

OXYGEN THERAPY & CAPNOGRAPHY

Flexicare's Oxygen Delivery and Capnography products include: Variable Concentration Masks; Nasal Cannulas; End-Tidal CO₂ Monitoring Nasal Cannulas and Masks; Capnography Accessories; and Nasal Hoods.



Capnography & CO₂ Monitoring

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Capnography

Capnography and CO₂ Monitoring

Monitoring the patient's breathing in emergency situations is of paramount importance. Delivering oxygen ensures the level of oxygen saturation in the blood is maintained, which is sometimes monitored and measured by a pulse oximeter. However, the pulse oximeter does not provide breath-by-breath patient ventilator status.

Capnography is the vital sign of ventilation. By tracking the patient's expired CO₂ clinicians can evaluate the ventilation condition of the patient during critical emergency situations and make the judgment to assess and treat the patient.

Advantages:

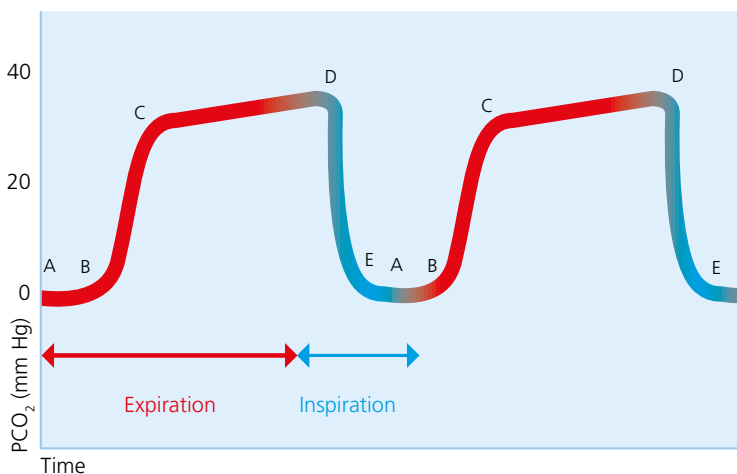
- Excellent sampling accuracy and waveforms as there are two end-tidal CO₂ sampling nares
- Reliable sampling under the following conditions:
 - Clogged sinus' in one nostril
 - Deviated septum
 - Any anatomical abnormalities
- Oxygen delivered to both nostrils at a lower rate, thus minimizing mucosal wall damage
- Secure luer lock connection for both male and female connections
- Soft tip cannula provides superior patient comfort and nare positioning
- Non-kinking tube ensures consistent and accurate delivery
- Universal oxygen connector is standard on all items

Capnography improves patient safety by providing the following vital information:

- Hypoventilation and hyperventilation
- Confirming, maintaining and assisting intubation
- Return of spontaneous circulation (ROSC)
- Measuring cardiac output during cardiopulmonary resuscitation (CPR)
- End-tidal CO₂ as a predictor of resuscitation outcome
- Monitoring sedated patients
- Perfusion warning sign
- ETCO₂ in asthma, chronic obstructive pulmonary disease (COPD), and congestive heart failure (CHF)



PCO₂ Inspiration and Expiration



Phase 1 is the section between A and B, where inhalation has ended and exhalation begins.

Phase 2 is the section between B and C, which represents continued exhalation from the remaining dead space and proximal alveoli.

Phase 3 is the section between C and D, which represents airflow from the alveoli during uniform ventilation (respiratory plateau). D is the end-tidal point where CO₂ concentration is highest and where the monitoring of the values is measured.

Phase 4 is the section between D and E, which represents inspiration.

