



Active Humidification

22mm breathing systems and humidification chamber



Critical Care ▪ Critical Care Breathing Systems

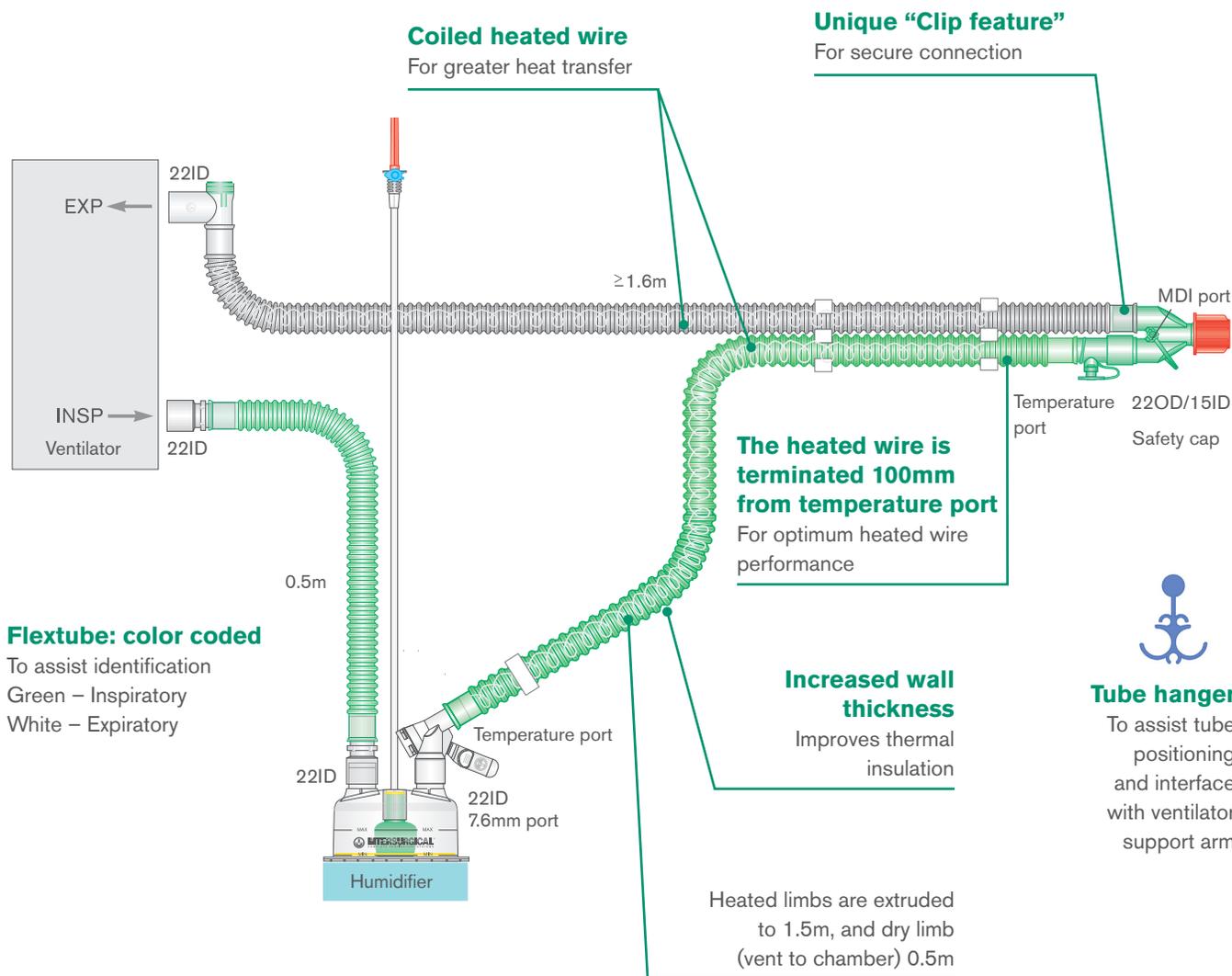
The complete solution for humidification

Intersurgical offers a selection of 22mm breathing systems for active humidification. These products have been designed to be compatible with the majority of humidifier base units found in intensive care areas. The coiled wire design offers an efficient method of transferring inspiratory and expiratory gases to the patient. The systems are packaged ready for use complete with Intersurgical high quality accessories. The humidification chamber is an integral part of the breathing system allowing it to interface with the heated humidifier base unit. The chamber, often referred to as a 'water bath humidifier', can also be used with heated humidifier bases, such as the MR850*, commonly found in intensive care areas.

