

# SONOREX TECHNIK

## ZM 212 - Module series

**Two-part  
high-power ultrasonic baths for aqueous fluids**

- ZM 212 UH: Ultrasonic bath with bottom sonication and heating  
 ZM 212 UHL: Ultrasonic bath with bottom and side sonication und heating  
 ZM 212 U: Ultrasonic bath with bottom sonication, without heating  
 ZM 212 UL: Ultrasonic bath with bottom and side sonication, without heating



ZM 212 UHL

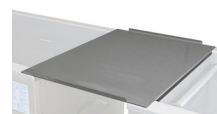
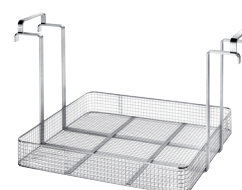
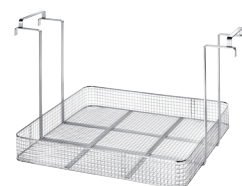
Two-part ultrasonic baths	ZM 212 UH	ZM 212 UHL	ZM 212 U	ZM 212 UL
Consisting of:				
Ultrasonic bath	TM 212 UH	TM 212 UHL	TM 212 U	TM 212 UL
Ultrasonic generator	LG 2002 T	LG 3020 T	LG 2002 T	LG 3020 T
Code No.	9320 - 25 kHz 9322 - 40 kHz	9328 - 25/25 kHz 9330 - 25/40 kHz 9332 - 40/40 kHz 9334 - 40/25 kHz	9324 - 25 kHz 9326 - 40 kHz	9336 - 25/25 kHz 9338 - 25/40 kHz 9340 - 40/40 kHz 9342 - 40/25 kHz

Ultrasonic bath	TM 212 UH	TM 212 UHL	TM 212 U	TM 212 UL
<b>Oscillating tank</b>				
Internal dimensions, l × w × d	750 × 650 × 500/520*mm, *inclined tank bottom			
Filling level mark from the middle of the tank bottom	410 mm			
Upper edge overflow gutter from the middle of the tank bottom	465 mm			
Tank edges	rounded, radius 20			
Capacity	285 l			
Operating volume up to filling level mark	230 l			
Filling volume up to upper edge overflow gutter	260 l			
Tank material	stainless steel AISI 316L, 2 mm			
Outlet / Inlet	3-way ball valve G 1 incl. hose and hose sockets, on the left side; brass, galvanically coated			
Overflow, tightly welded	ball valve G 1 incl. hose socket, on the right side; brass, galvanically coated			
Overflow gutter	on the right side			
Sprinkle tube	on the left side			
Tank bottom	inclined			
Oscillating systems				
at the tank bottom	40 pieces	30 pieces	40 pieces	30 pieces
at the front side of the tank	-	30 pieces	-	30 pieces
Control	turning knob	turning knob	-	-
<b>Temperature control</b>				
Adjustable temperature range	30 – 80 °C	30 – 80 °C	-	-
Heating power	7200 W	7200 W	-	-

	TM 212 UH	TM 212 UHL	TM 212 U	TM 212 UL
Housing				
External dimensions, l ×w × h	930 × 810 × 800 mm			
Housing material	stainless steel AISI 304			
Handles	on the sides			
Degree of protection	IP 32			
Feet	4 height adjustable feet			
Power supply				
Mains supply	400 V 3N~ (± 10 %), 50/60 Hz		230 V~ (± 10 %), 50/60 Hz	
Power consumption	7200 W		max. 23 W	
Current consumption per phase	max. 10.5 A		max. 0.1 A	
Leakage current	< 3.5 mA			
Mains cable	3 m, fixed at the unit, with three-phase plug CEKON 16 A		3 m, fixed at the unit, with safety plug CEE 7/7 (type E+F)	
Ultrasonic generator				
	LG 2002 T	LG 3020 T	LG 2002 T	LG 3020 T
Code No.	9542	9546	9542	9546
Power modules	2 pieces	2 pieces	2 pieces	2 pieces
Power adjustment	10 – 100 %			
Ultrasonic peak power corresponds to 4 times ultrasonic nominal power	2 × 4000 W	2 × 6000 W	2 × 4000 W	2 × 6000 W
Ultrasonic nominal power	2 × 1000 W	2 × 1500 W	2 × 1000 W	2 × 1500 W
Ultrasonic frequency	25 or 40 kHz	25 and / or 40 kHz	25 or 40 kHz	25 and / or 40 kHz
Pulse function	✓			
Housing				
External dimensions, l ×w × h	218 × 405 × 198 mm			
Housing material	aluminium, powder-coated			
Degree of protection	IP 20			
Power supply				
Mains supply	230 V~ (± 10 %), 50/60 Hz			
Power consumption	max. 3,0 kW			
Current consumption per phase	13.1 A			
Main fuse	16 A			
Leakage current	< 3.5 mA			
Mains cable	2 m, fixed at the unit, with safety plug CEE 7/7 (type E+F)			
Environmental conditions				
	ZM 212 UH	ZM 212 UHL	ZM 212 U	ZM 212 UL
Permissible ambient temperature	5 – 40 °C			
Permissible relative humidity to 31 °C	80 %			
Permissible relative humidity to 40 °C	50 %			
Shipping information				
Weight, net	120 kg	126 kg	112 kg	118 kg
Packing, l ×w × h	1 special pallet, 1200 × 1000 × 1150 mm			

