Anesthesia Circuit

Breathing Circuit and Accessories
Anesthesia Circuit can be best described as the lifeline between the patient and anesthesia machine. It consists of various combinations of interfaces, enabling the delivery of anesthetic gases to the patients in a consistent and highly regulated manner.

We understand that every patient is unique and that selection of circuit depends on the medical requirements. Hence we provide a wide range of circuit combinations, accessories and components to equip you with the right tool to deliver the best outcome for your patients.

“innovalue” products set the benchmark in the respiratory care industry. This can only be made possible by dedicating resources extensively in research and development in the field of Mechanical Ventilation & Anesthesia. Our range of products are developed by working in close collaboration with clinical physicians, engineers and expert designers. These relationships allow us to visualize the problems faced in the healthcare settings and enable us to devise a solution. We constantly aim for win-win situations for both clinicians and patients.

Anesthesia Circuit and Accessories:

- Durable, Standard and Swivel Dual Limb Anesthesia Circuit
- ECO Collapsible Anesthesia Circuit
- Theta Anesthesia Circuit
- Bain Anesthesia Circuit
- Coaxial Anesthesia Circuit
- Jackson Rees Anesthesia Circuit
- Venti.Plus™ Hyperinflation System
- Nitrous Oxide Anesthesia Circuit
- Airways and Laryngoscopes
- Masks, Heat and Moisture Exchange Filter (HMEF), Filters, Breathing Bags, Tubings and Connectors
Your Partner for Better Care
Airway management is an important first step in the domain of mechanical ventilation and anesthesia. It directly impacts on the safety of patients. We offer a range of endotracheal tubes, Berman and Guedel airways that are safe, effective and provides greater flexibility to healthcare professionals.

Our anesthesia circuits are available in durable and disposable models. We also provide fixed or adjustable lengths for the disposable models for more flexibility. To provide a combination that best suits your needs, a wide selection of circuits and accessories are available.

Face mask is another important aspect in respiratory care. Besides using the most suitable and skin-friendly materials, we pay extra attention on mask design to provide maximum patient comfort and a good seal. We also take designing face masks a step further by incorporating a port onto the mask for the insertion of measuring tubes, nasogastric tubes or endoscopy tubes.

Respiratory humidification and cross-infection prevention are crucial in mechanical ventilation and anesthesia. We deliver a wide range of HMEF and Filters to provide humidification to the inhaled air for enhanced patient comfort, while minimizing the risk of cross-infection.

In addition to the standard latex options in the market, we also supply non-latex and silicone breathing bags to mitigate the risk of allergic reactions in patients. The bags also come in volumes ranging from 0.25 liter to 3 liter.

We provide both durable and disposable manual resuscitators. The resuscitator bag volumes are also specifically designed to suit neonate, infant, pediatric and adult patients.

We have an extensive range of accessories, components and connectors to provide clinicians or healthcare professionals with the option to customize a setup to meet patient’s needs. Pressure valves, monitoring devices, tube or device holders are also available to provide support for clinical operation.
Airway Management

**Features** | **Benefits**
--- | ---
Inflatable Balloon Cuff | Provides a good seal against air leak and proper positioning to minimize airway damage
Anatomical curve | Specially designed for fast and easy insertion
Clear Indication | Accurate graduated markings for reference to ascertain insertion depth
Biocompatible Material | Meets international biocompatibility standards

### Endotracheal Tube

<table>
<thead>
<tr>
<th>Part No.</th>
<th>ID/OD</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3578-3582</td>
<td>3.0mmID/4.2mmOD to 5.0mmID/6.9mmOD</td>
<td>160mm to 240mm</td>
</tr>
<tr>
<td>3583</td>
<td>5.5mmID/7.5mmOD</td>
<td>270mm</td>
</tr>
<tr>
<td>3584-3592</td>
<td>6.0mmID/8.2mmOD to 10.0mmID/13.3mmOD</td>
<td>320mm</td>
</tr>
</tbody>
</table>

### Berman Airways

Shaped to follow the anatomical curves of the tongue and oropharyngeal airway. Dual-sided channels with holes to minimize the risk of airway occlusion. The side channel of the Berman airway permits the insertion of suction tube.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6313-6322</td>
<td>Berman Airway 30cm to 120cm</td>
</tr>
</tbody>
</table>

### Guedel Airways

Guedel airways are used to maintain a patent airway by preventing the tongue from resting against the posterior pharyngeal wall and obstructing the airway.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6304-6308</td>
<td>Guedel Airway 40cm to 80cm</td>
</tr>
<tr>
<td>6309-6312</td>
<td>Guedel Airway 90cm to 120cm</td>
</tr>
</tbody>
</table>
Anesthesia Breathing Circuit & Accessories

Closed Anesthesia Breathing Systems generally consist of the following parts: a fresh gas supply and inspiratory limb, a patient interface, an expiratory conduit, a breathing bag, an adjustable pressure limiting (APL) valve and a CO$_2$ filter. A closed system interface enables the complete re-breathing of exhaled air at a lower gas flow rate.

