42 to 65 kHz-A (Broadband)

Transformed to 100 ohms minimum (B1)

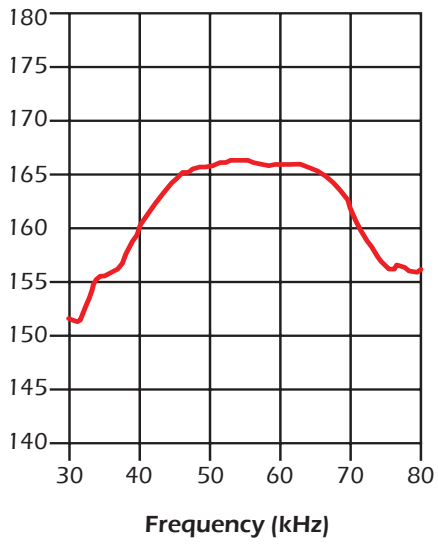
Power Rating:
- 1 kW @ 1% duty cycle
- CW(4): 25W in B265, PM265
  15W in M265, TM265

7 x 28.6 mm (1.13 in) PZT
Active Area: 45 cm^2 (6.9 in^2)
Radiating Surface: Urethane

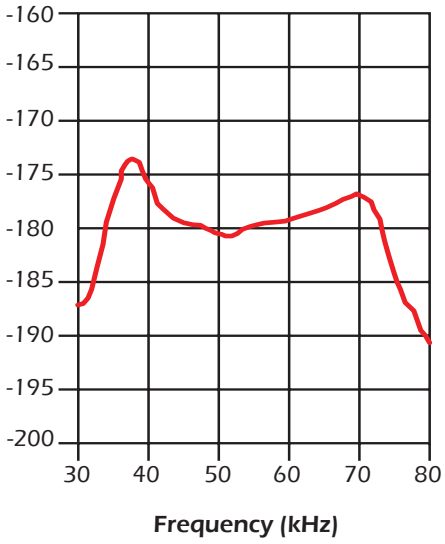
Q ≈ 2
Cable Type: C335
Cable Length: 10 m (33 ft)

Notes:
(1) dB re 1 µPa per volt at 1 meter
(2) dB re 1 volt per µPa
(3) Sum of transmitting voltage response and receiving voltage response
(4) CW Power ratings is for 20°C seawater temperature. Consult Airmar for different housing CW ratings.

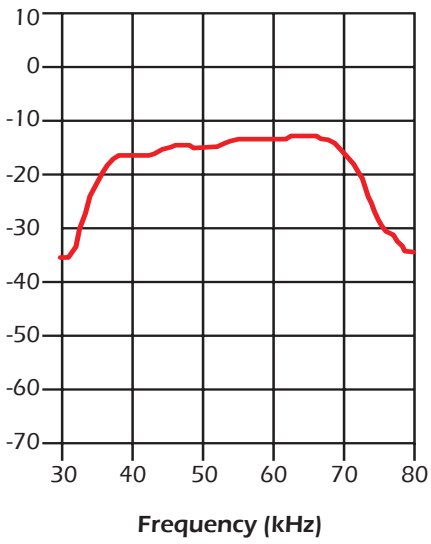
TVR



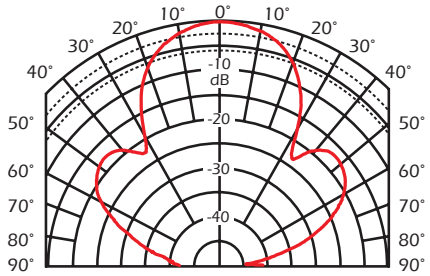
RVR



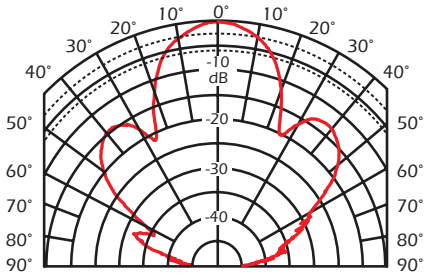
FOM



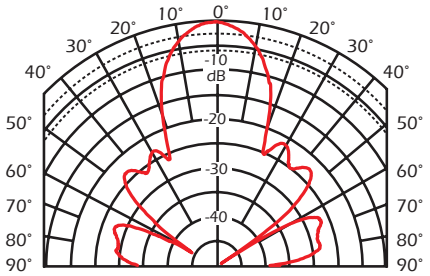
Transmit Radiation Pattern



Beamwidth	@ 42 kHz
-3 dB	25°
-6 dB	35°
-10 dB	43°



Beamwidth	@ 50 kHz
-3 dB	20°
-6 dB	28°
-10 dB	34°



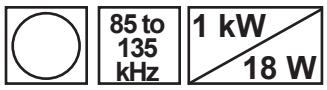
Beamwidth	@ 65 kHz
-3 dB	16°
-6 dB	22°
-10 dB	28°

