



NEW!

BMT-50-S-M

Now more types of tube!

Technical data	
Rating input	20 W
Rating output	17 W
Speed range, infinitely adjustable	300 – 6.000 rpm
Timer	1 – 59 s
	600 – 6.000 (rpm)
	600 – 4.000 (rpm)
Display timer	digital
Dimensions (W x D x H)	100 x 160 x 40 mm
Volume 20 ml Tube	2 - 20 ml
50 ml Tube	15 - 50 ml
Weight	0,75 kg
Protection class acc. to DIN EN 60529	IP 20

Application areas: Human medicine, pathology, veterinary medicine, animal hygiene institutes, clinical diagnosis research, foodstuffs testing laboratories, diagnostic laboratories, toxicology, medical research, pharmaceutical research, biological research, tumor biology, immunology, chemistry, cosmetics

ULTRA-TURRAX® Tube Drive

A unique, universal, single-use dispersing system with hermetically sealable sample vessels. Protection and security for: Infectious sample materials, toxic substances, high-odour substances.

new: Gamma-sterilised tubes

new: Tubes with pierceable membrane covers

new: Tubes with 50 ml volume

- Disperse, stir and grind using a single drive unit
- No possibility of cross-contamination
- Hermetically sealable disposable sample tubes
- High level of user safety
- Suitable for individual use and use in series
- Anti-locking function
- Increases safety due to low voltage (24 V)
- Chemical-resistant plastic
- Simple and safe disposal
- Worldwide service guaranteed by IKA®
- Patented

Ident. No.
3646000

100 – 240 V 50/60 Hz



ULTRA-TURRAX® Workstation

Included with delivery (page):

- 1 x ULTRA-TURRAX® Tube Drive (71),
- 2 x ST-20 Tube with stirring device (72),
- 2 x DT-20 Tube with rotor-stator element (72),
- 2 x BMT-20 G / S Tube for grinding with glass balls (G) or with stainless steel balls (S) (72),
- 1 x removal hook for removal the rotor-stator unit, power supply



Ident. No.
3645000

100 – 240 V 50/60 Hz



20 ml



50 ml

ST

Tube with stirring device

Suitable for:

- Mixing
- Stirring
- Extractions
- Preparation of soil sample suspensions

Application examples for the ST Tube

- Dissolving properties of drugs
- Incorporation of coloured pigments into a solvent
- Accelerated dissolution of sugar solutions
- Extraction of plant substances
- Accelerated dissolution of tablets, dragées, suppositories and capsules
- Mixing of fluids with higher viscosities



20 ml



50 ml

DT

Tube with rotor-stator element

Suitable for:

- Dispersion
- Homogenisation
- Suspensions
- Pharmacokinetics
- Metabolism studies
- Diagnosis

Application examples for the DT Tube

- Homogenisation of tissue samples including brain, liver, muscle tissue, kidney and lung
- Milling of plant samples including rosemary, rapeseed, tomato seeds, grapes, potatoes, cress, leaves and roots
- Production of O/W and W/O emulsions
- Homogenisation of effluent samples



20 ml



50 ml

BMT G/S

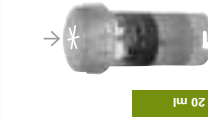
Tube for grinding with glass balls (G) or with stainless steel balls (S)

Suitable for:

- Dry milling of dry and brittle samples (e.g. kaolin, gypsum, coloured pigments, tablets)
- Cell maceration
- Processing of materials mixed with fluids

Application examples for the BMT G/S Tube

- Decomposition of animal, plant and human cells
- Dry milling of e.g. pigments, building materials and coal samples
- Dry milling of freeze-dried samples
- Milling of samples to determine water content



20 ml



50 ml

M

Tube with pierceable membrane

Suitable for:

- Introduction of media during the stirring, dispersing or milling process
- Sample extraction during the stirring, dispersing or milling process

Application examples for the M Tube

- Sample extraction from dissolved pharmaceuticals
- Addition of a reaction partner, e.g. for pigment reactions
- Storage of samples in the tube, with option to remove material from the closed container at any time
- No contamination when removing samples of materials hazardous to health



20 ml



50 ml

gamma

gamma sterilised tube

Suitable for:

- Grinding, mixing and dispersing under sterile conditions
- Aseptic storage of samples (tissue, blood, etc.)

Application examples for the gamma tube

- Homogenisation of sterile samples e.g. for medical, pathology and pharmaceutical use
- Storage of sterile sample material after preparation directly in the sample vessel (even at temperatures down to -20 °C)
- Simple handling during preparation of aseptic samples in the laboratory