**Types of Closed Anesthesia Breathing Systems Available:**
- Durable and Disposable Dual-Limb Anesthesia Circuit
- Theta, Bain and Coaxial Anesthesia Circuit

Semi-Open Anesthesia Breathing Systems generally consist of the parts shown in the illustration above. Our semi-open systems are convenient, lightweight and easily scavenged. It has minimal dead space, low airflow resistance and reduces the work of breathing.

**Types of Semi-Open Anesthesia Breathing Systems Available:**
- Mapleson D Anesthesia Circuit
- Jackson Rees Anesthesia Circuit
- Nitrous Oxide Anesthesia circuit
Durable Anesthesia Circuit

Functions:
● Conform to ISO 5367 for breathing circuit
● Hook ring on cuff for hanging the circuit to air dry
● Materials: polysulfone for plastic components, silicone rubber for tubing and cuff, conform to ISO-10993-1
Sterilization: autoclavable up to 134°C or Cidex or pasteurization for more than 50 cycles

Dimensions:
● Connector: 22mm and 15mm conform to ISO 5356-1
● Gas Sampling Port: Luer, conform to ISO 594-1
● Tubing: shown in the table above

Order Information

<table>
<thead>
<tr>
<th>REF</th>
<th>Elbow</th>
<th>Wye</th>
<th>Aplus Silicone Tubing, 22F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22/15 with Luer</td>
<td>22/15, 22M</td>
<td>Inhal: 120cm, 19F</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Exhale: 120cm, 19F</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to connect</td>
<td>Tubing cuffs designed for firm and sturdy contact</td>
</tr>
<tr>
<td>Smoothbore Tubing</td>
<td>Easy to clean with minimal air turbulence in the circuit</td>
</tr>
<tr>
<td>Kink Resistant</td>
<td>Ensures safety and smooth air flow</td>
</tr>
<tr>
<td>Durable</td>
<td>All parts autoclavable at 134°C</td>
</tr>
<tr>
<td>Biocompatible &amp; ISO conformance</td>
<td>Materials and functions conform to international standards</td>
</tr>
</tbody>
</table>

Optional Accessories (details on page 16):
● Anesthesia Masks and Endoscopy Masks
● HMEF and Filters
● Gas Sampling Line
● Silicone Breathing Bag (liter): 3L, 2L, 1L, 0.5L
● Patient Elbow and Patient wye with other types of ports are also available

Packaging:
● Adult: 1 set/pkg, 10 set/box
Hytrel Anesthesia Circuit

Features | Benefits
---|---
Easy to connect | Tubing cuffs designed for firm and sturdy contact
Smoothbore Tubing | Easy to clean with minimal air turbulence in the circuit
Kink Resistant | Ensures safety and smooth air flow
Semi-durable material | All parts autoclavable at 121°C
Biocompatible & ISO conformance | Materials and functions conform to international standards

Order Information

**Adult**

<table>
<thead>
<tr>
<th>REF</th>
<th>Elbow</th>
<th>Wye</th>
<th>Hytrel Tubing, 22F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Inhale</strong></td>
</tr>
<tr>
<td>6818</td>
<td>22/15 with Luer</td>
<td>22/15, 22M</td>
<td>120cm, 19F</td>
</tr>
</tbody>
</table>

**Pediatric**

<table>
<thead>
<tr>
<th>REF</th>
<th>Elbow</th>
<th>Wye</th>
<th>Hytrel Tubing, 15F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Inhale</strong></td>
</tr>
<tr>
<td>6819</td>
<td>22/15 with Luer</td>
<td>22/15, 15M</td>
<td>120cm, 15F</td>
</tr>
</tbody>
</table>

Specifications

**Functions:**
- Conform to ISO 5367 for breathing circuit
- Materials: polycarbonate for plastic components, silicone rubber for tubing and cuff, conform to ISO-10993-1
- Sterilization: autoclavable up to 121°C or Cidex or pasteurization for more than 20 cycles

**Dimensions:**
- Connector: 22mm and 15mm conform to ISO 5356-1
- Gas Sampling Port: Luer, conform to ISO 594-1
- Tubing: shown in the table above

**Optional Accessories (details on page 16):**
- Anesthesia Masks and Endoscopy Masks
- HMEF and Filters
- Gas Sampling Line
- Silicone Breathing Bag (liter): 3L, 2L, 1L, 0.5L
- Patient Elbow and Patient wye with other types of ports are also available

