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HELPING CHEMISTS

MILESTONE
ACCESSORIES & CONSUMABLES
CATALOGUE

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MILESTONE
H E L P I N G
C H E M I S T S

Dear Milestone Customer,

First of all, thank you for investing in our system, we are confident it will match your expectations and look forward to many years of successful cooperation with your Company. We are now pleased to share with you the Milestone Accessory and Consumables catalogue. The catalogue provides you an exhaustive explanation of all the main consumables and accaccessories available for your system. The catalogue will drive you through all the essential components for your Milestone system to ensure the proper performance and maintenance of the system. This document also includes all the options available to further enhance the flexibility of your Milestone system. Furthermore additional info and even additional accessories can be found at: **www.milestonesrl.com/store**. Feel free to contact us or your local distributor in case of doubts or if you wish to receive additional information. We are here to help you.

With our best regards.

Available for

ETHOS LEAN
- **MAXI-14 for ETHOS LEAN** | Digestion Rotor

ETHOS EASY, UP, X
- **SK-15A** | High Pressure Rotor
- **SK-15ET** | High Pressure Rotor (easyTEMP compatible)
- **SR-15ET** | Extraction Rotor
- **MAXI-24 HP** | High Performance Rotor (easyTEMP compatible)
- **MAXI-44** | High Throughput Rotor (easyTEMP compatible)
- **fastEX-24eT** | High Througput Extraction Rotor
- **SFS-24** | Simultaneous Filtration System

ultraWAVE
- **Position Racks and Racks for Mixed Vials**

DMA-80
- **Accessories & Consumables**

PYRO
- **Accessories & Consumables**

MAXI-14 Digestion Rotor for ETHOS LEAN

easyTEMP *compatible*

The MAXI-14 holds up to 14 PTFE-TFM vessels with a volume of 100 mL, and can perform digestion on a variety of samples, such as soils, sediments, wastewater and several organic matrices. The MAXI-14 rotor is fully compliant with commonly used standard methods, such as the US EPA 3015, 3051, and 3052.

| SAMPLE TYPE

Officials	Agriculture	Beverage	Cannabis	Ceramics
Chemicals	Clinicals	Consumer Products	Environmental	Food & Feed
Metals & Mining	Petrochemicals	Pharmaceuticals	Pigments	Polymers

| SAMPLE AMOUNT

Small	Medium	Large	Extra Large

| SAMPLE THROUGHPUT

6	**10**	**14**	**15**	**16**	**24**	**44**
6 positions	10 positions	14 positions	15 positions	16 positions	24 positions	44 positions

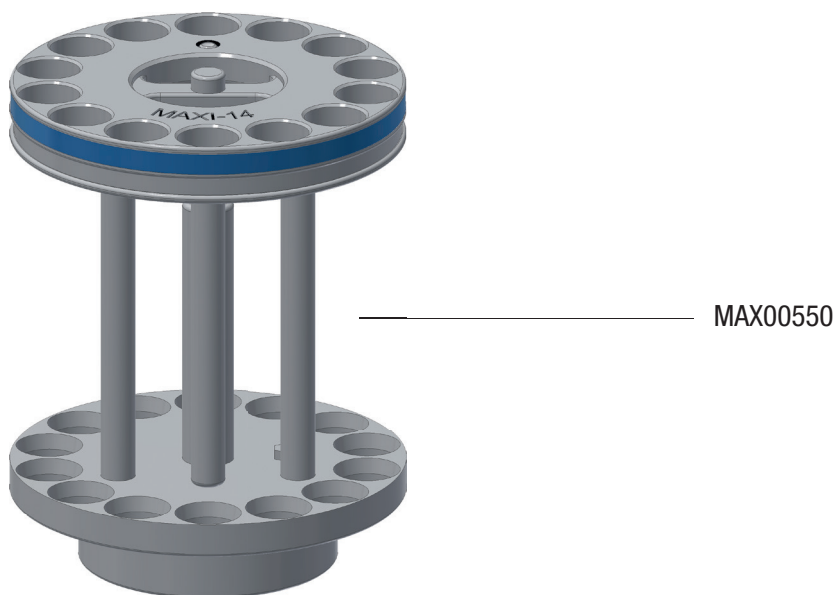# MAXI-14 Digestion Rotor for ETHOS LEAN
(easyTEMP compatible)
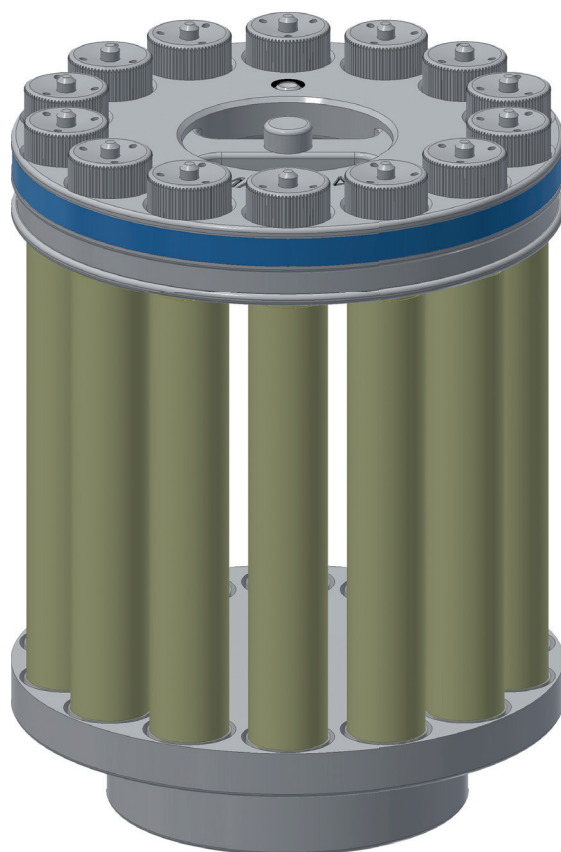
MAXI14A ✚

P/N	Description
MAXI14A ✚	MAXI-14 rotor, 100 mL, complete with 14 pressure reactors for ETHOS LEAN

MAXI14A
MAXI-14 rotor, 100 mL, complete with 14 pressure reactors for ETHOS LEAN
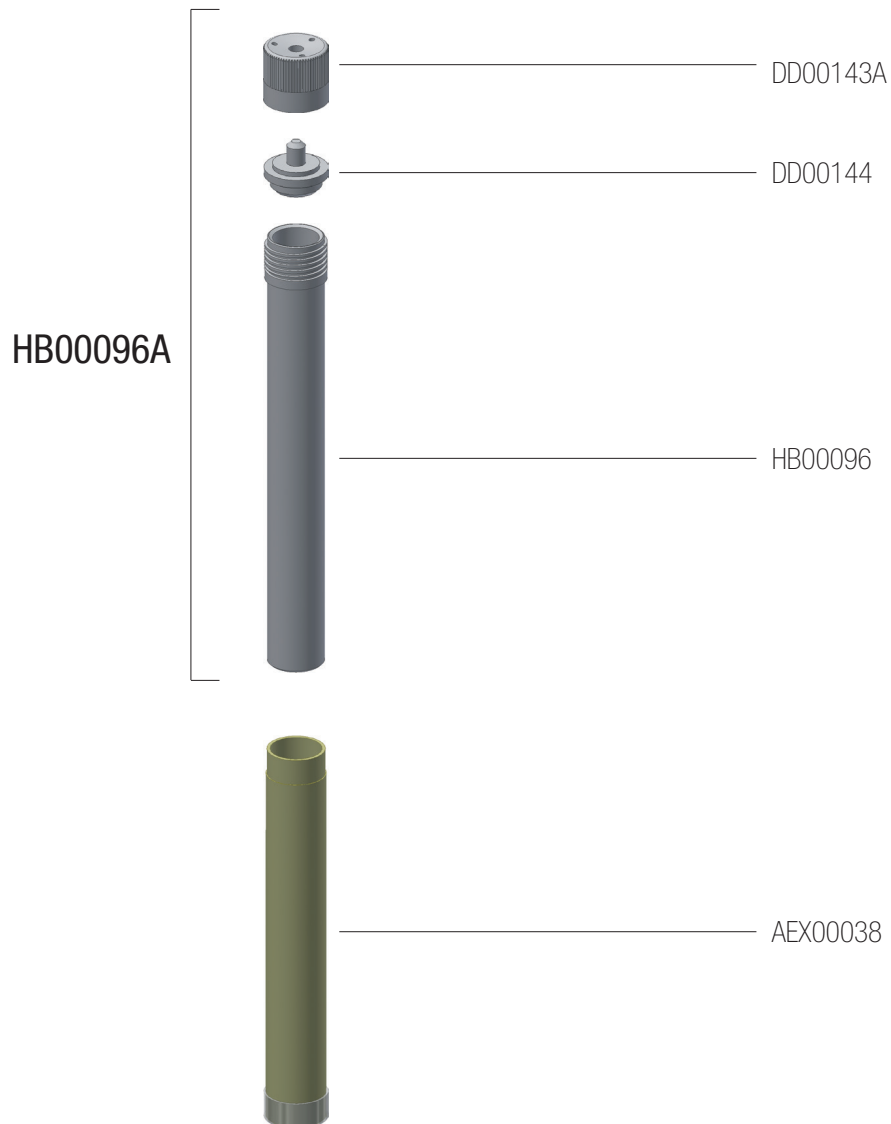
MAX00550

AEX00060 ➕

P/N	Description
MAX00550	MAXI-14 rotor body for 100 mL vessels for ETHOS LEAN
AEX00060 ➕	Vessel 100 mL with cover, automatic pressure valve and safety shield

MAXI14A
AEX00060
Vessel 100 ml with protection cover, automatic pressure valve and safety shield

DD00143A

DD00144

HB00096A

HB00096

AEX00038

P/N	Description
HB00096A	Vessel 100ml complete with threaded cover and pressure valve
└ DD00143A	Cover with thread for MAXI rotor vessel
└ DD00144	TFM valve for MAXI rotor cover
└ HB00096	Vessel 100ml complete with thread for MAXI rotor
AEX00038	Protection shield for pressure vessel 100ml

SK-15 High Pressure Rotor

The SK-15 rotor is only available for the ETHOS UP and the ETHOS EASY. The SK-15 is a high-pressure rotor featuring up to 15 TFM vessels with a volume of 100 mL and suitable for all applications. It is fully compliant with commonly used standard methods, such as the US EPA 3015, 3051, and 3052. The SK-15 features an enhanced 'vent-and-reseal' technology for controlling the inner pressure of all vessels with complete safety.

SAMPLE TYPE

Officials	Agriculture	Beverage	Cannabis	Ceramics
Chemicals	Clinicals	Consumer Products	Environmental	Food & Feed
Metals & Mining	Petrochemicals	Pharmaceuticals	Pigments	Polymers

SAMPLE AMOUNT

Small	Medium	Large	Extra Large

SAMPLE THROUGHPUT

6	10	12	**15**	16	24	44
6 positions	10 positions	12 positions	**15 positions**	16 positions	24 positions	44 positions

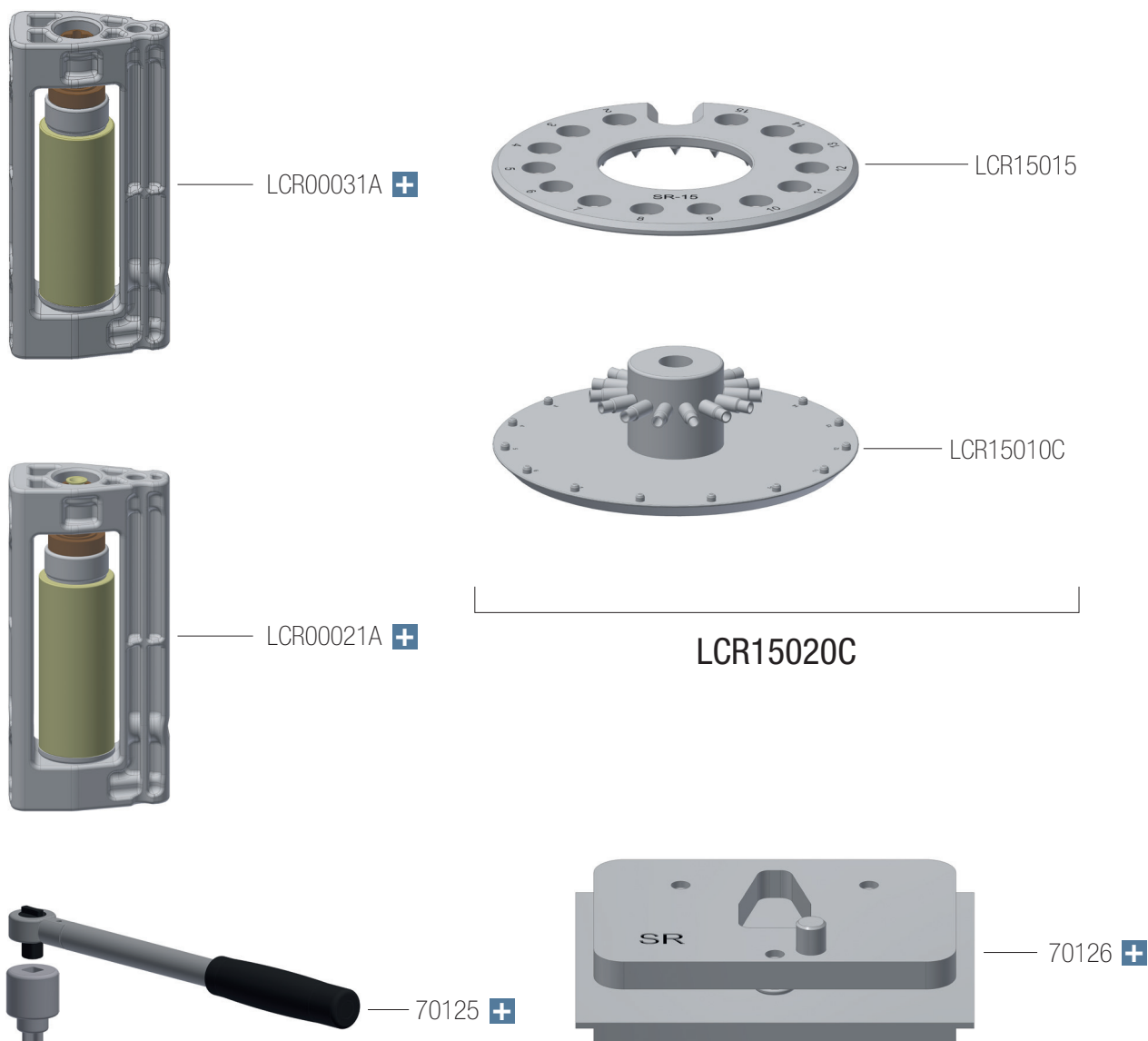# SK-15 High Pressure Rotor

SK15-A ✚

P/N	Description
SK15-A ✚	Starter kit 15 segments high pressure rotor complete

✚ *Include subparts*

# SK15-A

Starter kit 15 segments high pressure rotor complete

LCR00031A ✚

LCR15015

LCR00021A ✚

LCR15010C

LCR15020C

70125 ✚

70126 ✚

P/N	Description
LCR00021A ✚	ATC Reference Segment complete with ATC thermowell and installation tool
LCR00031A ✚	Standard segment complete
LCR15020C	Rotor body SK-15
└ LCR15015	SK-15 top plate
└ LCR15010C	SK-15 bottom plate
70125 ✚	Tension Wrench adjusted at 10 Nm, adapter included
70126 ✚	Workstation complete for SK-15

SK15-A
└ LCR00021A

ATC Reference Segment complete with ATC thermowell and installation tool

PCS2605

AS00003A

HB00066A

LCR0012
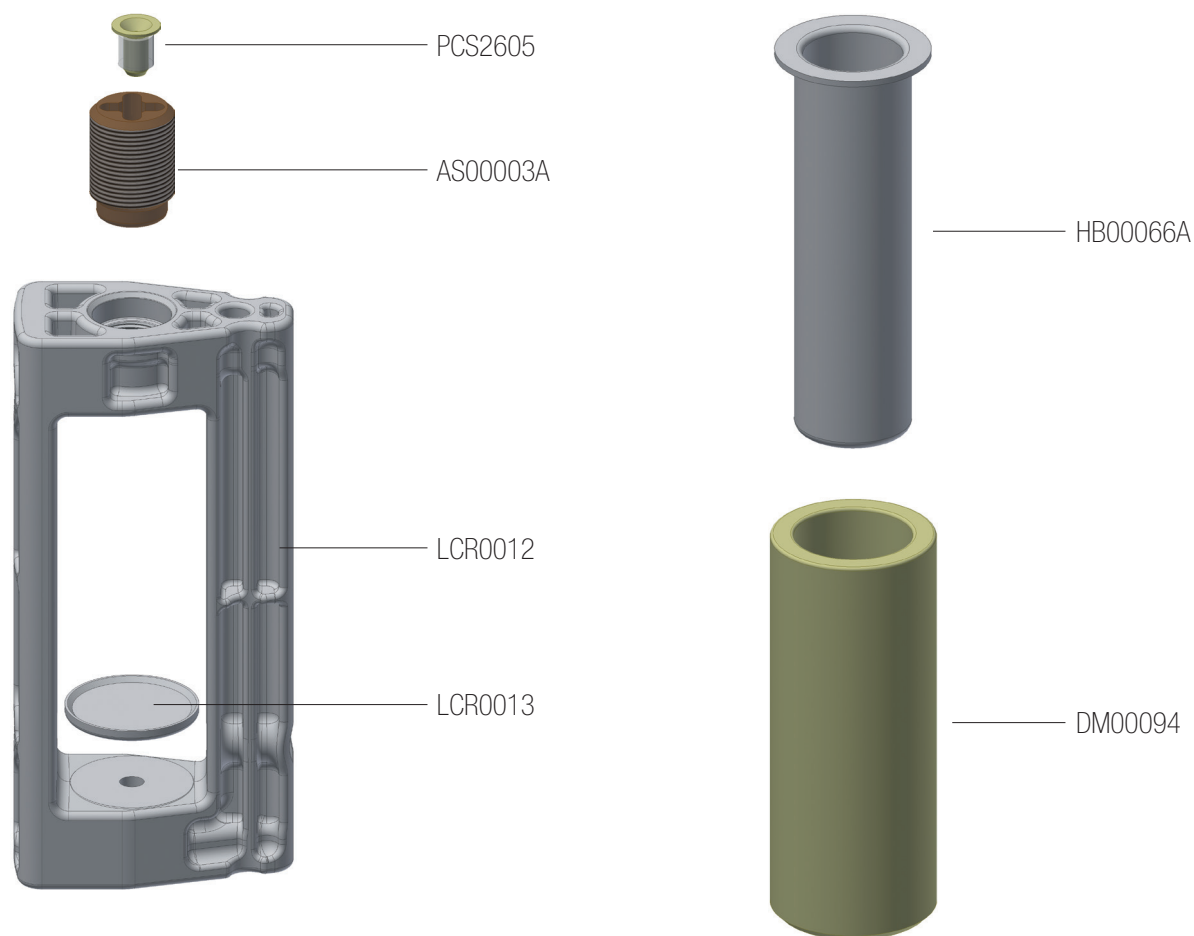
LCR0013

DM00094

P/N	Description
PCS2605	Ring adapter
AS00003A	Pressure screw M26X37 for ATC
LCR0012	Segment SK-15
LCR0013	Centering plate PTFE 54/48x10 mm for P/N DM00094
HB00066A	High pressure vessel 100ml
DM00094	Safety shield for high pressure vessel

SK15-A
└ LCR00021A *(continued)*
ATC Reference Segment complete with ATC thermowell and installation tool

AP000026A

055139

055140

DD00170

050174
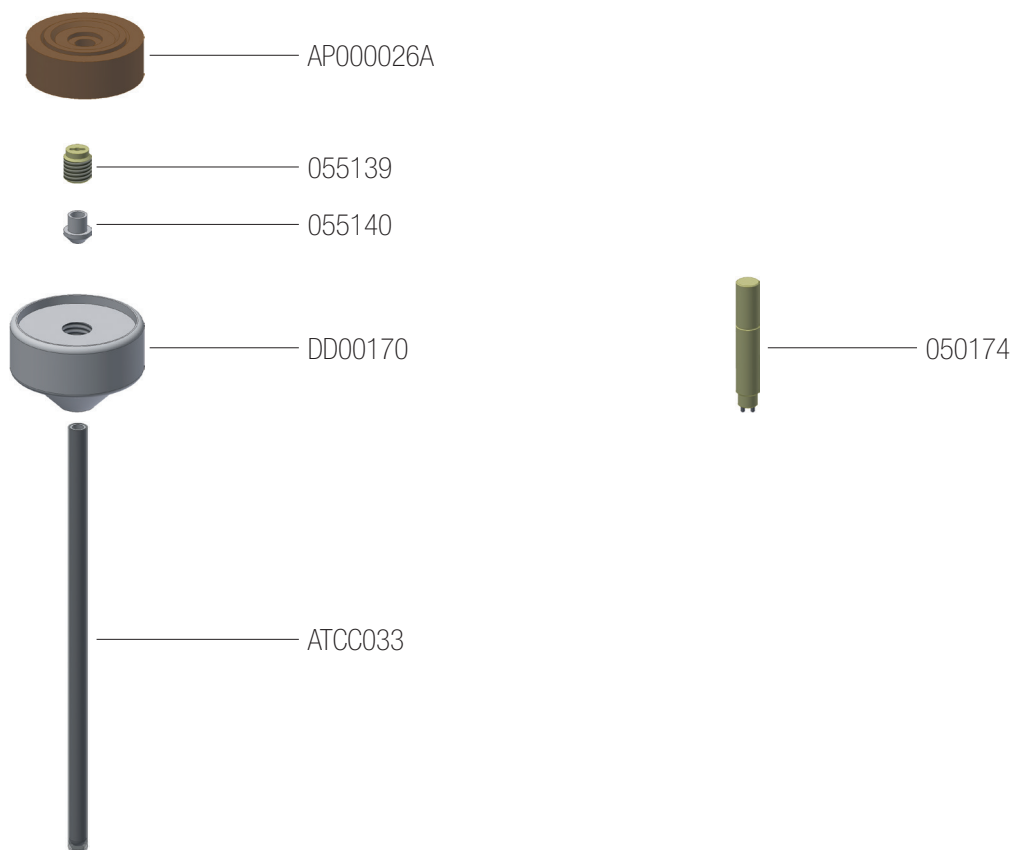
ATCC033

P/N	Description
AP000026A	Adapter plate for ATC with built-in safety releasing fluoropolymer spring
055139	ATC Sealing Screw
055140	ATC Sealing (included in P/N ATCC033)
DD00170	TFM Cover for ATC
ATCC033	Ceramic thermowell PTFE coated (Including P/N 055140)
050174	ATC Tool for spanning ceramic pipe sealing

SK15-A
## LCR00031A
Standard segment complete

AS00003

AP000026

DD00120

LCR0012

HB00066A

LCR0013

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
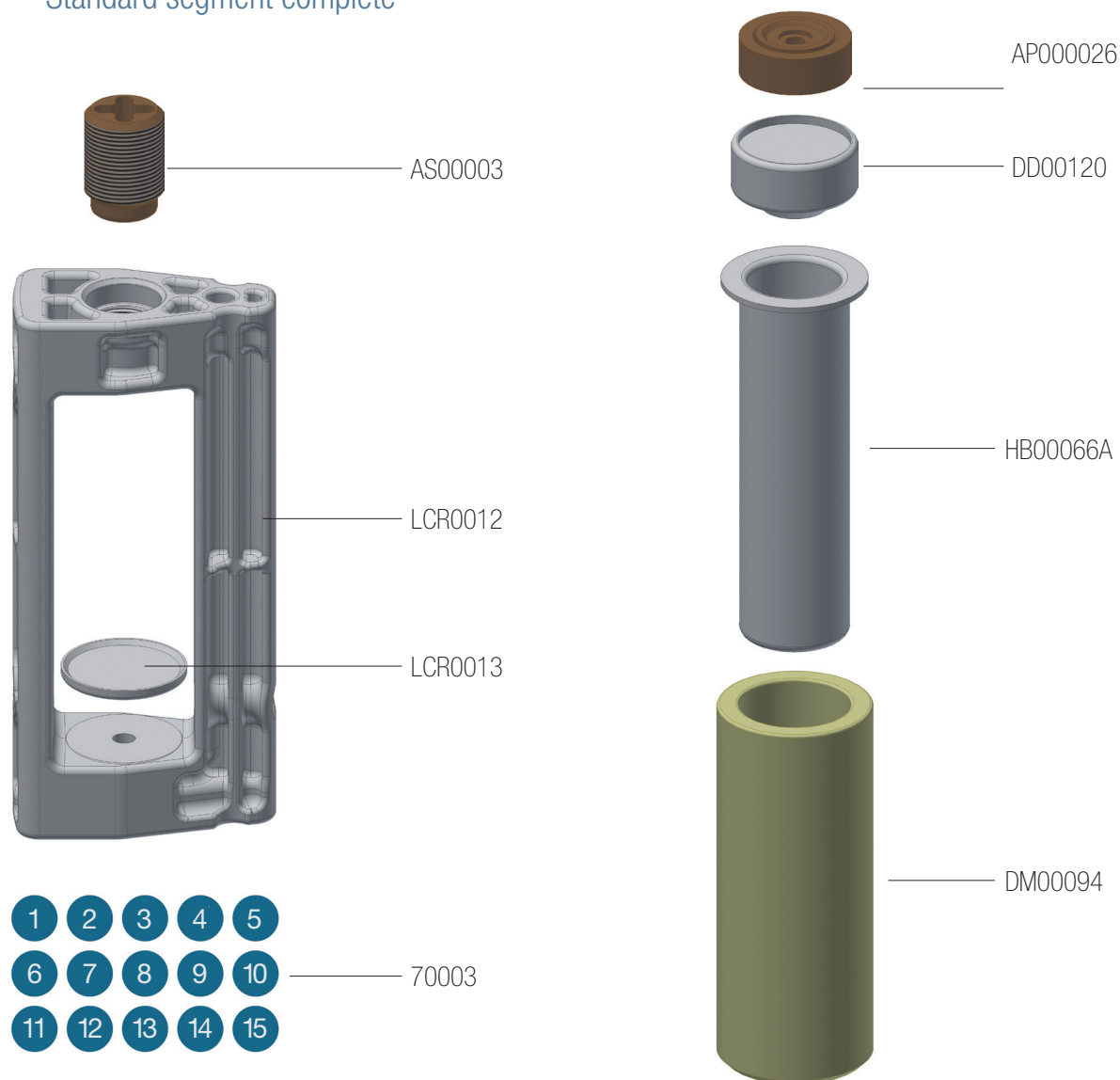
70003

DM00094

P/N	Description
AS00003	Pressure screw M26X37
LCR0012	Segment SK-15
LCR0013	Centering plate PTFE 54/48x10 mm for P/N DM00094
70003	Label SK15 vessels
AP000026	Adapter plate with built-in safety releasing fluoropolymer spring
DD00120	TFM Cover
HB00066A	High pressure vessel 100ml
DM00094	Safety shield for high pressure vessel

SK15-A
70125
Tension Wrench adjusted at 10 Nm, adapter included

934063B
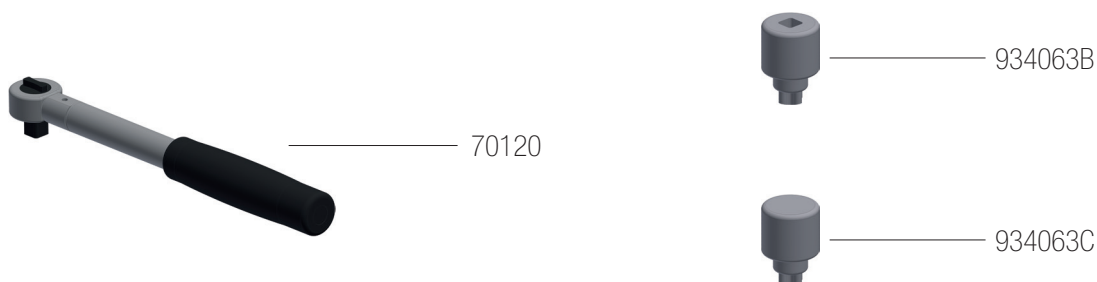
70120

934063C

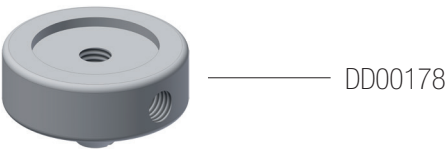| P/N	Description
70120	Torque wrench adjusted at 10 Nm
934063B	Adapter for torque wrench
934063C	Manual tool for vessel closing

SK15-A
70126
Workstation complete for SK-15
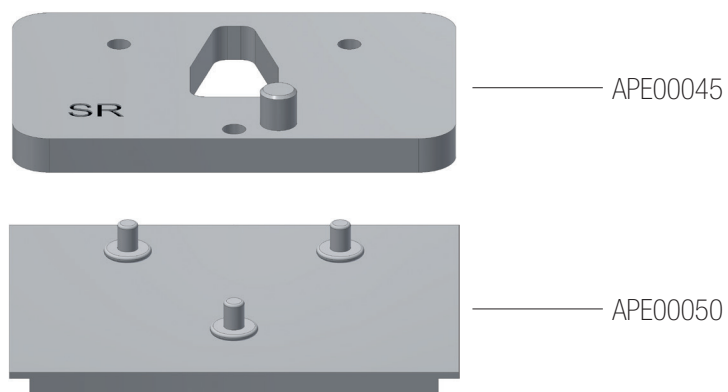
SR

APE00045

APE00050

P/N	Description
APE00045	Workstation for SK-15 rotor, upper part
APE00050	Workstation for SK-15 rotor, bottom part

PR00001

DD00178

PH00071

P/N	Description
PR00001	Indicator ring for SK15ET vessel
DD00178	ATC cover complete with pressure port
PH00071	Sample rack 15 positions

SK-15 High Pressure Rotor

easyTEMP *compatible*

The SK-15 rotor is only available for the ETHOS UP and the ETHOS EASY. The SK-15 is a high-pressure rotor featuring up to 15 TFM vessels with a volume of 100 mL and suitable for all applications. It is fully compliant with commonly used standard methods, such as the US EPA 3015, 3051, and 3052. The SK-15 features an enhanced 'vent-and-reseal' technology for controlling the inner pressure of all vessels with complete safety.

