

Pneumatic Infant Transport Ventilation

Operating Time on Oxygen / Air Cylinders

The **pNeuton mini** ventilator uses a sophisticated oxygen blender to mix oxygen and air for delivery to the patient. This blender requires both compressed oxygen and medical grade compressed air for proper operation.

There are several factors that affect the length of time the ventilator will operate from oxygen / air cylinders. The ventilator uses very little gas for its own operation (less than 3 L/min from the oxygen cylinder) and is not a major factor in gas consumption. The major factors are:

- Volume of gas in the oxygen and air cylinders
- Flow setting
- CPAP setting
- Position of the F₁O₂ control
- Mode selected

The following table shows the expected operating times under the following conditions:

- Full "E" size tanks of both oxygen and air (650 liters pressurized)
- IMV + CPAP mode
- CPAP: 5 cm H₂O

Expected operating time with full cylinders (in minutes)

Oxygen percentage	Set continuous flow in L/min				
	6	8	10	15	20
21	100	75	60	40	30
30	115	85	70	45	35
40	130	100	80	55	40
50	115	100	90	65	45
60	100	85	75	60	50
70	90	75	65	50	40
80	80	65	55	40	35
90	75	60	50	35	30
100	70	55	45	30	25

NOTE:

- If the mode is set to the CPAP the operating times will increase slightly.
- Depending on control settings, the ventilator may continue to operate past these times but the alarm will sound for low gas supply
- If the oxygen cylinder runs out before the air cylinder the ventilator will alarm continuously and stop providing breaths and CPAP. As long as there is gas in the air cylinder the alarm will continue and cannot be turned off. In addition medical air from the cylinder will still flow through the patient circuit until the cylinder runs out to allow for patient breathing.