**Packaging:**
- Adult: 1 set/pkg, 10 set/box
- Pediatric: 1 set/pkg, 15 set/box
ECO Anesthesia Circuit

**Features** | **Benefits**
--- | ---
Collapsible & Lightweight | A lighter and more economical option
| | Reduces transport cost and required storage space
Gas Sampling | Elbow with built-in 4.3 luer port for gas sampling
Single Patient Use | To minimize the risk of cross-infection
Biocompatible & ISO conformance | Materials and functions conform to international standards

### Order Information

**Adult**

<table>
<thead>
<tr>
<th>REF</th>
<th>Elbow</th>
<th>Wye</th>
<th>Collapsible Tubing, 22F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP10</td>
<td>22/15 with Luer</td>
<td>22/15, 22M</td>
<td>Inhale: 42-150cm, 22F</td>
</tr>
</tbody>
</table>

**Pediatric**

<table>
<thead>
<tr>
<th>REF</th>
<th>Elbow</th>
<th>Wye</th>
<th>Collapsible Tubing, 15F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP11</td>
<td>22/15 with Luer</td>
<td>22/15, 15M</td>
<td>Inhale: 42-150cm, 15F</td>
</tr>
</tbody>
</table>

### Specifications

**Functions:**
- Conform to ISO 5367 for breathing circuit
- Materials: Single patient use, conform to ISO-10993-1

**Dimensions:**
- Connector: 22mm and 15mm conform to ISO 5356-1
- Gas sampling port: Luer, conform to ISO 594-1
- Tubing: shown in the table above

**Optional Accessories (details on page 16):**
- Anesthesia Masks and Endoscopy Masks
- HMEF and Filters
- Gas Sampling Line
- Latex Breathing Bag: 3L, 2L, 1L, 0.5L
- Latex-Free Breathing Bag: 3L, 2L, 1L, 0.5L, 0.25L

**Packaging:**
- Adult: 1 set/pkg, 25 set/box
- Pediatric: 1 set/pkg, 25 set/box
Standard Anesthesia Circuit

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lightweight</td>
<td>A lighter and more economical option</td>
</tr>
<tr>
<td>Gas Sampling</td>
<td>Elbow with built-in 4.3 luer port for gas sampling</td>
</tr>
<tr>
<td>Single Patient Use</td>
<td>To minimize the risk of cross-infection</td>
</tr>
<tr>
<td>Biocompatible &amp; ISO conformance</td>
<td>Materials and functions conform to international standards</td>
</tr>
</tbody>
</table>

Order Information

**Adult**

<table>
<thead>
<tr>
<th>REF</th>
<th>Elbow</th>
<th>Wye</th>
<th>Corrugated Tubing, 22F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22/15 with Luer</td>
<td>22/15, 22M</td>
<td>Inhal: 120cm, 22F, Exhale: 150cm, 22F</td>
</tr>
<tr>
<td>66628</td>
<td>22/15 with Luer</td>
<td>22/15, 22M</td>
<td>Inhal: 150cm, 22F, Exhale: 180cm, 22F</td>
</tr>
</tbody>
</table>

**Pediatric**

<table>
<thead>
<tr>
<th>REF</th>
<th>Elbow</th>
<th>Wye</th>
<th>Corrugated Tubing, 15F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22/15 with Luer</td>
<td>22/15, 22M</td>
<td>Inhal: 120cm, 15F, Exhale: 150cm, 15F</td>
</tr>
<tr>
<td>66631</td>
<td>22/15 with Luer</td>
<td>22/15, 22M</td>
<td></td>
</tr>
<tr>
<td>66632</td>
<td>22/15 with Luer</td>
<td>22/15, 22M</td>
<td></td>
</tr>
</tbody>
</table>

Specifications

**Functions:**
- Conform to ISO 5367 for breathing circuit
- Materials: Single patient use, conform to ISO 10993-1

**Dimensions:**
- Connector: 22mm and 15mm conform to ISO 5356-1
- Gas sampling port: Luer, conform to ISO 594-1
- Tubing: shown in the table above

Optional Accessories (details on page 16):
- Anesthesia Masks and Endoscopy Masks
- HMEF and Filters
- Gas Sampling Line
- Latex Breathing Bag: 3L, 2L, 1L, 0.5L
- Latex-Free Breathing Bag: 3L, 2L, 1L, 0.5L, 0.25L

Packaging:
- Adult: 1 set/pkg, 15 set/box
- Pediatric: 1 set/pkg, 15 set/box
Swivel Anesthesia Circuit

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swivel Wye</td>
<td>Enables flexible adjustment of the tubing angles and can function like an Elbow connector</td>
</tr>
<tr>
<td>Lightweight</td>
<td>A lighter and more economical option</td>
</tr>
<tr>
<td>Gas Sampling</td>
<td>Swivel wye with built-in 4.3 luer port for gas sampling</td>
</tr>
<tr>
<td>Single Patient Use</td>
<td>To minimize the risk of cross-infection</td>
</tr>
<tr>
<td>Biocompatible &amp; ISO conformance</td>
<td>Materials and functions conform to international standards</td>
</tr>
</tbody>
</table>