❙ SAMPLE TYPE

Officials	Agriculture	Beverage	Cannabis	Ceramics
Chemicals	Clinicals	Consumer Products	Environmental	Food & Feed
Metals & Mining	Petrochemicals	Pharmaceuticals	Pigments	Polymers

❙ SAMPLE AMOUNT

Small   Medium   **Large**   Extra Large

❙ SAMPLE THROUGHPUT

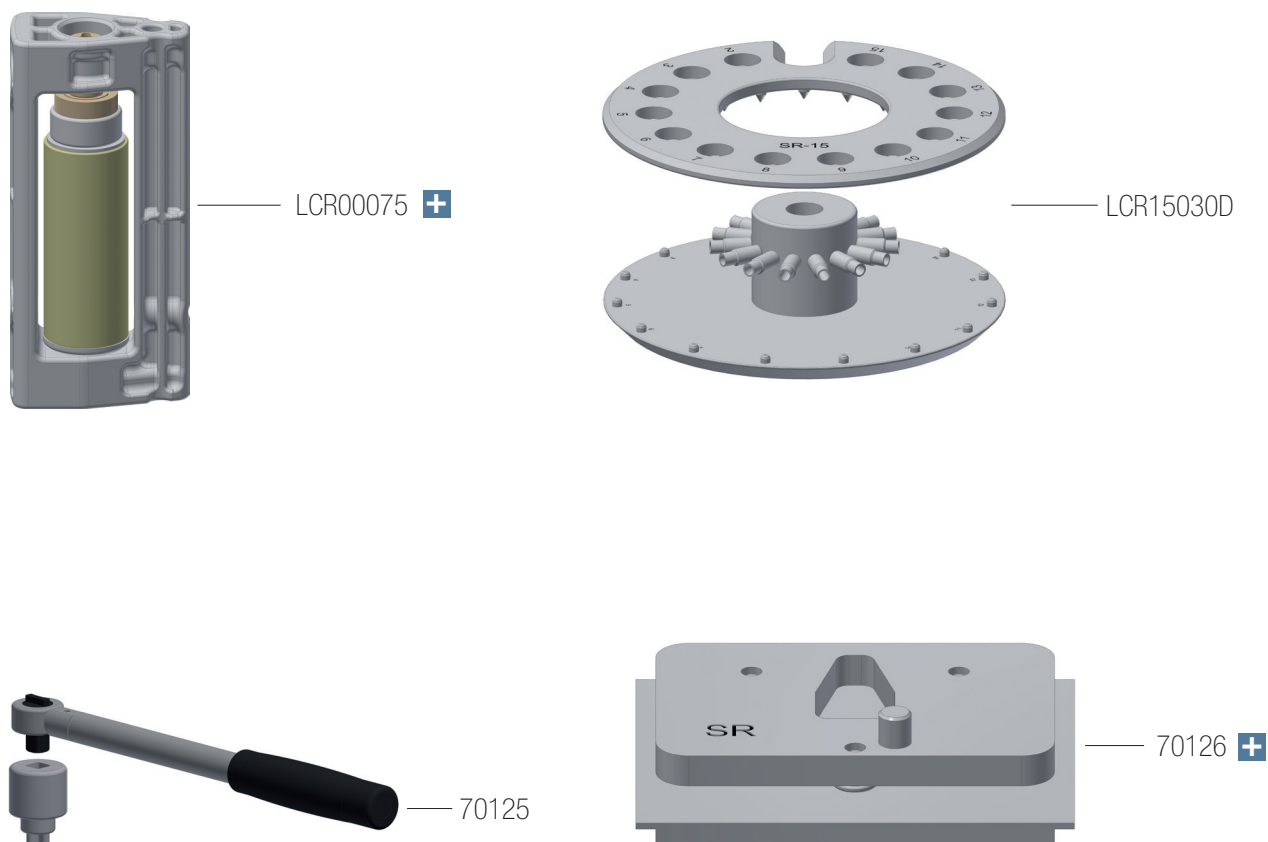| 6	10	12	**15**	16	24	44
6 positions	10 positions	12 positions	**15 positions**	16 positions	24 positions	44 positions

SK-15 High Pressure Rotor (easyTEMP compatible)

SK15-ET ➕

P/N	Description
SK15-ET ➕	Starter kit 15 segments high pressure rotor complete for easyTEMP

➕ *Include subparts*

SK15-ET

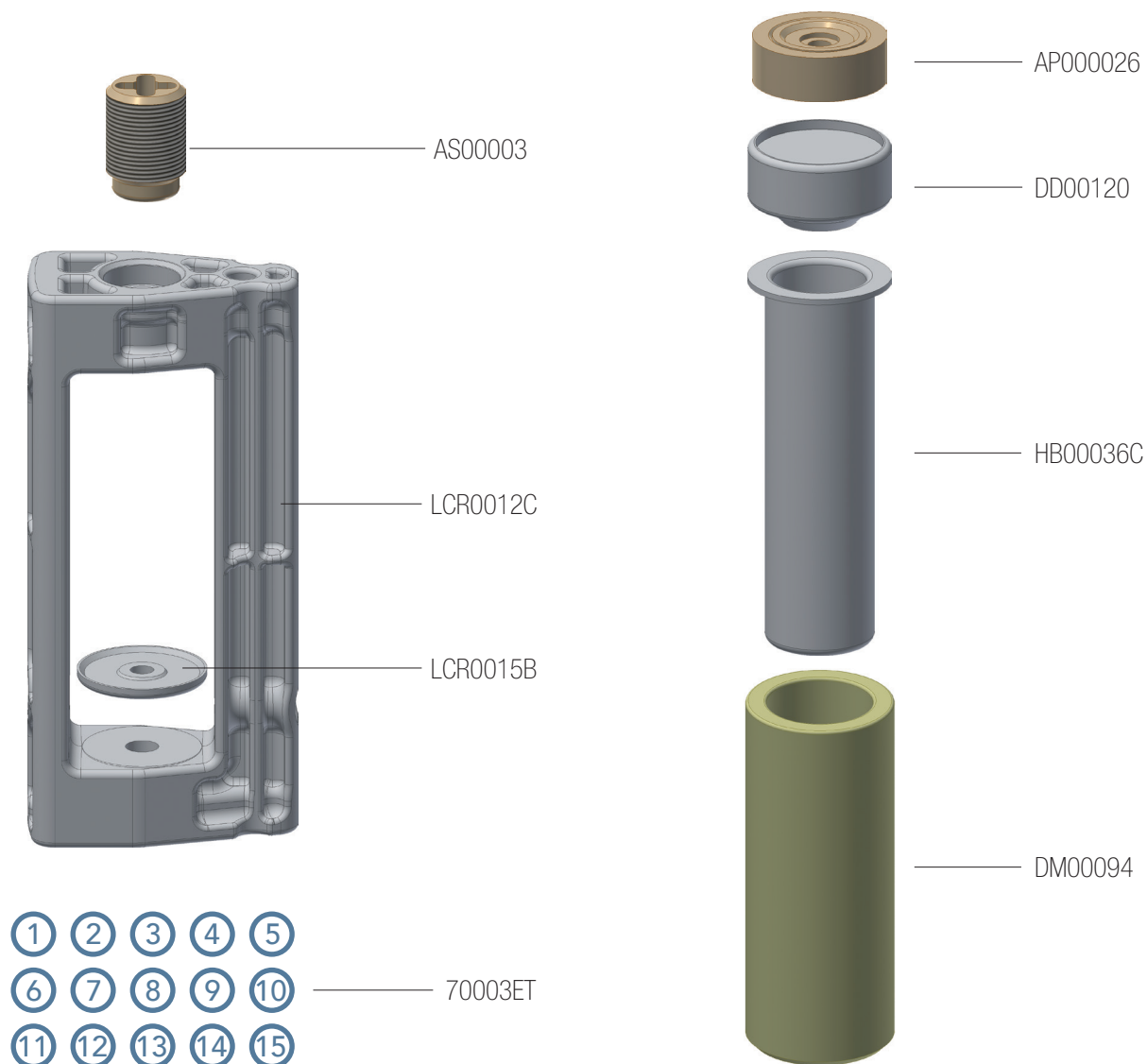Starter kit 15 segments high pressure rotor complete

LCR00075 ✚

LCR15030D

70125

70126 ✚

P/N	Description
LCR00075 ✚	Segment complete for SK-15ET rotor
LCR15030D	Rotor body SK-15ET
70125	Tension Wrench adjusted at 10 Nm, adapter included
70126 ✚	Workstation complete for SK-15ET

SK15-ET
└ LCR00075
Segment complete for SK-15ET rotor

AS00003

AP000026

DD00120

LCR0012C

HB00036C

LCR0015B

DM00094

① ② ③ ④ ⑤
⑥ ⑦ ⑧ ⑨ ⑩ — 70003ET
⑪ ⑫ ⑬ ⑭ ⑮

P/N	Description
AS00003	Pressure screw M26X37
LCR0012C	Segment SK-15ET
LCR0015B	Centering plate ITC 55/10x10 mm
70003ET	Label SK-15ET vessels
AP000026	Adapter plate with built-in safety releasing fluoropolymer spring
DD00120	TFM Cover
HB00036C	High pressure vessel for EasyTEMP control
DM00094	Safety shield for high pressure vessel

SK15-ET

70126

Workstation complete for SK-15ET
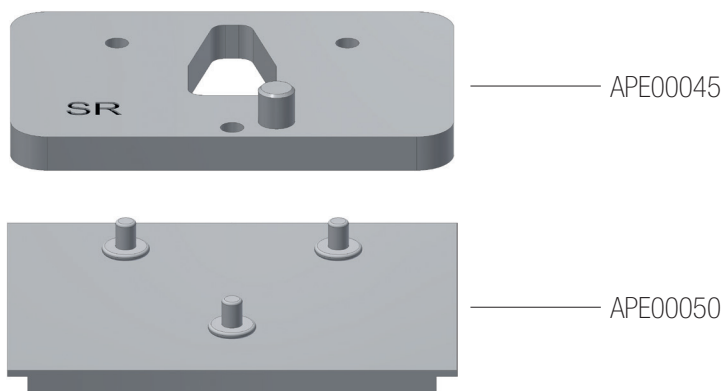
APE00045

APE00050

P/N	Description
APE00045	Workstation for SK-15 rotor, upper part
APE00050	Workstation for SK-15 rotor, bottom part

SK15-ET OPTIONS

PR00001

DD00172

PH00071

P/N	Description
PR00001	Indicator ring for SK15ET vessel
DD00172	TFM cover with pressure port
PH00071	Sample rack 15 positions

SK15-ET CONSUMABLES KIT

SK15ET-KIT1 SK15ET Start consumables kit

P/N	Qt.	Description
HB00036C	7	High pressure vessel for EasyTEMP control
DD00120	7	TFM Cover
AP000026	15	Adapter plate with built-in safety releasing fluoropolymer spring
SL0239E	1	Fep protection cover (set of 5 pieces)

SK15ET-KIT2 SK15ET Advanced consumables kit

P/N	Qt.	Description
HB00036C	15	High pressure vessel for EasyTEMP control
DD00120	15	TFM Cover
AP000026	15	Adapter plate with built-in safety releasing fluoropolymer spring
DM00094	15	Fep protection cover (set of 5 pieces)
SL0239E	1	Fep protection cover (set of 5 pieces)

SR-15 Extraction Rotor

The SR-15 rotor is compatible with any ETHOS X, EASY and UP equipped with easyTEMP sensor. The SR-15 is a features up to 15 TFM vessels with a volume of 100 mL and suitable for several extraction applications. Its design incorporates an enhanced 'vent-and-reseal' technology for controlling the inner pressure of all vessels, robust safety shields and large PTFE-TFM vessels.

SAMPLE TYPE

Officials   Environmental   Food & Feed   Pharmaceuticals   Polymers

SAMPLE AMOUNT

Small   Medium   Large   Extra Large

SAMPLE THROUGHPUT
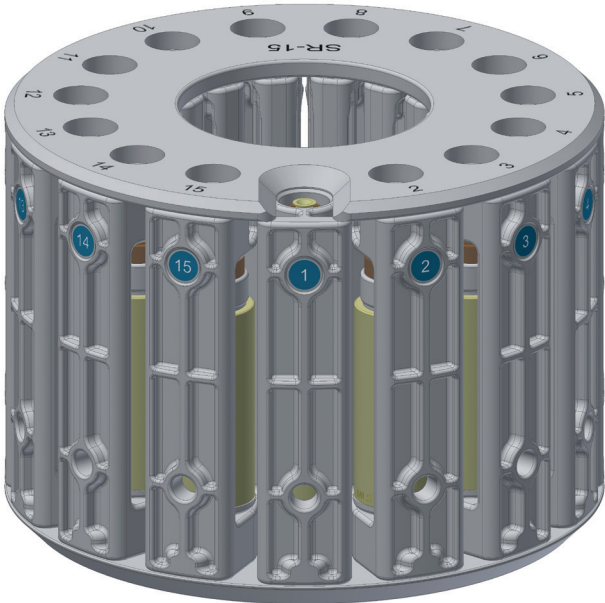
6 6 positions   **10** 10 positions   **12** 12 positions   **15** 15 positions   **16** 16 positions   **24** 24 positions   **44** 44 positions

SR-15 Extraction Rotor

SR15ET +

P/N	Description
SR15ET +	SR-15 rotor complete for extraction

+ *Include subparts*

SR15ET

SR-15 rotor complete for extraction
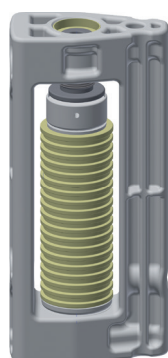
LCR15030D

LCR00180 ✚

70126

WZ00129
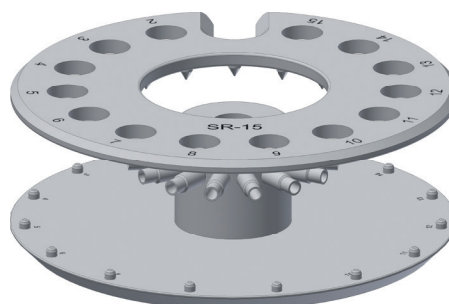
PH00023

MR12001
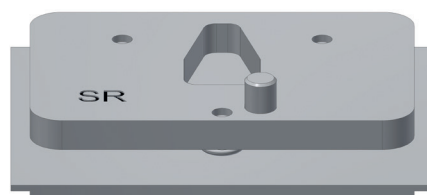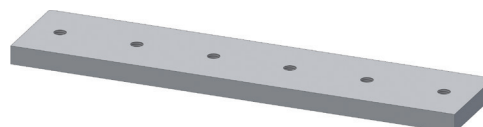
PH00071

PH00032

① ② ③ ④ ⑤ ⑥ ⑦ ⑧
⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ──── 70129

P/N	Description
LCR00180 ✚	Rotor segment complete with APCU for EasyTEMP control
LCR15030D	Rotor body SR-15ET
WZ00129	Capping tool
70126 ✚	Workstation complete for SK-15
MR12001	Stirring bars
PH00032	Cover shaping
PH00023	Conditioning plate
PH00071	Sample rack 15 positions
70129	Segments labels numbers 1-15, green-white

SR15ET
└ LCR00180

Rotor segment complete with APCU for EasyTEMP control

APU6067

DD00068

DD00078

APU6045

HB00036A

LCR0012F

LCR0016

DM00050
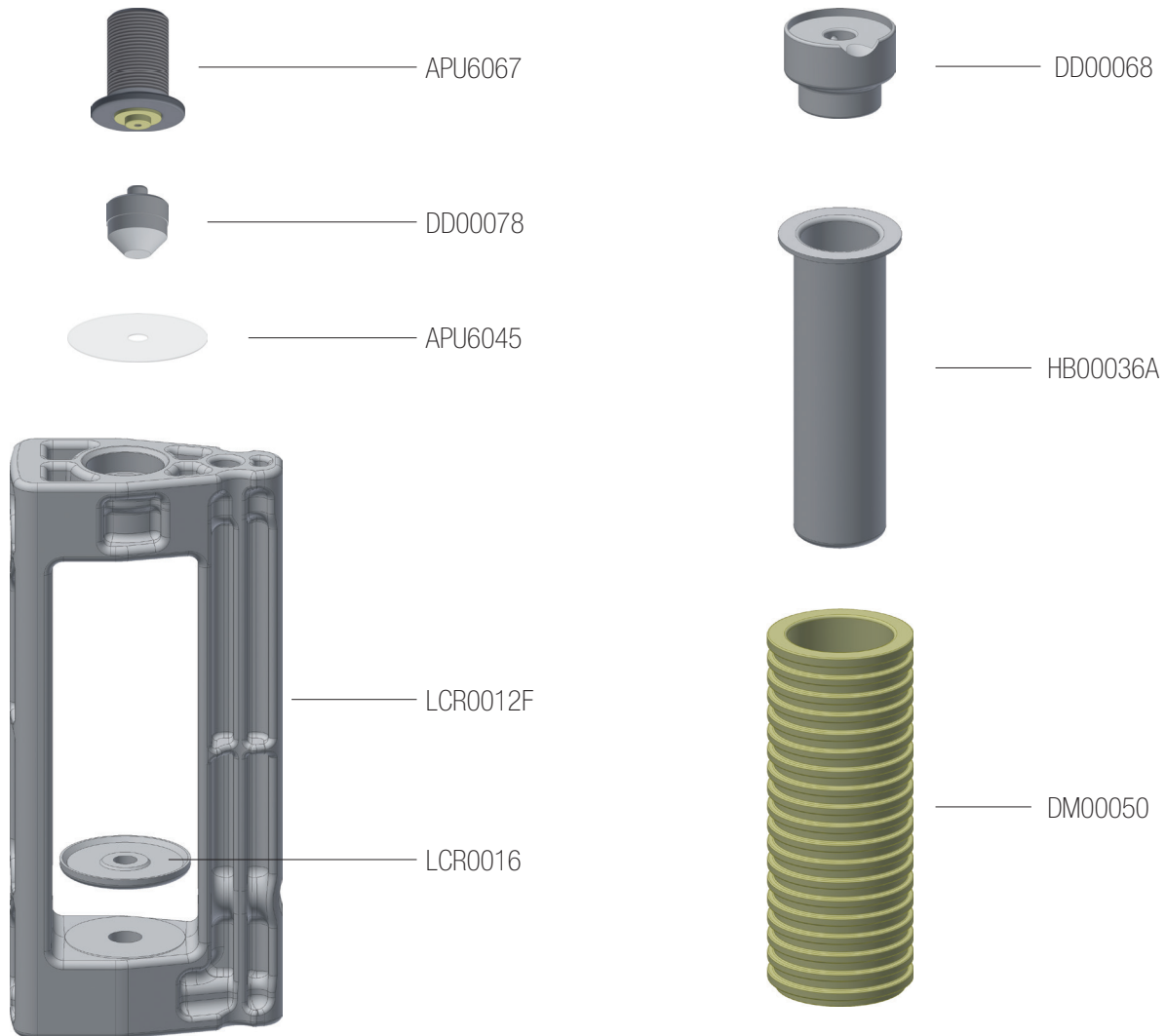
P/N	Description
APU6067	APCU-80 pressure control (M6)
DD00078	Ventil valve for APCU pressure control
APU6045	APCU-100 Protection foil
LCR0012F	Rotor segment with APCU for EasyTEMP control
LCR0016	Centering plate
DD00068	TFM cover
HB00036A	TFM vessel for EasyTEMP control
DM00050	Protection shield

SR15ET

70126

Workstation complete for SR15-ET
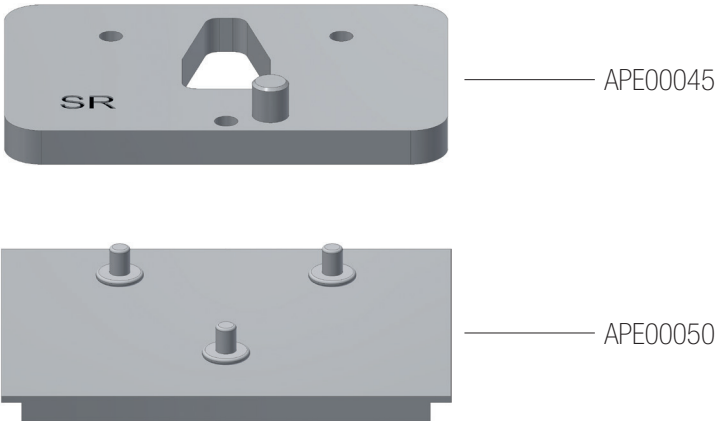
APE00045

APE00050

P/N	Description
APE00045	Workstation for SK-15 rotor, upper part
APE00050	Workstation for SK-15 rotor, bottom part

MAXI-24 HP High Performance Rotor

easyTEMP *compatible*

The MAXI-24 High Performance and Throughput Rotor is a rotor holding up to 24 PTFE-TFM vessels with a volume of 80 mL. The MAXI-24 High Performance (HP) offers superior productivity on a wide variety of matrices without compromising the digestion quality and performance.

SAMPLE TYPE

Officials	Agriculture	Beverage	Cannabis	Ceramics
Chemicals	Clinicals	Consumer Products	Environmental	Food & Feed
Metals & Mining	Petrochemicals	Pharmaceuticals	Pigments	Polymers

SAMPLE AMOUNT

Small	Medium	Large	Extra Large

SAMPLE THROUGHPUT

6	10	12	15	16	**24**	44
6 positions	10 positions	12 positions	15 positions	16 positions	24 positions	44 positions

MAXI-24 HP Microwave Digestion Rotor
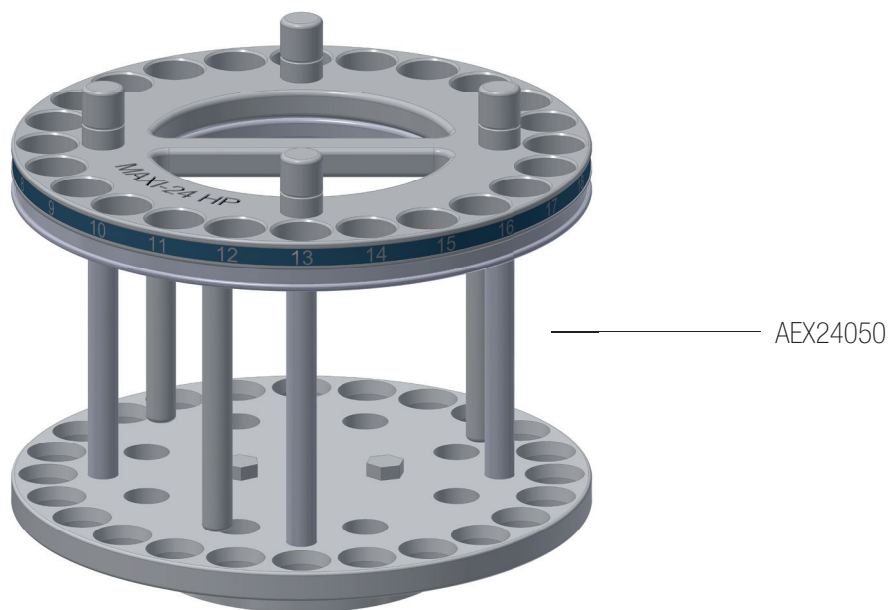## (easyTEMP compatible)
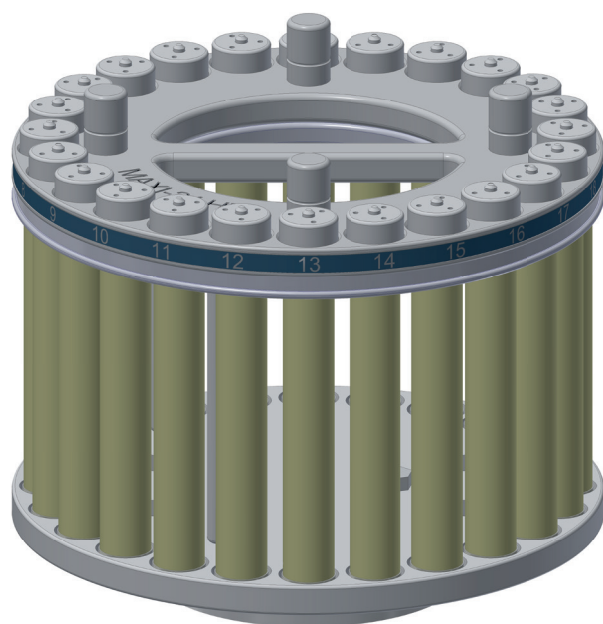
MAXI24HP ✚

P/N	Description
MAXI24HP ✚	MAXI-24 High Performance and Throughput rotor, 80 ml, complete with 24 pressure reactors

MAXI24HP

MAXI-24 High Performance and Throughput rotor, 80 ml, complete with 24 pressure reactors

AEX24050

AEX24020 ✚

P/N	Description
AEX24050	MAXI-24 high performance and throughput rotor body
AEX24020 ✚	MAXI-24 high performance and throughput vessel complete 80ml

MAXI24HP

AEX24020

MAXI-24 high performance and throughput vessel complete 80ml

DD00203

DD00144A

HB00096C

AEX00038

P/N	Description
DD00203	PTFE-TFM screw cap for vessel 80ml
DD00144A	PTFE-TFM valve for vessel 80ml
HB00096C	PTFE-TFM vessel 80ml
AEX00038	Protection shield for pressure vessel

MAXI-24 HP   CONSUMABLES KIT

MAXI24HP-KIT1 MAXI-24 HP Start consumables kit

P/N	Qt.	Description
HB00096C	8	PTFE-TFM vessel 80ml
DD00203	8	PTFE-TFM screw cap for vessel 80ml

MAXI24HP-KIT2 MAXI-24 HP Advanced consumables kit

P/N	Qt.	Description
HB00096C	24	PTFE-TFM vessel 80ml
DD00203	24	PTFE-TFM screw cap for vessel 80ml

