Tra il ventilatore ed il paziente : uno spazio da governare

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Fondazione IRCCS San Gerardo dei Tintori

Sistema Socio Sanitario
Regione Lombardia

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Conflitti di interesse

Lecture congressuali:

Molnlycke,Drager, Gettinge, Dimar, Intersurgical, Aerogen Medival, Hill-Rom

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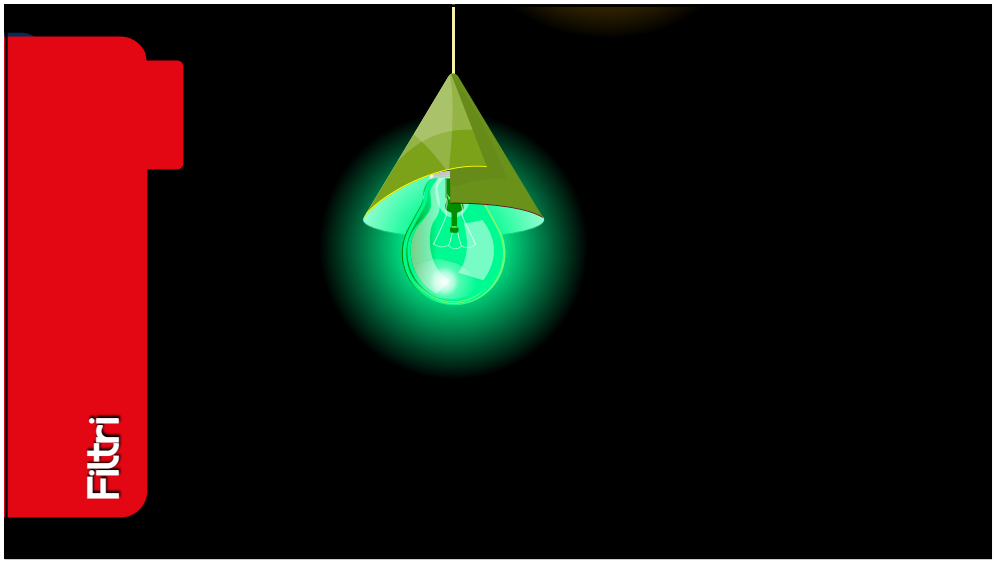

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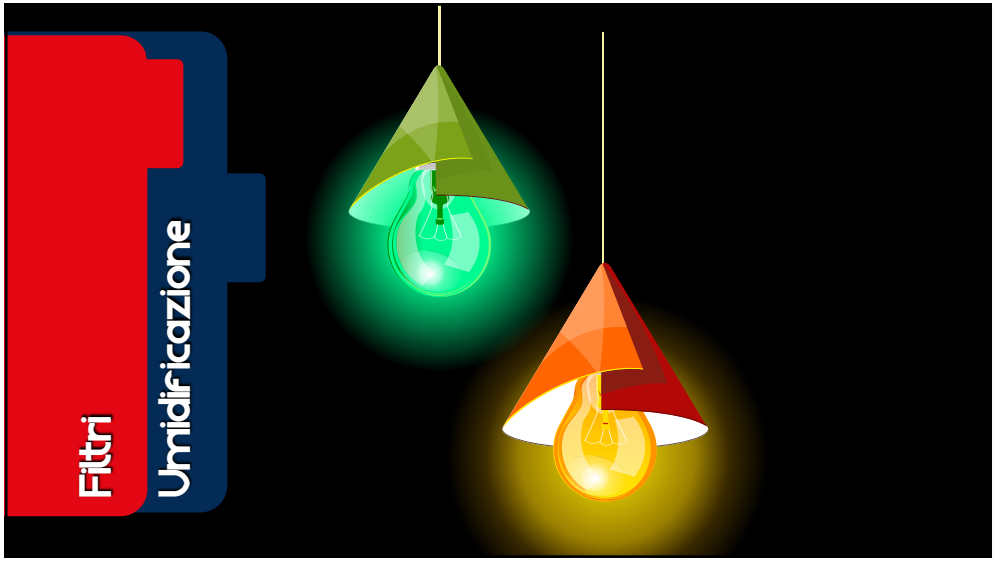

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ARDS

- TV 6 ml/kg,
- Pplat < 30 cm H_2O
- DP < 14 cmH_2O
- Umidificazione attiva
- Protezione ambientale

