

40 to 75 kHz-A (Broadband) Transformed to 100 ohms minimum (B1)

Power Rating:

- 300 W @ 1% duty cycle
- CW⁽⁴⁾: 8W in B75, B765

34.9 mm (1.37 in) PZT

Active Area: 9.6 cm² (1.49 in²)

Radiating Surface: Urethane

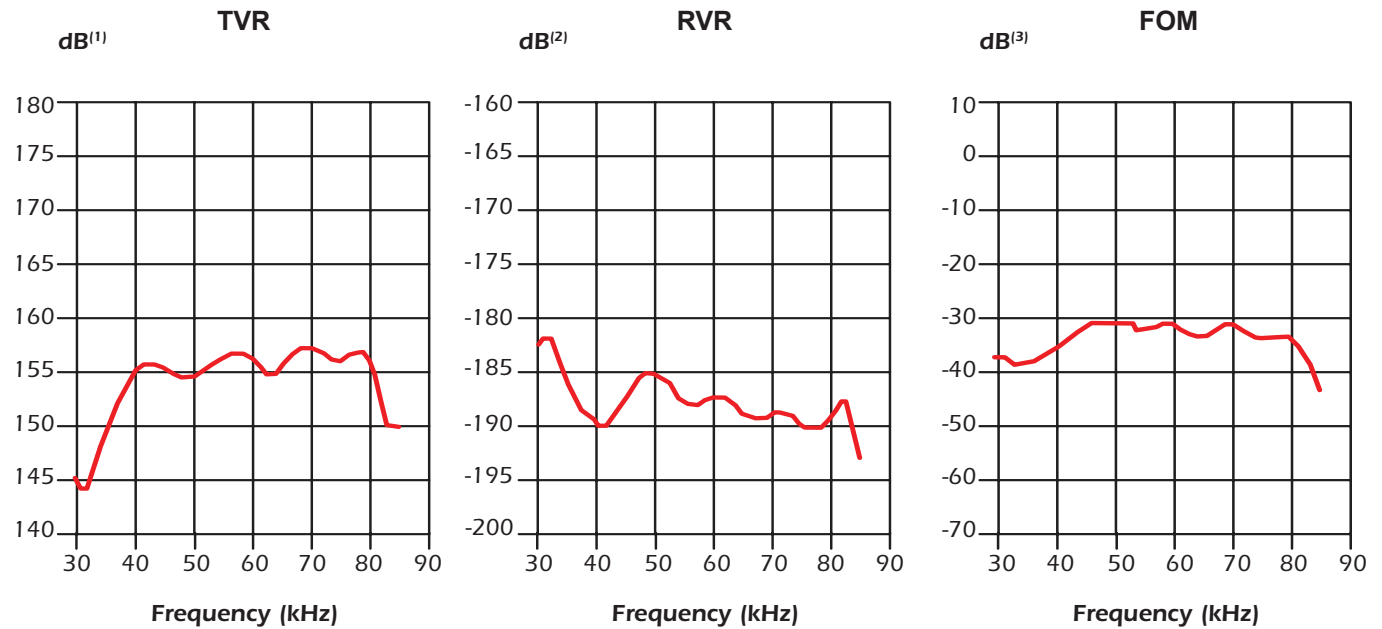
Q ≈ 2

Cable Type: C335

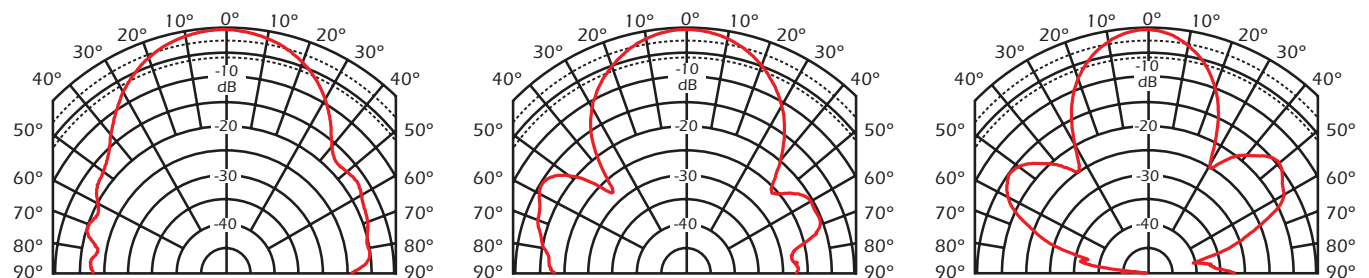
Cable Length: 12 m (40 ft)

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.