**Order Information**

**Adult**

<table>
<thead>
<tr>
<th>REF</th>
<th>Swivel Wye</th>
<th>Collapsible Tubing, 22F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td>66633</td>
<td>22/15 with Luer</td>
<td>42-150cm, 22F</td>
</tr>
</tbody>
</table>

**Specifications**

**Functions:**
- Conform to ISO 5367 for breathing circuit
- Materials: Single patient use, conform to ISO-10993-1

**Dimensions:**
- 22mm and 15mm conform to ISO 5356-1
- Gas sampling port: Luer, conform to ISO 594-1
- Tubing: shown in the table above

**Optional Accessories (details on page 16):**
- Anesthesia Masks and Endoscopy Masks
- HMEF and Filters
- Gas Sampling Line
- Latex Breathing Bag: 3L, 2L, 1L, 0.5L
- Latex-Free Breathing Bag: 3L, 2L, 1L, 0.5L, 0.25L

**Packaging:**
- Collapsible Model: 1 set/pkg, 25 set/box
- Corrugated Model: 1 set/pkg, 15 set/box
Theta Anesthesia Circuit

**Features** | **Benefits**
--- | ---
Theta θ Design | Inspiratory and expiratory flow within a single tube, separated by a divider
Lightweight | A lighter and more economical option
Gas Sampling | Elbow with built-in 4.3 luer port for gas sampling
Collapsible | Exhale limb for more flexibility
Single Patient Use | To minimize the risk of cross-infection
Biocompatible & ISO conformance | Materials and functions conform to international standards

**Order Information**

**Adult**

<table>
<thead>
<tr>
<th>REF</th>
<th>Elbow</th>
<th>Patient</th>
<th>Theta Tubing, 22F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Main Tube</td>
</tr>
<tr>
<td>AT18</td>
<td>22/15</td>
<td>22/15</td>
<td>180cm, 22F</td>
</tr>
<tr>
<td>AT30</td>
<td>22/15</td>
<td>22/15</td>
<td>300cm, 22F</td>
</tr>
</tbody>
</table>

**Specifications**

**Functions:**
- Conform to ISO 5367 for breathing circuit
- Materials: Single patient use, conform to ISO-10993-1

**Dimensions:**
- 22mm and 15mm conform to ISO 5356-1
- Gas sampling port: Luer, conform to ISO 594-1
- Tubing: shown in the table above

**Optional Accessories (details on page 16):**
- Anesthesia Masks and Endoscopy Masks
- HMEF and Filters
- Gas Sampling Line
- Latex Breathing Bag: 3L, 2L, 1L, 0.5L
- Latex-Free Breathing Bag: 3L, 2L, 1L, 0.5L, 0.25L

**Packaging:**
- 1 set/pkg, 20 set/box
Bain Circuit

Features | Benefits
--- | ---
AIO Compact Design | All-in-One Bain circuit with coaxial tube design. Smoothbore inspiratory limb within the expiratory limb
Lightweight | A lighter and more economical option
Gas Sampling | Elbow with built-in 4.3 luer port for gas sampling
Collapsible | Exhale limb for more flexibility
Single Patient Use | To minimize the risk of cross-infection
Biocompatible & ISO conformance | Materials and functions conform to international standards

Order Information

<table>
<thead>
<tr>
<th>REF</th>
<th>Elbow</th>
<th>Patient</th>
<th>Bain Tubing, 22F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Main Tube</strong></td>
</tr>
<tr>
<td>AB10</td>
<td>22/15</td>
<td>22/15</td>
<td>120cm, 22F</td>
</tr>
<tr>
<td>AB20</td>
<td>22/15</td>
<td>22/15</td>
<td>180cm, 22F</td>
</tr>
</tbody>
</table>

Specifications

Functions:
- Conform to ISO 5367 for breathing circuit
- Materials: Single patient use, conform to ISO-10993-1

Dimensions:
- 22mm and 15mm conform to ISO 5356-1
- Gas sampling port: Luer, conform to ISO 594-1
- Tubing: shown in the table above

Optional Accessories (details on page 16):
- Anesthesia Masks and Endoscopy Masks
- HMEF and Filters
- Gas Sampling Line
- Latex Breathing Bag: 3L, 2L, 1L, 0.5L
- Latex-Free Breathing Bag: 3L, 2L, 1L, 0.5L, 0.25L

Packaging:
- AB10: 1 set/pkg, 20 set/box
- AB20: 1 set/pkg, 15 set/box
Coaxial Anesthesia Circuit