7

ARDS

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8

Filtri

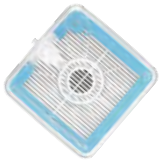
9

Filtri

Filtro

10

Filtri



HME

11

Filtri

HME+Filtro

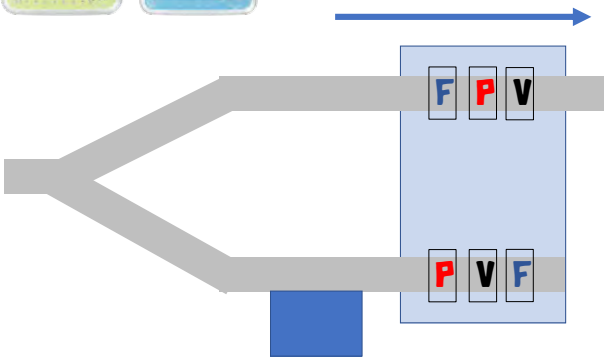
12

Filtri

13

Ventilazione

umidificazione attiva



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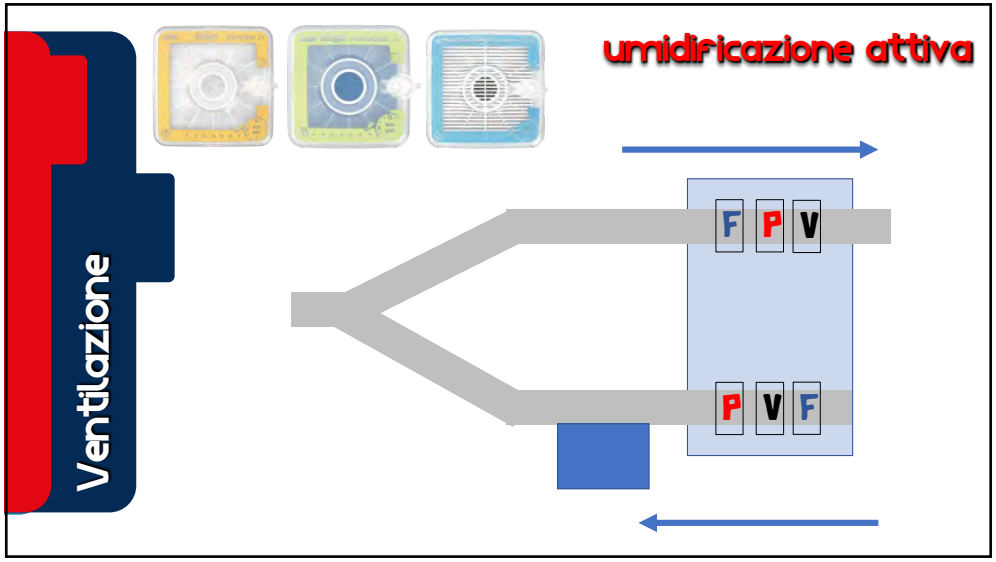
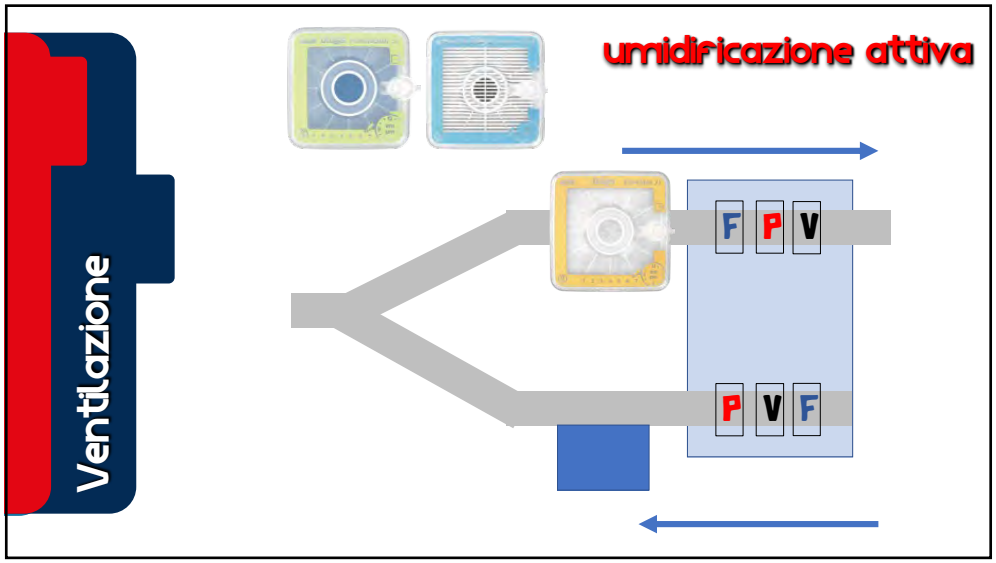
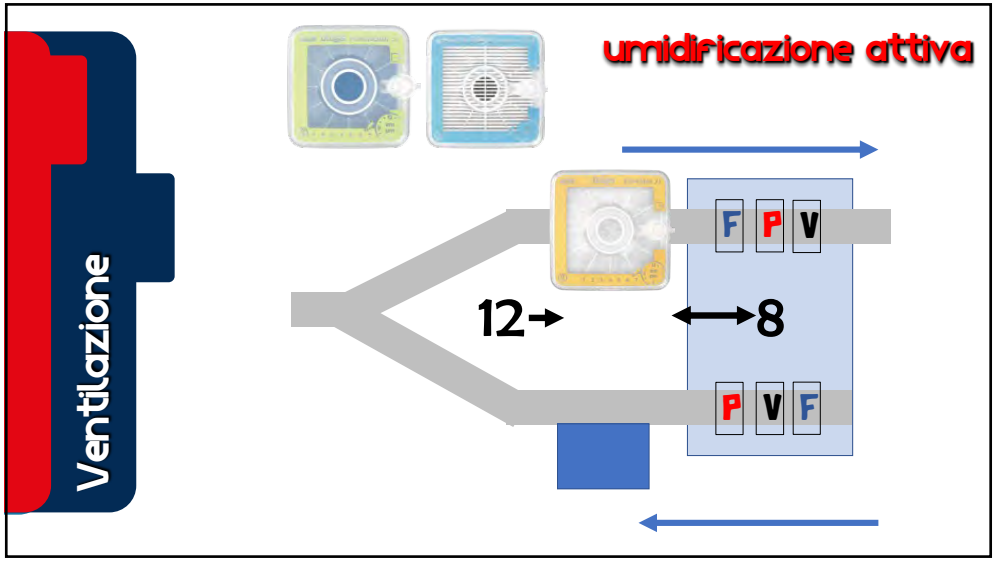

