

Metal Block Thermostates, Liebisch



Metal block thermostats with permanent or exchangeable heating block with standard bore hole diameters of 5 to 41 mm.

- Working temperature: ambient temperature up to 450°C, depending on model
- Standard bore hole depth: 65 mm
- Microprocessor-controlled temperature regulation according to specified method (PID)
- Timer function can be set as a standard
- Digital with LED display for simultaneous indication of set and actual temperatures, resolution: 0.1°C
- Temperature recording: PT 100 (1x)
- Temperature stability: $\pm 0.2\%$
- Rated load: 230 Volt, 50/60 Hz

All devices are also available with external control box to protect the precise electronic control system from solvent evaporations of aggressive samples.

Extensive range of accessories available on request.



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① Labtherm®

With fixed heating blocks, Labtherm® is the basic system in the range.

Type	Working temp. °C	Holes	Ø mm	Dimensions mm	Order No.
LT-130-36-5	RT-130	36	5.2	340×230×130	10 83 05014
LT-130-60-5	RT-130	60	5.2	450×230×130	10 83 05134
LT-130-112-5	RT-130	112	5.2	450×230×130	10 83 04101
LT-130-36-10	RT-130	36	10.2	340×230×130	10 83 05101
LT-130-60-10	RT-130	60	10.2	450×230×130	10 83 01101
LT-130-112-10	RT-130	112	10.2	450×230×130	10 83 06102
LT-130-36-11-25t	RT-130	36	11.2	340×230×130	10 83 05022
LT-130-49-11-25t	RT-130	49	11.2	450×230×130	10 83 01125
LT-130-36-12	RT-130	36	12.2	340×230×130	10 83 05016
LT-130-60-12	RT-130	60	12.2	450×230×130	10 83 06103
LT-130-104-12	RT-130	104	12.2	450×230×130	10 83 06104
LT-130-36-13	RT-130	36	13.2	340×230×130	10 83 05017
LT-130-60-13	RT-130	60	13.2	450×230×130	10 83 05137
LT-130-36-16	RT-130	36	16.2	340×230×130	46 83 13036
LT-130-60-16	RT-130	60	16.2	450×230×130	46 83 13060
LT-130-104-16	RT-130	104	16.2	530×290×130	10 83 05258
LT-130-36-17	RT-130	36	17.2	340×230×130	10 83 05019
LT-130-60-17	RT-130	60	17.2	450×230×130	10 83 05139
LT-130-104-17	RT-130	104	17.2	530×290×130	10 83 05259
LT-130-6-41	RT-130	6	41.0	340×230×130	10 83 06105
LT-130-15-41	RT-130	15	41.0	450×230×130	10 83 06106
LT-200-36-5	RT-200	36	5.2	340×230×130	10 83 05114
LT-200-60-5	RT-200	60	5.2	450×230×130	10 83 05234
LT-200-36-10	RT-200	36	10.2	340×230×130	10 83 07101
LT-200-60-10	RT-200	60	10.2	450×230×130	10 83 07102
LT-200-112-10	RT-200	112	10.2	450×230×130	10 83 07103
LT-200-36-12	RT-200	36	12.2	340×230×130	10 83 07104
LT-200-60-12	RT-200	60	12.2	450×230×130	10 83 07105
LT-200-104-12	RT-200	104	12.2	450×230×130	10 83 07106
LT-200-36-16	RT-200	36	16.2	340×230×130	46 83 20036
LT-200-60-16	RT-200	60	16.2	450×230×130	46 83 20060
LT-200-104-16	RT-200	104	16.2	530×290×130	10 83 05358
LT-200-36-17	RT-200	36	17.2	340×230×130	10 83 05020
LT-200-60-17	RT-200	60	17.2	450×230×130	10 83 05140
LT-200-104-17	RT-200	104	17.2	530×290×130	10 83 05260
LT-350-36-16	RT-350	36	16.2	430×290×160	10 83 05318
LT-350-60-16	RT-350	60	16.2	520×290×130	10 83 05438
LT-350-104-16	RT-350	104	16.2	580×370×180	10 83 07107
LT-400-36-16	RT-400	36	16.2	430×290×160	10 83 08101
LT-400-60-16	RT-400	60	16.2	520×290×160	10 83 08102
LT-400-104-16	RT-400	104	16.2	580×370×180	10 83 08103

Special versions (number, diameter, and depth of bores) available on request.

② Labtherm®-PVC

The Labtherm® PVC is intended for determining the thermostability of PVC in accordance with VDE 0472 Testing of cables, wires and flexible cords.

