

SONOREX TECHNIK

ZM 182 - Module series

Two-part
high-power ultrasonic baths for aqueous fluids

- ZM 182 UH: Ultrasonic bath with bottom sonication and heating
 ZM 182 UHL: Ultrasonic bath with bottom and side sonication und heating
 ZM 182 U: Ultrasonic bath with bottom sonication, without heating
 ZM 182 UL: Ultrasonic bath with bottom and side sonication, without heating



ZM 182 UHL

Two-part ultrasonic baths	ZM 182 UH	ZM 182 UHL	ZM 182 U	ZM 182 UL
Consisting of:				
Ultrasonic bath	TM 182 UH	TM 182 UHL	TM 182 U	TM 182 UL
Ultrasonic generator	LG 2002 T	LG 3020 T	LG 2002 T	LG 3020 T
Code No.	9220 - 25 kHz 9222 - 40 kHz	9228 - 25/25 kHz 9230 - 25/40 kHz 9232 - 40/40 kHz 9234 - 40/25 kHz	9224 - 25 kHz 9226 - 40 kHz	9236 - 25/25 kHz 9238 - 25/40 kHz 9240 - 40/40 kHz 9242 - 40/25 kHz

Ultrasonic bath	TM 182 UH	TM 182 UHL	TM 182 U	TM 182 UL
Oscillating tank				
Internal dimensions, l × w × d	1000 × 500 × 400/420* mm, *inclined tank bottom			
Filling level mark from the middle of the tank bottom	310 mm			
Upper edge overflow gutter from the middle of the tank bottom	365 mm			
Tank edges	rounded, radius 20			
Capacity	227 l			
Operating volume up to filling level mark	170 l			
Filling volume up to upper edge overflow gutter	200 l			
Tank material	stainless steel AISI 316L, 2 mm, welded			
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	-	-
Temperature control				
Adjustable temperature range	30 – 80 °C	30 – 80 °C	-	-
Heating power	7200 W	7200 W	-	-

	TM 182 UH	TM 182 UHL	TM 182 U	TM 182 UL
Housing				
External dimensions, l × w × h	1180 × 660 × 800 mm			
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	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				
Code No.	LG 2002 T	LG 3020 T	LG 2002 T	LG 3020 T
Power modules	9542	9546	9542	9546
Power adjustment	2 pieces	2 pieces	2 pieces	2 pieces
Power adjustment	10 – 100 %			
Ultrasonic peak power corresponds to 4 times ultrasonic nominal power	10 – 100 %			
Ultrasonic nominal power	2 × 4000 W	2 × 6000 W	2 × 4000 W	2 × 6000 W
Ultrasonic frequency	2 × 1000 W	2 × 1500 W	2 × 1000 W	2 × 1500 W
Pulse function	25 or 40 kHz	25 and / or 40 kHz	25 or 40 kHz	25 and / or 40 kHz
	✓			

Housing				
External dimensions, l × w × h	218 × 405 × 198 mm			
Housing material	aluminium, powder-coated			
Degree of protection	IP 20			

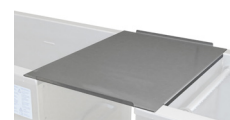
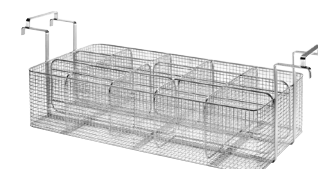
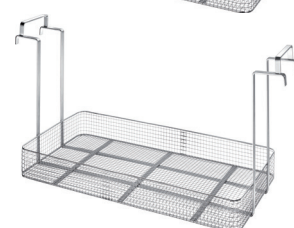
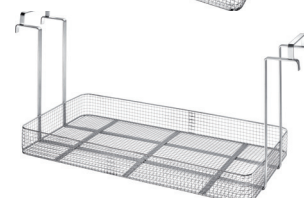
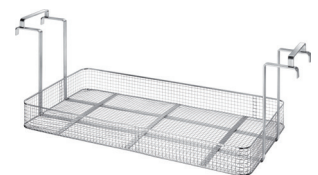
Power supply				
Mains supply	230 V~ (± 10 %), 50/60 Hz			
Power consumption	2,0 kW	3,0 kW	2,0 kW	3,0 kW
Current consumption per phase	13,1 A			
Main fuse	16 A			
Leakage current	< 3,5 mA			
Mains cable	2 m, fixed at the unit, with safety plug CEE 7/7 (type E+F)			

Environmental conditions				
Permissible ambient temperature	ZM 182 UH	ZM 182 UHL	ZM 182 U	ZM 182 UL
Permissible relative humidity to 31 °C	5 – 40 °C			
Permissible relative humidity to 40 °C	80 %			
	50 %			

Shipping information				
Weight, net	146 kg	152 kg	135 kg	140 kg
Packing, l × w × h	1 special pallet, 1400 × 800 × 1100 mm			

Accessories ultrasonic bath

Type	Code No.	Description
MK 180	8424	insert basket, stainless steel load up to 20 kg internal dimensions 930 × 460 × 90 mm, l × w × d mesh size 12.5 × 12.5 mm
MK 180 S	8477	insert basket, stainless steel load up to 40 kg internal dimensions 930 × 460 × 90 mm, l × w × d mesh size 12.5 × 12.5 mm
MK 180 B	8418	insert basket, stainless steel, applicable for lifting device MB load up to 20 kg internal dimensions 930 × 460 × 90 mm, l × w × d mesh size 12.5 × 12.5 mm
MK 180 BS	8482	insert basket, stainless steel, applicable for lifting device MB load up to 40 kg internal dimensions 930 × 460 × 90 mm, l × w × d mesh size 12.5 × 12.5 mm
MK 180 A	8427	insert basket, stainless steel, for 15 respirator masks load up to 20 kg internal dimensions 930 × 460 × 215 mm, l × w × d mesh size 12.5 × 12.5 mm
MD 180	8447	lid, stainless steel
TB 180	8404	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 182 H	9205	rinsing bath with heating, without ultrasound
RM 182	9206	rinsing bath without heating, without ultrasound
WG 180-2	8523	rack for 2 tanks, in connection with MB 180 B
WG 180-3	8524	rack for 3 tanks, in connection with MB 180 B
WG 180-4	8525	rack for 4 tanks, in connection with MB 180 B
MB 180	8311	lifting device with oscillation, for one unit
MB 180 B	8315	lifting device with oscillation, in connection with WG 180
KV 182	8457	cascade tube between two tanks



RM 182 H



RM 182



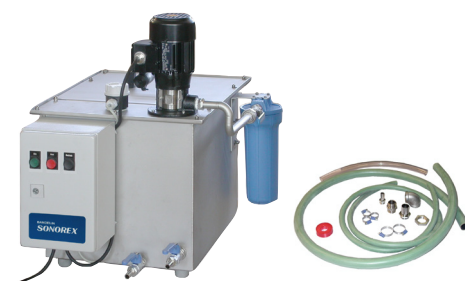
MB 180 B with WG 180-2



KV 182

Peripheral units

Type	Code No.	Description
FA 180	8612	filtration with pre- and fine filter incl. connection kit
OX 180	8604A	oil separator incl. connection kit
WA 180	8636A	DI-water-preparation device incl. connection kit
TO 180	8338	trough dryer internal dimensions 1000 × 500 × 400 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.

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BANDELIN electronic GmbH & Co. KG
Heinrichstraße 3 – 4
12207 Berlin
Deutschland

www.bandelin.com
info@bandelin.com
☎ : +49 30 768 80-0
📠 : +49 30 773 46 99

Zertifiziert nach
ISO 9001
ISO 13485