

Space requirements

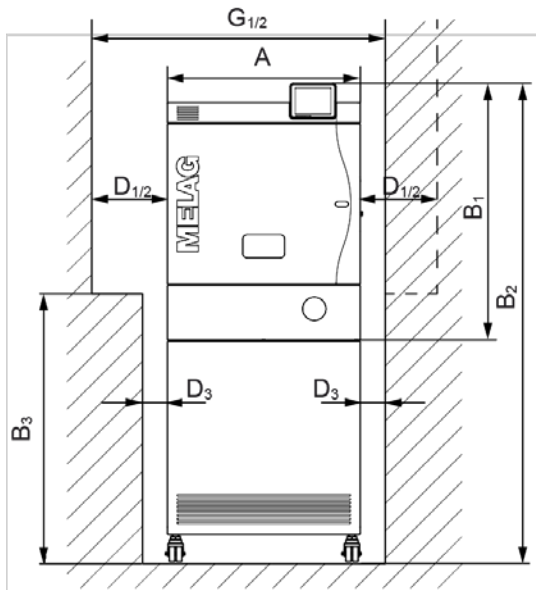


Fig. 1: Fore view, door hinge left

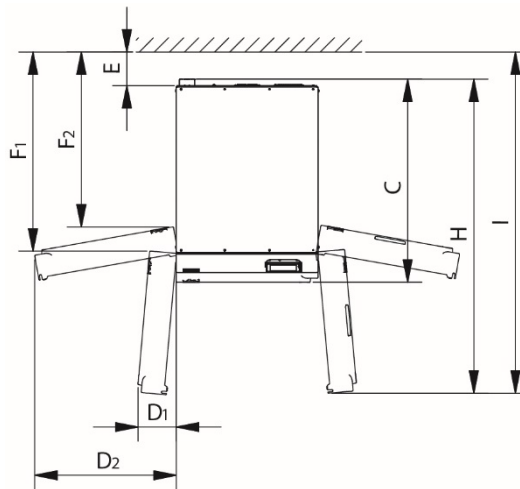


Fig. 2: Upper view, door hinge left (D1, D2) and door hinge right

Table 1: Space requirement for Cliniclave 45 in accordance with Fig. 1 and Fig. 2

Dimensions	Cliniclave 45
Width	A 65 cm
Height	B ₁ 85 cm + 6.5-7 cm max. height of the device feet
Height with floor unit	B ₂ 160 cm
Free area below the swing range of the door	B ₃ 85 cm
Depth	C 91 cm
Minimum clearance to the door hinge side*	D ₁ 25 cm (with a minimum opening angle of 95°)
	D ₂ 75 cm (with a maximum opening angle of 170°)
Minimum clearance to the side wall of the floor unit	D ₃ 8 cm
Minimum clearance to rear	E 15 cm
Free area (corresponds to the free room with a fully-opened floor unit door)	F ₁ 80 cm (with a minimum opening angle of 95°)
	F ₂ 70 cm (with a maximum opening angle of 170°)
Total required niche width	G ₁ min. 98 cm (with an opening angle of 95°)
	G ₂ min. 148 cm (with an opening angle of 170°)
Distance door to device rear	H 140 cm (with an opening angle of 95°)
Distance door to wall	I 152 cm (with an opening angle of 95°)
Clear width from the practice entrance to the installation location	min. 70 cm

*) With door hinge right, the clearances are to be inverted (dotted line)

A free area of 60 cm must be given each side of the autoclave/must be achievable by moving the autoclave to facilitate maintenance.

Additional space requirement for the reverse osmosis unit (only Cliniclave 45)

Steam sterilizers without a floor unit require sufficient space for the reverse osmosis unit. The reverse-osmosis unit can also be fixed to the wall underneath the work surface.

Sufficient space should be guaranteed permitting free access to the steam sterilizer hoses and cables to the reverse osmosis unit and for replacement of the filters.

Table 2: Dimensions of reverse osmosis unit

Reverse osmosis unit	Width	Height	Depth
MELAdem 56	52 cm	50 cm	20 cm
Pressure tank for the MELAdem 56	35 cm	35 cm	50 cm

