









fabian™ family of ventilators

TECHNICAL SPECIFICATION E-BOOK

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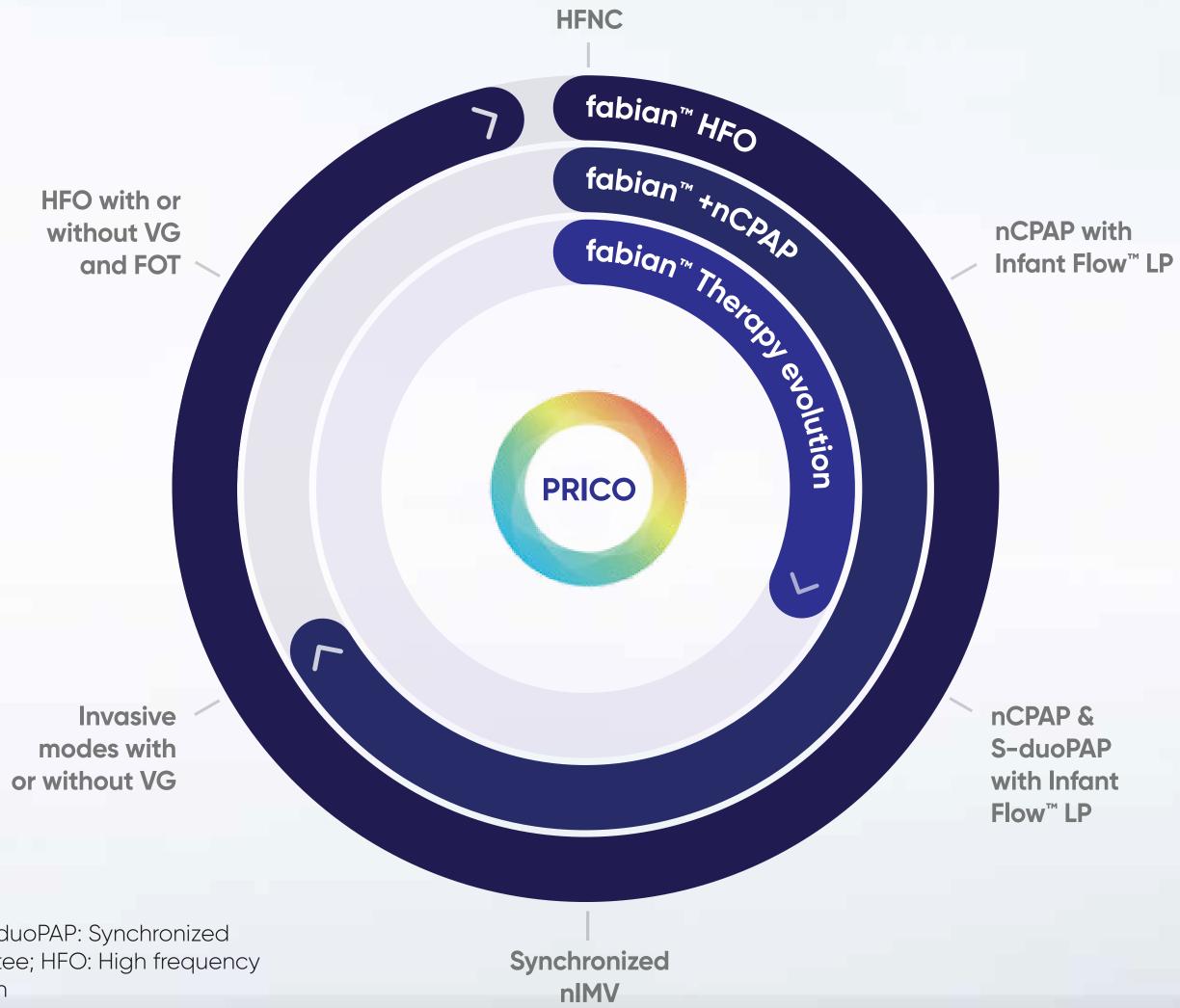
# For every baby under your care

There is a fabian™ device that meets their specialized respiratory needs.

fabian™ ventilation devices deliver vital care across the entire neonatal acuity spectrum—from the newborn who needs help after a complicated delivery to the most fragile premature baby in the NICU.