Ventilazione
umidificazione attiva
F P V
P V F

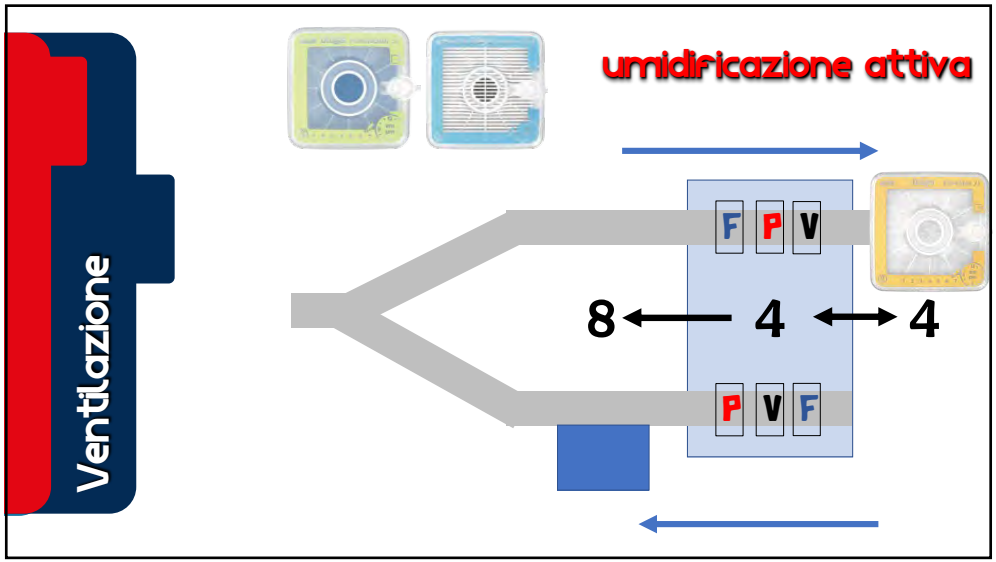
15


Ventilazione
umidificazione attiva
F P V
P V F

16


Ventilazione
umidificazione attiva
F P V
12
8
P V F

17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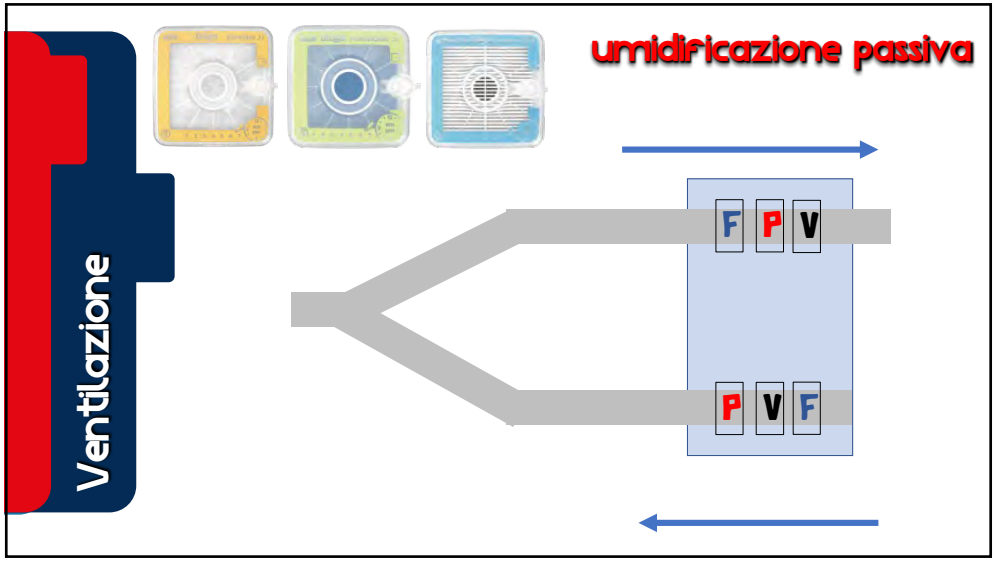