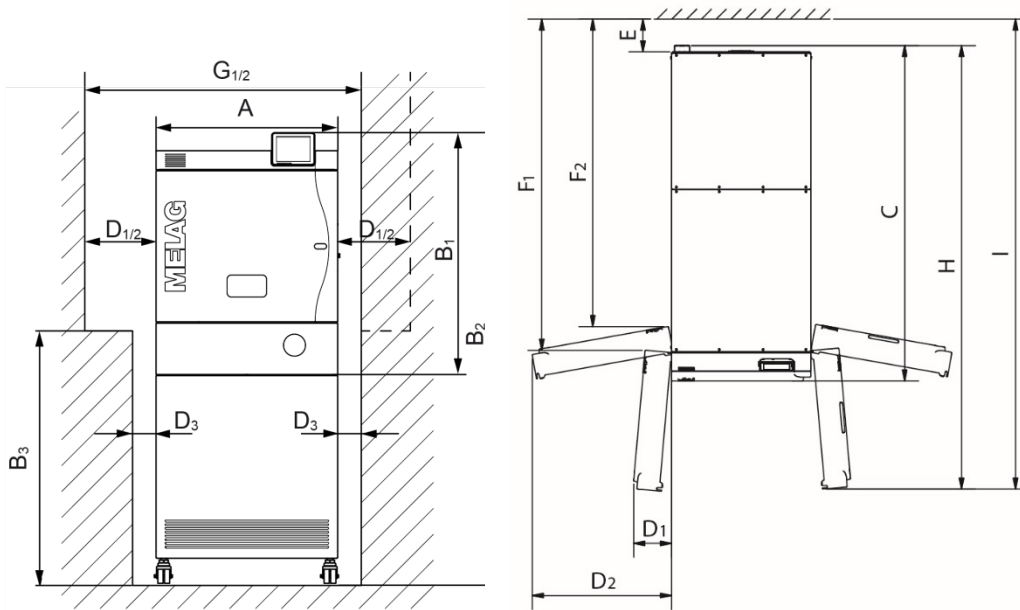


Fig. 2: Fore view, door hinge left

Fig. 2: Upper view, door hinge left (D1, D2) and door hinge right

Table 3: Space requirement for Cliniclave 45 M in accordance with Fig. 3 and Fig. 4

Dimensions		Cliniclave 45 M
Width	A	65 cm
Height	B ₁	85 cm
Height with floor unit	B ₂	160 cm
Free area below the swing range of the door	B ₃	85 cm
Depth	C	153 cm
Minimum clearance to the door hinge side*	D ₁	25 cm (with a minimum opening angle of 95°)
	D ₂	75 cm (with a maximum opening angle of 170°)
Minimum clearance to the side wall of the floor unit	D ₃	8 cm
Minimum clearance to rear	E	15 cm
Free space (corresponds to the free room with a completely open floor unit door)	F ₁	145 cm (with a minimum opening angle of 95°)
	F ₂	135 cm (with a maximum opening angle of 170°)
Total required niche width	G ₁	min. 98 cm (with an opening angle of 90°)
	G ₂	min. 148 cm (with an opening angle of 170°)
Distance door to device rear	H	202 cm (with an opening angle of 95°)
Distance door to wall	I	214 cm (with an opening angle of 95°)
Corridor width required		With a 90° curve, the sum of the door width and corridor width must amount to a minimum of 2.30 m

*) With door hinge right, the clearances are to be inverted (dotted line)

A free area of 60 cm must be given each side of the steam sterilizer/must be achievable by moving the steam sterilizer to facilitate maintenance

Installation location

Properties	Cliniclave 45	Cliniclave 45 M
Set-up surface	Level and horizontal	
Floor load in normal operation	240/320 ^{*)} kg 60/80 ^{*)} kg per caster	460 kg 115 kg per caster
Floor load with hydraulic pressure test	320/400 ^{*)} kg 80 kg/100 kg per caster	610 kg 152.5 kg per caster
Waste emission	up to 1.4 kW	up to 2 kW (when door open)
Ambient temperature	5 °C until 40 °C (ideal range 16 °C until 26 °C) sufficient ventilation of the room must be guaranteed	
Air humidity	30 % until 60 %	
Illumination	in accordance with DIN EN ISO 12100 and DIN EN 1837	