Designed for improving your workflow and budget, the fabian™ ventilator empowers the clinician to maintain the highest level of care as the infant's condition and needs change.

### Evolution of therapy as required to meet the infant's condition



HFNC: O<sub>2</sub> therapy-High flow nasal cannula; nCPAP: Nasal continuous positive airway pressure; S-duoPAP: Synchronized duo positive airway pressure; nIMV: Nasal intermittent mandatory ventilation; VG: Volume Guarantee; HFO: High frequency oscillation; FOT: Forced Oscillation Technique; PRICO: Predictive Intelligent Control of Oxygenation

## The fabian™ family of ventilators

Our total commitment to respiratory care is reflected in the comprehensive solutions we offer, ensuring appropriate care is readily available.

To optimize outcomes in the NICU, you need ventilation devices that help both vulnerable newborns and overburdened care teams breathe easier. No matter which product you choose, you're getting a device that features the latest technology and is ready to ventilate across the continuum of care.







fabian<sup>™</sup> +nCPAP evolution



fabian<sup>™</sup> HFO

Compare fabian<sup>™</sup> models and see how they differ in features, modes and more.



# Our expertise helps them quickly get home

Learn more about each device

Click on each item to learn more



fabian<sup>™</sup> Therapy evolution



fabian<sup>™</sup> +nCPAP evolution





fabian<sup>™</sup> HFO

A complete and highly advanced non-invasive ventilator featuring all classic and new NIV modes.

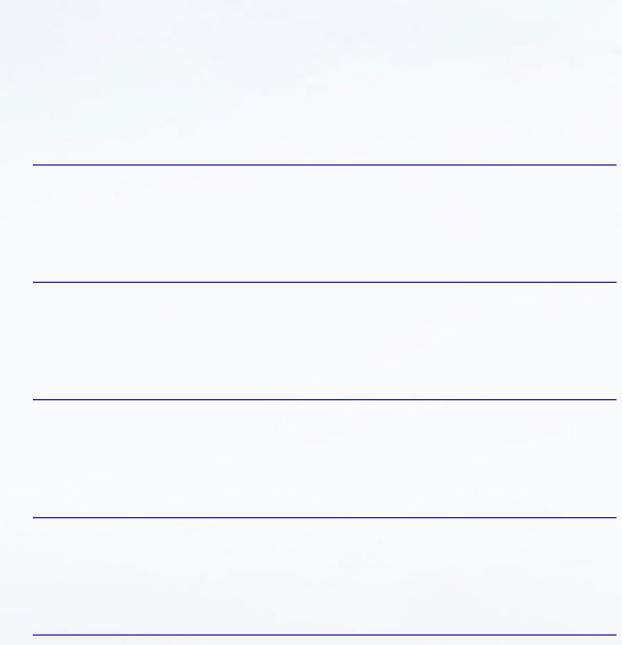
- >>> Feature highlights
- >>>> Standout ventilation modes
- >>> Technical specification summary





