



3680

**SUPERVARIO-N
MULTI-PURPOSE CENTRIFUGE**

Centrifuge for fat content determination according to Gerber, Roesse-Gottlieb, Babcock and for the determination of the solubility of milk powder (ADPI).

Properties:

- Stainless steel housing
- Programmable rotor speed from 600 rpm to 1130 rpm in increments of 10 rpm (corresponding to a g value of 77 to 372 g, depending on the rotor)
- Programmable heater up to 68 °C in 1 °C increments
- Programmable centrifugation time from 1 to 99 minutes
- Automatic interlocking safety lid
- Automatic shut-down in case of unbalance
- Automatic brake

Technical specifications:

Connection values: 230 V/50...60 Hz/1200 VA

Weight when empty: 26 kg

Total height with lid: 460 mm

External diameter: 670 mm

Filling height: 370 mm

Speed range: 600 to 1130 rpm

Temperature range: room temperature up to 68 °C

ACCESSORIES

- **For the determination of fat content according to Gerber**

3685

Head A: for a maximum of 36 butyrometer buckets, effective radius of the attachment: 260 mm

3631

Butyrometer bucket

- **For the determination of fat content according to Babcock**

3685

Head A: for a maximum of 18 Babcock buckets, effective radius of the attachment: 260 mm

3632

Babcock bucket

3254, 3256, 3258

Babcock bottle without stopper

- **For the determination of fat content according to Roesse-Gottlieb**

3686

Head B: for a maximum of 8 Mojonnier tubes, effective radius of the attachment: 190 mm (operation only possible in accordance with the respective safety regulations)

3870, 3871

Extraction tube according to Mojonnier

- **For solubility determination**

3687

Head C: for a maximum of 6 buckets for solubility index tubes, effective radius of the attachment: 190 mm

3633

Bucket for solubility index tubes

3634

Solubility index tube (ADPI tube)


3707

UNIVERSAL WATER BATH WB436-D (DIGITAL)

Digital temperature display (actual value), digital setpoint temperature adjustment. PT 100 sensor (platinum sensor). Stopwatch (1-100 min. with acoustic signal). Stainless steel inner and outer casing. Protection against overheating (even when tank is empty), use with distilled water if possible.

Technical specifications:

Temperature range: up to 100 °C

Volume: 18 l

Connected loads: 230V/50Hz...60Hz/1000 W

Interior dimensions (WxDxH): (300x320x194) mm

External dimensions (WxDxH): (331x396x265) mm

Weight: 10 kg

3708

UNIVERSAL WATER BATH WB436-A (ANALOGUE)

As art. no. 3707 but with analogue temperature control (adjusting knob), temperature display with thermometer (included in the scope of delivery), thermostatic heat controller.

ACCESSORIES FOR WATER BATHS WB436

3717

Butyrometer stand: stainless steel, for 36 butyrometers
Dimensions (WxDxH): (383x325x200) mm,
diameter of the hole: 27.2 mm

3766-G

Butyrometer tube (closed): made of brass, for butyrometer stand (art. no. 3717), external diameter, bottom: 27 mm, external diameter, top: 33 mm, internal diameter: 25.8 mm, length: 170 mm

3766-O

Butyrometer tube (open): made of brass, for butyrometer stand (art. no. 3717) external diameter, bottom: 27 mm, external diameter, top: 33 mm, inner diameter: 25.8 mm, length: 170 mm

LABORATORY GLASSWARE



Butyrometers

All butyrometers come in standard packs of 10.
Please place your order in units of 10.

3150

Precision butyrometer 0-4%: 0.05: for drinking milk and vat milk, frosted rear scale wall, fault tolerance: 0.025%, (accessory: 3280)

Milk butyrometer

3151

0-5%: 0.1 (accessory: 3280)

3152

0-6%: 0.1 (accessory: 3280)

3153

0-7%: 0.1 (accessory: 3280)

3154

0-8%: 0.1 (accessory: 3280)

3155

0-9%: 0.1 (accessory: 3280)

3156

0-10%: 0.1 (accessory: 3280)

3157

0-12%: 0.1 (accessory: 3280)

3158

0-16%: 0.2 (accessory: 3280)

Skimmed milk butyrometer (according to Sichler's method)

3160

0-1%: 0.01 with open bulb and round scale, (accessories: 3280, 3290)

3160-G

0-1%: 0.01 with closed bulb, (accessory: 3280)

Skimmed milk butyrometer (according to Kehe's method)

3161

0-4%: 0.05 (accessory: 3280)

3162

0-5%: 0.05 (accessory: 3280)

Skimmed milk butyrometer (according to Siegfeld's method)