^{*)} with floor unit

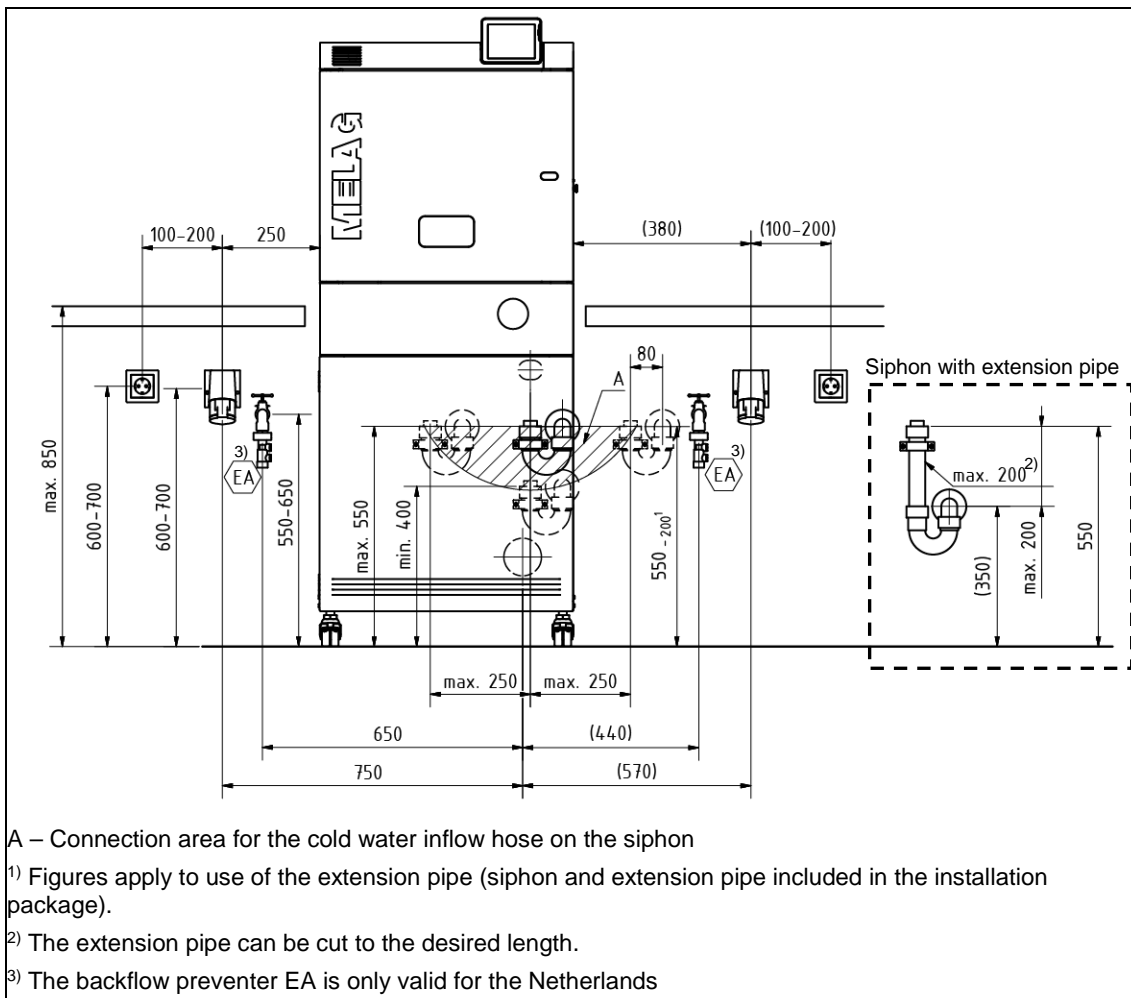


Fig. 3: Installation requirements (dimensions in mm)

On-site requirements

Mains supply



DANGER!

Incorrectly performed electrical connections can result in a short-circuit, fire, water damage and/or an electric shock. This could result in serious injury.

- The connections for electrical provision and water supply and discharge must be set-up by trained personnel.
- Observe the information regarding the installation and commissioning provided in the technical manual.

Observe the following safety measures when dealing with the cable and mains plug:

- ▶ Never splice or change the power cable.
- ▶ Never bend or twist the power cable.
- ▶ Never remove the plug by pulling on the power cable. Always take a grip on the plug.
- ▶ Never place any heavy objects on the power cable.
- ▶ Never run the cable over areas in which it could become trapped (e.g. doors or windows).
- ▶ Never lead the cable along a source of heat.
- ▶ Never use any nails, paper fasteners or similar objects to fix the cable.
- ▶ Should the cable or plug become damaged, switch off the autoclave. The power cable and plug should only be replaced by authorized personnel.
- ▶ Failure to observe these provisions can result in damage to the cable or plug and/or a fire or an electric shock. This could result in serious injury.

Table 4: On-site installation requirements for electrical connection

On-site installation requirements	Cliniclave 45	Cliniclave 45 M
On-site requirements	Electrical equipment must accord with DIN VDE 0100. A main switch (all-pole) should be fitted outside the installation room. This must be marked as the device and easily accessible for the operator. The feed line to the electrical connection must be laid separately from the distribution to the device. Observe the clockwise rotating field!	
Electrical connection	CEE socket with 380 V 415 V 16 A, separate electricity circuit with 3x16 A fuse (to ensure continued practice operation following an autoclave malfunction), an additional RCD switch with 30 mA, 3N AC 380 V until 415 V, 50/60 Hz, 3x16 A Observe the clockwise rotating field!	CEE socket with 380 V until 415 V 32 A, separate electricity circuit with 3x32 A fuse (to ensure continued practice operation following an autoclave malfunction), an additional RCD switch with 30 mA, 3N AC 380 V until 415 V, 50/60 Hz, 3x32 A Observe the clockwise rotating field!
Electrical power	max. 10.5 kW	max. 13.5 kW
Length of power cable	2.3 m (1.6 m when using a floor unit)	1.8 m from the floor unit
Leak detector water stop)	additional 230 V, 50 Hz socket	

