



## ULTRA-TURRAX® Tube Drive control

Experience enhancements for the patented and universal single-use dispersing system, with new functions and a digital OLED display that help broaden the application spectrum of the tube system and make handling easier.

A USB interface enables controlling via a PC and the documentation of all test parameters.

Through this unique feature custom-designed test procedures can be carried out, and the reproducibility of experiments is guaranteed.

- Clearly laid-out, multi-language OLED display for digital adjustment and display of all parameters; uses simple and precise menu navigation
- Turbo key for short-term intensive mixing, dispersing or grinding
- Adjustable rotational direction reversal for an improved mixing and grinding effect
- Collecting tray for protection against leaks.
- Programmable test conditions (library)

Accessories: ST-20 Tube with stirring device, DT-20 Tube with rotor-stator element, BMT-20-S Tube for grinding with stainless steel balls, BMT-20-G Tube for grinding with glass balls, ST-20-M Tube with stirring device, DT-20-M Tube with rotor-stator element, BMT-20-S-M Tube for grinding with stainless steel balls, BMT-20-G-M Tube for grinding with glass balls, ST-20-M-gamma Tube with stirring device, DT-20-M-gamma Tube with rotor-stator element, BMT-20-S-M-gamma Tube for grinding with stainless steel balls, ST-50 Tube with stirring device, DT-50 Tube with rotor-stator element, BMT-50-S Tube for grinding with stainless steel balls, BMT-50-G Tube for grinding with glass balls, ST-50-M Tube with stirring device, DT-50-M Tube with rotor-stator element, BMT-50-S-M Tube for grinding with stainless steel balls, BMT-50-G-M Tube for grinding with glass balls, ST-50-M-gamma Tube with stirring device, DT-50-M-gamma Tube with rotor-stator element,

### Technical Data

Motor rating input [W]	28
Motor rating output [W]	17
Viscosity max. [mPas]	5000
Speed range [rpm]	400 - 6000
Speed deviation [%]	10
Speed control	stepless
Speed display	LCD
Noise without element [dB(A)]	50
Timer	yes
Timer display	LCD
Dimensions (W x H x D) [mm]	122 x 48 x 178
Weight [kg]	0.9
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 20
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	20
DC Voltage [V=]	24
Power input [mA]	800
<b>Ident. No.</b>	<b>4135300</b>

BMT-50-S-M-gamma Tube for grinding with stainless steel balls, TC-20 Cover, TC-50 Cover,  
TC-20-M Cover with pierceable membran, TC-50-M Cover with pierceable membran, Glass balls  
for BMT tubes, Stainless steel balls for BMT tubes, labworldsoft®

## Data Sheet

Crushing / Dispersers



### ULTRA-TURRAX® Tube Drive Workstation

Workstation consists of ULTRA TURRAX® Tube Drive, 2 x ST-20, 2 x DT-20 incl. 1 removal hook for removal the rotor-stator unit, 2 x BMT-20 G / S, power supply.

World first: Universal Disposable Disperser System with hermetically sealable disposable sample tubes. Protection and security for: Infectious sample materials, toxic substances, high-odour substances

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, Tumour biology, Immunology, Chemistry, Cosmetics

- World first
- High level of user safety
- No possibility of cross-contamination
- Quick and simple
- Hygienic and clean
- Disperse, stir, and grind using a single drive unit
- Hermetically sealable disposable sample tubes
- Covers with pierceable membranes available on request
- Volumes from 2-15 ml
- Suitable for individual use and use in series
- Standardised working
- Anti-locking function
- Increases safety due to low voltage (24 V)
- Chemical-resistant plastic
- Worldwide service guaranteed by IKA®
- Patent pending

Accessories: ST-20 Tube with stirring device, DT-20 Tube with rotor-stator element, BMT-20-S Tube for grinding with stainless steel balls, BMT-20-G Tube for grinding with glass balls, ST-20-M Tube with stirring device, DT-20-M Tube with rotor-stator element, BMT-20-S-M Tube for grinding with stainless steel balls, BMT-20-G-M Tube for grinding with glass balls, ST-20-M-gamma Tube with stirring device, DT-20-M-gamma Tube with rotor-stator element, BMT-20-S-M-gamma Tube for grinding with stainless steel balls, ST-50 Tube with stirring device, DT-50 Tube with rotor-stator

