

# Technical Data Sheet

*Gas Consumption Models 3110, 3111, 3120 and 3121  
Single Chamber CO<sub>2</sub> Incubators*

3110, 3111, 3120, and 3121
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## Gas Consumption Models 3110, 3111, 3120 and 3121

### GAS CONSUMPTION Models 3110, 3111, 3120 and 3121 single chamber CO2 incubators

CO2 SET POINT	NORMAL USAGE	USAGE FOR DOOR OPENING	TANK LIFE: 0 DOOR OPENINGS PER DAY	TANK LIFE: 6 DOOR OPENINGS PER DAY
5% CO2	2.5 liters / hour	15 liters	210 days	84 days
10% CO2	3.5 liters / hour	24 liters	150 days	55 days

The CO2 is supplied in AGA 044 type cylinders. These cylinders are filled gravimetrically until they hold **50 lb.** of CO2. This translates to approximately **12680 liters of CO2** (expanded to atmospheric conditions). Since CO2 is supplied industrially as **liquefied gas** in pressurized cylinders, there is a period of time during which the pressure on the tank (shown on the regulator) stays the same even though CO2 is being used/injected. This is because the CO2 is in a two-phase state when supplied. Most of it is in liquid form and some of it is the vapor in the head space on top of the tank. For a constant temperature, the pressure stays constant until all of the CO2 becomes vapor (the right side of the dome). After this, the pressure drops off normally as CO2 is used. This is shown in the chart below. **At 25 °C and 5% CO2 set point, a CO2 tank will last approximately 210 days for normal usage without any door openings. For 6 door openings a day, the tank will last 84 days.**

CO2 tank pressure history at 25 °C for 5% CO2 set point