Type	Working temp. °C	Holes	Ø mm	Dimensions mm	Order No.
LT-PVC-210-36-5	RT-210	36	5.2	340×230×130	10 83 06014



③ Minitherm®

With fixed heating blocks, Minitherm® is the small version of the base system.

Type	Working temp. °C	Holes	Ø mm	Dimensions mm	Order No.
MT-130-16-10	RT-130	16	10.2	260×180×120	10 83 06107
MT-130-16-11-25	RT-130	16	11.2	260×180×120	10 83 06125
MT-130-16-12	RT-130	16	12.2	260×180×120	10 83 05638
MT-130-16-13	RT-130	16	13.2	260×180×120	10 83 05637
MT-130-16-16	RT-130	16	16.2	260×180×120	10 83 01303
MT-130-16-17	RT-130	16	17.2	260×180×120	10 83 05639

Special versions (number, diameter, and depth of bores) available on request.



④ Thermobil®

The Thermobil® offers the maximum flexibility in the lab. The interchangeable heating blocks are tailored exactly to the tray, milled from one complete aluminum block. Diameters in our standard range extend from 5.2 to 18.2 mm.

Type	Working temperature °C	Dimensions mm	Order No.
TM-130-36	RT-130	340×230×130	10 83 05001
TM-200-36	RT-200	340×230×130	10 83 05002
TM-130-56	RT-130	450×230×130	10 83 05100
TM-200-56	RT-200	450×230×130	46 83 20056



⑤ Control

Labtherm®Control-Box

The Labtherm® Control-Boxes can substitute the installed microprocessor control unit. They can be used for all Liebisch-Metalblock-Thermostats with a PT100 for external control to protect the precise electronic system from solvent evaporations of aggressive samples.

Type	Specification	Order No.
LT-R	Control-box with ramp function	10 83 06610
LT-R-T-int	Control-box with electronic timer 4-digit (0-99.99 min/sec / 0-99.99 h/min / 0-999.9 h)	10 83 06612
LT-R-2	Standard control-box for 2 units	10 83 06620
LT-R-W	Control-box with weekly timer	10 83 06621



⑥ Monoblocks for Thermobil® „small block holder“

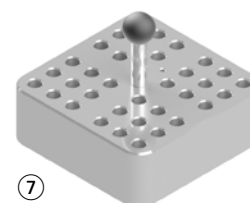
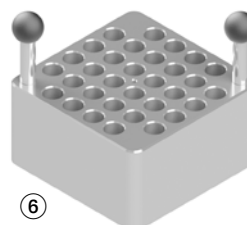
Type	Holes	Ø mm	Depth mm	Bottom	Block dim. mm	Order No.
MHB-36-5	36	5.2	65	pointed	139×139×75	10 83 01400
MHB-EVA-32-5	32	5.2	65	pointed	139×139×75	10 83 05400
MHB-36-10	36	10.2	65	pointed	139×139×75	10 83 01515
MHB-EVA-32-10	32	10.2	65	pointed	139×139×75	10 83 01555
MHB-36-11,2-25tief	36	11.2	25	flat	139×139×50	10 83 01520
MHB-EVA-32-11,2-25deep	32	11.2	25	flat	139×139×50	10 83 01560
MHB-EVA-32-11.9-20	32	11.9	20	flat	139×139×50	10 83 01548
MHB-36-12	36	12.2	65	pointed	139×139×75	10 83 01600
MHB-EVA-32-12	32	12.2	65	pointed	139×139×75	10 83 00000
MHB-36-13	36	13.2	65	pointed	139×139×75	10 83 01517
MHB-EVA-32-13	32	13.2	65	pointed	139×139×75	10 83 01557
MHB-36-16	36	16.2	65	pointed	139×139×75	10 83 01518
MHB-EVA-32-16	32	16.2	65	pointed	139×139×75	10 83 01558
MHB-36-17	36	17.2	65	pointed	139×139×75	10 83 01519
MHB-EVA-32-17	32	17.2	65	pointed	139×139×75	10 83 01559

Special versions (number, diameter, and depth of bores) available on request.



