



Transducerized Cleaning Tanks and Immersible Transducers

Branson manufactures five standard size transducerized 25 and 40kHz tanks that range from a 2.5 to a 50 gallon capacity (10 to 190 liters). All have drains and fills.

Type 316L bright-annealed stainless steel construction throughout permits the use of alkaline, mildly acidic, or neutral aqueous solutions. Branson tanks are available with or without integral heaters. Heated models are available to maintain solution temperatures up to 170°F (76°C). All models are available with a stainless steel parts basket and/or tank cover.

STANDARD FEATURES

- Bottom-mounted positive drain connection.
- Fully shielded internal components.

OPTIONS

- Stainless steel basket for parts handling.
- Stainless steel tank cover.
- Thermostatically-controlled heat.

NUMBERING SYSTEM

Each Branson transducerized tank has a model number which contains important information to guide the selection of a properly rated comparison power supply. When making a selection, note the frequency.

For example: CH1012-40-12

This model number, stamped on the tank nameplate, indicates whether the tank has a heater (H = heated), the length of the tank in inches, left to right (10"), the width of the tank in inches, front to back (12"), the operating frequency (40kHz), and the number of attached piezoelectric transducer elements (12).

POWER SUPPLY SELECTION

To select the correct power supply for your transducerized tank, add the total number of transducer elements involved by using the information from the model number as explained. Then, select a power supply whose last two numbers exactly match the number of transducer elements by referring



HEATED TANK SPECIFICATIONS

	Model 610**	Model 1012	Model 1216	Model 1620	Model 2024	Model 2032***
Tank Dimensions*	6" x 10" x 10" (152 x 254 x 254 mm)	10" x 12" x 10" (254 x 304 x 254 mm)	12" x 16" x 12" (304 x 406 x 304 mm)	16" x 20" x 16" (406 x 508 x 406 mm)	20" x 24" x 20" (508 x 610 x 508 mm)	20" x 32" x 20" (508 x 812 x 508 mm)
Overall Dimensions*	10" x 14" x 14.62" (254 x 355 x 356 mm)	14" x 16" x 15.62" (356 x 406 x 397 mm)	16" x 20" x 17.62" (406 x 508 x 447 mm)	20" x 24" x 21.75" (610 x 609 x 552 mm)	24" x 28" x 25.75" (609 x 711 x 654 mm)	26" x 36" x 25.75" (660 x 914 x 654 mm)
Capacity	2.5 gallons (9.4 liters)	5.0 gallons (18.9 liters)	10 gallons (37.8 liters)	20 gallons (75.7 liters)	40 gallons (151.4 liters)	50 gallons (189.2 liters)
Heater Wattage	500 Watts	1000 Watts	2000 Watts	3000 Watts	3000 Watts	5000 Watts
Power Equipment	120 V/1Ø 4.2 amps	120 V/1Ø 8.4 amps	220 V/1Ø 8.3 amps	220 V/1Ø 12.5 amps	220 V/1Ø 12.5 amps	220 V/1Ø 22 amps
Approx. Shipping Wt.	35 lbs. (16 kg)	44 lbs. (20 kg)	68 lbs. (31 kg)	115 lbs. (52 kg)	165 lbs. (75 kg)	195 lbs. (89 kg)

* All dimensions are in order, left-to-right, front-to-back, and top-to-bottom. Allow 6 inches (153mm) clearance on front-to-back dimensions for connections. Bench mounting of tank requires bottom support.

** No fill

*** #8 polished stainless steel

to the power supply specifications on Bulletin S-1044 (Series 8500) or S1043 (Series 8300).

IMMERSIBLE TRANSDUCERS

Branson immersible ultrasonic transducers can be placed wherever you need them in your existing cleaning tanks. These units give you the complete freedom to design specialized cleaning setups or to upgrade soak tanks with ultrasonics.

Each immersible transducer is fabricated from 316L bright annealed stainless steel with welded seams and stainless steel fittings. These hermetically sealed modular components are available in standard sizes starting at 6" x 18" - all 3.25" deep. Other sizes can be custom-built for special applications. Chrome plating is available to reduce cavitation erosion.

Branson offers three transducer configurations which vary according to their mounting style and electrical connections. This allows for maximum versatility of transducer placement on tank bottom or walls to permit optimum ultrasonic energy transmission. Whatever the configuration, Branson supplies all necessary interconnecting components.

NUMBERING SYSTEM

Each Branson immersible transducer has a model number which contains important information useful for selection of a properly rated companion power supply.

For example: FC618-40-12
This model number, stamped on the transducer nameplate, indicates, a type FC mounting, the size of 6" wide by 18" long, the operating

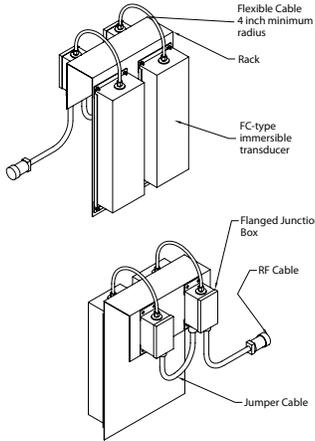
frequency (40kHz), and that it contains 12 piezoelectric elements.