20 ml			
Ident. No.	Product description	With pierceable membrane	Gamma sterilised
3703000	ST-20	-	-
3703100	DT-20	-	-
3703200	BMT-20-S	-	-
3703300	BMT-20-G	-	-
3749300	ST-20-gamma	+	+
3749400	DT-20-gamma	+	+
3749500	BMT-20-S-gamma	+	+
3749700	TC-20	-	-
3702500	ST-20-M	+	-
3702600	DT-20-M	+	-
3702700	BMT-20-S-M	+	-
3702800	BMT-20-G-M	+	-
3700500	ST-20-M-gamma	+	+
3700600	DT-20-M-gamma	+	+
3700700	BMT-20-S-M-gamma	+	+
3749900	TC-20-M	+	-
3699500	ST-50	-	-
3699600	DT-50	-	-
3699700	BMT-50-S	-	-
3699800	BMT-50-G	-	-
3799500	ST-50-gamma	+	+
3799600	DT-50-gamma	+	+
3799700	BMT-50-S-gamma	+	+
3749800	TC-50	-	-
3629500	ST-50-M	+	-
3629600	DT-50-M	+	-
3629700	BMT-50-S-M	+	-
3629800	BMT-50-G-M	+	-
3701500	ST-50-M-gamma	+	+
3701600	DT-50-M-gamma	+	+
3701700	BMT-50-S-M-gamma	+	+
3750000	TC-50-M	+	-
3699200	ST-100	-	-
3699300	DT-100	-	-
3699400	BMT-100-S	-	-
3699500	BMT-100-G	-	-
3799500	ST-100-gamma	+	+
3799600	DT-100-gamma	+	+
3799700	BMT-100-S-gamma	+	+
3749800	TC-100	-	-
3629500	ST-100-M	+	-
3629600	DT-100-M	+	-
3629700	BMT-100-S-M	+	-
3629800	BMT-100-G-M	+	-
3701500	ST-100-M-gamma	+	+
3701600	DT-100-M-gamma	+	+
3701700	BMT-100-S-M-gamma	+	+
3750000	TC-100-M	+	-
3699200	ST-200	-	-
3699300	DT-200	-	-
3699400	BMT-200-S	-	-
3699500	BMT-200-G	-	-
3799500	ST-200-gamma	+	+
3799600	DT-200-gamma	+	+
3799700	BMT-200-S-gamma	+	+
3749800	TC-200	-	-
3629500	ST-200-M	+	-
3629600	DT-200-M	+	-
3629700	BMT-200-S-M	+	-
3629800	BMT-200-G-M	+	-
3701500	ST-200-M-gamma	+	+
3701600	DT-200-M-gamma	+	+
3701700	BMT-200-S-M-gamma	+	+
3750000	TC-200-M	+	-
3699200	ST-1000	-	-
3699300	DT-1000	-	-
3699400	BMT-1000-S	-	-
3699500	BMT-1000-G	-	-
3799500	ST-1000-gamma	+	+
3799600	DT-1000-gamma	+	+
3799700	BMT-1000-S-gamma	+	+
3749800	TC-1000	-	-
3629500	ST-1000-M	+	-
3629600	DT-1000-M	+	-
3629700	BMT-1000-S-M	+	-
3629800	BMT-1000-G-M	+	-
3701500	ST-1000-M-gamma	+	+
3701600	DT-1000-M-gamma	+	+
3701700	BMT-1000-S-M-gamma	+	+
3750000	TC-1000-M	+	-
3699200	ST-2000	-	-
3699300	DT-2000	-	-
3699400	BMT-2000-S	-	-
3699500	BMT-2000-G	-	-
3799500	ST-2000-gamma	+	+
3799600	DT-2000-gamma	+	+
3799700	BMT-2000-S-gamma	+	+
3749800	TC-2000	-	-
3629500	ST-2000-M	+	-
3629600	DT-2000-M	+	-
3629700	BMT-2000-S-M	+	-
3629800	BMT-2000-G-M	+	-
3701500	ST-2000-M-gamma	+	+
3701600	DT-2000-M-gamma	+	+
3701700	BMT-2000-S-M-gamma	+	+
3750000	TC-2000-M	+	-
3699200	ST-5000	-	-
3699300	DT-5000	-	-
3699400	BMT-5000-S	-	-
3699500	BMT-5000-G	-	-
3799500	ST-5000-gamma	+	+
3799600	DT-5000-gamma	+	+
3799700	BMT-5000-S-gamma	+	+
3749800	TC-5000	-	-
3629500	ST-5000-M	+	-
3629600	DT-5000-M	+	-
3629700	BMT-5000-S-M	+	-
3629800	BMT-5000-G-M	+	-
3701500	ST-5000-M-gamma	+	+
3701600	DT-5000-M-gamma	+	+
3701700	BMT-5000-S-M-gamma	+	+
3750000	TC-5000-M	+	-
3699200	ST-10000	-	-
3699300	DT-10000	-	-
3699400	BMT-10000-S	-	-
3699500	BMT-10000-G	-	-
3799500	ST-10000-gamma	+	+
3799600	DT-10000-gamma	+	+
3799700	BMT-10000-S-gamma	+	+
3749800	TC-10000	-	-
3629500	ST-10000-M	+	-
3629600	DT-10000-M	+	-
3629700	BMT-10000-S-M	+	-
3629800	BMT-10000-G-M	+	-
3701500	ST-10000-M-gamma	+	+
3701600	DT-10000-M-gamma	+	+
3701700	BMT-10000-S-M-gamma	+	+
3750000	TC-10000-M	+	-

50 ml			
Ident. No.	Product description	With pierceable membrane	Gamma sterilised
3699500	ST-50	-	-
3699600	DT-50	-	-
3699700	BMT-50-S	-	-
3699800	BMT-50-G	-	-
3799500	ST-50-gamma	+	+
3799600	DT-50-gamma	+	+
3799700	BMT-50-S-gamma	+	+
3749800	TC-50	-	-
3629500	ST-50-M	+	-
3629600	DT-50-M	+	-
3629700	BMT-50-S-M	+	-
3629800	BMT-50-G-M	+	-
3701500	ST-50-M-gamma	+	+
3701600	DT-50-M-gamma	+	+
3701700	BMT-50-S-M-gamma	+	+
3750000	TC-50-M	+	-

BMT			
Ident. No.	Product description	Glass balls Ø 6 mm	Quantity per pack
3599200	Glass balls Ø 6 mm		250 g
3599300	Stainless steel balls Ø 6 mm		250 g



Dispersion example: liver

T 10 basic ULTRA-TURRAX®

Competitively priced dispersing instrument for volumes of 0.5 to 100 ml. A wide speed range allows you to work at high circumferential speeds even with small rotor diameters. Perfect ergonomic finish.

- **Quick-release coupling makes changing the dispersing elements easy**
- Immense speed stability with various materials due to high performance 125 Watt drive
- Ideal for manual operation due to its light weight and ergonomic form
- Extremely mobile due to direct line power (no transformer required)
- Stainless steel dispersing elements (5 mm, 8 mm and 10 mm diameter) can be cleaned quickly and easily as they can be dismounted without tools
- Plastic disposable dispersing elements in two sizes, particularly suitable for PCR analysis
- Included with delivery: empty storage case (for drive, clamp, dispersing elements) and spare seals and clamp R 200

Technical data	
Motor rating input	125 W
Motor rating output	75 W
Volume range (H ₂ O)	0.5 – 100 ml
Max. viscosity	5,000 mPas
Speed adjustment	stepless
Speed range	8,000 – 30,000 rpm
Speed stability	< 6 %
Speed display	scale
Noise without dispersing element	65 dB (A)
Overload protection	yes
Permitted ON-time (ON / OFF)	max. 10 min / min. 5 min
General data	
Dimensions (W x D x H)	46 x 57 x 201 mm
Weight	0.4 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 30

Ident. No.	230 V 50/60 Hz	115 V 50/60 Hz
3420000		
3420001		

Accessories (page):
R 200 Clamp (126), R 104 Stand (124),
H 44 Boss head clamp (126), Dispersing elements (82): S 10 N – 5 G, S 10 N – 8 G, S 10 N – 10 G, Plastic dispersing elements (84): S 10 D – 7 G – KS – 65, S 10 D – 7 G – KS – 110





Ident. No.
3561000 230 V 50/60 Hz
3561001 115 V 50/60 Hz

T 18 basic ULTRA-TURRAX®

Competitively priced dispersing instrument for volumes of 1 to 1.500 ml (H₂O).
A wide speed range allows you to work at high circumferential speeds.