Transmit Radiation Pattern



Beamwidth	@ 50 kHz
-3 dB	32°
-6 dB	45°
-10 dB	59°

Beamwidth	@ 65 kHz
-3 dB	28°
-6 dB	40°
-10 dB	51°

Beamwidth	@ 75 kHz
-3 dB	21°
-6 dB	30°
-10 dB	39°



Sensing Technology

Technical Data Catalog

40 to 75 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)
35.00	280.50	-39.59	216.15	-178.77	2.75	2.27	364.01	10331.93
36.00	222.38	-39.14	172.49	-140.36	3.49	2.84	286.70	12547.90
37.00	180.38	-37.05	143.97	-108.67	4.43	3.34	225.99	14366.86
38.00	150.31	-32.91	126.19	-81.67	5.59	3.61	179.04	15138.44
39.00	127.79	-26.20	114.66	-56.43	7.02	3.46	142.43	14100.23
41.00	108.82	-5.65	108.29	-10.70	9.15	0.90	109.35	3509.24
42.00	113.47	5.35	112.97	10.58	8.77	-0.82	113.96	-3115.06
43.00	126.37	13.74	122.76	30.01	7.69	-1.88	130.09	-6955.52
44.00	147.36	18.83	139.47	47.56	6.42	-2.19	155.69	-7921.99
46.00	202.86	17.06	193.94	59.50	4.71	-1.45	212.19	-5002.56
47.00	229.26	12.23	224.06	48.55	4.26	-0.92	234.58	-3127.95
48.00	249.49	4.80	248.61	20.89	3.99	-0.34	250.36	-1112.68
49.00	256.38	-3.36	255.94	-15.04	3.89	0.23	256.82	743.36
50.00	250.77	-10.57	246.52	-45.99	3.92	0.73	255.10	2327.82
51.00	237.78	-16.19	228.35	-66.30	4.04	1.17	247.60	3659.50
52.00	220.06	-19.99	206.80	-75.22	4.27	1.55	234.16	4754.44
53.00	203.43	-22.29	188.23	-77.15	4.55	1.86	219.85	5598.31
54.00	187.81	-22.26	173.81	-71.15	4.93	2.02	202.94	5945.49
56.00	169.55	-17.81	161.42	-51.87	5.62	1.80	178.09	5127.84
57.00	168.88	-14.34	163.62	-41.84	5.74	1.47	174.32	4095.67
58.00	174.92	-11.10	171.65	-33.68	5.61	1.10	178.26	3020.46
59.00	188.53	-9.55	185.91	-31.29	5.23	0.88	191.18	2374.60
60.00	206.18	-10.63	202.64	-38.04	4.77	0.89	209.78	2373.91
61.00	222.89	-14.16	216.12	-54.52	4.35	1.10	229.87	2863.11
62.00	230.76	-20.17	216.61	-79.57	4.07	1.49	245.84	3835.96
63.00	228.53	-26.46	204.58	-101.84	3.92	1.95	255.28	4926.37
64.00	214.52	-31.41	183.08	-111.81	3.98	2.43	251.36	6042.07
66.00	181.62	-34.16	150.29	-101.98	4.56	3.09	219.49	7455.22
67.00	170.54	-32.39	144.01	-91.36	4.95	3.14	201.97	7461.74
68.00	165.26	-29.46	143.90	-81.27	5.27	2.98	189.80	6964.78
69.00	165.84	-26.13	148.89	-73.03	5.41	2.66	184.71	6124.87
71.00	180.27	-23.16	165.75	-70.89	5.10	2.18	196.07	4889.82
72.00	189.42	-24.51	172.35	-78.57	4.80	2.19	208.17	4840.84
73.00	194.65	-26.45	174.28	-86.69	4.60	2.29	217.40	4988.39
74.00	195.93	-29.00	171.35	-95.00	4.46	2.47	224.02	5322.78
76.00	187.10	-31.10	160.20	-96.65	4.58	2.76	218.52	5782.00
77.00	181.70	-29.38	158.33	-89.15	4.80	2.70	208.53	5581.27
78.00	180.79	-25.42	163.28	-77.60	5.00	2.37	200.16	4844.68
79.00	189.84	-19.05	179.44	-61.98	4.98	1.72	200.85	3464.48
80.00	223.57	-12.15	218.56	-47.07	4.37	0.94	228.70	1873.50

