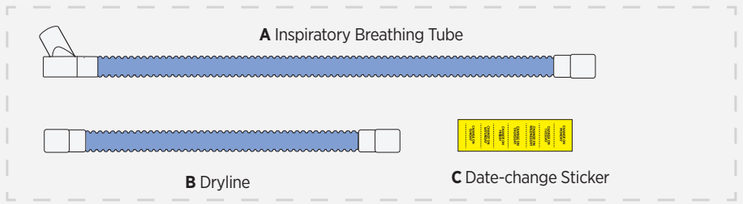
System Setup

(Refer to F&P 820 Humidifier User Instructions for additional information)

Required Components

820A10J



Humidification Chamber Setup

1. Slide the humidification chamber **(E)** onto the humidifier base and fill with water appropriately as per the user instruction.

⚠ WARNING

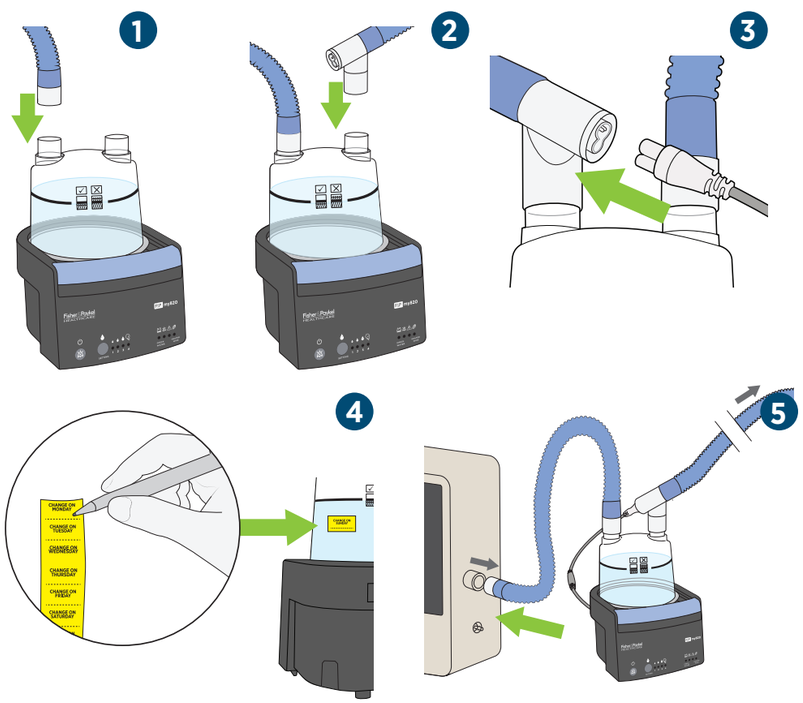
Prior to circuit setup, perform breathing tube checks:

- Visually inspect for damage (e.g., cracks, stretching or deformation), soilage, blockage or contamination.

Circuit Setup:

1. Connect the dryline **(B)** to either humidification-chamber-outlet port **(E)**.
2. Connect the elbow end of inspiratory breathing tube **(A)** to the other humidification-chamber-outlet port **(E)**.
3. Connect the Heater-wire Adapter to the inspiratory breathing tube **(A)**.
4. Select the date-change sticker **(C)** and mark it with the date that the circuit requires replacement.

Continue to the appropriate therapy set-up instructions.



