

C 150 - CO2-incubators with hot air sterilization

The C 150 sets new standards for cell cultivation: contamination-free as a result of hot air sterilization at 180 °C, stable pH thanks to a drift-free FPI infrared measurement system, superior temperature precision with excellent dynamics, and an interior that is condensation-free even at high humidity levels to ensure best growth results. Used stand alone or as a stack the C 150 is easily accessible.



► Performance features and equipment:

- Air jacket system assuring temperature accuracy and reproducible results
- Temperature range 7 °C (13 °F) above ambient up to 50 °C (122 °F)
- Water pan with built-in condensation control maintains dry interior walls
- Standard compliant 180 °C (356 °F) hot air sterilization using an overnight cycletime (acc to. DIN 58947, Pharmacopoeias, ANSI)
- Weldless deep-drawn inner chamber made of stainless steel with integrated shelf support system
- Drift free infrared CO2 measurement system
- Microprocessor with LED display for temperature and CO2-concentration
- Various alarm and status displays
- Automatic diagnostic system with optical and audible alarm, as well as zero-voltage relay contact for central monitoring
- Lockable controller keyboard via 3 digit password
- Independent adjustable temperature safety device class 3.1, providing full protection against chamber over-temperature, with visual and audible temperature alarm
- Gas mixing head
- Tightly-fitting inner glass door
- Door Lock
- Door hinged left or right, factory fitted
- Units are stackable with stacking adapter
- 3 perforated shelves made of stainless steel
- BINDER test certificate
- Two BINDER CO2-incubators, stacked:
- Two incubators C 150 series, incl. stacking adapter, ensuring direct thermal decoupled stacking



C 150

Exterior dimensions	
Width (mm/inch)	680 / 26.8
Height (mm/inch)	819 / 32.2
Depth (mm/inch)	815 / 32.1
plus door handle, I-triangle (mm/inch)	54 / 2.1
plus mains- and gas connection (mm/inch)	60 / 2.4
Wall clearance rear (mm/inch)	100 / 3.9
Wall clearance side (mm/inch)	50 / 2.0
Interior dimensions	
Width (mm/inch)	500 / 19.7
Height (mm/inch)	600 / 23.6
Depth (mm/inch)	500 / 19.7
Interior volume (l/cu.ft.)	150 / 5.4
Perforated shelves, stainless steel (number standard/max.)	3 / 6
Dimensions of perforated shelves, width x depth (mm)	491 x 442
width x depth (inch)	19.3 x 17.4
Weight of the unit (kg/lbs.)	95 / 209
Temperature / CO2 data	
Temperature range, 7 °C (44.6 °F) above ambient up to °C / °F	50
Temperature variation at 37 °C (98.6 °F) (± °C)	0.4
Temperature fluctuation (± °C)	0.1
Recovery time after door was opened for 30 sec. at 37 °C (98.6 °F) (Min) 1)	5
CO2 data	
CO2-range (Vol.-% CO2)	0 - 20
Setting accuracy (Vol.-% CO2)	0.1
Recovery time after door was opened for 30 sec. up to 5 vol. % (Min) 1) 2)	7
CO2 measurement	IR
Hose connectors for CO2 (mm/inch)	6
Humidity data	
Humidity (average values) (±2 % RH)	95 (±2)
Electrical data	
Housing protection acc. to EN 60529	IP 20
Nominal voltage (±10 %) 50 / 60 Hz (V)	230 / 100
Nominal power (kW)	1.4
Energy consumption 2) at 37 °C (W)	110

1) up to 98 % of the set value

2) The recovery times of the gas concentration inside the chamber following a door opening refer to an inlet pressure of 2.0 bars (psi).

All technical data is specified for units with standard equipment at an ambient temperature of 25 °C (77 °F) and a mains voltage fluctuation of +5%/-10%. The temperature data is determined in accordance to factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. Technical data refers to 100 % fan speed. All indications are average values, typical for units produced in series. We reserve the right to alter technical specifications at all times.



► Cleaning kit

Halogenfree detergents for gentle cleaning of interior chamber without causing corrosion:

- Mild cleaner for stainless steel to provide long -therm-protection
- Clinically approved disinfectant
- Cleaning cloth



► Calibration certificate for temperature and CO2

Factory calibration certificate for temperature and CO2. Temperature measurement in center / CO2 measurement performed using analyzed test gas at 37 °C (98.6 °F) and 5 % CO2.

**C 150**

Silicone access port on both sides closable with two silicone lids 30 mm (1.18 inch), left side	<input type="radio"/>
Silicone access port on both sides closable with two silicone lids 30 mm (1.18 inch), right side	<input type="radio"/>
Shelf, perforated, stainless steel	<input type="radio"/>
Base on castors	<input type="radio"/>
Stacking adapter C 150 / CB 150 for direct thermal decoupled stacking of a CB 150 / C 150 combination	<input type="radio"/>
Stacking adapter for direct thermal decoupled stacking of two C 150 CO2 incubators	<input type="radio"/>
Factory calibration certificate for temperature and CO2. Temperature measurement in center / CO2 measurement performed using analyzed test gas at 37 °C (98.6 °F) and 5 % CO2	<input type="radio"/>
Temperature measurement acc. to DIN 12880 (27 measuring points) at 37 °C (98.6 °F) or at specified temperature with measuring protocol and certificate	<input type="radio"/>
BINDER Gas Supply Service: External gastank changer for connection of 2 gastanks, either CO2 or N2, with audible and visual alarm and zero-voltage alarm output	<input type="radio"/>
Gastank connection kit for CO2, consisting of a gastank pressure regulator, max. pressure 10 bar, with connection parts, and a (5 m / 16.4 ft.) hose	<input type="radio"/>
4-20 mA analog output for temperature and CO2 measurements (e.g. chart recorder connection), with 6-pin DIN socket (output not adjustable)	<input type="radio"/>
Cleaning kit for equipment maintenance and disinfection, consisting of pH - neutral detergent (1000 g / 2.21 lbs., concentrate), spray disinfectant (500 ml / 0.13 gal. ready - for - use solution) and lint - free cleansing tissues	<input type="radio"/>
Manual for Primary Human Cell Culture	<input type="radio"/>