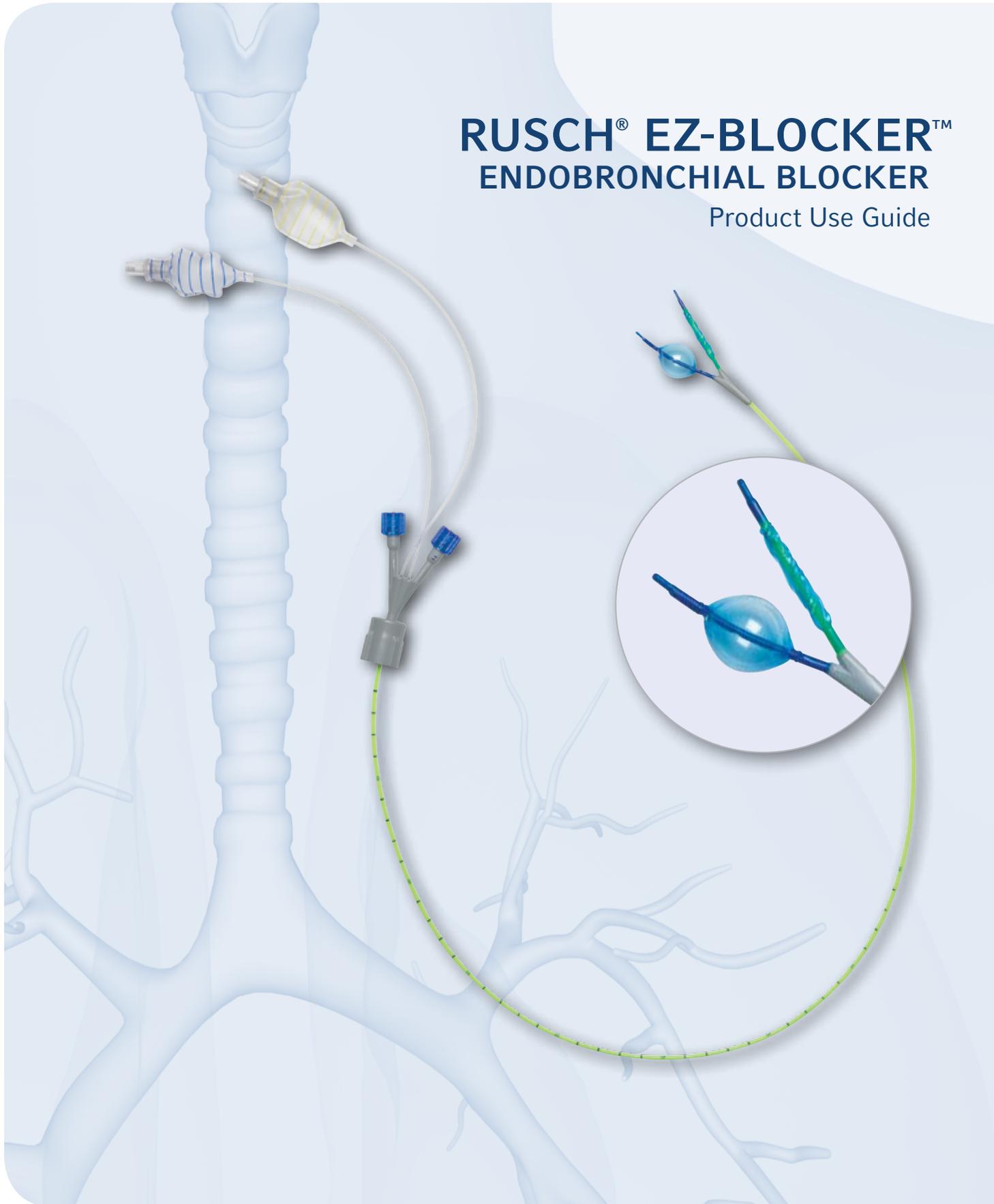


RUSCH® EZ-BLOCKER™ ENDOBONCHIAL BLOCKER

Product Use Guide



Product Overview

Like other bronchial blockers, the EZ-Blocker Endobronchial Blocker is placed through the central lumen of an endotracheal tube to allow for lung isolation. Unlike one-cuff bronchial blockers, however, the EZ-Blocker Endobronchial Blocker has two cuffs to achieve lung isolation. These two cuffs are placed on the unique bifurcated (or Y-shaped) distal end of the blocker. The bifurcation on the EZ-Blocker Endobronchial Blocker is shaped to mirror that of the patient's lungs at the carina. This unique, patented dual-cuff shape is designed to overcome many of the challenges associated with traditional one-cuff blockers because placement becomes intuitive — the device is securely seated at the carina to minimize dislodgement, and there is no need for lung collapse via resorption.