MAXI-44 High Throughput Rotor

easyTEMP *compatible*

The MAXI-44 is a very high throughput rotor holding up to 44 TFM vessels with a volume of 100 mL, and can perform easy digestions or leaching-type reactions on a variety of samples, such as soils, sediments, wastewater etc. The MAXI-44 rotor is fully compliant with commonly used standard methods, such as the US EPA 3015, 3051, and 3052.

| SAMPLE TYPE

Officials	Agriculture	Beverage	Cannabis	Ceramics
Chemicals	Clinicals	Consumer Products	Environmental	Food & Feed
Metals & Mining	Petrochemicals	Pharmaceuticals	Pigments	Polymers

| SAMPLE AMOUNT

Small	Medium	Large	Extra Large

| SAMPLE THROUGHPUT

6	10	12	15	16	24	44
6 positions	10 positions	12 positions	15 positions	16 positions	24 positions	44 positions

MAXI-44 Microwave Digestion Rotor
(easyTEMP compatible)
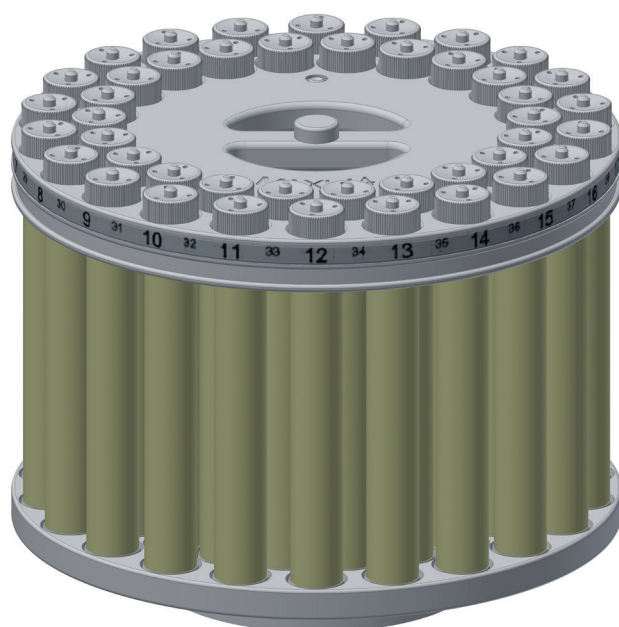
MAXI44 ✚

P/N	Description
MAXI44 ✚	MAXI-44 high throughput rotor, 100 ml, complete with 44 pressure reactors

MAXI44

MAXI-44 high throughput rotor, 100 ml, complete with 44 pressure reactors

70004
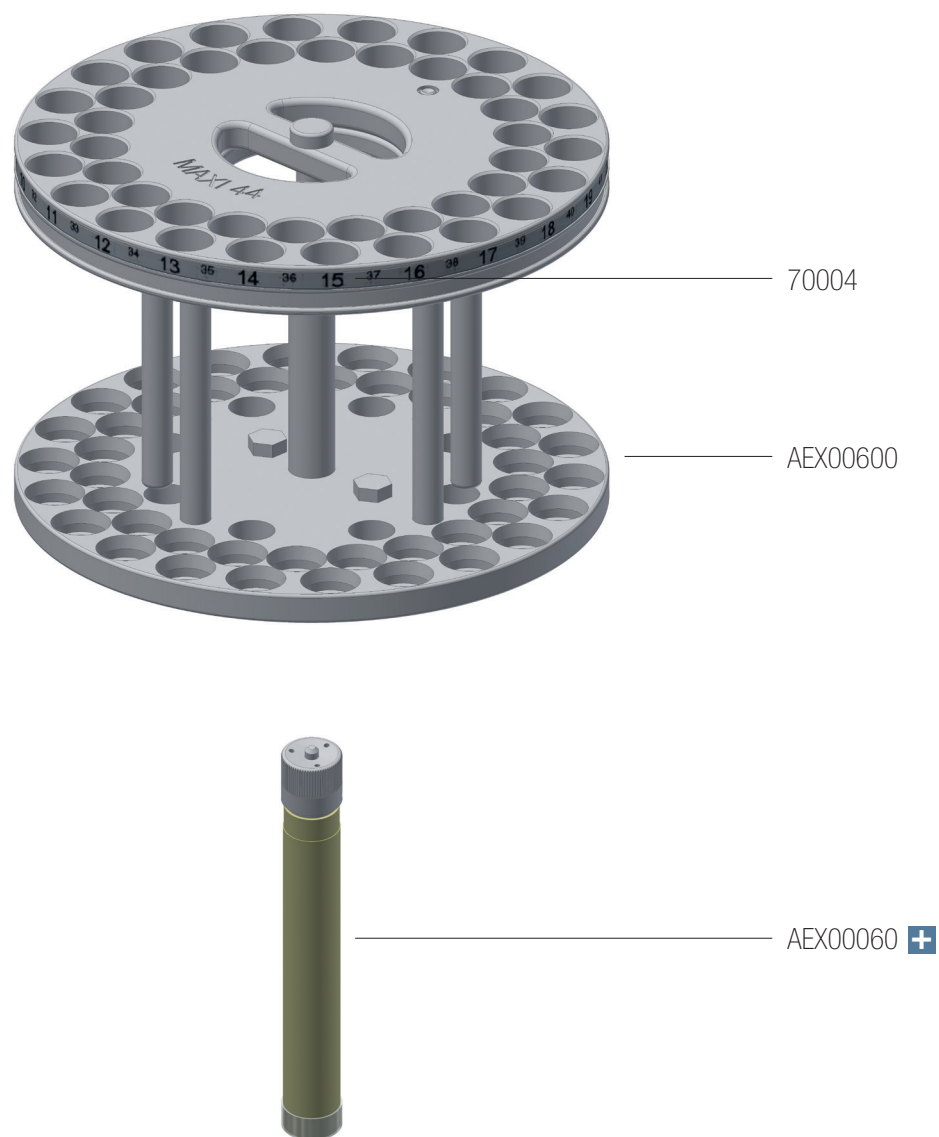
AEX00600

AEX00060 ➕

P/N	Description
70004	Label Maxi 44 rotor
AEX00600	MAXI-44 rotor body for 100ml vessels
AEX00060 ➕	Vessel 100 ml with protection cover, automatic pressure valve and safety shield

MAXI44
AEX00060
Vessel 100 ml with protection cover, automatic pressure valve and safety shield
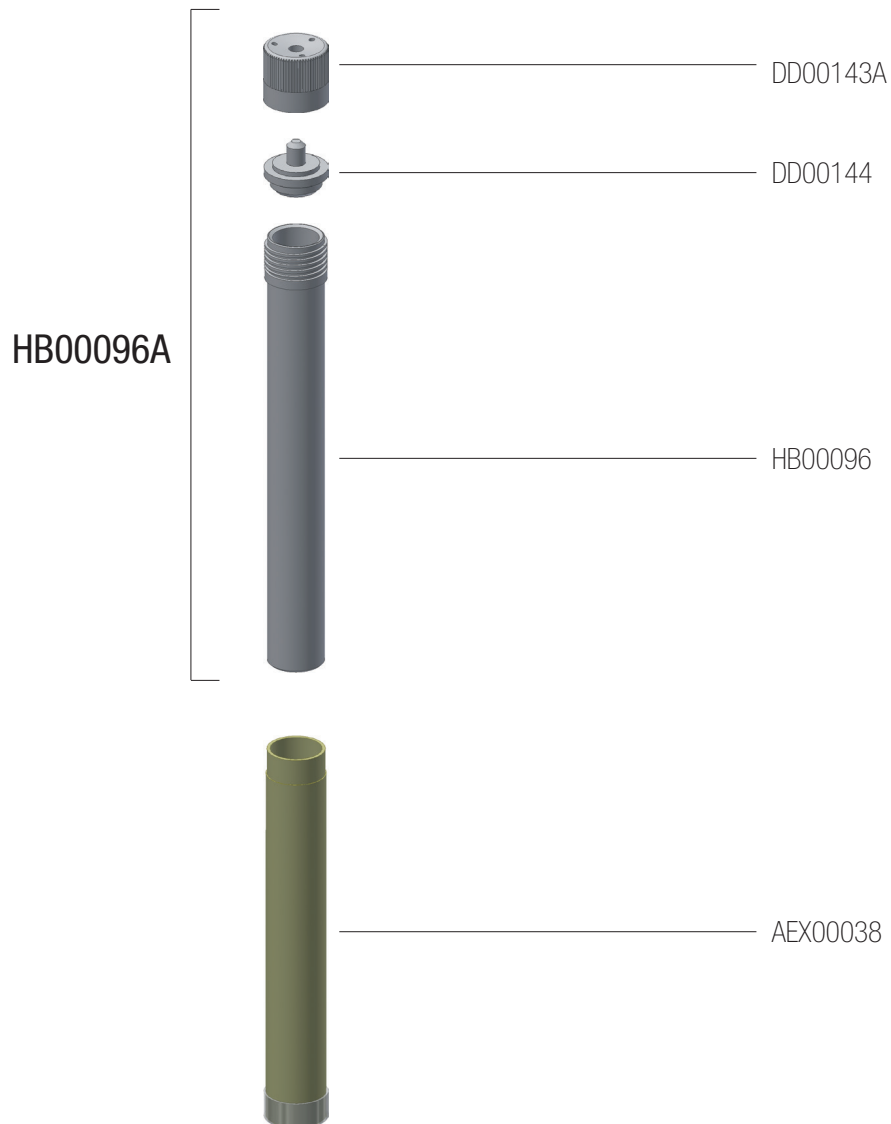
DD00143A

DD00144

HB00096A

HB00096

AEX00038

P/N	Description
HB00096A	Vessel 100ml complete with threaded cover and pressure valve
DD00143A	Cover with thread for MAXI rotor vessel
DD00144	TFM valve for MAXI rotor cover
HB00096	Vessel 100ml complete with thread for MAXI rotor
AEX00038	Protection shield for pressure vessel 100ml

MAXI-44 CONSUMABLES KIT

MAXI44-KIT1 MAXI44 Start consumables kit

P/N	Qt.	Description
HB00096	11	Vessel 100ml complete with thread for MAXI rotor
DD00143A	11	Cover with thread for MAXI rotor vessel
DD00144	11	TFM valve for MAXI rotor cover

MAXI44-KIT2 MAXI44 Advanced consumables kit

P/N	Qt.	Description
HB00096	22	Vessel 100ml complete with thread for MAXI rotor
DD00143A	22	Cover with thread for MAXI rotor vessel
DD00144	22	TFM valve for MAXI rotor cover
AEX00038	11	Protection shield for pressure vessel 100ml

fastEX-24eT High Throuput Extraction Rotor

The fastEX-24eT rotor consists of a 24-position carousel. Large volume vessels, made of PTFE with a dedicated Weflon ring, ensure fast and homogeneous heating. At the core of the vessel is a disposable 100 mL glass vial, for unsurpassed ease of use and low running costs.

SAMPLE TYPE

Officials

Agriculture

Environmental

Food

SAMPLE AMOUNT

Small

Medium

Large

SAMPLE THROUGHPUT

6	10	12	15	16	24	44
6 positions	10 positions	12 positions	15 positions	16 positions	24 positions	44 positions

fastEX-24eT High Througput Extraction Rotor
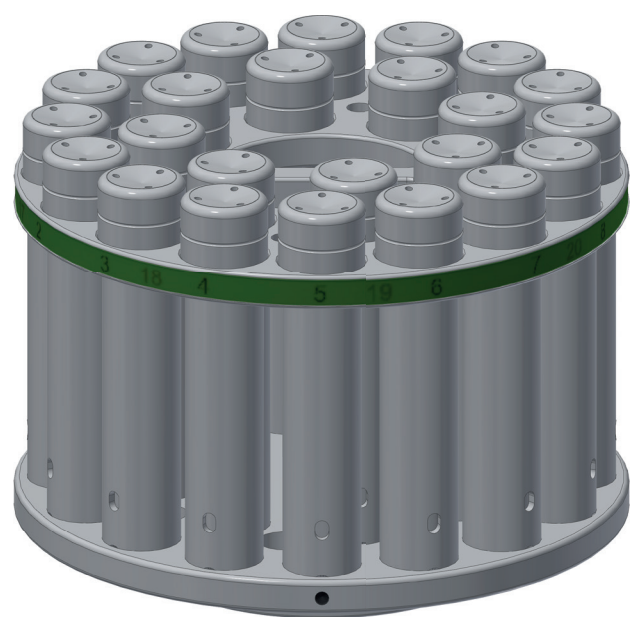
FEX1000B ✚

P/N	Description
FEX1000B ✚	fastEX-24eT rotor complete

✚ *Include subparts*

FEX1000B
fastEX-24eT rotor complete

FEX00060 ✚
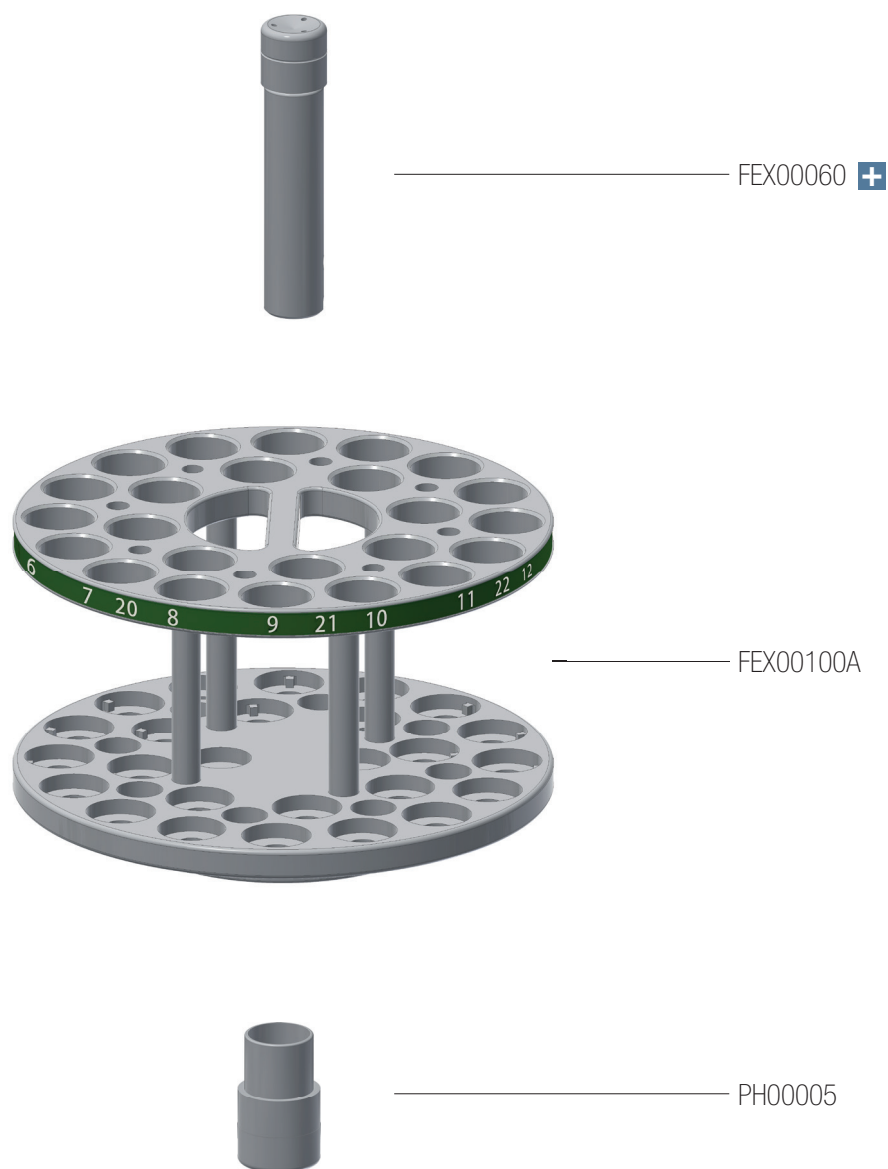
FEX00100A

PH00005

P/N	Description
FEX00060 ✚	Vessel complete for fastEX-24eT
FEX00100A	fastEX-24eT rotor body
PH00005	Weighing adapter

FEX1000B
└ FEX00060
Vessel complete for fastEX-24eT

DD00187

DD00186

GB00122

WHS0020
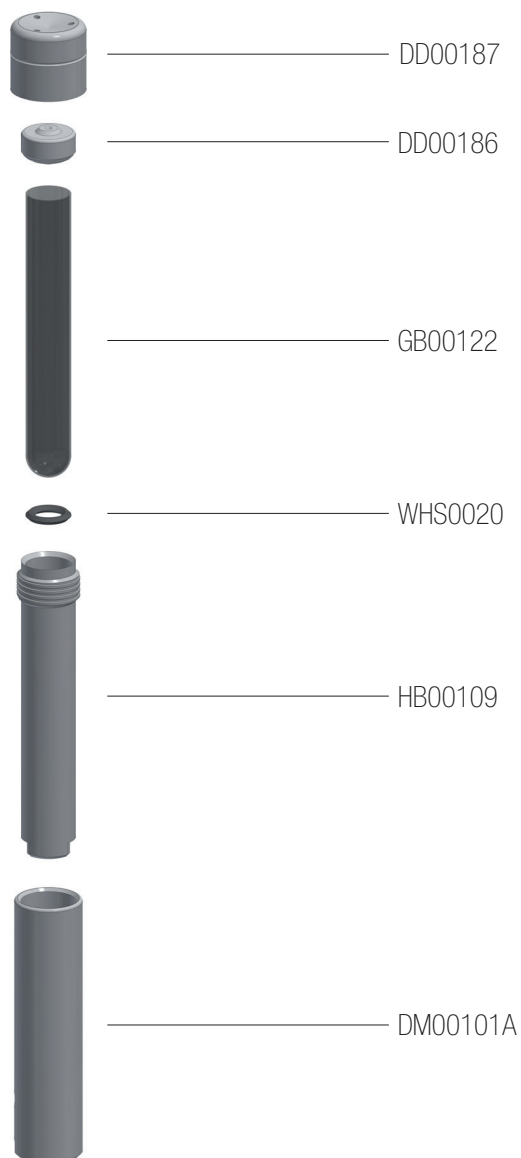
HB00109

DM00101A

P/N	Description
DD00187	Cover with thread for fastEX-24eT
DD00186	Valve cover for fastEX-24eT
GB00122	Glass disposable vial 100ml, 30/27 diameter, 4 x2000 mm
WHS0020	Weflon ring
HB00109	PTFE vessel with thread for fastEX-24eT
DM00101A	Protection shield for pressure vessel

fastEX-24eT

GB00122-#

FEX00010
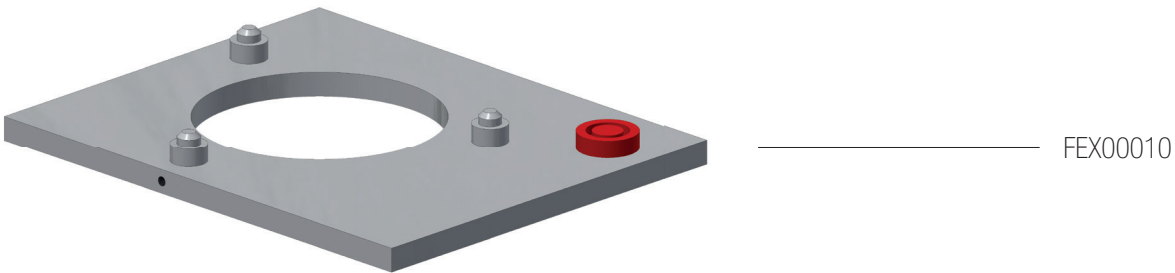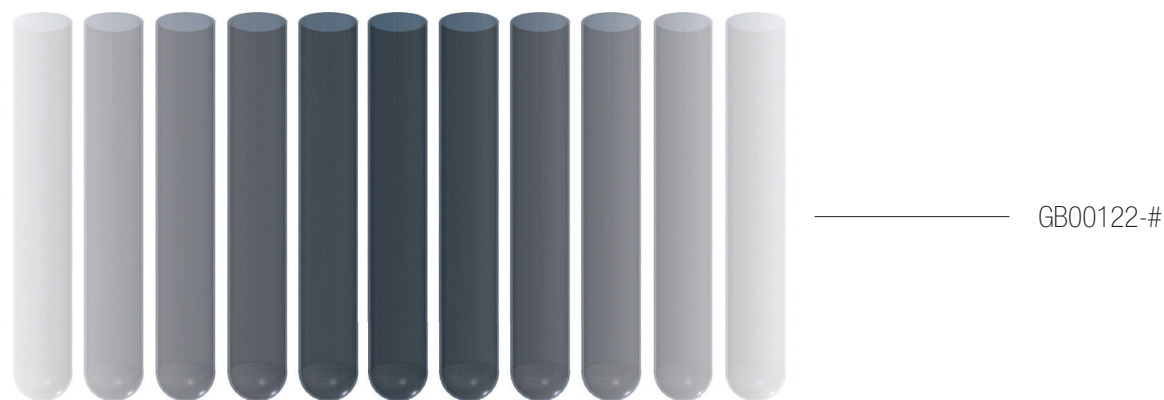
P/N	Description
GB00122-100	Glass disposable vial 100ml, 30/27 diameter, 4 x2000 mm (set of 100 pieces)
GB00122-200	Glass disposable vial 100ml, 30/27 diameter, 4 x2000 mm (set of 200 pieces)
GB00122-300	Glass disposable vial 100ml, 30/27 diameter, 4 x2000 mm (set of 300 pieces)
GB00122-500	Glass disposable vial 100ml, 30/27 diameter, 4 x2000 mm (set of 500 pieces)
GB00122-1000	Glass disposable vial 100ml, 30/27 diameter, 4 x2000 mm (set of 1000 pieces)
FEX00010	Installation and lift plate

WZ00239A

WZ00202E

P/N	Description
WZ00239A	Valve removal tool
WZ00202E	ACM - Automatic capping module for fastEX-24

SFS-24 Simultaneous Filtration System

The SFS-24 is a Simultaneous Filtration System with up to 24 positions. The SFS-24 is a perfect complement to process the solutions after solvent extraction or leaching-type digestion of environmental samples.

| SAMPLE TYPE

Officials

Agriculture

Environmental

| SAMPLE AMOUNT

Small

Medium

Large

Extra Large

| SAMPLE THROUGHPUT

6	10	12	15	16	24	44
6 positions	10 positions	12 positions	15 positions	16 positions	24 positions	44 positions

SFS-24 Simultaneous Filtration System for organic solutions for vials Ø 40mm
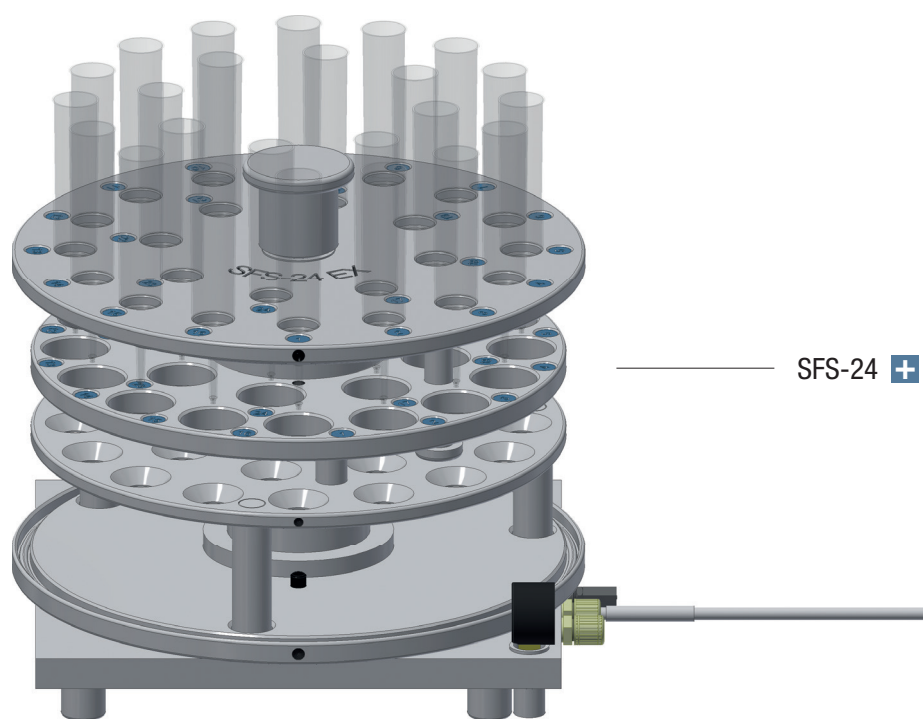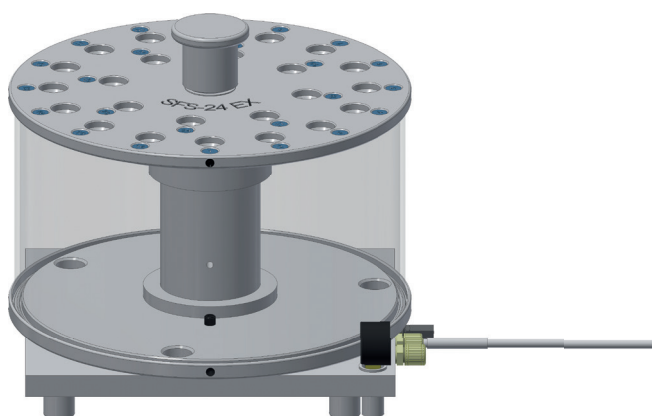

SFS-24 ✚

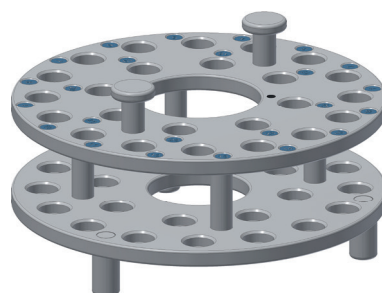| P/N	Description
SFS-24 ✚	Simultaneous filtration system complete 24 positions for organic solutions for vials Ø 40 mm

✚ *Include subparts*

SFS-24

Simultaneous filtration system complete 24 positions for organic solutions for vials Ø 40 mm
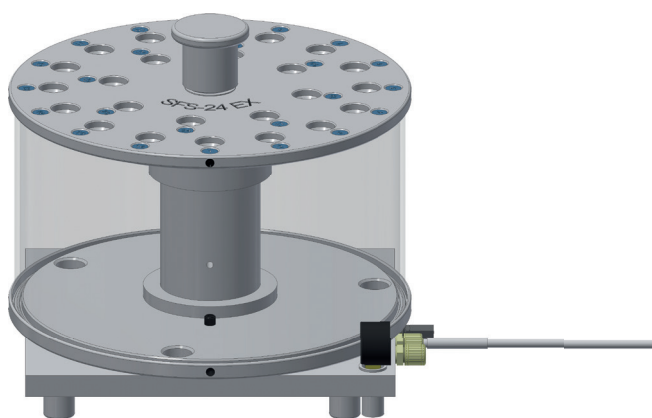
SFS24150
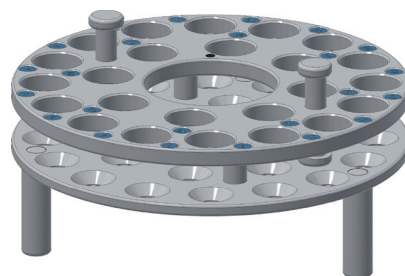
SFS24060

BEH0043A-1

BEH0046B-1

BEH0044C-1

FIL0019

P/N	Description
SFS24150	Simultaneous filtration system 24 positions
SFS24060	Filtration rack 24 positions for vials Ø 40x91mm
BEH0043A-1	PP filtration vial (29,5 Ø x 116)
BEH0044C-1	PP funnel (20,7Ø x 49)
BEH0046B-1	PP grid (17,6Ø x 2)
FIL0019	MCE (mixed cellulose esters) disk filter (set of 200 pieces) Ø 18mmfor filtration of particles > 0,45 µm
E01147A	Blind stopper for fast filtration Ø 27,5 (set of 15 pieces)

