable

REF 13881 for 8 x 13 ml Falcon tubes

REF 16518 for 2 x 13 ml and 8 x 5 ml Falcon tubes



Rev. 5\_02/2020



## Aluminium-Wärmeblöcke

**Qualität – Made in Germany**

Als Zusatz für CellTrans 2018, Cell-Trans 4016, Blockthermostat, Aspirator 3 mit Wärmeplatte und Wärmeplatten sind folgende Produkte erhältlich:

### Große Aluminium-Wärmeblöcke zur Aufnahme von



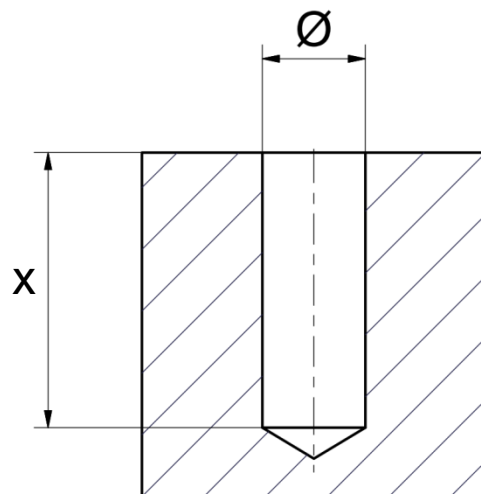
22 Falconröhrchen à 5 ml  
 $x = 54 \text{ mm}$ ,  $\varnothing = 12,2 - 12,4 \text{ mm}$   
 oder 38 Falconröhrchen à 13 ml  
 $x = 66 \text{ mm}$ ,  $\varnothing = 16,8 - 17,0 \text{ mm}$   
 (Mischbestückung möglich)

REF 10264



26 Röhrchen à 25 ml oder 26 ml  
 (z.B. Falcon, Sarstedt o.ä.)  
 $x = 68 \text{ mm}$ ,  $\varnothing = 23,9 - 24,1 \text{ mm}$

REF 10277



### Kleine Aluminium-Wärmeblöcke\* zur Aufnahme von



8 Falconröhrchen à 13 ml  
 $x = 60,5 \text{ mm}$ ,  $\varnothing = 16,8 - 17,0 \text{ mm}$

REF 12974



5 Röhrchen à 25 ml oder 26 ml  
 (z.B. Falcon, Sarstedt o.ä.)  
 $x = 70 \text{ mm}$ ,  $\varnothing = 24,0 - 24,1 \text{ mm}$

REF 12977

\*Die kleinen Wärmeblöcke sind für den CellTrans 2018 nicht passend

## Große Aluminium-Wärmeblöcke zur Aufnahme von



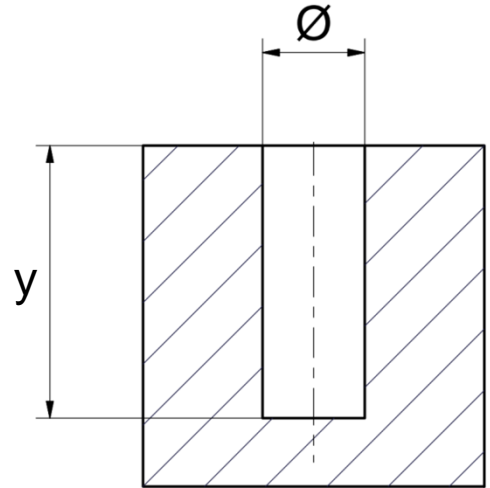
12 CCD-Röhrchen  
y = 72 mm, Ø = 35,5 – 35,6 mm

REF 14413



12 Falconröhrchen à 50 ml  
y = 81 mm, Ø = 29,95 – 30,05 mm

REF 14870



## Embryo Transfer Catheter

Quality – Made in Germany



### Special & proven design

- The Luer connection at the proximal end of the guiding cannula permits trouble-free insertion of the inner catheter
- The penetration depth and the direction can be set at the guiding cannula using a slide ring
- Atraumatic owing to the curved guiding cannula with a ball end, allowing the catheter to be used reliably even with difficult anatomic conditions
- Metal reinforced inner catheter shaft allows simple, safe handling
- Three different lengths permit optimal adaption to different anatomies
- Disposable product, double sterile packed