Connection to a network socket (RJ45)

Table 5: On-site requirements for connection to a network socket

	Cliniclave 45	Cliniclave 45 M
Required length of the network cable in the floor unit	60 cm	112 cm

When connecting a network cable to a network socket, please ensure the use of the correct length of network cable for installation in a floor unit.

Water connection

Table 6: Requirements for water connection for Cliniclave 45

Cliniclave 45	Cold water	Feed water	Waste water
Length of water hoses	2.20 m (1.30 m from floor unit)	n/A	1.50 m (1 m from floor unit)
Connection in practice	To the cold water cut-off valve (water inflow tap) G 3/4"	To a reverse-osmosis unit, e.g. MELAdem 56	To the surface-mounted siphon in the installation package
Installation height	55 cm until 65 cm	n/A	Max. 55 cm (upper edge of the siphon)
Min. flow pressure	1.5 bar at 8 l/min.	0.5 bar at 5 l/min.	n/A
Recommended flow pressure	2.5 bar until 6 bar at 8 l/min.	2 bar until 4 bars at 5 l/min.	
Minimum water pressure (static)	n/A	2 bar	n/A
Maximum water pressure (static)	10 bar	5 bar	n/A
Max. through-flow volume	n/A	n/A	Short-term max. 9 l/min
Max. water temperature	Max. 20 °C (ideal 15 °C) ¹⁾	n/A	Short-term max. 90 °C
Additional requirements	No additional back flow preventer required (internally secured against return flow into the potable water network by the air gap according to EN 1717, fluid category 5)	<p>With MELAdem 56</p> <p>No additional back flow preventer required (internally secured against return flow into the potable water network by the air gap according to EN 1717, fluid category 5)</p> <p>Other water treatment units</p> <p>additional protection required in accordance with DIN EN 1717, fluid category 5</p>	
Water quality	Potable water, max. water hardness 4 °dH until 12 °dH in accordance with DIN EN 285 ²⁾	In accordance with DIN EN 285, appendix B table B.1, max. 5 µS/cm	
Leak monitor	We recommend the installation of a leak detector with a cut-off valve (e.g. MELAG water stop)		

¹⁾ The higher the temperature, the longer the operating times and the higher the water consumption

²⁾ Higher levels of hardness necessitates the installation of a water-softening unit.

Table 7: Requirements for water connection for Cliniclave 45 M

Cliniclave 45 M	Cold water	Feed water	Waste water
Length of water hoses	1.30 m from the floor unit	n/A	1 m from the floor unit
Connection in practice	To the cold water cut-off valve (water inflow tap) G 3/4"	To a reverse osmosis unit, e.g. MELAdem 56 M	To the surface-mounted siphon in the installation package
Installation height	55 cm until 65 cm	n/A	Max. 55 cm (upper edge of the siphon)
Min. flow pressure	1.5 bar at 8 l/min.	0.5 bar at 5 l/min.	n/A
Recommended flow pressure	2.5 bar until 6 bar at 8 l/min.	2 bar until 4 bar at 5 l/min.	n/A
Minimum water pressure (static)	n/A	2 bar	n/A
Maximum water pressure (static)	10 bar	5 bar	n/A
Max. water temperature	Max. 20 °C (ideal 15 °C) ¹⁾	n/A	Short-term max. 90 °C
Additional requirements	No additional back flow preventer required (internally secured against return flow into the potable water network by the air gap according to EN 1717, fluid category 5)	With MELAdem 56 M no additional back flow preventer required (internally secured against return flow into the potable water network by the air gap according to EN 1717, fluid category 5) Other water treatment units additional protection required in accordance with DIN EN 1717, fluid category 5	
Water quality	Potable water, max. water hardness 4 °dH until 12 °dH in accordance with DIN EN 285 ¹⁾	In accordance with DIN EN 285, appendix B table B.1, max. 5 µS/cm	
Leak monitor	We recommend the installation of a leak detector with a cut-off valve (e.g. MELAG water stop)		

¹⁾ Higher levels of hardness necessitates the installation of a water-softening unit.



PLEASE NOTE

The waste water hose must be fitted at a constant incline without sagging. Deviations in the installation arrangements require consultation with MELAG. Failure to do so can result in autoclave malfunctions.