- Electronic speed control
 - Electronic overload protection
 - Quick release button for dispersing element
 - As standard, the T 18 is equipped with a connection for a revolution counter
- Dispersing elements not included with delivery.

Accessories (page):

Dispersing instruments (80 / 81), Stands (124):
R 1825, R 1826, R 1827, R 1828 Boss head clamp (126), DZM control.o Revolution counter (129), RH 3 Strap clamp (126)

Technical data	
Motor rating input	500 W
Motor rating output	300 W
Volume range (H ₂ O)	1 – 1.500 ml
Max. viscosity	5.000 mPaS
Speed adjustment	stepless
Speed range (under load)	3.500 – 24.000 rpm
Speed display	scale
Noise without dispersing element	73 dB (A)
Overload protection	yes
Diameter / length of extension arm	13 mm / 175 mm

General data

Dimensions (W x D x H)	65 x 80 x 240 mm
Weight	1,6 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 20



Ident. No.
3565000 230 V 50/60 Hz
3565001 115 V 50/60 Hz

T 25 digital ULTRA-TURRAX®

High-performance dispersing instrument for volumes from 1 - 2.000 ml (H₂O).
The spectrum of applications ranges from homogenizing waste water samples to the use in laboratory reactors, to dispersion tasks under vacuum / pressure and sample preparation in medical diagnostics.

- Three types of shaft bearings
- Standard version with digital display and a connection for a revolution counter
- Rotor-Stator configurations have thirty years of proven, guaranteed comparability of test results
- Wide range of dispersing elements (not included with delivery, page 80 / 81)

Accessories (page):

Dispersing instruments (80 / 81), Stands (124):
R 1825, R 1826, R 1827, R 1828 Boss head clamp (126), RH 3 Strap clamp (126)

Technical data	
Motor rating input	500 W
Motor rating output	300 W
Volume range (H ₂ O)	1 – 2.000 ml
Max. viscosity	5.000 mPaS
Speed adjustment	stepless
Speed range (under load)	3.400 – 24.000 rpm
Speed display	digital
Noise without dispersing element	73 dB (A)
Overload protection	yes
Diameter / length of extension arm	13 mm / 175 mm

General data

Dimensions (W x D x H)	65 x 80 x 240 mm
Weight	1,6 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 20



T 25 digital ULTRA-TURRAX®

Dispersing instrument for quantities up to approx. 2.000 ml, page 76
Ident. No. 3565000

T 18 basic ULTRA-TURRAX®

Dispersing instrument for quantities up to approx. 1.500 ml, page 76
Ident. No. 3561000

R 182

Boss head clamp, page 126
Ident. No. 2657700

S 18 N - 19 G

Dispersing element for quantities between 10 – 1.500 ml, page 80
Ident. No. L004640

S 25 N - 18 G

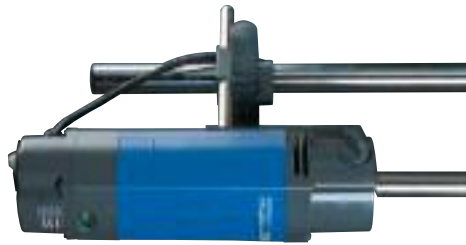
Dispersing element for quantities between 10 – 1.500 ml, S. 81
Ident. No. 0593400

RH 3

Strap clamp, page 126
Ident. No. 3006600

R 1827

Plate stand, page 124
Ident. No. 3160200



Ident. No.
3783500 230 V 50/60 Hz
3783501 115 V 50/60 Hz

T 50 basic ULTRA-TURRAX®

- High-performance dispersing instrument for volumes from 0.25 - 30 l (H₂O)
- Three types of shaft bearings
- Several rotor-stator configurations
- Agitator shaft R 50 allows the use of the T 50 basic as a "high-speed stirrer" (not included in delivery, page 86)
- Infinitely variable speed control, for continuous operation

- Reproducible operations due to constant speed even with viscosity changes
- Large selection of dispersing elements
- Plug-in connectors facilitate exchange of dispersing elements
- Electronic safety circuit and smooth start
- As standard, the T 50 basic is equipped with a connection for the revolution counter
- Wide range of dispersing elements (not included in delivery, page 82 / 83)

Accessories (page):

Dispersing elements (82 / 83), Special dispersing elements (86), Stands (124 / 125): R 2722, R 2723, R 271 Boss head clamp (126), DZM control o. Revolution counter (129), RH 5 Strap clamp (126)

T 50 basic ULTRA-TURRAX®

Dispersing instrument for quantities up to approx. 30 l, page 78

R 271

Boss head clamp, page 126
Ident. No. 2684000

S 50 N – G 45 G

Dispersing element for coarse crushing, page 82
Ident. No. 8003000

RH 5

Strap clamp, page 126
Ident. No. 3159000

R 2723

Telescopic stand, page 125
Ident. No. 1412100

S 50 N – G 45 F

Dispersing element for subsequent fine crushing, page 83
Ident. No. 8003900

T 65 D ULTRA-TURRAX®

The high-performance T 65 D dispersing instrument has been designed for typical pilot plant stations quantities from 2 - 50 l (H₂O).
- Three rotor-stator configurations for a variety of applications (not included with delivery)

- Plug-in connectors facilitate exchange of dispersing elements
- Speed controller on request
- Dispersing instruments for the production area: ask for our process technology catalog
- Cables and plugs not included with delivery

Technical data	
Motor rating input	1.800 W
Motor rating output	1.500 W
Volume range (H ₂ O)	2 – 50 l
Max. viscosity	5.000 mPas
Speed, fixed	7.200 rpm
Speed stability	5 %
Noise without dispersing element	75 dB(A)
Overload protection	Yes
General data	
Dimensions (W x D x H)	190 x 680 x 380 mm
Weight	28 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 54

Accessories (page):

Dispersing elements (83), T 653 Stand (125), SI 400 Safety switch (49), Fixing device SI 474 (49)



Ident. No.
1602800 3 x 400 V 50 Hz
1602802 3 x 230 V 60 Hz

Nomenclature dispersing elements

The variety of media to be processed also requires a variety of rotor-stator configurations and seals. In many cases it is necessary to use subsequently two dispersing elements, for pre-crushing and fine crushing. The plug-in connectors facilitate the exchange of the dispersing elements.



