

Data Sheet

Crushing / Dispersers



T 25 digital ULTRA-TURRAX®

High-performance dispersing instrument for volumes from 1 - 2000 ml (H₂O) with digital speed display. It offers a wide speed range from 3000 - 25,000 rpm that enables users to work at high circumferential speeds even with small rotor diameters. A broad choice of dispersing elements adds versatility. Applications ranges from homogenizing waste water samples, use in laboratory reactors, dispersion tasks under vacuum / pressure and sample preparation in medical diagnostics.

- Digital speed display
- Electronic speed control
- Electronic overload protection
- Stainless steel dispersing elements can be cleaned quickly and easily
- Plastic disposable dispersing elements are available in two sizes
- Error code display
- Quiet operation

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



170 Shields Court Unit 2
Markham, ON L3R 9T5
TEL: (905) 475-5880 ext. 226
FAX: (905) 475-1231

Technical Data

Motor rating input [W]	700
Motor rating output [W]	500
Volume range min. (H ₂ O) [l]	0.001
Volume range max. (H ₂ O) [l]	2
Viscosity max. [mPas]	5000
Speed range [rpm]	3000 - 25000
Speed deviation [%]	1
Speed display	LED
Speed control	stepless
Noise without element [dB(A)]	75
Extension arm diameter [mm]	13
Extension arm length [mm]	160
Process type	batch
Timer	no
Permissible ON time [%]	100
Dimensions (W x H x D) [mm]	87 x 271 x 106
Weight [kg]	2.5
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 20
RS 232 interface	no
USB interface	no
Analog output	no
Voltage [V]	220 - 240 / 100 - 120
Frequency [Hz]	50/60
Power input [W]	700

Ident. No. 0003725001

Dispersers | From Invention to Innovation

Proven and precise technology for 60 years

ULTRA-TURRAX® - the epitome of first-rate dispersing devices enable the best possible results whether used for homogenization, emulsification or suspensions. The IKA® range of dispersers are used for volumes ranging from 0.5 to 50,000 ml (H₂O) and come equipped with a digital display. These dispersers offer a wide speed range up to 30,000 rpm that enables users to work at high circumferential speeds even with small rotor diameters. The high-performance drive ensures immense speed stability. Due to their broad spectrum of dispersing tools, IKA® dispersers are highly effective for a variety of uses.

The unique and patented ULTRA-TURRAX® Tube Drive system is the world's first disperser system with disposable and sealed sample tubes. Multiple tube styles are available for mixing, homogenizing and grinding for a variety of applications.

The magic LAB® is a unique and multi-functional small-scale laboratory machine. It is designed for mixing, dispersing, wet milling and for the incorporation of powders into liquids. The magic LAB® is most frequently used for the development of new products or for optimizing existing process techniques. It is an ideal machine for continuous, circulating and batch processing with interchangeable modules.



reddot design award
winner 2012



reddot design award
winner 2012

IKA+

Scale-up principle

IKA® dispersers have a high degree of flexibility and scalability. Therefore, ensuring reliable scale-up by offering the possibility to work with the same method from formulation development to production.



1:50

T 10 basic	0.5 – 100 ml 5000 mPas	T 65 basic	2 – 50 l 5000 mPas
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3 Year warranty*

* 2+1 years after registering at www.ika.com/register, glassware and wearing parts excluded



Protection class according to DIN EN 60529: IP 42



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T-series | Innovative solutions for dispersion technology



T-series range of dispersers are designed for mixing and dispersing of products with a wide range of viscosities. This series of dispersers enables the best possible results for any application with improved product quality and better stability.



Digital display for precise monitoring of set and actual speeds



Wide selection of dispersing tools to suit your application



Rotating knob for adjusting the speed



Motor protection against overload



Quick-connect coupling to exchange dispersing tools easily



2+1 year after registering at www.ika.com/register

IKA+

Trial devices

You may request demo units in order to experience our high-quality disperser offerings first hand.



Special features | Accessories



1 Plate stands

R 1825	560 mm
R 1826	800 mm
R 1827	1000 mm

With slip resistant foil.

Ident. No.		
0003160000	R 1825	560 mm
0003160100	R 1826	800 mm
0003160200	R 1827	1000 mm

2 R 182 Boss head clamp

Ident. No.
0002657700

3 Dispersing element S 25 N – 18 G

Ident. No.
0000593400

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To get customized and additional accessories, please visit www.ika.com/service



Technical data | T-series ULTRA-TURRAX® Dispersers



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T 10 basic



T 18 digital



T 25 digital



reddot design award
winner 2012

Dispersing tools are not included
in delivery

Technical data	T 10 basic	T 18 digital	T 25 digital
Motor rating input / output	125 / 75 W	500 / 300 W	800 / 500 W
Volume range (H ₂ O)	0.5 – 100 ml	1 – 1500 ml	1 – 2000 ml
Viscosity max.	5000 mPas	5000 mPas	5000 mPas
Speed range	8000 – 30,000 rpm	3000 – 25,000 rpm	3000 – 25,000 rpm
Speed display	scale	LED	LED
Speed control	stepless	stepless	stepless
Noise without element	65 dB(A)	75 dB(A)	75 dB(A)
Extension arm diameter	8 mm	13 mm	13 mm
Extension arm length	130 mm	160 mm	160 mm
Process type	batch	batch	batch
Dimensions (W x D x H)	56 x 66 x 178 mm	87 x 106 x 271 mm	87 x 106 x 271 mm
Weight	0.5 kg	2.5 kg	2.5 kg
Perm. ambient temperature	5 – 40 °C	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80 %	80 %	80 %
Protect. class DIN EN 60529	IP 30	IP 20	IP 20
Interface	no	no	no
Voltage	230 V	200 – 240 V	200 – 240 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz

Ident. No. 0003737000

Ident. No. 0003720000

Ident. No. 0003725000



T 50 digital



T 65 basic

Available
Q3/2013



T 65 digital

Available
Q3/2013

Dispersing tools are not included
in delivery

Technical data	T 50 digital	T 65 basic	T 65 digital
Motor rating input / output	1100 / 700 W	1800 / 1500 W	2600 / 2200 W
Volume range (H ₂ O)	0.25 – 30 l	2 – 50 l	2 – 50 l
Viscosity max.	5000 mPas	5000 mPas	5000 mPas
Speed range	600 – 10,000 rpm	7200 rpm (fixed)	1000 – 9500 rpm
Speed display	LED	–	LED
Speed control	stepless	fixed	stepless
Noise without element	72 dB(A)	75 dB(A)	75 dB(A)
Extension arm diameter	16 mm	flange	flange
Extension arm length	220 mm	flange	flange
Process type	batch	batch	batch
Dimensions (W x D x H)	115 x 139 x 355 mm	185 x 400 x 450 mm	300 x 400 x 390 mm
Weight	5.76 kg	26 kg	29 kg
Perm. ambient temperature	5 – 40 °C	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80 %	80 %	80 %
Protect. class DIN EN 60529	IP 20	IP 54	IP 54
Interface	no	no	no
Voltage	200 – 240 V	3 x 400 V	3 x 400 V
Frequency	50/60 Hz	50 Hz	50/60 Hz

Ident. No. 0003787000

Ident. No. 0004023500

Ident. No. 0004234500

IKA® Original | Dispersing tools

A wide variety of rotor-stator configurations and seals are required to process different mediums. In order to make the device adaptable to the user's specific needs, it is sometimes necessary to use two dispersing tools to achieve from coarse to fine particle size reduction. The quick-connect coupling facilitates the exchange of dispersing tools.

