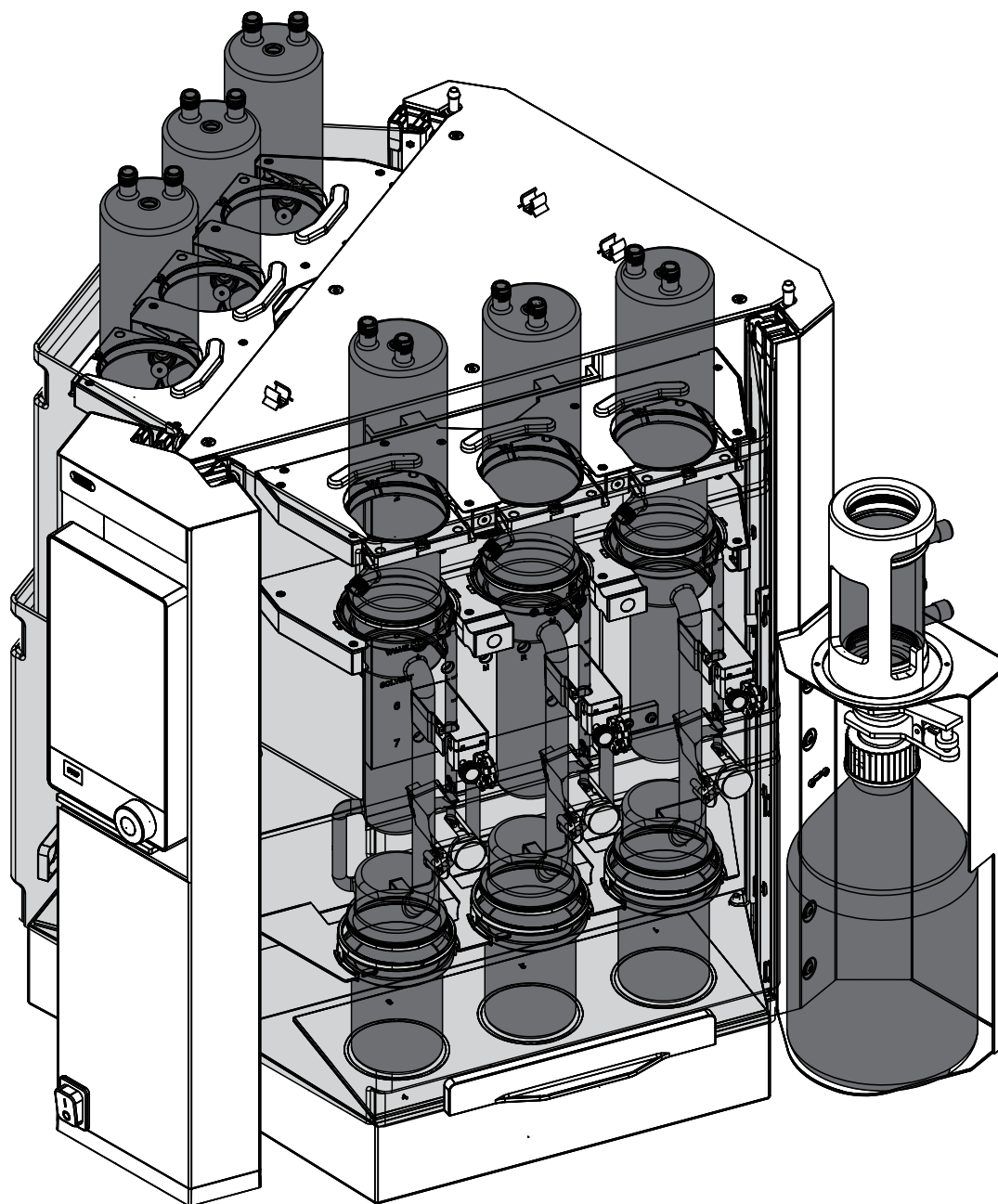




#### Technical data sheet

## FatExtractor E-500

The declaration of the total fat or crude fat is required for most foods and feeds. The FatExtractor E-500 is designed for solid-liquid extraction for quick and compliant fat determination. The design of the glass assemblies and the high-speed heaters combined with sophisticated process control allow for the fastest and most reproducible extraction processes with full compliance.

