

LENA

—
Reliable at high pressure too.



Different needs. One mask. LENA.

Most people breathe in and out without having to think about it. Patients with respiratory insufficiency or sleep-related respiratory disorders need help with breathing. LENA – the new full-face mask from Löwenstein – has been developed specially for ventilation. The primary focus is on a comfortable mask fit, particularly when high pressures are applied or when the pressure difference between inspiration and exhalation is considerable.



Pressure
remains stable



Large
pressure range



Ventilation



in
hospital



at
home



24h
Day and
night



disinfectable
and sterilizable



Forehead cushion

- broad surface distributes pressure evenly

Forehead support

- easy-to-use sliding element permits almost infinite adjustment

Connection for O₂ feed

- no adapter required

Exhalation system

- quiet and diffused flow for unimpaired wearing comfort

Elbow

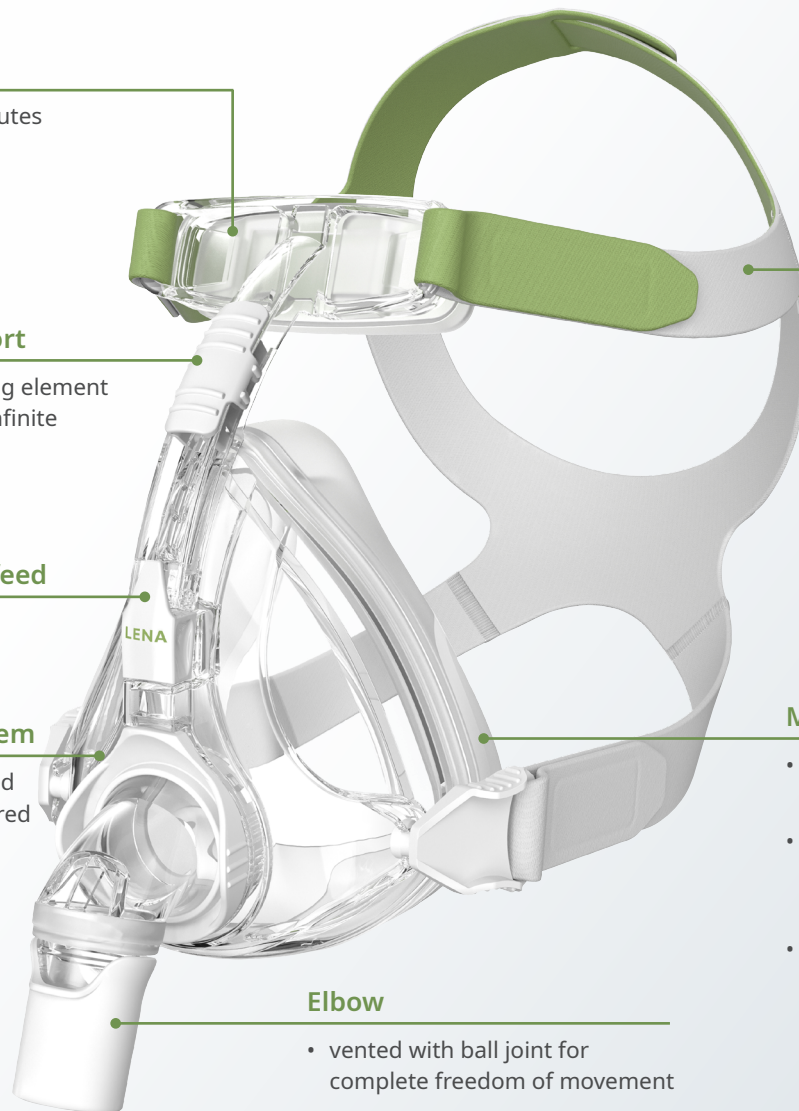
- vented with ball joint for complete freedom of movement
- non-vented for valve circuit ventilation

Headgear

- withstands high pressures and big pressure differences
- color coding helps with correct mask assembly
- rounded edges leave no marks on skin

Mask cushion

- double lip for a perfect seal all round
- new design with anatomically rounded, soft edges
- varied structure on the surface ensures a good, lasting fit



Three factors are essential for an optimum mask fit at high therapy pressures.

