



# NEONATOLOGY

Complete range for the smallest patients:

- Ventilators
- · Nursing care, thermotherapy and phototherapy
- Accessories

### **VENTILATORS**



### **LEONI PLUS**

**LEONI PLUS CLAC 2.0** 

Leoni plus is suitable for the long-term ventilation of very small preemies, newborns and children up to a body weight of 30 kg. In addition to the basic ventilation modes CPAP, IPPV/IMV, SIPPV and SIMV, the device offers two PSV modes. Moreover, the administered tidal volume can be restricted via the volume limit function. The assisted ventilation modes feature a volume-controlled tidal volume guarantee.

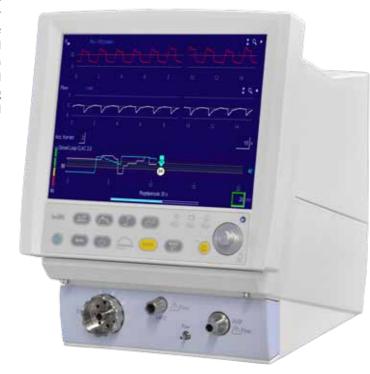
The precise hot wire flow sensor, designed for placement near the patient, enables the automatic tracking of trigger sensitivity relative to the patient's tidal volume (VT trigger adaptation).

The extremely powerful, integrated Leoni HFO\* high-frequency module uses the membrane principle; its frequency range between 5 and 20 Hz is suitable for use with patients weighing up to 12 kg. The managed amplitude control compensates leakages and compliance changes in the adjustment range.

The easy and intuitive operation of the device either relies on a 12-inch LCD colour touchscreen display or on a control knob. For optimal ergonomic organisation of the workspace in the ward, the display can be removed and attached to suit individual needs and working environments. All relevant settings, measuring values, alarm limits and graphic information such as curves and loops are featured in a single display. Users can freely configure the display according to their own requirements by choosing the number of curves and loops as well as the displayed measuring values.

Key product benefits at a glance:

- HFO\* according to the membrane principle
- Volume-targeted ventilation
- PSV mode
- NIV (nCPAP, s-nCPAP, nIPPV, s-nIPPV, HiFlow, nHFO (with NeoJet))\*
- VT trigger adaptation
- Simple operation no sub-menus
- Curves and loops
- Battery operation for up to 200 minutes



### ABDOMINAL SENSOR

In the first few months of life, diaphragmatic or abdominal breathing is predominant in our smallest patients. What could be more obvious than monitoring the breathing activity of children at the diaphragm and using the resulting signals as a trigger for inspiration and expiration?

The abdominal sensor by Löwenstein Medical allows for generating reliable trigger signals for non-invasive ventilation without direct intervention in the respiratory mechanics, adding weight to the patient interface or increasing the dead space.

Our neonatal ventilation device Leoni plus, together with the optional abdominal sensor, synchronises the non-invasive ventilation forms s-nIPPV and s-nCPAP, while providing apnoea monitoring in both ventilation modes.



#### CLAC 2.0 – the reliability you expect with optimised control algorithm

Löwenstein Medical has developed a unique algorithm for automatic oxygen control in premature and newborn babies (CLAC: Closed-Loop Automatic Oxygen Control), which is integrated into the NICU ventilator Leoni plus.

The ventilation device can be fully operated through the user interface, including visualisation of measuring data and alarm settings. Users can determine the current patient status at a glance from the graphic display.

CLAC assumes the task of routinely adapting the inspiratory oxygen in the breathing gas ( $FiO_2$ ) by continuously monitoring the needs and condition of the patient and adjusting the device settings accordingly. This leaves clinicians free to focus on other tasks.

Of course, manual intervention is possible at all times.



\*option

## LÖWENSTEIN medical



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To the website:



Images may depict optional accessories that can be ordered separately.

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