By simply changing the glass assembly, the FatExtractor E-500 complies with standard methods such as Soxhlet, Hot Extraction (HE) or Twisselmann (ECE). The glass assembly is interchangeable for a later conversion to another extraction method.

## Description of function

The FatExtractor E-500 is designed to carry out the following solid-liquid extraction methods:

- Soxhlet Extraction (see Chapter 1.1 “Soxhlet Extraction”, page 2)
- Hot Extraction (see Chapter 1.2 “Hot Extraction”, page 2)
- Economic Continuous Extraction (see Chapter 1.3 “Economic Continuous Extraction”, page 3)

## Soxhlet Extraction

### Step 1: Extraction

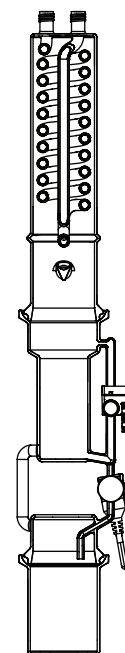
- The sample is located in the extraction chamber.
- The beaker contains the solvent.
- The solvent is heated, vapor rises up to the condenser, condenses and drops into the extraction chamber with the sample.
- The magnetic valve is closed, the solvent is collected up to the optical sensor and extracts the analyte.
- When the optical sensor is reached, the magnetic valve opens and the solvent containing the analyte flows back into the beaker.

### Step 2: Rinsing

- The solvent is heated, vapor rises up to the condenser, condenses and drops into the extraction chamber with the sample.
- The magnetic valve is open, the solvent flows back into beaker, the solvent is not collected.

### Step 3: Drying

- The solvent is heated, vapor rises up to the condenser, condenses and flows into tank.
- The analyte remains in the beaker.



## Hot Extraction

### Step 1: Extraction

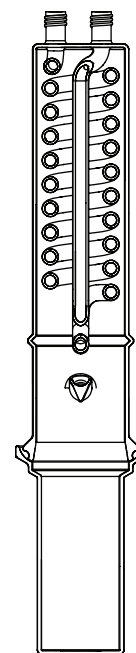
- The sample is located in the beaker.
- The beaker contains the solvent.
- The solvent is heated, vapor rises up to the condenser, condenses and drops into the beaker with the sample.

### Step 2: Rinsing

- The solvent in the beaker is heated up and evaporated.
- The vapor rises up to the condenser.
- The condensed solvent flows into the beaker with the sample.
- The tank bottle valve opens periodically and condensed solvent flows in the tank bottle.
- The solvent level decreases.

### Step 3: Drying

- The solvent is heated, vapor rises up to the condenser, condenses and flows into tank.
- The analyte remains in the beaker.



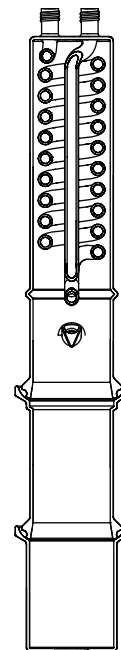
## Economic Continuous Extraction

### Step 1: Extraction

- The sample is located in the extraction chamber.
- The beaker contains the solvent.
- The solvent is heated, vapor rises up around the sample to the condenser, condenses and drops back into extraction chamber through the sample into the beaker.

### Step 2: Drying

- The solvent is heated, vapor rises up around the sample to the condenser, condenses and flows into tank.
- The analyte remains in the beaker.



## Order code FatExtractor E-500

The FatExtractor E-500 can be ordered in the following configurations: Soxhlet, Hot Extraction (e.g. Randall) or Economic Continuous Extraction (e.g. Twisselmann). For large sample volumes, use the Soxhlet LSV version, suitable for extraction thimbles with a diameter of 43 mm.

Choose the configuration depending on the solvents used for your application. The choice of the used solvent defines the sealing type. The essential resistance version includes robust FKM seals for the use with petroleum ether, hexane and chloroform. The extended resistance version includes PTFE sealings, that allow to use diethyl ether, dichloromethane, acetone or pentane additionally to the solvents of the essential resistance version.