IKA® Special accessories!

- > Bronze bearings to serve in a variety of applications
- > FDA-variant KV shafts are only available through special order

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 basic	S 10	N	—	5 / 8 / 10	G
T 18 digital	S 18	N	—	10 / 19	G
T 25 digital	S 25	N / KV / NK	—	8 / 10 / 18 / 19 / 25	G / F
T 50 digital	S / R 50	N	G / W	45 / 65 / 80	G / M / F
T 65 basic	S 65	KG – HH	G	65	G / M / F
T 65 digital	S 65	KG – HH	G	65	G / M / F

*N = PTFE bearing

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 FFPM seals rings

**G = Proved configuration

W = Special element

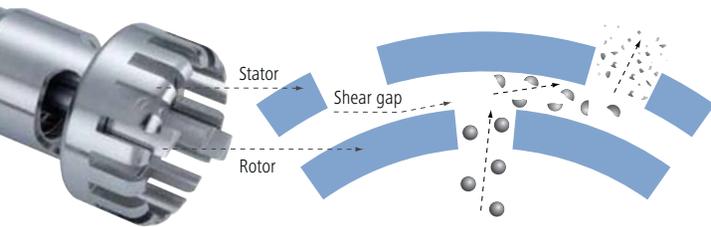
***G = Coarse

M = Medium

F = Fine

Find the right dispersing tool to suit your application

	Volume Range Liter	Volume Range								Vacuum operation	Circumferential speed (m/s)	Ultimate fineness, suspensions (µm)	Ultimate fineness, emulsions (µm)
		10 ml	50 ml	100 ml	500 ml	2 l	10 l	20 l	50 l				
										No	6.0	5 – 25	1 – 10
										No	9.6	5 – 25	1 – 10
(A)										No	11.9	5 – 25	1 – 10
										No	7.5	10 – 50	5 – 20
										No	7.5	10 – 50	5 – 20
										No	9.8	10 – 50	1 – 10
(B)										No	16.6	10 – 50	1 – 10
										No	8.8	10 – 50	5 – 20
										No	12.4	10 – 50	5 – 20
										No	8	10 – 50	1 – 10
										No	9.8	10 – 50	1 – 10
										No	16.6	10 – 50	1 – 10
										Yes	16.6	10 – 50	1 – 10
										No	16.6	10 – 50	1 – 10
(C)										No	22.3	15 – 50	1 – 10
										Yes	22.3	15 – 50	1 – 10
										No	23.6	5 – 25	1 – 5
										Yes	23.6	5 – 25	1 – 5
										No	8.8	10 – 50	5 – 20
										No	12.4	10 – 50	5 – 20
										No	18.8	40 – 100	10 – 30
(D)										No	21.2	25 – 50	5 – 20
										No	20.9	10 – 30	1 – 10
										Yes	21.9 (28.8: T 65 digital)	25 – 75	5 – 25
(E)										Yes	21.9 (28.8: T 65 digital)	25 – 50	5 – 15
										Yes	21.9 (28.8: T 65 digital)	5 – 20	1 – 10



IKA® dispersing technology works by using the rotor-stator principle. The system consists of a rotor within a stationary stator. Due to the high circumferential speed, the medium to be processed is drawn axially into the dispersion head and then forced radially through the slots in the rotor-stator arrangement. The high speed and minimal gap between the rotor and stator produces extremely strong shear forces which results in better dispersion.

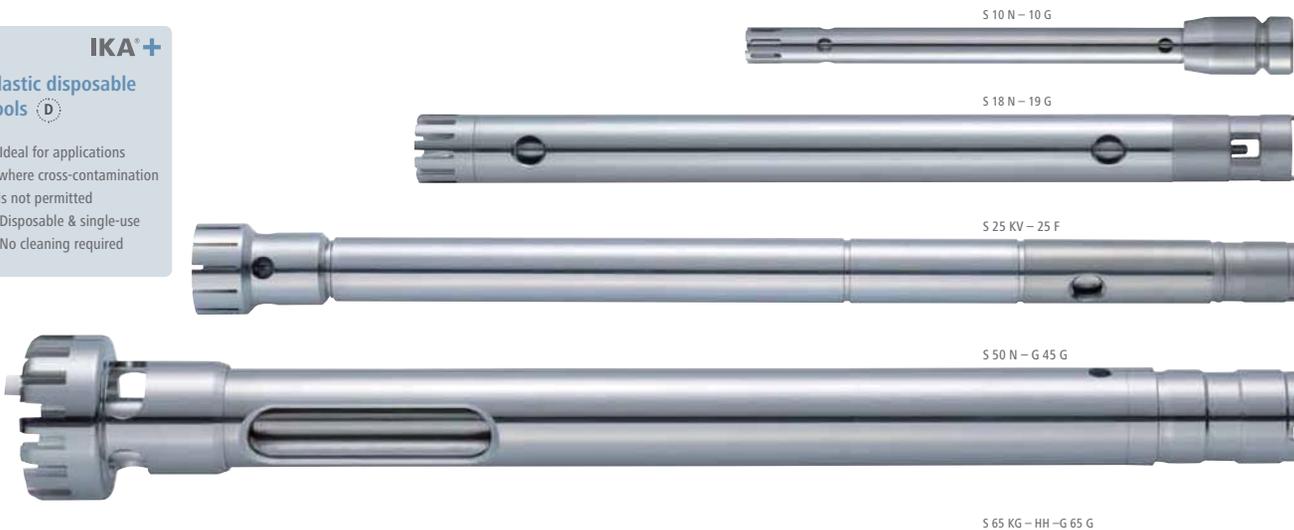


IKA® Original | Dispersing tools

IKA+

Plastic disposable tools

- > Ideal for applications where cross-contamination is not permitted
- > Disposable & single-use
- > No cleaning required