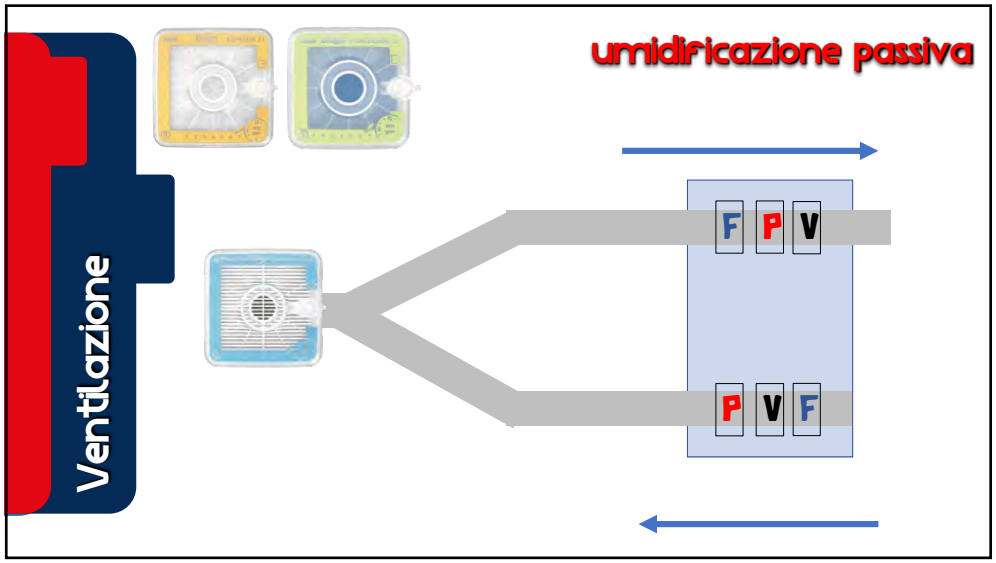
umidificazione attiva
F P V
8
4
4
P V F

18


umidificazione passiva
Ventilazione
F P V
P V F

19


umidificazione passiva
Ventilazione
F P V
P V F

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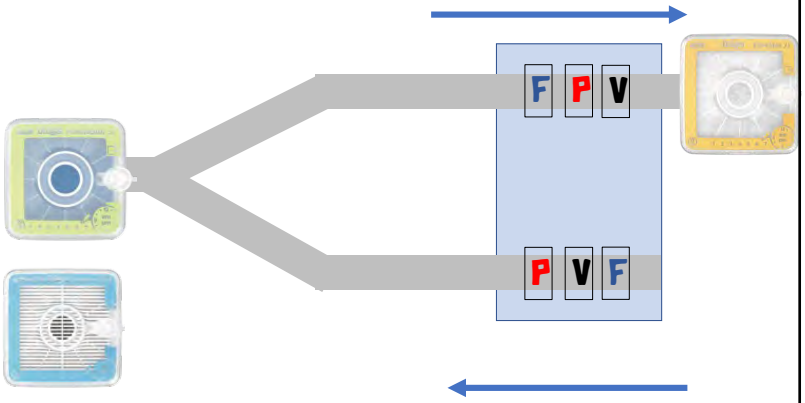
Ventilazione

