



## Model TR-1055 Deep Ocean Transducers

The Massa Model TR-1055 Family of Transducers was developed for the oceanographic community for high-power, deep-water transponder applications covering the frequency range from 8-16 kHz. The transducers employ lead zirconate-titanate as the active element contained within an oil-filled butyl rubber housing which is attached to a hard coated (anodic) aluminum mounting flange. Two types of mounting arrangements are provided to permit attaching the transducer either to a pipe flange (Model TR-1055A) or to a bulkhead (Models TR-1055C and TR-1055F). A high pressure seal is provided by means of an "O" ring located in the transducer flange as illustrated in the outline drawings on Page 2.

The Model TR-1055 Transducers will operate to depths exceeding 20,000 feet. A special high pressure rubber cable and flange assembly is available for mounting the TR-1055C flange when operation with an attached cable is desired.

For more information visit our web site at [www.massa.com](http://www.massa.com).

<b>SPECIFICATIONS</b> (Nominal at 12 kHz)	
Power Rating	1 kW
Source Level / Watt	169 dB re 1 $\mu$ Pa @ 1 m
Transmitting Response / Volt	133 dB re 1 $\mu$ Pa @ 1 m
Transmitting Response / Amp	193 dB re 1 $\mu$ Pa @ 1 m
Receiving Response	-183 dBV / 1 $\mu$ Pa
Bandwidth	8-16 kHz
Impedance	1000 Ohms
Directivity	Hemispherical, Conical
Operating Depth	Exceeding 20,000 ft.
Weight: TR-1055A TR-1055C TR-1055F	10 lbs. 6 1/2 lbs. 5 1/2 lbs.
Size	See outline drawings on Page 2



TR-1055F

### FEATURES

- High Power
  - Up to 1 kW
- Broad Band
  - From 8 to 16 kHz
- High Pressure
  - Operating Depth Exceeds 20,000 ft.
- Mounting is Available for Either a Pipe Flange or a Bulkhead

### APPLICATIONS

- Transponders
- Underwater Communication

### MASSA PRODUCTS CORPORATION

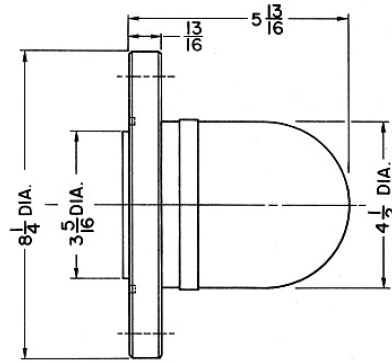
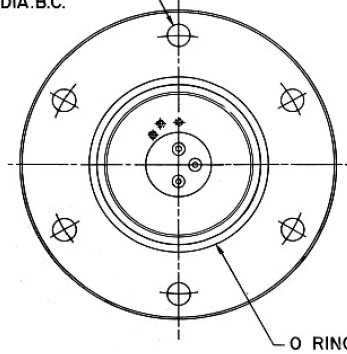
280 Lincoln St., Hingham, MA 02043 U.S.A.  
781-749-4800 | Toll Free USA: 800-962-7543  
sensors@massa.com | [www.massa.com](http://www.massa.com)

# TR-1055 Deep Ocean Transducers

## Outline and Mounting Dimensions (in inches)

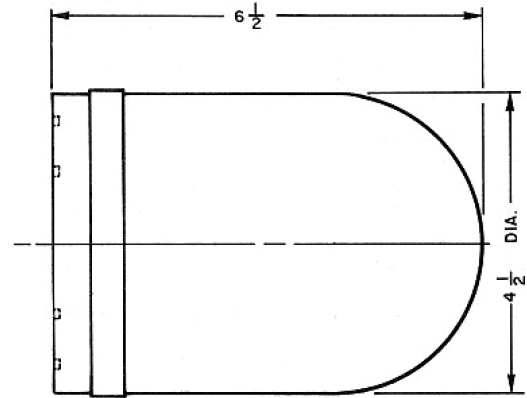
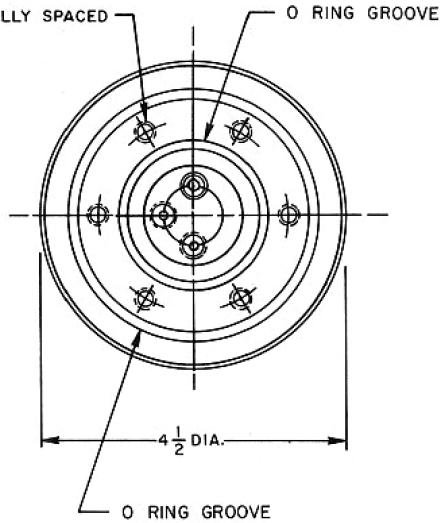
TR-1055A

$\frac{19}{32}$  DIA. 6 HOLES EQUALLY SPACED ON 7 DIA. B.C.



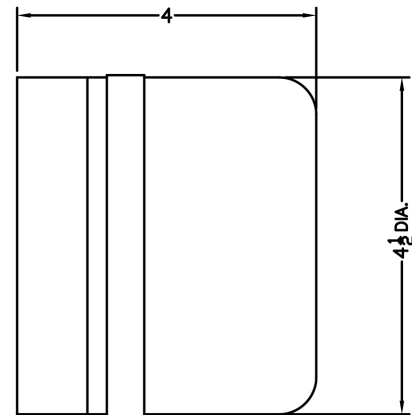
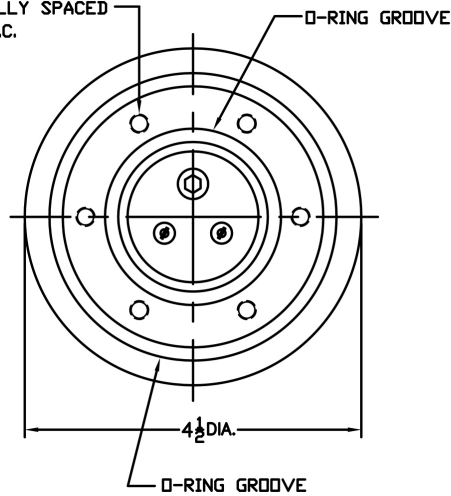
TR-1055C

$\frac{1}{4}$ -20 TAP X  $\frac{1}{2}$  DEEP  
6-PLACES EQUALLY SPACED  
ON  $2\frac{7}{8}$  DIA. B.C.



TR-1055F

$\frac{1}{4}$ -20 TAP X  $\frac{5}{8}$  DEEP  
6 PLACES EQUALLY SPACED  
ON A  $2\frac{7}{8}$  DIA. B.C.



*All specifications are subject to change without notice.*