	T 10 basic				
Dispersing element	S 10 N - 5 G	S 10 N - 8 G	S 10 N - 10 G	S 10 D - 7 G - KS - 65	S 10 D - 7 G - KS - 110
Ident. No.	0003304000	0003305500	0003370100	0003433225	0003433325
Working range	0.5 - 10 ml	1 - 50 ml	1 - 100 ml	1 - 20 ml	1 - 40 ml
Stator diameter	5 mm	8 mm	10 mm	7 mm	7 mm
Rotor diameter	3.8 mm	6.1 mm	7.6 mm	4.8 mm	4.8 mm
Gap between rotor and stator	0.1 mm	0.25 mm	0.2 mm	0.3 mm	0.3 mm
Min. / max. immersion depth	20 / 75 mm	20 / 95 mm	20 / 100 mm	20 / 50 mm	20 / 90 mm
Shaft length	92 mm	115 mm	115 mm	65 mm	110 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L	Polycarbonate (PC) Polysulfon (PSU)	Polycarbonate (PC) Polysulfon (PSU)
pH range	2 - 13	2 - 13	2 - 13	-	-
Suitable for solvents	yes	yes	yes	-	-
Max. temperature	180 °C	180 °C	180 °C	100 °C	100 °C
Sterilization methods	all methods	all methods	all methods	yes, autoclavable	yes, autoclavable
				 	 

	T 18 digital			
Dispersing element	S 18 N - 10 G	S 18 N - 19 G	S 18 D - 10 G - KS	S 18 D - 14 G - KS
Ident. No.	000L004639	000L004640	0003452400	0003452300
Working range	1 - 100 ml	10 - 1500 ml	10 - 100 ml	10 - 500 ml
Stator diameter	10 mm	19 mm	10 mm	14 mm
Rotor diameter	7.5 mm	12.7 mm	6.75 mm	9.5 mm
Gap between rotor and stator	0.35 mm	0.4 mm	0.25 mm	0.35 mm
Min. / max. immersion depth	25 / 70 mm	35 / 170 mm	15 / 85 mm	15 / 85 mm
Shaft length	108 mm	204 mm	150 mm	150 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	Polycarbonate (PC) Polyetheretherketon (PEEK)	Polycarbonate (PC) Polyetheretherketon (PEEK)
pH range	2 - 13	2 - 13	-	-
Suitable for solvents	yes	yes	-	-
Max. temperature	180 °C	180 °C	100 °C	100 °C
Sterilization methods	all methods	all methods	yes, autoclavable	yes, autoclavable
			 	 

IKA® Original | Dispersing tools



T 25 digital

Dispersing element	S 25 N – 8 G	S 25 N – 10 G	S 25 N – 18 G	S 25 KV – 18 G	S 25 NK – 19 G
Ident. No.	0001024200	0000594000	0000593400	0002348000	0002494700
Working range	1 – 50 ml	1 – 100 ml	10 – 1500 ml	10 – 1500 ml	25 – 1500 ml
Stator diameter	8 mm	10 mm	18 mm	18 mm	19 mm
Rotor diameter	6.1 mm	7.5 mm	12.7 mm	12.7 mm	12.7 mm
Gap between rotor and stator	0.25 mm	0.35 mm	0.3 mm	0.3 mm	0.3 mm
Min. / max. immersion depth	27 / 85 mm	22 / 85 mm	40 / 165 mm	40 / 225	40 / 165 mm
Shaft length	108 mm	105 mm	194 mm	270 mm	194 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L	FFPM / SIC, AISI 316L	PTFE, AISI 316L
pH range	2 – 13	2 – 13	2 – 13	2 – 13	2 – 13
Suitable for solvents	yes	yes	yes	yes	yes
Max. temperature	180 °C	180 °C	180 °C	220 °C	120 °C
Sterilization methods	all methods	all methods	all methods	wet chemical	wet chemical
Min. vacuum	–	–	–	1 mbar	–
Max. pressure	–	–	–	6 bar	–

10

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12

T 50 digital

Dispersing element	S 50 N – G 45 G	S 50 N – G 45 M	S 50 N – G 45 F
Ident. No.	0008003000	0008003300	0008003900
Working range	0.5 – 20 l	0.5 – 15 l	0.25 – 10 l
Stator diameter	45 mm	45 mm	45 mm
Rotor diameter	36 mm	40.5 mm	40 mm
Gap between rotor and stator	0.5 mm	0.25 mm	0.5 mm
Min. / max. immersion depth	70 / 250 mm	70 / 250 mm	70 / 250 mm
Shaft length	300 mm	290 mm	290 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
Max. temperature	180 °C	180 °C	180 °C
Sterilization methods	all methods	all methods	all methods

13

14

15



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

T 25 digital

Dispersing element	S 25 KV – 25 G	S 25 N – 25 F	S 25 KV – 25 F	S 25 D – 10 G – KS	S 25 D – 14 G – KS
Ident. No.	0001713300	0002466900	0001713800	0002404000	0003452200
Working range	50 – 2000 ml	50 – 2000 ml	100 – 2000 ml	100 – 2000 ml	10 – 100 ml
Stator diameter	25 mm	25 mm	25 mm	25 mm	10 mm
Rotor diameter	17 mm	17 mm	18 mm	18 mm	6.75 mm
Gap between rotor and stator	0.5 mm	0.5 mm	0.5 mm	0.5 mm	0.25 mm
Min. / max. immersion depth	40 / 165 mm	40 / 225 mm	40 / 165 mm	40 / 225 mm	15 / 85 mm
Shaft length	194 mm	270 mm	194 mm	270 mm	150 mm
Materials in contact with medium	PTFE, AISI 316L	FFPM / SIC, AISI 316L	PTFE, AISI 316L	FFPM / SIC, AISI 316L	Polycarbonate (PC)
pH range	2 – 13	2 – 13	2 – 13	2 – 13	–
Suitable for solvents	yes	yes	yes	yes	–
Max. temperature	180 °C	220 °C	180 °C	220 °C	100 °C
Sterilization methods	all methods	wet chemical	all methods	wet chemical	yes, autoclavable
Min. vacuum	–	1 mbar	–	1 mbar	–
Max. pressure	–	6 bar	–	6 bar	–

16

17

18

D

19

D

T 65 basic I digital

Dispersing element	S 65 KG – HH – G 65 G	S 65 KG – HH – G 65 M	S 65 KG – HH – G 65 F
Ident. No.	0008005500	0008005700	0008005900
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
Gap between rotor and stator	0.5 mm	0.5 mm	0.5 mm
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
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

20

21

22



IKA® Original | Special dispersing tools

IKA+

Saw Tooth (ST) dispersing tools

- > ST tools are recommended for use with tissue and other fibrous materials
- > Saw tooth design creates a cutting and tearing action for shredding fibrous materials
- > Made of high quality stainless steel



T 10 basic

Dispersing element	S 10 N – 8 G – ST	S 10 N – 10 G – ST
Ident. No.	0004446500	0004446700
Working range	1 – 50 ml	1 – 100 ml
Stator diameter	8 mm	10 mm
Rotor diameter	6.1 mm	7.6 mm
Gap between rotor and stator	0.25 mm	0.2 mm
Min. / max. immersion depth	20 / 95 mm	20 / 100 mm
Shaft length	115 mm	115 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L

