

3B ComfortLine™



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3B ComfortLine™



Rainout Control System  
Heated Breathing Tube



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# 3B ComfortLine™ Technology

## for a Comfortable Night and Enjoyable Day

### Condensation and Sleep

Obstructive sleep apnea (OSA), a well recognized sleep disorder, is treated by a range of respiratory devices that maintain positive airway pressure (PAP). However, the problem of condensation forming in the breathing tube decreases the effectiveness of these devices, by causing discomfort to the patient, disrupting sleep and impairing optimal humidity.

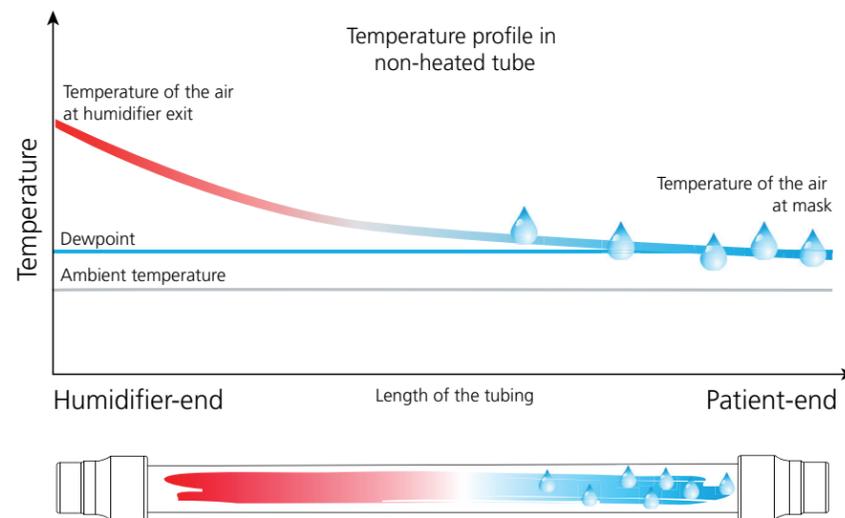
Condensation or rainout is the phenomenon whereby water vapor, generated by the

heated humidifier, turns into water droplets and collects inside the breathing tube.

**Condensation occurs as a result of the air in the tube cooling down.**

Technically, the temperature at which the vapor in the air in the tube starts condensing is known as its dewpoint. Cooling may happen due to a low ambient temperature or cold air flows (air conditioning, air from fans, etc). As water condensation builds up in the

breathing tube, the air reaching the patient will be less humidified. Insufficient humidification can result in nasal dryness and congestion. Additionally, the movement of the water collected in the tube may create a disturbing gurgling noise that may have a negative impact on sleep quality. Tube vibrations resulting from water accumulation may also lead to pressure fluctuations.



### Traditional Solutions and their shortcomings

Patients normally try and minimize rainout by means of various partial solutions:

- Lowering the setting of the heated humidifier, i.e. reducing the humidity output and as a result, decreasing the effectiveness of the humidification itself.
- Putting the breathing tube under the blankets.
- Raising the ambient temperature.
- Using a tubing sleeve or wrap.

### New Generation Flow Generators

Flow generator manufacturers have begun introducing new generation models of heated humidifiers that now have heated breathing tubes integrated in their devices. These heated breathing tubes are designed to only fit onto these new generation flow generators with heated humidifiers.

## Upgrade your equipment with 3B ComfortLine™ and get state-of-the-art humidification performance

The majority of patients still have previous models of flow generators and humidifiers, for which no effective rainout solutions are available.

The innovative 3B ComfortLine™ solution is a heated breathing tube designed to work with any type of humidifier that today uses with standard non-heated tubing.

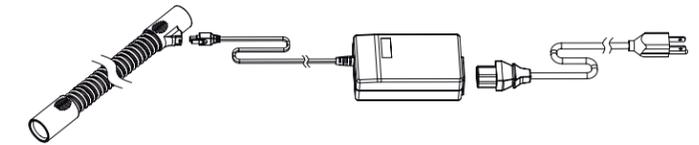
### Replace your standard tube with 3B ComfortLine™ now for better sleep quality

The 3B ComfortLine™ ROC system is an innovative design of stand-alone heated breathing tube that reduces or eliminates condensation in the tubing.