The Intersurgical auto-fill humidification chamber simply slides into position above the hot plate of the base controller. It allows the inspiratory gas to pass over the water heated by the humidifier, therefore, providing optimum humidification to the patient.

All products shown in this information sheet are DEHP free.

Flextube™ dual heated wire breathing systems



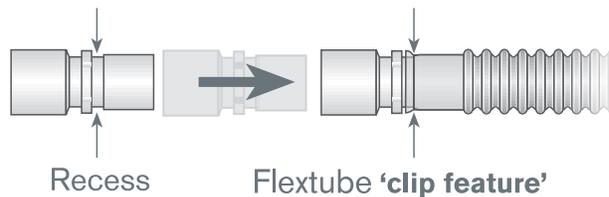
© 2026031A system illustrated

*This is a product of Fisher & Paykel Healthcare

Breathing systems unique features

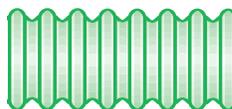
Unique “Clip feature” – cuffed ends

To ensure a secure seal between connector and flextube

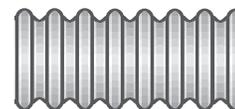


Flextube: color coded

Heated wire breathing systems require clear identification of the inspiratory and expiratory limbs to ensure correct orientation when connecting to the ventilator. Our breathing systems feature a green tint for the inspiratory limb and a white tint for the expiratory limb.



Inspiratory Limb



Expiratory Limb

22mm dual and single limb tube clips

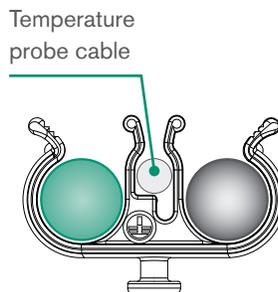
The tube clips are ergonomically designed to support breathing systems, temperature probe cables, and auxiliary lines in a safe and secure manner.