### Regulatory Standards

- Manufacturer certified as per ISO 13485
- Class Is according to Directive 93/42 EEC
- To be used by trained personnel only

### Enhanced Safety and Reliability

- Each batch MEA (Mouse Embryo Assay) and LAL (Endotoxin Assay) tested
- Biocompatibility conforming to ISO 10993
- Validated gamma-sterilisation
- Production under controlled conditions

## Specifications

### Packaging: normal

Embryo transfer catheter, length: 150 mm

REF 13365

Embryo transfer catheter, length: 190 mm

REF 13366

Embryo transfer catheter, length: 230 mm

REF 13369



### Packaging: hard blister, inner catheter and guiding cannula single packed

Embryo transfer catheter single packed, length: 190 mm

REF 14690





## Reactio

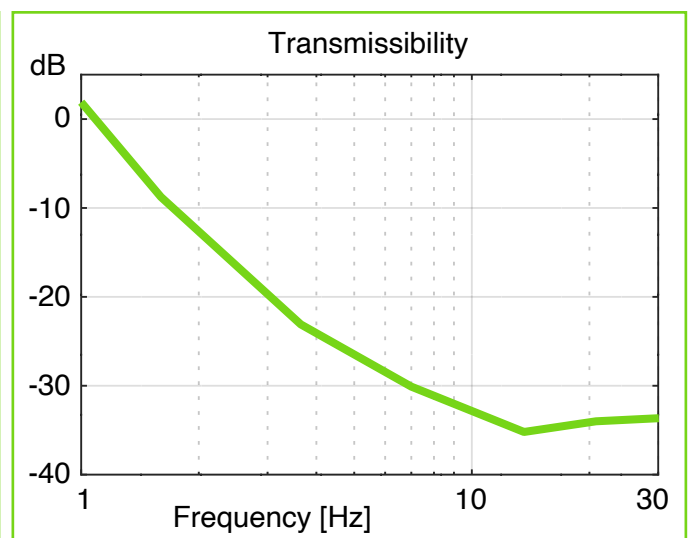
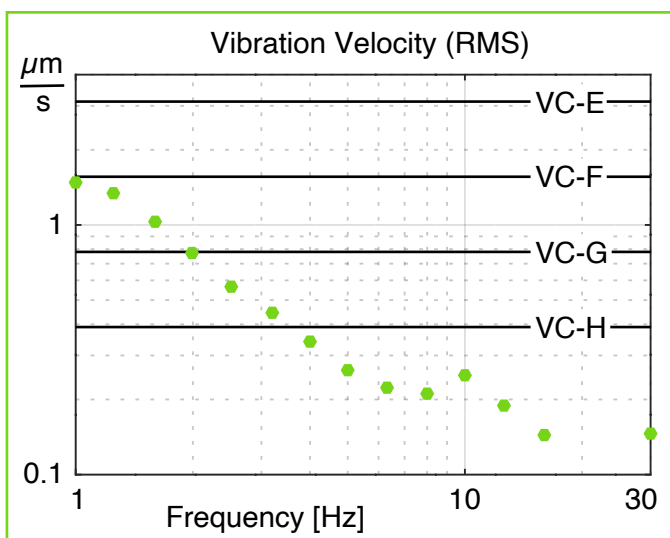
### Feedback Control Vibration Isolator

Made in Germany



### Key Features

- High performance, low price and different sizes offer cost efficient access to active vibration isolation for your applications
- Actively stabilized top-plate in 6-degrees of freedom, counter forces disturbances from applications, i.e. scanning X/Y - stages
- Super flat design, no configuration required and easy to use
- Meets highest vibration criteria: VC-F @ 1 Hz and VC-G @ 2 Hz
- Robust electronic feedback control handles even strong vibration and disturbances without interrupting or stopping isolation



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