①

T 50 digital

Dispersing element	R 50 "high speed" stirring shaft	Dispersing element	S 50 N – G 45 G – ST
Ident. No.	0001689300	Ident. No.	0008039500
Working range	0.25 – 30 l	Working range	0.5 – 20 l
Max. circumferential speed	15.7 – 23 m/s	Stator diameter	45 mm
Max. permissible rotor diameter	50 mm	Rotor diameter	36 mm
Material	Stainless steel (AISI 316L)	Gap between rotor and stator	0.5 mm
	* Included with delivery: R 1402 Dissolver Ident. No. 0001243300	Min. / max. immersion depth	70 / 250 mm
		Shaft length	300 mm
		Materials in contact with medium	PTFE, AISI 316L

④ ⑤

T 25 digital

Dispersing element	S 25 N – 8 G – ST	S 25 N – 10 G – ST	S 25 N – 18 G – ST	S 25 N – 25 G – ST
Ident. No.	0004446900	0004447100	0004447300	0004447500
Working range	1 – 50 ml	1 – 100 ml	10 – 1500 ml	50 – 2000 ml
Stator diameter	8 mm	10 mm	18 mm	25 mm
Rotor diameter	6.1 mm	7.5 mm	12.7 mm	17 mm
Gap between rotor and stator	0.25 mm	0.35 mm	0.3 mm	0.5 mm
Min. / max. immersion depth	27 / 85 mm	22 / 85 mm	40 / 165 mm	40 / 165 mm
Shaft length	108 mm	105 mm	194 mm	194 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L

②

③

T 50 digital

Dispersing element	S 50 N – W 65 SK Cutting head	S 50 N – W 80 SMK Jet mixer head
Ident. No.	0008005100	0008006300
Working range	1 – 10 l	1 – 50 l
Generator diameter	65 mm	80 mm
Min. / max. immersion depth	80 / 350 mm	140 / 350 mm
Available seals	S 50 N	S 50 N

⑥

⑦

Silentstream

The flow breaker is used to prevent vortexing and to minimize air induction into the medium.

Ident. No. 0003754000

Fits the following dispersing elements:

S 25 N-18 G	S 25 KV-18 G
S 25 N-25 G	S 25 KV-25 G
S 25 N-25 F	S 25 KV-25 F
S 25 NK-19 G	S 18 N-19 G

⑧

UTTD | ULTRA-TURRAX® Tube Drive control

IKA® has created a milestone for entering a new era of "sample preparation" with a revolutionary discovery – the unique and patented ULTRA-TURRAX® Tube Drive (UTTD) system. Disperse, stir, homogenize and grind using a single drive unit. The UTTD provides high repeatability and reproducibility to cover a broad range of applications.



Turbo function for short time intensive mixing, homogenizing or grinding



Built-in program library for tests to be repeated under identical conditions



Multilingual OLED display for simple and precise menu navigation



Rotating knob to vary the speed and the **pressing knob** for start/stop operation



USB interface to control and document all the parameters using labworldsoft® software and for updating your firmware



Reverse rotation switch to optimize mixing and crushing performance



Technical data

Motor rating input / output	20 / 17 W
Speed range / Turbo speed	400 – 6000 rpm / 8000 rpm
Display	OLED
Speed display	digital
Timer	10 s – 30 min (infinitely adjustable)
Reverse rotation interval	10 – 60 s
Dimensions (W x D x H)	122 x 178 x 48 mm
Weight	1.0 kg
Protection class DIN EN 60529	IP 20
Interface	yes
Voltage	100 – 240 V
Frequency	50/60 Hz

ULTRA-TURRAX® Tube Drive control

Ident. No. 0004135300

IKA+



Try our new reusable tube racks and single-tube holders! Please contact IKA® Service Department
E-Mail: service@ika.de

Accessories | IKA® Tubes



ST Tube with stirring device

Suitable for:

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

	Ident. No.
ST-20	0003703000
ST-20-M gamma	0003700500
ST-50	0003699500
ST-50-M	0003629500
ST-50-M gamma	0003701500



DT Tube with rotor-stator element

Suitable for:

- > Dispersion
- > Homogenization
- > Suspensions
- > Pharmacokinetics
- > Metabolism studies

	Ident. No.
DT-20	0003703100
DT-20-M gamma	0003700600
DT-50	0003699600
DT-50-M	0003629600
DT-50-M gamma	0003701600



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, colored pigments, tablets)
- > Cell maceration
- > Processing of materials mixed with fluids

	Ident. No.
BMT-20-S	0003703200
BMT-20-S-M gamma	0003700700
BMT-20-G	0003703300
BMT-50-S	0003699700
BMT-50-S-M	0003629700
BMT-50-S-M gamma	0003701700
BMT-50-G	0003699800
BMT-50-G-M	0003629800

Covers

	Ident. No.
TC-50 (10 pieces)	0003749800
TC-20-M (25 pieces)	0003749900
TC-50-M (10 pieces)	0003750000

Balls

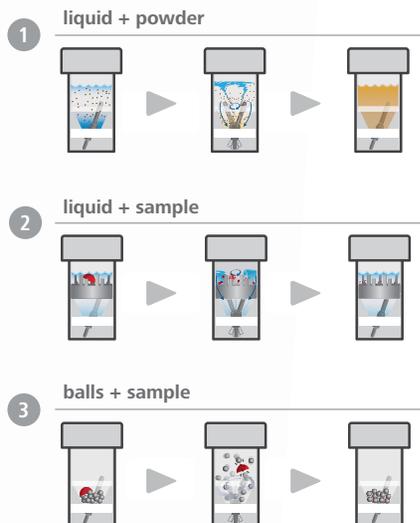
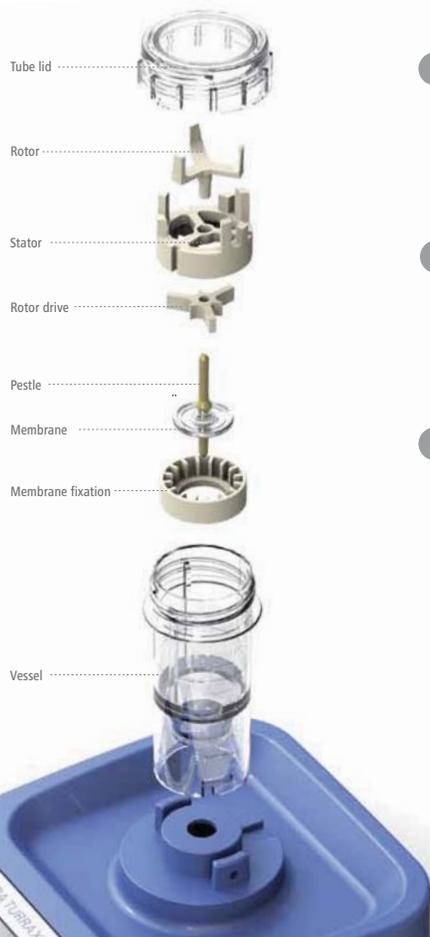
	Ident. No.
Glass balls Ø 6 mm (250 g)	0003599200
Stainless steel balls Ø 5 mm (250 g)	0003599300



All tubes are also available with a pierceable membrane and gamma-sterilized

UTTD | ULTRA-TURRAX® Tube Drive control

Accessories | IKA® Tubes



UTTD is ideal for preparing samples in an easier, faster, simpler and safer method.

