

Bröring EggQuality 3.0

Complete Combined Package Datasheet-Art.: 4008

Modular system. This modular system is a combination of modules that can be configured in various ways and customised to meet different customer requirements.

Measurement parameters of this system:

- Haugh Units
- Egg weight
- Egg shape
- Eggshell strength
- Yolk color
- Eggshell thickness



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1.1) Mini-Data Collector

Article number: 1002 Bröring EggQuality 3.0 Minidatensammler / Mini-Datacollector

Interface for electronic scale and albumen height meter for determining the thickness
freshness of chicken eggs

Technical specifications:

Power-Supply: 5V via Mini - USB connector
Power consumption: < 0,5W
Weight: 150g
Dimensions: 120mm x 70mm x 34mm (Length x Width x Height)
Interfaces: USB Mini, virtual Com-Port at PC
RS232, serial interface for scale Waage Kern 440-43N
Analog input 0-5V, connector for albumen height gauge, M8 4-pin.
Cable: Mini-USB to USB-Typ A, 1,2m
M8 sensorcable, 3-pin to DB-9



1.2) Albumen Height gauge

Article number: 1201 Bröring EggQuality 3.0 Albumen Height gauge

Potentiometric probe for determining the albumen height and freshness (Haugh units) of chicken eggs. The Haugh-Units are calculated from the albumen height and the egg weight.

The value of the Haugh units can be categorised as listed below:

AA:	>72
A:	60 - 71,9
B:	31 - 59,9
C:	00 - 30,9

Technical specifications:

Operating voltage:	5V via analog connection, 4-pin M8 sensor cable
Power consumption:	< 0.1W
Weight:	260g
Dimensions:	96mm x 85mm x 140mm (length x width x height), triangular
Interfaces:	Analog, potentiometric and trigger contact
Cable:	approx. 1m long, 4-pin M8 sensor cable
Measuring range:	2mm - 12mm, adjustable
Accuracy:	± 0,1mm



1.3) Laboratory balance Kern 440-43N

Article number: 1501 Bröring EggQuality 3.0 Laboratory balance Kern 440-43N

Technical specifications:

Operating voltage:	Power adapter, 100-240V AC 50/60Hz 0.5A (Battery optional)
Device voltage:	9V, 300mA
Battery operating time (Battery):	20h
Charging Time (Battery):	10h
Weight:	1015g
Dimensions:	165mm x 230mm x 80mm (length x width x height)
Dimensions weighing surface:	130mm x 130mm (length x width)
Interfaces:	RS-232 standard
Weighing capacity: [Max]	400g
Reproducibility:	0,1g
Stabilization time:	3s
Minimum weight of sample:	200g
(k = 2, U = 0.1%)	
(k = repeatability & U = accuracy)	



1.4) Basic Equipment Accesory Art.: 4001

1.4.1) Calibration plate for albumen height gauge Article number: 2001

Material: stainless steel
Dimensions: 50mm x 9mm (Diameter x Height [Max]), Circle
3 height levels: 4mm, 7mm, 9mm.
Weight: 75g
accuracy: $\pm 0,02\text{mm}$

1.4.2) Bröring work table, type I, normal size Article number: 2005

Dimensions: 300x190x120 mm, (L*W*H)
- *Brushed stainless steel walls*
- *Glass Top*
- *incl. Mirror*
Gewicht: 2400g

1.4.3) Accesory set Article number: 2050

Items included in the Accesory set:
- *Egg cup out of stainless steel*
- *Licefa work bowl A4-3*
Base 210 x 150 mm, 40 mm deep, top edge 260 x 200 mm
- *Plastic spatula, scraper edge 12 cm*

1.4.4) Connecting cable Article number: 2101

Connecting cable from laboratory balance to the mini data collector
(DB9 – M8)

1.4.5) Transport case Article number: 6023

Incl. foam insert for BIT CR
- *Water-repellent*
- *Shock-resistant*
Dimensions: 350mm x 150mm x 290 mm (length x width x height)
Weight: 1700g.

2) Fast-Egg-Shell-Tester (breaking strength measuring system)

Article number: 1101 Bröring EggQuality 3.0 Fast-Egg-Shell-Tester

Specifications:

Designation:	Fast-Egg-Shell-Tester Ver. 2
Power supply:	12 V DC, 1 A, external power supply
Power consumption:	about 5 Watt
Eggshell strength:	0-15kg (0-150N, Max 200N (Overload))
Max length:	84mm (optional: 95mm)
Protection:	IP40, protection against contact
Operating Temp.:	10 ° C to 45 ° C, Storage 0 to 60 ° C
Humidity:	max. 90% non-condensing
Dimensions:	300 x 100 x 130 mm (length x width x height)
Weight:	5.5 kg
Accessories:	AC adapter (output 12V/1A, input 100-240 V / 50-60 Hz) manual carrying case incl. foam insert for FEST - <i>Water-repellent</i> - <i>Shock-resistant</i>

Accessory:	receipt printer with data cable data cable for PC adaptor RS232 to USB Bröring EggQuality 3.0 software calibration weight 1 kg
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Optional:	Bluetooth Interface	Art.-Nr.: 1102
	reloadable Battery	Art.-Nr.: 1103
	Bluetooth Interface & reloadable Battery	Art.-Nr.: 1104
	external switches	



3) BIT CR Yolk colour meter

Article number: 1112 - BIT CR Yolk colour meter

Colorimeter, 3-filter system with RGB sensor and LED lighting

Specifications:

Power Supply:	USB, 5V 0,2A
Weight:	2500g
Dimensions:	300mm x 190mm x 120mm (length x width x height)
Cable:	USB cable
material:	stainless steel, glas

Accessory: calibration plate black/white



4) Shell-Thickness-Gauge

Article number: 1505 Broering Shell Thickness Gauge

Measuring device for determining the thickness of eggshells including holder and USB Interface.

Technical specifications:

Power Supply:	buttoncell 3V, CR2032
Weight:	550g
Dimensions:	100mm x 100mm x 150mm (length x width x height)
Interface:	Mini USB, Interface
Bottom measuring surface:	flat 10mm Diameter
Top measuring surface:	Ball head 6,5mm Diameter
Display:	Digital
Resolution:	0.001mm



5) BIT Bröring Calliper

Article number: 1506 Broering Calliper

Specifications:

Power Supply:	3V, CR2032
Measuring range:	0-150mm
Jaw length of the caliper:	40mm
Interface:	USB A
Resolution:	0.01mm
Accuracy:	$\pm 0.02\text{mm}$
Material:	stainless steel

5.1) Bröring Calliper Interface

Specifications:

Power Supply:	5V USB
Power consumption:	< 0,5W
Weight:	150g
Dimensions:	135mm x 70mm x 45mm (length x width x height)
Interface:	Mini USB, USB
Cable:	Mini-USB 1,50m, USB 1,50m



BIT Bröring Calliper



Bröring Calliper Interface

6) Complete Combined Package accesory Art.: 4008

Article number: 2105

USB – Hub

4 Port USB - Hub, depending on availability

7) Broering EggQuality PC-software for Complete Combined Package

Article number: 5001/5002/5003

Software only for one Complete Package, suitable for Windows systems 7 – 11