

Portable Pulse Oxygen Cylinder

DE Series

A pulse dose therapeutic oxygen conserving system designed for aircraft applications



About Portable Pulse Oxygen Cylinder DE Series



The Portable Oxygen Cylinder – DE Series is a therapeutic oxygen conserving system designed for passengers who have a pre-existing medical condition and pre-book oxygen for their flight(s), or for emergency purposes, using a mask.

The advantage of pulse dose is that oxygen is only consumed during that part of the inhalation where the oxygen is of benefit and a reduced amount of oxygen is needed with the consequent weight saving.

The DE Series has 5 pulse settings and constant flow settings of 2 and 4 litres per minute.

Includes a lightweight DOT approved cylinder, available in 3.2 litre water capacity with a working pressure of 200 bar.

The conserver gives an extremely economical performance, releasing a bolus of oxygen as soon as it registers a small drop in pressure in the customer's nose, it then closes very quickly, thus conserving oxygen. The conserver is best in class.

The regulator is of a robust design and incorporates a number of safety features. The "Cage" is designed to protect the regulator and conserver, ease handling and present a softer image to the customers and crew.



Main features

- ✓ Simple to use
- ✓ Oxygen only consumed during inhalation
- ✓ 5 pulse settings
- ✓ 2 constant flow settings
- ✓ Working pressure 200 bar
- ✓ Light weight, DOT approved cylinder
- ✓ Robust design with "Cage" to protect the regulator and conserver. Able to withstand a 3m drop test
- ✓ Self-extinguishing and meets the requirements of CS-25.853
- ✓ Cannula with in-line flow indicator

It is manufactured in a flame retardant material.

A purpose designed flame retardant bag, includes pockets for the operating instructions, a cannula, a mask and loops for attachment.

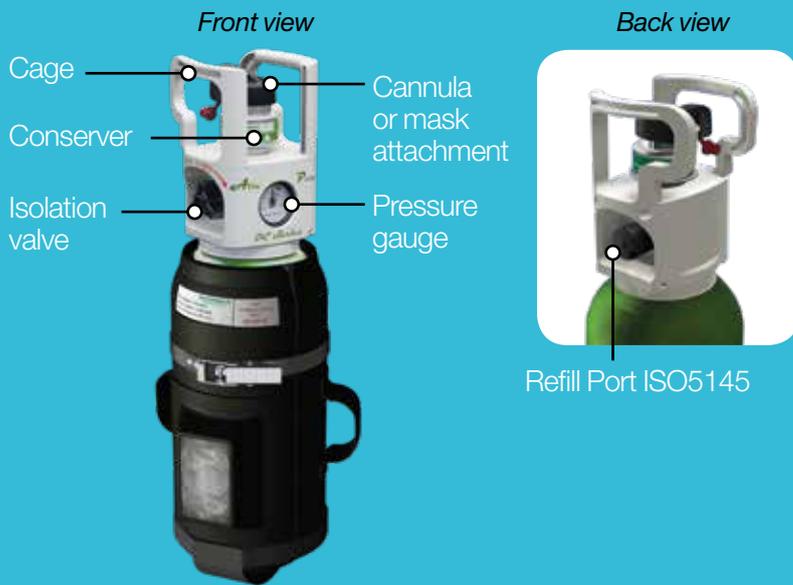
Cannula assemblies can be supplied with an in-line flow indicator, allowing cabin crew to check delivery of the oxygen without disturbing them. Stowages are available.

Human factors have been incorporated into the design from the outset and a number of features following consultation with experienced airline cabin safety specialists and engineers, have been incorporated.

Air Liquide is the world leader in gases, technologies and services for Industry and Health and is a specialist in the field of air gas separation technologies.

Air Liquide is a favoured partner with its cutting-edge expertise in aerospace. Our teams design systems that generate gases for use both on-board aircraft and on the ground.

DE Series components

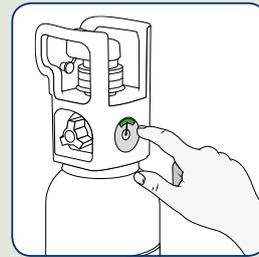


Accessories

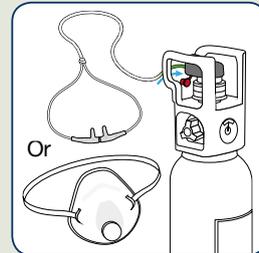
Bag with included pockets for cannula(e) and/or masks, can be supplied. Stowages, cannulae and masks are available.



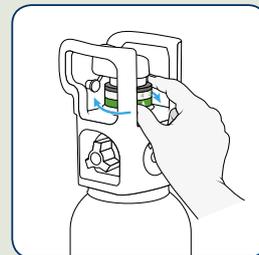
Operation



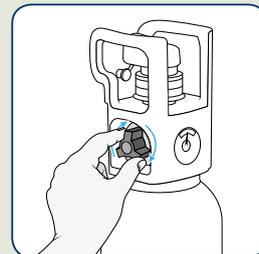
1. Check the oxygen level



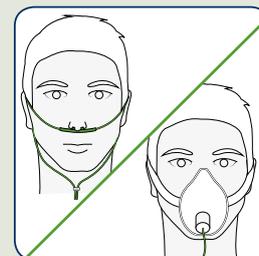
2. Attach cannula or mask to bottle



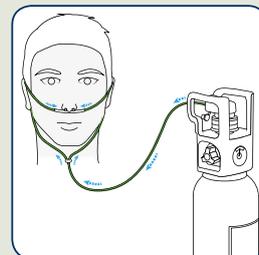
3. Select the correct flow rate as per user requirements



4. Turn the isolation valve to fully open



5. Place the cannula or the mask on the face



6. Ensure user has oxygen flow



7. Check user and gauge every half hour



Cylinder range and duration

Cylinder size (litres)	3.2	Approx. savings ratio. Pulse flow vs continuous flow
Dimensions length x width (mm)	490 x 140	
O ₂ capacity (litres)*	608	
Pulse setting 1 hour	36.2	3.50
Pulse setting 2 hours	23.0	4.50
Pulse setting 3 hours	17.5	5.10
Pulse setting 4 hours	14.1	5.60
Pulse setting 5 hours	11.5	5.70
2 litres/min continuous hours	5.1	
4 litres/min continuous hours	2.5	

*Assumes 10 bar residue in cylinder.

Notes: cylinder initial pressure 200 bar.

Durations stated are approximate and will vary with customer breathing rates.

Approvals

- AS9100 (Design Approval)
- BS EN ISO 9001 - 2008 (Design Approval)
- Part 21 G
- Part 145

Contacts

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