**IKA+
Special UTTD features**

- > Simple and safe disposal
- > Sealed disposable sample tubes
- > No cross-contamination
- > No cleaning required
- > Reproducible tests supports GLP and GMP reporting
- > Chemical resistant plastic
- > Patented
- > Available sterile
- > Available with pierceable lids
- > Batch traceability ensured

The UTTD tube drive system, with its universal, single use tubes is particularly suitable for processing infectious, toxic and high odor sample materials. Tests can be reproduced at any time with no risk of cross-contamination between individual samples.



magic LAB® | Exceptional and flexible scalability

Smooth changeover from laboratory to production

One machine for numerous mixing and homogenization tasks. Same working modules for laboratory and production.



1
Module DISPA-REACTOR® DR



2
Module MK/MKO
(Colloid Mill/Cone Mill)



3
Module MHD
(mixing, homogenizing, dispersing)



4
Module CMS



magic LAB® with module UTL



magic LAB® with module CMS and accessories
> for powder/granule incorporation into liquids in recirculation mode



magic LAB® with module Micro-Plant 1 l
> with exchangeable modules (UTL/DR/MK/MKO)



magic LAB® with module Micro-Plant 2 l
> with exchangeable modules (UTL/DR/MK/MKO)



magic LAB® with module UTC
> for dispersing/mixing in a batch operation

Technical data

Motor power	900 W
Speed range (40 m/s)	3000 – 26,000 rpm
Operating voltage	220 – 240 V
Frequency	50 – 60 Hz
Process pressure	up to 2.5 bar
Product temperature in continuous operation	up to 80° C
In short time operation (up to 18 min/h)	up to 120° C
Materials in contact with the medium	Stainless steel (AISI 316L and AISI 316Ti)
Sealing material	PTFE-compound
Shaft sealing ring	Standard FPM
Elastomers in the working chamber	optional EPDM (FDA), FFKM
Dimensions (W x D x H)	170 x 270 x 215 mm

magic LAB®

Ident. No. 000U078310

IKA+



Multifunction storage and transportation box

magic LAB®

- > Designed for mixing, dispersing, wet milling and for the incorporation of powders into liquids
- > Ideal machine for continuous, circulating and batch processing with interchangeable modules
- > Ensures reliable scale-up from formulation development to mass production
- > Optimal results due to rotor tip speed up to 40 m/s
- > Simple heating or cooling of all modules
- > Easy and quick exchange of each module
- > Flexibility and ease of use: one machine suits for many applications

IKA® offers more



labworldsoft®

IKA® laboratory software labworldsoft® is an advanced software for all your laboratory needs. With the help of this software, you can network up to 64 laboratory devices via one PC. All test parameters can be documented ensuring complete automation of your laboratory experiments. Measurements and processes may be run independently. Long waits and processing times are reduced, which increases productivity.



Comprehensive Worldwide Service!

Our dedicated team of engineers provides comprehensive worldwide technical service. Please feel free to contact your dealers or IKA® directly in case of any service queries. Hotline: In the event of an equipment malfunction or technical questions regarding devices and spare parts: call 00 8000 4524357 (00 8000 IKAHELP)



IKA® Application Support

Our Application Center spans 400 sqm and offers modern facilities for presenting and testing lab devices and processes. This brings us even closer to our customers and improves our service. Here, prospective buyers and customers can test out processes that involve stirring, shaking, dispersing, grinding, heating, analyzing and distilling. In addition, it also further extends the opportunity to test your own devices and to develop new models.



FAQ

What does "continuous operation" mean for dispersers? Are 4 hours OK?

4 hours equates to continuous operation! A further particle size reduction with rotor-stator systems does not happen after more than 15 mins. Only heat (due to friction) is transferred into the medium. For the drive itself, continuous operation is not a problem.

Due to the technical data, the ambient temperature of a disperser is 5 – 40 °C. What can be done, if the sample requires higher temperatures?

The prescribed ambient temperature of 5 – 40 °C is only valid for the drive. Of course, it is possible to work in mediums with higher temperatures, e.g. a dispersing element with "N" (PTFE) bearing can be used in mediums up to 180 °C.

Is it possible to disperse an abrasive material such as sand, glass or similar material?

In general, it is possible to disperse abrasive material, but a frequent change of the bearing is necessary. In addition, the shaft and spindle can wear off very quickly under these conditions.

Is it possible to disperse frozen samples?

Yes, in general this is possible if the sample is treated in some liquid. However, it is not possible to work with liquid nitrogen.

The teflon seal (PTFE) of my dispersing element is ripped. Can a new one be ordered?

Those PTFE parts are slotted and it is not a defect. They are used as a bearing. However, a new seal may be ordered from the spare parts list.

How often can we use disposable dispersing elements for the T 10 basic, T 18 basic and T 25 digital?

The disposable dispersing tools are designed for single use only.

Does IKA® offer high pressure dispersers?

Yes, it is possible to work under a pressure of up to 6 bar with dispersing tools having "KV" in their product description. IKA® also offers High Pressure Homogenizer system.

How does one avoid foam generation during dispersing?

To avoid this scenario, a ULTRA-TURRAX® disperser with "KV" tools are recommended. These tools are closed systems, which avoid the generation of foam.

The ULTRA-TURRAX® dispersing elements should not run dry. Does that mean that the bottom bore hole has to be in the medium?

Yes, the circulation hole should be in the medium on all accounts. This is the only way to guarantee the optimum cooling effect on the bearing.

Which is the right dispersing tool to crush vegetables and fruits? How should one clean this properly (sterile)?

The new Saw Tooth (ST) dispersing tools and a T 50 digital with cutting head S 50 N - W 65 SK would be suitable for this application. This tool can be cleaned, e.g. with acetone or every commonly used sterilization method.

IKA® +

Application Support!

For questions regarding applications and processes, you can call our hotline number:
00 8000 4522777 (00 8000 IKAAPPS)*
E-Mail: applicationsupport@ika.de

* Monday – Thursday from 8:30 - 16:30
Friday from 8:30 - 15:30

Labequip

170 Shields Court Unit 2
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TEL: (905) 475-5880 ext. 226
FAX: (905) 475-1231

Dispersers | From Invention to Innovation

Proven and precise technology for 60 years

ULTRA-TURRAX® - the epitome of first-rate dispersing devices enable the best possible results whether used for homogenization, emulsification or suspensions. The IKA® range of dispersers are used for volumes ranging from 0.5 to 50,000 ml (H₂O) and come equipped with a digital display. These dispersers offer a wide speed range up to 30,000 rpm that enables users to work at high circumferential speeds even with small rotor diameters. The high-performance drive ensures immense speed stability. Due to their broad spectrum of dispersing tools, IKA® dispersers are highly effective for a variety of uses.

The unique and patented ULTRA-TURRAX® Tube Drive system is the world's first disperser system with disposable and sealed sample tubes. Multiple tube styles are available for mixing, homogenizing and grinding for a variety of applications.