#### Feature highlights

Click categories below to view content



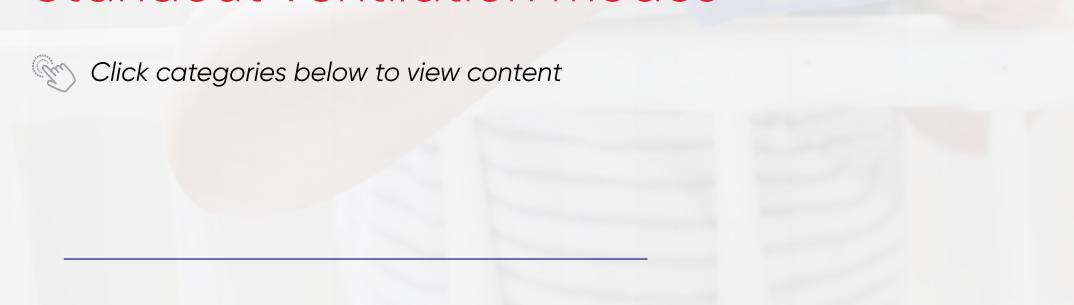




fabian™ Therapy evolution



Standout ventilation modes

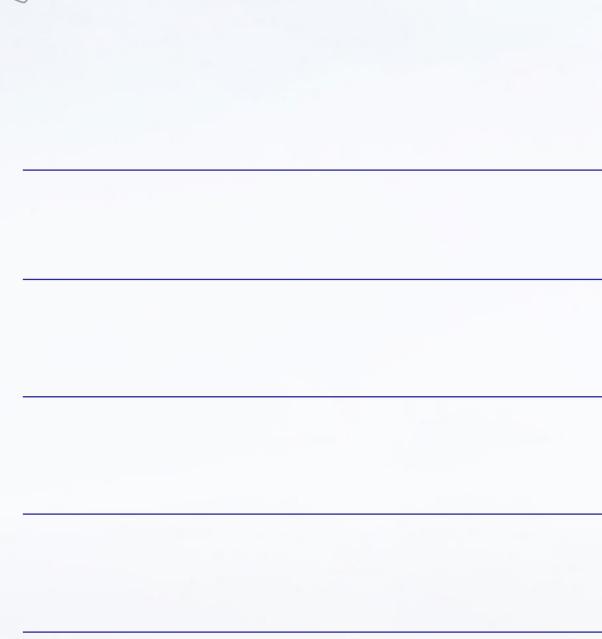


fabian™ Therapy evolution

#### Technical specifications



Click categories below to view content







fabian™ Therapy evolution

#### fabian™ +nCPAP evolution

Includes all of the noninvasive capabilities of the fabian<sup>™</sup> Therapy evolution, enhanced with invasive features that promote ventilator precision and synchrony.

- >>> Feature highlights
- >>> Standout ventilation modes
- >>> Technical specification summary





### fabian +nCPAP evolution

#### Feature highlights







### fabian +nCPAP evolution



#### Standout ventilation modes



### fabian +nCPAP evolution

#### Technical specifications





#### fabian HFO

The fabian™ HFO with a 10.4" touch screen is our most comprehensive ventilator. This model has true single membrane high frequency oscillation with active inspiration and expiration.

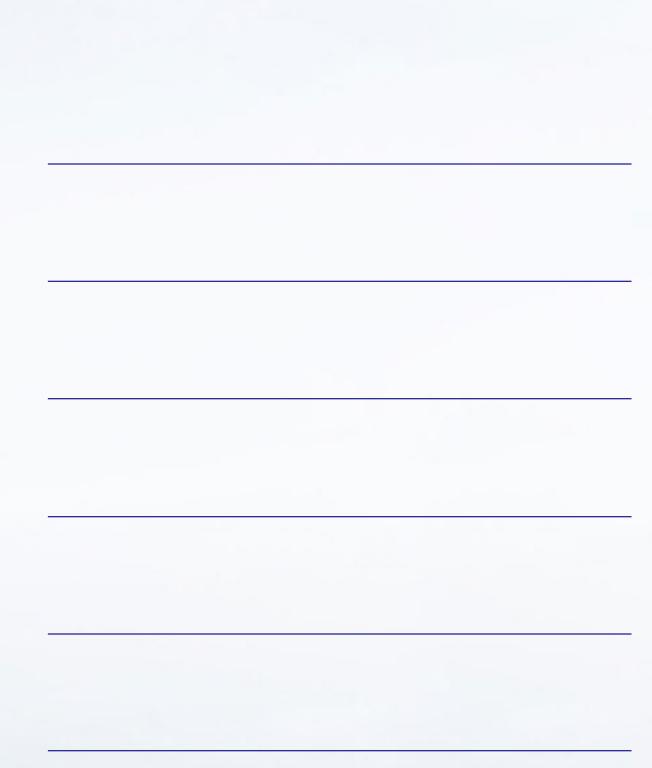
- >>> Feature highlights
- >>> High frequency oscillator (HFO)
- >>> Technical specification summary