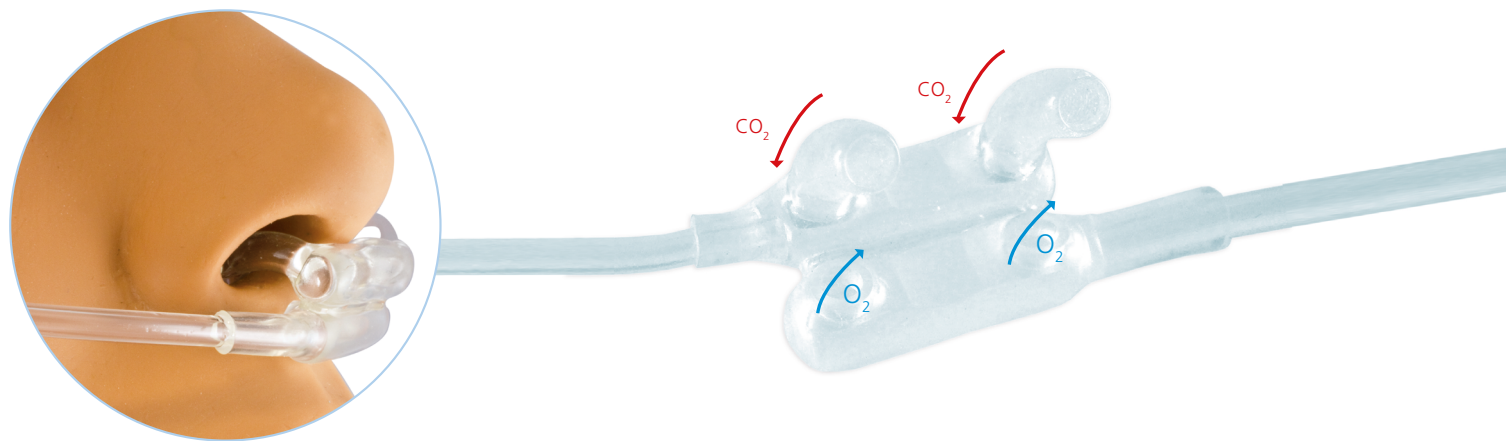
Dual Nasal Cannula

End-Tidal CO₂ Monitoring & O₂ Delivery Cannula

The Dual Nasal Cannula is designed to provide oxygen to both nostrils and also sample CO₂ at the same time.



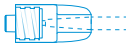

Dual Cannula



CO₂ CO₂ is sampled from both nostrils for side-stream CO₂ monitoring through the nares.

O₂ Fresh oxygen is delivered to both nostrils via the ports.

The patient's expiratory flow will divert fresh gas away from the sampling nares.

 MALE LUER		 FEMALE LUER	PRODUCT DESCRIPTION	PACK SIZE
032-10-123U	032-10-124U		Adult Dual Nasal Cannula, Pigtail Luer (7ft)	25
032-10-125U	032-10-126U		Adult Dual Nasal Cannula, Luer (7ft)	25
032-10-125AU	032-10-126AU		Adult Dual Nasal Cannula and Filter, Luer (7ft)	25
032-10-125CU			Adult Dual Nasal Cannula, Luer with Universal Adapter (7ft)	25
032-10-127U	032-10-128U		Adult Dual Nasal Cannula, Luer (10ft)	25
032-12-125U	032-12-126U		Pediatric Dual Nasal Cannula Luer (7ft)	25
032-12-125AU	032-12-126AU		Pediatric Dual Nasal Cannula and Filter, Luer (7ft)	25
032-12-125CU			Pediatric Dual Nasal Cannula, Luer with Universal Adapter (7ft)	25
032-13-125U	032-13-126U		Neonatal Dual Nasal Cannula, Luer (7ft)	25
032-10-125BU			Adult Dual Cannula with Slip Disc Filter (7ft)	25
032-12-125BU			Pediatric Dual Cannula with Slip Disc Filter (7ft)	25

Dual Mask

Capnography Mask

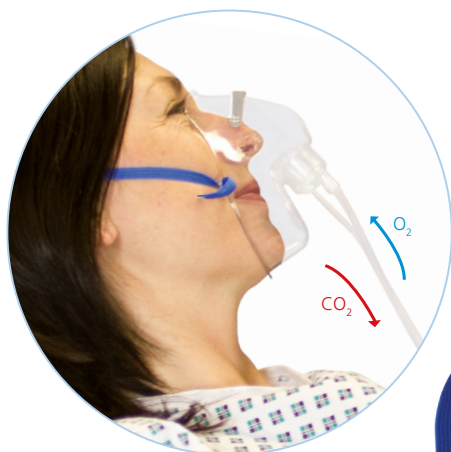
The Dual Capnography Mask provides continual monitoring of carbon dioxide being exhaled from the mouth and nose while administering oxygen to the patient. The integrated oxygen and sampling line is simple and easy to use.