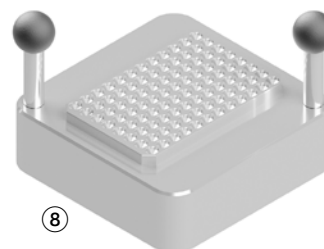
⑦ Monoblocks for Thermobil® „small block holder“ for Eppendorf vessels

Type	Holes	for vessels	Block dimensions mm	Order No.
MHB-56-0,2Ep	56	Eppendorf 0.2 ml	139×139×50	10 83 01510
MHB-36-0,5Ep	36	Eppendorf 0.5 ml	139×139×50	10 83 01511
MHB-EVA-32-0,5Ep	32	Eppendorf 0.5 ml	139×139×50	10 83 01551
MHB-36-1,5Ep	36	Eppendorf 1.5 ml	139×139×50	10 83 01512
MHB-EVA-32-1,5Ep	32	Eppendorf 1.5 ml	139×139×50	10 83 01552
MHB-36-2,0Ep	36	Eppendorf 2.0 ml	139×139×50	10 83 01513
MHB-EVA-32-2,0Ep	32	Eppendorf 2.0 ml	139×139×50	10 83 01553
MHB-36/18-0,5/ 18-1,5Ep	36	Eppendorf 0.5 and 1.5 ml	139×139×50	10 83 01200
MHB-36/18-1,5/ 18-2,0Ep	36	Eppendorf 1.5 and 2.0 ml	139×139×50	10 83 01113



⑧ **Monoblocks for Thermobil® „small block holder“ for microtiter-plate**

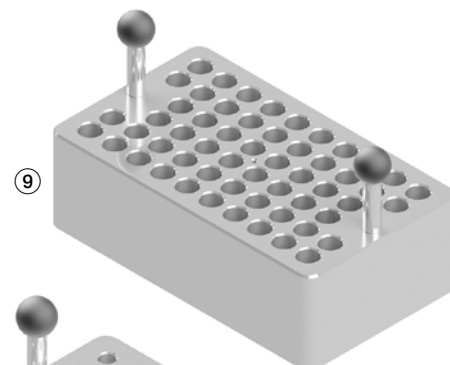
Type	for	Block dimensions mm	Order No.
MHB-96-T-00	96er without bores	139×139×50	10 83 09600
MHB-96-T-F	96er flat bottom	139×139×50	10 83 09610
MHB-96-T-R	96er round bottom	139×139×50	10 83 09620
MHB-96-T-V	96er V-bottom	139×139×50	10 83 09630
MHB-96-T-0,2Ep	96er for 0.2ml conical	139×139×50	10 83 09640



⑨ **Monoblocks for Thermobil® „large block holder“**

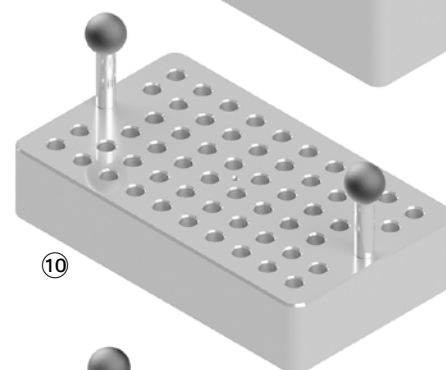
Type	Holes	Ø mm	Depth mm	Bottom	Block dimensions mm	Order No.
MHB-EVA-56-5	56	5.2	65	pointed	239×139×75	10 83 03400
MHB-108-5	108	5.2	65	pointed	239×139×75	10 83 04400
MHB-EVA-56-10	56	10.2	65	pointed	239×139×75	10 83 01535
MHB-108-10	108	10.2	65	pointed	239×139×75	10 83 04500
MHB-EVA-56-11,2-25deep	56	11.2	25	flat	239×139×50	10 83 01543
MHB-EVA-56-11	56	11.9	20	flat	239×139×50	10 83 01542
MHB-EVA-56-12	56	12.2	65	pointed	239×139×75	10 83 01536
MHB-89-12	89	12.2	65	pointed	239×139×75	10 83 01546
MHB-EVA-56-13	56	13.2	65	pointed	239×139×75	10 83 01537
MHB-89-13	89	13.2	65	pointed	239×139×75	10 83 01547
MHB-EVA-56-16	56	16.2	65	pointed	239×139×75	46 83 15616
MHB-EVA-56-17	56	17.2	65	pointed	239×139×75	10 83 01539

Special versions (number, diameter, and depth of bores) available on request.



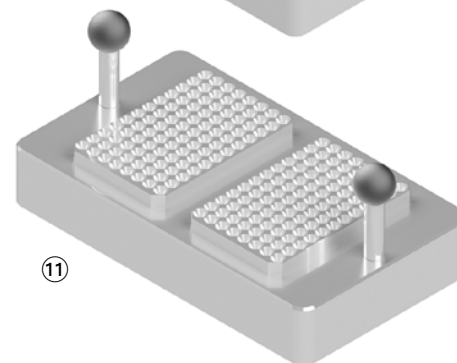
⑩ **Monoblocks for Thermobil® „large block holder“ for Eppendorf vessels**