Choose the configuration according to your needs:

|  |   |   |   |   |   |   |  |  |  |  |   |   |
|--|---|---|---|---|---|---|--|--|--|--|---|---|
|  | 1 | 1 | E | 5 | 0 | 0 |  |  |  |  | 0 | 0 |
|--|---|---|---|---|---|---|--|--|--|--|---|---|

Glass assembly

S Soxhlet

L Soxhlet LSV

H Hot Extraction

E Cont. Extraction ECE

Analyte protection

0 Without

1 Analyte protection

Interface

P Pro

S Standard

Solvent

0 PE, Hexane, Chloroform

1 PE, Hexane, Chloroform, DE, Acetone, MTBE, DCM, pentane

## Order code FatExtractor E-500 System

The FatExtractor E-500 can be bundled with the HydrolEx H-506 for total fat determination and a Recirculating Chiller F-305/F-308.

HydrolEx H-506 performs convenient and safe acid hydrolysis as a step prior to extraction. It is an essential work step of the total fat determination where matrix structures enclosing the fat fraction of food and feed samples are broken up.

For environmentally friendly operation the FatExtractor E-500 can be bundled with Recirculating Chiller F-305/F-308 for saving cooling water. The FatExtractor E-500 has to be operated either with a recirculating chiller or a tap water valve.

Choose the configuration according to your needs:

|                                                           |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
|-----------------------------------------------------------|----------|----------|----------|----------|----------|----------|--|--|--|--|--|--|----------|--|
| <b>1</b>                                                  | <b>1</b> | <b>S</b> | <b>E</b> | <b>5</b> | <b>0</b> | <b>0</b> |  |  |  |  |  |  | <b>0</b> |  |
| Glass assembly                                            |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| S Soxhlet                                                 |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| L Soxhlet LSV                                             |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| H Hot Extraction                                          |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| E Cont. Extraction ECE                                    |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| Analyte protection                                        |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 0 Without                                                 |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 1 Analyte protection                                      |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| Interface                                                 |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| P Pro                                                     |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| S Standard                                                |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| Cooling                                                   |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 0 Without                                                 |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 1 Tap water valve                                         |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 2 Chiller F-305                                           |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 3 Chiller F-308                                           |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| HydrolEx                                                  |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 0 Without                                                 |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 1 H-506                                                   |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 2 H-506 + waterjet pump                                   |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| Solvent                                                   |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 0 PE, Hexane, Chloroform                                  |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 1 PE, Hexane, Chloroform, DE, Acetone, MTBE, DCM, pentane |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| Voltage                                                   |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 1 220-240 V                                               |          |          |          |          |          |          |  |  |  |  |  |  |          |  |
| 2 100-120 V                                               |          |          |          |          |          |          |  |  |  |  |  |  |          |  |

## Scope of delivery

All configurations are supplied ready to use.