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaxial Design</td>
<td>Corrugated inspiratory limb within the expiratory limb</td>
</tr>
<tr>
<td>Lightweight</td>
<td>A lighter and more economical option</td>
</tr>
<tr>
<td>Gas Sampling</td>
<td>Elbow with built-in 4.3 luer port for gas sampling</td>
</tr>
<tr>
<td>Collapsible</td>
<td>Exhale limb for more flexibility</td>
</tr>
<tr>
<td>Single Patient Use</td>
<td>To minimize the risk of cross-infection</td>
</tr>
<tr>
<td>Biocompatible &amp; ISO conformance</td>
<td>Materials and functions conform to international standards</td>
</tr>
</tbody>
</table>

Order Information

<table>
<thead>
<tr>
<th>Adult</th>
<th>Coaxial Tubing, 22F Cuff</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF</td>
<td>Elbow</td>
</tr>
<tr>
<td>6656</td>
<td>22/15</td>
</tr>
<tr>
<td>6657</td>
<td>22/15</td>
</tr>
<tr>
<td>6693</td>
<td>22/15</td>
</tr>
<tr>
<td>6695</td>
<td>22/15</td>
</tr>
<tr>
<td>6696</td>
<td>22/15</td>
</tr>
</tbody>
</table>

Specifications

Functions:
- Conform to ISO 5367 for breathing circuit
- Materials: Single patient use, conform to ISO-10993-1

Dimensions:
- 22mm and 15mm conform to ISO 5356-1
- Gas sampling port: Luer, conform to ISO 594-1
- Tubing: shown in the table above

Optional Accessories (details on page 16):
- Anesthesia Masks and Endoscopy Masks
- Gas Sampling Line
- Latex Breathing Bag: 3L, 2L, 1L, 0.5L
- Latex-Free Breathing Bag: 3L, 2L, 1L, 0.5L, 0.25L

Packaging:
- 1 set/pkg, 15 set/box
Jackson Rees Anesthesia Circuit

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tail-end Control Valve</td>
<td>Allows the adjustment of pressure levels within the system</td>
</tr>
<tr>
<td>Connection to Scavenge System</td>
<td>Enables exhaled air to be collected and directed to a scavenging system</td>
</tr>
<tr>
<td>Lightweight and Disposable</td>
<td>Economical and minimizes the risk of cross-contamination</td>
</tr>
<tr>
<td>Single Patient Use</td>
<td>To minimize the risk of cross-infection</td>
</tr>
<tr>
<td>Biocompatible &amp; ISO conformance</td>
<td>Materials and functions conform to international standards</td>
</tr>
</tbody>
</table>

Order Information

### Adult to Pediatric

<table>
<thead>
<tr>
<th>REF</th>
<th>Patient</th>
<th>Tubing and Connection</th>
<th>Latex Breathing Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Flex tube</td>
<td>Supply</td>
</tr>
<tr>
<td>6617</td>
<td>22/15 Elbow</td>
<td>25cm, 22F Corrugated</td>
<td>200cm, 5F, 15M Cuff</td>
</tr>
<tr>
<td>6606</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Specifications**

**Functions:**
- Breathing bag system meets ISO 5362
- Materials: Single patient use; conform to ISO-10993-1
- Supply tube: PVC

**Dimensions:**
- Patient port 22/15mm conform to ISO 5356-1
- Gas supply port: 15mm OD, conform to ISO 5356-1
- Breathing bag: 2 liters, latex (different sizes or latex-free options available)
- Exhale/scavenge port: 22/19mm
- Tubing: shown in the table above

**Optional Accessories (details see page 16)**
- Anesthesia masks
- Different sizes of breathing bag (3L, 2L, 1L, 0.5L)
- Latex-free breathing bags

**Package:**
- 1 set/pkg, 15 set/box
Venti.Plus™ Hyperinflation System

Order Information

<table>
<thead>
<tr>
<th>REF</th>
<th>Patient</th>
<th>Venti.Plus™ Hyperinflation System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Manometer</td>
</tr>
<tr>
<td>H025</td>
<td>22/15mm</td>
<td>0-60 cmH₂O</td>
</tr>
<tr>
<td>H050</td>
<td>Swivel</td>
<td>0-60 cmH₂O</td>
</tr>
<tr>
<td>H100</td>
<td>Suction</td>
<td>0-60 cmH₂O</td>
</tr>
</tbody>
</table>

Specifications

- Breathing bag meets ISO 5362 for breathing bag
- Materials: Single patient use, conform to ISO-10993-1
- Supply tube: DEHP-Free PVC
- Latex-free breathing bag (green)

Dimensions:
- Patient port 22/15mm conform to ISO 5356-1
- Gas supply port: 4.7mm ID taper soft connector
- Breathing bag and tubing: shown in the table above

Optional Accessories (details on page 16):
- Disposable and durable anesthesia masks
- Models with disposable air-cushion masks included
  REF: H025-M, H050-M, H100-M

