

emergency

# MEDUMAT Standard<sup>a</sup>

*The Ventilation Standard for Professionals*



partner for life

**WEINMANN**  
medical technology



# MEDUMAT Standard<sup>a</sup>

## *The Ventilation Standard for Professionals*

MEDUMAT Standard<sup>a</sup> offers you everything you need for reliable emergency ventilation. Users around the world are impressed by its especially simple operation and ruggedness. With controlled and assisted ventilation we provide you with the ventilation options you require in an emergency. Our diverse modules let you add many supplemental functions, such as CPAP therapy, to MEDUMAT ventilators. When there's not a second to lose, the well-designed operating panel with special symbols and colors helps you to quickly set the right ventilation parameters. When placed on our portable LIFE-BASE system, the MEDUMAT Standard<sup>a</sup> has practically unlimited mobility.

### Your benefits at a glance

- Function expansion to meet your needs
- Alarm system ensures high level of safety
- Easy to transport
- Simple operation
- Complies with EN 1789



MEDUMAT Standard<sup>a</sup>  
WM 22800



# MEDUMAT Standard<sup>a</sup>

## Ventilate Reliably and Properly

An advantage MEDUMAT Standard<sup>a</sup> has over manual ventilation is the option of setting constant values for tidal volume, ventilation frequency and minute volume. These settings help to prevent ventilator-induced injuries\*. Furthermore, with a ventilator you can reliably prevent hyperventilation and damaging pressure peaks\*. That reduces the intrathoracic pressure, which in turn improves venous reflow and cardiac output\*. You can keep your hands free to provide additional care to the patient. If a problem arises, the ventilator emits acoustic and visual alarms.

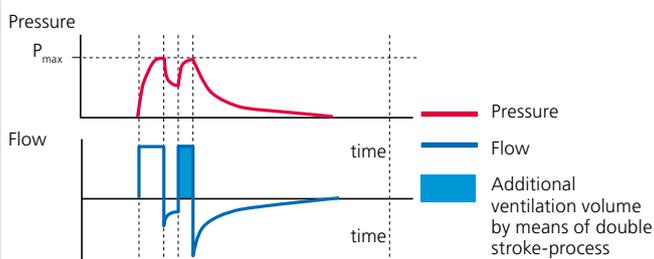
### Top reliability

- Automatic self-test when ventilator is switched on
- Color coding and arrow system simplifies fast and safe parameter settings for each patient group
- Settings for respiratory minute volume, respiratory rate and maximum ventilation pressure are infinitely adjustable
- Visual and acoustic alarms warn of acute problems such as stenosis, disconnection, loss of oxygen pressure, inadequate battery capacity, system failure, no triggering by patient

### Economical and flexible

- Air-Mix function reduces FiO<sub>2</sub> to about 60%
- No oxygen required for operation
- No external power supply necessary
- Can be combined with all WEINMANN Emergency modules, such as MODUL CPAP
- Assist function can be activated as needed

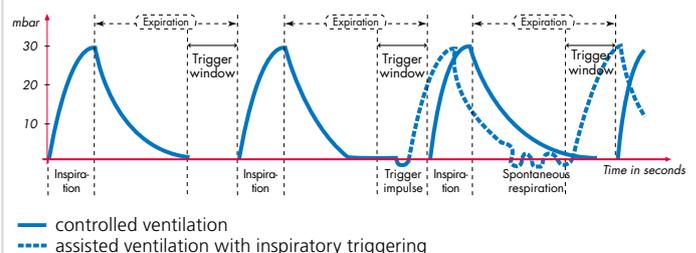
### Double stroke process



Behavior upon achieving maximum ventilation pressure (e.g., as result of CPR)

If the selected maximum ventilation pressure is exceeded, for example, during Cardiopulmonary Resuscitation (CPR), MEDUMAT Standard<sup>a</sup> will briefly switch to expiration and attempt to administer a ventilator breath in the same inspiratory phase. With this double-stroke procedure, the patient receives the maximum ventilation volume.

### Assisted ventilation with MEDUMAT Standard<sup>a</sup>



- controlled ventilation
- - - assisted ventilation with inspiratory triggering

Under assisted ventilation MEDUMAT Standard<sup>a</sup> gives the patient a ventilator breath in response to an inspiratory trigger. When the patient's respiratory efforts reach the trigger threshold, MEDUMAT Standard<sup>a</sup> delivers a mechanical breath to the patient. If the patient does not trigger a breath within the window for inspiration, the patient will receive controlled ventilation.

Easy to transport

Enhanced functionality  
with function modules

Integrated  
oxygen supply

Practical and safe storage  
of accessories



We offer you various pre-configured solutions to get MEDUMAT Standard<sup>a</sup> quickly and safely to the emergency site.

# LIFE-BASE

## Mobility for MEDUMAT Standard<sup>a</sup>

You can put together ventilation and oxygen therapy systems to fit your needs on the LIFE-BASE portable system. The extremely tough LIFE-BASE system can be carried in just one hand. For transport in a vehicle, the different LIFE-BASE models are ideally protected in the crash-proof BASE-STATION mounting. You can also conveniently carry

MEDUMAT Standard<sup>a</sup> in our emergency backpack RESCUE-PACK. With RESCUE-PACK on your back, you have an unobstructed view ahead and plenty of room to maneuver. On the way to the scene of an emergency, your hands are free to carry other equipment or to open doors.