Dual Mask

Star Lumen Tubing, Secured Oxygen Delivery

Star Lumen Tubing, supplied with international standard conforming connectors, ensures that the flow of oxygen is maintained even if the tube is kinked.



Easy Fit with Excellent Seal

The soft, pliable mask molds easily to the patient's face, while the feather rim provides maximum comfort to the patient.

Clear Observation of Face Color and Vital Signs

The mask is made of colorless and transparent soft PVC to allow for visual inspection.

Ease and Speed of Use

The swivel sampling and oxygen connector allows the mask to be fitted swiftly; the connector can be rotated to suit the patient's position.

Excellent Waveforms

Flexicare's unique design minimizes oxygen dilution, providing reliable sampling accuracy.



MALE LUER



FEMALE LUER

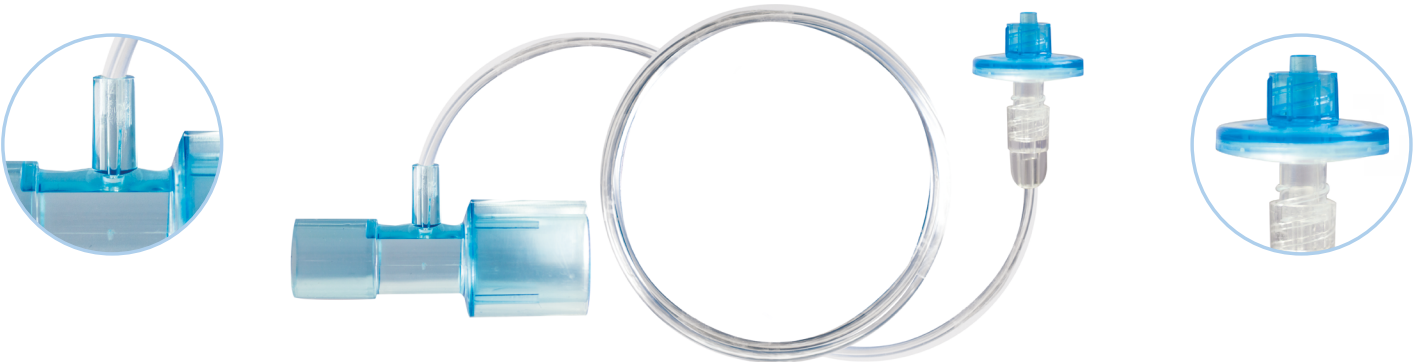
PRODUCT DESCRIPTION

PACK SIZE

032-10-135U	032-10-134U	Adult Dual Mask with CO ₂ Monitoring and Nose Clip (7ft)	50
	032-10-135CU	Adult Dual Mask with CO ₂ Monitoring and Nose Clip with Universal Adapter (7ft)	50
032-10-137U	032-10-136U	Adult Dual Mask with CO ₂ Monitoring, Nose Clip and Filter (7ft)	50
032-12-143U	032-12-142U	Pediatric Dual Mask with CO ₂ Monitoring (7ft)	50
	032-12-143CU	Pediatric Dual Mask with CO ₂ Monitoring and Nose Clip with Universal Adapter (7ft)	50
032-12-145U	032-12-144U	Pediatric Dual Mask with CO ₂ Monitoring and Filter (7ft)	50
	032-10-141BU	Adult Dual Mask with Slip Disc Filter (7ft)	50
	032-12-145BU	Pediatric Dual Mask with Slip Disc Filter (7ft)	50

CapnoCare

CapnoCare is a CO₂ sampling device for use during critical situations when monitoring of EtCO₂ is required. CapnoCare can be used with a resuscitator bag for intubated patients or with anesthesia masks.



Universal Connections

The 22/15mm connectors can be used with ET tubes or anesthesia masks.

Choice of Luer

Available in male, female and slip luer.

Fixed Line

The pre-assembled fixed line saves time and reduces the risk of mis-assembly and delays in critical clinical situations.

Hydrophobic Filter

Protects the monitor from condensation and cross-contamination risks.