TWO DISTINCT PROXIMAL BALLOONS

- Color of the markings on the pilot balloons match color of the distal lumens
- Provides indication of blocker orientation after placement

CENTRAL LUMENS

- Allow oxygen to be administered (CPAP) to the isolated lung during procedure
- Allow CO₂ flow check to ensure cuff is providing a full seal

RADIOPAQUE SHAFT

BIFURCATED DISTAL EXTENSIONS (Y-SHAPED)

- Distal ends are color-coded, allowing easy identification with corresponding colors on the pilot balloons
- Low-volume cuffs made of polyurethane, providing optimal seal for surgical procedures
- The unique bifurcated distal end of the EZ-Blocker Endobronchial Blocker allows for the intuitive placement of the cuffs in the right or left bronchus

DEPTH MARKERS

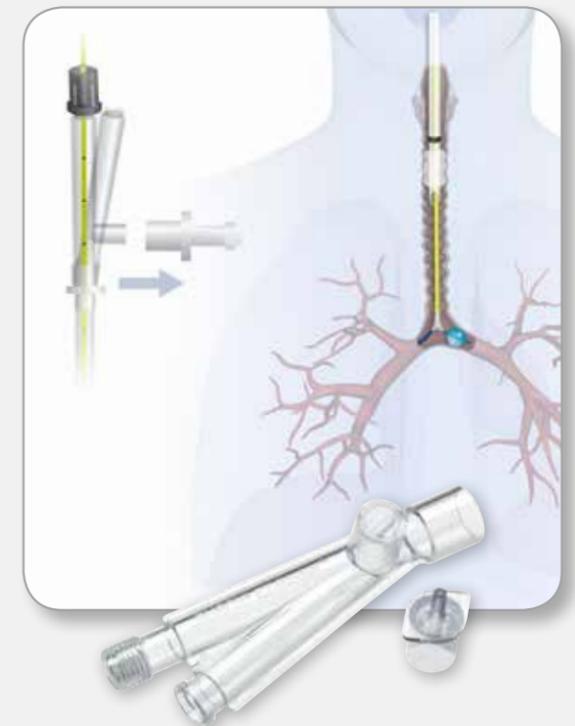
Indicate the depth of insertion by providing distance to the distal tip of the EZ-Blocker Endobronchial Blocker



Cross section of 4 inner lumens in the EZ-Blocker Endobronchial Blocker – 2 lumens are the pilot lines and 2 lumens are for the administration of oxygen below the EZ-Blocker Endobronchial Blocker cuffs.

Product Details

- The EZ-Blocker Endobronchial Blocker comes in one size. The catheter is 7 Fr. (or 2.33 mm) in diameter. This diameter allows it to easily fit into a 7.0 mm (or larger) endotracheal (ET) tube.
- Depth markings printed along the length of the EZ-Blocker Endobronchial Blocker provide an indication of insertion depth, measured from the distal tip of the catheter.
- The EZ-Blocker Endobronchial Blocker low-volume cuffs are made of polyurethane. The thin, polyurethane cuff material allows for superior compliance to the bronchial mucosa.
- The two cuffs have two corresponding pilot balloons. The pilot balloon with blue stripes corresponds to the distal cuff with the blue catheter cover. The pilot balloon with yellow stripes corresponds to the distal cuff with the yellow catheter cover.
- At the distal end of each side of the bifurcated catheter is a port to administer oxygen. These two flexible ports allow for the delivery of oxygen to each lung beyond the bronchial cuff using the luer connectors at the proximal end of the EZ-Blocker Endobronchial Blocker. When not in use, the proximal luer connections should be closed using the blue dust caps provided.
- The entire catheter is radiopaque to allow for verification of placement under X-ray.
- Each EZ-Blocker Endobronchial Blocker is supplied with an EZ-Multiport™ Adapter. This adapter connects directly to the 15 mm connector on the ET tube. Once the adaptor is connected to the ET tube, the circuit is connected to the side port.
- When the anesthesiologist is ready, the EZ-Blocker Endobronchial Blocker can be threaded through the top port on the EZ-Multiport Adapter and secured in place using the gray screw cap connected to the catheter.
- The EZ-Multiport Adapter also has a port designed for bronchoscope insertion.