Package:
- 1 set/pkg, 20 set/box
# Nitrous Oxide Anesthesia Circuit

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Pain Relief Interface</td>
<td>Delivery of anesthesia gases for pain relief during labour</td>
</tr>
<tr>
<td>One-way valve</td>
<td>Minimizes the mixing of atmospheric air with nitrous oxide within the system</td>
</tr>
<tr>
<td>Filter on Expiratory End</td>
<td>Filters exhaled air before exiting the system</td>
</tr>
<tr>
<td>HMEF on Inspiratory Side</td>
<td>Provides humidification and 0.3 micron filtration membrane with up to 99.99% bacteria filtration efficiency</td>
</tr>
<tr>
<td>Biocompatible &amp; ISO conformance</td>
<td>Materials and functions conform to international standards</td>
</tr>
</tbody>
</table>

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## Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Pain Relief Interface</td>
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</table>

## Order Information

<table>
<thead>
<tr>
<th>Adult</th>
<th>Patient Valved Tee with Mouth Piece</th>
<th>Inspiratory HMEF or Bacteria Filter</th>
<th>Collapsible Tubing 22F Cuff</th>
<th>Expiratory Bacteria Filter</th>
</tr>
</thead>
<tbody>
<tr>
<td>67021</td>
<td>●</td>
<td>HMEF</td>
<td>300cm</td>
<td>●</td>
</tr>
<tr>
<td>67020</td>
<td>●</td>
<td>HMEF</td>
<td>300cm</td>
<td>●</td>
</tr>
<tr>
<td>67018</td>
<td>●</td>
<td>Bacteria Filter</td>
<td>300cm</td>
<td></td>
</tr>
</tbody>
</table>

## Specifications

- Disposable mouthpiece and tee connector with 22F, 22M and 22/15mm one-way valve
- HMEF with 4.3F luer port for pressure sensor or CO₂ detection
- Disposable Collapsible Tubing with 22F Cuff
- Bacteria Filter with 22F, 22/15mm connection ports
- Materials: Single patient use, conform to ISO-10993-1
- Packaging: 1 set/pkg, 25 set/box
### Face Masks

**DeZire™ NIV Mask**
- Lightweight and ergonomic full face mask for NIV.
- Single layer cushion to minimize air leaks. The soft cushion also distributes surface area pressure for greater comfort.
- Each mask includes a headgear.

- **ZV20** SL NIV Mask, L
- **ZV21** SL NIV Mask, M
- **ZV22** SL NIV Mask, S

**Sil-Flex™ Silicone Mask**
- Ergonomic design with soft silicone material to provide better seal and comfort.
- Can be reprocessed for multiple use.
- Lower dead space for better air circulation.
- Bio-compatible and latex free.

- **5183** Sil-Flex Silicone Mask #5, Adult Large
- **5182** Sil-Flex Silicone Mask #4, Adult
- **5181** Sil-Flex Silicone Mask #3, Child Large
- **5122** Sil-Flex Silicone Mask #2, Child
- **5121** Sil-Flex Silicone Mask #1, Infant Large
- **5120** Sil-Flex Silicone Mask #0, Infant

**Indigo Face Mask**
- A single patient use mask designed with patient comfort and practicality in mind.
- Provides comparable comfort level of an air-cushion mask without the need to adjust the air content.
- Uses Non-PVC Material.
- Lightweight and transparent body for better patient monitoring.
- Unique hook ring to secure the face mask in a comfortable position.

- **7MGD01** Indigo Face Mask #1 (Blue)
- **7MGD02** Indigo Face Mask #2 (Orange)
- **7MGD03** Indigo Fa (Pink)
- **7MGD04** Indigo Face Mask #4 (White)
- **7MGD05** Indigo Face Mask #5 (Yellow)
- **7MGD06** Indigo Face Mask #6 (Green)
Face Masks

- **Aplus Aircushion Mask**
  - A super soft mask that offers great patient comfort.
  - Built-in check valve for air volume adjustments in the aircushion.
  - Materials conform to ISO biocompatibility standards.
  - Available in 6 sizes and color-coded for size identification.

  - 5350 Aircushion Mask #0, Infant
  - 5351 Aircushion Mask #1, Infant Large
  - 5352 Aircushion Mask #2, Child
  - 5353 Aircushion Mask #3 w/valve, Child Large
  - 5354 Aircushion Mask #4 w/valve, Adult
  - 5355 Aircushion Mask #5 w/valve, Adult Large
  - 5356 Aircushion Mask #6 w/valve, Extra Large

- **Air-soft Aircushion Mask**
  - A disposable mask for resuscitation, anesthesia and oxygen or aerosol delivery applications.
  - Built-in check valve for air volume adjustments in the aircushion.
  - Materials conform to ISO biocompatibility standards.
  - Available in 6 sizes and color-coded for size identification.