SFS-24 Simultaneous Filtration System
for organic solutions for vials Ø 27.5 mm
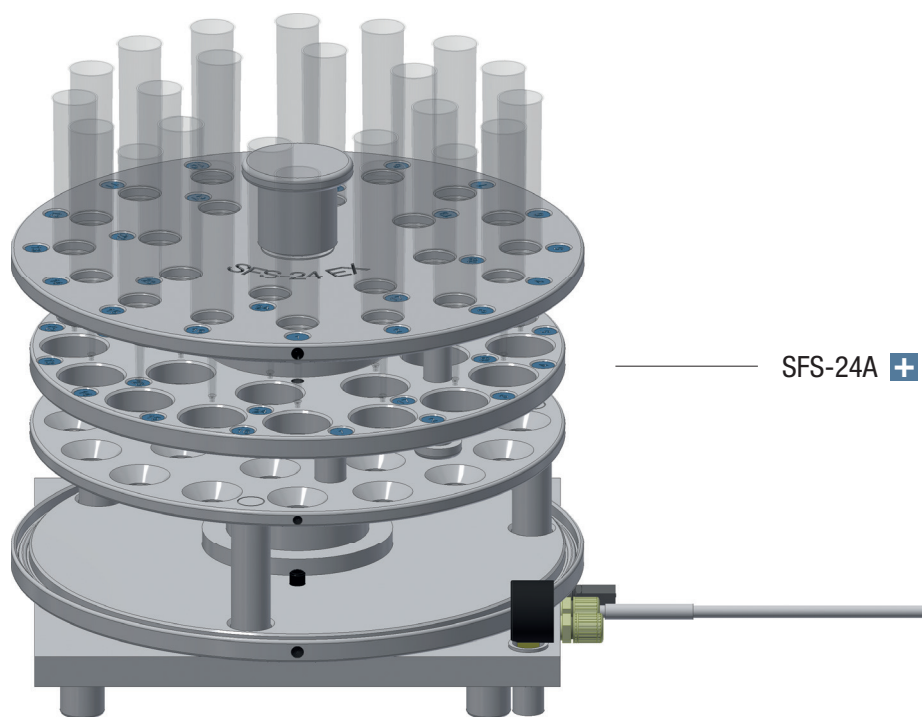
SFS-24A ✚

P/N	Description
SFS-24A ✚	Simultaneous filtration system complete 24 positions for organic solutions for vials Ø 27.5 mm

✚ *Include subparts*

SFS-24A

Simultaneous filtration system complete 24 positions for organic solutions for vials Ø 27.5 mm
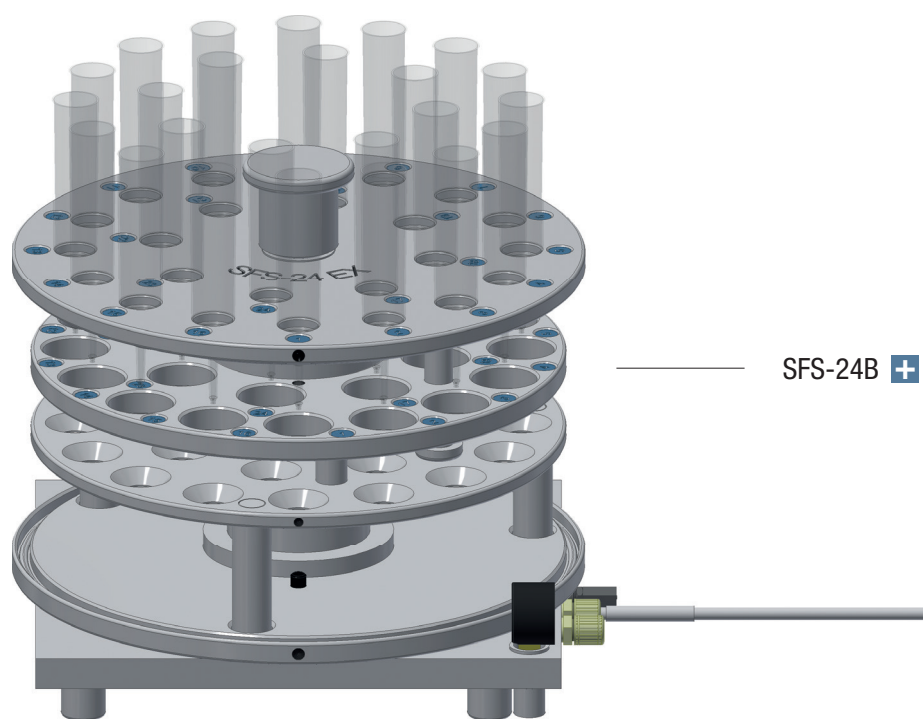
SFS24150

SFS24050

BEH0043A-1

SFS0001

BEH0046B-1

BEH0044C-1

FIL0019

P/N	Description
SFS24150	Simultaneous filtration system 24 positions
SFS24050	Filtration rack 24 positions for vials Ø 27.5x140 mm
BEH0043A-1	PP filtration vial (29,5 Ø x 116)
BEH0044C-1	PP funnel (20,7Ø x 49)
BEH0046B-1	PP grid (17,6Ø x 2)
FIL0019	MCE (mixed cellulose esters) disk filter (set of 200 pieces) Ø 18mm for filtration of particles > 0,45 µm
E01147A	Blind stopper for fast filtration Ø 27,5 (set of 15 pieces)
SFS0001	Glass filtration vial 27,5x140mm

SFS-24 Simultaneous Filtration System for acid solutions

SFS-24B [+]

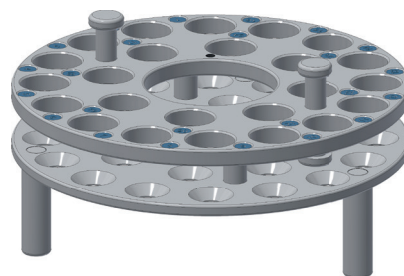| P/N	Description
SFS-24B [+]	Simultaneous filtration system complete 24 positions for acid solutions for 50ml flask

[+] *Include subparts*

SFS-24-B

Simultaneous filtration system complete 24 positions for acid solutions for 50ml flask
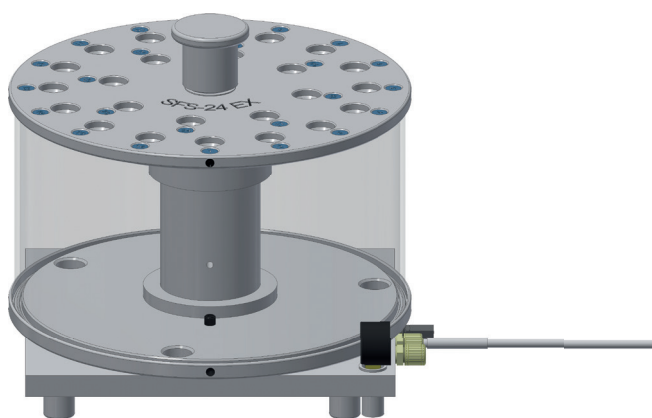
SFS24150

SFS24070

BEH0043A-1

BEH0046B-1

BEH0044C-1

FIL0019

P/N	Description
SFS24150	Simultaneous filtration system 24 positions
SFS24070	Filtration rack 24 positions for 50 ml flask with NS2 Ø 49x140 mm
BEH0043A-1	PP filtration vial (29,5 Ø x 116)
BEH0044C-1	PP funnel (20,7Ø x 49)
BEH0046B-1	PP grid (17,6Ø x 2)
FIL0019	MCE (mixed cellulose esters) disk filter (set of 200 pieces) Ø 18mm for filtration of particles > 0,45 µm
E01147A	Blind stopper for fast filtration Ø 27,5 (set of 15 pieces)

ultraWAVE 4 Position Racks

The ultraWAVE rack accommodates vials of different materials such as PTFE/TFM, quartz or disposable glass, and all are fitted with loose TFM caps to ensure pressure equalization. The Numbered rack tray provides the user with an easy visual indication of the vial number. Different vials material can be used along the same run.
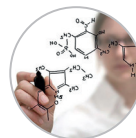
| SAMPLE TYPE

Food	Geochemistry	Metals	Research

| SAMPLE AMOUNT

Small	Medium	Large	Extra Large

| RACKS MATERIAL

Glass	PTFE/TFM	Quartz

ultraWAVE 4 Position Racks
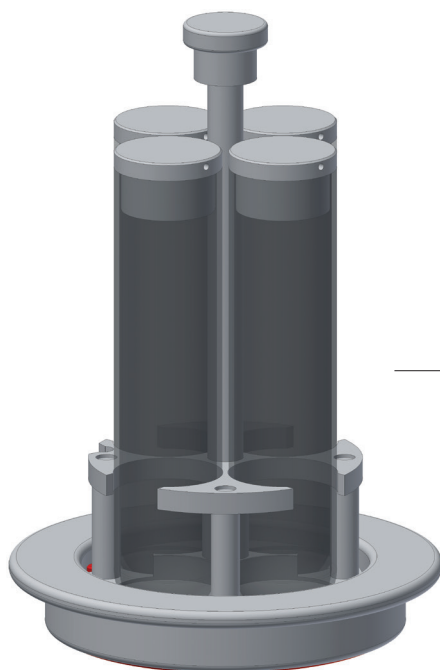
RACK4/G ➕
RACK4/Q ➕
RACK4/T ➕

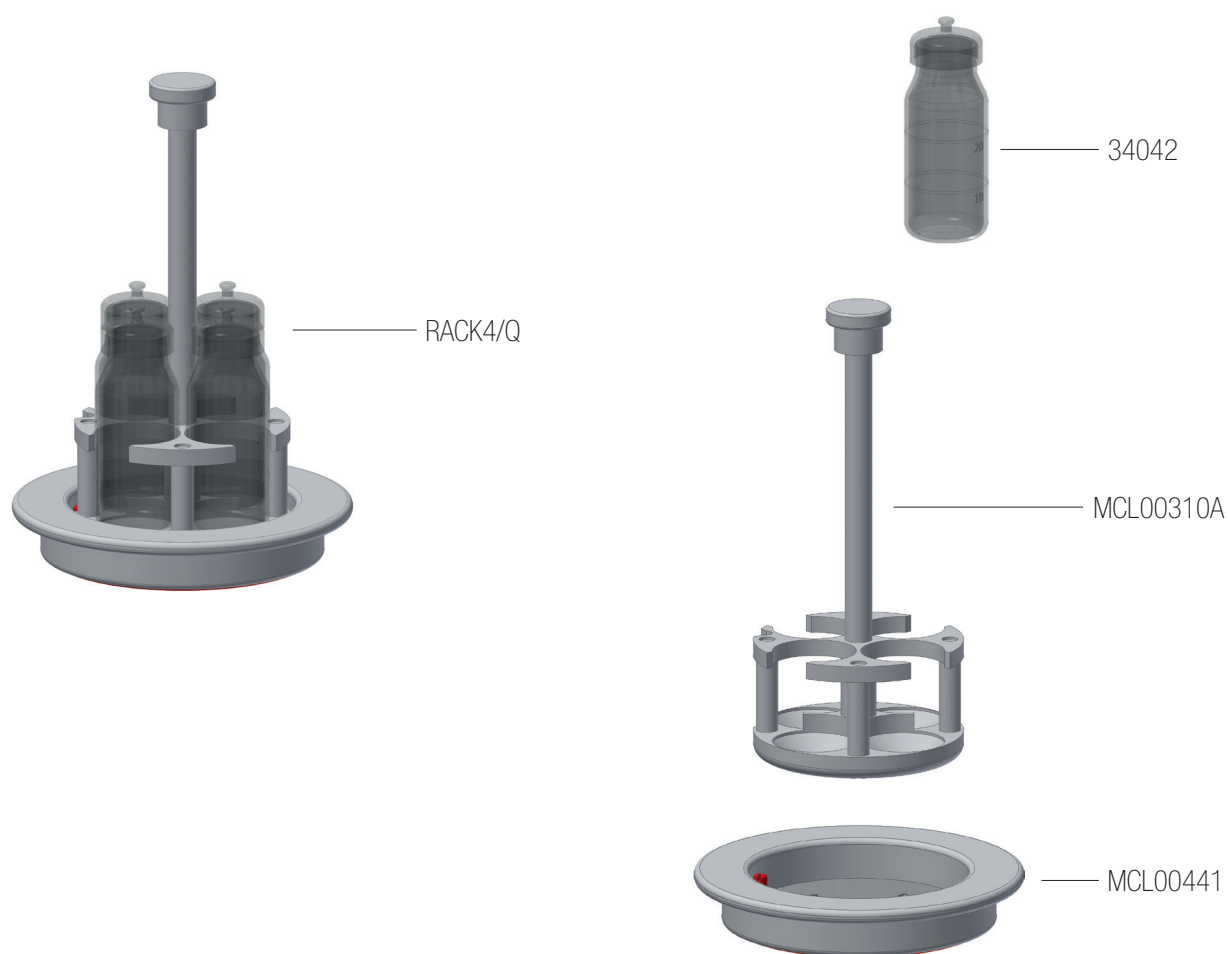| P/N	Description
RACK4/G ➕	4 position rack with GLASS vials and caps
RACK4/Q ➕	4 position rack with QUARTZ vials and caps
RACK4/T ➕	4 position rack with TFM vials and caps

➕ *Include subparts*

RACK4/G
4 positions rack with GLASS vials and caps
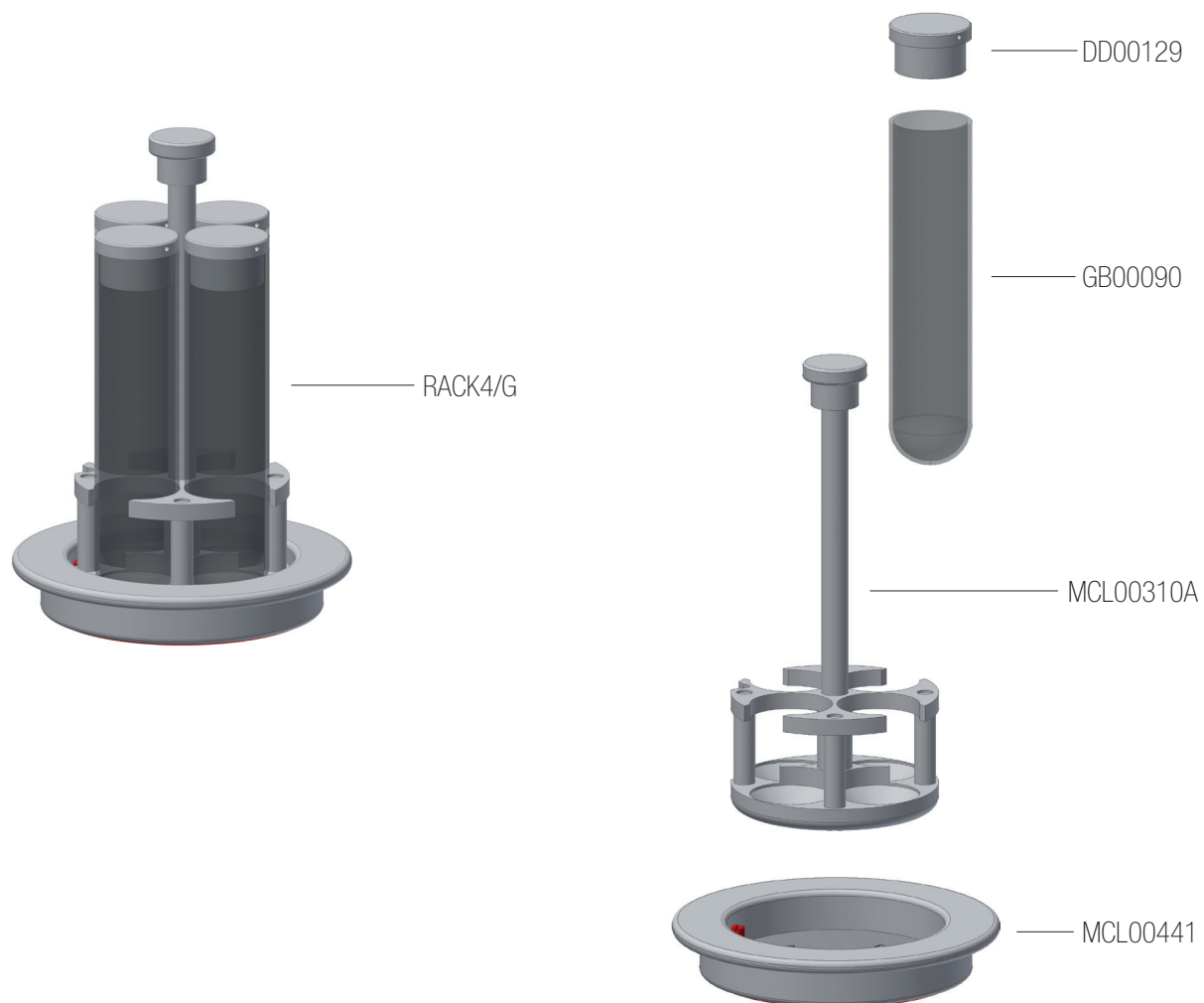
DD00129

GB00090

RACK4/G

MCL00310A

MCL00441

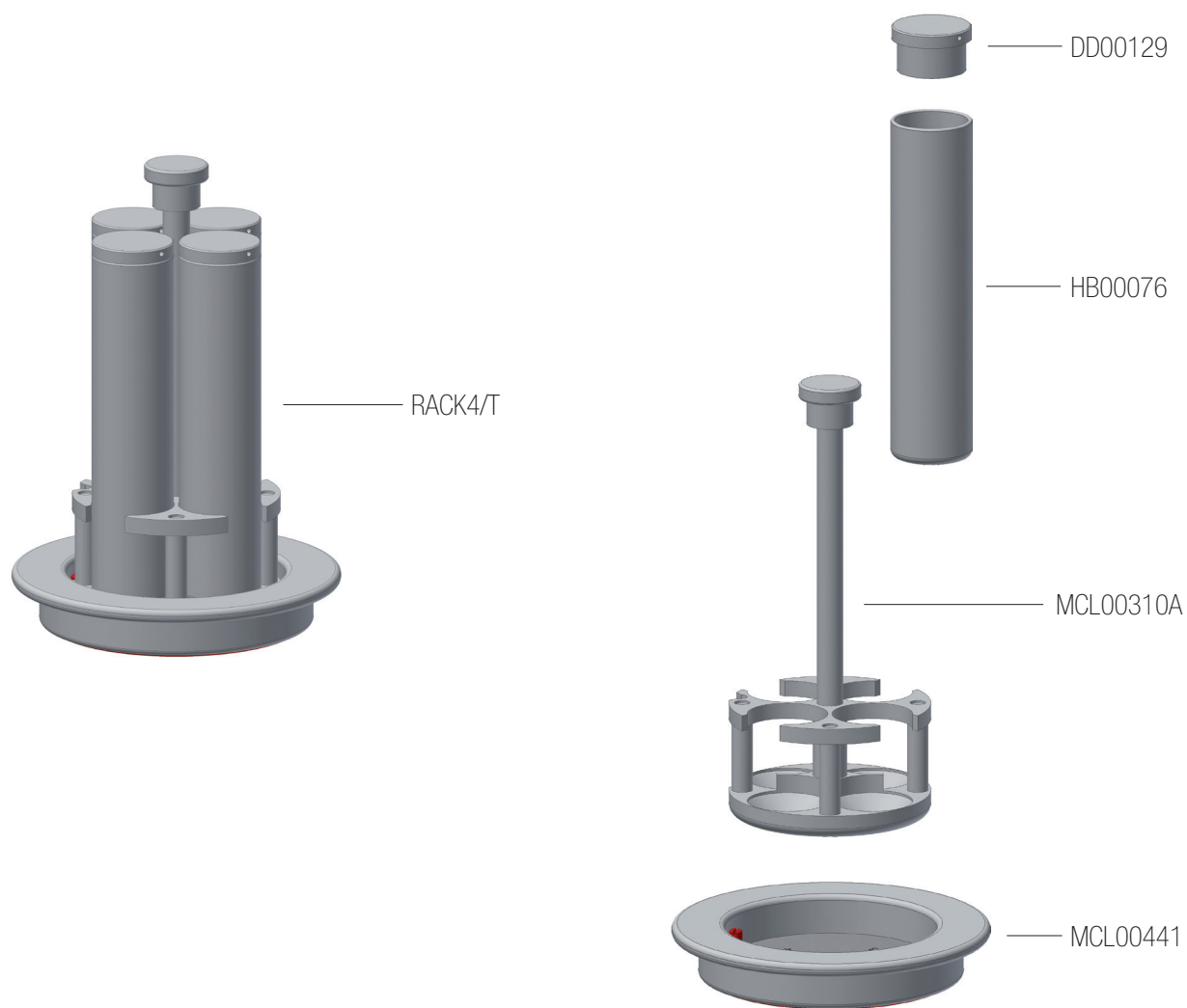| P/N	Description
RACK4/G	4 positions rack with GLASS vials and caps
DD00129	PTFE cap for vial Ø 30mm with internal Ø 27mm
GB00090	Glass vial 30/130 (Ø 30mm/27mm x 130) ca. 70 ml
MCL00310A	Sample rack 4/30
MCL00441	Rack bottom plate with 04 numbered positions

RACK4/Q

4 position rack with QUARTZ vials and caps

34042

RACK4/Q

MCL00310A

MCL00441

P/N	Description
RACK4/Q	4 position rack with QUARTZ vials and caps
34042	QS-50 Quartz Inserts COMPLETE (Ø 30mm x 70mm) cover included
MCL00310A	Sample rack 4/30
MCL00441	Rack bottom plate with 04 numbered positions

RACK4/T

4 positions rack with TFM vials and caps

RACK4/T

DD00129

HB00076

MCL00310A

MCL00441

P/N	Description
RACK4/T	4 positions rack with TFM vials and caps
DD00129	PTFE cap for vial Ø 30mm with internal Ø 27mm
HB00076	PTFE vial 30/130 (Ø 30 mm/27 mm x 130), ca. 70 ml
MCL00310A	Sample rack 4/30
MCL00441	Rack bottom plate with 04 numbered positions

ultraWAVE 5 Position Racks

The ultraWAVE rack accommodates vials of different materials such as PTFE/TFM, quartz or disposable glass, and all are fitted with loose TFM caps to ensure pressure equalization. The Numbered rack tray provides the user with an easy visual indication of the vial number. Different vials material can be used along the same run.
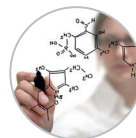
| SAMPLE TYPE

Food	Geochemistry	Metals	Research

| SAMPLE AMOUNT

Small	Medium	Large	Extra Large

| RACKS MATERIAL

Glass	PTFE/TFM	Quartz

ultraWAVE 5 Position Racks
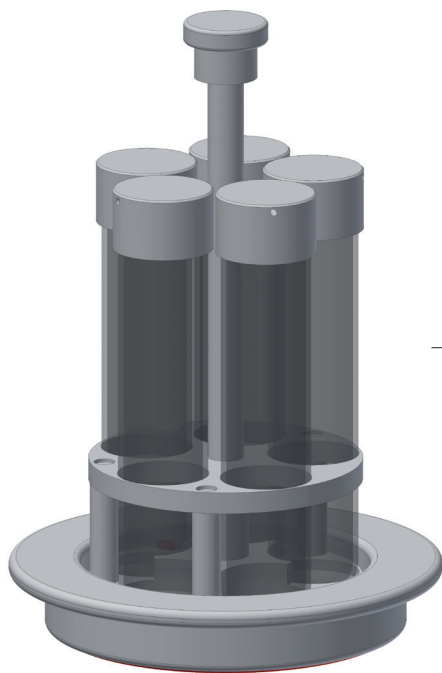
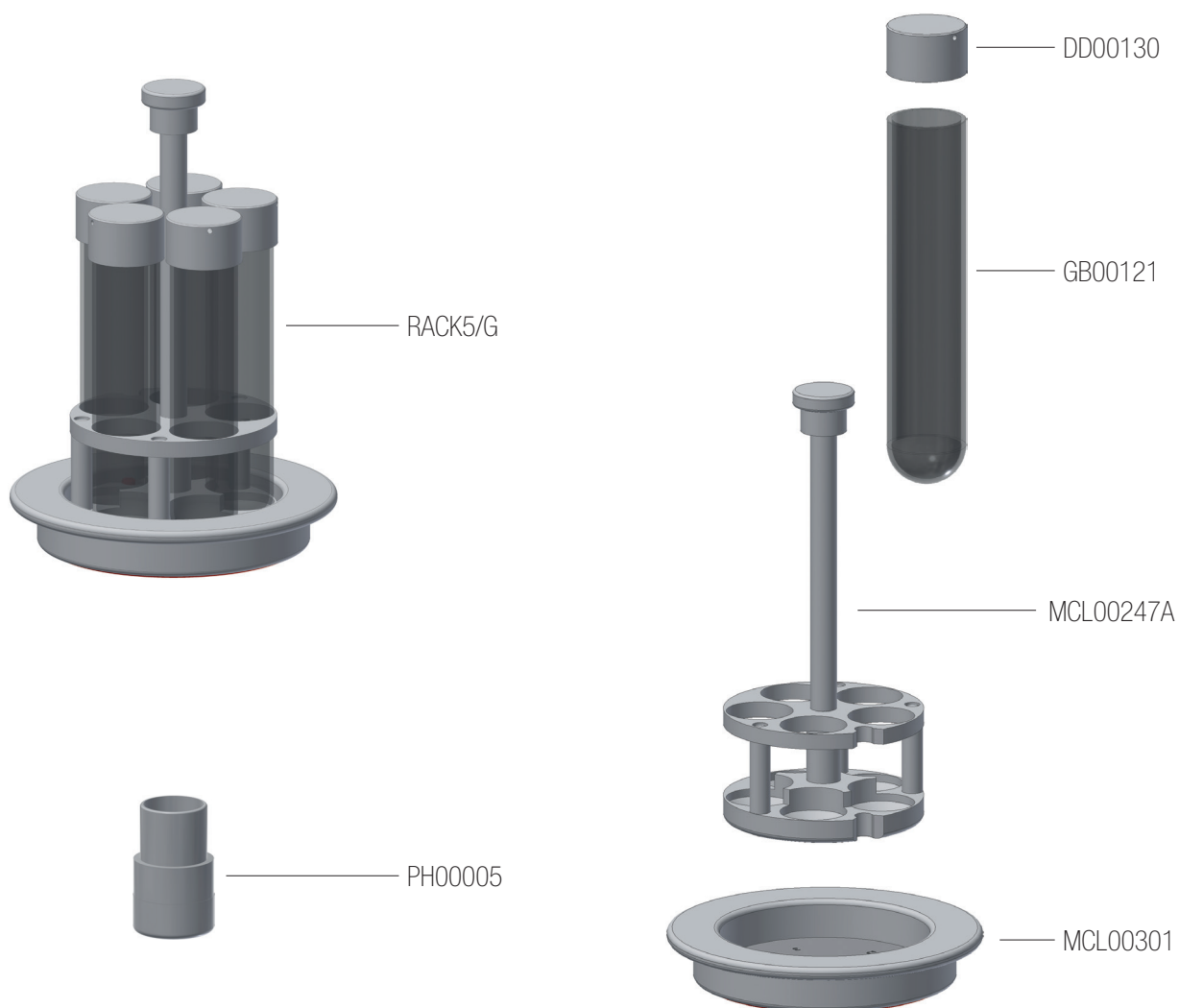RACK5/G ✚
RACK5/Q ✚
RACK5/T ✚

P/N	Description
RACK5/G ✚	5 position rack with GLASS vials and caps
RACK5/Q ✚	5 position rack with QUARTZ vials and caps
RACK5/T ✚	5 position rack with TFM vials and caps

