Medtronic

Puritan Bennett™ cuff pressure manager

Cuff pressure management

made simple Manually sustaining stable cuff pressures in your ventilated patients is inherently unreliable.

Our cuff pressure management tool offers a simple solution to a serious safety issue by continuously measuring and automatically maintaining cuff pressure.



Continuously measured, always managed

Help protect your patients against common and costly tracheal injuries and VAP caused by cuff overinflation and underinflation¹-7 with the Puritan Bennett™ cuff pressure manager – a simple and reliable way to monitor and maintain cuff pressure.

Our cuff pressure management solution is designed to take the pressure off you:

- Reduces manual work of measuring and adjusting cuff pressure with a manometer and syringe^{4,6,8}
- Provides 24-hour uninterrupted monitoring and management
- Improves adherence to established cuff pressure protocols²

Easy operation to support your range of needs

Our cuff pressure manager is designed around one simple concept – ease of use. That's why it comes in a portable, compact controller that also allows you to quickly inflate and deflate the cuff.

And it features an intuitive interface and a large, clear display that lets you see cuff pressure measurements from 2 meters away. Combine that with a versatile mounting system and 13 hours of battery life when fully charged, our cuff pressure manager delivers high-performance design that meets everyday convenience.

Protection features that provide standout safety

Reducing the risk of cuff overinflation and underinflation is just one way our cuff pressure manager protects your ventilated patients. Safety components such as cuff leakage detection and a filtered extension tube also combat ventilator-associated complications by reducing leakage of accumulated secretions¹⁰ and filtering bacteria and viruses if the cuff leaks or breaks.¹¹ The extension tube's shut-off valve safeguards your patient by maintaining cuff pressure, even if the tube accidentally disconnects from the device.¹²



Puritan Bennett™ cuff pressure manager features

Two operating modes

- Measure
- Control

One-click inflation and deflation

- \bullet Press one-click inflation button to inflate cuff to 25 cmH $_{2}O$
- Press and hold one-click deflation button for at least 2 seconds to deflate cuff

Time-limited pressure hold

Ideal for scenarios when higher cuff pressure is necessary for a specified period including:

- Oral cleaning or mucous suctioning
- Assessing lung function with an elevated applied airway pressure

Multiple mounting options

Supports cuffed endotracheal tubes

Sizes 3–10 (inner diameter)

Supports cuffed tracheostomy tubes

Sizes 2.5–10 (inner diameter of outer cannula)



Technical performance		
Pressure setting range	5 cmH ₂ 0 - 50 cmH ₂ O	
One-click inflation default target pressure	25 cmH ₂ O	
Pressure hold target pressure increase	5 cmH ₂ O	
Pressure hold time setting range	5–30 minutes	
Pressure hold time factory default setting	5 minutes	
Device system accuracy [†]	±2.5 cmH ₂ O	

Mechanical specifications		
Cuff pressure manager	Maximum dimensions: 120 mm x 145 mm x 59 mm Maximum weight: 450 g (0.99208 lb.)	
Cuff pressure manager display	57.54 mm x 111.2 mm x 4.75 mm, 3.2" diagonal	
Battery	The battery charges itself while the cuff pressure manager is powered on and connected to AC power. Takes up to 12 hours to fully charge battery.	
Warranty	Cuff pressure manager - 12 months from date of shipping	

Ordering information		
SKU	Description	Components
180-03	Cuff pressure manager	Cuff pressure manager, mounting rack, battery, and AC/DC adapter
180-05	Extension tube (10 pieces)	
PT00095341-SP	Rechargeable battery	

†Device system accuracy is the accuracy threshold between the displayed cuff pressure value and the cuff pressure as measured by a reference device.

- Lorente L, Lecuona M, Jimenez A, et al. Continuous endotracheal tube cuff pressure control system protects against ventilator-associated pneumonia. Crit Care. 2014;18(2):R77.
- 2. Efrati S, Bolotin G, Levi L, et al. Optimization of endotracheal tube cuff pressure by monitoring ${\rm CO_2}$ levels in the subglottic space in mechanically ventilated patients: a randomized controlled trial. Anesth Analg. 2017;125(4):1309–1315.
- Lorente L, Lecuona M, Jimenez A, Cabrera J, Mora ML. Subglottic secretion drainage and continuous control of cuff pressure used together save health care costs. Am J Infect Control. 2014;42(10):1101–1105.
- 4. Rouze A, De Jonckheere J, Zerimech F, et al. Efficiency of an electronic device in controlling tracheal cuff pressure in critically ill patients: a randomized controlled crossover study. *Ann Intensive Care*. 2016;6(1):93.
- Jaillette E, Zerimech F, De Jonckheere J, et al. Efficiency of a pneumatic device in controlling cuff pressure of polyurethane-cuffed tracheal tubes: a randomized controlled study. BMC Anesthesiol. 2013;13(1):50.
- Nseir S, Zerimech F, Fournier C, et al. Continuous control of tracheal cuff pressure and microaspiration of gastric contents in critically ill patients. Am J Respir Crit Care Med. 2011;184(9):1041–1047.
- 7. Dauvergne JE, Geffray A-L, Asehnoune K, et al. Automatic regulation of the endotracheal tube cuff pressure with a portable elastomeric device. A randomised controlled study. *Anaesth Crit Care Pain Med*. 2020;39(3):435–441.
- Wen Z, Wei L, Chen J, et al. Is continuous better than intermittent control of tracheal cuff pressure? A meta-analysis. Nurs Crit Care. 2019;24(2):76–82.
- 9. Based on internal test report #RE00199709, bench top test results. May 25, 2021.
- Based on internal test report #MEDR-2002, performance of Puffin endotracheal cuff management device in an acute porcine study. February 2, 2021.
- 11. Based on internal test report # RE00192986, Puffin extension tube agency test. 2019.
- 12. Based on internal test report # RE00195206, Puffin extension tube design verification test. 2020.

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99 Hereford Street Brampton, Ontario, L6Y 0R3 Toll-free: 800.268.5346 Tel: 905.460.3800

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