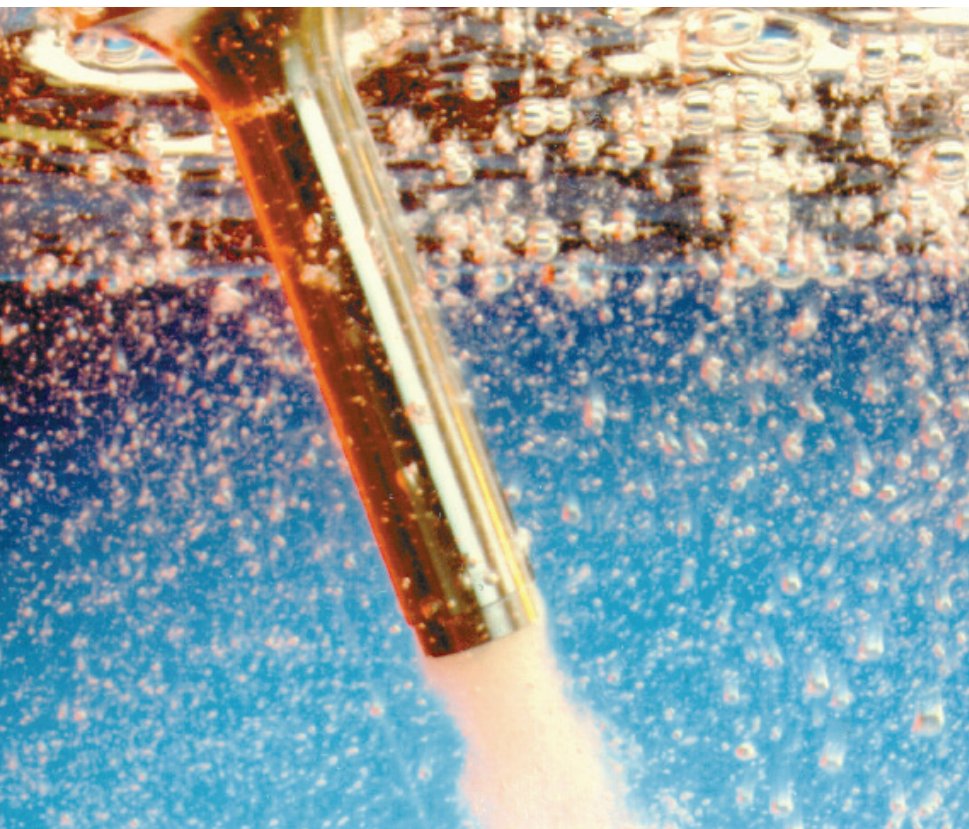


Sonic Dismembrators

Cell Disruptors / Homogenisers



Browse the full line of Fisherbrand™ Sonic Dismembrators available through the Fisher Scientific channel that include a variety of features and accessories to handle virtually any liquid processing application.



The application and sample volume indicate which unit, features and probe size is necessary. For example, cell disruption of samples smaller than 50mL can be accomplished with any of the four models. If the application will benefit from pulsing the ultrasonic energy to reduce heat gain, a programmable unit will be required. For samples larger than 100mL, a 500 or 700 watt unit is needed. High throughput, extended programming times and the ability to monitor sample temperature will require the 700 watt model.

DIRECT AND INDIRECT SONICATION

Both direct and indirect sonication tools are available depending on the application. Direct sonication involves the immersion of a probe into a sample vessel and processes most samples quickly and effectively. Indirect sonication eliminates the need for a probe to come in contact with the actual sample and allows the end user to process sealed tubes or vials. The Cup Horn accessory offers indirect sample processing.

APPLICATIONS INCLUDE:

- Cell disruption
- Homogenisation
- CHIP/DNA shearing
- Nanoparticle dispersion
- Protein extraction
- Sonochemistry
- Soil extraction
- Mixing

OVERVIEW

A sonic dismembrator is a device that creates ultrasonic energy and transmits this energy through a titanium probe into a liquid sample. This process creates cavitation (the implosion of micro-bubbles with high shear forces) which has the ability to process samples in many scientific applications.

