

## Dräger Carina®

Designed for both invasive and non-invasive ventilation, the Dräger Carina offers reliable and easy ventilation with its unique SynchPlus® technology. Its compact design allows for continuous therapy even during transport.



### TECHNICAL DATA

Patient type	Adults and pediatric patients
<b>Ventilation settings</b>	
Ventilation mode	SPN-CPAP/PS PC-SIMV/PS PC-AC VC-SIMV/PS VC-AC Apnea ventilation
Characteristics	- Non-invasive mask ventilation (NIV) - Invasive ventilation (Tube) - AutoFlow®/Volume Guarantee – Automatic adjustment of the inspiratory flow in volume-controlled modes - AutoAdapt™ in NIV SPN-CPAP/PS, creates a linear pressure rise over a defined time in order to slowly ease patients into ventilation - Leakage compensation up to 180 L/min
Respiratory rate (RR)	5 to 50/min
Tidal volume (VT, VTi)	100 to 2,000 mL, BTPS <sup>2</sup> )
Inspiration pressure (P <sub>insp</sub> )	Leakage valve: 5 to 40 mbar (or hPa or cmH <sub>2</sub> O) Expiratory valve: 5 to 50 mbar (or hPa or cmH <sub>2</sub> O)
Inspiration pressure limitation (P <sub>max</sub> )	Leakage valve: 5 to 40 mbar (or hPa or cmH <sub>2</sub> O) Expiratory valve: 5 to 50 mbar (or hPa or cmH <sub>2</sub> O)
PEEP/CPAP	3 to 20 mbar (or hPa or cmH <sub>2</sub> O)
Pressure support (ΔP <sub>supp</sub> )	Leakage valve 0 to 37 mbar (or hPa or cmH <sub>2</sub> O) Expiratory valve 0 to 47 mbar (or hPa or cmH <sub>2</sub> O)
Pressure support rise time (ramp)	Auto, 0.1 to 2.0 s
Maximum inspiratory time for supported	0.4 to 10 s
<b>Mandatory Breaths (Timax)</b>	
I:E ratio	1:39 to 2:1
Inspiration time (Ti)	0.3 to 8 s
O <sub>2</sub> concentration (FiO <sub>2</sub> )	21 to 100 vol%
Multisense trigger criteria, trigger sensitivity	Off, normal, sensitive



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**Measured value displays**

Positive end exp. pressure (PEEP)	0 to 25 mbar (or hPa or cmH <sub>2</sub> O)
Inspiratory peak pressure (PIP)	0 to 68 mbar (or hPa or cmH <sub>2</sub> O)
Mean airway pressure (Pmean)	0 to 68 mbar (or hPa or cmH <sub>2</sub> O)
Minute volume (MV, MV <sub>i</sub> )	0 to 60 L/min, BTPS
Inspiratory tidal volume (VT,VT <sub>i</sub> )	0 to 4.0 L, BTPS
Respiratory rate (RR)	0 to 75/min
Total leakage volume (MVleak)	0–99 L/min, BTPS

**Curve displays**

Airway pressure Paw (t)	0 to 80 mbar (or hPa or cmH <sub>2</sub> O)
Flow (t)	-160 to +160 L/min

**Alarms/monitoring**

Insp. Minute volume high	2 to 60 L/min
Insp. Minute volume low	0.1 to 39 L/min
Airway pressure Paw high	10 to 55 mbar (or hPa or cmH <sub>2</sub> O)
Tachypnea monitoring (RRhigh)	10 to 74/min, off
Apnea alarm time (Tapn)	5 to 60 seconds, off
Delay time until Paw alarm	Non-invasive ventilation (NIV) 0, 15, 30, 60, 90, 120 s
low !!! (Tdisconnect)	Invasive ventilation (tube) 0, 15, 30, 60 s

**Performance data**

Control principle	Time or Flow-controlled and pressure or volume-controlled
Disconnection detection	automatic
Reconnection detection	automatic (also in standby)
Grid voltage	Grid voltage 100 V to 240 V AC, 50/60 Hz
Power input	At 100 V AC max. 1.1 A At 240 V AC max. 0.5 A
Maximum power consumption	90 W (in operation, when loading the internal battery)
Typical power consumption	35 W (in operation, when loading the internal battery)
Operating period of internal battery	60 min
Noise level	40 dB (A) (with typical ventilation)

**Gas supply HPO**

O <sub>2</sub> operating pressure	40 psi to 87 psi
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**Gas supply LPO**

O <sub>2</sub> flow	0 to 10 L/min
Supply system for patient flow	Turbine
Maximum continuous inspiratory flow	180 L/min, BTPS (max 120 L/min with 100 % O <sub>2</sub> )

**Mechanical specification**

Dimensions (W x H x D)	Basic device: 175 x 275 x 385 mm (6.9 x 10.8 x 15.2 in) Trolley: 880 x 570 x 670 mm (34.7 x 22.4 x 67.06 cm)
Weight	5.5 kg (12.1 lbs) (basic device) 14.8 kg (32.6 lbs) (trolley)
Screen	TFT color screen 13.7 cm (5.4 in)

**Device outputs**

Digital output RS232	Dräger MEDIBUS or MEDIBUS.X protocol
Nurse call	cable-ready

<sup>1)</sup> AutoFlow® = Dräger trademark

<sup>2)</sup> BTPS = Body Temperature Pressure Saturated

## ORDERING INFORMATION

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Name	Description	Order-No.
Breathing Circuits	VentStar® Carina® LeakV	MP00312
	VentStar® Carina® ExpV	MP00313
	Disposable Expiration Valve Carina®	MP00220
	SyncVent Carina®	MP00224
Filters/HMEs	HEPA filter	57 03 105
	Filter CareStar® 30	MP01770
Masks	ClassicStar® NIV Full-Face Mask with SE, Size S	MP01573
	ClassicStar® NIV Full-Face Mask with SE, Size M	MP01574
	ClassicStar® NIV Full-Face Mask with SE, Size L	MP01575
	NovaStar® NIV Full-Face Mask with SE, Size S	MP01579
	NovaStar® NIV Full-Face Mask with SE, Size M	MP01580
	NovaStar® NIV Full-Face Mask with SE, Size L	MP01581

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