Type	Holes	for vessels	Block dimensions mm	Order No.
MHB-92-0,2Ep	92	Eppendorf 0.2 ml	239×139×50	10 83 01530
MHB-56-0,5Ep	56	Eppendorf 0.5 ml	239×139×50	10 83 01531
MHB-56-1,5Ep	56	Eppendorf 1.5 ml	239×139×50	10 83 01532
MHB-56-2,0Ep	56	Eppendorf 2.0 ml	239×139×50	10 83 01533
MHB-56/28-0,5/28-1,5Ep	56	Eppendorf 0.5 and 1.5 ml	239×139×50	10 83 01534
MHB-56/28-1,5/28-2,0Ep	56	Eppendorf 1.5 and 2.0 ml	239×139×50	10 83 01538



⑪ **Monoblocks for Thermobil® „large block holder“ for micrititer-plate**

Type	for	Block dimensions mm	Order No.
MHB-2×96-T-00	2× 96er without bores	239×139×50	10 83 00120
MHB-2×96-T-F	2× 96er with flat bottom	239×139×50	10 83 00121
MHB-2×96-T-R	2× 96er with round bottom	239×139×50	10 83 00122
MHB-2×96-T-V	2× 96er with V-bottom	239×139×50	10 83 00123
MHB-2×96-T-0,2Ep	2× 96er for 0,2ml conical	239×139×50	10 83 00124



⑫ **Thermobil® Mini**

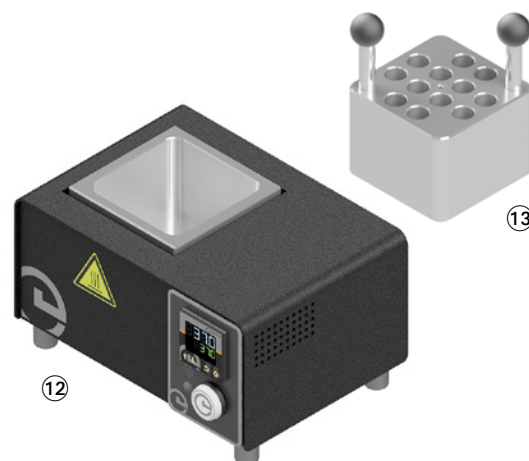
Thermobil® Mini is our miniature version for premium flexibility in the lab. With greatest accuracy, the exchangeable Mini monoblocks are adjusted to the block which is milled out of a solid aluminium block. Our standard program covers diameters from 5.2 to 18.2 mm.

Type	Working temperature °C	Dimensions mm	Order No.
TM-M-130-16	RT-130	260×180×120	10 83 05600

⑬ **Mono blocks for Thermobil® Mini**

Type	Holes	Ø mm	Depth mm	Bottom	Block dimensions mm	Order No.
MHB-M-EVA-12-0,5Ep	12	0.5 ml Epp	32	pointed	99×99×50	10 83 09931
MHB-M-EVA-12-1,5Ep	12	1.5 ml Epp	32	pointed	99×99×50	46 83 12150
MHB-M-EVA-12-2,0Ep	12	2.0 ml Epp	32	pointed	99×99×50	10 83 09933
MHB-M-EVA-12-10	12	10.2	65	pointed	99×99×75	10 83 09935
MHB-M-EVA-12-11	12	11.2	25	flat	99×99×50	10 83 09942
MHB-M-EVA-12-12	12	12.2	65	pointed	99×99×75	10 83 09936
MHB-M-EVA-12-13	12	13.2	65	pointed	99×99×75	10 83 09937
MHB-M-EVA-12-16	12	16.2	65	pointed	99×99×75	10 83 09938
MHB-M-EVA-12-17	12	17.2	65	pointed	99×99×75	10 83 09939

Special versions (number, diameter, and depth of bores) available on request.



14 Epptherm®

Epptherm® is a special device for the thermostatzation of 0.5 / 1.5 / 2.0 ml reaction vessels.