  - 5311 Air-Soft Mask #0 w/valve, Infant
  - 5312 Air-Soft Mask #1 w/valve, Infant Large
  - 5313 Air-Soft Mask #2 w/valve, Child
  - 5314 Air-Soft Mask #3 w/valve, Child Large
  - 5315 Air-Soft Mask #4 w/valve, Adult
  - 5316 Air-Soft Mask #5 w/valve, Adult Large

- **Endo Mask**
  - Single patient use mask for concurrent endoscopy procedures during anesthesia or mechanical ventilation.
  - Endo port carefully engineered to enable smooth insertion of endoscopy tube into nose or mouth.
  - Flexible and expandable membrane to accommodate different endoscope tube sizes and minimize air leakage.
  - Resealable port cap maintains air seal when endoscope is not used.
  - Soft mask with volume-adjustable aircushion to provide better comfort and seal.
  - Transparent mask body for better visual inspection of patient.
  - 4.0M port for pressure or CO₂ monitoring.

  - ED01 Endo Mask (Medium) with Head Strap
  - ED02 Endo Mask (Large) with Head Strap
HMEF & Filter

**Humi.AIDE pHMEF (Paper Media)**
- Provide heat and humidification with filtration between patient and circuit.
- Media: Paper with bacteria / virus filtration efficiency up to 99.99% / 99.97% respectively.
- 4.3 luer port for pressure sensing or CO₂ detection.
- Connection port: 22/15mm, 22/15mm.
- Resistance: 1.53 cmH₂O at 30 lpm.
- Compatible with ISO 9360-1.
- For a more detailed specifications, please refer to the pHMEF specification sheet.

**HF31 pHMEF**
**HF32 pHMEF with Luer Port**

**Adult HMEF (Foam Media)**
- Utilizes electrostatic mechanism to provide up to 99.99% bacteria filtration efficiency with 0.3 micron filter membrane.
- Port dimensions: 22/15mm and coaxial 22M/15F.
- 4.3 luer port for pressure sensing or CO₂ detection.
- Meets international bio-compatibility standards.
- For a more detailed specifications, please refer to the specification sheet.

**39012 HMEF with Luer Port**

**aF1 Disposable Filter**
- Lowers the risk of cross contamination with anesthesia circuit, manual resuscitator and other rescue devices.
- High efficiency with low resistance (<1.02 cmH₂O at 30 lpm).
- 3M filtration media G150 grade.
- ISO standard connections.
- Single-patient use to minimize cross-infection.
- Models with other connection ports are also available. Please refer to the Filter brochure.

**7FAD11 aF1 Disposable Filter, 22F/15M, 22/15mm, Luer**
**7FAD12 aF1 Disposable Filter, 22F/15M, 22/15mm**
Scavenge & Breathing Bags

 Silicone Breathing Bag
- High-performance silicone breathing bag for multiple reprocessing.
- Features a special cuff design and higher bag compliance.
- Tail-end hook for hanging to air-dry.
- Standard 22F connector.

 70099 Silicone Breathing Bag 3L
 70098 Silicone Breathing Bag 2L
 70097 Silicone Breathing Bag 1L
 70096 Silicone Breathing Bag 0.5L

 Latex-Free Breathing Bag
- Single-patient use breathing bag.
- Latex-free to mitigate the risk of latex allergy.
- Lower resistance and standard 22F connector with more rigid cuff.

 70140 Latex-Free Breathing Bag 3L
 70139 Latex-Free Breathing Bag 2L
 70138 Latex-Free Breathing Bag 1L
 70137 Latex-Free Breathing Bag 0.5L
 70142 Latex-Free Breathing Bag 0.25L

 Latex Breathing Bag
- Economical single-patient use breathing bag.
- Lower resistance and standard 22F connector with more rigid cuff.

 70092 Latex Breathing Bag 3L
 70091 Latex Breathing Bag 2L
 70090 Latex Breathing Bag 1L
 70089 Latex Breathing Bag 0.5L

 Silicone Anesthesia Scavenge Bag
- Collects exhaled air from anesthesia system.
- Superior and highly durable silicone breathing bag for multiple reprocessing.
- Tail-end hook for hanging to air-dry.
- Polycarbonate connector 30F.

 70160 Silicone Anesthesia Scavenge Bag, 3L
Support Items for Anesthesia

- **Patient Elbow**
  Various types of patient L connectors for different needs. For the complete list, please refer to the Elbow Connector brochure.

- **Patient Y & T Connectors**
  Thousands of combinations and types of patient Y and T connectors. For the complete list, please refer to the Wye and Tee Connector brochure.