42 to 65 kHz-A (Broadband)

Note: Impedance data includes cable

Balanced Impedance Table (Nominal Value) in 20°C Water

Test Frequency (kHz)	Impedance Magnitude (Ω)	Phase Angle (°)	Series Resistance (Ω)	Series Reactance (Ω)	Parallel Conductance (mS)	Parallel Susceptance (mS)	Parallel Resistance (Ω)	Parallel Capacitance (pF)
40.00	305.87	-15.48	294.78	-81.62	3.15	0.87	317.38	3470.98
41.00	247.24	-19.88	232.50	-84.08	3.80	1.38	262.91	5339.42
42.00	203.32	-20.42	190.54	-70.94	4.61	1.72	216.95	6502.90
43.00	173.62	-19.56	163.60	-58.14	5.43	1.93	184.26	7138.63
44.00	152.61	-16.64	146.22	-43.70	6.28	1.88	159.28	6786.59
45.00	140.30	-12.05	137.20	-29.29	6.97	1.49	143.46	5262.71
46.00	134.39	-8.36	132.96	-19.55	7.36	1.08	135.83	3745.19
47.00	129.98	-5.84	129.31	-13.23	7.65	0.78	130.66	2651.98
48.00	126.28	-3.80	126.00	-8.37	7.90	0.53	126.55	1740.80
49.00	123.64	-1.69	123.58	-3.64	8.08	0.24	123.69	773.95
50.00	119.60	0.02	119.60	0.03	8.36	0.00	119.60	-7.13
51.00	115.87	3.54	115.65	7.15	8.61	-0.53	116.09	-1661.96
52.00	116.85	7.67	115.81	15.59	8.48	-1.14	117.91	-3495.61
53.00	120.09	11.08	117.86	23.07	8.17	-1.60	122.37	-4803.73
54.00	125.09	13.76	121.50	29.74	7.77	-1.90	128.78	-5602.29
55.00	131.10	15.44	126.37	34.90	7.35	-2.03	136.01	-5875.61
56.00	138.17	16.25	132.65	38.67	6.95	-2.03	143.92	-5757.18
57.00	144.18	16.30	138.39	40.46	6.66	-1.95	150.22	-5434.31
58.00	147.81	16.55	141.69	42.11	6.48	-1.93	154.20	-5288.48
59.00	154.64	17.23	147.70	45.81	6.18	-1.92	161.91	-5167.01
60.00	159.67	16.88	152.79	46.36	5.99	-1.82	166.86	-4823.14
61.00	164.96	17.59	157.25	49.84	5.78	-1.83	173.05	-4778.87
62.00	171.78	18.35	163.05	54.08	5.53	-1.83	180.99	-4704.40
63.00	182.10	18.89	172.28	58.97	5.20	-1.78	192.47	-4492.47
64.00	190.26	19.35	179.52	63.03	4.96	-1.74	201.65	-4330.09
65.00	203.20	20.59	190.22	71.47	4.61	-1.73	217.07	-4238.17
66.00	220.23	21.49	204.92	80.67	4.23	-1.66	236.68	-4010.94
67.00	244.22	21.86	226.65	90.94	3.80	-1.52	263.14	-3622.18
68.00	275.19	21.56	255.95	101.11	3.38	-1.34	295.89	-3124.79
69.00	319.03	20.17	299.48	109.98	2.94	-1.08	339.87	-2492.40
70.00	381.73	15.34	368.12	101.01	2.53	-0.69	395.84	-1576.06



85 to 135 kHz-B (Broadband)

Transformed to 100 ohms minimum (B1)