Patient Groups > 10 kg

Technical specifications

Interface Connections	ISO 5356-1 Conical Connectors
Compliance @ 60 cmH_2O	
820A10J and MR325 Breathing Set	1.20 ± 0.10 mL/cmH_2O
	(Including 0.04 mL/cmH_2O measurement uncertainty)
Resistance to Flow	
820A10J and MR325 Breathing Set	
Inspiratory @ 15 L/min	0.25 ± 0.03 cmH_2O
Inspiratory @ 30 L/min	0.73 ± 0.06 cmH_2O
	(including 0.02 cmH_2O measurement uncertainty)
Maximum Operating Pressure	8 kPa
Breathing Tube Length	1.57 m (5' 2")
Breathing Tube Minimum Internal Diameter Ø	20 mm
Flowrate range (BTPS)	
Setting 1–3	5–70 L/min
Setting 4	5–40 L/min
Gas Leakage @ 60 cmH_2O	<40 mL/min
Maximum Delivered Gas Temperature	43 °C
Maximum Surface Temperature of the Breathing Tube (Applied Part)	44 °C

Operating Conditions

Ambient Temperature	18–26 °C (64–79 °F)
Ambient Humidity	15–90% RH
Pressure	700–1060 hPa

Inlet Gas Temperature

Minimum Inlet Gas Temperature:
Current Ambient Temperature
Maximum Inlet Gas Temperature:
Current Ambient Temperature + 10 °C

Humidity ≤20 mg/L

Symbol Definitions

	Exhaled gas	Rx only	Prescription only
	Fragile, handle with care		Date of manufacture
	Consult operating instructions		Manufacturer
	Type BF applied part		Use-by date
PHT DEHP BBP DBP	Not made with phthalates		Recyclable
LATEX	Not made with natural rubber latex	14	14 Days maximum use
	Single use		Transportation and storage temperature limits
LOT	Lot number	EC REP	European Union authorized representative
REF	Reference number		Importer
	This way up		Distributor
CH REP	Authorized representative for Switzerland		Patient category
UK REP	UK responsible person		

Warnings, Cautions and Notes

⚠ WARNINGS

Failure to comply with the warnings in these user instructions may impair performance of the device or compromise safety, including potentially causing serious harm:

- Do not use the breathing tubes longer than the specified 14-days duration of use.
- F&P-820-series breathing tubes have been designed and verified for use with the F&P 820 System, F&P my820 System and their accessories. Do not use these breathing tubes with any other respiratory humidifier or accessories.
- Remove any ignition sources, such as cigarettes, open flames or materials that ignite easily at high-oxygen concentrations, from the vicinity of the humidifier and its accessories.
- Ensure that the breathing tubes are correctly connected to facilitate sufficient delivery of respiratory gases to the patient.
- Always place the humidification chamber lower than the patient end of the breathing tube. This setup allows condensate to drain away from the patient and towards the humidification chamber, preventing blockage or occlusion.
- Appropriate monitoring must be in place during use to ensure exhalation pathways are kept clear. Failure to comply may lead to patients inhaling excess carbon dioxide (CO_2) resulting in hypercapnia.
- To avoid strangulation or tripping, ensure the breathing tubes and power cord are positioned in a tidy manner away from the floor and patient, so they will not get entangled or wrapped around limbs or neck.
- Monitor the breathing tube for condensate hourly to prevent excessive buildup of mobile condensate. If excessive buildup of mobile condensate is identified in the inspiratory breathing tube, drain the excess condensate back into the humidification chamber as required by lifting the inspiratory breathing tube, taking care not to let condensate travel towards the patient.
- Do not modify the breathing tubes in any way.
- Do not clean the breathing tubes as they are not intended to be cleaned.
- Do not stretch or milk the breathing tubes.
- Do not use the breathing tubes between patients. They are intended to be used by a single patient only.
- The prescribing physician or responsible organization is accountable for the compatibility of the flow source, patient interface and other devices used in combination with the F&P 820 System and F&P my820 System to administer clinical therapy to a patient. For each unique patient, set of devices and clinical therapy it is important to consider there is an appropriate expiratory gas pathway to avoid potential buildup of carbon dioxide (CO_2) and appropriate gas pressure control or relief to avoid potential barotrauma.
- Before operating the respiratory humidifier, ensure that the flow source is connected, turned on, and set up in accordance with the flow-rate range specified in the Technical specifications section of these user instructions.
- Replace the breathing tubes if damaged, soiled, blocked, or contaminated
- This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to http://www.P65Warnings.ca.gov

Caution

- Do not cover breathing tubes, e.g., with a blanket. Failure to comply may impair performance or injure the patient.