Improved Accessibility

10ft line enables clinicians to easily connect the patient to the monitor, even from a distance.

PART NUMBER	PRODUCT DESCRIPTION	PACK SIZE
010-750U	CapnoCare 10ft line with Male Luer Lock	10
010-755U	CapnoCare 10ft line with Female Luer Lock	10
010-760U	CapnoCare 10ft line with Slip Luer	10

Disc Filters

Hydrophobic Disc Filters protect the monitor from moisture during CO₂ monitoring.



PART NUMBER	PRODUCT DESCRIPTION	PACK SIZE
010-740U	Hydrophobic Disc Filter with Luer Lock	50
010-741U	Hydrophobic Disc Filter with Slip Luer	50

DualGuard™

Patient Safety During Endoscopy

The Challenge

Many patients become significantly hypoxic during gastrointestinal endoscopic procedures.¹ Following induced sedation during endoscopy, oxygen saturation falls moderately in most patients and quite profoundly in some to dangerously low levels. Hypoxia or hypercapnia may follow. Supplemental oxygenation during endoscopy has exerted by far the greatest impact on the reduction of the incidence of hypoxia in gastrointestinal endoscopy.²

To protect the patient, it is imperative to deliver oxygen and monitor CO₂ simultaneously

The Requirement

According to American Society of Anesthesiologists' (ASA) guidelines, during moderate or deep sedation the adequacy of ventilation shall be evaluated by continual observation of qualitative clinical signs and monitoring for the presence of exhaled carbon dioxide.³

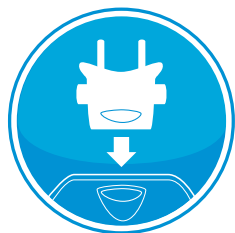
ASA guidelines require CO₂ monitoring for patient safety

The New Standard

The innovative DualGuard sets a new standard in endoscopic practices; it incorporates an endoscopy bite block with oxygen delivery and CO₂ monitoring for use in upper endoscopy procedures through to recovery.

The Ultimate Endoscopy Solution

Delivers O₂ and monitors CO₂ from both the mouth and nose simultaneously.

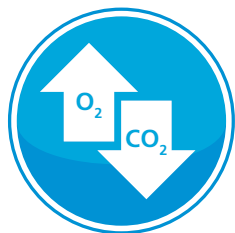


Protection for Patient and Equipment

The comfort rest bite block fits securely and comfortably in the mouth, protecting patient's teeth and endoscopy equipment.

All-In-One Kit

DualGuard incorporates: a Bite Block; Detachable Dual Nasal Cannula; LuerSafe Oral Monitoring Line; 10ft O₂ Tubing; and Adjustable Head Strap in one complete kit.



Care from Procedure to Recovery

Detachable Dual Nasal Cannula continues to deliver O₂ and monitor CO₂ post-procedure in recovery without the need for additional devices.