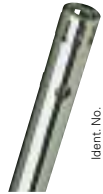
Example of the S 50 N – G 45 M dispersing element set-up

For dispersing instrument	Dispersing element Shaft / Agitator shaft	With seal or bearing type*	Generator or element**	With outer diameter (mm)	Degree of fineness achieved***
T 10	S 10	N	-	5 / 8 / 10	G
T 18	S 18	N	-	10 / 19	G
T 25	S 25	N / KR / KV / NK	-	8 / 10 / 18 / 19 / 25	G / F
T 50	S / R 50	N / KV / KR / KG – HH	G / W	45 / 65 / 80	G / M / F
T 65	S 65	KG – HH	G	65	G / M / F

* N = PTFE bearing, KR = Ball bearing with FKM-seal, KV = Ball bearing with vacuum-tight sliding-ring seal with silicon carbide seal rings, NK = PTFE bearing with additional ball bearing without seal, KG – HH = Ball bearing with sliding-ring seals of hard metal allow with FPM seal rings
** G = proved configuration, W = special element
*** G = coarse, M = medium, F = fine



Ident. No.
1 1024200



Ident. No.
2 0594000



Ident. No.
3 0593400



Ident. No.
4 1713300



Ident. No.
5 1713800



Ident. No.
8011900

Dispersing elements T 18 basic, T 25 digital

Dispersing element Ident. No.	S 18 N – 10 G L004639 without fig.	S 18 N – 19 G L004640 without fig.	S 25 N – 8 G 1024200 without fig.	S 25 N – 10 G 0594000 without fig.	S 25 N – 10 G – VS 1899000 without fig.	S 25 N – 18 G 0560300 without fig.	S 25 KV – 18 G 2348000 without fig.
Suitable for dispersing instrument	T 18 basic	T 18 basic	T 25 digital	T 25 digital	T 25 digital	T 25 digital	T 25 digital
Working range	1 – 100 ml	10 – 1,500 ml	1 – 50 ml	1 – 1,000 ml	1 – 1,500 ml	10 – 1,500 ml	10 – 1,500 ml
Stator diameter	10 mm	19 mm	8 mm	10 mm	10 mm	18 mm	18 mm
Rotor diameter	7.5 mm	12.7 mm	6.1 mm	7.5 mm	7.5 mm	12.7 mm	12.7 mm
Gap between rotor and stator	0.35 mm	0.4 mm	0.25 mm	0.35 mm	0.35 mm	0.3 mm	0.3 mm
Circumferential speed	9.4 m/s	15.9 m/s	7.7 m/s	9.4 m/s	9.4 m/s	15.9 m/s	15.9 m/s
Min./max. immersion depth	25 / 70 mm	35 / 170 mm	27 / 85 mm	22 / 85 mm	22 / 85 mm	40 / 185 mm	40 / 225 mm
Shaft length	108 mm	204 mm	108 mm	105 mm	105 mm	194 mm	270 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L	FKM, AISI 316L	FKM, AISI 316L
pH range	2 – 13	2 – 13	2 – 13	2 – 13	2 – 13	2 – 13	2 – 13
Suitable for solvents	yes	yes	yes	yes	yes	no	no
Suitable for abrasive substances	yes	yes	yes	yes	yes	no	no
Max. temperature	180 °C	180 °C	180 °C	180 °C	180 °C	80 °C	220 °C
Sterilization methods	all methods	all methods	all methods	all methods	all methods	wet chemical	wet chemical
Min. vacuum	–	–	–	–	–	50 mbar	1 mbar
Max. pressure	–	–	–	–	–	–	6 bar
Ultimate fineness, suspensions	10 – 50 µm	10 – 50 µm	10 – 50 µm	10 – 50 µm	10 – 50 µm	10 – 50 µm	10 – 50 µm
Ultimate fineness, emulsions	1 – 10 µm	1 – 10 µm	1 – 10 µm	1 – 10 µm	1 – 10 µm	1 – 10 µm	1 – 10 µm
Dispersing element Ident. No.	S 25 NK – 19 G 2494700 without fig.	S 25 KR – 25 G 1713400 without fig.	S 25 KV – 25 G 2466900 without fig.	S 25 N – 25 F 1713800 without fig.	S 25 KR – 25 F 1713900 without fig.	S 25 KV – 25 F – IL 2563000 without fig.	S 25 KV – 25 F – IL 2630200 without fig.
Suitable for dispersing instrument	T 25 digital	T 25 digital	T 25 digital	T 25 digital	T 25 digital	T 25 digital	T 25 digital
Working range	25 – 1,500 ml	50 – 2,000 ml	50 – 2,000 ml	100 – 2,000 ml	100 – 2,000 ml	100 – 2,000 ml	100 – 2,000 ml
Stator diameter	19 mm	25 mm	25 mm	25 mm	25 mm	25 mm	25 mm
Rotor diameter	12.7 mm	17 mm	17 mm	18 mm	18 mm	17 mm	17 mm
Gap between rotor and stator	0.3 mm	0.5 mm	0.5 mm	0.5 mm	0.5 mm	0.5 mm	0.5 mm
Circumferential speed	15.9 m/s	21.4 m/s	21.4 m/s	22.6 m/s	22.6 m/s	21.4 m/s	22.6 m/s
Min./max. immersion depth	40 / 165 mm	40 / 185 mm	40 / 185 mm	40 / 165 mm	40 / 185 mm	40 / 185 mm	40 / 185 mm
Shaft length	194 mm	194 mm	270 mm	194 mm	194 mm	110 mm	110 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	FKM, AISI 316L	PTFE, AISI 316L	FKM, AISI 316L	FKM, AISI 316L	FKM, AISI 316L
pH range	2 – 13	2 – 13	2 – 13	2 – 13	2 – 13	2 – 13	2 – 13
Suitable for solvents	yes	yes	no	yes	no	yes	yes
Suitable for abrasive substances	yes	yes	no	yes	no	no	no
Max. temperature	120 °C	180 °C	80 °C	180 °C	80 °C	220 °C	220 °C
Sterilization methods	wet chemical	wet chemical	wet chemical	wet chemical	wet chemical	wet chemical	wet chemical
Min. vacuum	–	–	50 mbar	all methods	50 mbar	1 mbar	1 mbar
Max. pressure	–	–	6 bar	–	–	6 bar	6 bar
Ultimate fineness, suspensions	10 – 50 µm	15 – 50 µm	15 – 50 µm	5 – 25 µm	5 – 25 µm	15 – 50 µm	5 – 25 µm
Ultimate fineness, emulsions	1 – 10 µm	1 – 10 µm	1 – 10 µm	1 – 5 µm	1 – 5 µm	1 – 10 µm	1 – 5 µm

