

Silent Blending



Premium Safety Standards

Superior Ease of Use

Reduced Cost of Ownership

Silent Blending

Premium Safety Standards

Superior Ease of Use

Reduced Cost of Ownership

Unique and truly driveless technology allows for uncountable **years of maintenance-free operation** eliminating down times and spare parts cost

This unique magnetic drive technology allows for operation in a **reduced particle environment**

The drive unit is designed without any clutches, and therefore the **level of noise is reduced to a minimum**

The average operational **lifespan of 10 years** is backed by a **3 year warranty** and makes your purchase a truly worthwhile investment.



Featuring a speed range up to 75,000 rpm the SilentCrusher S is by far the **fastest and most silent** homogenizer in the world

This high speed range **reduces process times** significantly

Operate your SilentCrusher without ear plugs and **without any risk to your health**



Are you exposed to highly critical noise levels or even wear ear plugs when homogenizing a sample?

Silent Blending

Silent Crusher models operate at a significantly reduced noise level and at an outstanding high speed!

▶ Silent Blending

Your first choice for disruption of tissue in biotechnology, for sample preparation in medicine, for enzymatic treatment in food industry and various applications in the pharmaceutical, cosmetic, paint & lacquer industry and in petrochemistry.

- ▶ SilentCrusher models operate at a significantly reduced noise and in addition at an outstandingly high speed.

This unique combination is made possible by an electromagnetic field that eliminates noise from conventional motors.



Your Advantages

- The wearless drive guarantees numerous **years of maintenance-free operation**. As a result you will experience **no down times, no maintenance or spare part costs**
- Operate the SilentCrusher without ear plugs and **without any risk to your aural health**
- The drive unit is designed without any clutches and therefore the **level of noise is reduced to a minimum**
- This technology allows for **usage in reduced particle environment**

▶ SilentCrusher S

Small model for use in microbiology



P/N 595-05000-00 (without generator)

Technical Data: SilentCrusher S

Input Power:	(W)	24
Dimensions:		
Drive:	(dia. x h mm)	125 x 197
Power Supply Pack	(w x h x t in mm)	106 x 30 x 65
Voltage:	(V/Hz)	100-240 / 47-63
Protection Class:	(IP)	30
Weight:	(kg)	0.8

- Featuring a speed range up to 75,000 rpm, the SilentCrusher S is by far the fastest and most silent homogenizer in the world
- To protect your sample effectively from any thermal damage, the drive system switches off automatically after 90 seconds
- The ease of use will elate you: simply drop the reaction vessel into the drive system and it will start automatically
- If required, you can easily cool down samples by using ice or cold water. Three discs are included in every shipment which allow for height positioning of any cooling tray
- Ideal for homogenizing sample quantities from 0.8 – 10 ml and a viscosity up to 5,000 mPa s
- Choose from three different sterilizable generators: 3, 5 or 7 mm – these options will certainly include a generator that works best for your needs

▶ SilentCrusher M

Model for all standard applications



P/N 595-06000-00 (without generator)

Technical Data: SilentCrusher M

Input Power:	(W)	130
Dimensions:		
Drive:	(w x h x d mm)	90 x 174 x 90
Power Supply Pack	(w x h x t in mm)	196 x 51 x 88
Voltage:	(V/Hz)	100-240 / 47-63
Protection Class:	(IP)	30
Weight:	(kg)	1.0

- With a speed range up to 26,000 rpm, the SilentCrusher M is the most silent homogenizer in the world
- Speed can be adjusted individually from 5,000 – 26,000 rpm
- Large digital display allows for easy setting and readout even from a distance
- Allows for any viscosity up to 5,000 mPa s
- Your first choice for any quantities from 0.8 – 2,000 ml
- Choose from 13 different sterilizable generators: from 6 – 22 mm diameter, you will find options which meet your specification
- Complete package SilentCrusher M at a special price: includes SilentCrusher M, plate stand, 2 cross sleeves and vessel holding bracket (no generators) P/N 595-06009-00

Generators and Accessories

SilentCrusher M – Generators

- Homogenize with high-quality generators made of corrosion-resistant stainless steel AISI 316
- SilentCrusher generators are easily disassembled for quick and convenient cleaning – ideal for multiple samples
- Generators are autoclavable up to 130 °C or allow for air sterilization up to 180 °C
- Due to interchangeable ball bearings and chemical-resistant PTFE, all bearings are designed for years of unlimited usage
- For larger samples it may be necessary to pre-crush samples. In this case, we recommend generators which feature additional sprockets (except for 18 G, 18 DG, 22 G)
- For applications under vacuum down to 20 mbar or pressure up to 6 bar, we recommend our sealed generators*

