

CPAP p12

Breathing aid device that helps COVID-19 patients



Facilitates
easy breathing



Compact and
lightweight



Easy to clean /
sterilize

Continuous positive airway pressure (CPAP) device

Secure's p12 breathing aid is a continuous positive airway pressure (CPAP) device. This device helps COVID-19 patients with breathing difficulties. It pushes air, containing oxygen, into the mouth and nose at a continuous pressure, keeping airways open, that increases the amount of oxygen entering the bloodstream. It allows COVID-19 patients to breathe easily, especially the ones with severe respiratory problems. Although, its use does not replace invasive mechanical ventilation (IMV), but early application may provide a bridge to IMV.

This CPAP device has been manufactured in India under the licensing agreement with University College London and Mercedes AMG High Performance Powertrains Ltd, in the UK. Technical information to design manufacturing processes and certify the product has been strictly followed, as per the agreement. This device will enable healthcare systems around the country to provide respiratory support to COVID-19 patients, under scheduled observations.



Application

- For COVID-19 patients in government / private hospitals under the supervision and recommendation of physicians or trained medical personnel.
- To be strictly used with oxygen monitor / analyser and standard shipway kits, as recommended for the patient circuit.

Benefits

- Helps COVID-19 patients to breathe more easily and steadily.
- Can restore normal sleep pattern and increase overall sleep time.
- CPAP is a possible alternative, while addressing the shortage of ventilators, to support COVID-19 patients with breathing difficulties, provided appropriate monitoring is done, and depending on patient's condition.

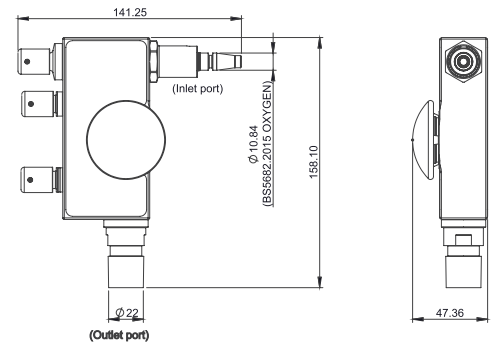
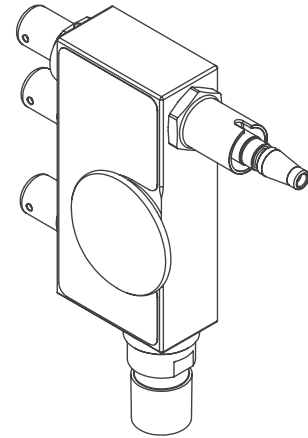
Features

- CPAP helps COVID-19 patients with breathing difficulties.
- Can provide oxygen concentration of 30-95%, as suggested by physicians.
- Oxygen monitor is dictated by the rating of the PEEP valve on the patient's mask.
- Compact, portable, lightweight and sturdy.
- Easy to use and clean / sterilize.



Technical specifications

Risk classification	
Category	Class B
Operating range	
Ambient temperature	0-40 °C
Humidity	0-95% (RH)
Oxygen Fraction, FiO ₂ %	30-95%
Patient flow rate	5-60-120 LPM
CPAP (PEEP valve)	2.5-20cmH ₂ O
Dimension (without packing)	
HxWxD	158x141x48mm (Approx.)
Weight	
Mass	495gm (Approx.)
Oxygen inlet connection	
Oxygen supply pressure	Schrader male probe (BS 5682:2015) 4 +/- 0.25 bars
Oxygen outlet connection	
	22mm male taper (BS 4356:2015)



- This device shall be installed and operated by physicians or trained medical personnel only.
- Do not use this device on confirmed or suspected COVID-19 patients without appropriate protection (PPE).
- All hospitals must ensure their VIE (Vacuum Insulated Evaporator) outflow, and downstream flows and pressures to specific ward areas, before deploying this device.
- Switch off the device, if not in use to avoid wasting oxygen.
- Altering the CPAP is done by changing the mask outlet PEEP valve (Not by changing flow).

Suggested Initial CPAP settings: PEEP 5-10 cmH₂O + 60% oxygen (FiO₂) targeting SpO₂ of 88 – 92% via pulse oximeter. After the CPAP is applied, the patient should be reviewed over 30-60 minutes. If the patient responds positively, close observation and monitoring must continue for a further six hours to ensure no decline occurs, with careful monitoring continuing thereafter.