The magic LAB® is a unique and multi-functional small-scale laboratory machine. It is designed for mixing, dispersing, wet milling and for the incorporation of powders into liquids. The magic LAB® is most frequently used for the development of new products or for optimizing existing process techniques. It is an ideal machine for continuous, circulating and batch processing with interchangeable modules.




reddot design award
winner 2012


reddot design award
winner 2012

IKA+

Scale-up principle

IKA® dispersers have a high degree of flexibility and scalability. Therefore, ensuring reliable scale-up by offering the possibility to work with the same method from formulation development to production.



 Patented




reddot design award
winner 2012

3 Year warranty*

* 2+1 years after registering at www.ika.com/register, glassware and wearing parts excluded



Protection class according to DIN EN 60529: IP 42



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Markham, ON L3R 9T5
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FAX: (905) 475-1231

T-series | Innovative solutions for dispersion technology



T-series range of dispersers are designed for mixing and dispersing of products with a wide range of viscosities. This series of dispersers enables the best possible results for any application with improved product quality and better stability.



-  **Digital display** for precise monitoring of set and actual speeds
-  Wide selection of dispersing tools to suit your application
-  **Rotating knob** for adjusting the speed

 **Motor protection** against overload

 **Quick-connect coupling** to exchange dispersing tools easily

 **2+1 year** after registering at www.ika.com/register

IKA+

Trial devices
You may request demo units in order to experience our high-quality disperser offerings first hand.



Special features | Accessories



- ① **Plate stands**
- | | |
|--------|---------|
| R 1825 | 560 mm |
| R 1826 | 800 mm |
| R 1827 | 1000 mm |
- With slip resistant foil.

Ident. No.		
0003160000	R 1825	560 mm
0003160100	R 1826	800 mm
0003160200	R 1827	1000 mm



- ② **R 182 Boss head clamp**

Ident. No.
0002657700



- ③ **Dispersing element**
S 25 N - 18 G

Ident. No.
0000593400

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To get customized and additional accessories, please visit www.ika.com/service



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Technical data | T-series ULTRA-TURRAX® Dispersers



reddot design award
winner 2012



T 10 basic



T 18 digital



T 25 digital



reddot design award
winner 2012

Dispersing tools are not included
in delivery

Technical data	T 10 basic	T 18 digital	T 25 digital
Motor rating input / output	125 / 75 W	500 / 300 W	800 / 500 W
Volume range (H ₂ O)	0.5 – 100 ml	1 – 1500 ml	1 – 2000 ml
Viscosity max.	5000 mPas	5000 mPas	5000 mPas
Speed range	8000 – 30,000 rpm	3000 – 25,000 rpm	3000 – 25,000 rpm
Speed display	scale	LED	LED
Speed control	stepless	stepless	stepless
Noise without element	65 dB(A)	75 dB(A)	75 dB(A)
Extension arm diameter	8 mm	13 mm	13 mm
Extension arm length	130 mm	160 mm	160 mm
Process type	batch	batch	batch
Dimensions (W x D x H)	56 x 66 x 178 mm	87 x 106 x 271 mm	87 x 106 x 271 mm
Weight	0.5 kg	2.5 kg	2.5 kg
Perm. ambient temperature	5 – 40 °C	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80 %	80 %	80 %
Protect. class DIN EN 60529	IP 30	IP 20	IP 20
Interface	no	no	no
Voltage	230 V	200 – 240 V	200 – 240 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz

Ident. No. 0003737000

Ident. No. 0003720000

Ident. No. 0003725000



T 50 digital



T 65 basic



T 65 digital

Available
Q3/2013

Available
Q3/2013

Dispersing tools are not included
in delivery

Technical data	T 50 digital	T 65 basic	T 65 digital
Motor rating input / output	1100 / 700 W	1800 / 1500 W	2600 / 2200 W
Volume range (H ₂ O)	0.25 – 30 l	2 – 50 l	2 – 50 l
Viscosity max.	5000 mPas	5000 mPas	5000 mPas
Speed range	600 – 10,000 rpm	7200 rpm (fixed)	1000 – 9500 rpm
Speed display	LED	–	LED
Speed control	stepless	fixed	stepless
Noise without element	72 dB(A)	75 dB(A)	75 dB(A)
Extension arm diameter	16 mm	flange	flange
Extension arm length	220 mm	flange	flange
Process type	batch	batch	batch
Dimensions (W x D x H)	115 x 139 x 355 mm	185 x 400 x 450 mm	300 x 400 x 390 mm
Weight	5.76 kg	26 kg	29 kg
Perm. ambient temperature	5 – 40 °C	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80 %	80 %	80 %
Protect. class DIN EN 60529	IP 20	IP 54	IP 54
Interface	no	no	no
Voltage	200 – 240 V	3 x 400 V	3 x 400 V
Frequency	50/60 Hz	50 Hz	50/60 Hz

Ident. No. 0003787000

Ident. No. 0004023500

Ident. No. 0004234500

IKA® Original | Dispersing tools

A wide variety of rotor-stator configurations and seals are required to process different mediums. In order to make the device adaptable to the user's specific needs, it is sometimes necessary to use two dispersing tools to achieve from coarse to fine particle size reduction. The quick-connect coupling facilitates the exchange of dispersing tools.

IKA+ Special accessories!

- > Bronze bearings to serve in a variety of applications
- > FDA-variant KV shafts are only available through special order

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 basic	S 10	N	—	5 / 8 / 10	G
T 18 digital	S 18	N	—	10 / 19	G
T 25 digital	S 25	N / KV / NK	—	8 / 10 / 18 / 19 / 25	G / F
T 50 digital	S / R 50	N	G / W	45 / 65 / 80	G / M / F
T 65 basic	S 65	KG – HH	G	65	G / M / F
T 65 digital	S 65	KG – HH	G	65	G / M / F