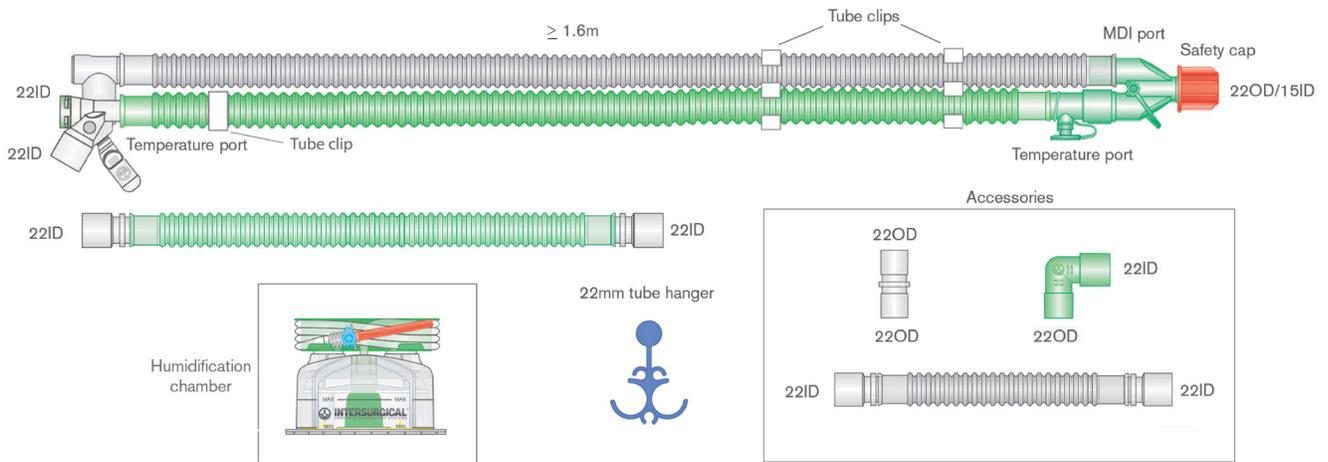
22mm single tube clip



22mm dual tube clip



Dual limb breathing systems for active humidification with heated wire and auto-fill humidification chamber options

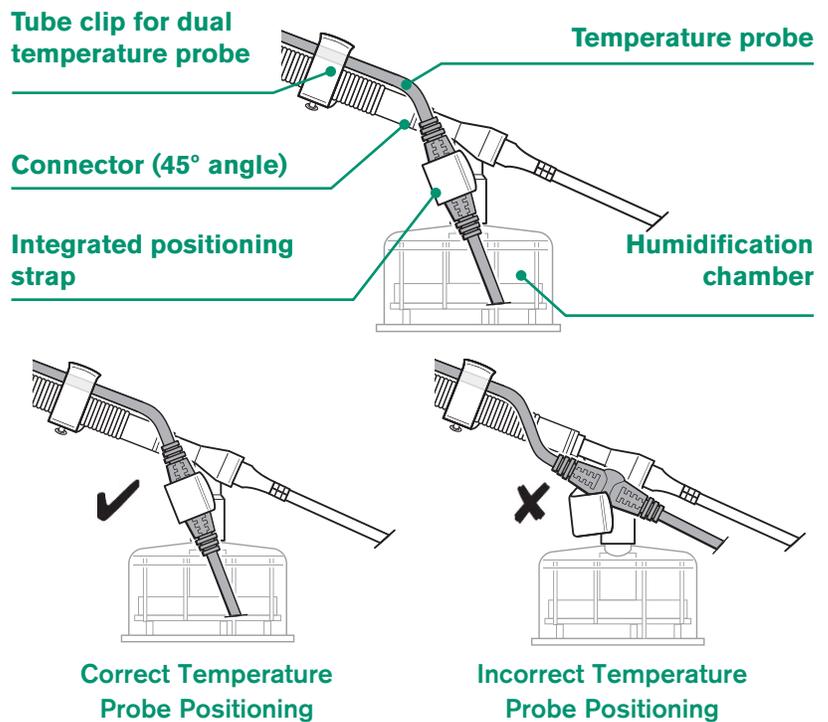


Available without humidification chamber, please see ordering codes below

Distal temperature/flow sensor probe positioning:

- The heated inspiratory limb attaches to the humidification chamber and provides a 45° degree connection allowing better tube positioning
- Insert the distal temperature/flow sensor probe with a continuous, but gentle force in the orientation shown until it butts up against the angled connector
- Snap to close the intergrated positioning strap. This will ensure probe alignment and that it is fully inserted

Note: If the strap is snapped in place the temperature/flow sensor probe is correctly inserted and aligned properly.