umidificazione passiva



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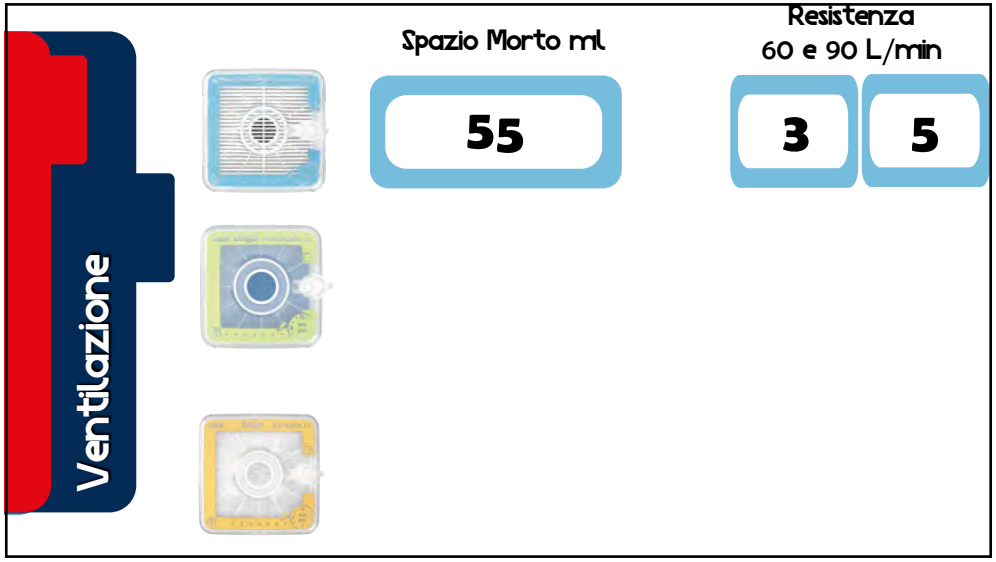
Ventilazione

