

# Neopuff™

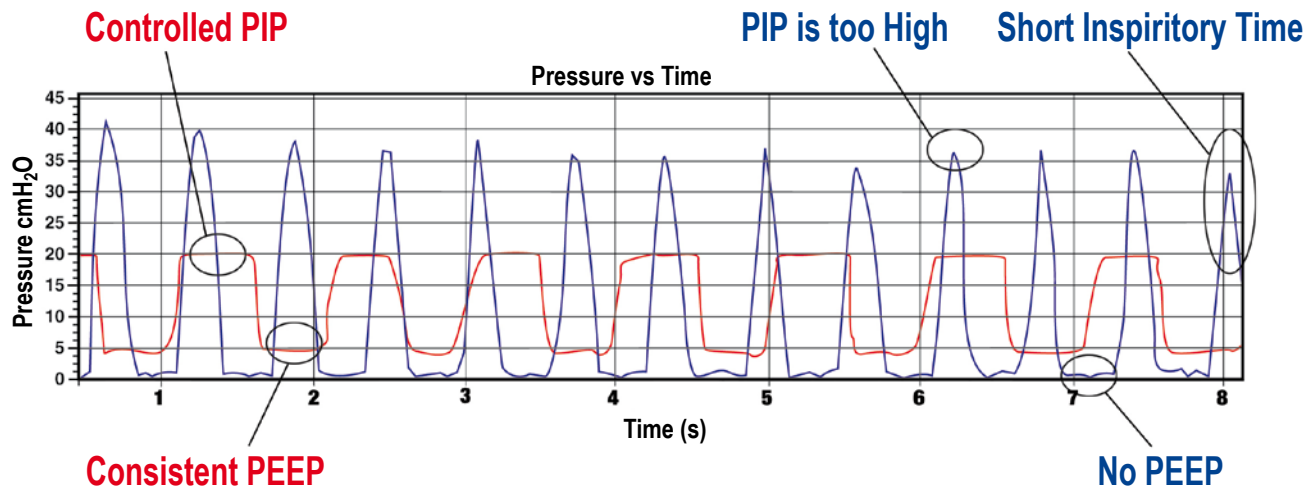
## INFANT T-PIECE RESUSCITATOR



**Fisher & Paykel**  
HEALTHCARE

# Optimal Resuscitation

*The Neopuff™ Infant T-Piece Resuscitator is an easy to use, manually operated, gas-powered resuscitator that provides optimal resuscitation.*



REF: Data from measurements using resus simulator, self-inflating bag and Neopuff by a qualified resuscitator.

## Safe, Controlled and Precise Peak Inspiratory Pressure (PIP)

The Neopuff™ Infant T-Piece Resuscitator will safely inflate the baby's lungs and provide optimum oxygenation by delivering consistent PIP with each breath avoiding the risks associated with under or over inflation at uncontrolled pressures.

## Consistent and Precise Positive End Expiratory Pressure (PEEP)

The Neopuff™ Infant T-Piece Resuscitator helps establish and maintain Functional Residual Capacity (FRC) by providing a consistent PEEP throughout the resuscitation process.

## Humidified Resuscitation

The Neopuff™ Infant T-Piece Resuscitator facilitates the delivery of warm humidified gas to help protect the pulmonary epithelium and reduce heat and moisture loss especially during prolonged resuscitation. Conditioning cold, dry gas to body temperature and saturated with water vapour can help reduce the risk of an inflammatory response occurring in the infant's airway.

# Neopuff™ Infant T-Piece Resuscitator

*Wherever resuscitation is needed*

- **Easy to Use**

With the Neopuff™ Infant T-Piece Resuscitator, the experience, training, concentration and fatigue level of the operator do not affect the pressures delivered.



The desired PIP is set by turning the inspiratory pressure control



The desired PEEP is set by adjusting the T-Piece aperture



The lightweight patient T-Piece allows simple, effortless, breath by breath resuscitation by simply occluding the T-Piece aperture with thumb or finger.



- **Flexibility in Operation**

The Neopuff can accept and deliver oxygen concentrations from 21% to 100% coming from a flow meter or a blender. The patient T-Piece can connect to neonatal masks or endotracheal tubes.

- **Accurate Pressure Delivery**

The fast-acting manometer provides constant reassurance of mask seal and delivered PIP and PEEP.

- **Alternate Temporary Respiratory Support**

Consistent PEEP can be delivered to assist with breathing during transport or ventilator circuit change.

*"Target inflation pressures and long inspiratory times are more consistently achieved in mechanical models when T-Piece devices are used rather than the bags"*

*2005 NRP/AHA/AAP Guidelines Part 13: Neonatal Resuscitation Guidelines. Circulation 2005;112:188-195;*

*"The pop-off valves of self-inflating bags are flow-dependent, and pressures generated during resuscitation may exceed the target values"*

*2005 International Consensus on Cardiopulmonary Resuscitation and Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science With Treatment Recommendations Circulation, November 29, 2005; Volume 112; No 22; Part 7: Neonatal Resuscitation. p 91-99*

*"The Neopuff is a modified T-Piece...the PIP and PEEP are constant for every breath. They can be adjusted according to clinical response"*

*O'Donnell CP, Davis PG, Morley CJ Resuscitation of Premature Infants: What are We Doing Wrong and Can We Do Better? Biol Neonate 2003;84(1):76-82*