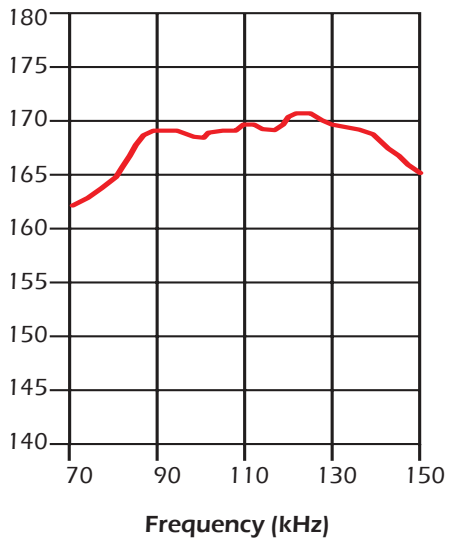
Power Rating:
- 1 kW @ 1% duty cycle
- CW(4): 18W in B175, B265, B285, PM265
  12W in M265, TM185, TM265

65 mm (2.56 in) PZT
Active Area: 33 cm² (5.1 in²)

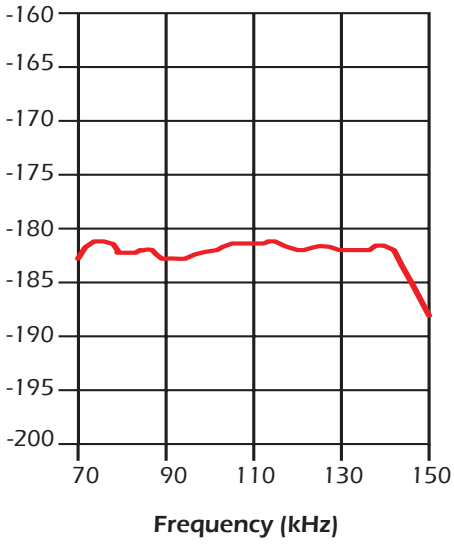
Radiating Surface: Urethane
Q ≈ 2
Cable Type: C335
Cable Length: 10 m (33 ft)

Notes:
(1) dB re 1 µPa per volt at 1 meter
(2) dB re 1 volt per µPa
(3) Sum of transmitting voltage response and receiving voltage response
(4) CW Power ratings is for 20°C seawater temperature. Consult Airmar for different housing CW ratings.

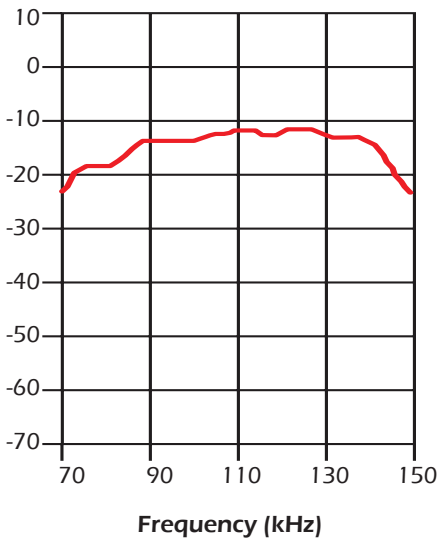
TVR



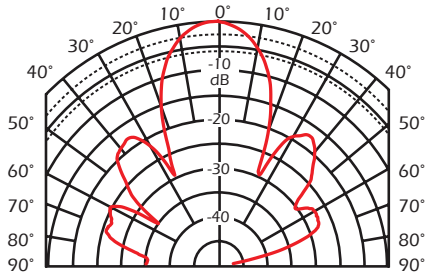
RVR



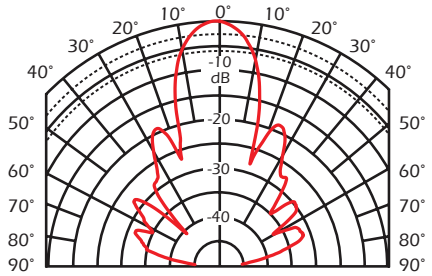
FOM



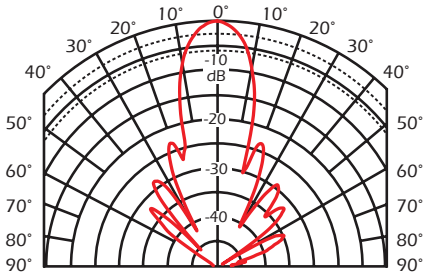
Transmit Radiation Pattern



Beamwidth	@ 85 kHz
-3 dB	16°
-6 dB	22°
-10 dB	29°



Beamwidth	@ 105 kHz
-3 dB	13°
-6 dB	18°
-10 dB	22°



Beamwidth	@ 135 kHz
-3 dB	11°
-6 dB	15°
-10 dB	19°

85 to 135 kHz-B (Broadband)