For nomenclature see page 79

SW 18 Slab rotor

Technical data	
Rotor diameter	12.8 mm
Gap between rotor and stator	0.35 mm
Circumferential speed	16.1 m/s
Materials in contact with medium	stainless steel AISI 316L
Applications	viscous, fibrous tissue

Additional rotor for dispersing elements:

- S 25 N – 18 G
- S 25 KR – 18 G
- S 25 KV – 18 G



Ident. No.
1 3304000



Ident. No.
2 3305000



Ident. No.
3 3370100

Dispersing elements T 10 basic

For nomenclature see page 79

Dispersing element Ident. No. Fig.	S 10 N - 5 G 3304000 1	S 10 N - 8 G 3305000 2	S 10 N - 10 G 3370100 3
Suitable for dispersing instrument	T 10 basic	T 10 basic	T 10 basic
Working range	0.5 - 10 ml	1 - 50 ml	1 - 100 ml
Stator diameter	5 mm	8 mm	10 mm
Rotor diameter	3.8 mm	6.1 mm	7.6 mm
Gap between rotor and stator	0.1 mm	0.25 mm	0.2 mm
Min. / max. immersion depth	20 / 75 mm	20 / 95 mm	20 / 100 mm
Shaft length	92 mm	115 mm	115 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L
pH range	2 - 13	2 - 13	2 - 13
Suitable for solvents	yes	yes	yes
Suitable for abrasive substances	yes	yes	yes
Max. temperature	180 °C	180 °C	180 °C
Sterilization methods	all methods	all methods	all methods
Min. vacuum	-	-	-
Max. pressure	-	-	-
Ultimate fineness, suspensions	5 - 25 µm	5 - 25 µm	5 - 25 µm
Ultimate fineness, emulsions	1 - 10 µm	1 - 10 µm	1 - 10 µm

Dispersing elements T 50 basic



Ident. No.
1 8003000



Ident. No.
2 8003300



Ident. No.
3 8003900

S 50 N - Special length shafts also available in 430 mm (order label S 50 N 1)



Ident. No.
1 8005900



Ident. No.
2 8005700



Ident. No.
3 8005500

Dispersing elements T 65 D

For nomenclature see page 79

Dispersing element Ident. No. Fig.	S 65 KG - HH - G 65 G 8005900 1	S 65 KG - HH - G 65 M 8005700 2	S 65 KG - HH - G 65 F 8005500 3
Suitable for dispersing instrument	T 65 D	T 65 D	T 65 D
Working range	2 - 50 l	2 - 40 l	2 - 30 l
Stator diameter	65 mm	65 mm	65 mm
Rotor diameter	58 mm	58 mm	58 mm
Circumferential speed	21.9 m/s	21.9 m/s	21.9 m/s
Min. / max. immersion depth	90 / 450 mm	80 / 450 mm	80 / 450 mm
Shaft length	520 mm	510 mm	500 mm
Materials in contact with medium	FFPM / SIC, AISI 316L	FFPM / SIC, AISI 316L	FFPM / SIC, AISI 316L
pH range	2 - 13	2 - 13	2 - 13
Suitable for solvents	yes	yes	yes
Suitable for abrasive substances	no	no	no
Max. temperature	180 °C	180 °C	180 °C
Sterilization methods	wet chemical	wet chemical	wet chemical
Min. vacuum	1 mbar	1 mbar	1 mbar
Max. pressure	6 bar	6 bar	6 bar
Ultimate fineness, suspensions	25 - 75 µm	20 - 50 µm	5 - 20 µm
Ultimate fineness, emulsions	5 - 25 µm	5 - 15 µm	1 - 10 µm

For nomenclature see page 79

Dispersing element Ident. No. Fig.	S 50 N - G 45 G 8003000 1	S 50 KR - G 45 M without fig. 8003400 2	S 50 N - G 45 F 8003300 3	S 50 KV - G 45 G - IL 8015800 without fig. T 50 basic
Suitable for dispersing instrument	T 50 basic	T 50 basic	T 50 basic	T 50 basic
Working range	0.5 - 20 l	0.5 - 15 l	0.25 - 10 l	0.25 - 10 l
Stator diameter	45 mm	45 mm	45 mm	45 mm
Rotor diameter	36 mm	36 mm	40.5 mm	36 mm
Circumferential speed	18.8 m/s	18.8 m/s	20.9 m/s	18.8 m/s
Min. / max. immersion depth	70 / 260 mm	70 / 260 mm	70 / 260 mm	70 mm
Shaft length	300 mm	300 mm	290 mm	105 mm
Materials in contact with medium	PTFE, AISI 316L	FKM, AISI 316L	PTFE, AISI 316L	FKM, AISI 316L
pH range	2 - 13	2 - 13	2 - 13	2 - 13
Suitable for solvents	yes	no	yes	yes
Suitable for abrasive substances	yes	no	yes	no
Max. temperature	180 °C	80 °C	180 °C	220 °C
Sterilization methods	all methods	wet chemical	all methods	wet chemical
Min. vacuum	-	100 mbar	-	1 mbar
Max. pressure	-	-	-	6 bar
Ultimate fineness, suspensions	40 - 100 µm	25 - 50 µm	10 - 30 µm	40 - 100 µm
Ultimate fineness, emulsions	10 - 30 µm	5 - 20 µm	1 - 10 µm	10 - 30 µm

Nomenclature: Plastic dispersing elements

Plastic dispersing elements are ideal for those applications where absolutely no cross-contamination is permitted. They are disposable and can be thrown away after a single use. The element is disposable and designed for one-way use. However, it can be re-used several times in applications where this is permitted. If you decide to re-use the element, make sure that you follow the cleaning instructions carefully. Example use: homogenizing tissue samples.

For disperser	Dispersing element shaft	Seals	Diameter stator (mm)	Degree of fineness achieved	Material
T 10	S 10	D = without seal	7	G = coarse	KS = plastic
T 18	S 18	D = without seal	10 / 14	G = coarse	KS = plastic
T 25	S 25	D = without seal	10 / 14	G = coarse	KS = plastic

Plastic dispersing elements for T 10 basic

Dispersing element	S 10 D - 7 G - KS - 65	S 10 D - 7 G - KS - 110
Ident. No. (Packing unit)	3433212 (12 pcs.) 3433225 (25 pcs.)	3433312 (12 pcs.) 3433325 (25 pcs.)
Suitable for dispersing instrument	T 10 basic	T 10 basic
Working range	1 - 20 ml	1 - 40 ml
Stator diameter	7 mm	7 mm
Rotor diameter	4.8 mm	4.8 mm
Min. / max. immersion depth	20 / 50 mm	20 / 90 mm
Shaft length	65 mm	110 mm
Materials in contact with medium	Polycarbonate (PC) Polysulfon (PSU)	Polycarbonate (PC) Polysulfon (PSU)
Max. temperature	100 °C	100 °C
Sterilization methods	yes, autoclavable	yes, autoclavable
Plastic materials used approved by FDA.		



