

KingFlex2™

co-axial breathing circuit



Versatile. Shapeable. Dependable.

The first and only expandable single-limb breathing circuit on the market. Its smart design and advanced technology make your circuit choice simple. Its versatility has something for everyone.

Versatile.

- For use on patients of every size over 3 kg where a circle circuit would typically be used.
- Easy conversion for use in transport and post-op.

Shapeable.

- Inch-for-inch, among the lightest weight circuits on the market.
- Available in 72" and 108" expanded lengths.
- Expandable single-limb extensions available to increase circuit length.
- 360 degree drapability and solid memory.
- Collapsed-circuit 50-count case pack has small storage space requirements.

Dependable.

- Single machine-end filter provides separate inspiratory and expiratory HEPA-level challenged at >99.97% @ .3 microns.
- Clinically-proven humidification levels achieved through thermal efficiency, without the need for a separate HME.

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Options

- Reusable or disposable transport adapters
- 72" flex extension
- Polymer manifold
- Filtered and non-filtered versions
- Gas sampling lines with and without filters and co-extruded
- Sample port elbow
- Bain/Mapelson D arm adapter
- Scented or non-scented face masks (Size 1, 2, 3, 4, 5, 6 and round)
- Breathing bag – regular, textured, latex-free, Rainbow Breathing Bags® or Contour®

Filter Data

Viral: MIL test – VFE

Average viral (X174, 0.027 micron size) removal efficiency of >99.9996%

Bacterial: MIL test – BFE

Average bacterial Staphylococcus Aureus removal efficiency of >99.9999%

0.3 Micron: HEPA level challenge

Average >99.97% – PASS

Testing Data

Thermal efficiency (°C) in anesthesia only

Temperature was continuously monitored at four positions in the circle system during the test: inspiratory dome valve (I_{vent}) and patient inspiratory (I_{prox}).

| Temperature (Initial) | I _{vent} | I _{prox} |
|-----------------------|-------------------|-------------------|
| King Flex2 | 22.3 | 23.2 |
| Standard Circle | 21.5 | 23.1 |

| Temperature (at 15 min.) | I _{vent} | I _{prox} |
|--------------------------|-------------------|-------------------|
| King Flex2 | 23.6 | 29.2 |
| Standard Circle | 21.6 | 23.9 |

Humidification delivery (at 15 min.) in anesthesia only

Fresh gas flow rate: 2L/min.; tidal volume: 800ml; respiratory rate: 12 breaths/min.

| | |
|--------------------------|---------------------------------|
| Absolute humidity: | 27.1 mg H ₂ O/L |
| Relative humidity: | 91% at 29.5°C |
| Compliance | .60 ml/cmH ₂ O/meter |
| Dead Space with elbow | 13 cc's |
| Dead Space without elbow | 6 cc's |

| Weight | grams/inch |
|------------|------------|
| King Flex2 | 1.71 |

Resistance (cmH₂O)

Defined as the pressure difference from inlet to outlet of the device per unit of flow.

| Flow | 0.5 L/sec |
|------------------------|-----------|
| King Flex2 (insp.) 24" | 0.2 |
| King Flex2 (exp.) 24" | 0.8 |
| King Flex2 (insp.) 72" | 0.6 |
| King Flex2 (exp.) 72" | 1.0 |
| King Flex2 Filter | 0.8 |

Test results and filter data on file.
All testing conducted by independent labs.

King systems

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