✚ *Include subparts*

RACK5/G
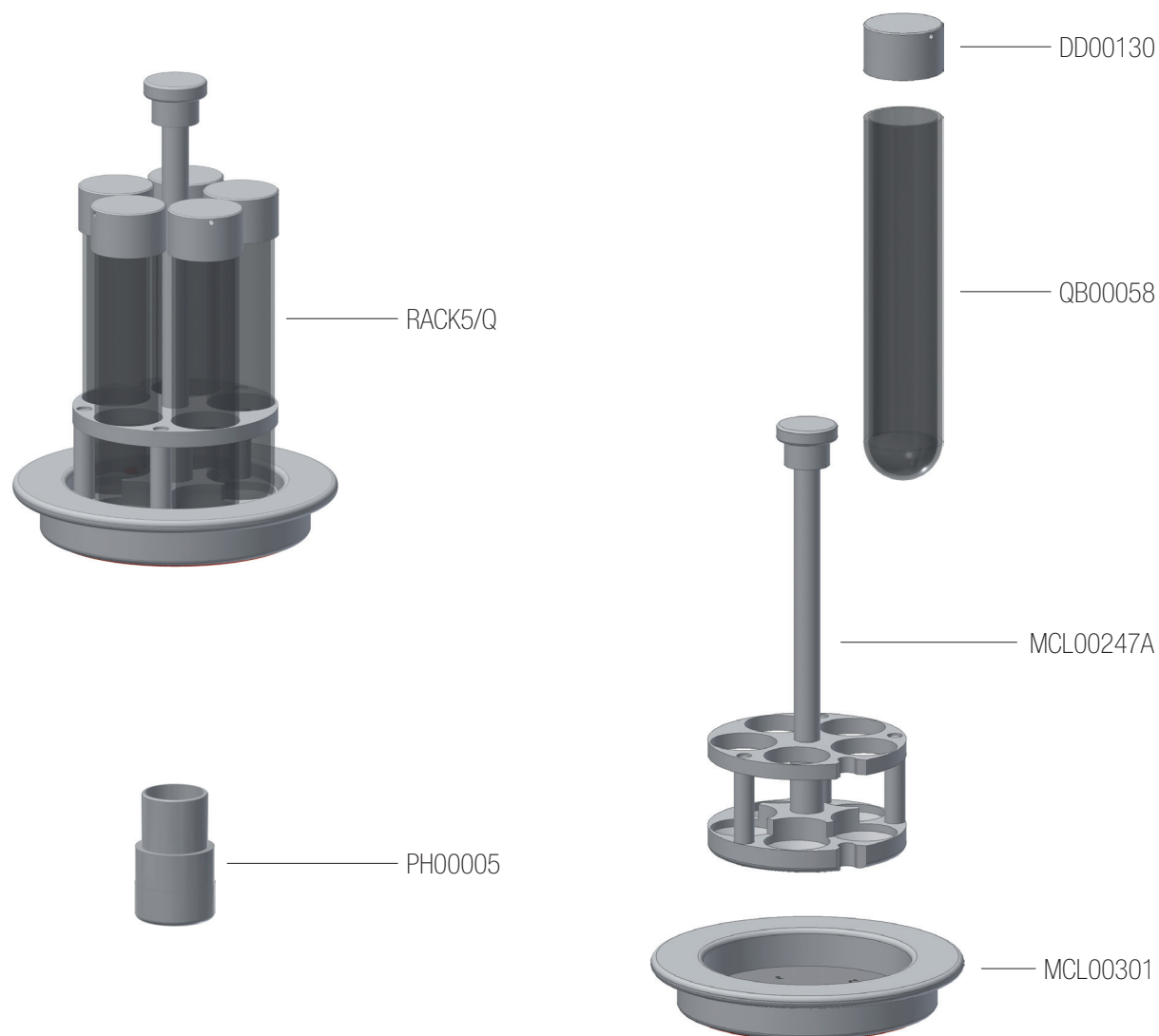
5 position rack with GLASS vials and caps

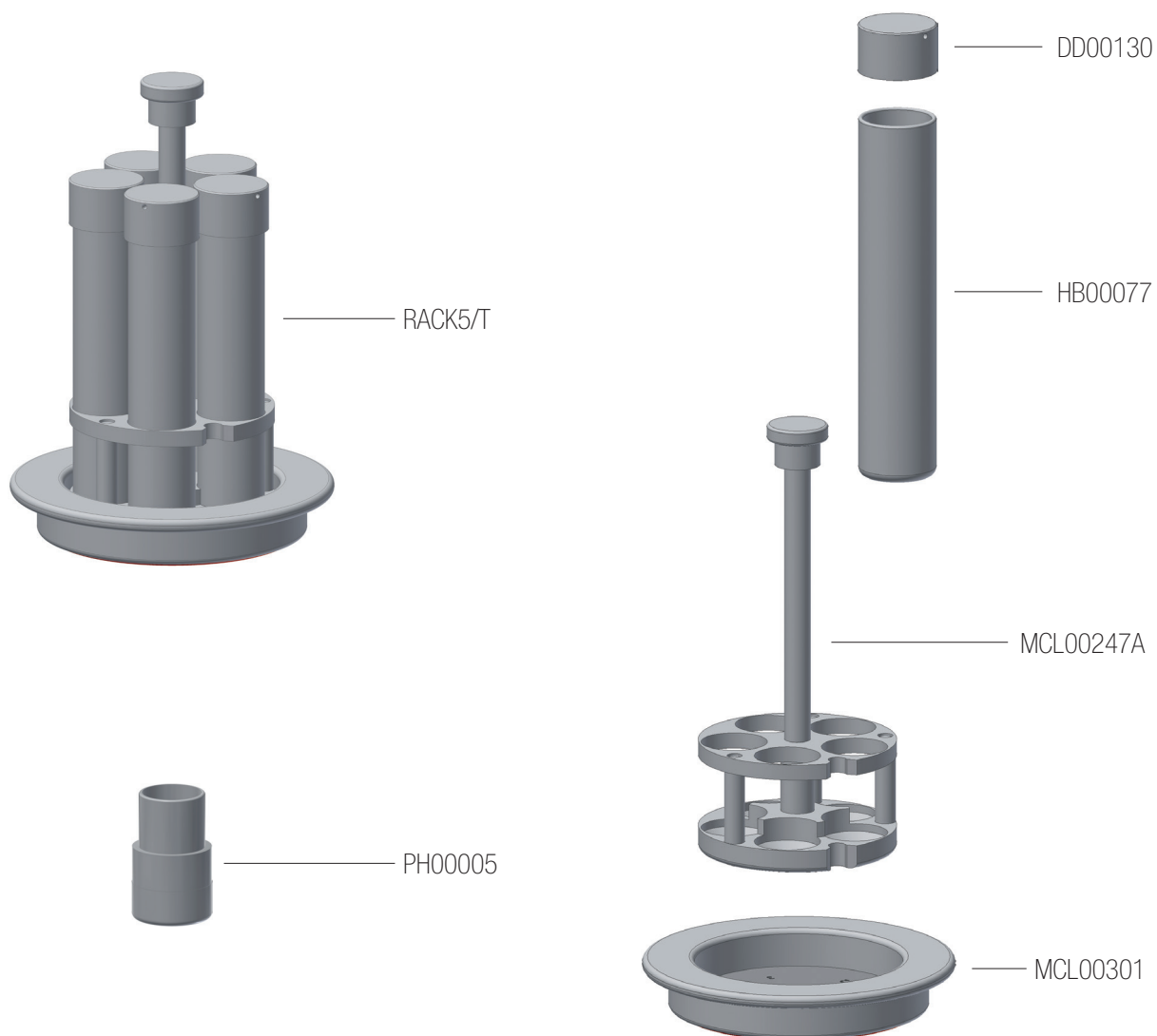| P/N	Description
RACK5/G	5 position rack with GLASS vials and caps
PH00005	Weighing adapter
DD00130	PTFE cap for vial Ø 25 mm
GB00121	Glass vial 25/120 (Ø 25 mm/22mm x 120mm) ca. 40 ml
MCL00247A	Sample rack 5/25
MCL00301	Rack bottom plate with 05 numbered positions

RACK5/Q

5 position rack with QUARTZ vials and caps

RACK5/Q

DD00130

QB00058

MCL00247A

PH00005

MCL00301

P/N	Description
RACK5/Q	5 position rack with QUARTZ vials and caps
PH00005	Weighing adapter
DD00130	PTFE cap for vial Ø 25 mm
QB00058	Quartz vial 25/120 (Ø 25 mm/22 mm x 120mm) ca. 40 ml
MCL00247A	Sample rack 5/25
MCL00301	Rack bottom plate with 05 numbered positions

RACK5/T

5 position rack with TFM vials and caps

DD00130

HB00077

RACK5/T

MCL00247A

PH00005

MCL00301

P/N	Description
RACK5/T	5 position rack with TFM vials and caps
PH00005	Weighing adapter
DD00130	PTFE cap for vial Ø 25 mm
HB00077	PTFE vial 25/120 (Ø 25 mm/22 mm x 120mm) ca. 40 ml
MCL00247A	Sample rack 5/25
MCL00301	Rack bottom plate with 05 numbered positions

ultraWAVE 8 Position Racks

The ultraWAVE rack accommodates vials of different materials such as quartz or disposable glass, and all are fitted with loose TFM caps to ensure pressure equalization. The Numbered rack tray provides the user with an easy visual indication of the vial number. Different vials material can be used along the same run.
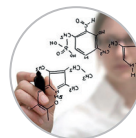
SAMPLE TYPE

Food

Geochemistry

Metals

Research

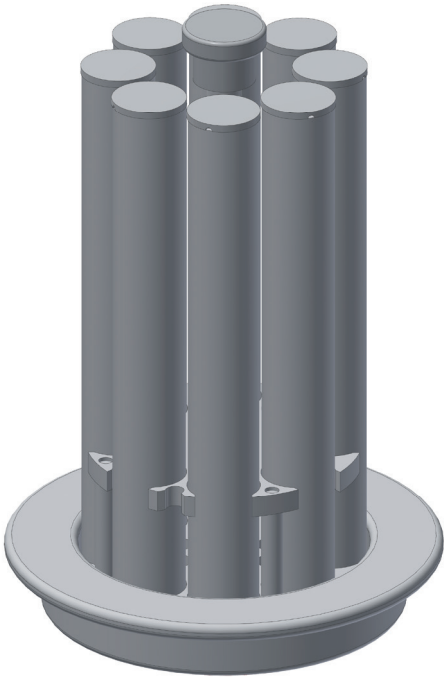## SAMPLE AMOUNT

Small

Medium

Large

Extra Large

RACKS MATERIAL
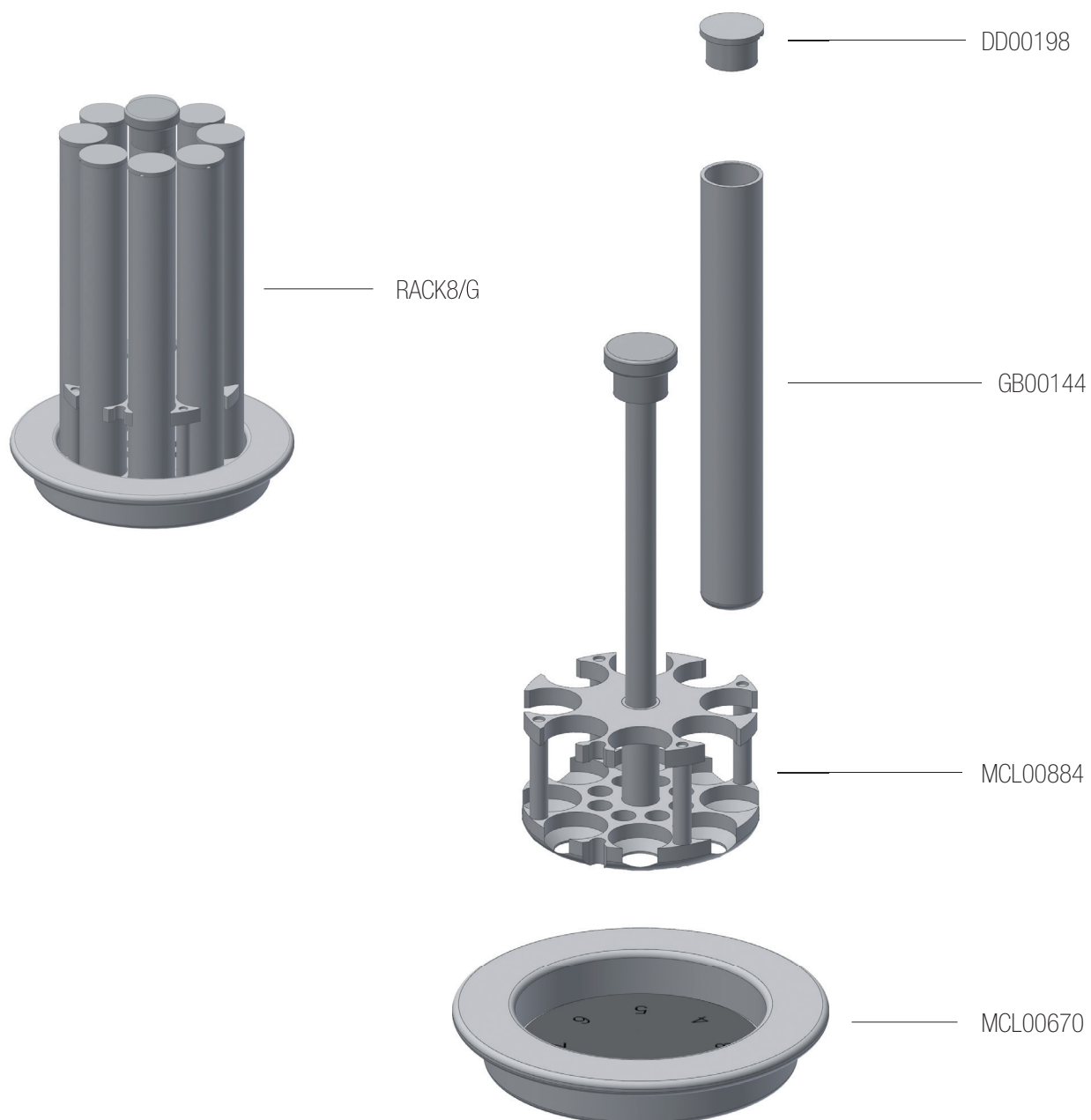
Glass

PTFE/TFM

Quartz

ultraWAVE 8 Position Racks

RACK8/G ✚
RACK8/T ✚
RACK8/Q ✚

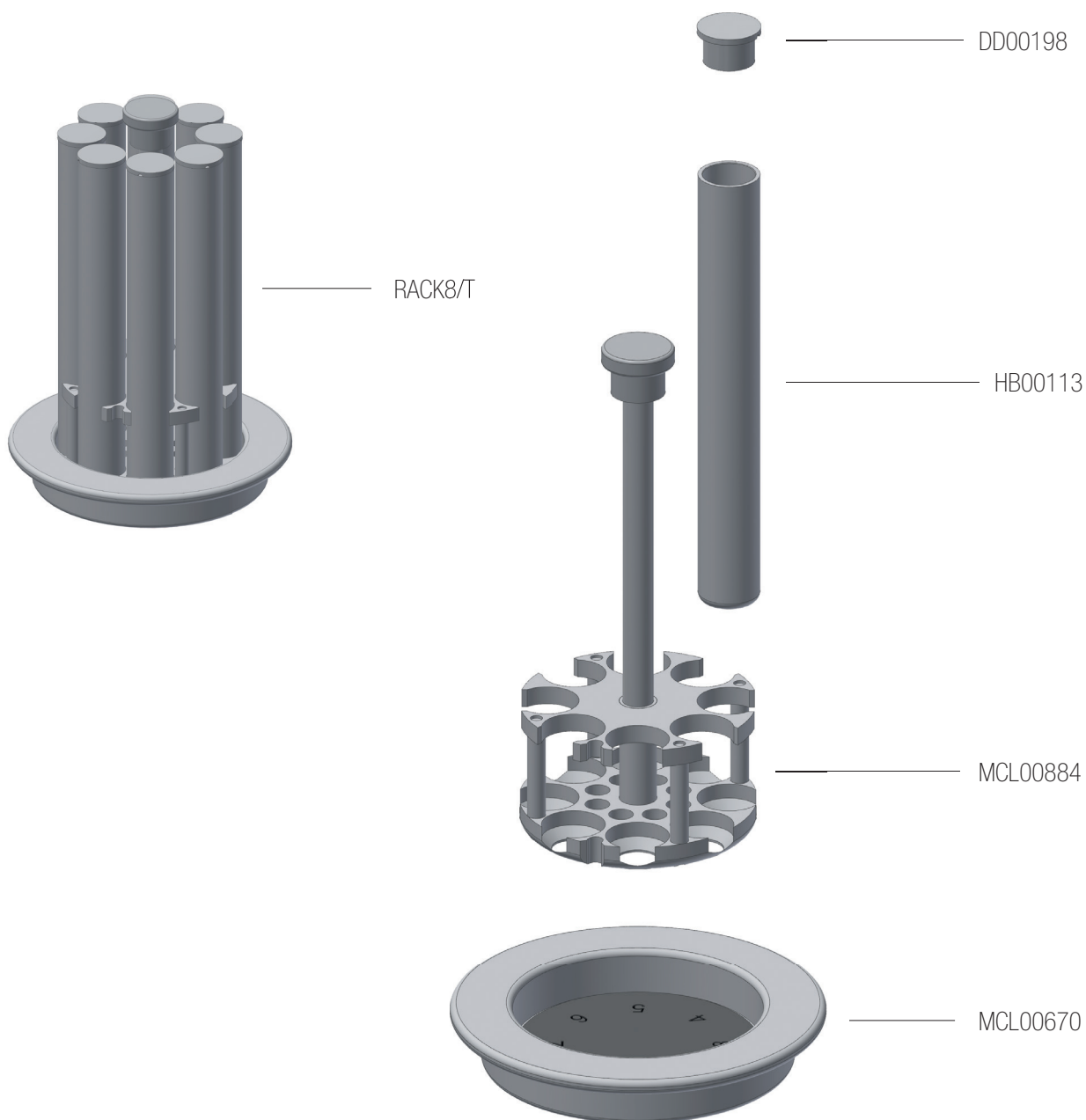| P/N	Description
RACK8/G ✚	8 position rack with GLASS vials and caps
RACK8/T ✚	8 position rack with TFM vials and caps
RACK8/Q ✚	8 position rack with QUARTZ vials and caps

✚ *Include subparts*

RACK8/G

8 position rack with GLASS vials and caps

DD00198

RACK8/G

GB00144

MCL00884

MCL00670

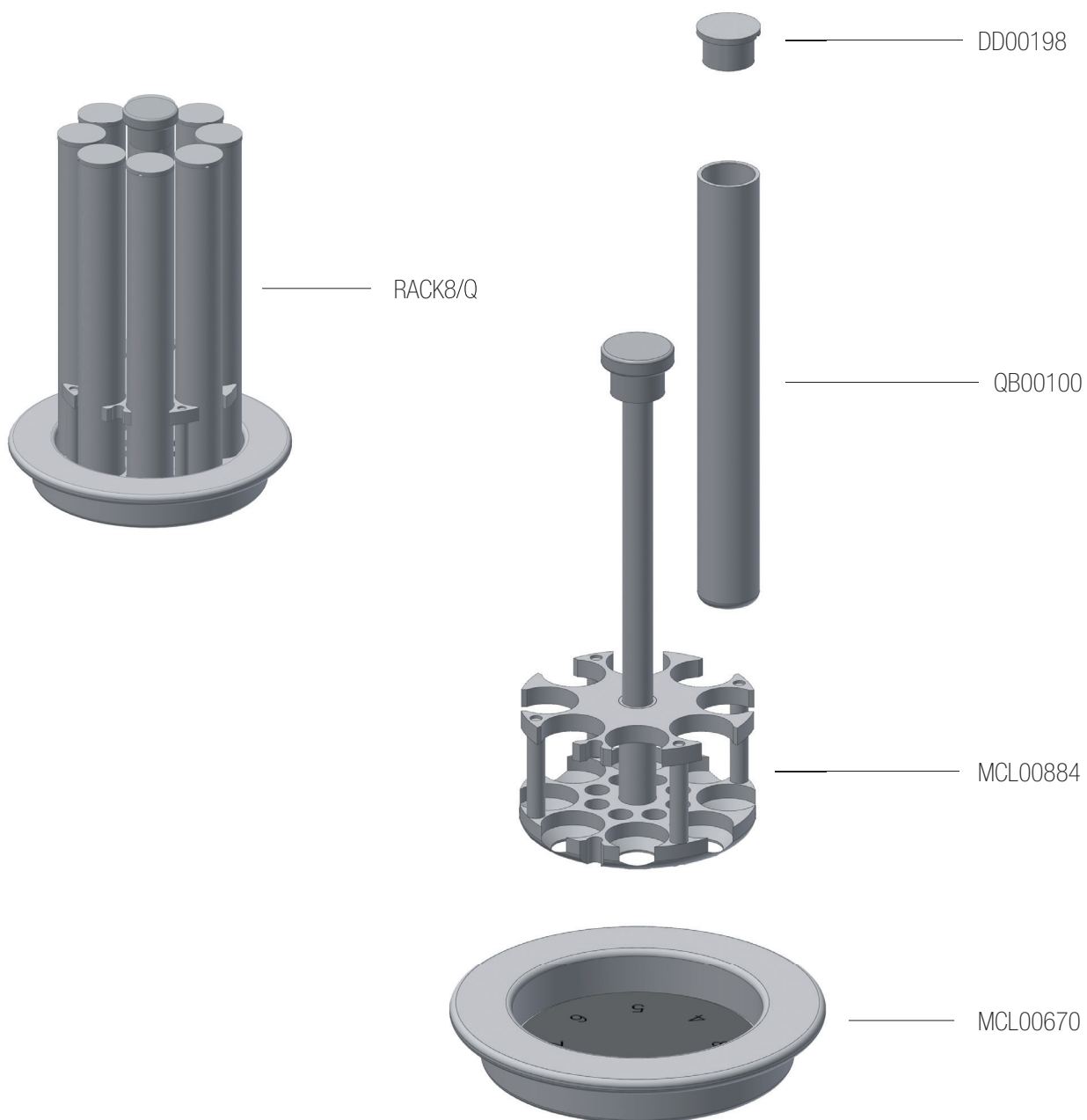| P/N	Description
MCL00884	Sample rack 8/20
MCL00670	Rack bottom plate with 08 numbered positions
DD00198	PTFE cap for vial Ø 20 mm
GB00144	Glass vial 20/120 (Ø 20 mm/17 mm x 120 mm) ca. 29 ml

RACK8/T
8 position rack with TFM vials and caps

DD00198

RACK8/T

HB00113

MCL00884

MCL00670

P/N	Description
MCL00884	Sample rack 8/20
MCL00670	Rack bottom plate with 08 numbered positions
DD00198	PTFE cap for vial Ø 20 mm
HB00113	TFM vial 20/150 (Ø 20 mm/17 mm x 150 mm) ca. 33 ml

RACK8/Q

8 position rack with QUARTZ vials and caps

DD00198

RACK8/Q

QB00100

MCL00884

MCL00670

P/N	Description
MCL00884	Sample rack 8/20
MCL00670	Rack bottom plate with 08 numbered positions
DD00198	PTFE cap for vial Ø 20 mm
QB00100	Quartz vials Ø 20 x 130 mm

ultraWAVE 15 Position Racks

The ultraWAVE rack accommodates vials of different materials such as PTFE/TFM, quartz or disposable glass, and all are fitted with loose TFM caps to ensure pressure equalization. The Numbered rack tray provides the user with an easy visual indication of the vial number. Different vials material can be used along the same run.
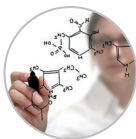
SAMPLE TYPE

Biological　　Environmental　　Food　　Geochemistry　　Pharmaceuticals

Petrochemicals　　Research

SAMPLE AMOUNT

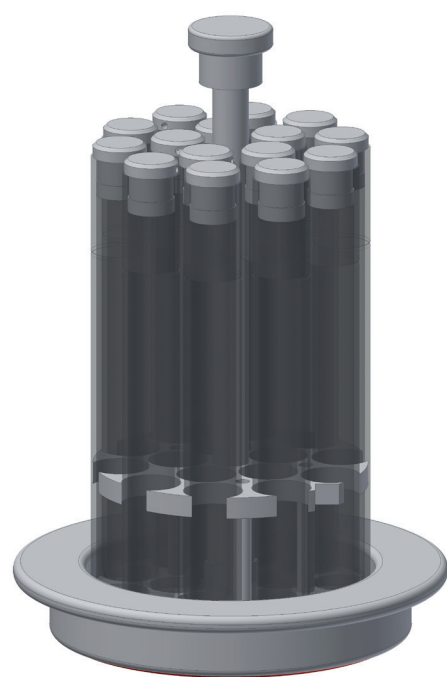Small　　Medium　　Large　　Extra Large

RACKS MATERIAL

Glass　　PTFE/TFM　　Quartz
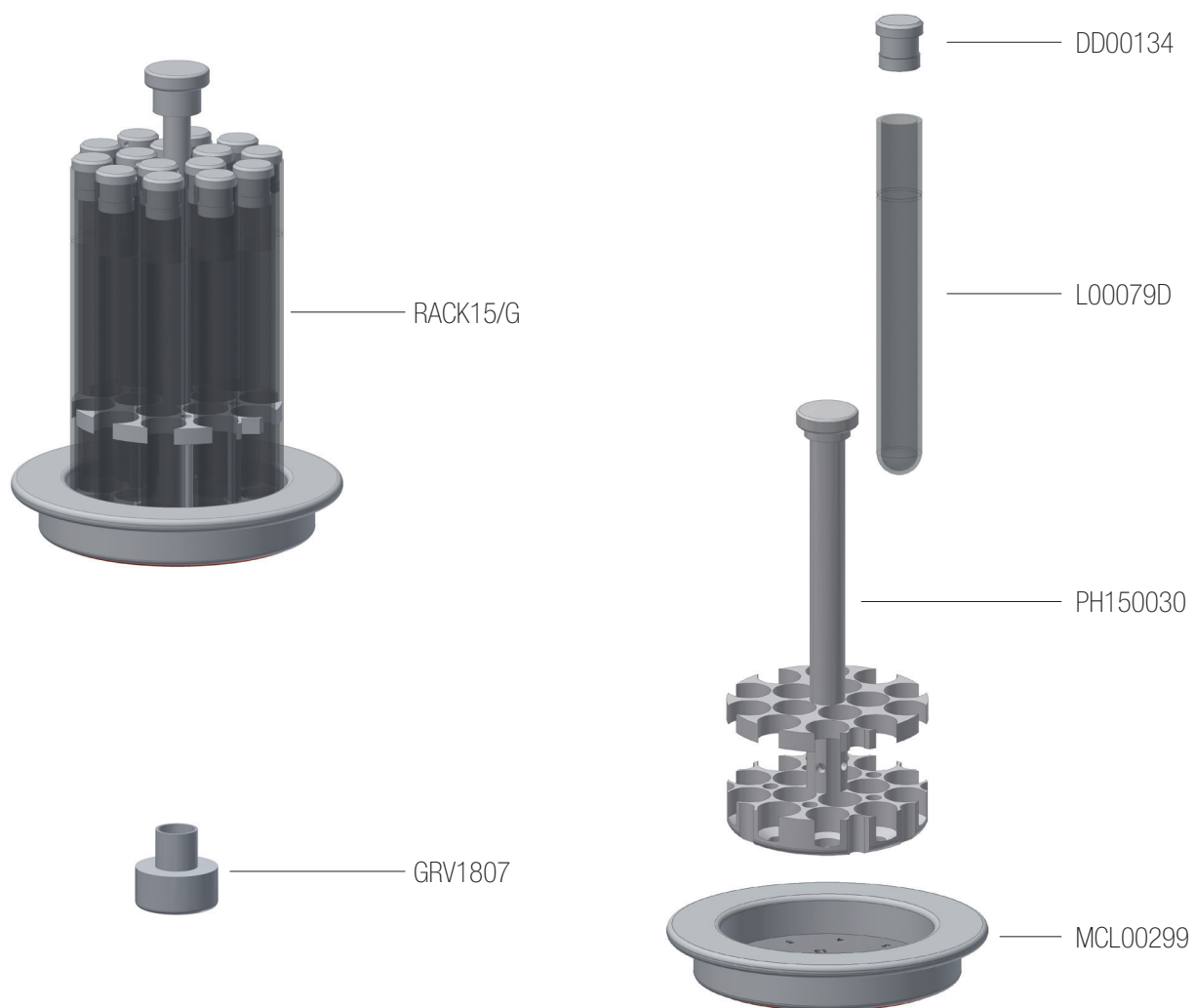
ultraWAVE 15 Position Racks