## fabian HFO

#### Feature highlights







## fabian HFO

#### Technical specifications



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fabian™ HFO

## High Frequency Oscillation



fabian<sup>™</sup> offers high frequency oscillation in addition to all standard NIV and conventional modes

High frequency oscillation (HFO) in the fabian<sup>™</sup> is designed with a single membrane and piston technology. The design enables high performance with active inspiration and expiration. This is the same working principle behind the 3100A oscillator.

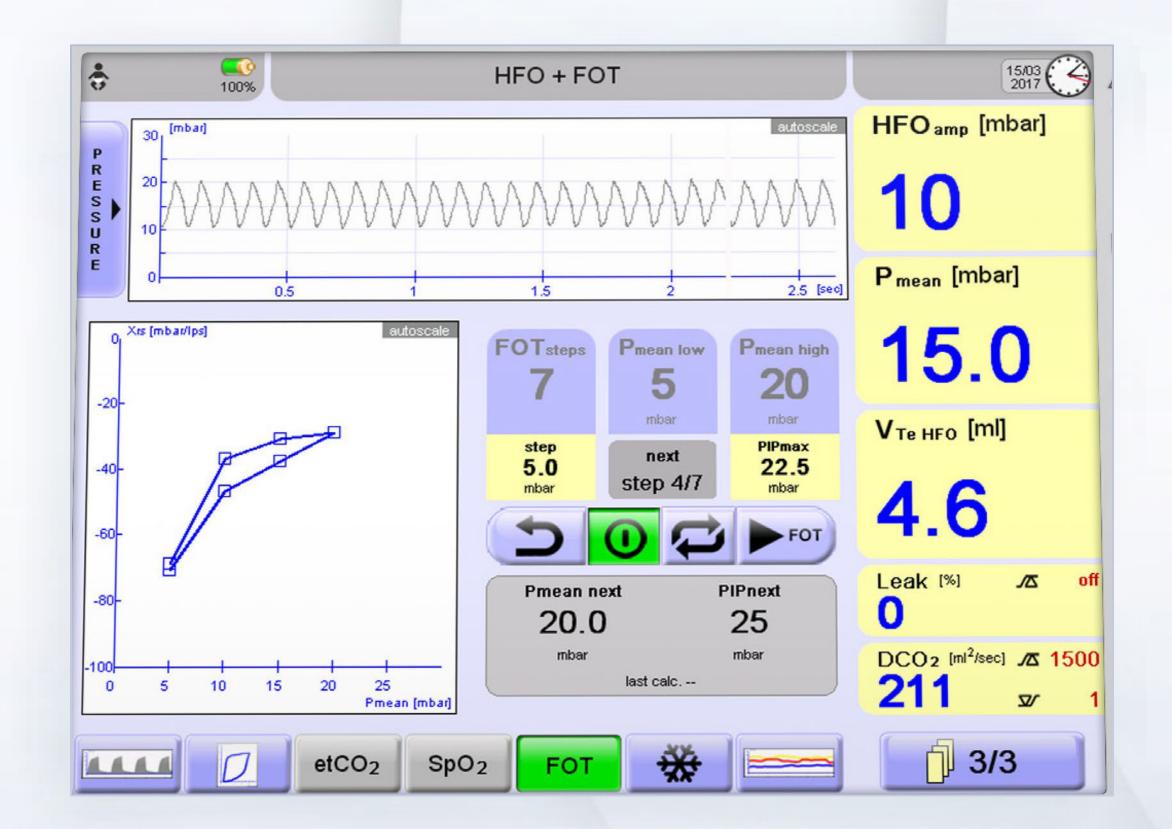
HFO is fully integrated into the inspiratory section. The fresh gas port allows for easier use of Nitric Oxide (NO) systems and functions as the nCPAP port, making it even easier to switch modalities.