The **mask cushion** stands out with its double lip. The therapy pressure creates an air cushion that provides a perfect seal without causing any pressure points. The shape mirrors the anatomy and is based on two factors: Our patient face database that has been growing for many years and the market feedback that is constantly collected and evaluated.

The second important factor concerns the **connection between mask cushion and mask body**. On the one hand, the connection must be stable during the therapy – both at constantly high pressures and with high pressure differences during

inspiration and exhalation with BiLevel therapy. On the other hand, the connection must be easy to disassemble so that it can be cleaned simply and effectively. An apparent paradox that LENA resolves effectively.

The **headgear** completes the essential triad. The headgear material is strong enough to ensure that the mask does not leak or become unstable at high pressure differences. An individually adjustable forehead support including forehead cushion gives LENA extra grip.

Spare parts/accessories



LENA headgear

Standard: LMT 26435
XL: WM 25338



LENA mask cushion

Size S: LMT 26602
Size M: LMT 26603
Size L: LMT 26604



LENA ripcord

LMT 26464



Endoscopy adapter NV

LMT 15968



NV elbow set

LMT 15970



LENA elbow set

LMT 15969

Further information about our therapy solutions, accessories and mask systems is available at loewensteinmedical.com

Technical specifications

	LENA	LENA NV
Product class to (EU) Medical Device Regulation 2017/745	II a	II a
Dimensions (H x W x D)		
• Size S	155 x 100 x 95 mm	155 x 100 x 105 mm
• Size M	165 x 100 x 95 mm	165 x 100 x 105 mm
• Size L	175 x 100 x 100 mm	175 x 100 x 110 mm
Weight		
• Size S	137 g	135 g
• Size M	141 g	139 g
• Size L	150 g	148 g
Dead space		
• Size S	246 ml	252 ml
• Size M	288 ml	270 ml
• Size L	326 ml	321 ml
Therapy pressure	4 hPa – 35 hPa	4 hPa – 35 hPa
Tapered tube connection to EN ISO 5356-1	Ø 22 mm (male)	Ø 22 mm (female)
Temperature range		
• Operation	+5 °C to +40 °C	+5 °C to +40 °C
• Storage	-20 °C to +70 °C	-20 °C to +70 °C

	LENA	LENA NV
Flow resistance		
• at 50 l/min	0.32 hPa	0.04 hPa
• at 100 l/min	0.68 hPa	0.14 hPa
Flow resistance, anti-asphyxia valve		
• Inspiration at 50 l/min	0.6 hPa	-
• Exhalation at 50 l/min	0.8 hPa	-
Switching pressure, anti-asphyxia valve		
• Open:	0.5 hPa	-
• Close:	2.2 hPa	-
Quoted two-figure noise emission value to ISO 4871:		
• Sound pressure level:	12 dB(A)	-
• Sound power level:	20 dB(A)	-
• Uncertainty factor:	3 dB(A)	-
Service life	5 years	5 years
Useful life	up to 12 months ¹	up to 12 months ¹
Standards applied	EN ISO 17510: 2020	EN ISO 17510: 2020

¹ Materials used to manufacture masks will age if exposed to aggressive detergents, for example. In individual cases, it may therefore be necessary to replace mask parts sooner.

Reprocessing

Material of mask parts	Chemical disinfection	Thermal disinfection	Sterilization	Cycle	Hand wash	Dishwasher
Plastic	•	•	–	30	daily	weekly
Silicone	•	•	•	30	daily	weekly
Textile	–	–	–	–	weekly	–

Details of reprocessing can be found in the "Information on hygiene treatment" brochure on our homepage.

Device name	Size	Article no.	HMV item no.
LENA	S	LMT 26460	14.24.16.6066
LENA	M	LMT 26470	14.24.16.6066
LENA	L	LMT 26480	14.24.16.6066
LENA NV	S	LMT 26960	14.24.16.1028
LENA NV	M	LMT 26970	14.24.16.1028
LENA NV	L	LMT 26980	14.24.16.1028

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