RACK15/G ➕
RACK15/Q ➕
RACK15/T ➕

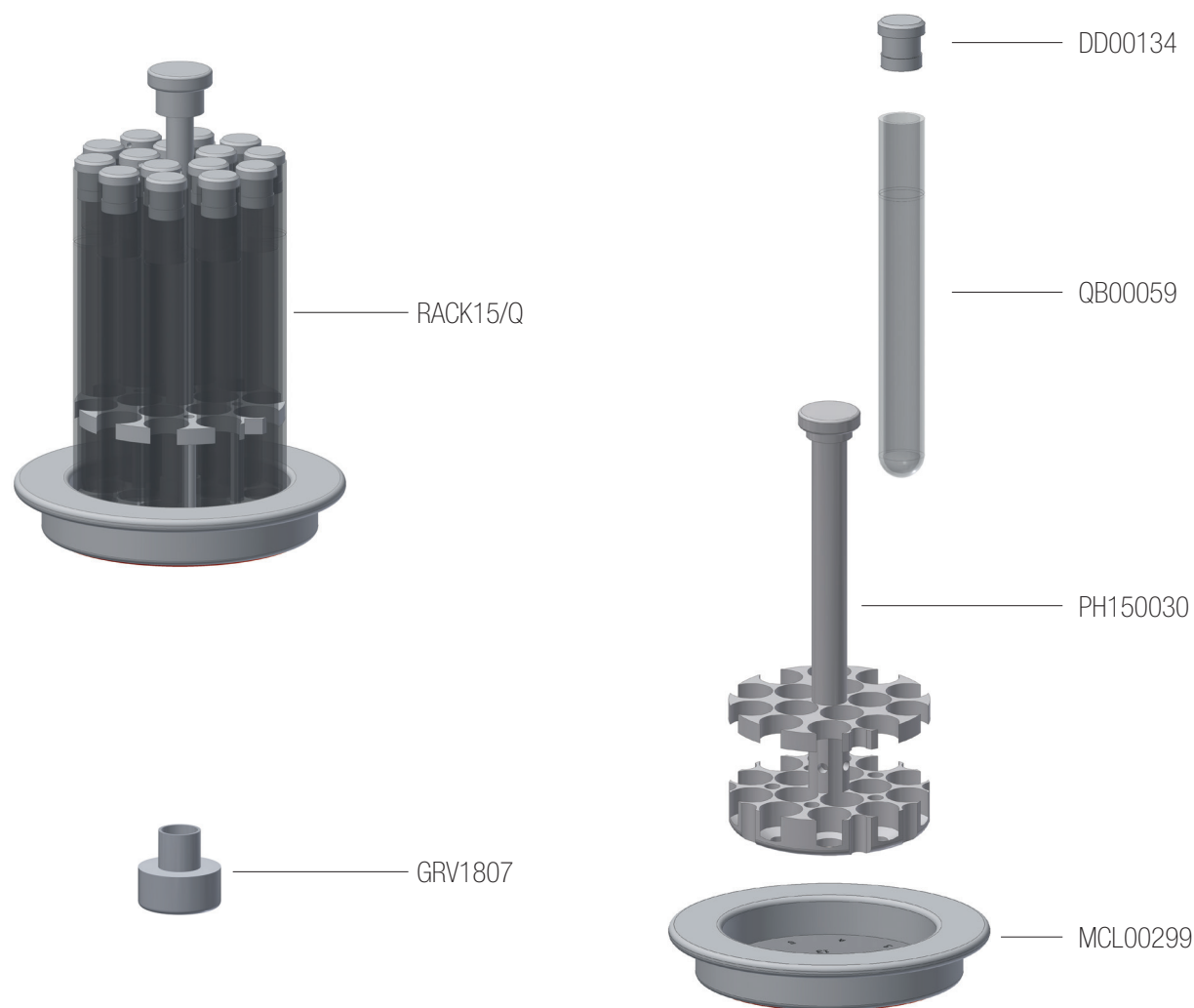| P/N	Description
RACK15/G ➕	15 position rack with GLASS vials and caps
RACK15/Q ➕	15 position rack with QUARTZ vials and caps
RACK15/T ➕	15 position rack with TFM vials and caps

➕ *Include subparts*

RACK15/G
15 position rack with GLASS vials and caps

RACK15/G

DD00134

L00079D

PH150030

GRV1807

MCL00299

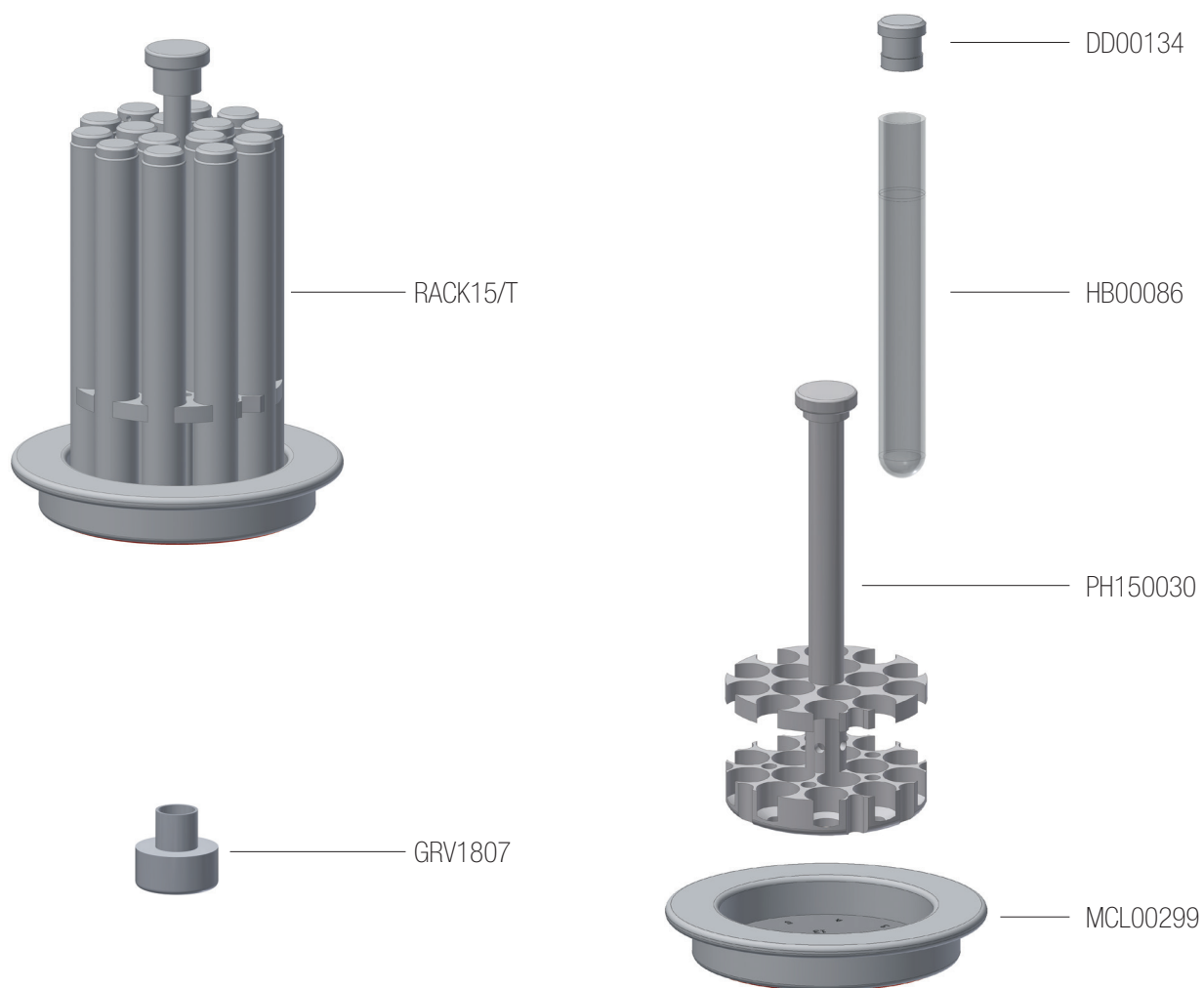| P/N	Description
RACK15/G	15 position rack with GLASS vials and caps
GRV1807	Weighing adapter
DD00134	PTFE cap for vial Ø 16 mm with internal Ø 13 mm
L00079D	Glass vials (disposable) set of 1000 pieces (Ø 16 mm x 125mm)
PH150030	Sample rack 15/16
MCL00299	Rack bottom plate with 15 numbered positions

RACK15/Q
15 position rack with QUARTZ vials and caps

DD00134

QB00059

RACK15/Q

PH150030

GRV1807

MCL00299

P/N	Description
RACK15/Q	15 position rack with QUARTZ vials and caps
GRV1807	Weighing adapter
DD00134	PTFE cap for vial Ø 16 mm with internal Ø 13 mm
QB00059	Quartz vial 16/130 (Ø 16 mm/13,6 mm x 130mm) ca. 15 ml
PH150030	Sample rack 15/16
MCL00299	Rack bottom plate with 15 numbered positions

RACK15/T
15 position rack with TFM vials and caps

RACK15/T

DD00134

HB00086

PH150030

GRV1807

MCL00299

P/N	Description
RACK15/T	15 position rack with TFM vials and caps
GRV1807	Weighing adapter
DD00134	PTFE cap for vial Ø 16 mm with internal Ø 13 mm
HB00086	PTFE vial 16/130 (Ø 16 mm/ 13 mm x 130mm) ca. 15 ml
PH150030	Sample rack 15/16
MCL00299	Rack bottom plate with 15 numbered positions

ultraWAVE 19 Position Racks

The ultraWAVE rack accommodates vials of different materials such as PTFE/TFM, quartz or disposable glass, and all are fitted with loose TFM caps to ensure pressure equalization. The Numbered rack tray provides the user with an easy visual indication of the vial number. Different vials material can be used along the same run.
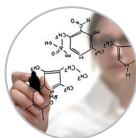
SAMPLE TYPE

Biological   Food   Research

SAMPLE AMOUNT

Small   Medium   Large   Extra Large
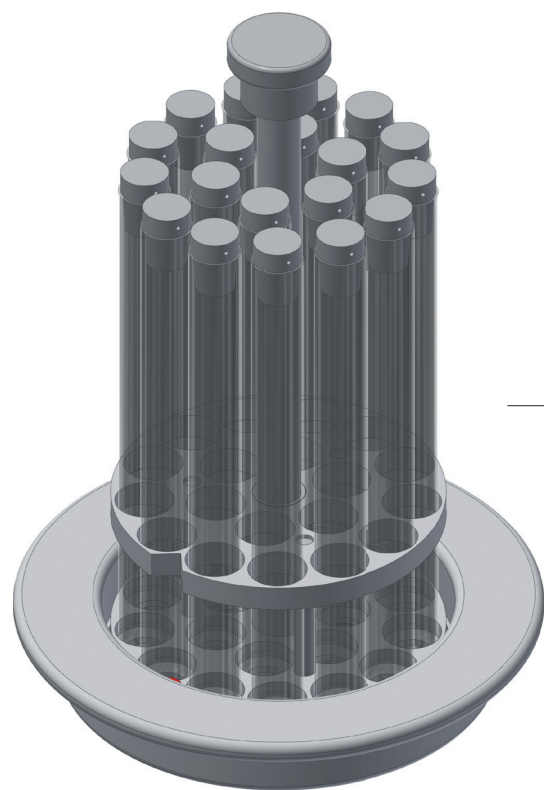
RACKS MATERIAL

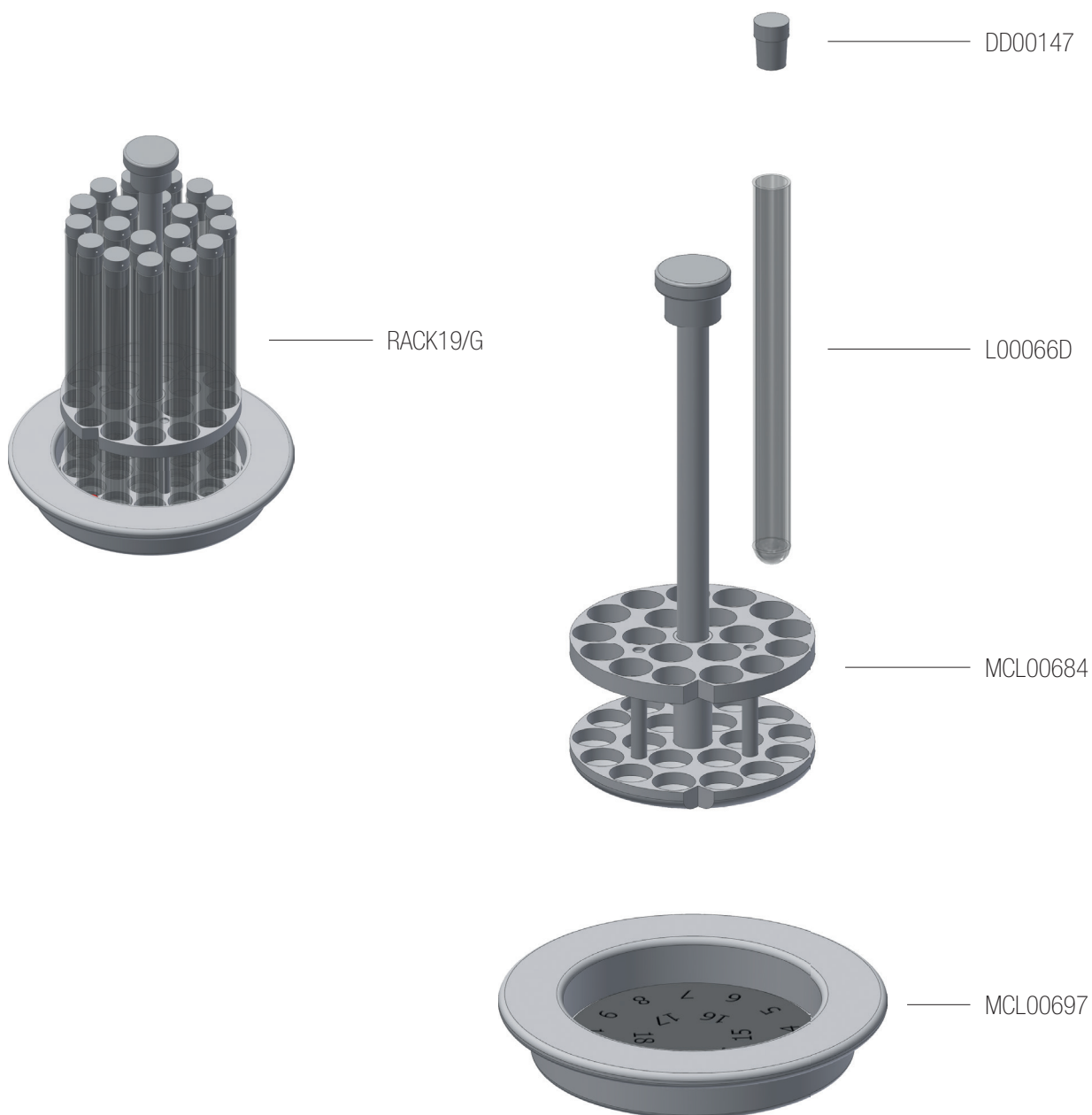Glass   PTFE/TFM   Quartz

ultraWAVE 19 Position Racks

RACK19/G ➕
RACK19/Q ➕
RACK19/T ➕

P/N	Description
RACK19/G ➕	19 position rack with GLASS vials and caps
RACK19/Q ➕	19 position rack with QUARTZ vials and caps
RACK19/T ➕	19 position rack with TFM vials and caps

➕ *Include subparts*

RACK19/G

19 position rack with GLASS vials and caps

DD00147

RACK19/G

L00066D

MCL00684

MCL00697

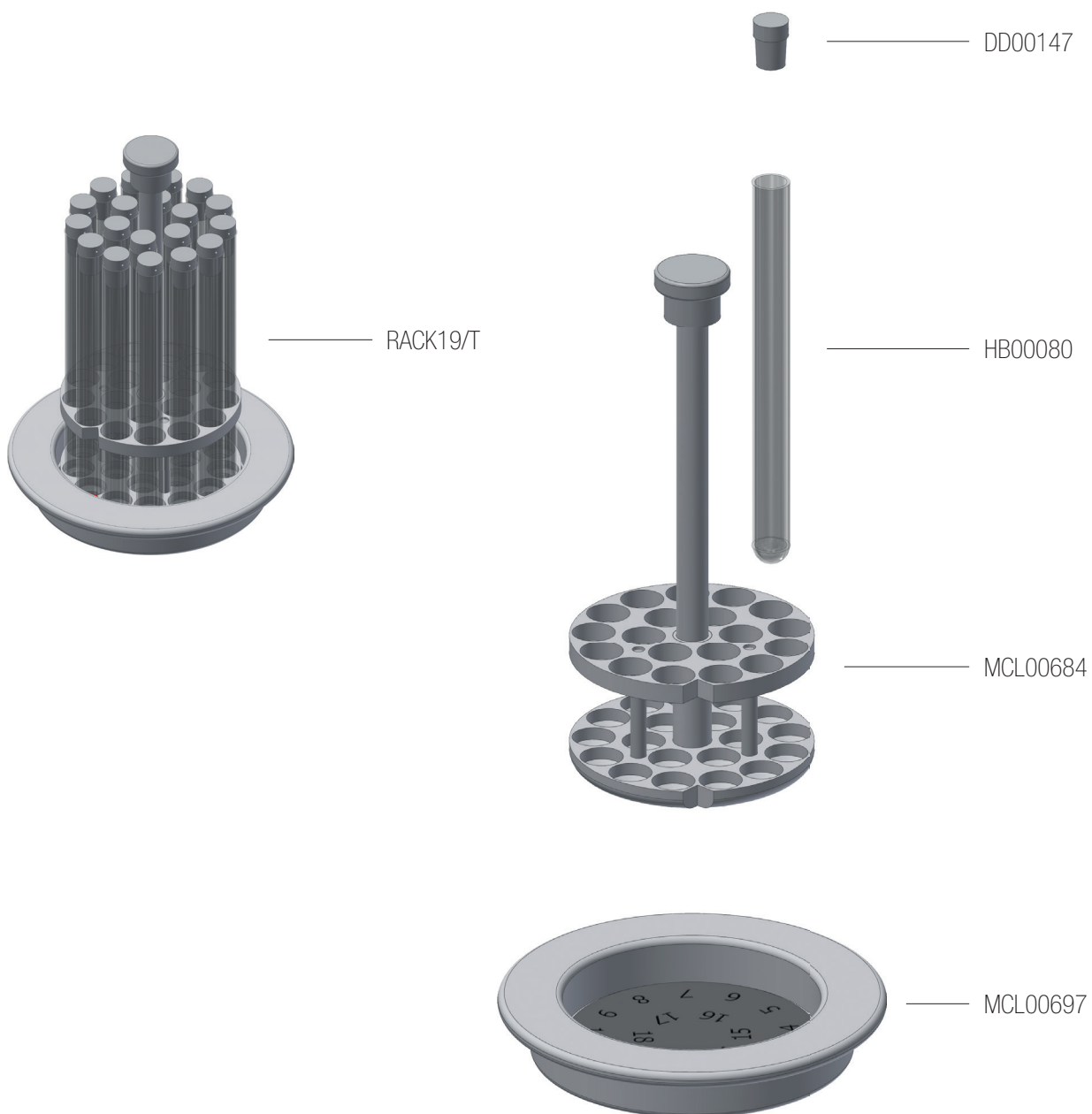| P/N	Description
MCL00684	Sample rack 19/12
MCL00697	Rack bottom plate with 19 numbered positions
DD00147	PTFE cap for vial Ø 12 mm
L00066D	Glass vials (disposable) set of 250 pieces (Ø 12 mm x 100 mm) ca. 10 ml

RACK19/Q

19 position rack with QUARTZ vials and caps
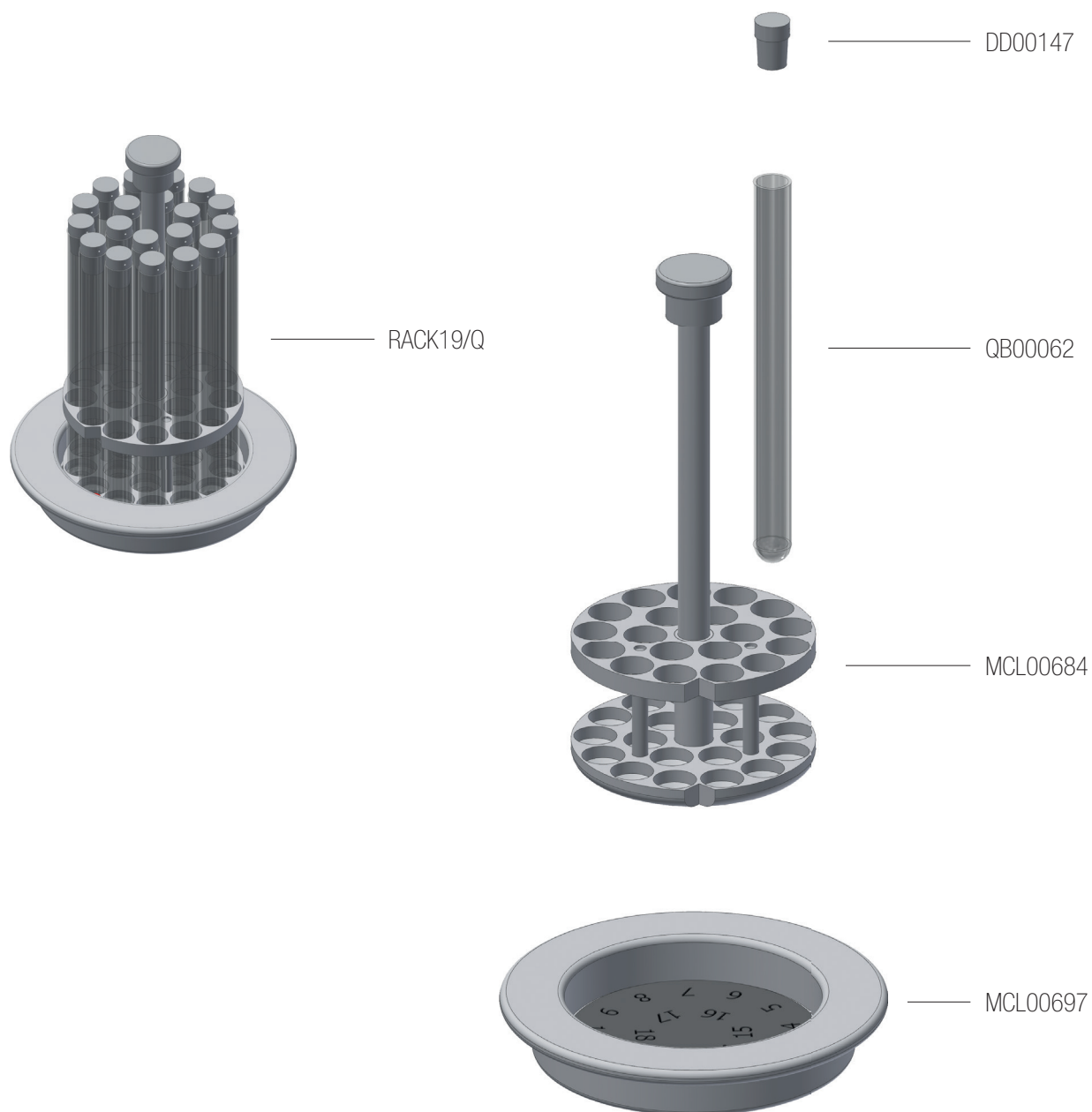
DD00147

RACK19/Q

QB00062

MCL00684

MCL00697

P/N	Description
MCL00684	Sample rack 19/12
MCL00697	Rack bottom plate with 19 numbered positions
DD00147	PTFE cap for vial Ø 12 mm
QB00062	Quartz vial 12/130 (Ø 12 mm x 130mm) ca. 10 ml

RACK19/T
19 position rack with TFM vials and caps

DD00147

RACK19/T

HB00080

MCL00684

MCL00697

P/N	Description
MCL00684	Sample rack 19/12
MCL00697	Rack bottom plate with 19 numbered positions
DD00147	PTFE cap for vial Ø 12 mm
HB00080	PPTFE vial 12/100 (Ø 12 mm x 100mm) ca. 7 ml

ultraWAVE 22 Position Racks

The ultraWAVE rack accommodates vials of different materials such as PTFE/TFM, quartz or disposable glass, and all are fitted with loose TFM caps to ensure pressure equalization. The Numbered rack tray provides the user with an easy visual indication of the vial number. Different vials material can be used along the same run.
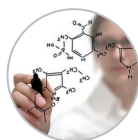
SAMPLE TYPE