Technical Data	
Motor rating input [W]	20
Motor rating output [W]	17
Viscosity max. [mPas]	5000
Speed range [rpm]	300 - 6000
Speed deviation [%]	10
Speed display	scale
Speed control	stepless
Noise without element [dB(A)]	50
Process type	batch
Dimensions (W x H x D) [mm]	100 x 40 x 160
Weight [kg]	0.75
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 20
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	20
DC Voltage [V=]	24
Power input [mA]	800
<b>Ident. No.</b>	<b>3645000</b>

element, BMT-50-S Tube for grinding with stainless steel balls, BMT-50-G Tube for grinding with glass balls, ST-50-M Tube with stirring device, DT-50-M Tube with rotor-stator element, BMT-50-S-M Tube for grinding with stainless steel balls, BMT-50-G-M Tube for grinding with glass balls, ST-50-M-gamma Tube with stirring device, DT-50-M-gamma Tube with rotor-stator element, BMT-50-S-M-gamma Tube for grinding with stainless steel balls, TC-20 Cover, TC-50 Cover, TC-20-M Cover with pierceable membran, TC-50-M Cover with pierceable membran, Glass balls for BMT tubes, Stainless steel balls for BMT tubes

## Data Sheet

Crushing / Dispersers



## ULTRA-TURRAX® Tube Drive

World first: Universal Disposable Disperser System with hermetically sealable disposable sample tubes. Protection and security for: Infectious sample materials, toxic substances, high-odour substances

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, Tumour biology, Immunology, Chemistry, Cosmetics

- World first
- High level of user safety
- No possibility of cross-contamination
- Quick and simple
- Hygienic and clean
- Disperse, stir, and grind using a single drive unit
- Hermetically sealable disposable sample tubes
- Covers with pierceable membranes available on request
- Volumes from 2-15 ml
- Suitable for individual use and use in series
- Standardised working
- Anti-locking function
- Increases safety due to low voltage (24 V)
- Chemical-resistant plastic
- Worldwide service guaranteed by IKA®
- Patent pending

Accessories: ST-20 Tube with stirring device, DT-20 Tube with rotor-stator element, BMT-20-S Tube for grinding with stainless steel balls, BMT-20-G Tube for grinding with glass balls, ST-20-M Tube with stirring device, DT-20-M Tube with rotor-stator element, BMT-20-S-M Tube for grinding with stainless steel balls, BMT-20-G-M Tube for grinding with glass balls, ST-20-M-gamma Tube with stirring device, DT-20-M-gamma Tube with rotor-stator element, BMT-20-S-M-gamma Tube for grinding with stainless steel balls, ST-50 Tube with stirring device, DT-50 Tube with rotor-stator element, BMT-50-S Tube for grinding with stainless steel balls, BMT-50-G Tube for grinding with

### Technical Data

Motor rating input [W]	20
Motor rating output [W]	17
Viscosity max. [mPas]	5000
Speed range [rpm]	300 - 6000
Speed deviation [%]	10
Speed display	scale
Speed control	stepless
Noise without element [dB(A)]	50
Process type	batch
Dimensions (W x H x D) [mm]	100 x 40 x 160
Weight [kg]	0.75
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 20
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	20
DC Voltage [V=]	24
Power input [mA]	800
<b>Ident. No.</b>	<b>3646000</b>

glass balls, ST-50-M Tube with stirring device, DT-50-M Tube with rotor-stator element, BMT-50-S-M Tube for grinding with stainless steel balls, BMT-50-G-M Tube for grinding with glass balls, ST-50-M-gamma Tube with stirring device, DT-50-M-gamma Tube with rotor-stator element, BMT-50-S-M-gamma Tube for grinding with stainless steel balls, TC-20 Cover, TC-50 Cover, TC-20-M Cover with pierceable membran, TC-50-M Cover with pierceable membran, Glass balls for BMT tubes, Stainless steel balls for BMT tubes



### T 18 basic ULTRA-TURRAX®

The new ULTRA -TURRAX® high-performance disperser by IKA®

- For volumes of 1 to 1.500 ml (H<sub>2</sub>O)
- 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