- **ADU Connector**
  A disposable Tee-Piece that can be used in anesthesia circuit or other ventilation equipment. 6M angled port for gas supply or pressure monitoring.
  6727 Disposable ADU Connector

- **Washington T-Piece**
  A disposable Tee-Piece that can be used in anesthesia circuit or other ventilation equipment. 6M angled port for gas supply or pressure monitoring.
  73046 Washington T-Piece

- **Disposable Fiber Optic Laryngoscope Set**
  An economical single-patient use laryngoscope set, made of lightweight engineering plastic.
  6141 Filter Optic Laryngoscope Set (each box including: Mcintosh Blade #2, 3, 4, Miller Blade #0, 1, 2 and Handle)

- **Gas Sampling Line**
  Different types of tubes for sampling.
  30001 Gas Sampling Line 10Ft - MF
  30002 Gas Sampling Line 10Ft - MM
  30009 Gas Sampling Line 10Ft - F/F

- **Tail-End Control Valve**
  Designed to adjust or release air or gas for breathing bag in Jackson Ree circuit or hyperinflation system.
  71065 Durable Tail-End Control Valve
  70029 Disposable Tail-End Control Valve

- **APL Valve**
  Adjustable Pressure Limiting Valve for closed system. Connection port dimension: 22F and 30M
  71083 APL Valve 0-60cmH2O
  71084 APL Valve 0-40cmH2O

- **Manual Resuscitator**
  Durable and disposable manual resuscitators and hyperinflation system for artificial ventilation.
  MG59 Rescu-6™ Manual Resuscitator

- **ERGO Fixtures**
  Ergonomic clamps for pole, table and rail to secure devices in place. Dual holder model available for pole clamp. For more information, please visit www.galemed.com

- **Durable Fiber Optic Laryngoscope Set**
  Stainless steel blade stays cool to touch, minimizing the risk of thermal injury. Fine surface texture.
  6151 Fiber Optic Laryngoscope Set (each pouch includes: Mcintosh Blade #0, 1, 2, & Middle Handle)
  6141 Fiber Optic Laryngoscope Set (each pouch includes: Mcintosh Blade #1, 2, 3, & Middle Handle)
Symbols and Cleaning Instructions

Types of Breathing Circuit Tubing

- Smoothbore Tubing
  - Reduces air turbulence.
  - Low water retention and improved drainage.
- Corrugated Tubing
  - Provides an economical solution for ventilation circuits.
  - Material: EVA. Lightweight.
- Collapsible Tubing
  - Economical solution with lighter weight. Superior flexibility with adjustable length to suit different needs.
  - Reduces transport cost and required storage space.

Materials and Cleaning Instructions

Users or operators should fully understand the functions of each product and the following symbols before use:

- Caution
- Manufacturer
- Manufacturer Date
- Shelf Life
- Product Usage Environment Temperature Limit
- Sterilized by Ethylene Oxide
- Disposable Product. Do not reuse
- Single-Patient use only. Do not reuse on multiple-users.
- DEHP Free
- Latex Free

Common Materials and Sterilization Method

<table>
<thead>
<tr>
<th>Material</th>
<th>Autoclavable</th>
<th>Chemical and Pasteurization</th>
<th>Ethylene Oxide Sterilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Acrylic</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>K-Resin</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>ABS</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Polyethylene(PE)</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Polypropylene(PP)</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hytrel</td>
<td>Up to 121°C</td>
<td>Mild Only</td>
<td>Yes</td>
</tr>
<tr>
<td>Polycarbonate(PC)</td>
<td>Up to 121°C</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Polysulfone(PSF)</td>
<td>Up to 134°C</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Silicone Rubber</td>
<td>Up to 134°C</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Note: PSF and Silicone Rubber are autoclavable up to 134°C (at least 50 cycles). Hytrel and Polycarbonate are autoclavable up to 121°C (at least 20 cycles).

*Dispensable and Single-patient use products are designed to reduce the risk of cross-infection and therefore have strict prohibitions on re-processing and reusing on multiple patients. When reusing durable products, please exercise strict adherence to validated institution policy and procedure, as well as the information available on disinfection or sterilization processes. Clean or disinfect when:

1. Any product part has been used
2. Any product part is contaminated
3. Any product part has been in use for more than 24 hours on a single-patient

Manufacturer’s suggested procedure for disinfection:
The following instruction is a general guide. Please refer to individual organization’s operating instructions on cleaning and disinfecting products:

a. High Temperature Pressure Disinfection:
   Products should be disinfected at 134°C for 5 minutes (e.g., for materials such as polysulfone and silicone). For hytrel and polycarbonate products, the temperature should not exceed 121°C and should not be processed for longer than 15 minutes.

b. Chemical Disinfection:
   Products should be soaked under warm water with mild detergents. Wash and rinse thoroughly to remove any residual material and store in a cool dry place to allow it to air dry.

c. Ethylene Oxide Disinfection:
   Follow the instruction for use for Ethylene Oxide disinfection devices.