Biological

Food

Research

SAMPLE AMOUNT

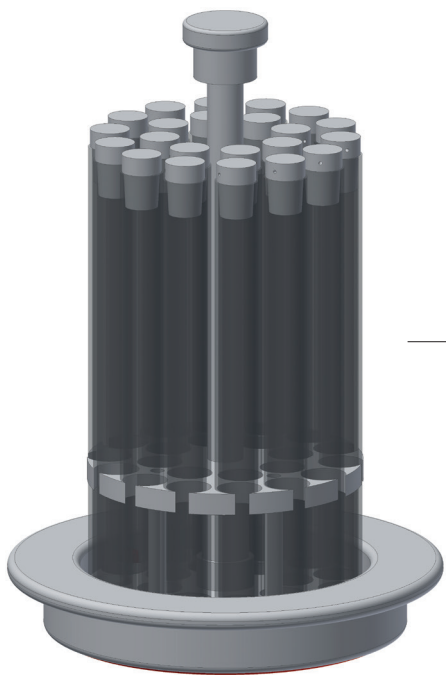Small

Medium

Large

Extra Large

RACKS MATERIAL

Glass

PTFE/TFM

Quartz
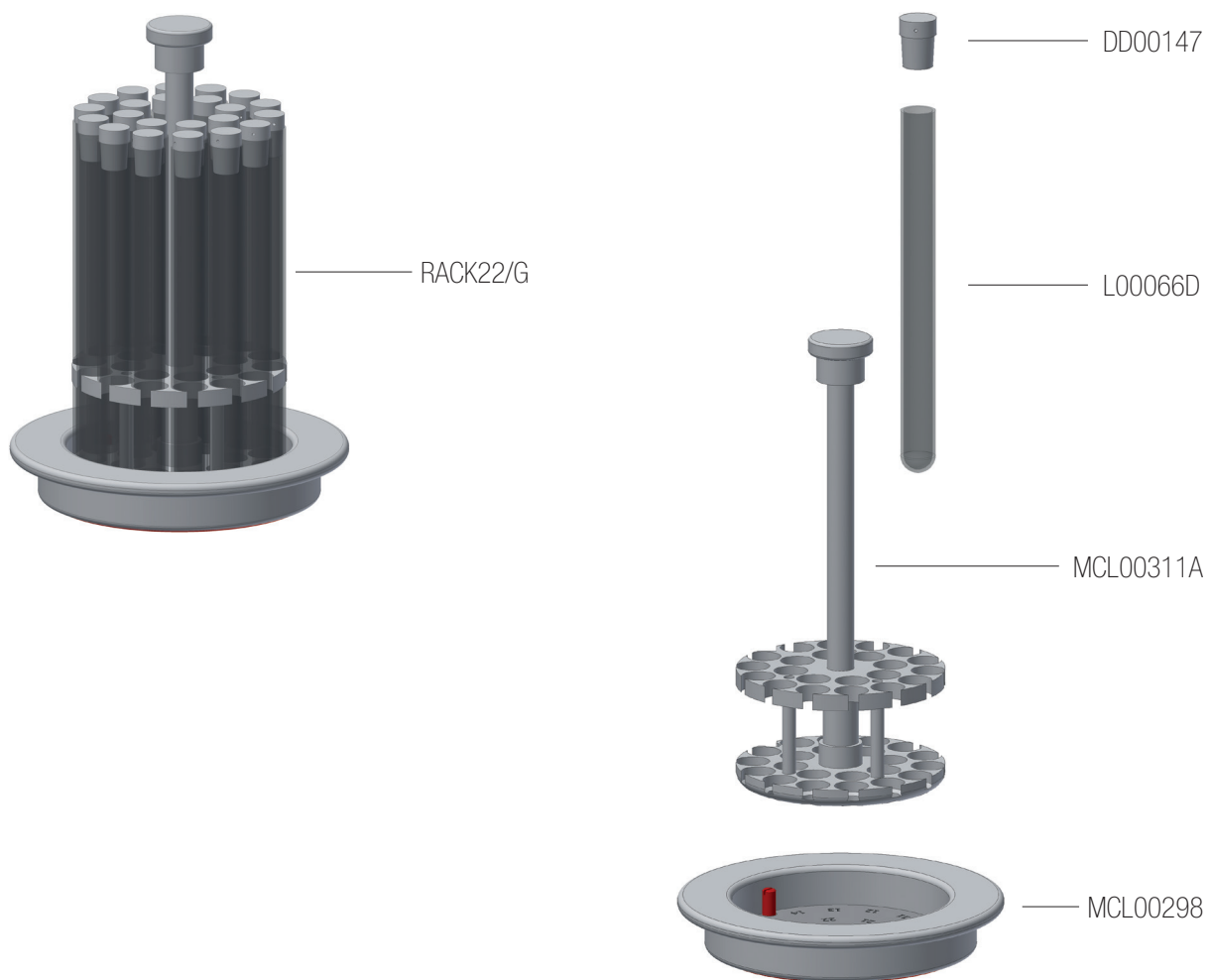
ultraWAVE 22 Position Racks

RACK22/G ✚
RACK22/Q ✚
RACK22/T ✚

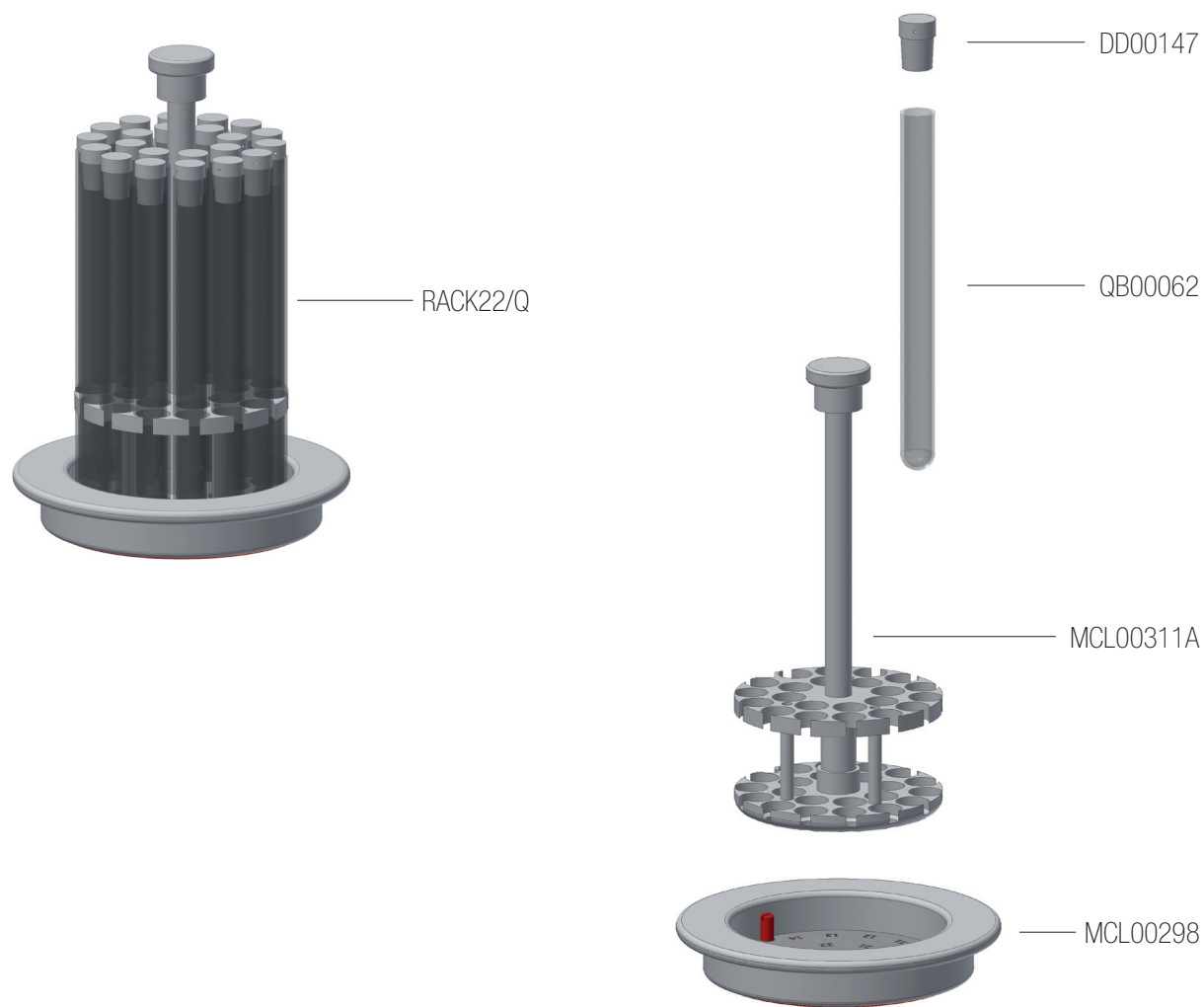| P/N	Description
RACK22/G ✚	22 position rack with GLASS vials and caps
RACK22/Q ✚	22 position rack with QUARTZ vials and caps
RACK22/T ✚	22 position rack with TFM vials and caps

✚ *Include subparts*

RACK22/G
22 position rack with GLASS vials and caps

RACK22/G

DD00147

L00066D

MCL00311A

MCL00298

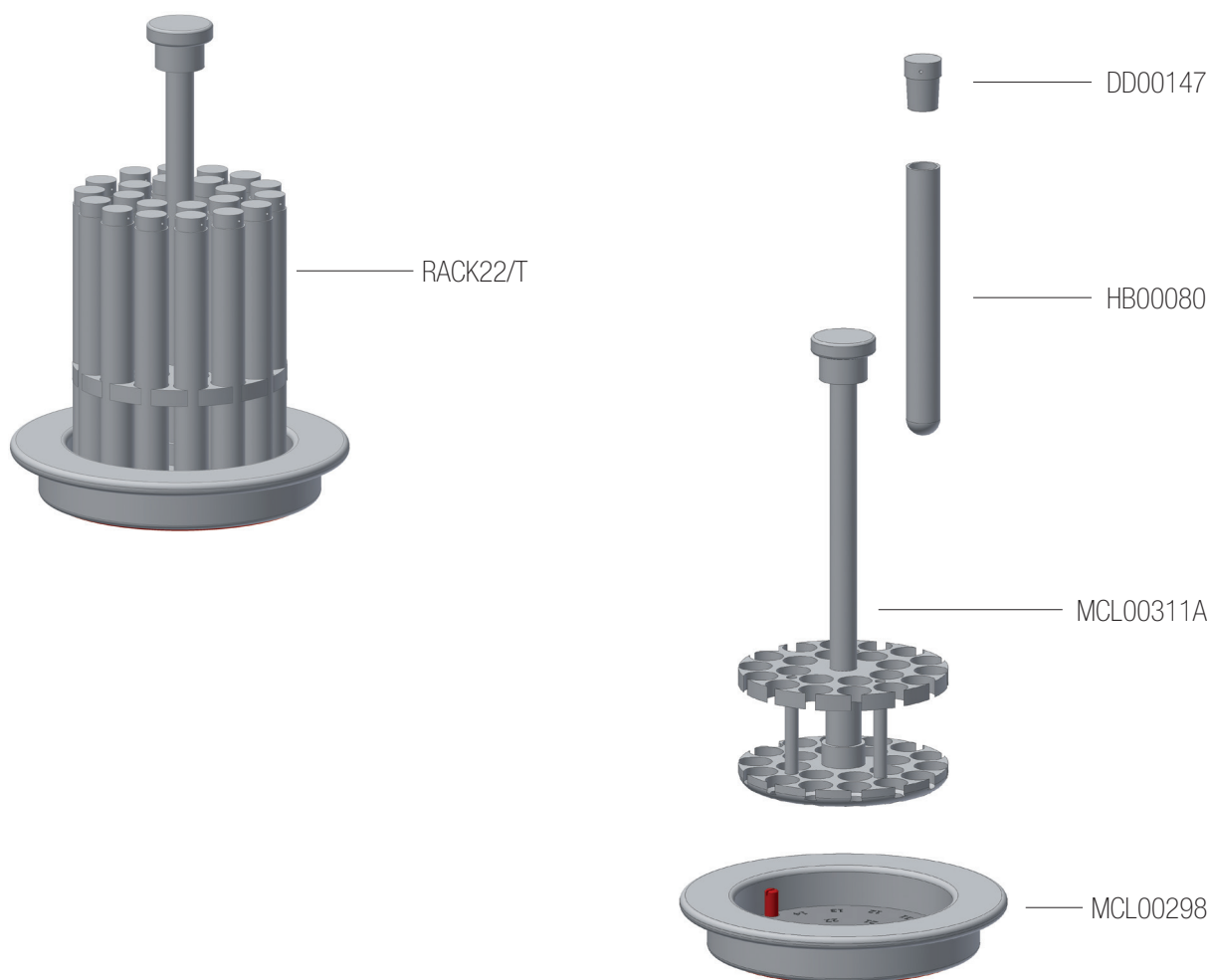| P/N	Description
RACK22/G	22 position rack with GLASS vials and caps
DD00147	PTFE cap for vial Ø 12 mm
L00066D	Glass vials (disposable) set of 250 pieces (Ø 12 mm x 100 mm) ca. 8 ml
MCL00311A	Sample rack 22/12
MCL00298	Rack bottom plate with 22 numbered positions

RACK22/Q

22 position rack with QUARTZ vials and caps

DD00147

QB00062

RACK22/Q

MCL00311A

MCL00298

P/N	Description
RACK22/Q	22 position rack with QUARTZ vials and caps
DD00147	PTFE cap for vial Ø 12 mm
QB00062	Quartz vial 12/130 (Ø 12 mm x 130mm) ca. 10 ml
MCL00311A	Sample rack 22/12
MCL00298	Rack bottom plate with 22 numbered positions

RACK22/T

22 position rack with TFM vials and caps

RACK22/T

DD00147

HB00080

MCL00311A

MCL00298

P/N	Description
RACK22/T	22 position rack with TFM vials and caps
DD00147	PTFE cap for vial Ø 12 mm
HB00080	PTFE vial 12/100 (Ø 12 mm x 100mm) ca. 7 ml
MCL00311A	Sample rack 22/12
MCL00298	Rack bottom plate with 22 numbered positions

ultraWAVE 26 Position Racks

The ultraWAVE rack accommodates disposable glass vials and all are fitted with loose TFM caps to ensure pressure equalization. The Numbered rack tray provides the user with an easy visual indication of the vial number. Different vials material can be used along the same run.
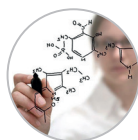
▌ SAMPLE TYPE

Biological

Food

Research

▌ SAMPLE AMOUNT

Small

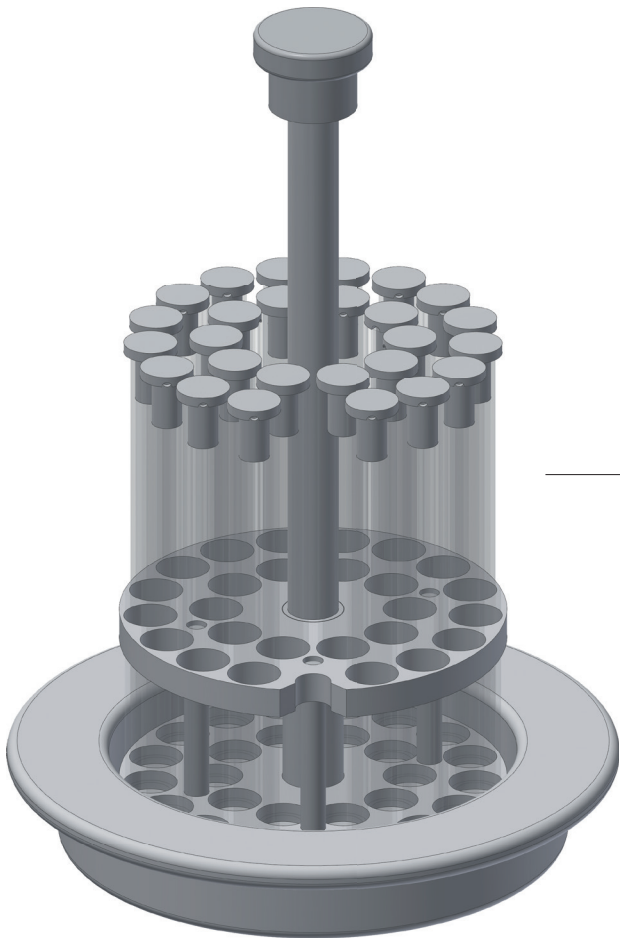Medium

Large

Extra Large

▌ RACKS MATERIAL

Glass

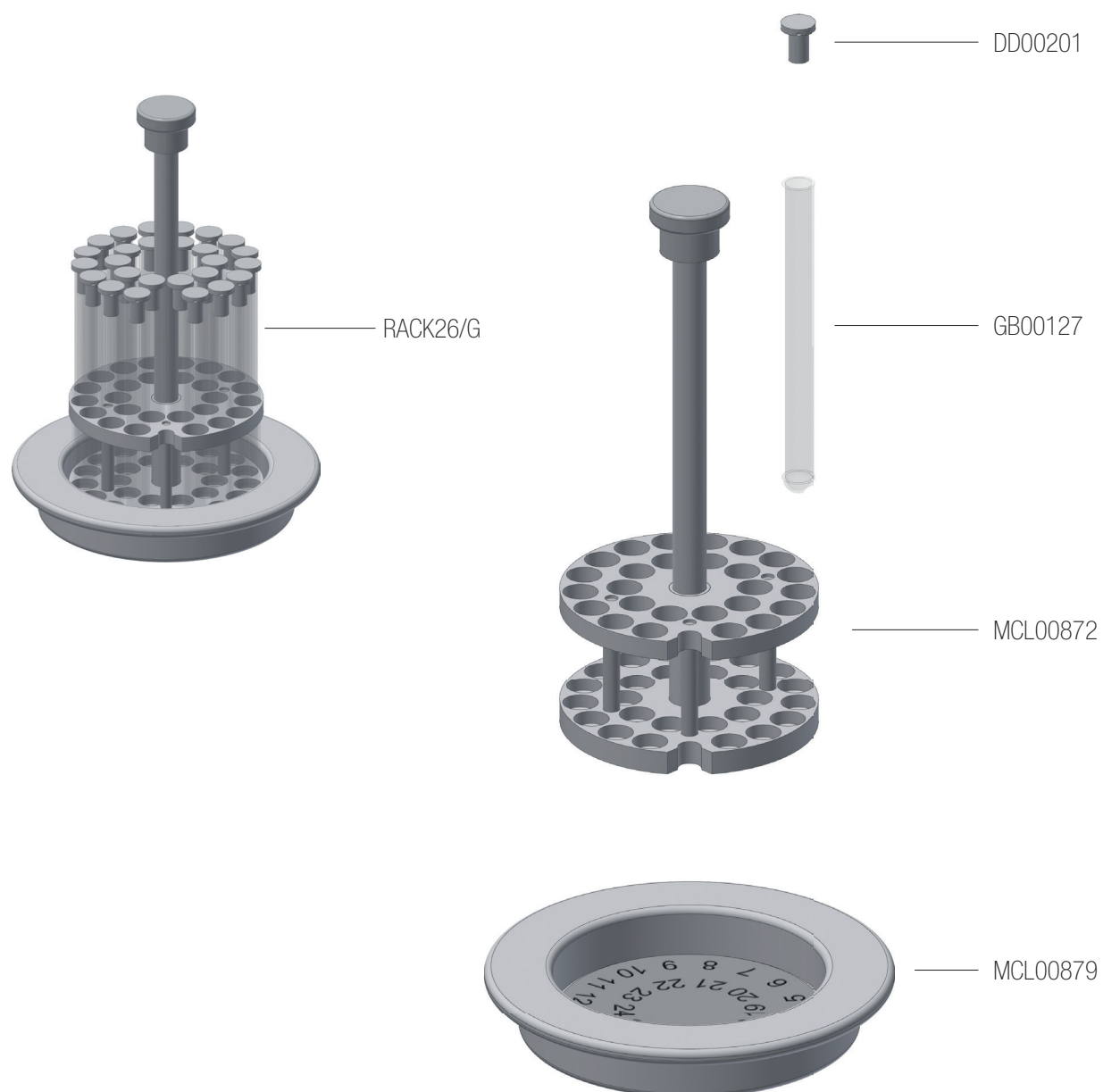PTFE/TFM

Quartz

ultraWAVE 26 Position Racks

RACK26/G ✚

P/N	Description
RACK26/G ✚	26 position rack with GLASS vials and caps

✚ *Include subparts*

RACK26/G

26 position rack with GLASS vials and caps

DD00201

RACK26/G

GB00127

MCL00872

MCL00879

P/N	Description
MCL00872	Sample rack 26/10
MCL00879	Rack bottom plate with 26 numbered positions
DD00201	PTFE cap for vial Ø 10 mm
GB00127	Glass vials (disposable) (Ø 10 mm/ 8 mm x 100 mm) ca. 5 ml

ultraWAVE Racks for Mixed Vials

The ultraWAVE racks for mixed vials accommodates vials of different materials such as quartz or disposable glass, and all are fitted with loose TFM caps to ensure pressure equalization. The mixed racks allow to process different sample amounts and sample types along the same run. The Numbered rack tray provides the user with an easy visual indication of the vial number. Different vials material can be used along the same run.
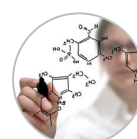
SAMPLE TYPE

| Biological | Environmental | Food | Pharmaceutical | Research |

SAMPLE AMOUNT

| Small | Medium | Large | Extra Large |

RACKS MATERIAL
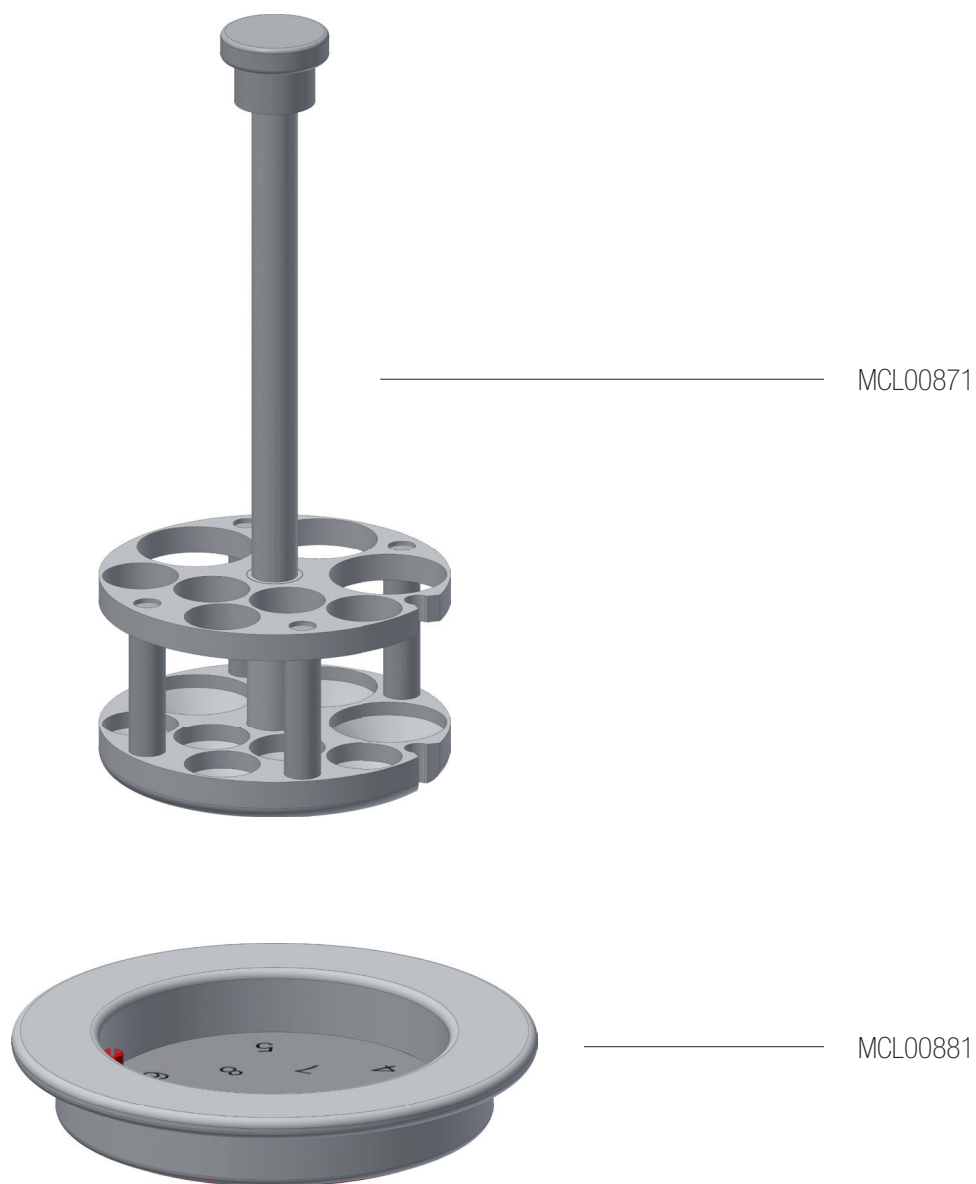
| Glass | PTFE/TFM | Quartz |

# ultraWAVE 8-Position Rack for Mixed Vials

MCL00871

MCL00881

8 POSITION MIXED RACK (3 vials Ø 25 mm + 5 vials Ø 16 mm)

Suitable for n.3 vials (any material) of the 5 position rack and n. 5 vials (any material) of the 15 position rack.

P/N	Description
MCL00871	Sample rack 3/25 mm - 5/16 mm
MCL00881	Rack bottom plate with 3 + 5 numbered positions

ultraWAVE 18-Position Rack for Mixed Vials

MCL00723A
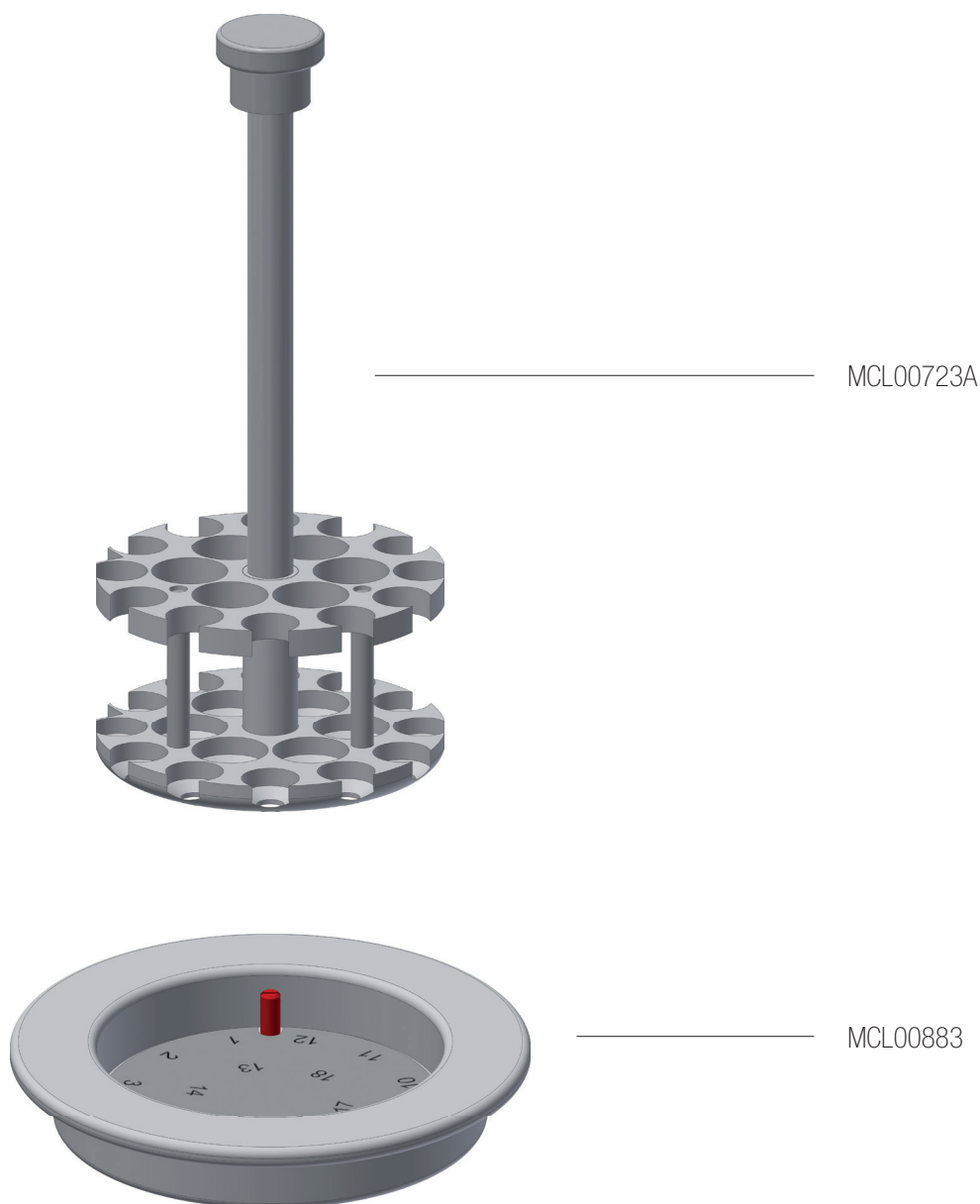
MCL00883

18 POSITION MIXED RACK (6 vials Ø 16 mm + 12 vials Ø 12 mm)
Suitable for n.6 vials (any material) of the 15 position rack and n. 12 vials (any material) of the 22 position rack.