POWER SUPPLY FREQUENCY SELECTION

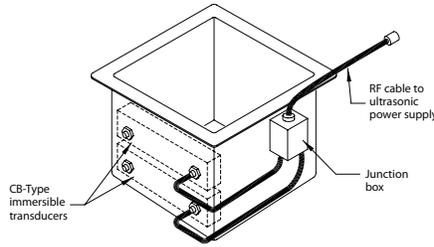
Branson immersible transducers may be used singly or in multiples, powered by a Branson generator of suitable capacity. The power supply and all transducers must operate at the same frequency. To select the correct power supply for a cleaning setup, add the total number of transducer elements involved by using the information from the model number as explained. Then, select a power supply whose last two numbers exactly match the number of transducer elements. Multiple power supplies may be required. Refer to the power supply specifications chart on the front of this sheet.

IMMERSIBLE TRANSDUCER CONFIGURATIONS

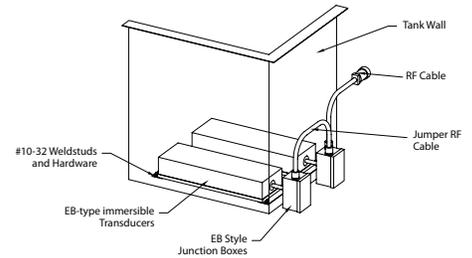
Branson offers three transducer configurations, Types FC, CB, and EB, which vary according to their mounting means and electrical connections.



Type FC — Most versatile type; does not require holes in the tank. May be side or bottom mounted using integral mounting flanges. Watertight 3' lead-in cables required. Special cable lengths available, also right-angle fitting for tight-radius turns.

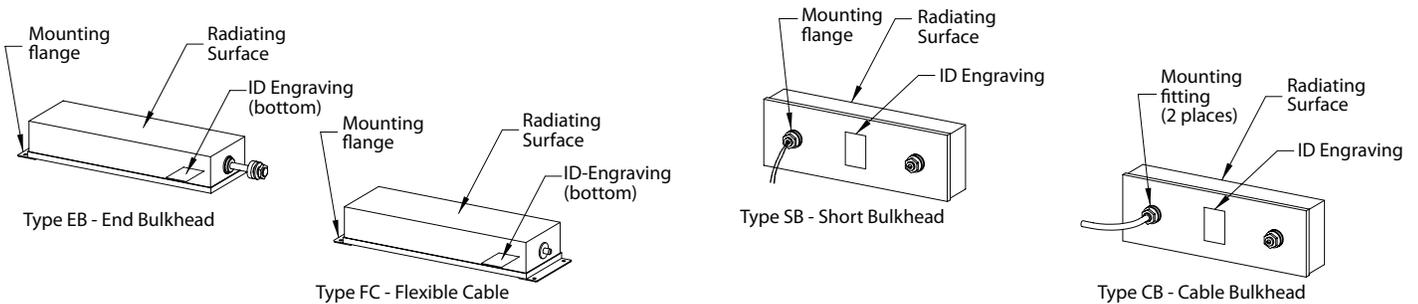


Type CB — The most common style for side or bottom mounting. One or two bulkhead fittings, depending on transducer size. Supplied with 8' RF cable, which allows master junction box to be remotely located. Special length cables available.



Type EB — For bottom-mounting, especially when under-tank clearance prevents use of Type CB. May be affixed to tank bottom using integral mounting flange. Standard 1-1/4" mounting fitting supplied; other lengths available.

IMMERSIBLE TRANSDUCER MOUNTS & SPECIFICATIONS



	Model 610-6	Model 618-2
Dimensions* (Width x Length)	6" X 10" (152 x 254 mm)	6" X 18" (152 x 457 mm)
Approx. Shipping Wt.	18 lbs. (8 kg)	30 lbs. (14 kg)

* All transducers are 3-1/4" (82 mm) deep. Stated dimensions do not include mounting flanges on types FC and EB. Other sizes or custom-made transducers are available upon request. Chrome plating and high-frequency units are also available. Note: Opposed side-mounted transducers should have at least 12" of space between radiating faces.

Ultrasonic Cleaning

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Branson's unmatched global resources ensure optimal solutions for the most challenging materials joining and precision cleaning applications.

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ranging from market changes, product quality/life cycles and production costs, to employee safety and environmental compliance. And, Branson's commitment to the publicly funded industrial collective research initiative and cooperation with various research centers have produced widespread innovations in plastics joining technology that are benefiting companies everywhere.

Branson is a leading innovator in the Industrial Automation division of Emerson, a diversified global manufacturing and technology company. Emerson is a progressive

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