LIFE-BASE III with  
MEDUMAT Standard<sup>a</sup>  
and MODUL CPAP,  
WM 8251

RESCUE PACK I with  
MEDUMAT Standard<sup>a</sup>,  
WM 9065





## Accessories for MEDUMAT Standard<sup>a</sup>

**A**

1	Patient hose system with patient valve	WM 22520
2	Patient hose system with patient valve, disposable	WM 28110
	■ Set of disposable ventilation tubes 10 pcs of WM 28110	WM 15454
	■ Set of disposable ventilation tubes 25 pcs of WM 28110	WM 15455
	■ Set of disposable ventilation tubes 50 pcs of WM 28110	WM 15456
3	Refitting set for device outlet filter	WM 15780
4	Bacteria filter	WM 22162
5	PEEP valve with connection nozzle, infinitely adjustable settings from 2.5 to 10 mbar (22 mm exterior diameter)	WM 3215
6	Reusable protective sleeve for ventilation tube	WM 8297
7	EasyLung	WM 28625
	■ Test set	WM 15382
8	Station MEDUMAT	WM 22550
	■ Station MEDUMAT with standard rail holder	WM 22670

## Replacement parts for MEDUMAT Standard<sup>a</sup>

**R**

■ Respiration tube, double lumen	WM 22647
■ Patient valve, consisting of: Patient hose connection (WM 3213), Upper control element (WM 3181), Bottom control element with spontaneous breathing option (WM 3285), Lip membrane (WM 3211)	WM 3280
■ Patient hose connection	WM 3213
■ Upper control element	WM 3181
■ Bottom control element with spontaneous breathing option	WM 3285
■ Valve membrane for expiration arm on patient valve	WM 3212
■ Insert for spontaneous breathing arm	WM 3282
■ Membrane for spontaneous breathing arm, red	WM 3284
■ Lip membrane	WM 3211
■ Set I lip membrane (25 pcs. WM 3211)	WM 15320
■ Set II lip membrane (50 pcs. WM 3211)	WM 15330
■ Set of batteries	WM 15186

Technical data	MEDUMAT Standard <sup>a</sup>	CE 0197
Device dimensions (W x H x D in mm):	190 x 110 x 90	
Weight (in kg)	about 1,1	
Product class as per directive 93/42/ECC:	IIb	
<b>Operating conditions</b> ■ Temperature range: ■ Humidity: ■ Air pressure:	-18 to +60 °C 15% to 95% 70 kPa to 110 kPa	
<b>Control:</b>	Time-controlled, volume-constant	
<b>Storage temperature:</b>	-40 to +70 °C	
<b>Operating gas:</b>	Medical-grade oxygen	
<b>Operating pressure:</b>	2,7 to 6 bar *	
<b>Required amount of gas:</b>	70 l/min	
<b>Respiratory rate:</b>	5 to 40 (infinitely adjustable)	
<b>Ventilation modes:</b>	Controlled ventilation (IPPV), Assisted ventilation (SIMV)	
<b>Inspiration : Expiration</b>	1:1,67	
<b>Inspiration: Expiration (assisted)</b>	1:1 to 1:2.3 variable	
<b>Respiratory Minute Volume (MV)</b>	3–20 l/min (infinitely adjustable)	
<b>Tidal volume:</b>	75 to 4000 ml (infinitely adjustable)	
<b>Tolerances MV</b> Room temperature (20 °C):  -18 °C to +60 °C:	for 3 l/min =± 20 % for >3 l/min =± 15 %  for 3 l/min =± 35 % for >3 l/min =± 20 %	
<b>Max. ventilation pressure (Pmax)</b>	20–60 mbar * (infinitely adjustable)	
<b>Pressurized gas connection</b>	External thread G 3/8"	
<b>Power supply</b> <b>Expected service life</b> <b>Maximum storage</b>	No maintenance lithium battery 3.6 V; 5.2 Ah > 2 years 10 years after delivery	
<b>Ventilation hose</b>	Spiral silicone hose NW 10	
<b>Degree of protection from splashing water</b>	IPX4	
<b>Standards used</b>	EN 794-3, EN 60601-1, EN 1789, RTCA-DO160 E	
<b>Alarm sound pressure</b>	54 dB (A)	
<b>Manometer accuracy</b>	Class 1,6	
<b>Patient valve dead space volume</b>	12,8 ml	

\* 1 mbar  $\hat{=}$  1 hPa

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## Simply professional

You can rely on WEINMANN Emergency. We set the standards for mobile solutions in patient ventilation. Our 140 years of experience and close association with professional users in emergency medical services, armies/public authorities and hospitals have led to the development of intelligent and perfectly coordinated technologies. In conjunction with the professionals in emergency, transport and disaster medicine, we pursue our shared goal of saving human lives.



Would you like to know more?  
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