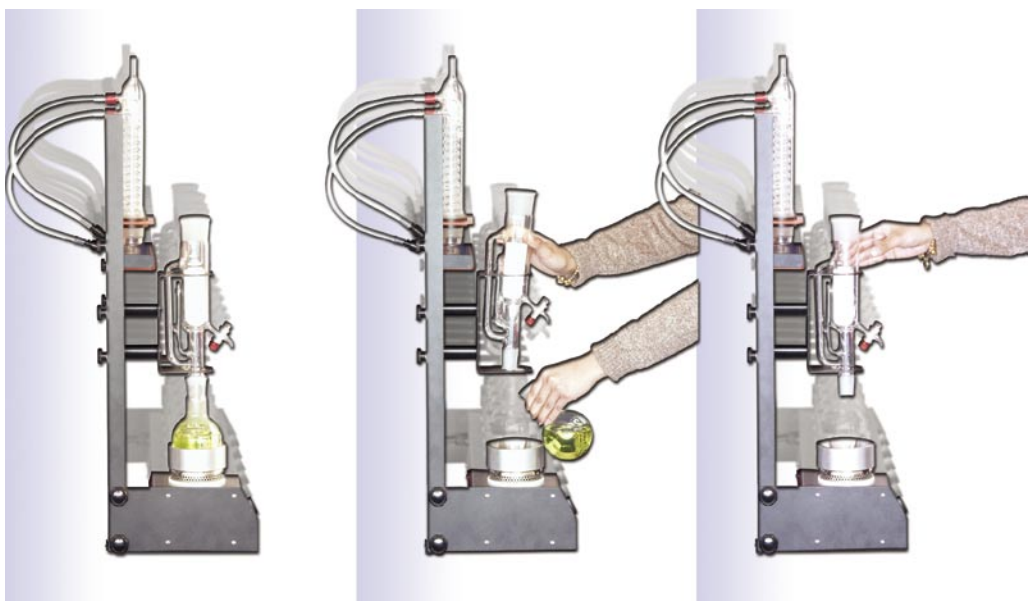


Extraction

The behr Range for Soxhlet Method



KEX 100 F

The Soxhlet method is the standard extraction method. behr equipment for Soxhlet extraction meets the most varying requirements of daily work in a laboratory.

- practical stand for holding the condensers securely between extractions
- extractor sizes from 30 ml to 2000 ml
- compact systems with a locator for 1 sample
- multi-sample extractors with locators for 4 or 6 samples
- extractors with a specially developed siphon tube ensure a uniform extraction process at all sample positions
- the use of extractors with a stopcock does away with the need for any additional distillation after extraction
- Condensers with screwed- on tubing nipples

Hydrolysis units (1, 4 or 6 sample places) for the acid digestion preceding the extraction when determining the total fat content according to Weibull and Stoldt.

Complete compact extraction systems

Complete compact extraction systems with stand, heating module, mount, hoses and glass-ware (round-bottom reaction flask, extractor, Dimroth condenser for extraction). Infinitely variable heating regulation. After the extraction cycle the compact systems drain the solvent through a drain cock at the extractor directly into the reservoir.

Compact systems for the Soxhlet extraction

Model	Article description	230 V~ Art.-No.	115 V~ Art.-No.
KEX 30	Compact system for the 30-ml extraction	80 48 00520	80 48 005205
KEX 100	Compact system for the 100-ml extraction	80 48 00521	80 48 005215
KEX 250	Compact system for the 250-ml extraction	80 48 00540	80 48 005405
KEX 500	Compact system for the 500-ml extraction	80 48 00542	80 48 005425

Compact systems for the Soxhlet extraction

Model	Article description	230 V~ Art.-No.	115 V~ Art.-No.
KEX 30 F	Compact system for the 30-ml extraction with stopcock	80 48 00541	80 48 005415
KEX 100 F	Compact system for the 100-ml extraction with stopcock	80 48 00522	80 48 005225
KEX 250 F	Compact system for the 250-ml extraction with stopcock	80 48 00536	80 48 005365
KEX 500 F	Compact system for the 500-ml extraction with stopcock	80 48 00543	80 48 005435
UK 12/400	Recirculating cooler, 380 W	80 48 40204	