S 10 D - 7 G - KS - 65	12 pcs.
3433212	25 pcs.

S 10 D - 7 G - KS - 110	12 pcs.
3433312	25 pcs.

Plastic dispersing elements for T 18 basic

Dispersing element	S 18 D - 10 G - KS	S 18 D - 14 G - KS
Ident. No. (Packing unit)	3452000 (5 pcs. *) 3452400 (10 pcs. *)	3451900 (5 pcs. *) 3452300 (10 pcs. *)
Suitable for dispersing instrument	T 18 basic	T 18 basic
Working range	10 - 100 ml	10 - 500 ml
Stator diameter	10 mm	14 mm
Rotor diameter	6.75 mm	9.5 mm
Min. / max. immersion depth	15 / 85 mm	15 / 85 mm
Shaft length	150 mm	150 mm
Materials in contact with medium	Polycarbonate (PC) Polyetheretherketon (PEEK)	Polycarbonate (PC) Polyetheretherketon (PEEK)
Max. temperature	100 °C	100 °C
Sterilization methods	yes, autoclavable	yes, autoclavable
Plastic materials used approved by FDA.		
* incl. 1 Disposable tube		



S 18 D - 10 G - KS	5 pcs. *
3452000	10 pcs. *



S 18 D - 14 G - KS	5 pcs. *
3451900	10 pcs. *

Plastic dispersing elements for T 25 digital

Dispersing element	S 25 D - 10 G - KS	S 25 D - 14 G - KS
Ident. No. (Packing unit)	3451800 (5 pcs. *) 3452200 (10 pcs. *)	3451700 (5 pcs. *) 3452100 (10 pcs. *)
Suitable for dispersing instrument	T 25 digital	T 25 digital
Working range	10 - 100 ml	10 - 500 ml
Stator diameter	10 mm	14 mm
Rotor diameter	6.75 mm	9.5 mm
Min. / max. immersion depth	15 / 85 mm	15 / 85 mm
Shaft length	150 mm	150 mm
Materials in contact with medium	Polycarbonate (PC) Polyetheretherketon (PEEK)	Polycarbonate (PC) Polyetheretherketon (PEEK)
Max. temperature	100 °C	100 °C
Sterilization methods	yes, autoclavable	yes, autoclavable
Plastic materials used approved by FDA.		
* incl. 1 Disposable tube		



S 25 D - 10 G - KS	5 pcs. *
3451800	10 pcs. *



S 25 D - 14 G - KS	5 pcs. *
3451700	10 pcs. *

Disposable tube S 18 / 25-ET50

50 ml for attaching onto plastic tools from S 18 D and S 25 D series. Allows dispersing in a closed system (splash guard).

General data	PP
Material	



Ident. No.	3452500
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Ident. No.
1289300

R 50 "high speed" stirring shaft

With the stirring shaft R 50, the T 50 basic is quickly converted into a high speed stirrer. 700 W and 10,000 rpm are provided for rapid mixing, dissolving, and disagglomerating pigment agglomerates. The conical shaft is supported by means of ball bearings; the mixing elements have a screw connection. For operational safety a protective cage is fitted around the mixing element.

Included with delivery (page):

R 1402 Dissolver (86)

Accessories (page):

Dispersing elements (86); R 1405 , R 1402



Ident. No.
1289800

R 1405 Propeller



Ident. No.
1243300

R 1402 Dissolver



Ident. No.
8006300
8006400

S 50 ... – W 80 SMK Jet mixer head

For shortening mixing and dissolving times. The vertical flow and the high circumferential speed up to 10,000 rpm ensure intensive mixing. The head is used for adding gases or liquids; for lump-free suspension of difficult to dissolve powders or for dissolving sedimented, already hardened substances.



Ident. No.
8005100

S 50 N – W 65 SK Cutting head

To crush large pieces (up to 50 mm) of fibrous materials, such as vegetation, vegetables and fruit.

General data	
Immersion depth	180 mm
Working range	0.25 – 30 l
Max. circumferential speed	15.7 – 23 m/s
Max. permissible rotor diameter	50 mm
Material	stainl. steel (AISI 316L)

General data	
Working range	0.25 – 10 l
Rotor diameter	45 mm

General data	
Working range	1 – 30 l
Rotor diameter	42 mm

General data	
Min. / max. immersion depth	140 / 350 mm
Working range	1 – 50 l
Generator diameter	80 mm
Available seals	S 50 N S 50 KR

General data	
Min. / max. immersion depth	80 / 350 mm
Working range	1 – 10 l
Generator diameter	65 mm
Available seals	S 50 N

UTL 25 digital Inline ULTRA-TURRAX®

For circulation or flow-through processes in the laboratory.

- Simple, compact and sturdy modular design
- Easily sterilized, autoclave-compatible
- Table-top or stand-supported device, low space requirement
- Easy disassembly
- Large delivery capacity of 4.4 to 11.6 l/min with open outlet (the mounting of a valve can reduce the flow rate)
- For air-free, sterile, and inline suspension, emulsifying and deagglomeration
- For vacuum or pressurized operation (up to 6 bar)
- If the DK 25.11 is used, air induction is also prevented in batch operation
- Not self-priming
- A pump can be integrated between intake nozzle and vessel. As a result, viscous fluids can be processed
- **Not suitable for continuous operation or cyclical continuous operation**

Flow rate (H ₂ O)	11.6 l/min
Speed range	6.500 – 24.000 rpm
Materials in contact with medium	stainl. steel (AISI 316L) FFPM
Max. operating temperature	180 °C
Dimensions (W x D x H)	450 x 100 x 120 mm
Weight	3.8 kg
Chamber volume	28 ml
Min. vacuum	1 mbar
Max. pressure	6 bar
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 20



Ident. No.
8014400
8014401

230 V 50/60 Hz
115 V 50/60 Hz



Example application

Included with delivery (page):

T 25 digital (76), AD 25 Mounting (88),

DK 25.11 Flow chamber (88),

S 25 KV – 25 G – IL Dispersing element (81)

Accessories (page):

Dispersing element S 25 KV – 25 F – IL (81)

UTL 50 basic Inline ULTRA-TURRAX®

For circulation or flow-through processes in the laboratory or pilot plant stations.

