



# Silent Blending

Leading Safety Standards

Superior Ease of Use

Reduced Cost of Ownership

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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



- Leading Safety Standards
- Superior Ease of Use
- Reduced Cost of Ownership

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

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**



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**

## ➤ Silent Blending

Your first choice for disruption blending 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 significantly reduced noise levels and high speeds
- This unique combination is made possible by utilizing an electromagnetic field that eliminates noise which is generated 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 and no spare part cost**
- Operate the SilentCrusher without ear plugs and **without any risk to your audible health**
- The drive unit is designed without any clutches, and therefore the **level of noise is reduced to a minimum**
- This unique magnetic drive technology allows for **operation in a reduced particle environment**

## SilentCrusher S

Small model for use in microbiology

- 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
- Superior ease of use: 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

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



### Technical Specifications – SilentCrusher S

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

## SilentCrusher M

Model for all standard applications

- 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
- **Plug & Play Package SilentCrusher M: includes SilentCrusher M, plate stand, 2 boss head clamps and vessel holding bracket (no generators)**  
P/N 595-06009-00



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

### Technical Specifications – 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 d mm)	196 x 51 x 88
Voltage	(V/Hz)	100 – 240 / 47 – 63
Protection Class	(IP)	30
Weight	(kg)	1,0



## 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 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



### SilentCrusher M – Accessories



Plate stand

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



Boss head for SilentCrusher M / Heat-On

2 clamps are required to attach the SilentCrusher M and the vessel holding bracket  
P/N 570-31100-00



Vessel holding bracket incl. 2 retainer rings

For different vessels dia. 20 - 105 mm  
P/N 570-30100-00

## Technical Service



Stefan Pill  
Head of Technical Service

Stefan Pill is responsible for all Technical Service Operations of the Repair Department. His team assists researchers and distributors in after-sales subjects worldwide.

- Professional product repairs performed at authorized repair facilities
- Repair turn-around time within 4 days
- No-charge quotes for all repairs
- No-charge loaners are often available during repair period
- Most repair facilities will organize logistics on your behalf

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