Specifications for the compact systems for Soxhlet extraction

	KEX 30	KEX 100	KEX 250
Voltage	230 VAC/115 VAC		
Frequency	50/60 Hz		
Current consumption	3 A /6 A		
Power consumption	450 W		
Weight	approx. 7,5 kg		
Dimensions in cm (W x D x H)	approx. 23 x 33 x 71,5	approx. 23 x 33 x 80	

behrotest® serial heaters with energy control

behrotest® serial heaters are the economical and user-friendly solution for the classic Soxhlet or fat extraction:

- energy for each sample position is individually adjustable
- cooling water distributor ensures even cooling at all sample positions
- practical stand for holding the condensers securely between extractions
- mounts for holding the extraction spacers after removing the sample vessels
- S models: The extractors with stopcock do away with the need for any additional distillation after extraction
- comes with Euro Schuko and UK wallpower supply

Multi-sample extractors for Soxhlet extraction

Model	Article description	Extractor volume ml	230 V~ Art.-No.
R 304	Multi-sample extractor, 4 sample positions	30	80 48 80031
R 306	Multi-sample extractor, 6 sample positions	30	80 48 80032
R 304 S	Multi-sample extractor, 4 sample positions with stopcock	30	80 48 80041
R 306 S	Multi-sample extractor, 6 sample positions with stopcock	30	80 48 80042
R 104 S	Multi-sample extractor, 4 sample positions with stopcock	100	80 48 80023
R 106 S	Multi-sample extractor, 6 sample positions with stopcock	100	80 48 80022
R 254 S	Multi-sample extractor, 4 sample positions with stopcock	250	80 48 80033
R 256 S	Multi-sample extractor, 6 sample positions with stopcock	250	80 48 80034

Glass compositions

Extraction	Roundbottom flasks	Extractor	Condenser
30 ml	100 ml	30 ml	RFK 30
100 ml	250 ml	100 ml	RFK 100
250 ml	500 ml	250 ml	RFK 100



KEX 500 and
UK 12/400



R 106 S

Specifications for the multi-sample extractors

	4 sample positions		6 sample positions	
Voltage	230 VAC/115 VAC			
Frequency	50/60 Hz			
Power consumption	1140 W		2160 W	
Current consumption	8 A	16 A	10 A	20 A
Weight (without glass)	approx. 15,1 kg		approx. 19,8 kg	
Dimensions in cm (W x D x H) (without glass)	approx. 53 x 32 x 74		approx. 76 x 32 x 74	



HYDRO 6

Hydrolysis unit, complete:

- Serial heating unit
- Rack for 4 or 6 funnels
- 4 or 6 glass funnels, 100 mm
- PE bottle, 500 ml, cap with squirt tube
- 100 fluted filters
- Boiling stones
- Cooling water distribution with condenser rack and hoses
- Beakers (600 ml), cold fingers
- Glass bar

behrotest® hydrolysis units - preparation of samples for extraction

The Weibull-Stoldt method

The quantitative fat content in a foodstuff is determined by extraction with a solvent. The "free fat" is determined by direct extraction. The "total fat content" contains not only "free fat" but also the "bound fats", which are released by means of the acid digestion.

Hydrolysis units

Model	Article description	230 V~ Art.-No.	115 V~ Art.-No.
HYDRO 1	Hydrolysis unit, complete, space for 1 sample	80 48 80028	80 48 800285
HYDRO 4	Hydrolysis unit, complete, rack spaces for 4 samples	80 48 80029	
HYDRO 6	Hydrolysis unit, complete, rack spaces for 6 samples	80 48 80030	

Technical data

	HYDRO 1		HYDRO 4		HYDRO 6	
Voltage	230 VAC/115 VAC					
Frequency	50/60 Hz					
Power consumption	450 W		1440 W		2160 W	
Current consumption	3 A	6 A	8 A	16 A	10 A	20 A
Weight	approx. 7,5 kg		approx. 15,1 kg (without glas)		approx. 19,8 kg (without glas)	
Dimensions in cm (W x D x H)	approx. 71,5 x 33 x 23		approx. 53 x 32 x 74		approx. 76 x 32 x 74	

behrotest® units for crude fibre digestion

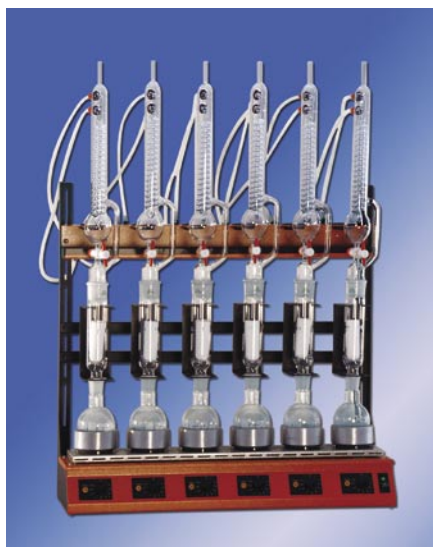
Crude fibre digestion units with 4 or 6 sample positions. Ready-to-connect complete devices with all the necessary accessories.