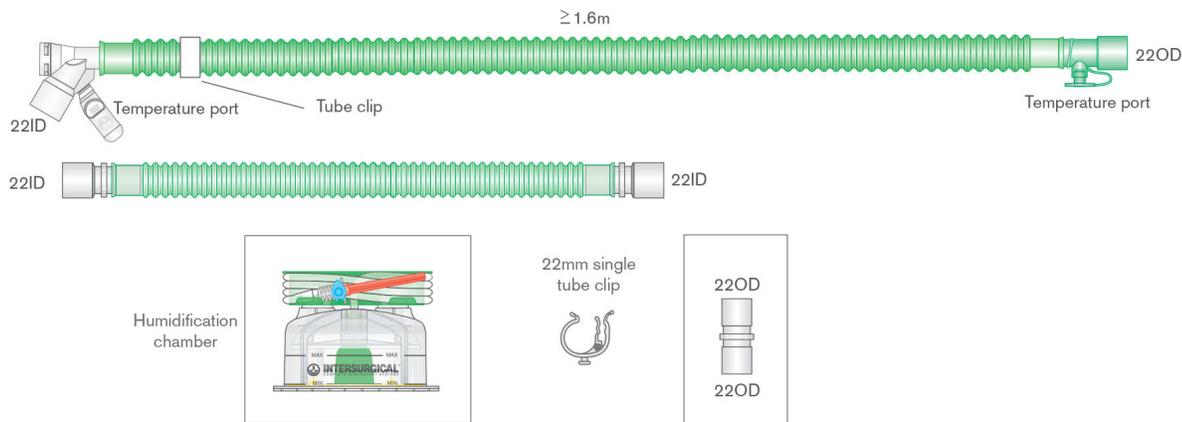


system illustrated

Code	Description	Equivalent to	Box Qty.
2026030A	22mm Flextube dual heated wire breathing system with limb, ≥1.6m length	RT1 10*	10
2026031A	22mm Flextube dual heated wire breathing system with auto fill chamber and limb, ≥1.6m length	RT210*	7



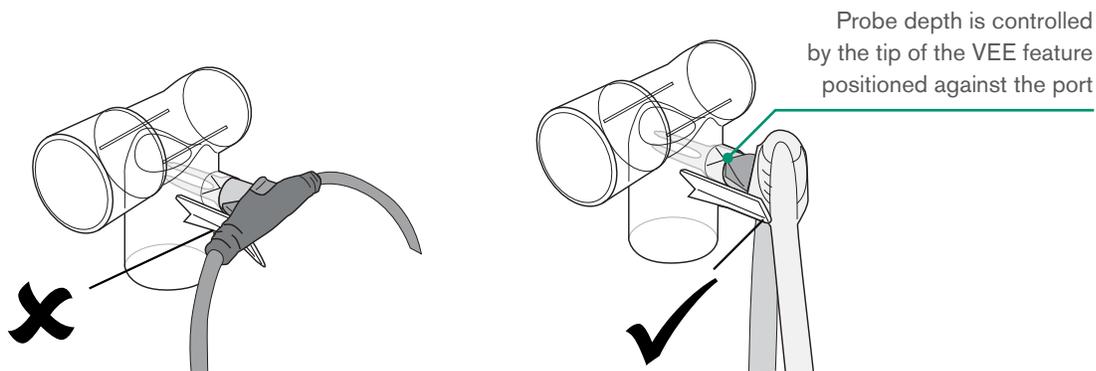
Single limb breathing systems for active humidification with heated wire and auto-fill humidification chamber options



Available without humidification chamber, please see ordering codes below

Temperature probe

Chamber temp probe is positioned using fin or paddle, ensuring correct orientation of the temperature probe in the gas flow.



system illustrated

Code	Description	Equivalent to	Box Qty.
2026035	22mm Flextube single limb heated system with limb, $\geq 1.6\text{m}$ length	RT114*	20
2026036	22mm Flextube single limb heated system with auto fill chamber and limb, $\geq 1.6\text{m}$ length	RT202*	7

*These are all products of Fisher & Paykel Healthcare

Auto-fill humidification chamber

Extensive research has enabled Intersurgical to develop a single use, auto-fill humidification chamber with many unique features that offer benefits and advantages over other humidification chambers on the market. The innovative chamber design has been refined to enhance performance and function while making it easier to use.

The auto-fill chamber establishes a fixed level of fluid within the chamber to maintain a constant system volume. This, coupled with the strong polycarbonate body and non-compressible float design, ensures that adverse changes in system volume are reduced to a minimum.

The auto-fill chamber provides optimum humidity output without compromising the resistance to flow. The dual-float, dual-valve design provides further assurance of reliability.

The Intersurgical auto-fill chamber is supplied complete with a fill set and spike with sealed cap.