- Stand-supported device, low space requirement
- Large flow rate of 24 l/min with open outlet (the mounting of a valve reduces the delivery capacity)
- For vacuum or pressurized operation to 6 bar
- If the DK 50.11 is used, air induction is also prevented in batch operation
- **Not suitable for continuous operation or cyclical continuous operation**

Flow rate (H ₂ O)	24 l/min
Speed range	4.000 – 10.000 rpm
Materials in contact with medium	stainl. steel (AISI 316L) FFPM
Max. operating temperature	180 °C
Dimensions (W x D x H)	130 x 150 x 500 mm
Weight	6.1 kg
Chamber volume	94 ml
Min. vacuum	1 mbar
Max. pressure	6 bar
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 °C
Protection class acc. to DIN EN 60529	IP 21



Ident. No.
8023800
8023801

230 V 50/60 Hz
115 V 50/60 Hz

Included with delivery (page):

T 50 basic (78), DK 50.11 Flow chamber (88),

S 50 KV – G 45 G – IL Dispersing element (83)

Accessories (page):

R 2723 Telescopic stand (125), R 271 Boss head clamp (126)



Ident. No.
2518000

DK 25.11 Flow chamber

For S 25 KV - 25 ... - IL dispersing elements.
Allows inline operation mode, see UTL 25 digital,
page 87.

Batch operation (see fig.):
DK 25.11 is mounted around the dispersing ele-
ment. The DK 25.11 must be at a lower elevation
than the surface of the liquid during operation.
With this operating mode, no air is drawn in as a
result of turbulence in the vessel.

General data	
Chamber volume	26 ml
Vacuum	1 mbar
Pressure	6 bar



Ident. No.
2562500

AD 25

Mounting support for DK 25.11



Ident. No.
2810000

DK 50.11 Flow chamber

For S 50 KV - G 45 ... - IL dispersing elements.
Allows operation in inline mode, see UTL 50
basic, page 87.

If used in batch mode: DK 50.11 is mounted
around the dispersing element. Additional fea-
tures as DK 25.11.

General data	
Chamber volume	94 ml
Vacuum	1 mbar
Pressure	6 bar

A 11 basic Analytical mill

Batch mill for, 2 different grinding procedures:
Impact grinding of hard, brittle or non-elastic
grinding materials with high-grade stainless steel
beater. This beater can be used for a Mohs hard-
ness up to 6 (incl. with delivery).

Cutting grinding for pulverizing soft, fibrous ma-
terials with a cutting blade (not incl. with delivery).

- Moist and gluey materials can be pulverized by adding water
- Grinding chamber made of Tefcel (ETFE, glass fiber-reinforced) with stainless steel inlet (AISI 316L), useful volume 80 ml (incl. with delivery). For embrittlement of grinding materials with liquid nitrogen in the grinding chamber
- Optionally, a 250 ml grinding chamber is available (page 90)

Technical data	
Motor rating input	160 W
Motor rating output	100 W
Speed	28.000 rpm (fixed)
Useful volume	80 ml
Duty cycle ON / OFF	1 min / 10 min
Overload protection	yes
Circumferential speed	53 m/s
Max. granularity of task	10 mm
Dimensions (W x D x H)	85 x 85 x 240 mm
Weight	1,5 kg
Permissible ambient temperature	5 - 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 43



Ident. No.
2900000
230 V 50/60 Hz
2900001
115 V 50/60 Hz

Accessories (page):

A 11.1 Spare beater (89), A 11.2 Cutting blade (89), A 11.3 Beater (89), A 11.4 Grinding chamber (90), A 11.5 Spare grinding chamber (90), A 11.6 Double beater (90), A 11.7 Funnel (90)

A 11.1 Spare beater

For pulverizing substances with a Mohs hardness up to 6. Included with the analytical mill A 11 basic.



Ident. No.
2904600

A 11.2 Cutting blade

For pulverizing soft, fibrous grinding materials. Not included with the analytical mill A 11 basic.



Ident. No.
2905200

A 11.3 Beater

For pulverizing substances with a Mohs hardness up to 9, coated with chromium carbide. Not included with the analytical mill A 11 basic.



Ident. No.
2963000

General data	
Material	stainl. steel (AISI 420)

General data	
Material	stainl. steel (AISI 440B)

General data	
Material	stainl. steel (AISI 440B)



Ident. No.
2904100

A 11.4 Grinding chamber

Made of polycarbonate with stainless steel inlet. Not suitable for cooling with N₂, only applicable with double beater A 11.6. Not included with the analytical mill A 11 basic.

General data	
Useful volume	250 ml
Material	stainl. steel (AISI 316L)



Ident. No.
2983100

A 11.5 Spare grinding chamber

Made of Tefcel (ETFE, glass fibre-reinforced) with stainless steel inlet. Excellent resistance to chemicals and low temperatures (-200 °C). Included with the analytical mill A 11 basic.

General data	
Useful volume	80 ml
Material	stainl. steel (AISI 316L)



Ident. No.
3302900

A 11.6 Double beater

For use up to Mohs hardness 3. Only applicable with grinding chamber A 11.4. Not included with the analytical mill A 11 basic.

General data	
Material	titanium, surface-hardened



Ident. No.
3046700

A 11.7 Funnel

Prevents splashing by pouring in liquid nitrogen in the grinding chamber A 11.5. Not included with the analytical mill A 11 basic.

General data	
Material jacket	PTFE
Material sieve	stainl. steel (AISI 316L)



Ident. No.
1603600
1603603

M 20 Universal mill

Batch mill suitable for dry grinding of hard and brittle substances.

- Double-walled grinding chamber can be cooled with water through two hose adapters
- Removable grinding chamber, easy to clean
- Two grinding chambers can be alternately operated using one drive
- M 21 blade incl. with delivery

Technical data	
Motor rating input	440 W
Motor rating output	225 W
Speed	20.000 rpm (fixed)
Circumferential speed	72 m/s
Overload protection	current limitation
Useful volume	250 ml
Material grinding chamber	stainl. steel (AISI 304)
Material cover	stainl. steel (AISI 304)
Max. granularity of task	max. 5 – 7 mm
Duty cycle ON / OFF	7 min / 10 min (with cooling)
Weight	6,6 kg
Dimensions (W x D x H)	170 x 170 x 350 mm
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 21

Accessories (page):

M 21 Spare cutter (91), M 22 Hard metal cutter (91), M 23 Star-shaped cutter (91), M 20.1 Grinding chamber (91)



Ident. No.
0325200

M 21 Spare cutter, stainless steel

Suitable for crushing materials up to Mohs hardness 5. Included with M 20.