*"Our experience suggests that the Neopuff, a unique neonatal resuscitation ventilator, facilitates the delivery of desired airway pressures while allowing the operators to use both hands to attempt to obtain and maintain a patent airway"*

*Finer NN, Rich W, Craft A, Henderson C Comparison of methods of bag and mask ventilation for neonatal resuscitation. Resuscitation 2001;49(3):299-305*

*"Devices are now available that provide CPAP to the spontaneously breathing infant (e.g., Neopuff). These devices can provide positive end-expiratory pressure during IPPV, followed by CPAP once the infant commences to breathe spontaneously."*

*Martin R, Fanaroff AA, Walsh MC, Eds. Fanaroff and Martin's Neonatal-Perinatal Medicine, Diseases of the Fetus and Infant. 8 ed: Mosby Elsevier, 2006. Chap 25, Part 2 p491.*

*"The T-piece/face mask technique is easier to use and more effective as the inflation pressure can be maintained for longer"*

*Milner A. The importance of ventilation to effective resuscitation in the term and preterm infant. Semin Neonatol 2001;6(3):219-24.*

*"The one sample t tests performed for each device showed significant deviations from the set target parameters of PIP and PEEP for both the self inflating and anaesthetic bag devices ( $p < 0.001$ ) and also for target rate ( $P < 0.05$ ). The Neopuff device was more consistent and reliable in its performance by comparison.*

*Hussey SG, Ryan CA, Murphy BP. Comparison of three manual ventilation devices using an intubated mannequin. Arch Dis Child Fetal Neonatal Ed. 2004;89(6):F490-3*

*"The best and easiest way to deliver a consistent and sustained PIP and adequate PEEP is a pressure-limited mechanical device with a T-piece (e.g., Neopuff®)"*

*Te Pas AB, Walther FJ. Ventilation of very preterm infants in the delivery room. Current Pediatric Reviews 2006;2(3)187-197.*

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## Product Specifications

Manometer Range	-20 to 80cm H <sub>2</sub> O [mbar]
Maximum pressure relief*	@8LPM 5 to 70cm H <sub>2</sub> O
Peak inspiratory pressure (PIP)*	@8LPM 4 to 73cm H <sub>2</sub> O
Positive end-expiratory Pressure (PEEP)*	@8LPM 1 to 9cm H <sub>2</sub> O
Gas inlet flow range	5LPM (min) to 15LPM (max) If the gas inlet flow rate increases from 5 to 15LPM, the peak inspiratory pressure typically increases approximately 8cm H <sub>2</sub> O (0.8kPa)
Delivered oxygen concentration	Up to 100% depending on gas supply
Operating time* 400L cylinder	@8LPM 50 minutes

\*Typical values



Model Shown  
**RD900 Neopuff™**  
Infant Resuscitator  
(Stand alone)

Height	250mm (9.8")
Width	200mm (7.9")
Depth	100mm (3.9")
Weight	1.9kg (6lb)
Recommended body weight	Up to 10kg (22lb)
Operating and storage limits	-20°C to 50°C Up to 90% relative humidity
Standard	ISO10651-5

# C€ 0123

For full product specifications please contact your Fisher & Paykel representative. Fisher & Paykel have a policy of continuous product improvement and reserve the right to alter specifications without notice.



Also available  
**900IW130 Neopuff™**  
Infant Resuscitator  
Module  
(Installed in the CosyCot™  
Infant Warmer)

## Ordering Information

Please refer to the product catalogue for further information on the Neopuff™ Infant Resuscitator and accessories.

Caution: US Federal law restricts this device to sale by, or on the order of a physician.

**Warning: The Neopuff™ Infant T-Piece Resuscitator should only be used by properly trained medical professionals.**

**Use only approved Fisher & Paykel gas supply line, accessories and Patient T-Piece.**

Product Code	Description	Quantity
RD900	Neopuff™ Infant Resuscitator (stand alone unit)	1
900RD008	Gas Supply Line with Hose Adaptor – short (18cm/7")	10/bx
900RD009	Gas Supply Line with Hose Adaptor – long (183cm/72")	10/bx
900RD010	Single Use Resuscitation Kit without Mask	10/bx
900RD110	Single Use Humidified Resuscitation kit	10/bx
900RD014-10	Single Use Resuscitation Kit with 42mm Mask	10/bx
900RD015-10	Single Use Resuscitation Kit with 50mm Mask	10/bx
900RD016-10	Single Use Resuscitation Kit with 60mm Mask	10/bx
RD020-01	Reusable Test Lung (Latex-free)	1/bx
RD800-EN	Neonatal Resuscitation Mask Starter Kit	5 sizes/bx
RD803-10	Neonatal Resuscitation Mask 35mm (1.38")	10/bx
RD804-10	Neonatal Resuscitation Mask 42mm (1.65")	10/bx
RD805-10	Neonatal Resuscitation Mask 50mm (1.97")	10/bx
RD806-10	Neonatal Resuscitation Mask 60mm (2.36")	10/bx
RD807-10	Neonatal Resuscitation Mask 72mm (2.83")	10/bx

For more information, please visit [www.fphcare.com/neonatal](http://www.fphcare.com/neonatal)

**Neonatal**

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