Inline filter

Prevents any debris from entering the chamber

Dual-valve

For added security

Baffles and webs

Ensure an efficient gas flow through the chamber for increased humidity

Clearly visible water level indicator

Easy to see for instant accurate fluid level assessment

Advanced dual float design

The closed cell material of the primary float ensures a totally reliable unsinkable rigid mechanism, while the secondary float provides added security

Simplified labeling

Provides precise and clear instructions

Fill set

Permanently attached at the chamber to prevent disconnection

Protective cassette

Protects the chamber from contamination and conveniently stores the fill set before use

Fill set spike cover

With sealed cover to allow for ventilator leak test

Hydrophobic membrane filter

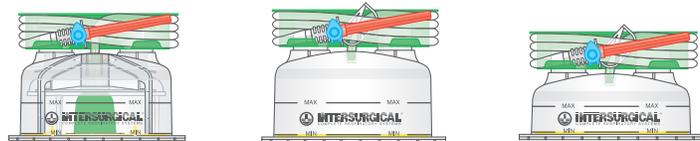
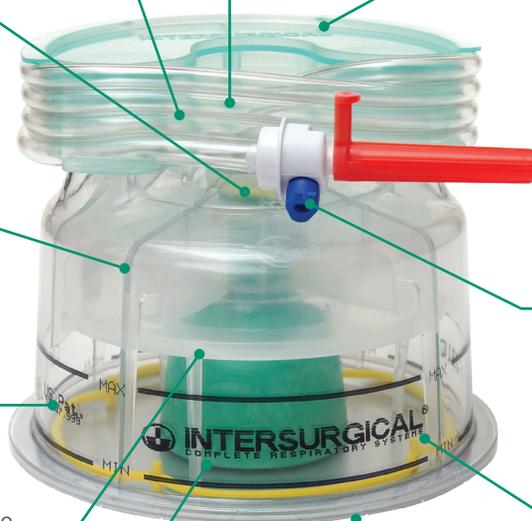
Allows connection to a rigid or collapsible reservoir bottle

Strong polycarbonate clear material

Improved compliance characteristic allows for easy visual assessment of the fluid level at all times

Shrouded heated plate cover

Prevents accidental burns when removing the chamber from the heater base



2310030

2320030

2330030

Code	Description	Equivalent to	Box Qty.
2310030	Auto-fill humidification chamber	MR290*	30
2320030	Manual fill humidification chamber		30
2330030	Low volume manual fill humidification chamber		30

*This is a product of Fisher & Paykel Healthcare

Filter Option



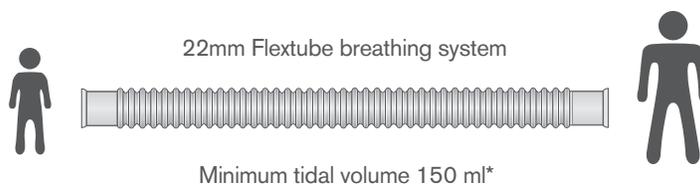
Clear-Guard™ Midi



Filta-Guard™

Code	1644030	1944030
Box Qty.	50	40
Luer lock port	✓	
Bacterial filtration efficiency	>99.9%	>99.999%
Viral filtration efficiency	>99.9%	>99.999%
Resistance to flow at 30L/min	0.7cm H ₂ O	1.0cm H ₂ O
Resistance to flow at 60L/min	1.8cm H ₂ O	2.3cm H ₂ O
Compressible volume	34ml	67ml
Weight	19g	40g
Connectors	22ID – 22OD/15ID	22ID – 22OD/15ID
Minimum tidal volume	>100ml	>200ml

Breathing system application



Breathing system comparison

Description	System Compliance	
Intersurgical dual heated wire breathing system with dry chamber	19.9 ml/kPa	1.95ml/cmH ₂ O
Fisher & Paykel Healthcare dual heated wire breathing system with dry chamber	18.9 ml/kPa	1.85ml/cmH ₂ O

*Minimum tidal volume is a clinical decision based on vital signs and lung condition.