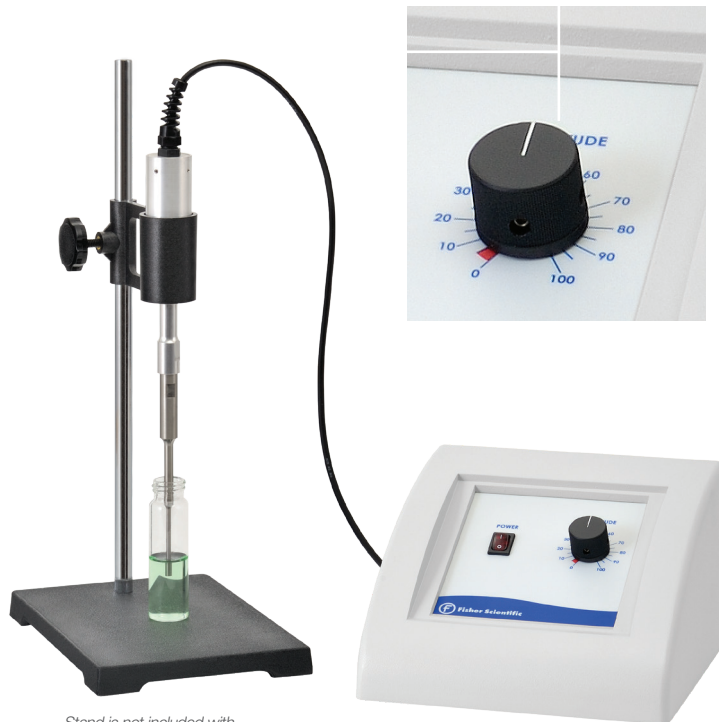
Fisherbrand Sonic Dismembrators feature a wide range of accessories that enable the user to process microlitre to one litre sample volumes. Small volumes require microtip probes and lower power output. Larger volumes require larger probes and higher amounts of energy to be delivered to the sample.

Fisherbrand Model 50 Sonic Dismembrator

Economical, small volume cell disruptor

- Processes 0.2mL to 50mL
- 50 watts
- Continuous or remote operation (footswitch optional)
- Lightweight converter (340g) for hand-held operation

INCLUDES: Generator, converter, 3mm probe, cables, wrench set, manual, two-year warranty



Stand is not included with sonic dismembrator

ACCESSORIES

Probe options for direct sonication of samples up to 50mL

Cat. No.	Tip Diameter	Processing Volume, mL*
12921181	2mm (5/64")	0.2-5
12911181	3mm (1/8")	0.5-15

* Processing volume of any probe will increase with the use of a stir bar.



Footswitch for hands-free operation

Cat. No. 12961161



Stand with 13mm diameter, 610mm tall pole and converter clamp.

Cat. No. 12347338



Sound Enclosure with converter clamp (508mm x 254mm x 254mm (W x L x H) external dimension).

Cat. No. 12353745

TECHNICAL SPECIFICATIONS:

Dimensions (generator):
203mm x 190mm x 152mm
(W x L x H)

Power rating: 50 watts

Operating frequency: 20kHz

Cat. No.	Voltage
12961151	230V, 50/60Hz

Model 50 Sonic Dismembrator

Compact, portable and extremely simple to operate. Weighing less than 2kg, this model is the smallest unit on the market and is highly effective for cell disruption, sample preparation and many other small volume applications.

Fisherbrand Model 120 Sonic Dismembrator

Programmable system for effective cell lysis and sample preparation delivering consistent and reproducible results



- Processes 0.2 to 50mL
- 120 watts
- Programmable from one second to 10 hours
- Overload protection
- Pulse mode (one second to 59 seconds)
- Energy display (watts and Joules)
- Lightweight converter (340g) for hand-held operation

INCLUDES: Generator, converter, 3mm (1/8") probe, cables, wrench set, manual, two-year warranty

TECHNICAL SPECIFICATIONS:

Dimensions (generator):
203mm x 330mm x 152mm
(W x L x H)

Power rating: 120 watts

Operating frequency: 20kHz

Cat. No.	Voltage
12337338	230V, 50/60Hz

Model 120 Sonic Dismembrator

This model is ideal for small sample sizes and offers both manual and programmable operation. A variety of accessories are available including probes for individual samples, 8-tip horn for increased sample throughput and a cup horn for indirect sonication.

ACCESSORIES

Probe options for direct sonication of samples up to 50mL.



Cat. No.	Tip Diameter	Processing Volume, mL*
12921181	2mm (5/64")	0.2-5
12911181	3mm (1/8")	0.5-15
12931181	6mm (1/4")	5-50

* Processing volume of any probe will increase with the use of a stir bar.



Sound Enclosure with converter clamp (508mm x 254mm x 254mm (W x L x H) external dimension).

Cat. No. 12353745

8-Tip Horn for processing 8 samples at one time. 3mm (1/8") tip diameter.

Cat. No. 12357338



Cup Horn for indirect processing of individual sealed tubes or vials. 38mm (1.5") cup diameter.

Cat. No. 12991181



Stand with 13mm diameter, 610mm tall pole and converter clamp.

Cat. No. 12347338



Fisherbrand Model 505 Sonic Dismembrator

High-power, programmable system ideal for nanotechnology, cell disruption and homogenisation applications

- Processes 0.5mL to 500mL
- 500 watts
- Programmable from one second to 10 hours
- Overload protection
- Pulse mode (one second to 59 seconds)
- Energy display (watts and Joules)



Stand is not included with sonic dismembrator

INCLUDES: Generator, converter, 13mm (1/2") probe, cables, wrench set, manual, two-year warranty

ACCESSORIES

Microtip probe options for direct sonication of samples up to 50mL.