Notes

- Be aware of the layout of the breathing tubes during set up. Avoid stretching, deforming or kinking, i.e., sharp bends, the breathing tubes to prevent leak.
- Please refer your enquiries about set up, troubleshooting and any unexpected operation of the respiratory humidifier or accessories to your healthcare provider or local Fisher & Paykel Healthcare representative.
- If a serious incident has occurred while using this device, please inform your local Fisher & Paykel Healthcare representative and the Competent Authority in your country.
- Breathing tube may be kitted with accessories. The accessories may or may not be necessary depending on the specific-use scenario.

Disposal

⚠ WARNING: After use, dispose of the breathing tubes and accessories as per the responsible organization's, or local authorities, guidelines.

F&P 820 System

QUICK SETUP GUIDE

F&P 820 Circuit Heated Single Limb 22 mm

USER INSTRUCTIONS REF 820A10J

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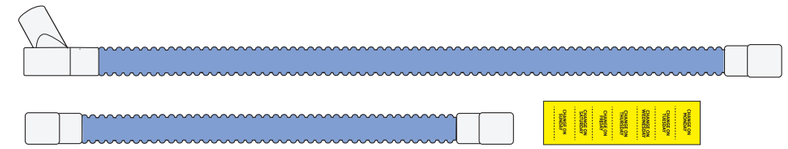
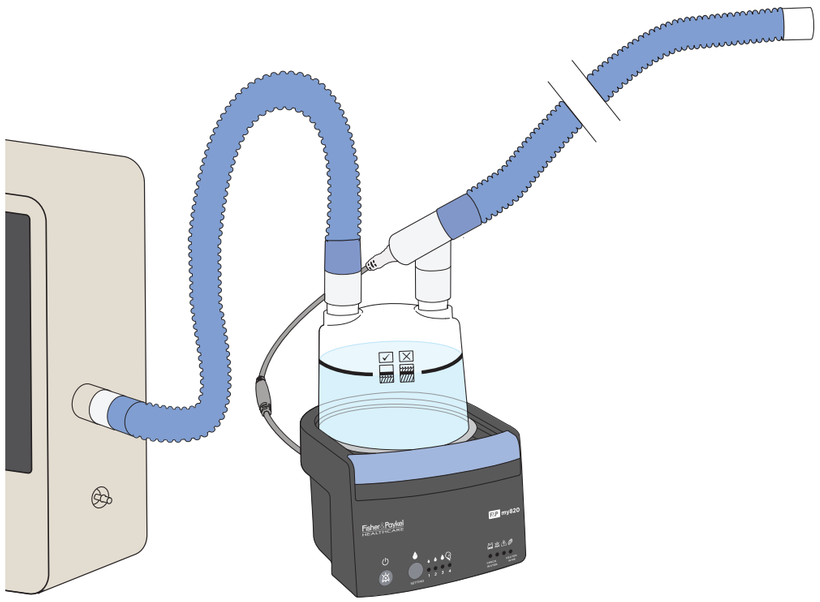


Rx only 14



Indications for use

The F&P-820-series breathing tubes are an accessory to the F&P 820 System and F&P my820 System and are compatible with F&P 820 and F&P my820 respiratory humidifiers.

The F&P 820 System and F&P my820 System are intended to provide therapeutic levels of heat and humidity to a patient's inspired respiratory gases when using a continuous or intermittent ventilator system or a continuous gas flow.

This system is intended for both noninvasive and invasive therapies. The addition of heat and humidity to the supply of cold and dry respiratory gases provided through noninvasive or invasive ventilation is beneficial to prevent drying of the patient's airways.