**Accessories ultrasonic bath**

Type	Code No.	Description
MK 210	8425	insert basket, stainless steel load up to 20 kg internal dimensions 680 × 610 × 90 mm, l × w × d mesh size 12.5 × 12.5 mm
MK 210 S	8478	insert basket, stainless steel load up to 40 kg internal dimensions 680 × 610 × 90 mm, l × w × d mesh size 12.5 × 12.5 mm
MK 210 B	8419	insert basket, stainless steel, applicable for lifting device MB load up to 20 kg internal dimensions 680 × 610 × 90 mm, l × w × d mesh size 12.5 × 12.5 mm
MK 210 BS	8483	insert basket, stainless steel, applicable for lifting device MB load up to 40 kg internal dimensions 680 × 610 × 90 mm, l × w × d mesh size 12.5 × 12.5 mm
MD 210	8448	lid, stainless steel
TB 210	8405	drop plate, stainless steel, between two tanks if using a MB


**Accessories ultrasonic generator**

FS 15 L	8466	remote control with timer cable with plug, 7 m length time setting 1 – 15 min, ± 10 % continuous operation (∞)
FS 7	8468	remote control cable with 7 m cable length, one-sided with plug



### Supplementary equipment

Type	Code No.	Description
RM 212 H	9305	rinsing bath with heating, without ultrasound
RM 212	9306	rinsing bath without heating, without ultrasound
WG 210-2	8526	rack for 2 tanks, in connection with MB 210 B
WG 210-3	8527	rack for 3 tanks, in connection with MB 210 B
WG 210-4	8528	rack for 4 tanks, in connection with MB 210 B
MB 210	8312	lifting device with oscillation, for one unit
MB 210 B	8316	lifting device with oscillation, in connection with WG 210
KV 212	8458	cascade tube between two tanks



RM 212 H



RM 212



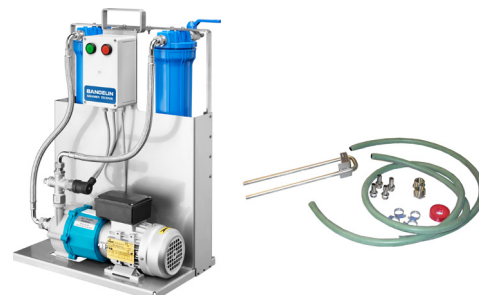
MB 210 B with WG 210-2



KV 212

Peripheral units

Type	Code No.	Description
FA 210	8613	filtration with pre- and fine filter incl. connection kit
OX 210	8605A	oil separator incl. connection kit
WA 210	8637A	DI-water-preparation device incl. connection kit
TO 210	8339	trough dryer, internal dimensions 750 × 650 × 500 mm, l × w × d



**Caution!**

Do not use combustible liquids, acids, chemicals containing chloride ions and household cleaners.

Do not place items on the tank bottom.

Recommendation: Special cleaning agents TICKOPUR

Subject to technical alterations without notice. Dimensions subject to production tolerances.  
Illustrations exemplary, not true to scale. Decoration products are not included in delivery.

2348a GB/2020-06