

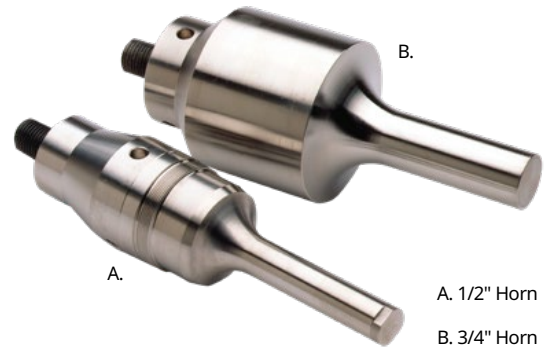
Branson™ Sonifier Cell Disruptor

Disruptor Horns

Overview

Horns (probes) transmit ultrasonic energy into a solution. The dimensions of the horn and the output control setting determine the amount of amplitude (tip movement) and degree of ultrasonic activity in the liquid. Generally, the smaller the tip diameter, the higher the amplitude. Larger tip diameters have less amplitude but can accommodate larger volumes. All Sonifier horns and tips are fabricated from titanium. Please note the charted amplitude ratings and liquid volumes when selecting horns.

A step horn with a threaded body enables the attachment of various screw-on accessories, such as a continuous flow cell. Tapped horn ends enable attachment of microtips. Tapped horns are supplied with removable flat tips.



A.

B.

A. 1/2" Horn

B. 3/4" Horn

STEP HORNS WITH THREADED BODY					
	Tip Diameter	3/8" (9.5mm)	1/2" (13mm)	1/2" (13mm)	3/4" (19mm)
	Tip Conf.	Solid	Tapped +	Solid	Solid
	Intensity	Very High	High	High	Medium
	Ampl. Range**	36-240	21-145	21-145	9.5-63
	Volume (Liquid)	5-300 mL	10-500 mL	10-500 mL	25-1000 mL
	Part Number	101-147-039	101-147-037R*	101-147-038	101-147-043

HIGH GAIN HORNS*			
	Tip Diameter	3/4" (19mm)	1" (25.4mm)
	Tip Conf.	Solid	Solid
	Intensity	Medium	Low
	Ampl. Range**	19-130	6.3-40.5
	Volume (Liquid)	25-1000 mL	50-2000 mL
	Part Number	101-147-035R	101-147-076

EXPONENTIAL HORNS*			
	Tip Diameter	1/2" (13mm)	1/2" (13mm)
	Tip Conf.	Tapped++	+ Solid
	Intensity	Medium	Medium
	Ampl. Range**	10-65	10-65
	Volume (Liquid)	10-500 mL	10-500 mL
	Part Number	101-147-040	101-147-041

NOTE:

High gain horns can't be used with screw-on accessories as they provide higher amplitude.

Exponential horns have lower tip amplitude but can withstand higher tip loading. Best suited for applications requiring the compressing of solids such as powders and tissue.

** Amplitudes quoted are total peak-to-peak movement in microns as measured on positions 1 and 10 of the output control

+ Replaceable flat tip, 1/4-20 thread, part number 101-148-013

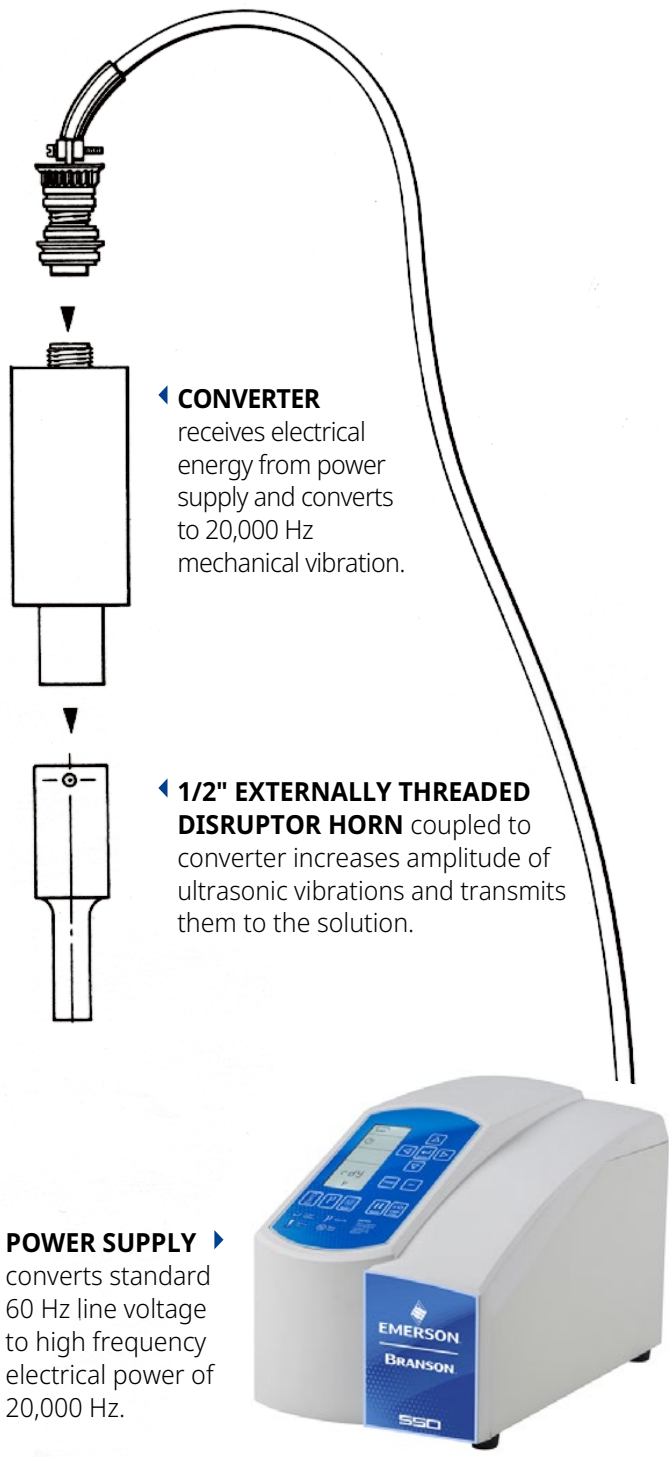
++ Replaceable flat tip, 1/4-28 thread, part number 101-148-024

For more information:
www.Emerson.com/Branson

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Branson Sonifier Cell Disruptor



◀ **CONVERTER**
receives electrical energy from power supply and converts to 20,000 Hz mechanical vibration.

◀ **1/2" EXTERNALLY THREADED DISRUPTOR HORN** coupled to converter increases amplitude of ultrasonic vibrations and transmits them to the solution.

POWER SUPPLY ▶
converts standard 60 Hz line voltage to high frequency electrical power of 20,000 Hz.



Model SFX550 shown

Flow-thru horn compatible with SFX250 and SFX550

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