RUSCH® EZ-BLOCKER™ ENDOBRONCHIA

Product Use Guide



FIGURE 1: VENTILATION

- After patient intubation with a proper sized endotracheal tube, the EZ-Multiport™ Adapter should be connected to the endotracheal (ET) tube and the circuit should be connected to start ventilation.



FIGURE 2: ET TUBE PLACEMENT

- To ensure proper functioning of the EZ-Blocker Endobronchial Blocker, the ET tube should be positioned 4 cm above the carina.

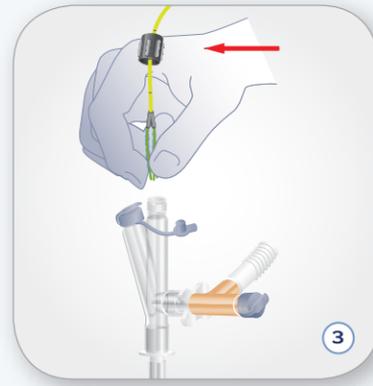


FIGURE 3: INSERTING EZ-BLOCKER ENDOBRONCHIAL BLOCKER

- After testing both cuffs for functionality, deflate both cuffs of the EZ-Blocker Endobronchial Blocker completely.
- Lubricate the distal cuffs of the EZ-Blocker Endobronchial Blocker according to standard practice procedures. (No lidocaine or lubricant containing lidocaine should be used on the distal cuffs.)
- Remove the plug on the EZ-Multiport Adapter, introduce the EZ-Blocker Endobronchial Blocker and advance the blocker into the ET tube.
- Partially secure the gray screw cap attached to the EZ-Blocker Endobronchial Blocker to minimize the leakage of ventilation during blocker placement.