Enabling Clinical & Regulatory Compliance

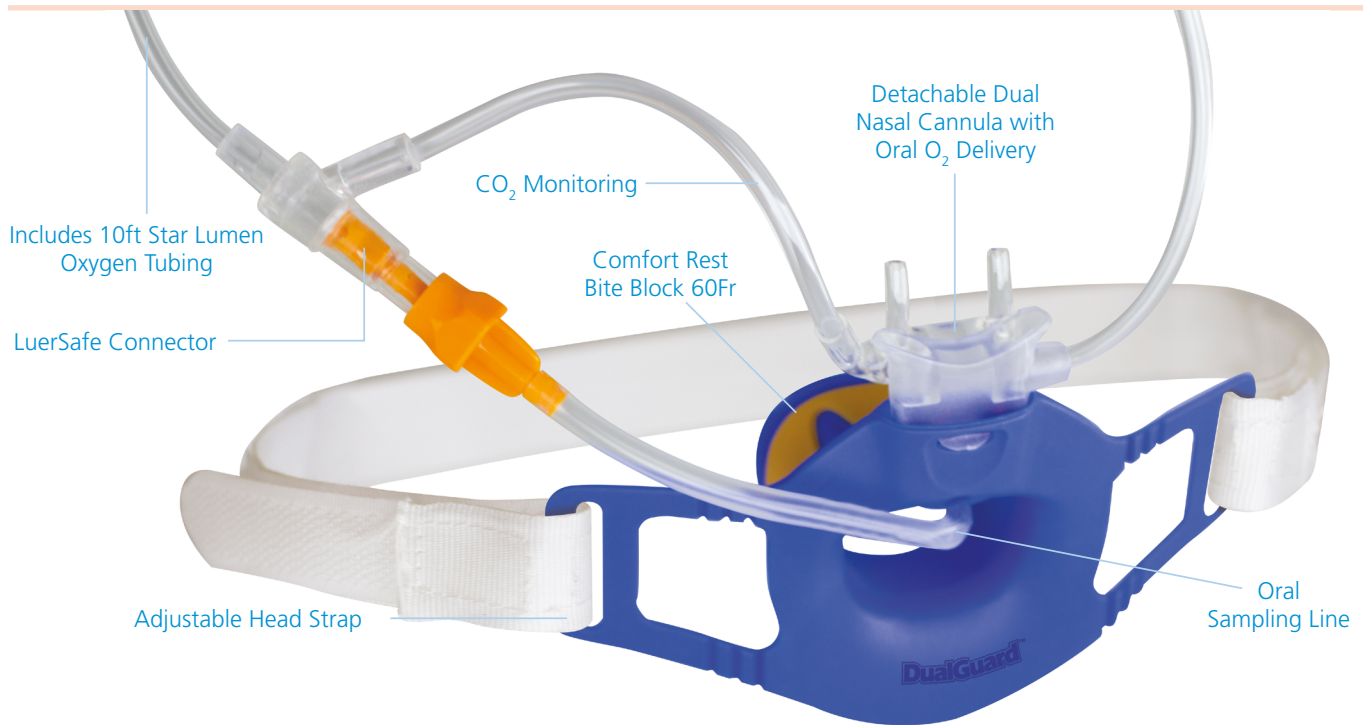
DualGuard provides reliable O₂ delivery and CO₂ sampling, improving patient safety while fulfilling regulatory guidelines.

¹ Whorell PJ, Smith CI, Fosteer KJ: *Arterial Blood Gas Tensions During Upper Gastrointestinal Endoscopy*, Gut 1976;17: 797-800

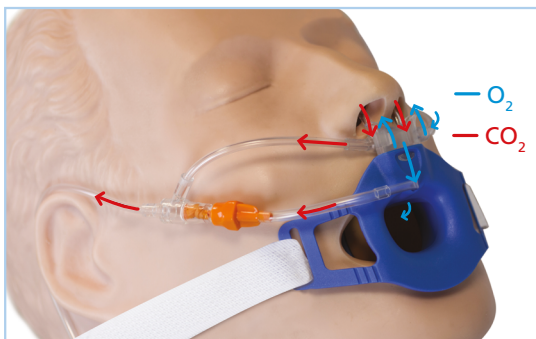
² T.J.Borody : *Methods of Oxygen Delivery During Upper Gastrointestinal Endoscopy*, Endoscopy 1994: 26: 320-321

³ American Society of Anesthesiologists. *Standards for Basic Anesthetic Monitoring*. 2011.

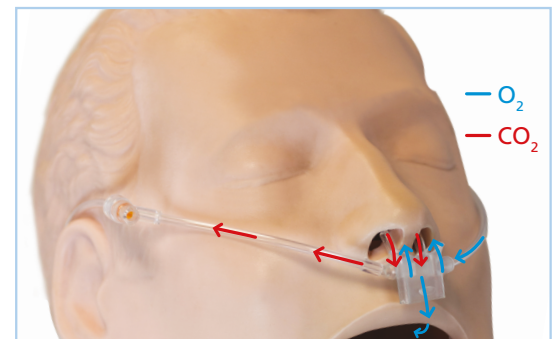
DualGuard



- Continuous oxygen delivery and CO₂ monitoring post-procedure without the need to use another device.
- Superior waveforms and reliable sampling for oral and/or nasal breathers even with sinus congestion or a deviated septum.
- Flexicare's unique cap-less self-sealing LuerSafe port only accepts the correct corresponding color-coded LuerSafe monitoring line to open the valve and provide oral CO₂ sampling.