Accessories: R 182 Boss head clamp, RH 3 Strap clamp, R 1825 Plate stand, R 1826 Plate stand, R 1827 Plate stand, S 18 N - 19 G Dispersing element, S 18 D - 10 G - KS Dispersing element (10 pcs), S 18 / 2 -ET 0 Disposable tube, Silentstream, S 18 N - 10 G Dispersing element, S 18 D - 14 G - KS Dispersing element (10 pcs)

Technical Data	
Motor rating input [W]	500
Motor rating output [W]	300
Volume range min. (H <sub>2</sub> O) [l]	0.001
Volume range max. (H <sub>2</sub> O) [l]	1.5
Viscosity max. [mPas]	5000
Speed range [rpm]	3500 - 24000
Speed deviation [%]	1
Speed control	stepless
Speed display	scale
Noise without element [dB(A)]	73
Extension arm diameter [mm]	13
Extension arm length [mm]	175
Process type	batch
Dimensions (W x H x D) [mm]	65 x 240 x 80
Weight [kg]	1.6
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 20
RS 232 interface	no
Analog output	no
Voltage [V]	220 - 240
Frequency [Hz]	50/60
Power input [W]	500
<b>Ident. No.</b>	<b>3561000</b>

## Data Sheet

Crushing / Dispersers



### T 25 digital ULTRA-TURRAX®

The new ULTRA -TURRAX® high-performance disperser by IKA®

- For volumes of 1 to 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
- Rotor-Stator configurations have thirty years of proven, guaranteed comparability of test results

Accessories: S 25 N - 18 G Dispersing element, Silentstream, S 25 N - 8 G Dispersing element, S 25 N - 25 G Dispersing element, S 25 N - 25 F Dispersing element, S 25 KV - 18 G Dispersing element, S 25 KV - 25 F Dispersing element, S 25 KV - 25 G Dispersing element, S 25 NK - 19 G Dispersing element, R 182 Boss head clamp, RH 3 Strap clamp, R 1825 Plate stand, R 1826 Plate stand, R 1827 Plate stand, S 25 D - 14 G - KS Dispersing element (10 pcs), S 25 D - 10 G - KS Dispersing element (10 pcs), S 18 / 2 -ET 0 Disposable tube, S 25 N - 10 G Dispersing element

Technical Data	
Motor rating input [W]	500
Motor rating output [W]	300
Volume range min. (H2O) [l]	0.001
Volume range max. (H2O) [l]	2
Viscosity max. [mPas]	5000
Speed range [rpm]	3400 - 24000
Speed deviation [%]	1
Speed display	LED
Speed control	stepless
Noise without element [dB(A)]	73
Extension arm diameter [mm]	13
Extension arm length [mm]	175
Process type	batch
Dimensions (W x H x D) [mm]	65 x 240 x 80
Weight [kg]	1.6
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 20
RS 232 interface	no
Analog output	no
Voltage [V]	220 - 240 / 100 - 120
Frequency [Hz]	50/60
Power input [W]	500
<b>Ident. No.</b>	<b>3565000</b>

## Data Sheet

Crushing / Dispersers



### T 10 basic ULTRA-TURRAX®

New, 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.

- Immense speed stability with various media thanks to high performance 125 Watt drive
- Ideal for manual operation thanks to its light weight and ergonomic form
- Extremely mobile thanks to direct mains operation (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
- Quick-release coupling makes changing the dispersing elements easy

Included with delivery:

- clamp R 200
  - storage case, empty (for drive, dispersing elements and spare seals)
- Please order dispersing elements separately

Accessories: H 44 Boss head clamp, S 10 N - 5 G Dispersing element, S 10 N - 8 G Dispersing element, S10 D - 7G - KS - 110 Dispersing element, R 200 Clamp, R 104 Stand, S10 D - 7G - KS - 65 Dispersing element, S 10 N - 10 G Dispersing element

#### Technical Data

Motor rating input [W]	125
Motor rating output [W]	75
Volume range min. (H2O) [l]	0.0005
Volume range max. (H2O) [l]	0.1
Viscosity max. [mPas]	5000
Speed range [rpm]	8000 - 30000
Speed display	scale
Speed control	stepless
Noise without element [dB(A)]	65
Extension arm diameter [mm]	8
Extension arm length [mm]	100
Process type	batch
Power-on time ON [min]	10
Power-on time OFF [min]	5
Dimensions (W x H x D) [mm]	46 x 201 x 57
Weight [kg]	0.4
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 30
Voltage [V]	230 / 115 / 100
Frequency [Hz]	50/60
Power input [W]	125
<b>Ident. No.</b>	<b>3420000</b>

## Data Sheet

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### 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 (H<sub>2</sub>O).