80 to 130 kHz-A (Broadband)

Transformed to 100 ohms minimum (B1)

Power Rating:

- 600 W @ 1% duty cycle
- CW⁽⁴⁾: 6W in B75, B765, B785

43 mm (1.7 in) PZT

Active Area: 15 cm² (2.3 in²)

Radiating Surface: Urethane

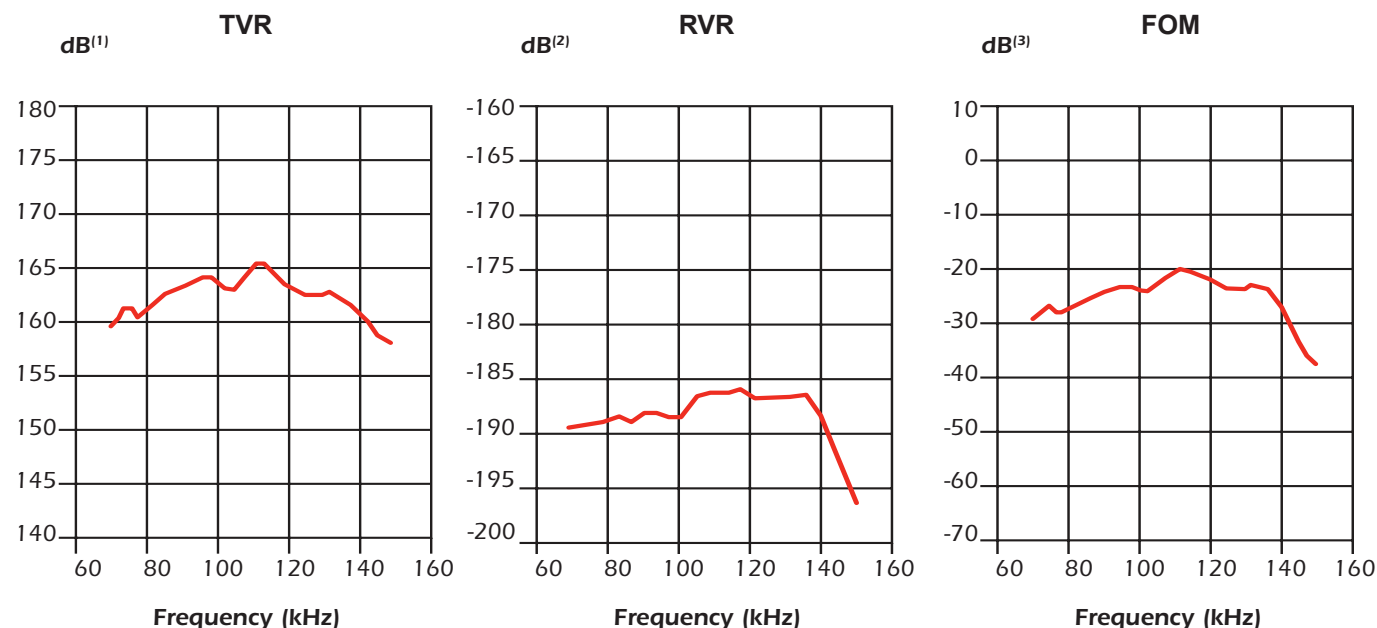
Q ≈ 2.5

Cable Type: C334

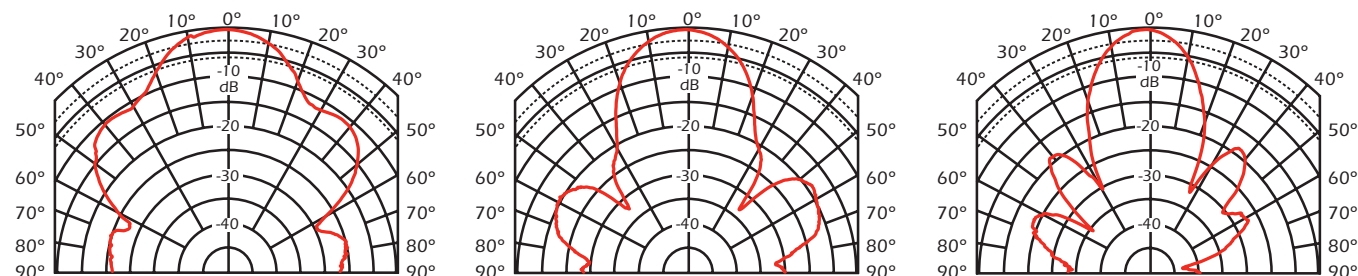
Cable Length: 12 m (40 ft)

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.