Type	Working temp. °C	Holes for	Dimensions mm	Order No.
EPT-130-64-0,2	RT-130	64 0.2 ml Epp	340×230×130	10 83 00610
EPT-130-36-0,5	RT-130	36 0.5 ml Epp	340×230×130	10 83 01610
EPT-130-36/18-0,5/18-1,5	RT-130	36 0.5 and 1.5 ml Epp	340×230×130	10 83 05061
EPT-130-36-1,5	RT-130	36 1.5 ml Epp	340×230×130	46 83 13015
EPT-130-36/18-1,5/18-2,0	RT-130	36 1.5 and 2.0 ml Epp	340×230×130	10 83 05062
EPT-130-36-2,0	RT-130	36 2.0 ml Epp	340×230×130	10 83 01661
EPT-130-112-0,2	RT-130	112 0.2 ml Epp	450×230×130	10 83 00611
EPT-130-60-0,5	RT-130	60 0.5 ml Epp	450×230×130	10 83 02611
EPT-130-60/30-0,5/30-1,5	RT-130	60 0.5 and 1.5 ml Epp	450×230×130	10 83 03611
EPT-130-60-1,5	RT-130	60 1.5 ml Epp	450×230×130	10 83 05132
EPT-130-60/30-1,5/30-2,0	RT-130	60 1.5 and 2.0 ml Epp	450×230×130	10 83 05164
EPT-130-60-2,0	RT-130	60 2.0 ml Epp	450×230×130	46 83 13062
EPT-130-104-0,5	RT-130	104 0.5 ml Epp	530×290×130	10 83 05265
EPT-130-104/52-0,5/52-1,5	RT-130	104 0.5 and 1.5 ml Epp	530×290×130	10 83 05511
EPT-130-104-1,5	RT-130	104 1.5 ml Epp	530×290×130	10 83 05252
EPT-130-104/52-1,5/52-2,0	RT-130	104 1.5 and 2.0 ml Epp	530×290×130	10 83 05266
EPT-130-104-2,0	RT-130	104 2.0 ml Epp	530×290×130	10 83 05253

Special versions (number, diameter, and depth of bores) available on request.

15 Test racks

Test racks for convenient handling of Eppendorf vessels 0,5 – 2,0 ml.

Type	Holes	Volume ml	Order No.
EPTG-36-0,5	36	0.5	10 83 01611
EPTG-36-1,5/2,0	36	1.5/2.0	10 83 01612
EPTG-60-0,5	60	0.5	10 83 01621
EPTG-60-1,5/2,0	60	1.5/2.0	10 83 01622
EPTG-104-1,5/2,0	104	1.5/2.0	10 83 01632

16 Epptherm® Mini

The Epptherm® Mini is a special device for the thermostatzation of 0.5 / 1.5 / 2.0 ml reaction vessels.

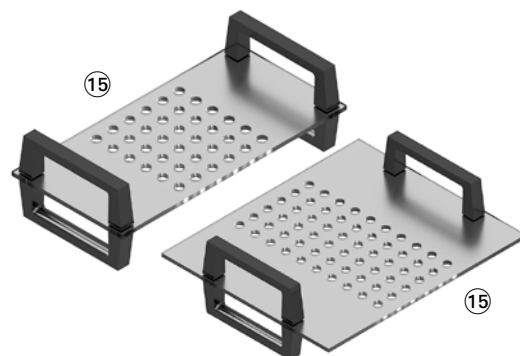
Type	Working temp. °C	Holes for	Dimensions mm	Order No.
MT-130-16-0,5Ep	RT-130	16 0.5 ml Epp	260×180×120	10 83 05631
MT-130-16-1,5Ep	RT-130	16 1.5 ml Epp	260×180×120	10 83 05632
MT-130-16-2,0Ep	RT-130	16 2.0 ml Epp	260×180×120	10 83 05633
MT-130-16-/8-0,5/8-1,5	RT-130	16 0.5/1.5 ml Epp	260×180×120	10 83 05661
MT-130-16-/8-1,5/8-2,0	RT-130	16 1.5/2.0 ml Epp	260×180×120	10 83 05662

Special versions (number, diameter, and depth of bores) available on request.

17 Mikrotherm®

Specially designed for the thermostatzation of microtiter plates.

Type	Working temp. °C	for	Order No.
LT-130-96-T-00	RT-130	96er without bores	10 83 06310
LT-130-96-T-F	RT-130	96er flat bottom	10 83 06311
LT-130-96-T-R	RT-130	96er round bottom	10 83 06312
LT-130-96-T-V	RT-130	96er V-bottom	10 83 06313
LT-130-2×96-T-00	RT-130	2× 96er without bores	10 83 06320
LT-130-2×96-T-F	RT-130	2× 96er flat bottom	10 83 06321
LT-130-2×96-T-R	RT-130	2× 96er round bottom	10 83 06322
LT-130-2×96-T-V	RT-130	96er V-bottom	10 83 06323



18 Evaporator®

The Evaporator® is the complete system for efficient sample concentration. It consists of a Labtherm® with permanently installed heater block and the Multiplex valve depot for 32 or 60 sample places.