*N = PTFE bearing

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 FFPM seals rings

**G = Proved configuration

W = Special element

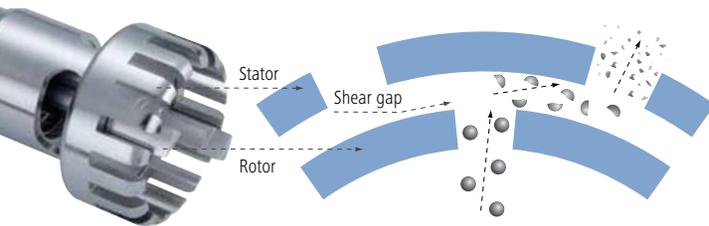
***G = Coarse

M = Medium

F = Fine

Find the right dispersing tool to suit your application

Volume Range Liter	Volume Range								Vacuum operation	Circumferential speed (m/s)	Ultimate fineness, suspensions (µm)	Ultimate fineness, emulsions (µm)
	10 ml	50 ml	100 ml	500 ml	2 l	10 l	20 l	50 l				
									No	6.0	5 – 25	1 – 10
									No	9.6	5 – 25	1 – 10
(A)									No	11.9	5 – 25	1 – 10
									No	7.5	10 – 50	5 – 20
									No	7.5	10 – 50	5 – 20
									No	9.8	10 – 50	1 – 10
(B)									No	16.6	10 – 50	1 – 10
									No	8.8	10 – 50	5 – 20
									No	12.4	10 – 50	5 – 20
									No	8	10 – 50	1 – 10
									No	9.8	10 – 50	1 – 10
									No	16.6	10 – 50	1 – 10
									Yes	16.6	10 – 50	1 – 10
(C)									No	16.6	10 – 50	1 – 10
									No	22.3	15 – 50	1 – 10
									Yes	22.3	15 – 50	1 – 10
									No	23.6	5 – 25	1 – 5
									Yes	23.6	5 – 25	1 – 5
									No	8.8	10 – 50	5 – 20
									No	12.4	10 – 50	5 – 20
(D)									No	18.8	40 – 100	10 – 30
									No	21.2	25 – 50	5 – 20
									No	20.9	10 – 30	1 – 10
(E)									Yes	21.9 (28.8: T 65 digital)	25 – 75	5 – 25
									Yes	21.9 (28.8: T 65 digital)	25 – 50	5 – 15
									Yes	21.9 (28.8: T 65 digital)	5 – 20	1 – 10



IKA® dispersing technology works by using the rotor-stator principle. The system consists of a rotor within a stationary stator. Due to the high circumferential speed, the medium to be processed is drawn axially into the dispersion head and then forced radially through the slots in the rotor-stator arrangement. The high speed and minimal gap between the rotor and stator produces extremely strong shear forces which results in better dispersion.

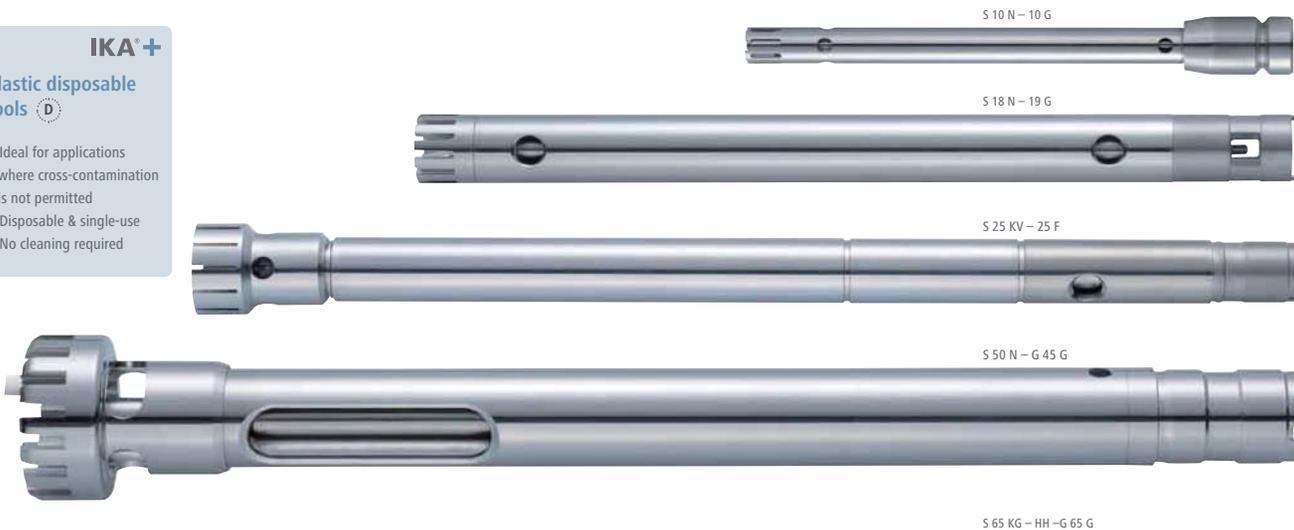


IKA® Original | Dispersing tools

IKA+

Plastic disposable tools

- > Ideal for applications where cross-contamination is not permitted
- > Disposable & single-use
- > No cleaning required



	T 10 basic				
Dispersing element	S 10 N-5 G	S 10 N-8 G	S 10 N-10 G	S 10 D-7 G-KS-65	S 10 D-7 G-KS-110
Ident. No.	0003304000	0003305500	0003370100	0003433225	0003433325
Working range	0.5 – 10 ml	1 – 50 ml	1 – 100 ml	1 – 20 ml	1 – 40 ml
Stator diameter	5 mm	8 mm	10 mm	7 mm	7 mm
Rotor diameter	3.8 mm	6.1 mm	7.6 mm	4.8 mm	4.8 mm
Gap between rotor and stator	0.1 mm	0.25 mm	0.2 mm	0.3 mm	0.3 mm
Min. / max. immersion depth	20 / 75 mm	20 / 95 mm	20 / 100 mm	20 / 50 mm	20 / 90 mm
Shaft length	92 mm	115 mm	115 mm	65 mm	110 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L	Polycarbonate (PC) Polysulfon (PSU)	Polycarbonate (PC) Polysulfon (PSU)
pH range	2 – 13	2 – 13	2 – 13	–	–
Suitable for solvents	yes	yes	yes	–	–
Max. temperature	180 °C	180 °C	180 °C	100 °C	100 °C
Sterilization methods	all methods	all methods	all methods	yes, autoclavable	yes, autoclavable
				 	 

	T 18 digital			
Dispersing element	S 18 N-10 G	S 18 N-19 G	S 18 D-10 G-KS	S 18 D-14 G-KS
Ident. No.	000L004639	000L004640	0003452400	0003452300
Working range	1 – 100 ml	10 – 1500 ml	10 – 100 ml	10 – 500 ml
Stator diameter	10 mm	19 mm	10 mm	14 mm
Rotor diameter	7.5 mm	12.7 mm	6.75 mm	9.5 mm
Gap between rotor and stator	0.35 mm	0.4 mm	0.25 mm	0.35 mm
Min. / max. immersion depth	25 / 70 mm	35 / 170 mm	15 / 85 mm	15 / 85 mm
Shaft length	108 mm	204 mm	150 mm	150 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	Polycarbonate (PC) Polyetheretherketon (PEEK)	Polycarbonate (PC) Polyetheretherketon (PEEK)
pH range	2 – 13	2 – 13	–	–
Suitable for solvents	yes	yes	–	–
Max. temperature	180 °C	180 °C	100 °C	100 °C
Sterilization methods	all methods	all methods	yes, autoclavable	yes, autoclavable
			 	 

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IKA® Original | Dispersing tools