Transmit Radiation Pattern



Beamwidth	@ 80 kHz
-3 dB	24°
-6 dB	33°
-10 dB	43°

Beamwidth	@ 100 kHz
-3 dB	20°
-6 dB	29°
-10 dB	36°

Beamwidth	@ 130 kHz
-3 dB	16°
-6 dB	23°
-10 dB	29°



Sensing Technology

Technical Data Catalog

80 to 130 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 ($^{\circ}$)	Series Resistance (Ω)	Series Reactance (Ω)	Parallel Conductance (mS)	Parallel Susceptance (mS)	Parallel Resistance (Ω)	Parallel Capacitance (pF)
70.00	112.82	57.74	60.22	95.40	4.73	-7.50	211.35	-17042.10
72.00	109.93	52.61	66.76	87.33	5.52	-7.23	181.01	-15975.96
74.00	106.06	51.34	66.25	82.82	5.89	-7.36	169.77	-15835.37
76.00	109.80	51.58	68.24	86.02	5.66	-7.14	176.67	-14942.55
78.00	117.91	48.81	77.66	88.72	5.59	-6.38	179.03	-13022.05
80.00	122.20	43.56	88.55	84.21	5.93	-5.64	168.63	-11219.11
82.00	121.09	38.46	94.82	75.31	6.47	-5.14	154.64	-9968.67
84.00	116.51	35.29	95.10	67.31	7.01	-4.96	142.74	-9394.42
86.00	112.35	34.52	92.57	63.67	7.33	-5.04	136.35	-9334.78
88.00	112.53	34.68	92.54	64.02	7.31	-5.06	136.83	-9144.45
90.00	115.22	33.69	95.86	63.91	7.22	-4.81	138.48	-8514.20
92.00	115.97	31.52	98.85	60.63	7.35	-4.51	136.04	-7799.69
94.00	114.40	29.63	99.44	56.57	7.60	-4.32	131.62	-7317.73
96.00	111.06	29.59	96.58	54.84	7.83	-4.45	127.72	-7370.08
98.00	109.88	32.16	93.01	58.49	7.70	-4.84	129.79	-7868.17
100.00	114.43	35.31	93.38	66.14	7.13	-5.05	140.22	-8038.96
102.00	126.23	37.76	99.81	77.29	6.26	-4.85	159.66	-7568.24
104.00	144.84	36.21	116.86	85.57	5.57	-4.08	179.51	-6242.24
106.00	162.27	27.60	143.81	75.17	5.46	-2.85	183.10	-4286.33
108.00	156.07	19.63	147.00	52.42	6.04	-2.15	165.69	-3171.62
110.00	143.31	17.48	136.69	43.05	6.66	-2.10	150.25	-3033.01
112.00	137.74	19.31	129.99	45.55	6.85	-2.40	145.95	-3411.58
114.00	139.98	23.09	128.77	54.89	6.57	-2.80	152.17	-3911.20
116.00	153.87	25.36	139.04	65.91	5.87	-2.78	170.28	-3819.54
118.00	175.82	23.36	161.41	69.73	5.22	-2.26	191.53	-3042.09
120.00	185.83	18.33	176.40	58.44	5.11	-1.69	195.76	-2244.56
122.00	195.12	15.64	187.90	52.59	4.94	-1.38	202.62	-1801.91
124.00	208.10	11.62	203.84	41.91	4.71	-0.97	212.45	-1242.15
126.00	217.11	7.58	215.22	28.63	4.57	-0.61	219.03	-767.19
128.00	226.43	3.49	226.01	13.77	4.41	-0.27	226.85	-333.95
130.00	234.00	-1.13	233.96	-4.60	4.27	0.08	234.05	102.84
132.00	238.43	-4.07	237.83	-16.93	4.18	0.30	239.03	359.03
134.00	257.22	-5.81	255.90	-26.02	3.87	0.39	258.55	467.17
136.00	294.93	-11.35	289.16	-58.06	3.32	0.67	300.82	781.14
138.00	327.05	-22.37	302.44	-124.46	2.83	1.16	353.66	1342.03
140.00	331.62	-36.85	265.37	-198.88	2.41	1.81	414.42	2055.87