- Three rotor-stator configurations for a variety of applications (not included with delivery)
- Plug-in connectors facilitate exchange of dispersing elements
- Dispersing instruments for the production area: ask for our process technology catalogs
- Cables and plugs not included with delivery

Accessories: T 653 Telescopic stand, S 65 KG - HH - G 65 F Dispersing element, S 65 KG - HH - G 65 M Dispersing element, S 65 KG - HH - G 65 G Dispersing element

Technical Data	
Motor rating input [W]	1800
Motor rating output [W]	1500
Volume range min. (H <sub>2</sub> O) [l]	2
Volume range max. (H <sub>2</sub> O) [l]	50
Viscosity max. [mPas]	5000
Speed max. [rpm]	7200
Noise without element [dB(A)]	75
Process type	batch
Dimensions (W x H x D) [mm]	190 x 380 x 580
Weight [kg]	28
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 54
Voltage [V]	3 x 400 Y / 3 x 230
Frequency [Hz]	50
Power input [W]	1800
<b>Ident. No.</b>	<b>1602800</b>



### T 50 basic ULTRA-TURRAX®

High-performance dispersing instrument for volumes from 0.25 - 30 l (H<sub>2</sub>O).

- 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)
- 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)

Accessories: R 1402 Dissolver, R 1405 Propeller, R 2722 H-Stand, R 2723 Telescopic stand, R 50 stirring shaft «high speed», S 50 N - W 80 SMK Jet mixer head, RH 5 Strap clamp, S 50 N - G 45 G Dispersing element, S 50 N - G 45 M Dispersing element, S 50 N - G 45 F Dispersing element, S 50 N - W 65 SK Cutting head, R 271 Boss head clamp

Technical Data	
Motor rating input [W]	1100
Motor rating output [W]	700
Volume range min. (H <sub>2</sub> O) [l]	0.25
Volume range max. (H <sub>2</sub> O) [l]	30
Viscosity max. [mPas]	5000
Speed range [rpm]	500 - 10000
Speed deviation [%]	1
Speed control	stepless
Speed display	scale
Noise without element [dB(A)]	72
Extension arm diameter [mm]	16
Extension arm length [mm]	220
Process type	batch
Dimensions (W x H x D) [mm]	125 x 367 x 120
Weight [kg]	6
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 20
Voltage [V]	230
Frequency [Hz]	50/60
Power input [W]	1100
<b>Ident. No.</b>	<b>3783500</b>



### T 65 D ULTRA-TURRAX® Package

For volumes from 2 up to 50 ltr (H<sub>2</sub>O)

High-performance T 65 D dispersing instrument has been designed for typical pilot plant stations applications. Suitable for mixing, emulsifying and dispersing of freeflowing resp. liquid media in a batch system. Powerful three phase asynchron motor. Three rotor-stator configurations for a variety of applications optionally available. Plug-in connectors facilitate exchange of dispersing elements. Cables and plugs not included in the delivery.

Package:

T 65 D (drive)

Telescopic stand T 653

S 65 KG-HH-G 65 G (Dispersing tool)

Technical Data	
Motor rating input [W]	1800
Motor rating output [W]	1500
Volume range min. (H <sub>2</sub> O) [l]	2
Volume range max. (H <sub>2</sub> O) [l]	50
Viscosity max. [mPas]	5000
Speed max. [rpm]	7200
Noise without element [dB(A)]	75
Process type	batch
Dimensions (W x H x D) [mm]	190 x 380 x 580
Weight [kg]	28
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 54
Voltage [V]	3 x 400 Y
Frequency [Hz]	50
Power input [W]	1800
<b>Ident. No.</b>	<b>9019600</b>