Stage 1
During Endoscopy with Optional CO₂ Monitoring



Stage 2
Post Procedure and in Recovery

032-10-850U	DualGuard Adult 10ft Line with Female Luer Lock	25
032-10-855U	DualGuard Adult 10ft Line with Male Luer Lock	25
032-10-860U	DualGuard Adult 10ft Line with Female Luer Lock Filter	25
032-10-865U	DualGuard Adult 10ft Line with Male Luer Lock Filter	25
032-10-868U	DualGuard Adult 10ft Line with Slip Luer Filter	25

Nasal Hoods

Flexicare's range of single-use and reusable nasal hoods are designed to provide the best solution for nitrous oxide delivery during dental procedures.

Nasal Hoods



Reduced Risk of Gas Leakage

The feathered edges provide a comfortable fit while also maintaining a secure seal.



Increased Patient Compliance

Helping patients overcome anxiety associated with dental procedures.



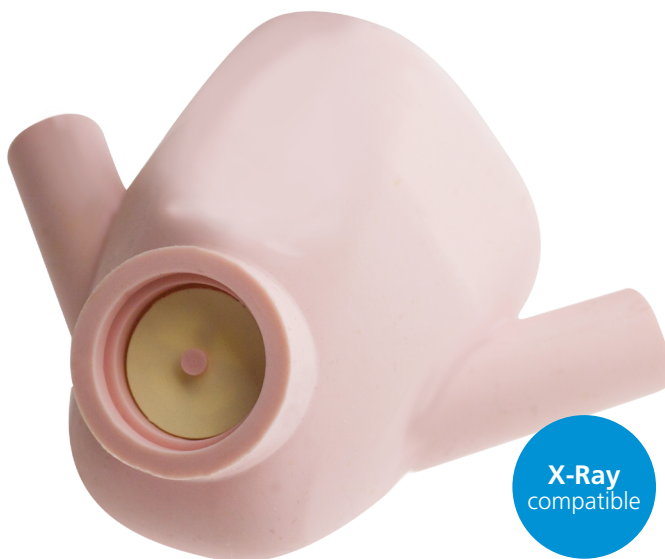
Latex Free

Eliminating the risk of allergic reaction to latex.



Variety of Scents

Flexicare offers a range of pleasant scents as well as plain.



X-Ray compatible

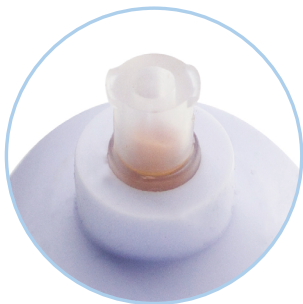


PART NUMBER	DESCRIPTION	SIZE	USE	SCENT	COLOR	PACK SIZE
035-55-210U	Nasal Hood	Small	Single-Use	Plain		20
035-55-210GU	Nasal Hood	Small	Single-Use	Grape		20
035-55-210SU	Nasal Hood	Small	Single-Use	Strawberry		20
035-55-220U	Nasal Hood	Medium	Single-Use	Plain		20
035-55-220VU	Nasal Hood	Medium	Single-Use	Vanilla		20
035-55-220SU	Nasal Hood	Medium	Single-Use	Strawberry		20
035-55-230U	Nasal Hood	Large	Single-Use	Plain		20
035-55-230VU	Nasal Hood	Large	Single-Use	Vanilla		20
035-55-230MU	Nasal Hood	Large	Single-Use	Mint		20
035-55-110U	Nasal Hood	Small	Reusable	Plain		20
035-55-120U	Nasal Hood	Medium	Reusable	Plain		20
035-55-130U	Nasal Hood	Large	Reusable	Plain		20

Dual Nasal Hoods

The unique Dual Nasal Hood with LuerSafe provides optional CO2 monitoring during dental procedures that utilize nitrous oxide or other forms of sedation.

Dual Nasal Hoods



Capnography and CO₂ Monitoring

Monitoring a patient's breathing is of paramount importance. Capnography is the vital sign of ventilation. By tracking the patient's expired CO₂, clinicians can evaluate the ventilation condition of the patient during sedation and make the judgment to assess and treat the patient.

