Seattle PAP plus – Bubble CPAP System

Helping infants with respiratory distress breathe easier.[3]
The Seattle-Positive Airway Pressure (PAP) system is an innovation which uses the proven advantages of Bubble CPAP therapy, such as oscillatory effects similar to high frequency ventilation[1, 2] combined with a unique design.

D-15228-2017

Dräger. Technology for Life®

Benefits

Answering the Challenge

Worldwide, almost 1 million infants die each year from respiratory distress. Respiratory muscle exhaustion is a major cause of failure in conventional n-B-CPAP therapy. These failures, which occur in half of babies receiving this therapy, often necessitate endotracheal intubation and mechanical ventilation that carry the risk of tissue damage and inflammation.[3]

The Seattle-PAP plus from Dräger may be a solution for such complications. The patented Seattle-PAP plus Bubble CPAP System is designed to create continuous positive airway pressure and pressure oscillations. The 135° angle in the submersed tubing increases the amplitude of oscillations, thus providing effects similar to high frequency oscillatory ventilation for improving gas exchange and offer more efficient respiratory support compared to other methods of non invasive respiratory support.[1,2] These oscillations are thought to lessen the work required from respiratory muscles, which would make it easier for babies to breathe.[3, 4, 5, 6]

Easy to set-up, easy to use

Seattle-PAP plus is safe, effective and easy to use. It was designed to:

- Promote infant safety with a uniquely designed pressure manifold with pressure relief valve.
- Safety tube lock to avoid unintended changes of the PEEP level.
- Provide comfort and optimum CPAP support to the infant due to disposable BabyFlow plus interfaces complementing the system.
- Include funnel with the filling tube which minimises spillages.
- The swivel connector to the expiratory limb prevents unneccessary disconnections and pressure loss.
- The water trap in the expiratory limb prevents unwanted pressure peaks due to condensation in the expiratory limb[7].

It requires only oxygen and compressed air, both to be administered by an O_2-blender such as the Oxymixer from Dräger and a humidification source for the circuit.

Simple yet versatile

The Seattle PAP plus has a functional design with a complete focus on the infant's clinical needs. It is both easy to understand and use. You can:

- Easily adjust the CPAP from 4.5 to 10 cm H_2O.
- Quickly connect the Bubble CPAP System to your choice of BabyFlow CPAP interface solutions.
- In combination with BabyFlow plus you can treat patients with the needed masks and prongs.

Benefits

Low training investment

Time is of the essence in every clinical environment. For this reason, the Seattle-PAP plus requires minimal training to use. Caregivers can learn to use the device safely and effectively in short time, so they can focus more on the patient rather the managing bedside technology.

Safety first

Inadvertent changes of the position of the tube in the water, thus changing the CPAP level can cause serious harm to your patient. With the Seattle PAP plus you select your desired settings by locking the tube in the set position. This avoids accidential changes of CPAP levels and is a unique safety feature. Safety and simplicity with no need to worry.

Infection Prevention

Prevention and control of infections is an additional factor that went into the design concept. Consequently, all components for this system are designed with single-patient use in mind, thus eliminating the risk of cross-contamination.

Accessories

Dräger BabyFlow® plus

The superior non-invasive respiratory support system, designed to maximize performance and patient comfort.

D-48842-2015

Related Products

D-51315-2015

Oxymixer

Oxymixer enables a continuous and individually adjusted mixture of medical air and medical oxygen to be administered to infants, children and adults. The O_2 concentration is easily adjusted.

Ordering Information

Seattle PAP plus			**MP02260**
BabyFlow® plus disposable			
S		20 pieces	MP03700
M		20 pieces	MP03701
L		20 pieces	MP03702
Microfiber Caps			
XS	white	5 pieces	84 18 533
S	yellow seam	5 pieces	84 18 534
M	red seam	5 pieces	84 18 535
L	green seam	5 pieces	84 18 536
XL	orange seam	5 pieces	84 18 537
XXL	blue seam	5 pieces	84 18 538
XXL plus	white/black seam	5 pieces	84 18 539
Headgear			
XXS		5 pieces	MP03880
XS		5 pieces	MP03881
S		5 pieces	MP03882
M		5 pieces	MP03883
L		5 pieces	MP03884
XL		5 pieces	MP03885
Neo mask			
S		10 pieces	84 18 491
M		10 pieces	84 18 490
L		10 pieces	84 18 619
4		10 pieces	MP01494
5		10 pieces	MP01495
6		10 pieces	MP01496
Standard prongs			
Prongs XS		10 pieces	84 18 415
Prongs S		10 pieces	84 18 605
Prongs M		10 pieces	84 18 416
Prongs L		10 pieces	84 18 531
Prongs XL		10 pieces	84 18 417
Prongs XXL		10 pieces	84 18 617
Wide prongs			
Prongs 3		10 pieces	84 18 603
Prongs 4		10 pieces	84 18 607
Prongs 5		10 pieces	84 18 609
Prongs 6		10 pieces	84 18 611
Soft connector N		20 pieces	MP03826

Demo pack BabyFlow® plus, size S	MP03703
Demo pack BabyFlow® plus, size M	MP03704
Demo pack BabyFlow® plus, size L	MP03705

Oxymixer Low Flow	MP04203
Oxymixer Low Flow with Monitor	MP04204

Literature

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[2] High-Frequency Oscillatory Ventilation: Theory and Practical Applications, Jane Pillow, Dräger Booklet 9102693 from 2016

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[7] Effects of condensate in the exhalation limb of neonatal circuits on airway pressure during bubble CPAP. Respir Care. 2013 Nov;58(11):1840-6. doi: 10.4187/respcare.02322. Epub 2013 Mar 12, Youngquist TM[1], Richardson CP, Diblasi RM.

9106.200 | 18.10-1 | HQ | PP | Subject to modifications | © 2018 Drägerwerk AG & Co. KGaA

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