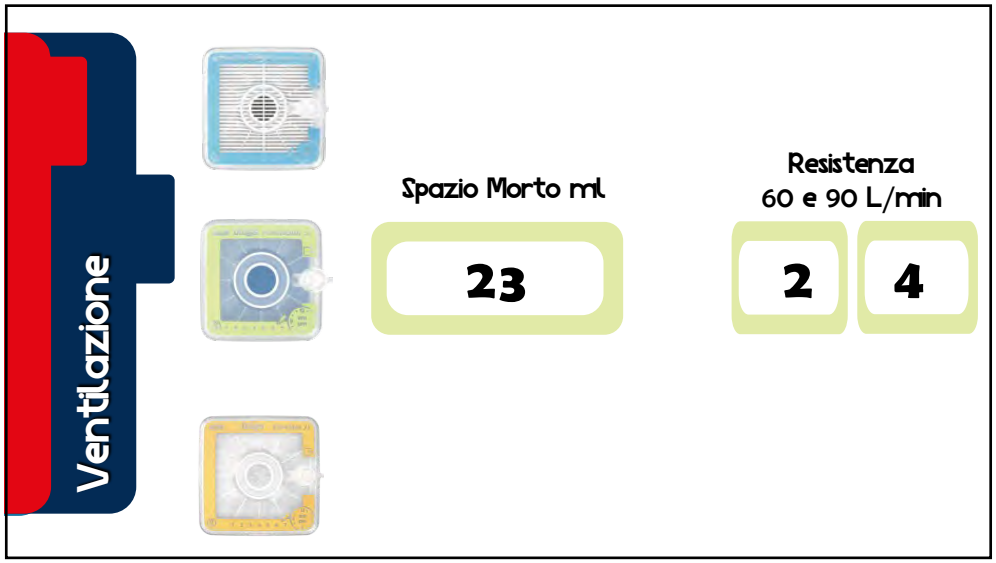
Spazio Morto ml

Resistenza
60 e 90 L/min

22


Ventilazione
Spazio Morto ml
55
Resistenza
60 e 90 L/min
3
5

23


Ventilazione
Spazio Morto ml
23
Resistenza
60 e 90 L/min
2
4

24

Ventilazione

Spazio Morto ml	Resistenza 60 e 90 L/min	
19	1	2

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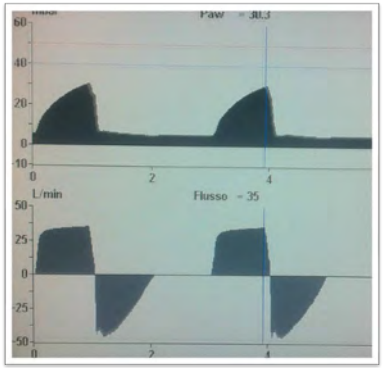
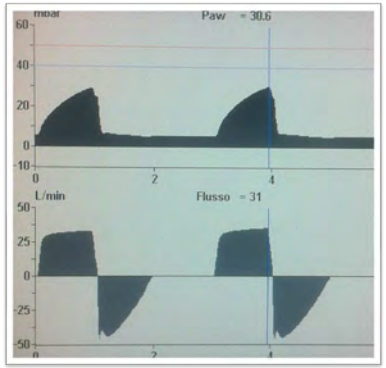
Ventilazione

Lato Inspiratorio





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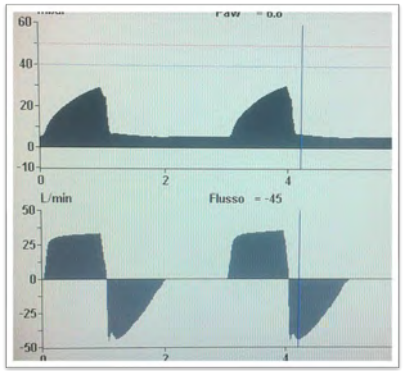
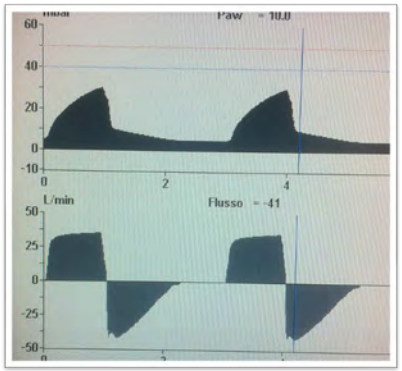
Ventilazione





Lato espiratorio

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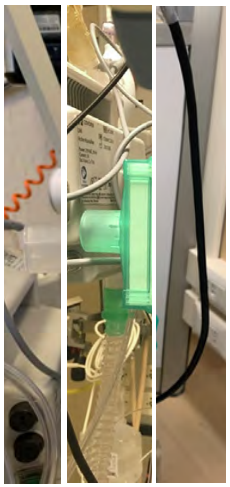
Ventilazione


Intensive and Critical Care Nursing

Procedures to minimize viral diffusion in the ICU during the COVID-19 pandemic



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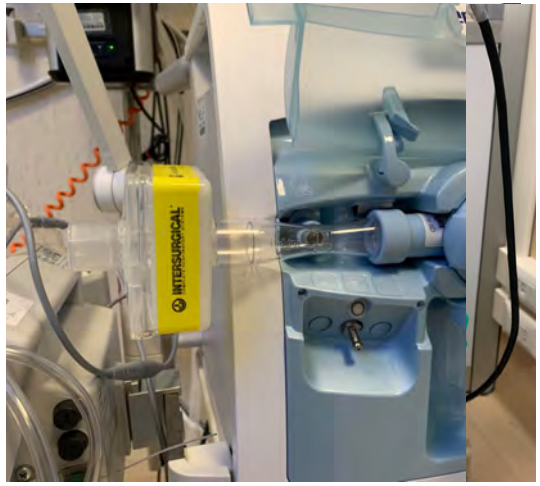
Ventilazione



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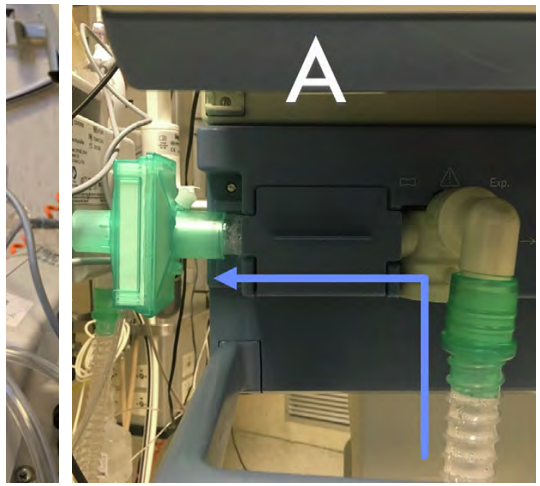
Ventilazione