3164

0-0.5%: 0.02 (accessory: 3280)

Powdered milk butyrometer (according to Teichert's method)

3170

0-35%: 0.5 (accessory: 3310)

3171

0-70%: 1.0 (accessory: 3310)

Ice cream and condensed milk butyrometer (according to Roeder's weighing method)

3180

0-6-12%: 0.1 (accessories: 3290, 3300, 3320)

3181

0-15%: 0.2 (accessories: 3290, 3300, 3320)

Cream butyrometer (measuring method, for ice cream)

3189 0-15%: 0.2 (accessory: 3280) **3190** 0-20%: 0.2 (accessory: 3280)

Cream butyrometer (according to Roeder's weighing method)

3200 0-5-40%: 0.5 (accessories: 3290, 3300, 3320) **3201** 0-30-55%: 0.5 (accessories: 3290, 3300, 3320)

3202 0-50-75%: 0.5 (accessories: 3290, 3300, 3320) **3203** 0-5-70%: 1.0 (accessories: 3290, 3300, 3320)

3208 **Cream butyrometer (weighing method according to Schulz-Kley)**
with closed bulb 0-5-40%: 0.5 (accessory: 3280)

Cream butyrometer (according to Koehler's measuring method)

3209 0-30%: 0.5 (accessory: 3280) **3210** 0-40%: 0.5 (accessory: 3280)

3211 0-50%: 1.0 (accessory: 3280) **3212** 0-60%: 1.0 (accessory: 3280)

3213 0-70%: 1.0 (accessory: 3280) **3214** 0-80%: 1.0 (accessory: 3280)

3220 **Butter butyrometer (according to Roeder's weighing method):**
0-70-90%: 0.5 (accessories: 3290, 3300, 3323)

3230 **Cheese butyrometer (weighing method according to Van Gulik):**
0-40%: 0.5 (accessories: 3290, 3300, 3321)

3240 **Curd butyrometer (weighing method):**
0-20%: 0.2 (accessories: 3290, 3300, 3321)

3250 **Food butyrometer (according to Roeder's weighing method):**
0-100%: 1.0 (accessories: 3290, 3300, 3320)


BUTYROMETER ACCESSORIES

3260 **FIBU PATENT
CLOSURE**

For all measuring method butyrometers, FIBU without adjustment key.



3270 ADJUSTMENT KEY

For FIBU patent closure.

3280 Rubber stopper, conical: for all measuring method butyrometers, diameter 11 mm/16mm, L: 43 mm

3290 Rubber stopper: for all weighing method butyrometers for sealing the bulb, diameter 9 mm/13 mm, L: 20 mm

3300 Rubber stopper with hole: for all weighing method butyrometers, diameter 17 mm/22 mm, L: 30 mm

3310 Rubber stopper without hole: for powdered milk butyrometers, also suitable for extraction tube according to Mojonnier (art. no. 3870 3871), diameter 17 mm/22 mm, L: 30 mm

3320 Cream beaker without holes: for ice cream and condensed milk butyrometers and cream butyrometers according to Roeder, external Ø: 15 mm, L: 77 mm

3321 Cheese beaker with holes: for butyrometers according to Van Gulik's method: external Ø: 15 mm, L: 77 mm

3323 Butter beaker with 2 holes: external Ø: 15 mm, L: 77 mm

Butyrometer stand (also suitable for special solubility index tubes, art. no. 3637)

3330 for 36 samples (PP plastic), dimensions (WxDxH): (610x80x160) mm

3331 for 12 samples (PP plastic), dimensions (WxDxH): (225x80x160) mm

Protective shaking hood

3340 for 36 samples (PP plastic), suitable for art. no. 3330, dimensions (WxDxH): (660x95x165) mm

3341 for 12 samples (PP plastic), suitable for art. no. 3331, dimensions (WxDxH): (230x85x90) mm

Volumetric pipettes (with one ring mark)

3431	10.75 ml milk	3432	11 ml milk
3433	1 ml amyl alcohol	3434	5.05 ml cream
3435	5 ml water	3436	5 ml cream
3437	50 ml short design, L: 390 mm	3438	25 ml short design, L: 365 mm

Automatic tilt measure Superior

3420	With rubber stopper and 500 ml storage bottle, 10 ml sulphuric acid
3421	With rubber stopper and 250 ml storage bottle, 1 ml amyl alcohol

Digital proportioning devices

For aggressive acids and alkalis, without bottles.

9484	1-10 ml: 0.05 ml, with thread adapter: A25, A28, A32, A38, A40
9485	2.5-25 ml: 0.1 ml, with thread adapter: A32, A38, A40

Variable proportioning devices

For aggressive acids and alkalis, without bottles.