|                                              | Hot Extraction | Economic Continuous Extraction | Soxhlet Extraction | Soxhlet Extraction LSV |
|----------------------------------------------|----------------|--------------------------------|--------------------|------------------------|
| FatExtractor E-500                           | 1              | 1                              | 1                  | 1                      |
| Condenser E-500                              | 6              | 6                              | 6                  | 6                      |
| Extraction glass chamber ECE                 | -              | 6                              | -                  | -                      |
| Extraction glass chamber Soxhlet             | -              | -                              | 6                  | -                      |
| Extraction glass chamber Soxhlet LSV         | -              | -                              | -                  | 6                      |
| Soxhlet assembly cpl.                        | -              | -                              | 6                  | 6                      |
| Extraction beaker                            | -              | 6                              | 6                  | 6                      |
| Extraction beaker HE                         | 6              | -                              | -                  | -                      |
| Sealing E-500 / Sealing E-X00, PTFE          | 6              | 12                             | 12                 | 12                     |
| Set of glass sample tube holder (3 pcs.)     | 2              | 2                              | 2                  | -                      |
| Set of glass sample tube holder LSV (3 pcs.) | -              | -                              | -                  | 2                      |
| Set of holders for thimbles 25 mm (3 pcs.)   | 2              | 2                              | 2                  | -                      |
| Set of holders for thimbles 33 mm (3 pcs.)   | 2              | 2                              | 2                  | 2                      |
| Set of holders for thimbles 43 mm (3 pcs.)   | -              | -                              | -                  | 2                      |
| Extraction thimbles 25 x 100 mm              | 6              | 6                              | 6                  | -                      |
| Extraction thimbles 33 x 94 mm               | 6              | 6                              | 6                  | 6                      |
| Extraction thimbles 43 x 118 mm              | -              | -                              | -                  | 6                      |
| Solvent tank cpl.                            | 1              | 1                              | 1                  | 1                      |
| Cooling water hose 3 m                       | 2              | 2                              | 2                  | 2                      |
| Beaker tong                                  | 1              | 1                              | 1                  | 1                      |
| Extraction beaker carrier                    | -              | 1                              | 1                  | 1                      |
| Extraction beaker carrier HE                 | 1              | -                              | -                  | -                      |
| Funnel                                       | 1              | 1                              | 1                  | 1                      |

|                                        | Hot Extraction | Economic Continuous Extraction | Soxhlet Extraction | Soxhlet Extraction LSV |
|----------------------------------------|----------------|--------------------------------|--------------------|------------------------|
| Power cord                             | 1              | 1                              | 1                  | 1                      |
| Pliers for glass sample tube with frit | 1              | 1                              | 1                  | 1                      |
| Operation manual                       | 1              | 1                              | 1                  | 1                      |

## Technical data

### FatExtractor E-500

| Specification                                                             | E-500                                        |
|---------------------------------------------------------------------------|----------------------------------------------|
| Power consumption                                                         | 1300 W                                       |
| Connection voltage                                                        | 100 - 240 ± 10 % VAC                         |
| Fuse                                                                      | 10 A                                         |
| Frequency                                                                 | 50 / 60 Hz                                   |
| Overvoltage category                                                      | II                                           |
| Pollution degree                                                          | 2                                            |
| Protection Class                                                          | 1                                            |
| Dimensions (W x D x H)<br>(with glassware Soxhlet Extraction)             | 638 x 595 x 742 mm                           |
| Dimensions (W x D x H)<br>( with glassware Hot Extraction)                | 638 x 595 x 613 mm                           |
| Dimensions (W x D x H)<br>(with glassware Economic Continuous Extraction) | 638 x 595 x 622 mm                           |
| Minimum clearance (W x D)                                                 | 200 mm                                       |
| Minimum clearance (H)                                                     | 500 mm                                       |
| Weight<br>(without glassware)                                             | 41.8 kg                                      |
| Weight<br>(with glassware Soxhlet Extraction)                             | 49.6 kg                                      |
| Total heating power<br>(rated)                                            | 600 W                                        |
| Total heating power<br>(maximum)                                          | 1200 W                                       |
| Hose connection                                                           | 6 / 9 mm                                     |
| Minimum water flow                                                        | 100 mL/min                                   |
| Allowed water pressure<br>( nominal value)                                | 6 bar                                        |
| Allowed water pressure<br>(maximum)                                       | 8 bar                                        |
| Inlet cooling medium temperature                                          | 25 °C below the boiling point of the solvent |
| Number of extraction positions                                            | 6                                            |
| Solvent tank volume                                                       | 2 L                                          |

| Specification                                                | E-500                              |
|--------------------------------------------------------------|------------------------------------|
| Max. filling level<br>(Extraction glass chamber Soxhlet)     | 120 mL                             |
| Max. filling level<br>(Extraction glass chamber Soxhlet LSV) | 195 mL                             |
| Max. working volumes<br>(Beaker)                             | 175 mL                             |
| Max. working volumes<br>(Beaker HE)                          | 100 mL                             |
| Language                                                     | DE, EN, IT, ES, FR, JA, CN, PL, RU |
| Method storage<br>(Interface)                                | 20 methods                         |
| Method storage<br>(Pro interface)                            | 40 methods                         |