behrotest® apparatus for crude fibre digestion

Model	Article description	230 V~ Art.-No.
EXR 4	Complete crude fibre digestion unit with 4 sample positions	80 48 80044
EXR 6	Complete crude fibre digestion unit with 6 sample positions	80 48 80046

Extraction

The behr Range for Twisselmann Method



The Twisselmann method of extraction is a continuous high-temperature extraction. It functions in a similar way to Soxhlet extraction. However in the Twisselmann extractor the temperature in the sample is very hot, i.e. close to the solvent's boiling point. This improves solubility and reduces the extraction time.

The extraction temperature is higher because the condensed solvent from above and the rising hot solvent vapour from below flow through the extraction thimble at the same time and mix there. The temperature of this mixture is a lot higher than that of the condensed solvent.

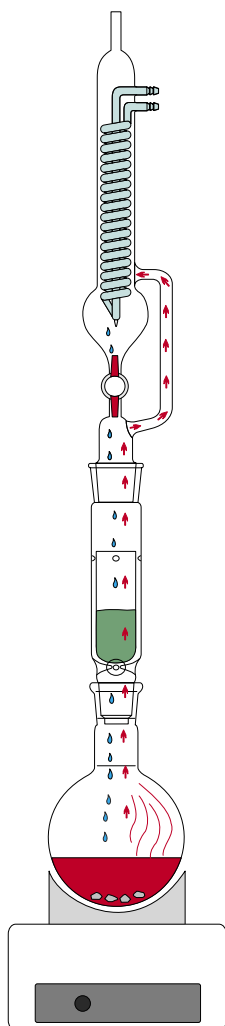
The Twisselmann extraction time is up to 50% shorter than the Soxhlet extraction time.

Compact extraction system in accordance with Twisselmann

Complete compact extraction system with stand, heating module, mount, hoses and glassware (round-bottom reaction flask, extractor, Dimroth condenser for extraction).

Model	Article description	230 V~ Art.-No.	115 V~ Art.-No.
KEX 100 T	Compact system for Twisselmann extraction	804800537	8048005375

R 106 T



behrotest® multi-sample extractors for Twisselmann extraction

Economical and user-friendly units for extraction in accordance with Twisselmann:

- each sample position is individually adjustable
- cooling water distributor ensures an even cooling at all sample positions
- practical stand for holding the condensers securely between the extractions
- mounts for holding the spacers after the removal of the sample containers

Model	Article description	230 V~ Art.-No.
R 104 T	Multi-sample extractor for an extraction in accordance with Twisselmann, complete for 4 sample positions	804880045
R 106 T	Multi-sample extractor for an extraction in accordance with Twisselmann, complete for 6 sample positions	804880043

Extraction

Accessories

Accessories for the extraction

Model	Article description	Art.-No.
EZ 30	Soxhlet-extractor, 30 ml	80 48 41031
PTFE 29	PTFE collars for EZ 30	80 48 30290
EX 30 HS	Extraction thimbles for EZ 30, pack with 25 pcs	80 48 41033
EZ 100	Soxhlet extractor, 100 ml	80 48 41032
EZ 100/ stopcock	Soxhlet extractor, 100 ml, with stopcock	80 48 41035
EX 100 HS	Extraction thimbles for EZ 100 (stopcock), pack with 25 pcs	80 48 41034
EZ 250	Soxhlet extractor, 250 ml	80 48 41039
EZ 250/ stopcock	Soxhlet extractor, 250 ml, with stopcock	80 48 41038
EX 250 HS	Extraction thimbles for EZ 250 (stopcock), pack with 25 pcs	80 48 41040
EZT	Extractor, 100 ml, for the Twisselmann extractors	80 48 41043
PTFE 45	PTFE collars for EZ 100 and EZ 100/stopcock, EZ 250 and EZ 250/stopcock	80 48 30450
RFKT	Condenser for 100-ml Twisselmann extractors	80 48 41044
RFK 30	Reflux condenser for 30-ml extractors	80 48 41011
RFK 100	Reflux condenser for 100-ml extractors (EZ 100 or EZ 100/stopcock)	80 48 51070