The Dual Nasal Hood is designed to provide desired gas to both nostrils and also sample CO₂ at the same time. Quality CO₂ waveforms are achieved as the patient's expiratory flow will divert fresh gas away from the inhalation channel.

Unique LuerSafe Port

Dual Nasal Hoods feature Flexicare's unique cap-less self-sealing LuerSafe port, which will only accept the correct corresponding color-coded LuerSafe monitoring line to be fitted to open the valve and provide uninterrupted flow to sample CO₂ levels.




LuerSafe eliminates erroneous mis-connections to standard luer connections, ensuring a fail-safe connection to the monitoring port only.

Universal Adaptor

All Dual Nasal Hoods come with the LuerSafe monitoring line, which has a universal adaptor that accommodates both male and female connectors.

Capnography improves patient safety:

- Monitoring sedated patients breath-by-breath
- Early identification of Hypoventilation and Hyperventilation
- Perfusion warning sign

PART NUMBER	DESCRIPTION	SIZE	USE	SCENT	COLOR	PACK SIZE
035-55-310U	Dual Capnography Nasal Hood with LuerSafe Line	Small	Single-Use	Plain		20
035-55-320U	Dual Capnography Nasal Hood with LuerSafe Line	Medium	Single-Use	Plain		20
035-55-330U	Dual Capnography Nasal Hood with LuerSafe Line	Large	Single-Use	Plain		20

Variable Concentration

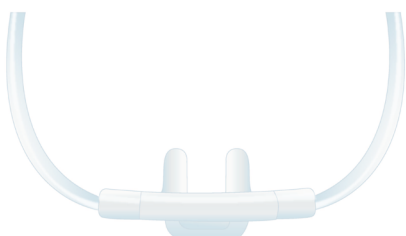
All masks are supplied with knitted latex free straps. The knitted strap maintains its width when stretched, reducing the pressure on the patient's skin and can protect the patient from pressure sores.



032-10-002U	Adult MC Mask with Head Strap and Tubing	50
032-10-002NCU	Adult MC Mask with Head Strap, Tubing and Nose Clip	50
032-10-009U	Pediatric MC Mask with Head Strap and Tubing	50

Nasal Cannulas

Nasal Cannulas are used for their simplicity and patient convenience. There is entrainment of ambient air through the nostrils. The FiO₂ achieved is proportional to: the flow rate of oxygen (1-6 l/mni); the patient's tidal volume; inspiratory flow rate; and the volume of the nasal pharynx.



032-10-022U	Adult Nasal Cannula with 7ft Tubing	50
032-10-022FLU	Adult Flared Nasal Cannula with 7ft Tubing	50
032-10-101U	Adult Soft Tip Curved Nasal Cannula with Tubing	50
032-10-103U	Pediatric Soft Tip Curved Nasal Cannula with Tubing	50
032-10-105U	Neonatal Soft Tip Curved Nasal Cannula with Tubing	50
032-10-108U	Adult Nasal Cannula with CO ₂ Monitoring	25

Non-Rebreathing Mask

The Non-Rebreathing Mask provides a high concentration of oxygen, while the reservoir bag allows for adequate oxygen to be available in order to meet unpredictable patient breathing patterns and tidal volumes.



032-10-072U	Adult Non-Rebreathing Mask with Head Strap and Tubing	50
032-10-072NCU	Adult Non-Rebreathing Mask with Head Strap, Tubing and Nose Clip	50
032-10-080U	Pediatric Non-Rebreathing Mask and Tubing	50

Pocket Resuscitation Mask

Protect patients against cross-contamination with the Flexicare Single Patient Use Resuscitator Mask.



Integrated Bacterial / Viral Filter

Protects both patient and resuscitator.

Pre-Filled Cushion

The pre-filled cushion provides maximum seal.

Built in Oxygen Line Port with Cap

Allows connection of oxygen if required with no need to change mask during transportation.

Secure Durable Carrying Case

The mask is carefully protected until required. The case features an easy open release catch with printed easy-to-follow instructions.

Latex-Free Strap

Assists in maintaining the mask in a secure position and eliminates the risk of latex reaction.

010-999U	Pocket Resuscitation First Aid Mask	20
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