This system is designed for adult and pediatric (excluding neonate) use in hospitals, long-term-care facilities and homes, under the prescription of qualified medical professionals.

www.fphcare.com

REF 903025 REV A 2023-08

Fisher & Paykel HEALTHCARE

F&P 820 System

High-flow Therapy Setup

with a nasal cannula interface

Nasal Cannula

⚠ **WARNING:** Ensure the nasal cannula is appropriately sized to allow venting. See the nasal cannula user instructions for information.

Patient Group

Adult

Ventilator or Flow Source Requirements

- Must operate in a high-flow therapy mode for a single-breathing-tube configuration.
- Must have a 22 mm male connection to the breathing tube, conforming with ISO:5356-1.

Patient Interface Compatibility

- Must be compatible with humidified gas.

Examples
- F&P Optiflow™ 3S: OPT104X
- F&P Optiflow+: OPT94X

Set-up Instructions

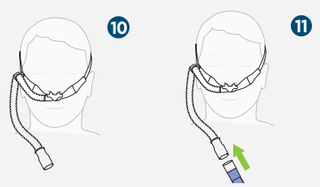
5. Connect the other end of the dryline **(B)** to the ventilator or flow source.
6. Turn on the ventilator or flow source, set up for therapy and perform any checks if required as per its user Instructions. Start ventilation flow.
7. Check flow rate is within range for therapy (as specified in the F&P 820 Humidifier user instructions).
   - Flow-rate range: 5–70 L/min for settings 1, 2 and 3; 5–40 L/min for setting 4.
8. Turn on the F&P 820 Humidifier Base and complete any start-up checks (as specified in the F&P 820 Humidifier user instructions).
9. Select a temperature and humidity setting.
   - Temperature and humidity setting 1, 2, 3 or 4 (as per F&P 820 Humidifier user instructions), depending on patient comfort.

⚠ **WARNING:** Check the humidification setting correctly matches the flow rate and patient interface

10. Connect a nasal cannula to the patient.
11. Connect the patient end of the inspiratory tube **(A)** to the patient (nasal cannula) to initiate therapy.

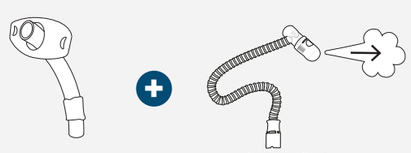
Refer to F&P 820 Humidifier user instructions for in-use operation.

Population	Humidifier Setting	Flow Rate
Adult	Setting 1 ●○○○ Setting 2 ●●○○ Setting 3 ●●●○	5–70 L/min
	Setting 4 ●●●●	5–40 L/min



High-flow Therapy Setup

with a tracheostomy or ET Tube



Tracheostomy or ET Tube

Tracheostomy direct-connection Interface

⚠ **WARNING:** The F&P Optiflow™ OPT970 'tracheostomy direct connection' MUST be used when providing high-flow therapy via a tracheostomy tube. This requirement is to ensure that there is an open pathway for the patient to exhale.

Patient Group

Adult

Ventilator or Flow Source Requirements

- Must operate in a high-flow therapy mode for a single-breathing-tube configuration.
- Must have a 22 mm male connection to the breathing tube, conforming with ISO:5356-1.

Patient Interface Compatibility

- Must be compatible with humidified gas.
- Must have a 15 mm male connection as per ISO: 5356-1.

Set-up Instructions

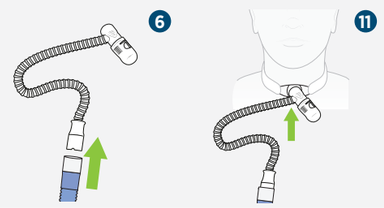
5. Connect the other end of the dryline **(B)** to the ventilator or flow source.
6. Connect F&P tracheostomy direct-connection interface to the patient end of inspiratory tube **(A)**.
7. Turn on the ventilator or flow source, set up for the therapy and perform any checks if required as per its user instructions. Start ventilation flow.
8. Check flow rate is within range for therapy (as specified in the F&P 820 Humidifier user instructions).
   - Flow-rate range: 5–40 L/min.
9. Turn on the F&P 820 Humidifier Base and complete any start-up checks (as specified in the F&P 820 Humidifier user instructions).
10. Select a temperature and humidity setting.
    - Temperature and humidity setting 4 (as per the F&P 820 Humidifier user instructions).

