

LEONI PLUS

Technical Specification



Leoni plus		Leoni plus Transport
CONTROL		
Control principle	timed, pressure-limited, tidal volume guarantee, tidal volume limit	timed, pressure-limited, tidal volume guarantee, tidal volume limit
Trigger principle	volume trigger and/or direct flow trigger	volume trigger and/or direct flow trigger
Trigger setting	automatic trigger, 0,1 - 1,0 l/min	automatic trigger, 0,1 - 1,0 l/min
Trigger delay	approx. 30 msec	approx. 30 msec
Flow sensor	hot-wire anemometer, close to patient on Y-piece	hot-wire anemometer, close to patient on Y-piece
Dead space expansion	0,6 ml	0,6 ml
GAS BLENDER		
Flow principle	constant flow, VIVE	constant flow, VIVE
Gas mixture	elctronic gas mixer	elctronic gas mixer
Inspiratory O ₂ concentration	21% - 100%	21% - 100%
Oxygen flush	23% - 100% for maximun 2 min	23% - 100% for maximun 2 min
VENTILATION MODES		
CPAP	yes	yes
IPPV and IMV (+VT limit)	yes	yes
S-IPPV (+VT limit +VTG)	yes	yes
SIMV (+ P support +VT limit +VTG)	yes	yes
PSV-S-IPPV (+VT limit +VTG)	yes	yes
PSV-SIMV (+ P support +VT limit +VTG)	yes	yes
nCPAP	with NeoJet™	with NeoJet™
nIPPV	with NeoJet™	with NeoJet™
HFOV with VTG	yes	yes
nHFO	with NeoJet™	with NeoJet™
High-Flow	yes	yes
PARAMETER		
Peak inspiration pressure	4 - 60 mbar	4 - 60 mbar
PEEP / CPAP	0 - 30 mbar	0 - 30 mbar
Frequency	2 - 200 1/min	2 - 200 1/min
Inspiration time	0,1 - 2 sec	0,1 - 2 sec
Expiration time	0,2 - 30 sec	0,2 - 30 sec
Inspiration flow	1 - 32 l/min	1 - 32 l/min
Expiration flow	2 - 10 l/min	2 - 10 l/min
HFOV		
Principle	integrated membranes	integrated membranes
Oscillation setting range	5 - 100 mbar	5 - 100 mbar
Mean pressure setting range	0 - 40 mbar	0 - 40 mbar
Frequency setting range	5 - 20 Hz	5 - 20 Hz
I:E (IV)	9 : 1 - 1 : 299	9 : 1 - 1 : 299
I:E (NIV)	30 : 1 - 1 : 299	30 : 1 - 1 : 299

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VTG in HFO	0,1 ml - 30 ml	0,1 ml - 30 ml
I:E HFO	50 : 50; 33 : 66; 40 : 60; 25 : 75	50 : 50; 33 : 66; 40 : 60; 25 : 75
Recruitment	Manual breath / sigh function / continuous as frequency	Manual breath / sigh function / continuous as frequency
MONITORING		
Ventilation graphs	pressure, flow, volume, plethysmogram (only with CLAC)	pressure, flow, volume
Ventilation loops	flow/pressure, volume/pressure, flow/volume	flow/pressure, volume/pressure, flow/volume
Lung function	compliance, C20/C, resistance	compliance, C20/C, resistance
Alarms	plain text messages in 3 large alarm windows	plain text messages in 3 large alarm windows
Logbook function	4500 alarms	4500 alarms
O ₂ measurement	21% - 100%	21% - 100%
CLAC		
CLAC (Closed loop automatic oxygen control) automatic O ₂ adaption with integrated Masimo SpO ₂ technology	optional	---
ELECTRICAL DATA		
Power supply	100 - 240 V _{AC} , 50/60 Hz	100 - 240 V _{AC} , 50/60 Hz
Battery-powered operation	200 min conventional, 60 min HFOV	200 min conventional, 60 min HFOV
SIZES		
Dimensions (W x H x D)	30,5 x 38,5 x 39 cm	30,5 x 38,5 x 39 cm
Weight	22 kg (including HFOV-Modul)	22 kg (including HFOV-Modul)
APPROVED FOR TRANSPORT		
Norm	---	transport standard EN 794-3 for transport ventilators during transport within and outside the hospital with a connection using a fastening system according to EN 1789:2010 (for road ambulances) and during transport in air ambulances with a connection using a fastening system according to EN 13718-1 and RTCA/DO160G