P/N	Description
MCL00723A	Sample rack 6/16 mm - 12/12 mm
MCL00883	Rack bottom plate with 6 + 12 numbered positions

UW-KIT ultraWAVE consumables

| P/N	Description
OR0206	O-ring viton 86*2,2
OR0165	Viton o-ring for PTFE cover, 78x2mm
OR0170	Viton o-ring for PTFE cover, 3.5x1.5mm
OR0117	O-Ring for rack holder and burst disk, 14x2mm, viton
HB00070B	TFM Vessel 900ml volume
MCL0435	TFM cover Ø 90 H21
MCL0122	PEEK ring for locking spindle Ø18/9.5mm
MCL0699A	PTFE basic disk Ø 75X1mm (set of 10 pieces)

DMA-80 Accessories & Consumables

| Suitable for the following DMA-80 models:

- DMA-80 evo Dualcell (Single Beam and Double Beam)
- DMA-80 evo Tricell (Double Beam)
- DMA-80 evo Wide Range
- DMA-80 Dualcell
- DMA-80 Tricell
- DMA-80 Wide Range

The DMA-80 is capable to determine mercury in a wide variety of samples, either solid, liquid and gas. The system is fully compliant with the US EPA 7473 and allows direct mercury analysis in virtually any sample. All the models have a specific working range, which allows to measure from low ppb levels up to high ppm. The DMA-80 evo available with single and double beam configuration further enhance the system stability and precision, ensure superior limit of quantification and reproducibility.

| SAMPLE TYPE
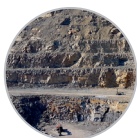
Cement/Mining

Clinicals/Biological

Environmental

Food/Fish

Petrochemicals

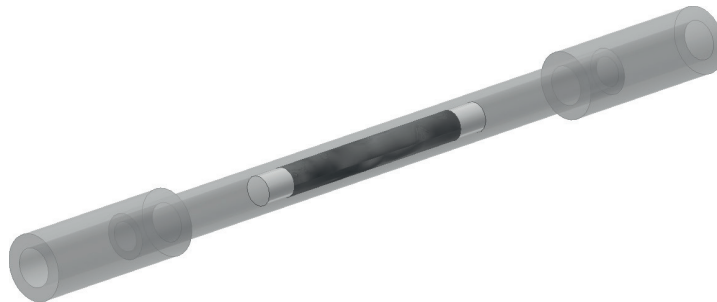Power plant/Coal

DMA-80 Accessories & Consumables

DMA8333
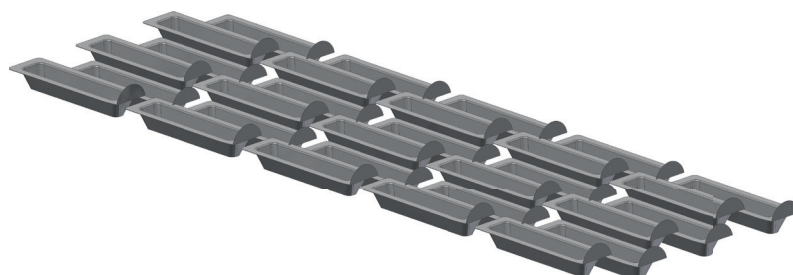Quartz catalyst tube complete

DMA8134
Amalgamator complete with 2 connections

DMA8142
Sample metal boats (set of 40 pieces)

DMA8347

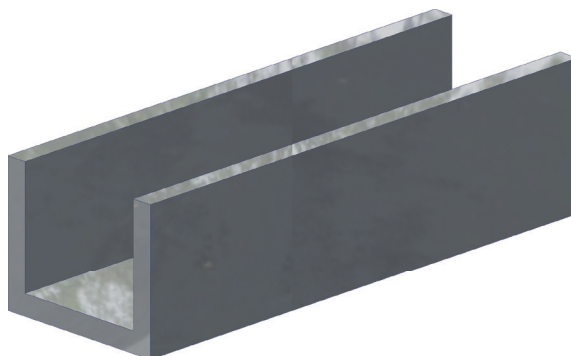Quartz sample boats for DMA-80, set of 10 pcs - 1,5ml

70200

Hg Trap

DMA0464

Weighing stand for sample boats

DMA80-KIT2 DMA-80 Start consumables kit

| P/N	Description
DMA8333	Quartz catalyst tube complete
DMA8134	Amalgamator complete with 2 connections
SL00128A	Silicon joints (set of 10 pieces)
SO0376B	Heating coil Amalgamator 13 Wi
DMA8347	Quartz sample boats for DMA-80, set of 10 pcs - 1,5ml
DMA8142	Sample metal boats (set of 40 pieces)
70200	Hg Trap

DMA80-KIT3 DMA-80 Advanced consumables kit

P/N	Description
DMA8333	Quartz catalyst tube complete
DMA8134	Amalgamator complete with 2 connections
SL00128A	Silicon joints (set of 10 pieces)
DMA8347	Quartz sample boats for DMA-80, set of 10 pcs - 1,5ml
DMA8142	Sample metal boats (set of 40 pieces)
SO0376D	Heating coil for drying ashing
DMA8057	Sample boat holder complete with sealing ring REPLACED BY DMA8335B
DMA8335B	Steel fork with ceramic plug
DMA8457	O-ring set for cuvette type Tricon
70200	Hg Trap

PYRO Accessories & Consumables

| Suitable for the following PYRO configurations:

- **PYRO High Sample Throughput***
- **PYRO Sulfated Ashing***
- **PYRO UltraFAST Heating***
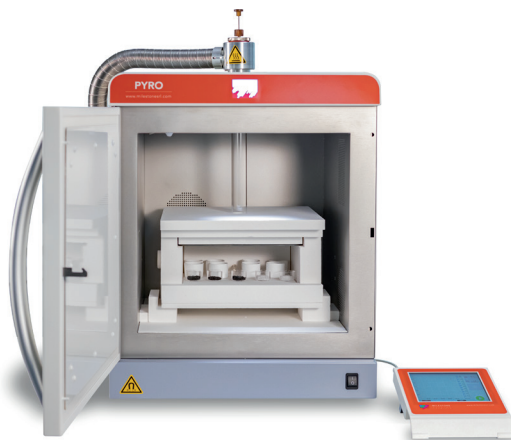
The Milestone PYRO is an advanced microwave muffle furnace, suitable for several applications such as ashing, sulfated ashing, loss on ignition (LOI), residue on ignition (ROI), fusion and, all high temperature reactions under controlled conditions.

| SAMPLE TYPE

Officials

Environmental
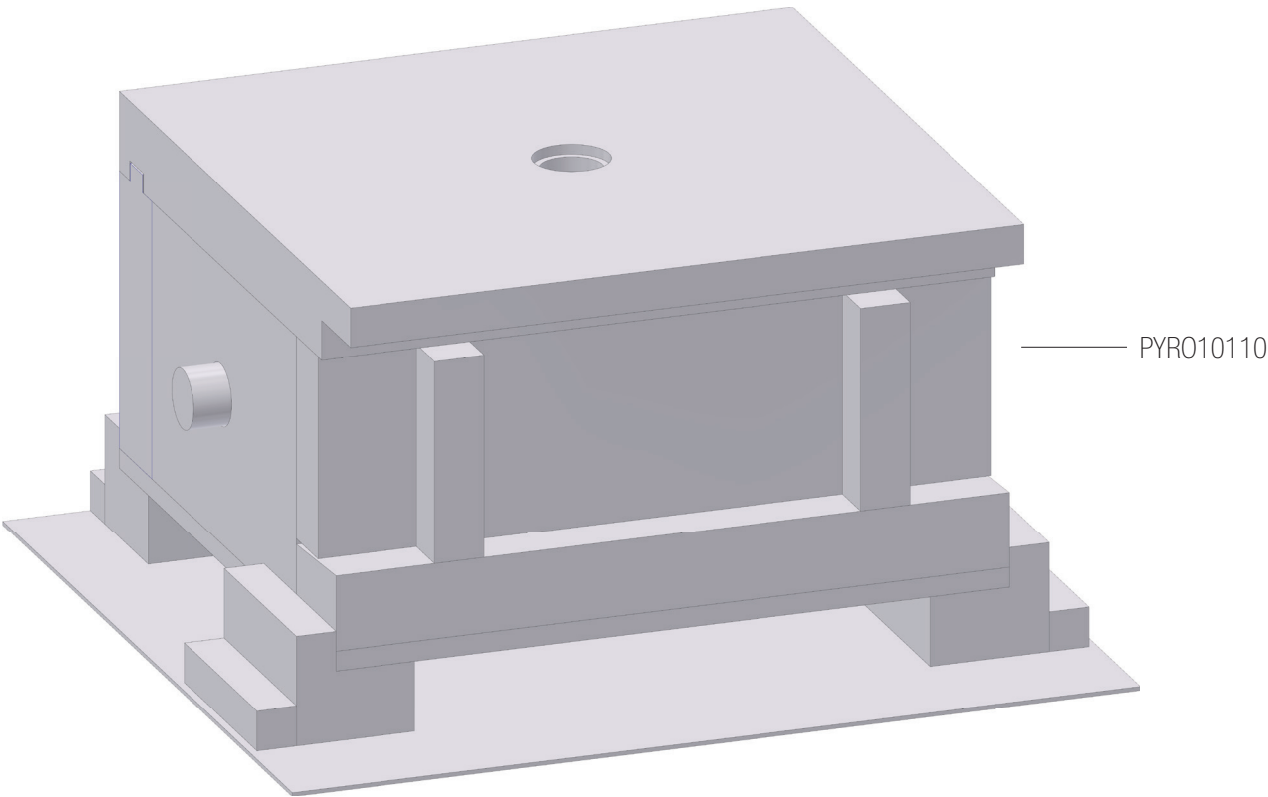
Food/Feed

Petrochemicals
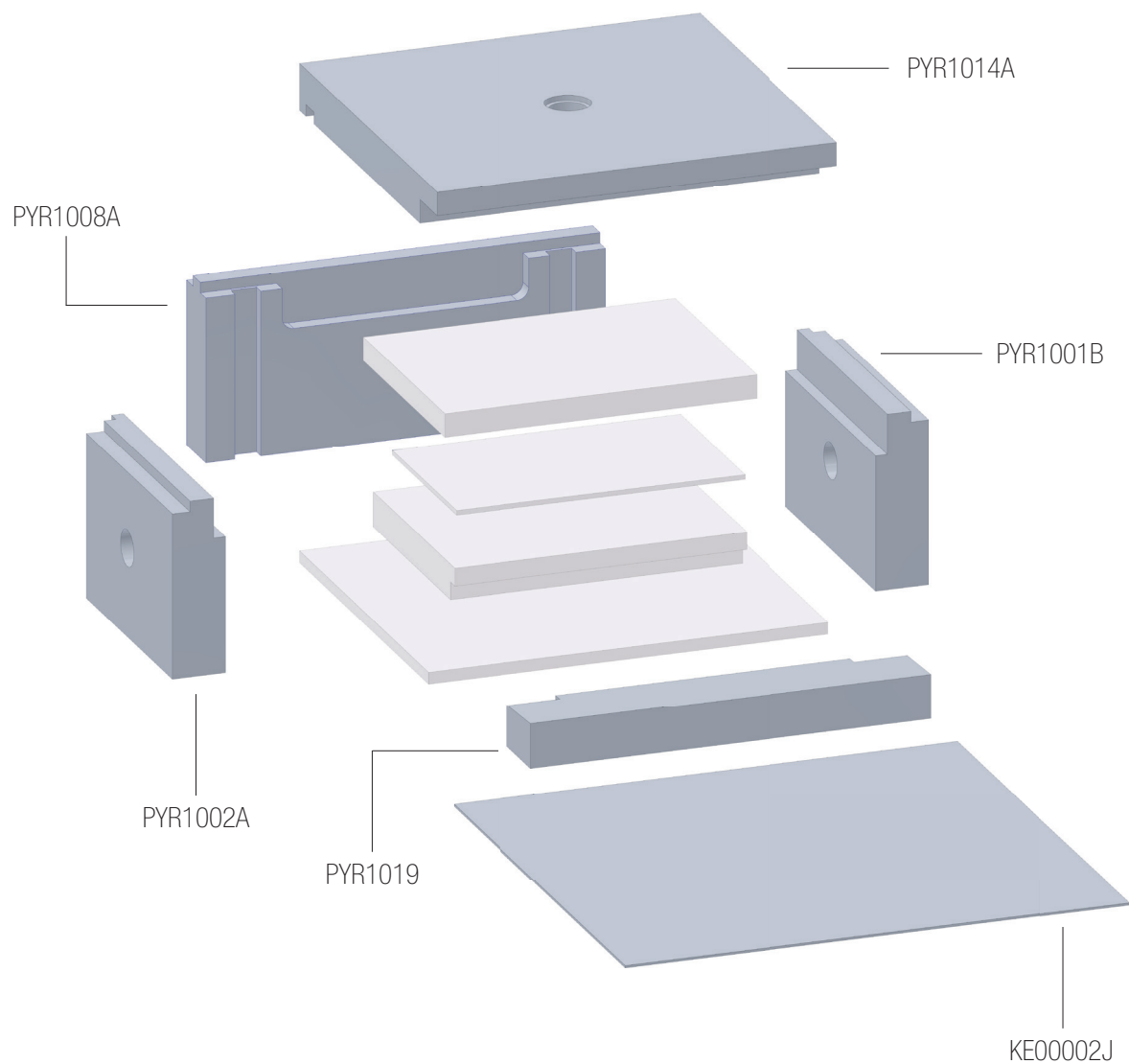
Pharmaceuticals

Polymers

* Models from 2021

PYRO10110 PYRO muffle furnace complete

PYRO10110

P/N	Description
PYRO10110	Rectangular muffle furnace complete

PYRO10110 (continued)
Rectangular muffle furnace complete

PYR1014A

PYR1008A

PYR1001B

PYR1002A

PYR1019

KE00002J

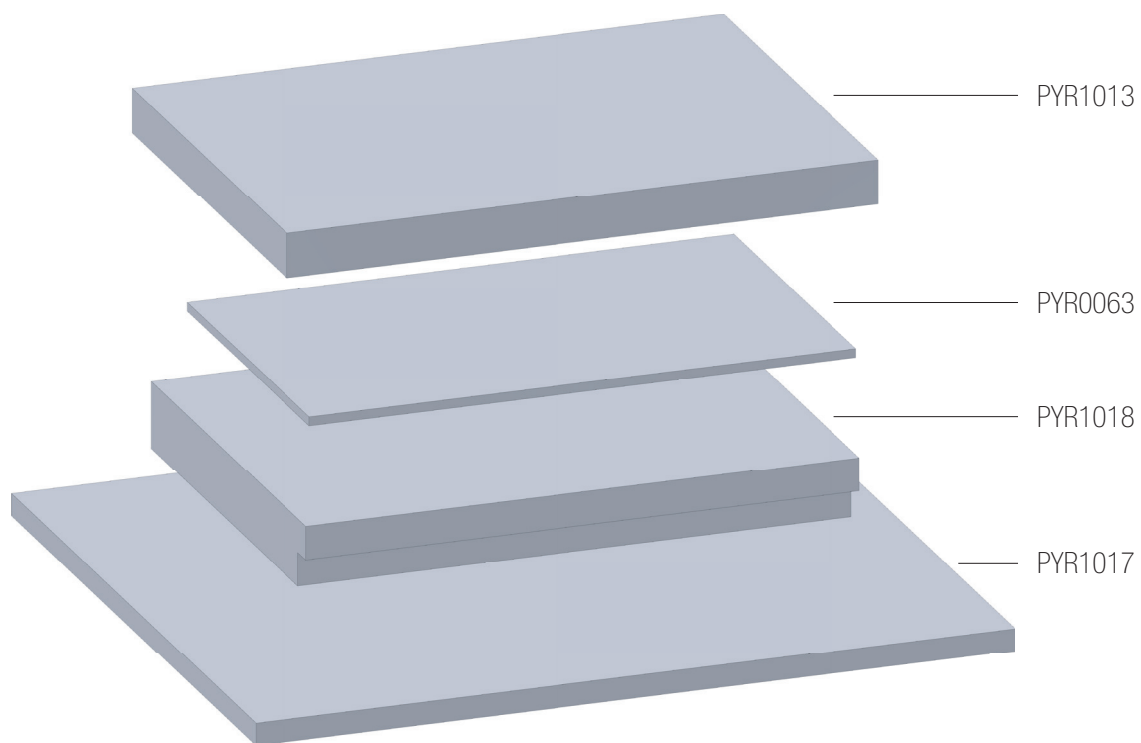| P/N	Description
PYR1014A	Muffle cover 240x320x40 mm
PYR1008A	Back support of muffle
PYR1002A	Left lateral panel
PYR1001B	Right lateral panel
PYR1019	Lower frontal frame
KE00002J	Insulating floor KF-fiber

PYRO10110 (continued)
Rectangular muffle furnace complete
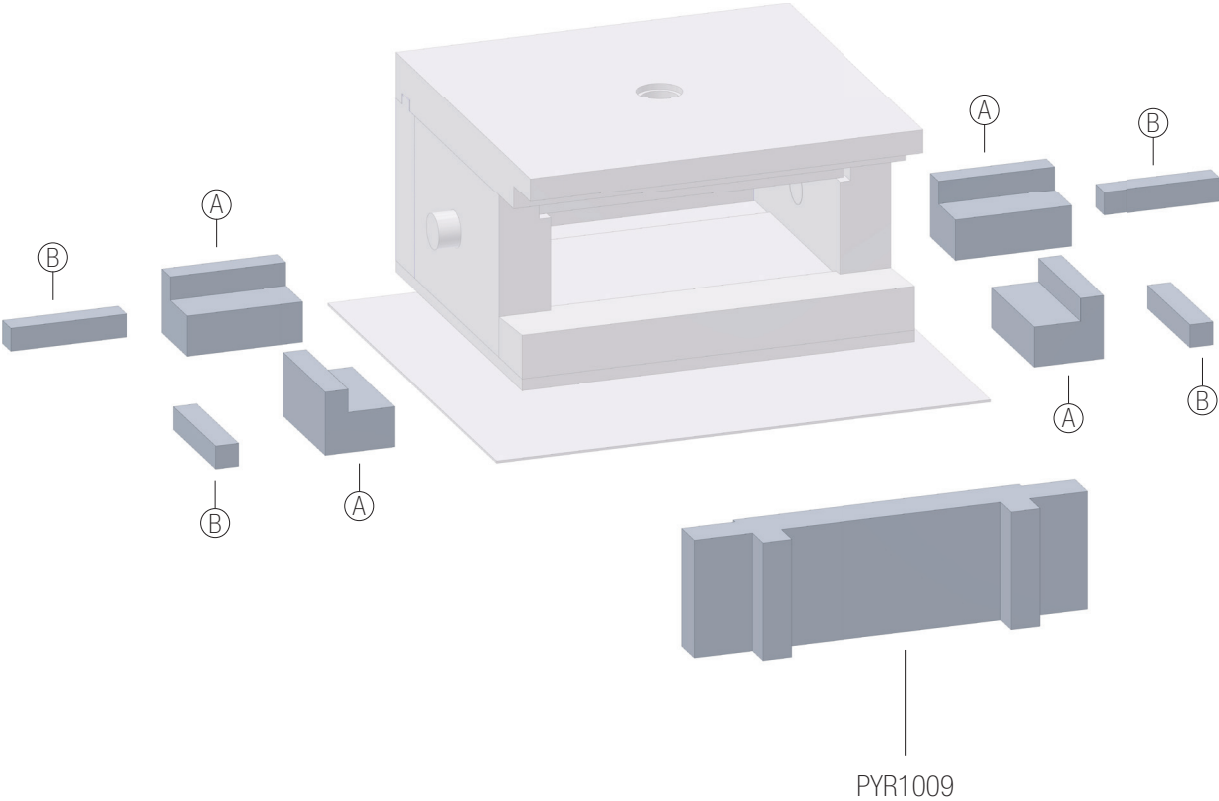
PYR1009

P/N	Description
PYR1009	Muffle door
PYR1003 Ⓐ	Support
PYR1006 Ⓑ	Fixed rectangle column

PYRO10110

Rectangular muffle furnace complete

PYR1013

PYR0063

PYR1018

PYR1017

P/N	Description
PYR1013	Insulating plate 265x175x20 mm
PYR0063	Quartz plate
PYR1018	Insulating plate 250x180x20 mm
PYR1017	Floor plate

933988

PYR0029
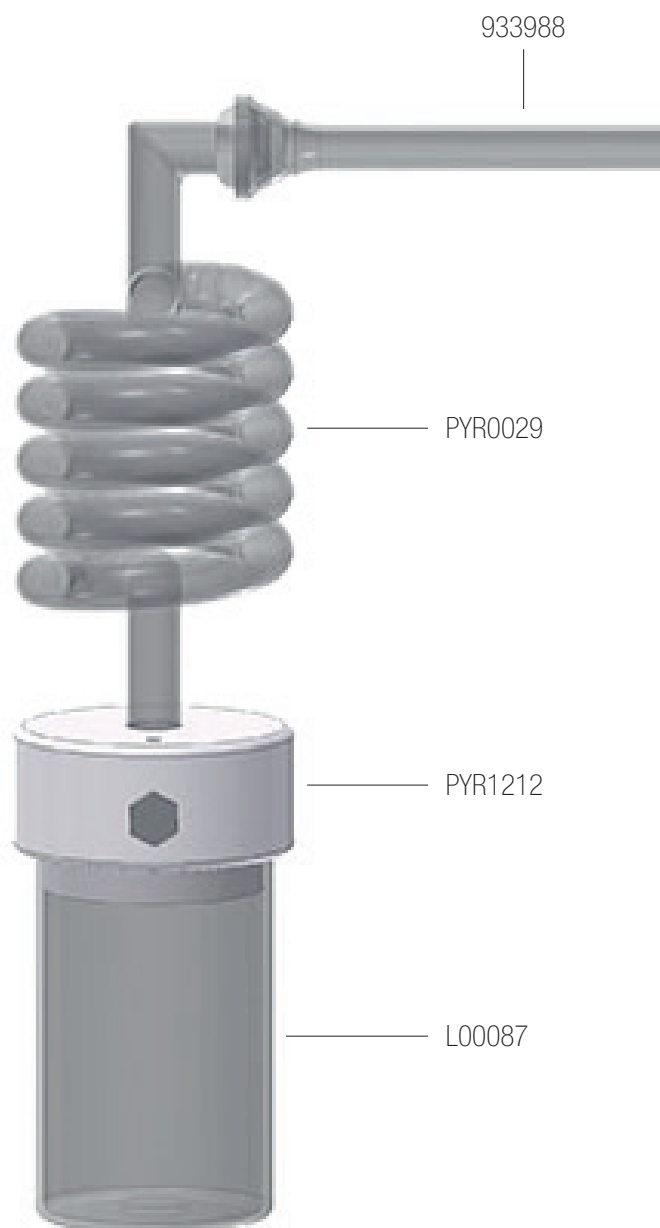
PYR1212

L00087

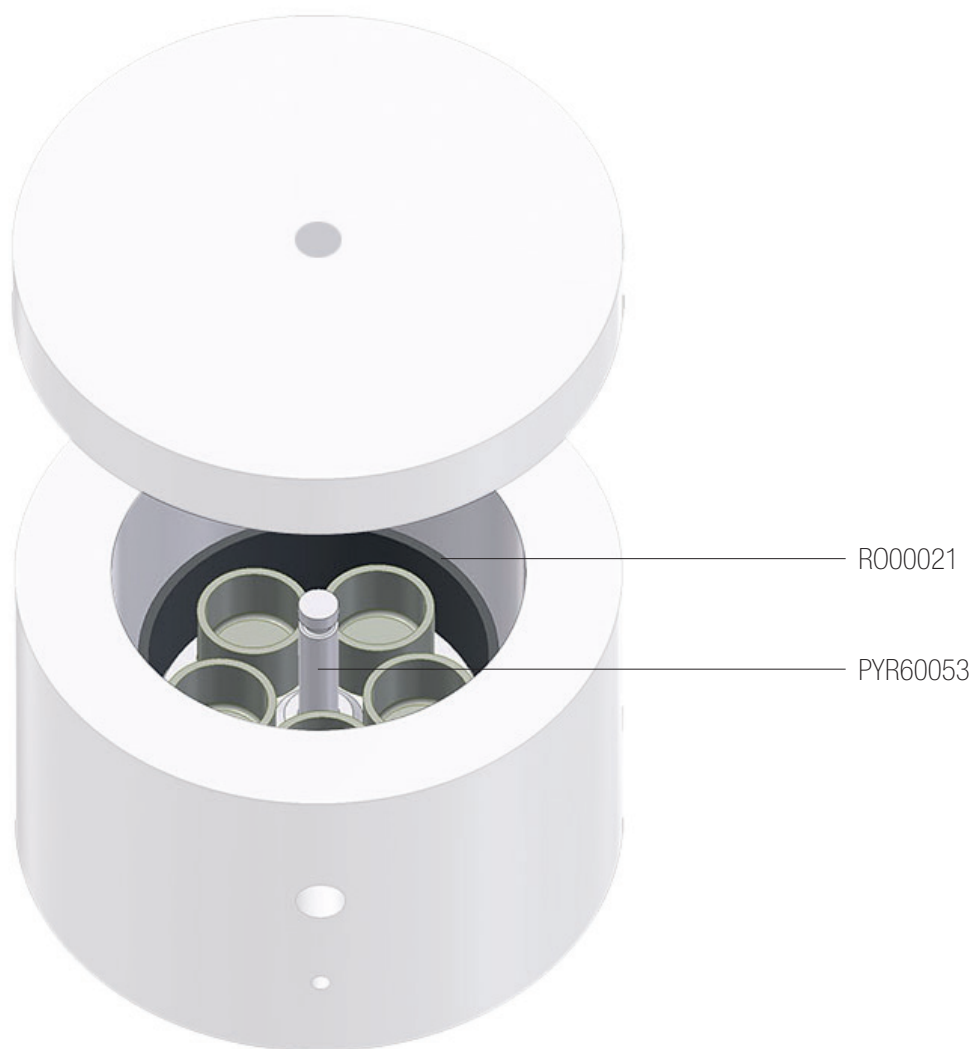| P/N	Description
933988	Quartz tube for acid removal PYRO SA
PYR0029	Quartz coil for acid condensation
PYR1212	PTFE cover for L00087 flask
L00087	Glass flask for acid condensation
L00105	Fixing clip

PYR60160 UltraFAST heating muffle complete
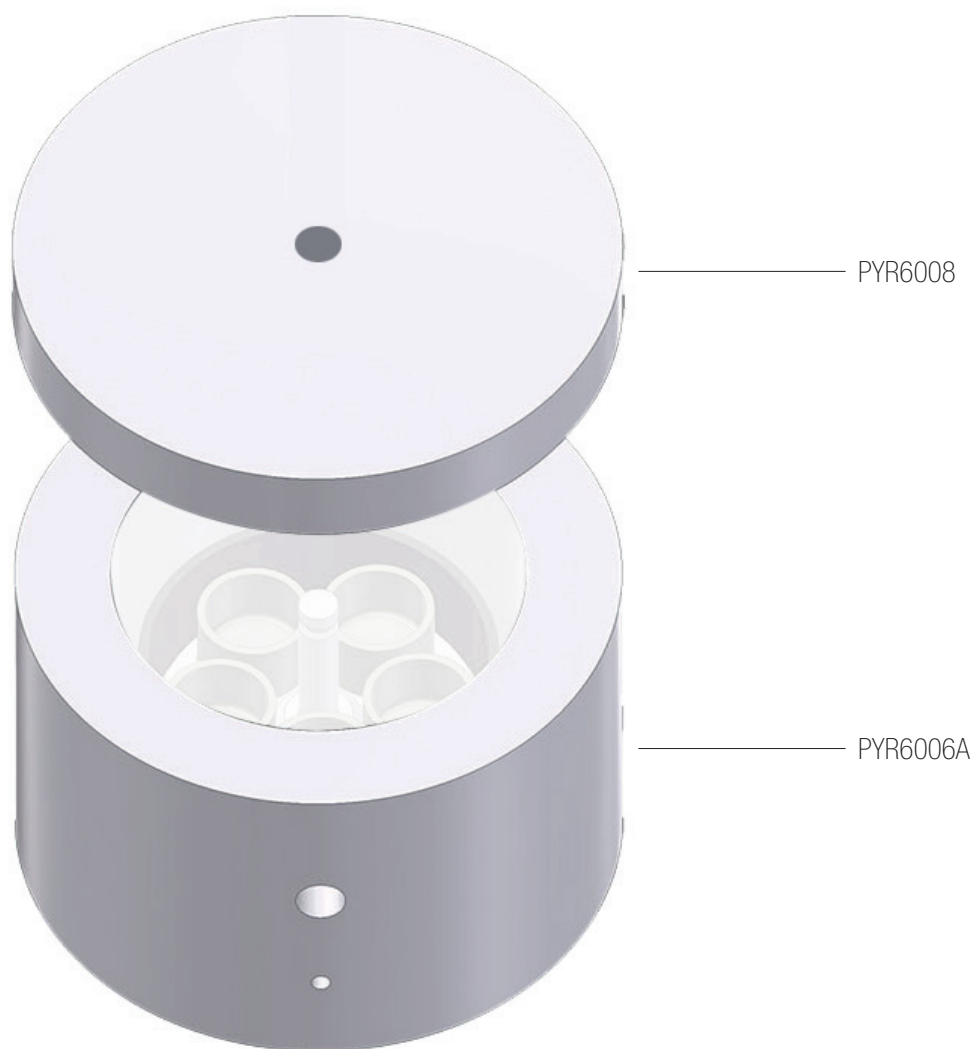
PYR6008

PYR6006A

P/N	Description
PYR6006A	Muffle furnace
PYR6008	Cover for muffle furnace (diam 220x40mm)
KR16000	Ceramic tube (diam 16/12x45mm)
KE20002B	Insulating disc (diam 150x2mm)
KE00005G	Insulation ceramic fiber paper (455x20x5mm)

RO00021

PYR60053

P/N	Description
PYR60053	5-place crucibles holder
RO00021	Heating ring 130 (OD)-122 (ID) x 40 (H) mm up to 1200°C