## Ambient conditions

For indoor use only.

|                               |                                                                                            |
|-------------------------------|--------------------------------------------------------------------------------------------|
| Max. altitude above sea level | 2000 m                                                                                     |
| Ambient temperature           | 5–40 °C                                                                                    |
| Maximum relative humidity     | 80% for temperatures up to 31 °C<br>decreasing linearly to 50 % relative humidity at 40 °C |
| Storage temperature           | max. 45 °C                                                                                 |

## Conversion and upgrade kits

The FatExtractor E-500 can be converted into another configuration with an easy change of glass assembly. Choose the needed conversion kit according to the matrix.

| from<br>to                           | Soxhlet<br>Extraction | Hot<br>Extraction    | Economic<br>Continuous<br>Extraction | Soxhlet<br>Extraction<br>LSV |
|--------------------------------------|-----------------------|----------------------|--------------------------------------|------------------------------|
| Soxhlet<br>Extraction                |                       | 11068489<br>11073683 | 11068492                             |                              |
| Hot<br>Extraction                    | 11068487              |                      | 11068487                             | 11068487                     |
| Economic<br>Continuous<br>Extraction | 11068488              | 11068491<br>11073685 |                                      | 11068488                     |
| Soxhlet<br>Extraction<br>LSV         |                       | 11068490<br>11073684 | 11068493                             |                              |

|                                                                                                                                                                                                                                                                                                                          | Order no. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Conversion kit from Soxhlet / ECE to HE<br>incl.: 6 beakers HE (3 x 11067475) , beaker brackets HE (2 x 11067829), set of draining tubes for HE (11067480), beaker carrier cover for HE                                                                                                                                  | 11068487  |
| Conversion kit from Soxhlet / Universal to ECE<br>Includes 6 Extraction glass chamber ECE (11062499), set of draining tubes for ECE (11067479)                                                                                                                                                                           | 11068488  |
| Conversion kit from HE to Soxhlet<br>Includes 6 Extraction glass chamber Soxhlet (11062496), 6 beaker (3 x 11067474), 6 beaker brackets (2 x 11067828), 6 Soxhlet assemblies cpl. (11067065) and a chamber rack (11067077), set of draining tubes for Soxhlet (11067478), two safety shields top, cpl. (2 x 11067832)    | 11068489  |
| Conversion kit from HE to ECE<br>Includes 6 Extraction glass chamber ECE (11062499), 6 beaker (3 x 11067474), 6 beaker brackets (2 x 11067828), set of draining tubes for ECE (11067479) and a chamber rack (11067077)                                                                                                   | 11068491  |
| Conversion kit from ECE to Soxhlet<br>Includes 6 Extraction glass chamber Soxhlet (11062496), 6 Soxhlet assemblies cpl. (11067065) and set of draining tubes for Soxhlet (11067478), two safety shields top, cpl. (2 x 11067832)                                                                                         | 11068492  |
| Conversion kit HE to Soxhlet LSV<br>Includes 6 Extraction glass chamber Soxhlet LSV (11062497), 6 beaker (3 x 11067474), 6 beaker brackets (2 x 11067828), 6 Soxhlet assemblies cpl. (11067065) and a chamber rack (11067077), set of draining tubes for Soxhlet (11067478), two safety shields top, cpl. (2 x 11067832) | 11068490  |