The bias flow and expiratory valve mechanism minimizes mean airway pressure (MAP) instability in instances of high leaks.

Other optional settings during HFO therapy include:

- Volume limit
- Volume guarantee
- FOT
- PRICO
- Manual inspiration

- Nasal-HFO
- Nebulizing treatment
- O<sub>2</sub> flush
- ETCO<sub>2</sub>





### Forced Oscillation Technique

#### Vyare

#### Intelligent lung optimization from the very start

#### Available on the fabian™ HFO

The patented Forced Oscillation Technique (FOT) is a non-invasive, protective and easy method that allows the clinician to optimize lung volume. During a recruitment maneuver FOT determines the optimal reactance Xrs by sending a small and well defined pressure oscillation into the airway opening, and subsequently measures the flow response of the respiratory system. The reactance Xrs is a very precise measure of how the lung reacts to the pressure pulse. By setting the optimal CPAP, PEEP and MAP level for the individual patient, FOT greatly reduces mechanical stress to the lungs.

#### The following sensors and ventilation additives can be used together with FOT:

- Volume Guarantee (VG)
- Volume Limit (VL)
- SpO<sub>2</sub> sensor
- Predictive Intelligent Control of Oxygenation (PRICO)

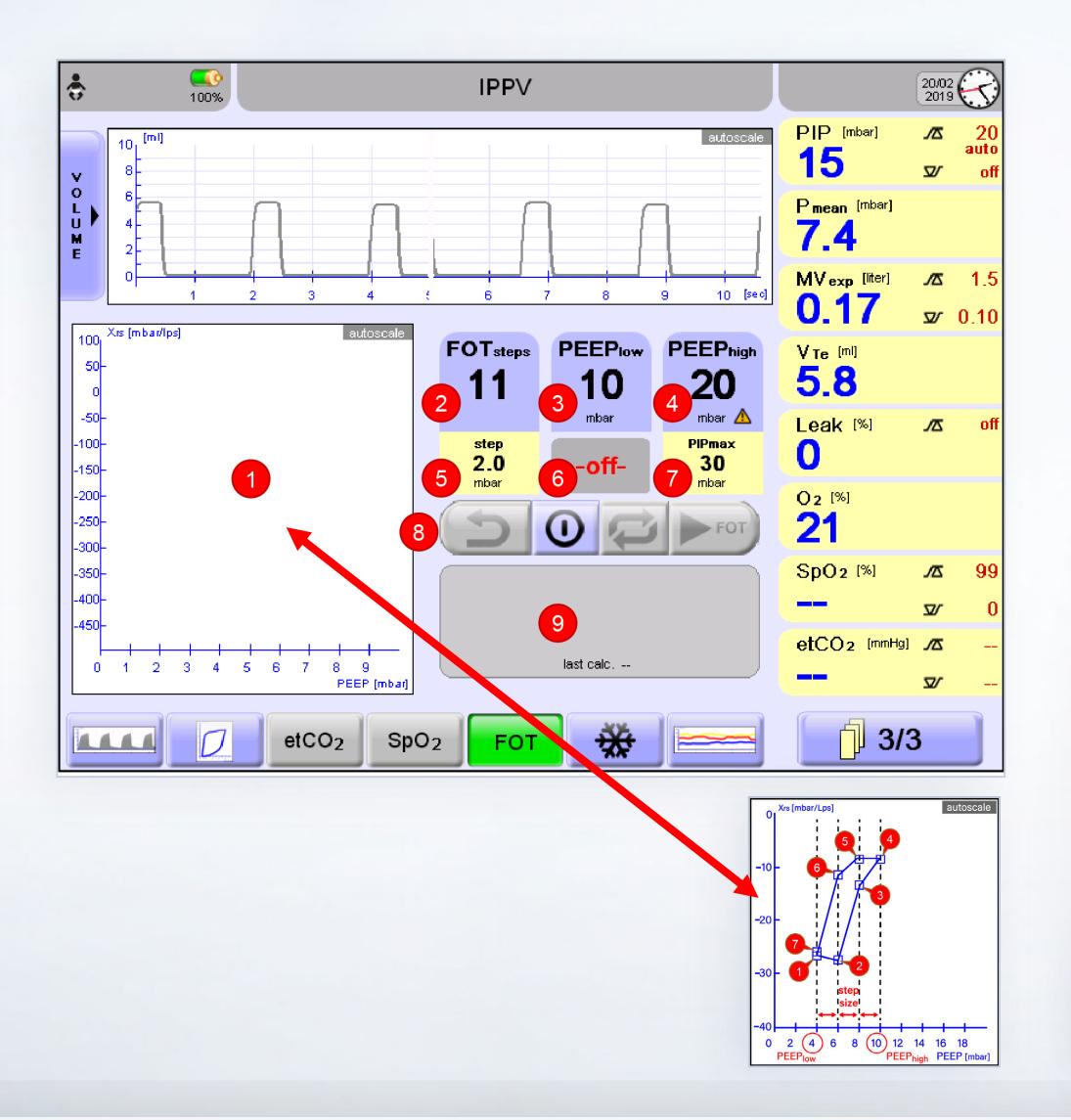
FOT is available as a submenu under Waves / loops in fabian™ HFO ventilators in the following modes:

| FOT Type         |  |  |
|------------------|--|--|
| FOT-HFO          |  |  |
|                  |  |  |
|                  |  |  |
| FOT-Conventional |  |  |
|                  |  |  |
|                  |  |  |
|                  |  |  |
|                  |  |  |



# FOT on display





| IPPV settings |         | FOT settings |          |          |        |
|---------------|---------|--------------|----------|----------|--------|
| PEEP          | Pinsp   | PEEPlow      | PEEPhigh | FOTsteps | Step   |
| 6 mbar        | 14 mbar | 4 mbar       | 10 mbar  | 7        | 2 mbar |

fabian™ HFO

# Predictive Intelligent Control of Oxygenation

Predictive Intelligent Control of Oxygenation (PRICO) is the next generation of Intelligent Closed-Loop  $FiO_2$ -Sp $O_2$  control, maintaining the patient's  $SpO_2$  within the desired range. Together with the Masimo  $Set^{\mathbb{R}} SpO_2$ -Sensors, its unique algorithm  $FiO_2$  adjustments are performed automatically, quickly, and more reliably than ever before.

PRICO not only supports caregivers in their daily goal for best possible patient comfort and safety, but also helps clinicians save time, reduce cost, and improve their workflow.

- >>> How PRICO works
- >>>> PRICO parameters
- >>>> PRICO modes

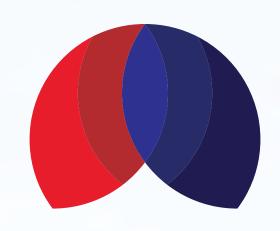


# Precision for delicate lungs with volume guarantee









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REFERENCE: 1. 1. COLIN J. MORLEY, VOLUME-LIMITED AND VOLUME-TARGETED VENTILATION, CLINICS IN PERINATOLOGY, 39 (2012), 513-523 HTTP://DX.DOI.ORG/10.1016/J.CLP.2012.06.016

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