Cat. No.	Tip Diameter	Processing Volume, mL
12991171	3mm (1/8")	0.5-15
12901181	6mm (1/4")	5-50

Probe options for direct sonication of samples up to 500mL.



Cat. No.	Tip Diameter	Processing Volume, mL*	Type of Probe
12921171	13mm (1/2")	10-250	Replaceable Tip
12911171	13mm (1/2")	10-250	Solid Tip*
12971161	19mm (3/4")	25-500	Replaceable Tip
12911171	19mm (3/4")	25-500	Solid Tip*

* Solid Tip probes are required when working with organic solvents.

Replacement tips for probes.



Cat. No.	Tip Diameter
12951171	13mm (1/2")
12961171	19mm (3/4")

Cup Horn for indirect processing of up to 8 (2mL) sealed tubes or vials, 63mm cup diameter.



Cat. No. 12706908

Stand with 13mm diameter, 610mm tall support rod and converter clamp.



Cat. No. 12883563

Sound Enclosure (343mm x 775mm x 330mm (W x L x H) external dimension).



Cat. No. 12893553

TECHNICAL SPECIFICATIONS:

Dimensions (generator):

203mm x 387mm x 216mm (W x L x H)

Power rating: 500 watts

Operating frequency: 20kHz

Cat. No.	Voltage
12893543	230V, 50/60Hz

Model 505 Sonic Dismembrator

The model 505 offers the same programmable features as the model 120 but delivers substantially more power. This model can process both small and large sample volumes. A variety of accessories are available including probes for individual samples and a cup horn for indirect sonication.

Fisherbrand Model 705 Sonic Dismembrator

Ultra-high power with advanced programming for DNA shearing/ChIP and all liquid processing applications



Stand is not included with sonic dismembrator

- Processes 0.2 to 1,000mL
- 700 watts
- Touch screen display
- Programmable from one second to 99 hours
- Save up to 10 different programs
- Overload protection
- Pulse mode (one second to 24 hours)
- Energy display (real-time watts and cumulative Joules)
- Temperature monitoring (requires optional temperature probe)
- Full amplitude control from 1 to 100%

INCLUDES: Generator, converter, 13mm (1/2") probe, cables, wrench set, manual, two year warranty

TECHNICAL SPECIFICATIONS:

Dimensions (generator):

203mm x 387mm x 216mm (W x L x H)

Power rating: 700 watts

Operating frequency: 20kHz

Cat. No.	Voltage
12931151	230V, 50/60Hz

Model 705 Sonic Dismembrator

Model 705 is a full-featured, programmable ultrasonic processor with easy-to-use touch screen controls. The additional power and variety of accessories accommodates the widest range of sample volumes and applications.

ACCESSORIES

Microtip probe options for direct sonication of samples up to 50mL.

Cat. No.	Tip Diameter	Processing Volume, mL
12981171	2mm (1/16")	0.2-5
12991171	3mm (1/8")	0.5-15
12901181	6mm (1/4")	5-50



Probe options for direct sonication of samples up to 1000mL.

Cat. No.	Tip Diameter	Processing Volume*, mL	Type of Probe
12921171	13mm (1/2")	10 - 250	Replaceable Tip
12911171	13mm (1/2")	10 - 250	Solid Tip*
12971161	19mm (3/4")	25 - 500	Replaceable Tip
12981161	19mm (3/4")	25 - 500	Solid Tip*
12901171	25mm (1")	50 - 1000	Replaceable Tip
12991161	25mm (1")	50 - 1000	Solid Tip*



* Solid tip probes are required when working with organic solvents.

Safety Notice: Sonic dismembrators generate extremely high noise levels (over 100dB). Safety standards state that workers must employ hearing protection at this decibel level. A sound enclosure will reduce the decibel level and eliminate the need for everyone in the laboratory to wear sound dampening headphones or earplugs.

Cup horn for indirect processing of up to 8 (2mL) sealed tubes or vials. 63mm cup diameter.

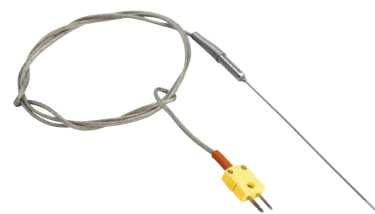
Cat. No. 12706908



Recirculating chiller – accurately control water temperature and water level in the cup horn: tubing and connector set is required.

Cat. No. 12748586

Cat. No. 15171293 (tubing and connector set)



Monitor sample temperature with a 152mm temperature probe.

Cat. No. 12911161

4-tip horn for direct processing of four samples at one time; tip diameter is 3mm (1/8") and space between tips is 18mm.

Cat. No. 12941181



Replacement tips for probes.

Cat. No.	Tip Diameter
12951171	13mm (1/2")
12961171	19mm (3/4")
12971171	25mm (1")



Stand with 13mm diameter, 610mm tall support rod and converter clamp.

Cat. No. 12883563



Sound enclosure (343mm x 775mm x 330mm (W x L x H) external dimension).

Cat. No. 12893553

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