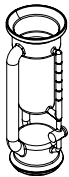
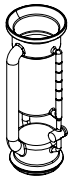
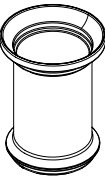
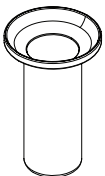
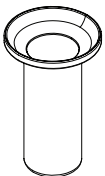
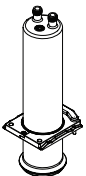
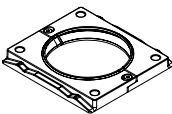
|                                                                                                                                                                                                                                                                                                           | Order no. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Conversion kit ECE to Soxhlet LSV                                                                                                                                                                                                                                                                         | 11068493  |
| Includes 6 Extraction glass chamber Soxhlet LSV (11062497), 6 Soxhlet assemblies cpl. (11067065) and a set of draining tubes for Soxhlet (11067478), two safety shields top, cpl. (2 x 11067832)                                                                                                          |           |
| Upgrade kit Analyte protection                                                                                                                                                                                                                                                                            | 11068524  |
| For later upgrade of a FatExtractor E-500 with analyte protection sensor                                                                                                                                                                                                                                  |           |
| Upgrade kit Interface Pro                                                                                                                                                                                                                                                                                 | 11068525  |
| For later upgrade of a FatExtractor E-500 with a Pro interface (7 " touch screen)                                                                                                                                                                                                                         |           |
| Conversion kit HE to Soxhlet LSV PTFE                                                                                                                                                                                                                                                                     | 11073684  |
| Includes 6 Extraction glass chamber Soxhlet LSV (11062497), 6 beaker (3 x 11067474), 6 beaker brackets (2 x 11067828), 6 Soxhlet assemblies cpl. (11067065) and a chamber rack (11067077), set of draining tubes for Soxhlet (11067478), two safety shields top, cpl. (2 x 11067832), , E-X00 seals, PTFE |           |
| Conversion kit from HE to Soxhlet PTFE                                                                                                                                                                                                                                                                    | 11073683  |
| Includes 6 Extraction glass chamber Soxhlet (11062496), 6 beaker (3 x 11067474), 6 beaker brackets (2 x 11067828), 6 Soxhlet assemblies cpl. (11067065) and a chamber rack (11067077), set of draining tubes for Soxhlet (11067478), two safety shields top, cpl. (2 x 11067832), , E-X00 seals, PTFE     |           |
| Conversion kit from HE to ECE PTFE                                                                                                                                                                                                                                                                        | 11073685  |
| Includes 6 Extraction glass chamber ECE (11062499), 6 beaker (3 x 11067474), 6 beaker brackets (2 x 11067828), set of draining tubes for ECE (11067479) and a chamber rack (11067077), , E-X00 seals, PTFE                                                                                                |           |

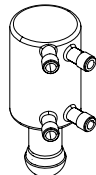
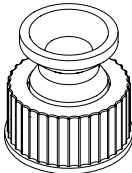
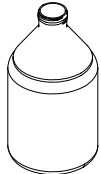
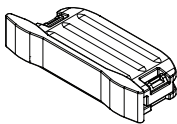
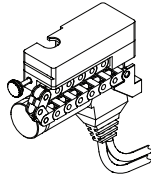
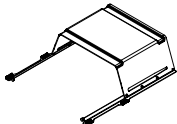
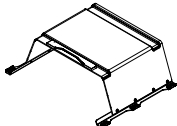
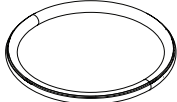
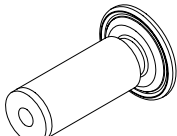
## Chiller

| No. Units | Ambient Temperature | Chiller                     |
|-----------|---------------------|-----------------------------|
| 1         | < 30 °C             | Recirculating Chiller F-305 |
| 1         | < 40 °C             | Recirculating Chiller F-308 |
| 2         | < 30 °C             | Recirculating Chiller F-308 |
| 2         | < 40 °C             | Recirculating Chiller F-314 |

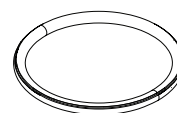
|                                                                      | Order no. |
|----------------------------------------------------------------------|-----------|
| Recirculating Chiller F-305                                          | 11F30501  |
| 550 W at 15 °C, Display, 230 V                                       |           |
| Recirculating Chiller F-305                                          | 11F30502  |
| 550 W at 15 °C, Display, 115 V                                       |           |
| Recirculating Chiller F-308                                          | 11F30801  |
| 900 W at 15 °C, Display, 230 V                                       |           |
| Cooling capacity 900 W at 15 °C, for temperatures from -10 to 25 °C  |           |
| Recirculating Chiller F-308                                          | 11F30802  |
| 900 W at 15 °C, Display, 115 V                                       |           |
| Cooling capacity 900 W at 15 °C, for temperatures from -10 to 25 °C  |           |
| Recirculating Chiller F-314                                          | 11F31401  |
| 1400 W at 15 °C, Display, 230 V                                      |           |
| Cooling capacity 1400 W at 15 °C, for temperatures from -10 to 25 °C |           |
| Recirculating Chiller F-314                                          | 11F31402  |
| 1400 W at 15 °C, Display, 115 V                                      |           |
| Cooling capacity 1400 W at 15 °C, for temperatures from -10 to 25 °C |           |