Ident. No.
0521800

M 22 Hard metal cutter

Made of tungsten carbide for hard materials up to Mohs hardness 9. Not included with M 20.



Ident. No.
1443400

M 23 Star-shaped cutter

Used to crush fibrous substances such as paper and vegetation, but also for plastics and material with a low specific weight. Not included with M 20.



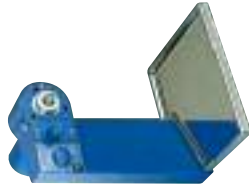
Ident. No.
8006200

M 20.1 Grinding chamber

A second grinding chamber ensures effective processing. The grinding chambers can be placed on the drive alternately. One chamber is cleaned and filled while the other is being processed. Cutters are not included with M 20.

Accessories (page):

M 21 Spare cutter (91), M 22 Hard metal cutter (91), M 23 Star-shaped cutter (91)



Ident. No.
2836000 230 V 50/60 Hz
2836001 115 V 50/60 Hz

MF 10 basic Microfine grinder drive

- Continuously operating universal grinder.
- Powerful drive
- Easy to clean working surface made of stainless steel
- Two different grinding heads can be attached to the drive
- Heads are easily changeable
- Grinding heads not incl. with delivery

Accessories (page):

- MF 10.1 Cutting-grinding head (92), MF 10.2, Impact grinding head (92)

* Values depend on material and desired ultimate fineness. We would be happy to perform a sample milling process in our Technical Application Laboratory.

MF 10.1 Cutting-grinding head

For crushing fibrous substances such as paper and vegetation, but also for plastics and material with a low volume weight. Before being discharged, the ground material passes through a sieve. This sieve is interchangeable and available in different hole sizes (not incl. with delivery). The ground material can then be collected using an NS 29 standard ground vessel.



Ident. No.
2870900



Ident. No.
2871000



Ident. No.
2938900 MF 0.25
2939000 MF 0.5
2939200 MF 1.0
2939400 MF 2.0
2939500 MF 3.0
2939600 MF 4.0

Technical data	
Motor rating input	1.000 W
Motor rating output	900 W
Speed range	3.000 – 6.500 rpm
Circumferential speed	
Cutting-grinding head	22.5 m/s
Impact grinding head	31.4 m/s
Materials in contact with medium	stainl. steel (AISI 316L)
Duty cycle* ON / OFF	120 / 30 min
Overload protection	yes
Weight	320 x 300 x 380 mm
Dimensions (W x D x H)	9.7 kg
Permissible ambient temperature	5 – 40 °C
Permissible relative humidity	80 %
Protection class acc. to DIN EN 60529	IP 22

Technical data	
Circumferential speed	22.5 m/s
Max. granularity of task	max. 15 mm
Dimensions including MF 10 basic	320 x 300 x 560 mm
Weight incl. MF 10 basic	10.5 kg
Materials in contact with medium	stainl. steel
Grinding channel and cover	(AISI 304)
Blades	(AISI 440B)
Shaft, rotor, screws	(AISI 316L)

Technical data	
Circumferential speed	31.4 m/s
Max. granularity of task	max. 10 mm
Dimensions including MF 10 basic	320 x 300 x 450 mm
Weight incl. MF 10 basic	11 kg
Materials in contact with medium	stainl. steel
Grinding channel and cover	(AISI 304)
Hammer beater	(AISI 304)
Shaft, rotor, screws	(AISI 316L)

General data	
Material	stainl. steel (AISI 304)
Hole size (diameter)	
MF 0.25	0.25 mm
MF 0.5	0.5 mm
MF 1.0	1.0 mm
MF 2.0	2.0 mm
MF 3.0	3.0 mm
MF 4.0	4.0 mm
	Wider holes on request

MF 10 basic

Drive for inline microfine grinder. Grinding head and sieves not incl. with delivery, page 92

Ident. No. 2836000

MF 10.1

Cutting-grinding head, interchangeable with impact grinding head MF 10.2, page 92

Ident. No. 2870900

MF 10.2

Impact grinding head, interchangeable with cutting-grinding head MF 10.1, page 92

Ident. No. 2871000

MF 0.5

Sieve for insertion into cutting-grinding head MF 10.1 or impact grinding head MF 10.2, with hole size 0.5 mm, page 92

Ident. No. 2938900

MF 2.0

Sieve for insertion into cutting-grinding head MF 10.1 or impact grinding head MF 10.2, with hole size 2.0 mm, page 92

Ident. No. 2939400

- Continuously operating universal grinder.
- Powerful drive
- Easy to clean working surface made of stainless steel
- Two different grinding heads can be attached to the drive
- Heads are easily changeable
- Grinding heads not incl. with delivery

Accessories (page):

- MF 10.1 Cutting-grinding head (92), MF 10.2, Impact grinding head (92)

* Values depend on material and desired ultimate fineness. We would be happy to perform a sample milling process in our Technical Application Laboratory.

MF 10.1 Cutting-grinding head

For crushing fibrous substances such as paper and vegetation, but also for plastics and material with a low volume weight. Before being discharged, the ground material passes through a sieve. This sieve is interchangeable and available in different hole sizes (not incl. with delivery). The ground material can then be collected using an NS 29 standard ground vessel.

Accessories (page):

- MF Sieve (92)

MF 10.2 Impact grinding head

For crushing brittle, hard materials such as minerals, building materials up to Mohs hardness 6. Before being discharged, the ground material passes through a sieve. This sieve is interchangeable and available in different hole sizes (not incl. with delivery). The ground material can then be collected using an NS 29 standard ground vessel.

Accessories (page):

- MF Sieve (92)

MF Sieve

Interchangeable sieves for insertion into the grinding heads ensure maximum particle size filtering.

Heating / Tempering



C-MAG HP 7

New hotplate made of glass ceramics which offers excellent chemical resistance.

- Fixed safety circuit of 550 °C
- Hot Top indicator >> hot surface warning to prevent burns!
- Exact temperature setting via digital display (LED)

Page 96

Hotplates	96 – 97, 100
Heating baths	98, 100
Thermostats	99 – 101