Model	Stator ø outer [mm]	Rotor ø [mm]	Slot width [mm]	Shaft length [mm]	Volume [ml]	Original particle size [mm]	Tip speed in water [m/s]	Max. speed [rpm]	Max. noise [dB (A)] in 1 m distance	P/N	
6 F	5.3	3.2	0.6	60	0.8 - 30	< 0.4	4.4	26,000	73	596-06010-00	
8 F	8.2	6.6	0.6	80	3 - 50	< 0.4	9	26,000	44	596-08010-00	
8 DF*	8.2	6.6	0.6	75	3 - 50	< 0.4	9	26,000	44	596-08110-00	
12 F	12	9	0.6	120	25 - 250	< 2.0	12.2	26,000	62	596-12010-00	
12 G	12	9	2.0	120	25 - 250	< 2.0	12.2	26,000	62	596-12020-00	
12 DF*	12	9	0.6	115	25 - 250	< 2.0	12.2	26,000	62	596-12110-00	
12 DG*	12	9	2.0	115	25 - 250	< 2.0	12.2	26,000	62	596-12120-00	
18 F	18	12.5	1.5	180	100 - 1,500	< 4.0	17	26,000	74	596-18010-00	
18 G	18	12.5	3.0	180	100 - 1,500	< 4.0	17	26,000	74	596-18020-00	
18 DF*	18	12.5	1.5	175	100 - 1,500	< 4.0	17	26,000	68	596-18110-00	
18 DG*	18	12.5	3.0	175	100 - 1,500	< 4.0	17	26,000	68	596-18120-00	
22 F	22	16.5	1.5	180	100 - 2,000	< 4.0	17.3	20,000	73	596-22010-00	
22 G	22	16.5	3.0	180	100 - 2,000	< 4.0	17.3	20,000	73	596-22020-00	

SilentCrusher M – Accessories



Vessel holding bracket incl. 2 retainer rings
For different vessels dia. 20 - 105 mm
P/N 570-30100-00



Boss head for SilentCrusher M / Heat-On
Please note: 2 clamps are required to attach the SilentCrusher M and the vessel holding bracket
P/N 570-31100-00



Plate stand
Footprint: 180 x 245 mm
Shaft: ø 13 mm, Length: 600 mm
P/N 570-17000-00

SilentCrusher S – Generators

- Homogenize with high-quality generators made of corrosion-resistant stainless steel AISI 316
- SilentCrusher generators are easily disassembled for quick and convenient cleaning – ideal for multiple samples
- Generators are autoclavable up to 130 °C or allow for air sterilization up to 180 °C
- To ensure years of unlimited usage, the ball bearings and the attachment for the generators are made of chemical-resistant PTFE
- 10 Polypropylene vessels which perfectly fit your generator of choice are included as a standard

Model	Stator ø outer [mm]	Rotor ø [mm]	Slot width [mm]	Shaft length [mm]	Volume [ml]	Original particle size [mm]	Tip speed in water [m/s]	Max. noise [dB (A)] in 1 m distance	Application with	P/N Generators	P/N Replacement vessels (100 pcs)
3 F	3.3	2	0.6	26	0.8 - 1.0	< 0.4	7.85	47	Eppendorf- vessel	596-03010-00	596-00003-00
5 F	5	3.2	0.6	38	2.0 - 4.0	< 0.4	11.8	50	Test tube	596-05010-00	596-00005-00
7 F	7	3.9	0.6	55	6.0 - 10.0	< 0.4	17.7	54	Test tube	596-07010-00	596-00007-00



Your Heidolph Support Center

As we want you to have more time to thoroughly concentrate on your research, the whole Heidolph team enthusiastically provides you with extensive support and help to reduce your workload.

Our Commitment



- Ease of use
- Long performance life
- 3-year warranty for all Heidolph products

Repair Services



- On site or at our repair facilities
- Repair within 4 working days
- No-charge repair quotes

Service Seminars



- At Heidolph's facilities for all distributors
- Field service in many countries around the world
- Full documentation provided

Online Support



- Catalogs and manuals for download
- Software-based configuration tools
- Spare part lists for download

Quality Control



- Individual quality control for every unit
- Calibration certificates available upon request
- IQ-OQ validation for Large-Scale Evaporators

Individual Solutions



- Application support
- Non-obligatory demo units
- Installation and training on site

Repair Support



- We organize equipment pick-up on site
- Assistance with logistics
- Loan units if available upon request

Your Heidolph Support Center

Customer Service: **+49 9122-992068**

Online Support: **www.heidolph.com**

We respond in less than 24 hours . . .

Guaranteed!





Heidolph Instruments GmbH & Co. KG

Walpersdorfer Str. 12 • 91126 Schwabach/Germany

Phone +49 (0) 91 22/99 20 68 • Fax +49 (0) 91 22/99 20 65

sales@heidolph.de • www.heidolph.com