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PULSEDOSE CONSERVING DEVICE INFORMATION SHEET

The PulseDose Conserving Device is intended as a delivery device for medical-grade oxygen from high-pressure oxygen cylinders. This is an ambulatory device, which allows patients to ambulate longer than they would with a continuous flow regulator on the same cylinder.

How the PulseDose Works

PulseDose dramatically extends the use time from a supply of oxygen, offering increased mobility with improved comfort and increased efficiency.

What is PulseDose? The concept is based on the fact that the normal breathing pattern is inhalation for 1/3 of the time, and exhalation about 2/3 of the time. At 20 BPM the oxygen delivered in continuous flow, assuming inspiration is 1/3 of the breathing cycle, would be 16 cc/LPM. As a result, PulseDose extends the use time of an oxygen system by an average of 3:1. PulseDose senses the start of inhalation and instantly releases a short “pulsed” dose at the very beginning of the breathing cycle. Since all of the “pulsed” oxygen finds its way deep into the lungs, less oxygen is required to accomplish the same effect than with tradition continuous flow oxygen systems. This means that a PulseDose oxygen system will last two to four times longer than a continuous flow oxygen system, yet still provide the same therapeutic benefit.

Because PulseDose responds to each individual’s breathing patterns, the use time will vary for each individual depending on the PulseDose prescription rate and the breath rate. The following chart shows the theoretical ambulatory ranges for the PulseDose.

NOTE- All ambulatory ranges are calculated assuming a breath rate of 20 breaths per minute in PulseDose (PD) mode

USE TIMES SHOWN IN HOURS									
Delivered Volume cc's:	16.5	24.75	33	41.25	49.5	66	82.5	99	
Flow Rate	1	1.5	2	2.5	3	4	5	6	Mode
C 406 Litres	6.9 21.0	4.6 14.0	3.5 10.5	2.8 8.4	2.3 7.0	1.7 5.2	1.4 4.2	1.2 3.5	
C682 Litres									

Specifications subject to change without notice. This chart is intended to be used only as a guide.



To prevent injury from cylinder tipping over, do not use cannula tubing lengths over 10 feet (3 meters) with small compressed oxygen cylinders. Unattended cylinders should be secured.

NOTE - A mask should not be used in the PulseDose delivery mode as it may not fit to the face well enough to allow the conserving device to sense inhalation efforts. Also, the therapeutic effect of PulseDose would not be realised, as the dose of oxygen would be diluted in the mask prior to inhalation.

NOTE - A paediatric or low-flow cannula should not be used in PulseDose delivery mode. The reduced diameter of the cannula causes too much back pressure and will affect the oxygen volume delivered.

NOTE - PulseDose delivers oxygen in a very short "puff". It does not deliver oxygen during the entire inhalation. The length of time that PulseDose delivers oxygen will not vary from breath to breath. The time is set in correlation to the oxygen dosage set on the conserving device (patient's prescription setting).

NOTE - PulseDose is designed to prevent the delivery of pulses more than every 1 ½ seconds. If the breath rate is greater than 40 BPM, this feature prevents delivery of excessive oxygen by not dosing on every breath.

NOTE - If using NiMH batteries, carefully monitor when the low battery indicator flashes red. It is recommended that a spare fully-charged set of alkaline batteries be kept in reserve and installed when the battery indicator is constant red.