It is a versatile solution that fits all humidifiers, humidifiers and masks that work with standard non-heated tubing.

The 3B ComfortLine™ Rainout Control System consists of the Comfort Line Heated Breathing Tube (HBT) and the Comfort Line Power Supply Unit (PSU).

The 3B ComfortLine™ HBT connects to the Comfort Line PSU via an easy plug-and-play connector.

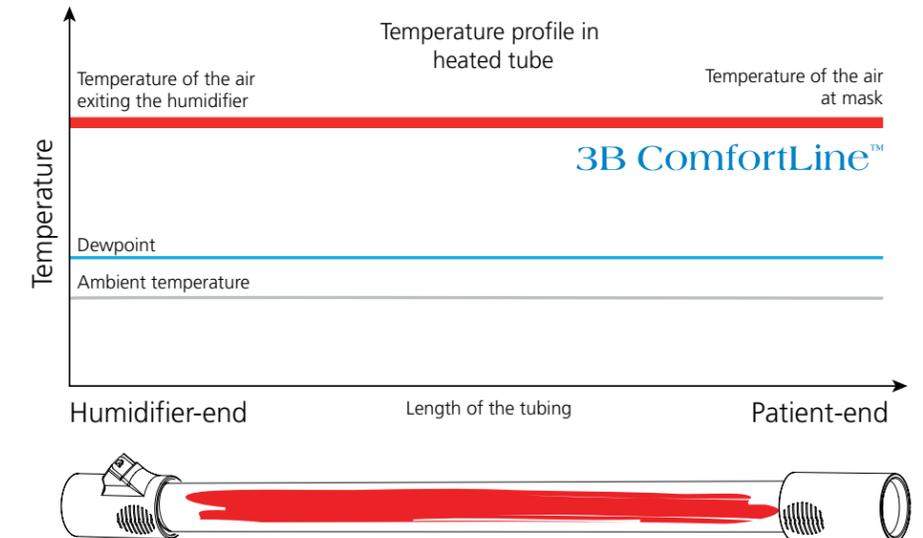


### How Does It Work?

The 3B ComfortLine™ Heated Breathing Tube has copper wires embedded in the tubing wall.

These copper wires generate heat that maintains the air temperature inside the tube.

The heating wires are carefully positioned to provide uniform heating along the tube's entire length, thereby avoiding condensation of water droplets on the wall of the tube and hence water accumulation.



### The Benefits of 3B ComfortLine™ ROC

#### Comfort

The 3B ComfortLine™ ROC enhances therapy comfort by removing condensation.

As a result, patients are no longer obliged to lower the settings of their humidifiers, but now have the opportunity to optimize the humidity output to suit their clinical needs and personal comfort.

Avoiding condensation reduces pressure instability, avoids sleep disruption and provides optimal air humidification. The 3B ComfortLine™ ROC offers you a comfortable night's sleep and an enjoyable day.

#### Convenience

Due to the standard conical connectors, the 3B ComfortLine™ ROC is a universal solution that can be fully integrated into any flow generator or humidifier and all types of mask that today uses standard tubes.

The 3B ComfortLine™ Heated Breathing Tube is connected to the power supply via an easy to use plug-and-play connector.

The 3B ComfortLine™ breathing tube is an innovative accessory that offers unparalleled comfort with any humidifier.

#### Compliance

Compliance with PAP therapy is dependent upon numerous factors related to the patient, clinician and equipment. PAP therapy acceptance by the patient can be improved based on technological interventions like heated humidification, behavioral interventions and by reducing side effects. Condensation in the breathing tube is however a frequent negative side-effect of heated humidification which is mitigated by the 3B ComfortLine™ ROC. As such, the 3B ComfortLine™ ROC is an innovative tool to enhance effective humidification: humidity generated by the humidifier equals humidity delivered to the patient! 3B ComfortLine™ gets you the humidification you deserve!