Type	Working temp. °C	Holes	Ø mm	Dimensions mm	Order No.
EVTF-130-36-5	RT-130	32 (36)	5.2	340×230×130	10 83 04610
EVTF-130-36-10	RT-130	32 (36)	10.2	340×230×130	10 83 03610
EVTF-130-36-11	RT-130	32 (36)	11.2	340×230×130	10 83 06111
EVTF-130-36-12	RT-130	32 (36)	12.2	340×230×130	10 83 07611
EVTF-130-36-13	RT-130	32 (36)	13.2	340×230×130	10 83 03613
EVTF-130-36-16	RT-130	32 (36)	16.2	340×230×130	46 83 13016
EVTF-130-36-17	RT-130	32 (36)	17.2	340×230×130	10 83 03617
EVTF-200-36-5	RT-200	32 (36)	5.2	340×230×130	10 83 07621
EVTF-200-36-10	RT-200	32 (36)	10.2	340×230×130	10 83 03710
EVTF-200-36-12	RT-200	32 (36)	12.2	340×230×130	10 83 03712
EVTF-200-36-13	RT-200	32 (36)	13.2	340×230×130	10 83 03713
EVTF-200-36-16	RT-200	32 (36)	16.2	340×230×130	10 83 08621
EVTF-200-36-17	RT-200	32 (36)	17.2	340×230×130	10 83 03717
EVTF-130-60/ 30-1,5/30-2,0Epp	RT-130	60	1.5 and 2.0 ml Epp	450×230×130	10 83 03831
EVTF-130-60-5	RT-130	60	5.2	450×230×130	10 83 06611
EVTF-130-60-10	RT-130	60	10.2	450×230×130	10 83 06010
EVTF-130-60-11	RT-130	60	11.2	450×230×130	10 83 04611
EVTF-130-60-12	RT-130	60	12.2	450×230×130	10 83 06012
EVTF-130-60-13	RT-130	60	13.2	450×230×130	10 83 06013
EVTF-130-60-16	RT-130	60	16.2	450×230×130	10 83 06016
EVTF-130-60-17	RT-130	60	17.2	450×230×130	10 83 06017
EVTF-200-60-5	RT-200	60	5.2	450×230×130	10 83 08622
EVTF-200-60-10	RT-200	60	10.2	450×230×130	10 83 06110
EVTF-200-60-12	RT-200	60	12.2	450×230×130	10 83 08623
EVTF-200-60-13	RT-200	60	13.2	450×230×130	10 83 06113
EVTF-200-60-16	RT-200	60	16.2	450×230×130	46 83 20016
EVTF-200-60-17	RT-200	60	17.2	450×230×130	10 83 06117

Special versions (number, diameter, and depth of bores) available on request.



19 Evaporator®

The Evaporator® is the complete system for efficient sample concentration. It consists of a Thermobil® with replaceable heater block and the Multiplex valve depot for 32 or 56 samples.

Type	Working temp. °C	Holes	Ø mm	Dimensions mm	Order No.
EVTM-130-32-5	RT-130	32	5.2	340×230×130	10 83 05411
EVTM-130-32-10	RT-130	32	10.2	340×230×130	10 83 03210
EVTM-130-32-11	RT-130	32	11.2	340×230×130	10 83 03601
EVTM-130-32-12	RT-130	32	12.2	340×230×130	10 83 05611
EVTM-130-32-13	RT-130	32	13.2	340×230×130	10 83 03213
EVTM-130-32-16	RT-130	32	16.2	340×230×130	46 83 13032
EVTM-130-32-17	RT-130	32	17.2	340×230×130	10 83 03217
EVTM-200-32-5	RT-200	32	5.2	340×230×130	10 83 08624
EVTM-200-32-10	RT-200	32	10.2	340×230×130	10 83 03310
EVTM-200-32-12	RT-200	32	12.2	340×230×130	10 83 08625
EVTM-200-32-13	RT-200	32	13.2	340×230×130	10 83 03313
EVTM-200-32-16	RT-200	32	16.2	340×230×130	10 83 03316
EVTM-200-32-17	RT-200	32	17.2	340×230×130	10 83 03317
EVTM-130-56-5	RT-130	56	5.2	450×230×130	10 83 05612
EVTM-130-56/ 28-1,5/28-2,0Epp	RT-130	56	1.5 and 2.0 ml Epp	450×230×130	10 83 03431
EVTM-130-56-10	RT-130	56	10.2	450×230×130	10 83 05610
EVTM-130-56-11	RT-130	56	11.2	450×230×130	10 83 04311
EVTM-130-56-12	RT-130	56	12.2	450×230×130	10 83 06101
EVTM-130-56-13	RT-130	56	13.2	450×230×130	10 83 05613
EVTM-130-56-16	RT-130	56	16.2	450×230×130	10 83 05616
EVTM-130-56-17	RT-130	56	17.2	450×230×130	10 83 05617
EVTM-200-56-5	RT-200	56	5.2	450×230×130	10 83 08626
EVTM-200-56-10	RT-200	56	10.2	450×230×130	10 83 05710
EVTM-200-56-12	RT-200	56	12.2	450×230×130	10 83 08627
EVTM-200-56-13	RT-200	56	13.2	450×230×130	10 83 05713
EVTM-200-56-16	RT-200	56	16.2	450×230×130	46 83 20017
EVTM-200-56-17	RT-200	56	17.2	450×230×130	10 83 05717

Special versions (number, diameter, and depth of bores) available on request.