## Spare parts

|                                      | Order no. | Image                                                                                 |
|--------------------------------------|-----------|---------------------------------------------------------------------------------------|
| Extraction glass chamber Soxhlet     | 11062496  |    |
| Extraction glass chamber Soxhlet LSV | 11062497  |    |
| Extraction glass chamber ECE         | 11062499  |    |
| Set of beakers, 2 pcs.               | 11067474  |   |
| Set of beakers, 12 pcs.              | 11074664  |  |
| Set of beakers HE, 2 pcs.            | 11067475  |  |
| Set of beakers HE, 12 pcs.           | 11074665  |  |
| Condenser E-500 cpl.                 | 11067063  |  |
| Condenser flange E-500               | 11067817  |  |

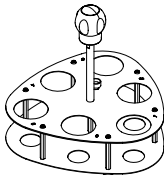
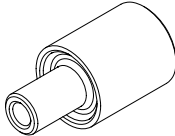
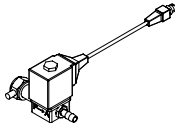
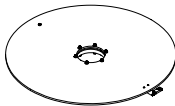
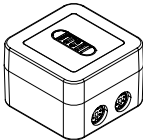
|                                                                                                                      | Order no. | Image                                                                                 |
|----------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|
| Condenser tank bottle                                                                                                | 11065966  |    |
| Tank adapter, PTFE                                                                                                   | 11064590  |    |
| Tank bottle 2 L, GL 45                                                                                               | 11070509  |    |
| Set of gliding elements including magnets, 10 pcs.                                                                   | 11067827  |    |
| Soxhlet assembly cpl.<br>One part constiting of magnetic valve and level sensor for extraction glass chamber Soxhlet | 11067065  |  |
| Protection shield top, cpl.                                                                                          | 11067832  |  |
| Protection shield bottom, cpl.                                                                                       | 11067831  |  |
| Set of seals E-500, FKM, 6 pcs.                                                                                      | 11069012  |  |
| Set of seals E-X00, PTFE, 12 pcs.                                                                                    | 11085085  |                                                                                       |
| Set of 6 Membranes with anchor for magnetic valve unit                                                               | 11085084  |  |

|                                                                                                                       | Order no. | Image |
|-----------------------------------------------------------------------------------------------------------------------|-----------|-------|
| Joint clip                                                                                                            | 11070136  |       |
| Set of beaker brackets, 3 pcs.                                                                                        | 11067828  |       |
| Set of beaker brackets HE, 3 pcs.                                                                                     | 11067829  |       |
| Reflectorfoil analyte protection, 6 pcs.                                                                              | 11068522  |       |
| Reflector foil for tank level sensor                                                                                  | 11068018  |       |
| Knurled nut and sealing disks, 2 pcs. Connection of the draining tubes to the condensers                              | 11068520  |       |
| Set of flange locks, 6 pcs.                                                                                           | 11067833  |       |
| Silicone hose D6/9 L=3 m                                                                                              | 048355    |       |
| Set of draining tubes SOX, FEP                                                                                        | 11067478  |       |
| The draining tubes connect the receiving funnel in the condensers with the tank valve to drain solvent into the tank. |           |       |
| Set of draining tubes HE, FEP                                                                                         | 11067480  |       |
| The draining tubes connect the receiving funnel in the condensers with the tank valve to drain solvent into the tank. |           |       |
| Set of draining tubes ECE, FEP                                                                                        | 11067479  |       |
| Set of seals E-X00, PTFE, 2 pcs.                                                                                      | 11067483  |       |