T 25 digital					
Dispersing element	S 25 N – 8 G	S 25 N – 10 G	S 25 N – 18 G	S 25 KV – 18 G	S 25 NK – 19 G
Ident. No.	0001024200	0000594000	0000593400	0002348000	0002494700
Working range	1 – 50 ml	1 – 100 ml	10 – 1500 ml	10 – 1500 ml	25 – 1500 ml
Stator diameter	8 mm	10 mm	18 mm	18 mm	19 mm
Rotor diameter	6.1 mm	7.5 mm	12.7 mm	12.7 mm	12.7 mm
Gap between rotor and stator	0.25 mm	0.35 mm	0.3 mm	0.3 mm	0.3 mm
Min. / max. immersion depth	27 / 85 mm	22 / 85 mm	40 / 165 mm	40 / 225	40 / 165 mm
Shaft length	108 mm	105 mm	194 mm	270 mm	194 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L	FFPM / SIC, AISI 316L	PTFE, AISI 316L
pH range	2 – 13	2 – 13	2 – 13	2 – 13	2 – 13
Suitable for solvents	yes	yes	yes	yes	yes
Max. temperature	180 °C	180 °C	180 °C	220 °C	120 °C
Sterilization methods	all methods	all methods	all methods	wet chemical	wet chemical
Min. vacuum	–	–	–	1 mbar	–
Max. pressure	–	–	–	6 bar	–

10

11

12

12

12

T 50 digital			
Dispersing element	S 50 N – G 45 G	S 50 N – G 45 M	S 50 N – G 45 F
Ident. No.	0008003000	0008003300	0008003900
Working range	0.5 – 20 l	0.5 – 15 l	0.25 – 10 l
Stator diameter	45 mm	45 mm	45 mm
Rotor diameter	36 mm	40.5 mm	40 mm
Gap between rotor and stator	0.5 mm	0.25 mm	0.5 mm
Min. / max. immersion depth	70 / 250 mm	70 / 250 mm	70 / 250 mm
Shaft length	300 mm	290 mm	290 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
Max. temperature	180 °C	180 °C	180 °C
Sterilization methods	all methods	all methods	all methods

13

14

15



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

T 25 digital						
Dispersing element	S 25 N – 25 G	S 25 KV – 25 G	S 25 N – 25 F	S 25 KV – 25 F	S 25 D – 10 G – KS	S 25 D – 14 G – KS
Ident. No.	0001713300	0002466900	0001713800	0002404000	0003452200	0003452100
Working range	50 – 2000 ml	50 – 2000 ml	100 – 2000 ml	100 – 2000 ml	10 – 100 ml	10 – 500 ml
Stator diameter	25 mm	25 mm	25 mm	25 mm	10 mm	14 mm
Rotor diameter	17 mm	17 mm	18 mm	18 mm	6.75 mm	9.5 mm
Gap between rotor and stator	0.5 mm	0.5 mm	0.5 mm	0.5 mm	0.25 mm	0.35 mm
Min. / max. immersion depth	40 / 165 mm	40 / 225 mm	40 / 165 mm	40 / 225 mm	15 / 85 mm	15 / 85 mm
Shaft length	194 mm	270 mm	194 mm	270 mm	150 mm	150 mm
Materials in contact with medium	PTFE, AISI 316L	FFPM / SIC, AISI 316L	PTFE, AISI 316L	FFPM / SIC, AISI 316L	Polycarbonate (PC) Polyetheretherketon (PEEK)	Polycarbonate (PC) Polyetheretherketon (PEEK)
pH range	2 – 13	2 – 13	2 – 13	2 – 13	–	–
Suitable for solvents	yes	yes	yes	yes	–	–
Max. temperature	180 °C	220 °C	180 °C	220 °C	100 °C	100 °C
Sterilization methods	all methods	wet chemical	all methods	wet chemical	yes, autoclavable	yes, autoclavable
Min. vacuum	–	1 mbar	–	1 mbar	–	–
Max. pressure	–	6 bar	–	6 bar	–	–

16

17

18

D

19

D

T 65 basic I digital			
Dispersing element	S 65 KG – HH – G 65 G	S 65 KG – HH – G 65 M	S 65 KG – HH – G 65 F
Ident. No.	0008005500	0008005700	0008005900
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
Gap between rotor and stator	0.5 mm	0.5 mm	0.5 mm
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
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

20

21

22



IKA® Original | Special dispersing tools

IKA+

Saw Tooth (ST) dispersing tools

- > ST tools are recommended for use with tissue and other fibrous materials
- > Saw tooth design creates a cutting and tearing action for shredding fibrous materials
- > Made of high quality stainless steel



T 10 basic

Dispersing element	S 10 N – 8 G – ST	S 10 N – 10 G – ST
Ident. No.	0004446500	0004446700
Working range	1 – 50 ml	1 – 100 ml
Stator diameter	8 mm	10 mm
Rotor diameter	6.1 mm	7.6 mm
Gap between rotor and stator	0.25 mm	0.2 mm
Min. / max. immersion depth	20 / 95 mm	20 / 100 mm
Shaft length	115 mm	115 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L

①

T 50 digital

Dispersing element	R 50 "high speed" stirring shaft	Dispersing element	S 50 N – G 45 G – ST
Ident. No.	0001689300	Ident. No.	0008039500
Working range	0.25 – 30 l	Working range	0.5 – 20 l
Max. circumferential speed	15.7 – 23 m/s	Stator diameter	45 mm
Max. permissible rotor diameter	50 mm	Rotor diameter	36 mm
Material	Stainless steel (AISI 316L)	Gap between rotor and stator	0.5 mm
	* Included with delivery: R 1402 Dissolver Ident. No. 0001243300	Min. / max. immersion depth	70 / 250 mm
		Shaft length	300 mm
		Materials in contact with medium	PTFE, AISI 316L

④ ⑤

T 25 digital

Dispersing element	S 25 N – 8 G – ST	S 25 N – 10 G – ST	S 25 N – 18 G – ST	S 25 N – 25 G – ST
Ident. No.	0004446900	0004447100	0004447300	0004447500
Working range	1 – 50 ml	1 – 100 ml	10 – 1500 ml	50 – 2000 ml
Stator diameter	8 mm	10 mm	18 mm	25 mm
Rotor diameter	6.1 mm	7.5 mm	12.7 mm	17 mm
Gap between rotor and stator	0.25 mm	0.35 mm	0.3 mm	0.5 mm
Min. / max. immersion depth	27 / 85 mm	22 / 85 mm	40 / 165 mm	40 / 165 mm
Shaft length	108 mm	105 mm	194 mm	194 mm
Materials in contact with medium	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L	PTFE, AISI 316L

②

③

T 50 digital

Dispersing element	S 50 N – W 65 SK Cutting head	S 50 N – W 80 SMK Jet mixer head
Ident. No.	0008005100	0008006300
Working range	1 – 10 l	1 – 50 l
Generator diameter	65 mm	80 mm
Min. / max. immersion depth	80 / 350 mm	140 / 350 mm
Available seals	S 50 N	S 50 N

⑥

⑦

Silentstream

The flow breaker is used to prevent vortexing and to minimize air induction into the medium.

Ident. No. 0003754000

Fits the following dispersing elements:

S 25 N-18 G	S 25 KV-18 G
S 25 N-25 G	S 25 KV-25 G
S 25 N-25 F	S 25 KV-25 F
S 25 NK-19 G	S 18 N-19 G

⑧