⚠ **WARNING:** Check the humidification setting correctly matches the flow rate and patient interface.

11. Connect the F&P tracheostomy direct-connection interface to the patient's tracheostomy or endotracheal tube to initiate therapy.

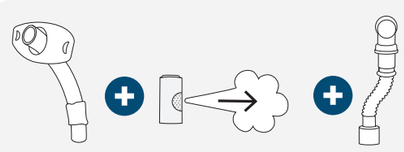
Refer to F&P 820 Humidifier user instructions for in-use operation.

Population	Humidifier Setting	Flow Rate
Adult	Setting 4 ●●●●	5–40 L/min



Ventilation Therapy Setup

with a tracheostomy or ET Tube



Tracheostomy or ET Tube

Expiratory valve or Intentional leak device

Flexible Adapter

⚠ **WARNING:** Ensure an expiratory valve or intentional-leak device is used.

Patient Group

Adult and pediatric

Ventilator or Flow Source Requirements

- Must operate in a therapy mode for a single-breathing-tube configuration that is intended to leak.
- Must have a 22 mm male connection to the breathing tube, conforming with ISO:5356-1.
- Must be compatible with the selected interface and the passive-exhalation port.

Patient Interface Compatibility

- Must be compatible with humidified gas.

Intentional-leak Device Compatibility

- Must have an appropriate exhalation pathway (leak).
- Must have a 22 mm male connection to the breathing tube, conforming with ISO:5356-1.

Flexible-adapter Compatibility

- Must be compatible with humidified gas.
- Must connect the tracheostomy or endotracheal tube to the passive-exhalation port.

Set-up Instructions

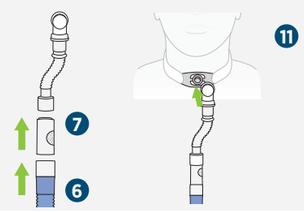
5. Connect the other end of the dryline **(B)** to the ventilator or flow source.
6. Connect the expiratory valve or intentional-leak device to the patient end of the inspiratory tube **(A)**.
7. Connect the flexible adapter to the end of the expiratory valve or intentional-leak device.
8. Turn on the ventilator or flow source, set up for the therapy and perform any checks if required as per its user instructions. Start ventilation flow.
9. Turn on the F&P 820 Humidifier Base and complete any start-up checks (as specified in the F&P 820 Humidifier user instructions).
10. Select a temperature and humidity setting.
    - Temperature and humidity setting 4 (as per the F&P 820 Humidifier user instructions).

⚠ **WARNING:** Check the humidification setting correctly matches the flow rate and patient interface.

11. Connect the flexible adapter to the patient's tracheostomy or endotracheal tube to initiate therapy.

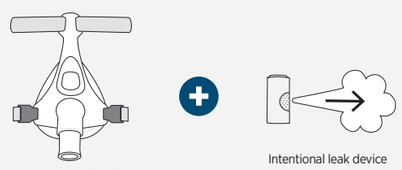
Refer to the F&P 820 Humidifier user instructions for in-use operation.

Population	Humidifier Setting	Flow Rate
Adult Ped	Setting 4 ●●●●	5–40 L/min



Ventilation Therapy Setup

with a non-vented mask



Non-vented Mask

Intentional leak device

⚠ **WARNING:** Ensure an intentional-leak device is used.