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Ventilazione

Intensive and Critical Care Nursing

Procedures to minimize viral diffusion in the ICU during the COVID-19 pandemic

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Ventilazione

Intensive and Critical Care Nursing

Procedures to minimize viral diffusion in the ICU during the COVID-19 pandemic

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Ventilazione

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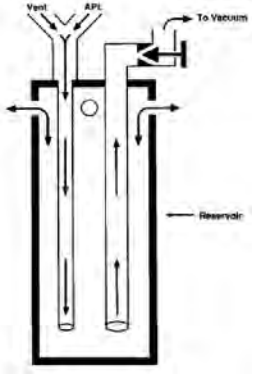
Ventilazione



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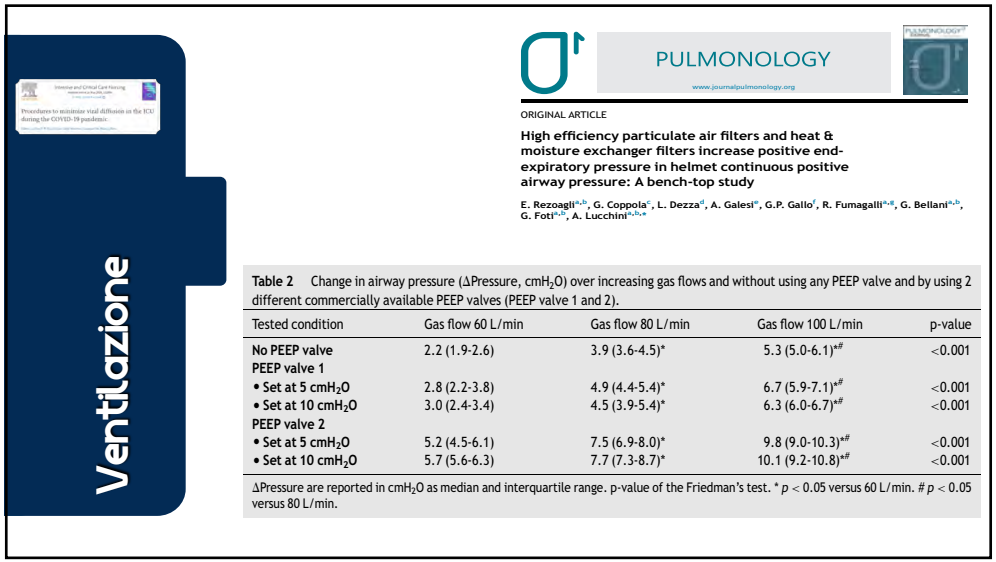

Table 2 Change in airway pressure (ΔPressure, cmH_2O) over increasing gas flows and without using any PEEP valve and by using 2 different commercially available PEEP valves (PEEP valve 1 and 2).

Tested condition	Gas flow 60 L/min	Gas flow 80 L/min	Gas flow 100 L/min	p-value
No PEEP valve	2.2 (1.9-2.6)	3.9 (3.6-4.5)*	5.3 (5.0-6.1)*#	<0.001
PEEP valve 1				
• **Set at 5 cmH_2O**	2.8 (2.2-3.8)	4.9 (4.4-5.4)*	6.7 (5.9-7.1)*#	<0.001
• **Set at 10 cmH_2O**	3.0 (2.4-3.4)	4.5 (3.9-5.4)*	6.3 (6.0-6.7)*#	<0.001
PEEP valve 2				
• **Set at 5 cmH_2O**	5.2 (4.5-6.1)	7.5 (6.9-8.0)*	9.8 (9.0-10.3)*#	<0.001
• **Set at 10 cmH_2O**	5.7 (5.6-6.3)	7.7 (7.3-8.7)*	10.1 (9.2-10.8)*#	<0.001

ΔPressure are reported in cmH_2O as median and interquartile range. p-value of the Friedman's test. * $p < 0.05$ versus 60 L/min. # $p < 0.05$ versus 80 L/min.