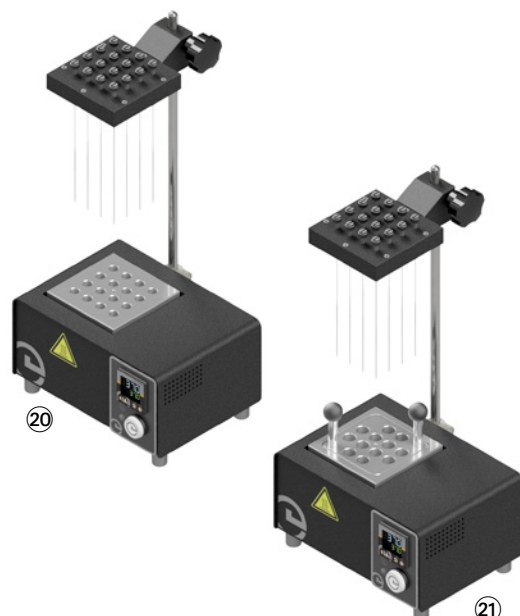


20 Evaporator® Mini

The Evaporator® Mini is the miniature version of the complete system for efficient sample concentration. It consists of a Minitherm® with permanently installed heater block and the Multiplex valve depot for 16 sample places.

Type	Working temp. °C	Holes	Ø mm	Dimensions mm	Order No.
EVTF-M-130-16-1,5Ep	RT-130	16	1.5 ml Epp	260×180×120	10 83 09611
EVTF-M-130-16-2,0Ep	RT-130	16	2.0 ml Epp	260×180×120	10 83 09612
EVTF-M-130-16-5	RT-130	16	5.2	260×180×120	10 83 09613
EVTF-M-130-16-11	RT-130	16	11.2	260×180×120	10 83 06948
EVTF-M-130-16-12	RT-130	16	12.2	260×180×120	10 83 06936
EVTF-M-130-16-13	RT-130	16	13.2	260×180×120	10 83 06937
EVTF-M-130-16-16	RT-130	16	16.2	260×180×120	10 83 01306
EVTF-M-130-16-17	RT-130	16	17.2	260×180×120	10 83 06939

Special versions (number, diameter, and depth of bores) available on request.

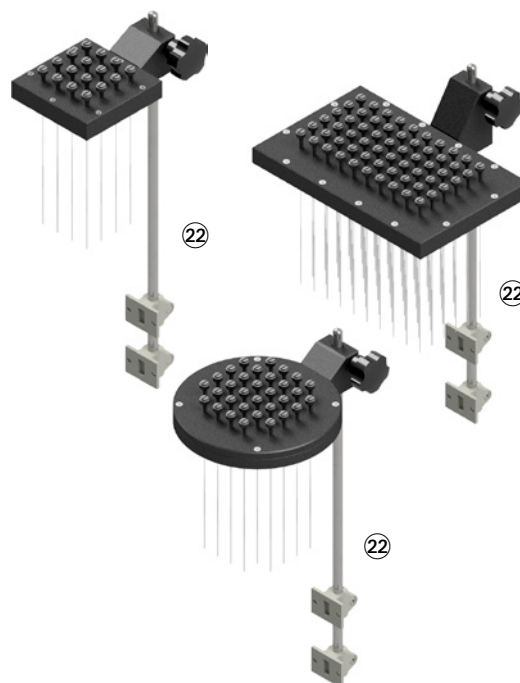


21 Evaporator® Mini

The Evaporator® Mini is the miniature version of the complete system for efficient sample concentration. It consists of a Thermobil® Mini with replaceable heater block and the Multiplex valve depot for 12 sample places.

Type	Working temp. °C	Holes	Ø mm	Dimensions mm	Order No.
EVTM-M-130-12-1,5Ep	RT-130	12	1.5 ml Epp	260×180×120	10 83 09614
EVTM-M-130-12-2,0Ep	RT-130	12	2.0 ml Epp	260×180×120	10 83 09615
EVTM-M-130-12-5	RT-130	12	5.2	260×180×120	10 83 09616
EVTM-M-130-12-11	RT-130	12	11.2	260×180×120	10 83 02601
EVTM-M-130-12-12	RT-130	12	12.2	260×180×120	10 83 07036
EVTM-M-130-12-13	RT-130	12	13.2	260×180×120	10 83 07037
EVTM-M-130-12-16	RT-130	12	16.2	260×180×120	10 83 07038
EVTM-M-130-12-17	RT-130	12	17.2	260×180×120	10 83 07039

Special versions (number, diameter, and depth of bores) available on request.