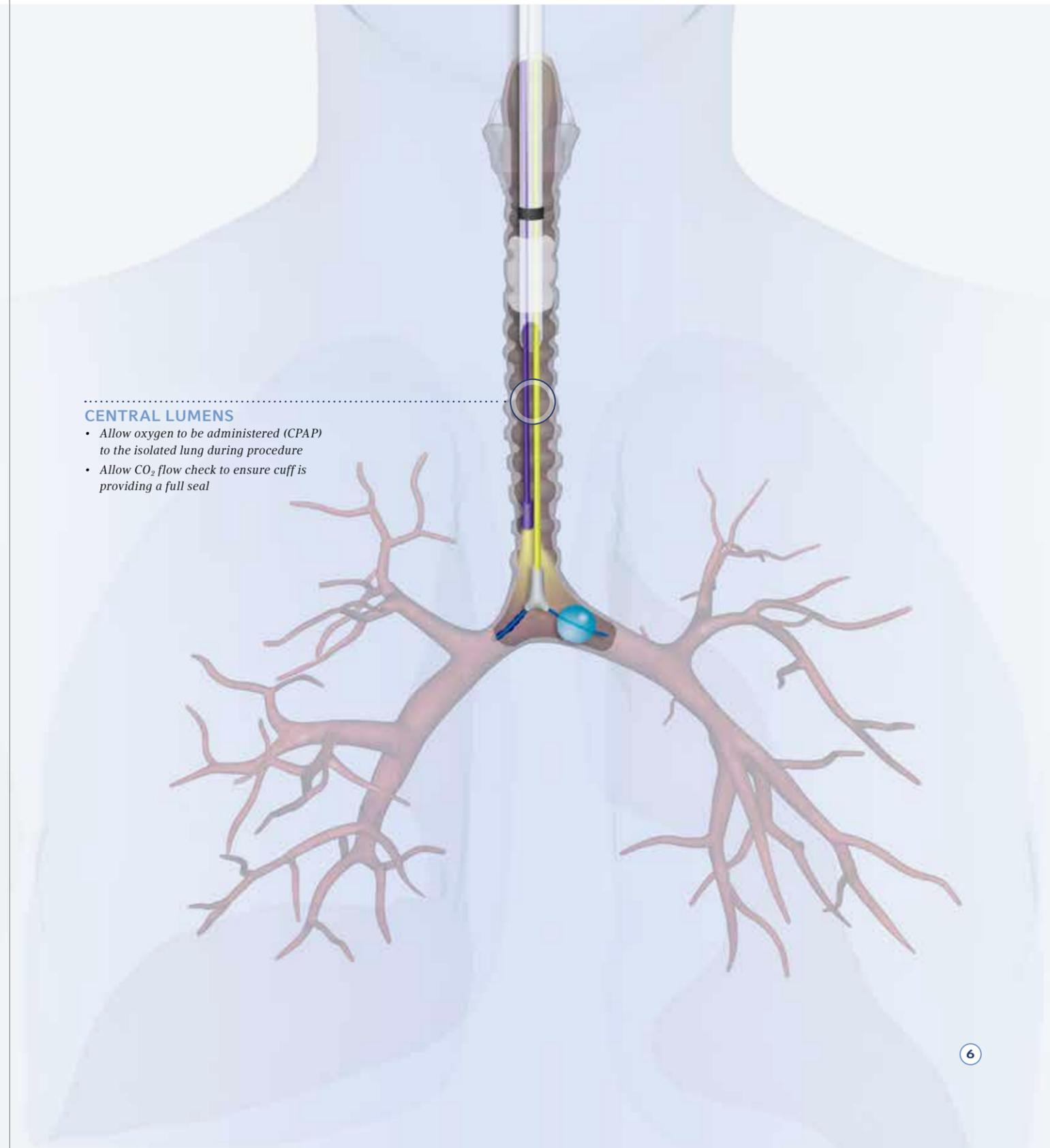
FIGURE 4: INSERTING BRONCHOSCOPE

- Remove the other cap on the EZ-Multiport Adapter and introduce a fiber optic bronchoscope in order to visualize the airway and the EZ-Blocker Endobronchial Blocker.



FIGURE 5: ADVANCING EZ-BLOCKER ENDOBRONCHIAL BLOCKER

- Advance the EZ-Blocker Endobronchial Blocker under direct visual control until both extensions are just outside the ET tube.



CENTRAL LUMENS

- Allow oxygen to be administered (CPAP) to the isolated lung during procedure
- Allow CO₂ flow check to ensure cuff is providing a full seal

FIGURE 6: PLACING EZ-BLOCKER ENDOBRONCHIAL BLOCKER & ESTABLISHING MOV

- Under direct visual guidance, advance the device until both distal extensions have been introduced in both main stem bronchi.
- Once the EZ-Blocker Endobronchial Blocker is correctly positioned in the patient’s airway, the cap, which is mounted on the shaft of the EZ-Blocker Endobronchial Blocker, can be tightened on the port of the EZ-Multiport Adapter until air tight.
- Inflate the appropriate distal cuff by inflating the corresponding pilot balloon; the distal cuff on the blue catheter cover corresponds with the blue striped pilot balloon, and the distal cuff on the yellow catheter cover corresponds with the yellow striped pilot balloon.
- To properly inflate an EZ-Blocker Endobronchial Blocker cuff, inflate while watching with the bronchoscope to the Minimal Occlusion Volume (MOV). MOV is the least amount of air required to completely occlude the bronchus. To securely occlude the bronchus, add an extra 1–2 cc of air into the cuff after the bronchus is initially occluded. To confirm occlusion, ensure the secretions in the bronchial mucosa no longer bubble.
- **TIP:** Note the volume of air instilled into the bronchial cuff to create the MOV and consider writing this volume on the appropriate pilot balloon for reference when lung isolation is performed.
- Deflate both bronchial cuffs fully and continue ventilation as normal.
- In case of repositioning the patient or the patient’s head, the closing cap needs to be unscrewed to the extent that the EZ-Blocker Endobronchial Blocker can move freely through the closing cap.
- After repositioning the patient or the patient’s head, check the cuff position with the fiber optic or video bronchoscope again.