Patient Group

Adult

Ventilator or Flow Source Requirements

- Must operate in a therapy mode for a single-breathing-tube configuration that is intended to leak.
- Must have a 22 mm male connection to the breathing tube, conforming with ISO:5356-1.
- Must be compatible with the selected mask and the passive-exhalation port.

Patient Interface Compatibility

- Must be compatible with humidified gas.
- Must connect with the chosen passive-exhalation port.

Examples
- F&P Nivairo™: RT045
- F&P Visairo™: RT075

Intentional-leak Device Compatibility

- Must have an appropriate exhalation pathway (leak).
- Must have a 22 mm male connection to the breathing tube, conforming with ISO:5356-1.
- Must connect with the chosen interface.

Set-up Instructions

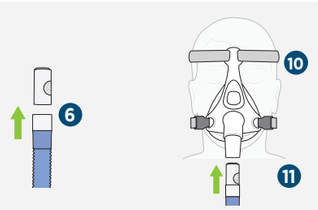
5. Connect the other end of the dryline **(B)** to the ventilator or flow source
6. Connect the intentional-leak device to patient end of inspiratory tube **(A)**
7. Turn on the ventilator, set up for therapy and perform any checks if required as per its user instructions. Start ventilation flow.
8. Turn on the F&P 820 Humidifier Base and complete any start-up checks (as specified in the F&P 820 Humidifier user instructions).
9. Select a temperature and humidity setting
   - Humidifier setting: 1, 2, or 3 (as per F&P 820 Humidifier user instructions) depending on patient comfort.

⚠ **WARNING:** Check the humidification setting correctly matches the flow rate and patient interface.

10. Fit mask to patient.
11. Connect the intentional-leak device with the inspiratory tube and to the patient (mask) to initiate therapy

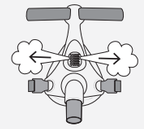
Refer to the F&P 820 Humidifier user instructions for in-use operation.

Population	Humidifier Setting	Flow Rate
Adult	Setting 1 ●○○○ Setting 2 ●●○○ Setting 3 ●●●○	5–70 L/min



Ventilation Therapy Setup

with a vented mask



Vented Mask

⚠ **WARNING:** Ensure vented mask is selected.

Patient Group

Adult

Ventilator or Flow Source Requirements

- Must operate in a therapy mode for a single-breathing-tube configuration that is intended to leak.
- Must have a 22 mm male connection to the breathing tube, conforming with ISO:5356-1.
- Must be compatible with the selected mask.

Patient Interface Compatibility

- Must be compatible with humidified gas.
- Must have a 22 mm male connection, conforming with ISO:5356-1.
- Must have an appropriate exhalation pathway (leak).

Examples
- F&P Nivairo: RT047
- F&P Visairo: RT077

Set-up Instructions

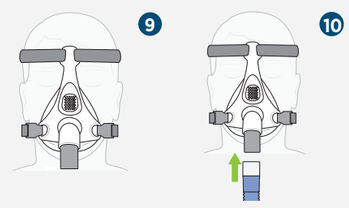
5. Connect the other end of the dryline **(B)** to the ventilator or flow source
6. Turn on the ventilator, set up for therapy and perform any checks if required as per its user instructions. Start ventilation flow.
7. Turn on the F&P 820 Humidifier Base and complete any start-up checks (as specified in the F&P 820 Humidifier user instructions).
8. Select a temperature and humidity setting
   - Humidifier setting: 1, 2, or 3 (as per the F&P 820 Humidifier user instructions) depending on patient comfort.

⚠ **WARNING:** Check the humidification setting correctly matches the flow rate and patient interface.

9. Fit mask to patient.
10. Connect the patient end of inspiratory tube **(A)** to the patient (mask) to initiate therapy.

Refer to the F&P 820 Humidifier user instructions for in-use operation.

Population	Humidifier Setting	Flow Rate
Adult	Setting 1 ●○○○ Setting 2 ●●○○ Setting 3 ●●●○	5–70 L/min



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