22 Multiplex-Valve-Unit

Multiplex-Valve-Unit for evaporating and concentrating different samples with selected gases. High-adjustable and swivelling to the side for easy sample loading. Incl. frame rod, coupling bracket, unit-clamps, luer-needles and PTFE-hose attachment.

Type	Specification	Order No.
MPVD-16	for Minis with up to 16 bores	10 83 01709
MPVD-32	for up to 32 bores	10 83 01710
MPVD-60	for up to 56/60 bores	10 83 01711
MPVD-PTFE-16	for up to 16 bores with PTFE-coated Luer-Needles	10 83 01712
MPVD-PTFE-32	for up to 32 bores with PTFE-coated Luer-Needles	10 83 01713
MPVD-PTFE-60	for up to 56/60 bores with PTFE-coated Luer-Needles	10 83 01714
MPVD-96-Mikrotiter	with PTFE-coated Luer-Needles for 96er Mikrotiter-plates	10 83 01715
MPVD-96-Mikrotiter, 8 sectors lockable	with PTFE-coated Luer-Needles for 96er Mikrotiter-plates, 8 sectors lockable á 12 positions	10 83 01716
MPVD-S-xx	Special version	10 83 01799



Accessories

Article	Specification	Order No.
Luer-Needles stainless steel	100 mm length, 12 pc./pack.	10 83 01821
Luer-Needles stainless steel	100 mm length, 16 pc./pack.	10 83 01717
Luer-Needles stainless steel	50 mm length, 12 pc./pack.	10 83 01822
Luer-Needles PTFE	PTFE-coated, 12 pc./pack.	10 83 01823
PTFE- hose attachment	16 pc./pack.	10 83 01810
PTFE- hose attachment	32 pc./pack.	10 83 01811
Frame rod, complete	for the MPVD, incl. adjustable ring, 2x clamps, 3x keys	10 83 01812
23 LT-KK-32 „little crank“	comfortable crank handle wheel for simultaneous stepless turning down of the MPVD	10 83 01813
24 LT-GK-60 „big crank“	comfortable crank handle wheel for simultaneous stepless turning down of the MPVD	10 83 01814
25 Conversion kit MPVD-32	Conversion kit for upgrading the standard tripod rod to the convenient hand crank	10 83 01103
26 Conversion kit MPVD-60	Conversion kit for upgrading the standard tripod rod to the convenient hand crank (factory conversion only)	10 83 01104
Luer-Needle attachment	chrome	10 83 01962
Mounting clamps	for MPVD, incl. screws	10 83 01961
Knurled screws	10 pieces = 1 PU	10 83 04471
Covering caps	10 pieces = 1 PU	10 83 01414

27 Covering caps

High-quality transparent cover hoods with two stainless steel handles, for use at max. 200°C.

Type	suitable for	for blocks, dimensions mm	Order No.
LT-AH-100	Minitherm® and Thermobil® Mini	120×120	10 83 00100
LT-AH-140	LT-36 and TM-32	139×139	10 83 00140
LT-AH-240	LT-60 and TM-56	239×139	10 83 00240

28 Covering plates

Transparent cover plate with handle for mono-blocks with 50 mm block height (eg. Eppendorf, Mikrotiter etc.).

Type	suitable for	for blocks, dimensions mm	Order No.
TM-AP-100	TM-Mini	99×99	10 83 01100
TM-AP-140	TM-32	139×139	10 83 01140
TM-AP-240	TM-56	239×139	10 83 01240

29 Rotatherm

The Rotatherm® connects temperature control with gentle overhead mixing. With the variably adjustable rotation, the samples are mixed by either regular or permanent rotation. The integrated timer makes it possible to programme individual operating steps. The device is available with fixed installed heating blocks or with exchangeable heating blocks upon request.

Technical data:

Temperature range:	RT to +150°C
Sample places:	max. 2 × 32
Drilling diameter:	5 to 41 mm
Drilling depth:	max. 90 mm
Drilling bottom:	pointed, round or plain
Heating rate:	upon request
Revolution:	up to 50 rpm
Heating power:	1250 Watt
Operating voltage:	230 Volt
Housing dimensions:	650 × 240 × 450 mm

Article	Order No.
Rotatherm RT-150-2x...	10 83 01502