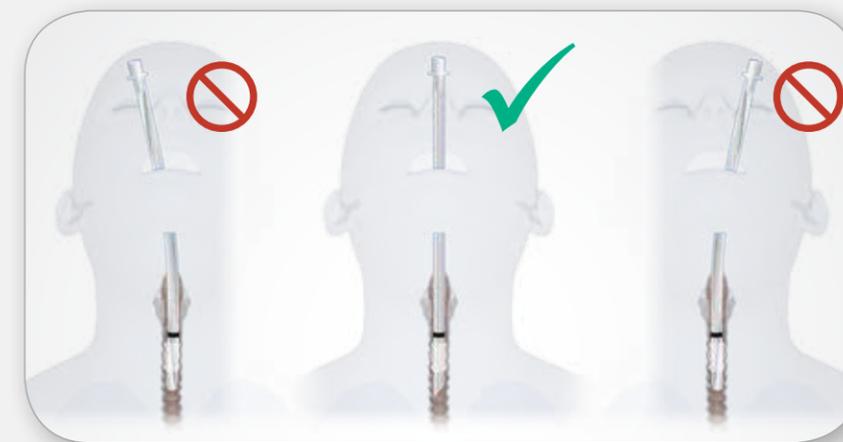
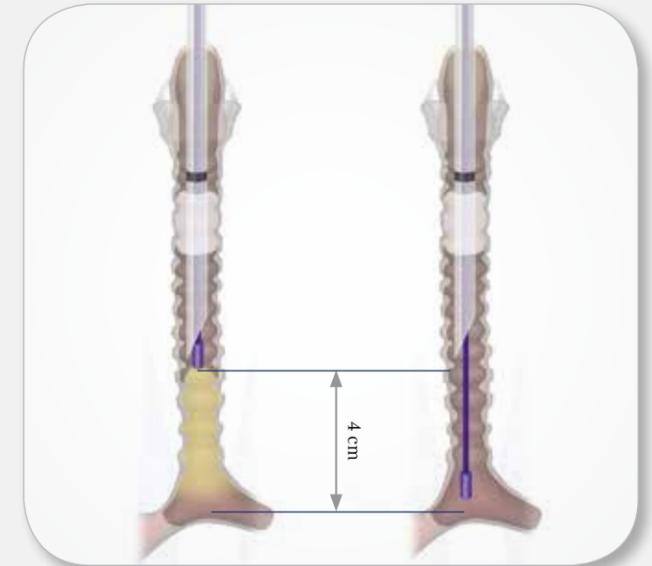
FIGURE 7: LUNG COLLAPSE

- Prior to lung collapse, prepare your patient with 100% oxygen saturation while the EZ-Blocker Endobronchial Blocker cuffs are fully deflated.
- Just before the surgeon breaks the thoracic vacuum (i.e., enters the thorax), physically remove the circuit connection piece to stop ventilation.
- Allow 15–20 seconds for the lung to collapse to its natural volume, then inflate the appropriate distal cuff of the EZ-Blocker Endobronchial Blocker to allow for isolation of the targeted lung and start one lung ventilation by reconnecting the circuit to the EZ-Multiport Adapter.



Tips for Insertion

The distal ends of the EZ-Blocker Endobronchial Blocker are approximately 4 cm long, so in order to allow the Y-shape distal ends to deploy properly one should intubate so that the end of the ET tube is at least 4 cm from the carina. Verify by “touching” the carina with the bronchoscope then pulling it back until reaching the entrance of the distal end of the ET tube.



Keep the ET tube midline; Do not rotate to either side. This will help prevent directing the EZ-Blocker Endobronchial Blocker into one of the main stem bronchi.

PRODUCT INFORMATION

REF.	SET COMPONENTS	LENGTH	SIZE	SMALLEST RECOMMENDED ETT*	QTY
MG-02770-002	<ul style="list-style-type: none"> • 1 EZ-Blocker™ Endobronchial Blocker • 1 EZ-Multiport™ Adaptor with scope lid • 1 oxygen adaptor • 2 dust caps 	75 cm	7 Fr.	7.0 mm	5

* Using small pediatric size (3.4 mm) fiber optic bronchoscope.

Teleflex, EZ-Blocker, EZ-Multiport and Rusch are trademarks or registered trademarks of Teleflex Incorporated or its affiliates.

Teleflex is a global provider of medical products designed to enable healthcare providers to protect against infections and improve patient and provider safety. The company specializes in products and services for vascular access, respiratory, general and regional anesthesia, cardiac care, urology and surgery. Teleflex also provides specialty products for device manufacturers.

© 2013 Teleflex Incorporated. All rights reserved. 2012-1156



TELEFLEX MEDICAL PO Box 12600 Research Triangle Park, NC 27709
Toll Free: 866.246.6990 Phone: 919.544.8000 Intl: 919.433.8088
TELEFLEX.COM