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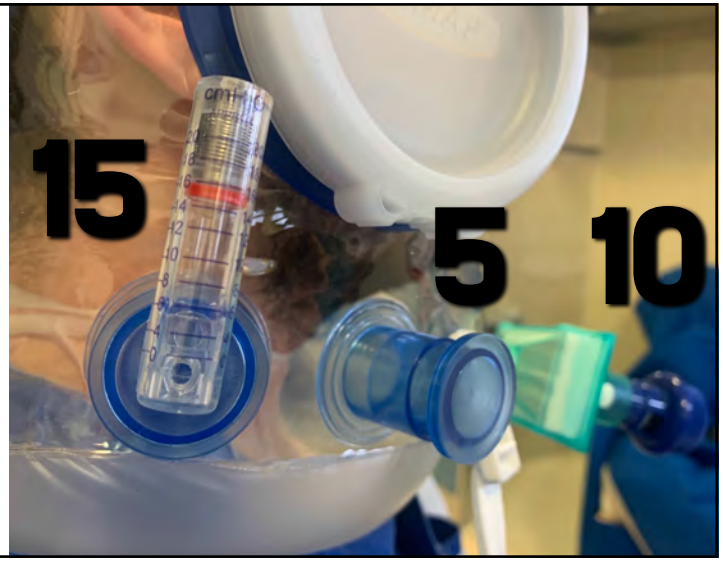
Ventilazione



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Valvole

Riutilizzabile vs. Monouso

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Valvole

Riutilizzabile vs. Monouso

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Valvole

User's Manual

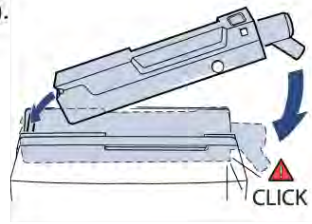
VENTILATION
SERVO-i/s
CLEANING AND MAINTENANCE

MAQUET

CRITICAL CARE

The expiratory cassette will last at least:

- 100 autoclaving cycles with 4-7 minutes sterilization time at 134°C (273°F).
- 50 autoclaving cycles with 18 minutes sterilization time at 134°C (273°F).



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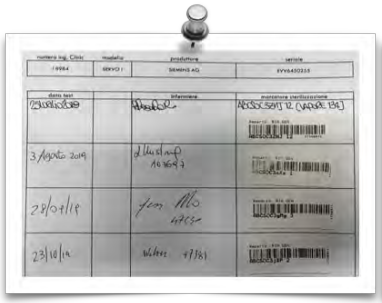
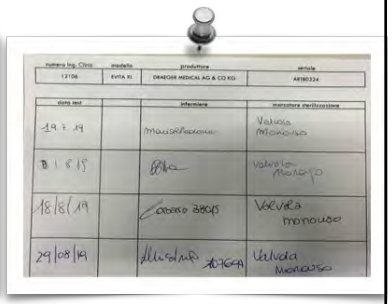
Valvole





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Bulleri et al.
Intensive Care Medicine Experimental (2023) 11:36
https://doi.org/10.1186/s40635-023-00519-1

Intensive Care Medicine
Experimental

RESEARCH ARTICLES Open Access

Efficacy of endotracheal tube clamping to prevent positive airways pressure loss and pressure behavior after reconnection: a bench study

Enrico Bulleri[1], Cristian Fusi[1], Stefano Bambi[2], Luigi Pisani[3,5], Alice Galesi[4], Enrico Rizzello[5], Alberto Lucchini[6,10], Paolo Merlani[1,7] and Alberto Pagnamenta[1,8,9*]

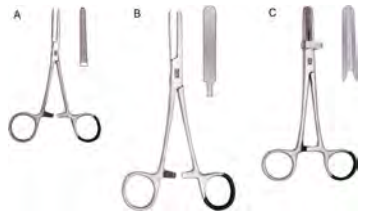
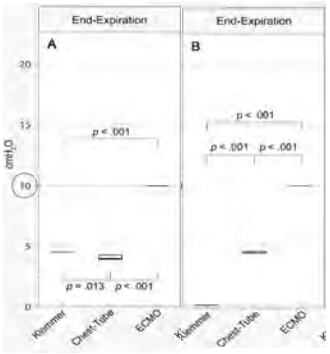


Fig. 1 Type of clamp tested. Rochester-Péan forceps straight 14 cm (**A**) thus named "Klemmer"; tubing Clamp Forceps 20 cm (**B**) thus named "Chest-Tube" and Tubing Clamp Forceps 18 cm (**C**) thus named "ECMO"



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