## Accessories

|                                                                   | Order no. | Image |
|-------------------------------------------------------------------|-----------|-------|
| Holder for glass sample tubes, stainless steel                    | 11067219  |       |
| Holder for glass sample tubes, PTFE                               | 11067220  |       |
| Holder for extraction thimbles (diameter 25 - 43 mm)              | 11068443  |       |
| Extraction beaker carrier<br>Allows to carry 6 beakers (11067474) | 11067042  |       |

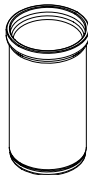
|                                                                                                                                                      | Order no. | Image                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|
| Extraction beaker HE carrier<br>Allows to carry 6 beakers HE (11067475)                                                                              | 11067493  |    |
| Set condenser insulations E-500, 6 pcs.<br>The insulation of the condensers prevent condensing water and is recommended in high humidity environment | 11069078  |                                                                                       |
| Set insulation cooling water hoses<br>The insulation of the water hoses prevent condensing water and is recommended in high humidity environment.    | 11069079  |                                                                                       |
| Support solvent supply<br>Allows to fix the tubes of solvent dispensers to the condensers for convenient solvent addition.                           | 11068306  |    |
| Cooling water valve. 24VAC<br>Valve opens cooling water feed during distillation. Meant to be used with a vacuum controller/interface.               | 031356    |    |
| Extension cable for the cooling water valve, 2 m                                                                                                     | 11069477  |                                                                                       |
| Turning disk<br>Allows for turning the instrument for easier access.                                                                                 | 11067985  |  |
| StatusLight cpl., incl. communication cable<br>Indicates the status of the instrument (instrument is ready to use, has an error or is in operation). | 11068959  |  |
| Funnel                                                                                                                                               | 11067473  |                                                                                       |

## Consumables

|                                  | Order no. |
|----------------------------------|-----------|
| Quartz sand 0.3 - 0.9 mm, 2.5 kg | 037689    |
| Celite® 545, 1 kg                | 11068920  |

## Glass sample tubes and extraction thimbles

|                                                                                        | Order no. | Image                                                                                 |
|----------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|
| Glass sample tubes with frit, 6 pcs.<br>Working volume: 64 mL<br>Filling volume: 82 mL | 11067497  |  |

|                                                                                                                    | Order no. | Image                                                                               |
|--------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------------------|
| Glass sample tubes LSV with frit, 6 pcs.<br>Working volume: 116 mL<br>Filling volume: 144 mL                       | 11067814  |  |
| Extraction thimbles 25 x 100 mm, 25 pcs.<br>Working volume: 44 mL                                                  | 018105    |  |
| Extraction thimbles 33 x 94 mm, 25 pcs.<br>Working volume: 64 mL                                                   | 11058983  |  |
| Extraction thimbles, Set. 25 pcs, 43 x 118 mm, cellulose<br>For Soxhlet extraction unit.<br>Working volume: 150 mL | 018106    |  |

## Holder for extraction thimbles

|                                                               | Order no. |
|---------------------------------------------------------------|-----------|
| Set of holders for glass sample tubes with frit, PTFE, 3 pcs. | 11067485  |
| Set of holders for LSV glass sample tubes, PTFE, 3 pcs.       | 11067486  |
| Holders for thimbles d25, PTFE, 3 pcs.                        | 11067488  |
| Holders for thimbles d33, PTFE, 3 pcs.                        | 11067490  |
| Holders for thimbles d43, PTFE, 3 pcs.                        | 11067491  |

## Documentation

|                                                                                                                                       | Order no. |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------|
| IQ/OQ for FatExtractor E-500                                                                                                          | 11068557  |
| Installation/Operation qualification for the FatExtractor E-500 incl. binder with documents IQ/OQ, inspection and basic tag (English) |           |
| Repeating OQ for FatExtractor E-500                                                                                                   | 11068559  |
| Repeating operation qualification for FatExtractor E-500, incl. document, inspection and basic tag (English)                          |           |