Note: Impedance data includes cable

Balanced Impedance Table (Nominal Value) in 20°C Water

Test Frequency (kHz)	Impedance Magnitude (Ω)	Phase Angle (°)	Series Resistance (Ω)	Series Reactance (Ω)	Parallel Conductance (mS)	Parallel Susceptance (mS)	Parallel Resistance (Ω)	Parallel Capacitance (pF)
75.00	240.21	29.30	209.48	117.57	3.63	-2.04	275.46	-4323.59
77.00	231.70	16.69	221.94	66.54	4.13	-1.24	241.89	-2561.81
79.00	204.27	7.58	202.48	26.95	4.85	-0.65	206.07	-1301.08
81.00	183.32	3.40	182.99	10.87	5.45	-0.32	183.64	-635.29
83.00	170.03	-1.06	170.00	-3.14	5.88	0.11	170.06	208.32
85.00	150.91	-5.20	150.29	-13.67	6.60	0.60	151.54	1123.61
87.00	130.38	-5.70	129.74	-12.96	7.63	0.76	131.03	1394.63
89.00	117.20	-2.52	117.09	-5.15	8.52	0.38	117.31	670.63
91.00	111.64	3.07	111.48	5.97	8.94	-0.48	111.79	-837.83
93.00	114.06	8.14	112.91	16.15	8.68	-1.24	115.22	-2124.79
95.00	120.70	10.90	118.52	22.83	8.14	-1.57	122.92	-2625.71
97.00	130.07	12.03	127.22	27.11	7.52	-1.60	133.00	-2629.03
99.00	142.17	10.29	139.88	25.39	6.92	-1.26	144.49	-2019.20
101.00	148.32	6.09	147.49	15.73	6.70	-0.71	149.16	-1126.55
103.00	149.11	3.53	148.82	9.19	6.69	-0.41	149.39	-638.51
105.00	152.85	1.70	152.78	4.52	6.54	-0.19	152.92	-293.52
107.00	156.36	-1.39	156.31	-3.80	6.39	0.16	156.40	230.91
109.00	155.91	-3.97	155.54	-10.80	6.40	0.44	156.29	648.58
111.00	156.14	-4.98	155.55	-13.55	6.38	0.56	156.73	797.02
113.00	164.32	-5.79	163.48	-16.59	6.05	0.61	165.16	865.42
115.00	174.54	-11.92	170.77	-36.06	5.61	1.18	178.39	1638.25
117.00	164.75	-19.34	155.45	-54.57	5.73	2.01	174.60	2734.69
119.00	148.66	-20.46	139.28	-51.96	6.30	2.35	158.67	3144.64
121.00	142.19	-17.38	135.70	-42.47	6.71	2.10	148.99	2762.55
123.00	147.06	-14.66	142.28	-37.23	6.58	1.72	152.02	2227.19
125.00	157.33	-15.05	151.93	-40.86	6.14	1.65	162.92	2101.98
127.00	165.42	-17.43	157.83	-49.55	5.77	1.81	173.39	2269.18
129.00	170.32	-20.27	159.77	-59.00	5.51	2.03	181.56	2509.22
131.00	173.62	-22.89	159.96	-67.53	5.31	2.24	188.46	2721.46
133.00	177.00	-24.58	160.96	-73.63	5.14	2.35	194.64	2812.33
135.00	185.77	-25.74	167.34	-80.67	4.85	2.34	206.23	2755.77
137.00	201.62	-28.69	176.86	-96.81	4.35	2.38	229.85	2766.43
139.00	219.05	-34.90	179.66	-125.31	3.74	2.61	267.06	2990.37
141.00	229.49	-43.85	165.50	-158.98	3.14	3.02	318.22	3407.39
143.00	224.57	-54.12	131.63	-181.95	2.61	3.61	383.13	4015.33
145.00	206.22	-62.51	95.20	-182.93	2.24	4.30	446.71	4721.54