9487	1-10 ml: 0.2 ml, with thread adapter: A25, A28, A32, A38, A40
9488	2.5-25 ml: 0.5 ml, with thread adapter: A32, A38, A40

Babcock bottle (without stopper)

3254	0-8% for milk, stopper on request	3256	0-20% for cream, [stopper: 3290]
3258	0-60% for cream and cheese [stopper: 3290]		

Extraction tube (according to Mojonnier)

3870	With rounded bulb, accessories: cork stopper [art. no. 3872], or rubber stopper [art. no. 3310]
3871	With flattened bulb, accessories: cork stopper [art. no. 3872], or rubber stopper [art. no. 3310]

3875 **Wooden stand:** for 12 extraction tubes according to Mojonnier

3634 **ADPI solubility index tube:** 50 ml, graduated from 0-20 ml and mark at 50 ml (see SuperVario-N (3680)), external Ø: 30 mm, L: 138 mm

3637 **Special solubility index tubes:** for determining the solubility of milk powder, fitting into the butyrometer tubes (art. no. 3641) for use in the „Nova Safety“ bench centrifuge (art. no. 3670)

Suitable rubber stoppers, see art. no. 3050

Matching stand, see art. no. 3331

external Ø: 24 mm, H: 180 mm

Lactodensimeter

6600 **For milk according to GERBER's method, large model:** negative scale, with thermometer in stem, 1.020-1.040: 0.0005 g/ml, T= 20 °C, 10-40 °C, approx. (300 x 28) mm, normal design/standard model

6610 **For milk according to GERBER's method, small model:** with thermometer in the body, 1.020-1.035: 0.0005 g/ml, T= 20 °C, 0-40 °C, approx. (210 x 17) mm, normal design / standard model

6630 **For milk according to Quevenne's method, coloured triple scale:** 1.015-1.040: 0.001g/ml, T= 20 °C with thermometer 0-40 °C, approx. (290 x 22) mm

6630-15 **For milk according to Quevenne's method, coloured triple scale:** 1.015-1.040: 0.001g/ml, T= 15 °C with thermometer 0-40 °C, approx. (290 x 22) mm

6631 **For milk according to Quevenne's method, coloured triple scale:** 1.015-1.040: 0.001g/ml, T= 20 °C without thermometer, approx. (210 x 22) mm

6631-15 **For milk according to Quevenne's method, coloured triple scale:** 1.015-1.040: 0.001g/ml, T= 15 °C without thermometer, approx. (210 x 22) mm

Hydrometer

6620 **For milk:** according to former DIN 10290, without thermometer, 1.020-1.045: 0.0005 g/ml, T= 20 °C, approx. (350 x 25) mm, standard version

6640 **for butter milk serum:** DIN 10293, without thermometer, 1.014-1.030: 0.0002 g/ml, T= 20 °C, standard model, approx. (240 x 21) mm

6660 **For condensed milk** (reading at the top): 1.000-1.240: 0.002 g/ml, T= 20 °C, approx. (310x19) mm

6661 **For condensed milk** (reading at the top): 1.040-1.080: 0.001 g/ml, T= 20 °C, approx. (230x21) mm

- 6670** For yoghurt and chocolate milk: with thermometer in the body, reading at the top, 1.030-1.060: 0.001g/ml, T= 20 °C, approx. (220 x16) mm
- 6680** Hydrometer for brine/Beaumé (0-30/0.5 Bé, T= 15 °C): without thermometer, approx. (240x17) mm
- 6681** Hydrometer for brine/Beaumé (0-30/0.5 Bé, T= 15 °C): with thermometer: (0-40) °C

THERMOMETER/ ACCESSORIES

- 7001** Dairy thermometer (with loop): special red filling, (0-100) °C: 1 °C approx. (250x17) mm
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- 7031** Dairy thermometer: in plastic case with loop, boil and impact-proof, floatable, special red filling, (0-100)°C: 1 °C approx. (280x28) mm
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- 7041** Dairy thermometer: special red filling, as a replacement for no. 7031, approx. (250x17) mm
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- 7046** Universal thermometer: special red filling, (-10-100) °C: 1.0, approx. (260x8) mm
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- 7120** Digital second thermometer 926: for daily temperature measurements in the food industry, for laboratory use, ISO calibration certificate for an extra charge, measurement range (-50 to +400)° C: 0.1 °C (1 °C from 200°C), accuracy ± 0.3 °C
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- 7122** Insertion/precision sensor: for 7120, diameter 4 mm, L: 110 mm