

EXHAUST SYSTEM SIZE

The size of the wet marine exhaust muffler is determined by the engine size (H.P.) and the engine manufacturer's allowable back pressure. Diesel engines are particularly sensitive to back pressure. If you have any questions or need help, call Centek Industries at [229.228.7653](tel:229.228.7653)

The sizing table to the right is for general recommendations only:

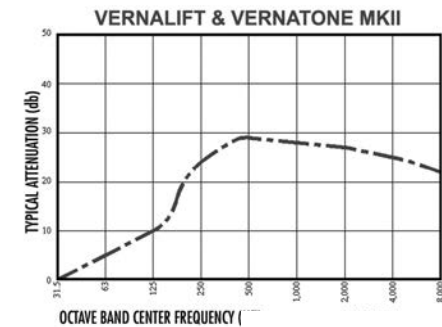
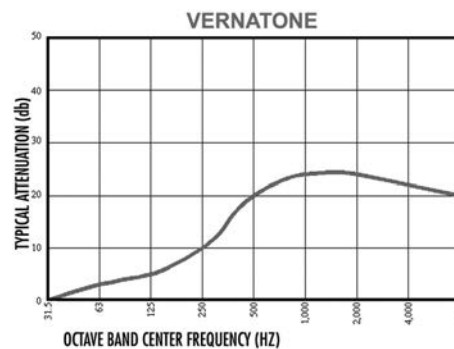
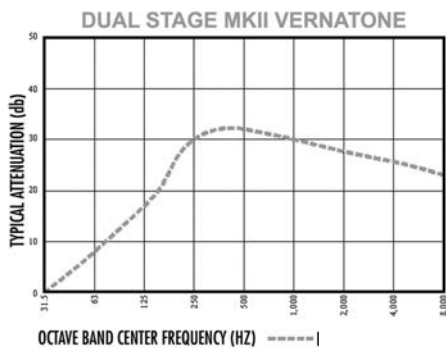
NOTE: For V-Block engines where twin exhaust lines are desired, divide the H.P. by two and then match to the appropriate size.

DIAMETER	GASOLINE hp	DIESEL hp
1.50 or 1.63	30	10
2.00"	60	25
2.50"	110	40
3.00"	160	60
3.50"	220	85
4.00"	280	125
4.50"	320	170
5.00"	370	210
6.00"	440	280
8.00"	-	420
10.00"	-	680
12.00"	-	900
14.00"	-	1150
16.00"	-	1800
18.00"	-	2000
20.00"	-	2500
22.00"	-	2700

Larger sizes are available upon request. Contact Centek for more information.

SOUND ATTENUATION IS BASED ON A COMPARISON TO STRAIGHT EXHAUST

Fair	10-12 dB
Good	15-18 dB
Better	22-28 dB
Best	25-30 dB



The attenuation curves as shown are typical only for the products as shown and meant to display their comparative acoustical properties. Actual results will depend highly on the engine to which the product is applied and the operating parameters of that engine.

PART#	A	C	D	G
	IN/OUT	LGTH	DIA	FIGURE
	IN/MM	IN/MM	IN/MM	
1000216	3.00 / 76	43.00 / 1,092	4.38 / 111	1
1000217	3.00 / 76	40.00 / 1,016	4.38 / 111	2
1000262	3.50 / 89	42.00 / 1,067	4.38 / 111	1
1000266	3.50 / 89	40.00 / 1,016	4.38 / 111	2
1000265	4.00 / 102	44.00 / 1,018	4.38 / 111	1
1000267	4.00 / 102	40.00 / 1,016	4.38 / 111	2

Application: Ski Boats • Fuel Type: Gas Only • Waterline: Above Only • Sound Rating: Good

VERNA SKI

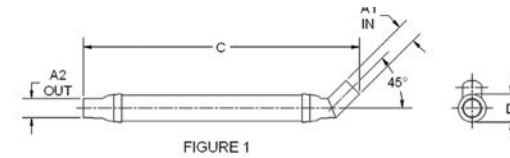


FIGURE 1

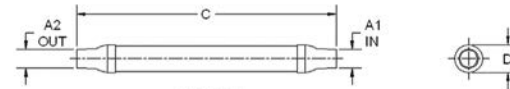
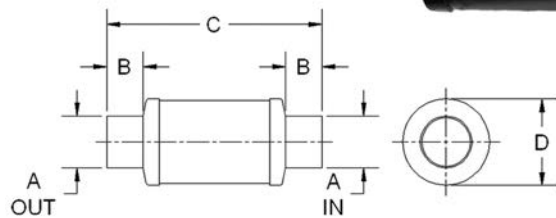


FIGURE 2

MINIMAX



PART#	A	B	C	D
	IN/OUT	I/O LGH	LGTH	DIA
	IN/MM	IN/MM	IN/MM	IN/MM
1050250	2.50 / 64	2.00 / 51	12.75 / 324	6.38 / 162
1050300	3.00 / 76	2.50 / 64	13.75 / 349	6.38 / 162
1050350	3.50 / 89	2.50 / 64	14.75 / 375	6.38 / 162
1050400	4.00 / 102	3.00 / 76	16.75 / 425	8.38 / 213
1050450	4.50 / 114	3.00 / 76	18.75 / 476	8.38 / 213
1050500	5.00 / 127	3.50 / 89	20.75 / 527	8.38 / 213
1050600	6.00 / 152	4.00 / 102	25.00 / 635	10.04 / 255

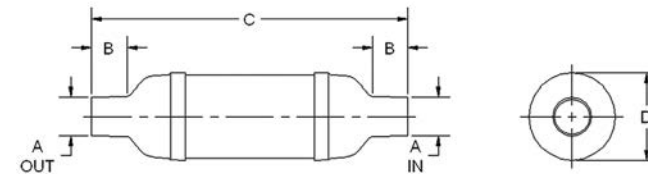
Application: V Drives & Space Restraints • Fuel Type: Gas/Diesel • Waterline: Above Only • Sound Rating: Fair

PART#	A	B	C	D
	IN/OUT	I/O LGH	LGTH	DIA
	IN/MM	IN/MM	IN/MM	IN/MM
1000103	2.50 / 64	3.00 / 76	21.62 / 549	5.58 / 142
1000145	3.00 / 76	3.50 / 89	20.12 / 511	7.07 / 180
1000104	3.00 / 76	3.50 / 89	25.84 / 656	7.07 / 180
1000105	3.50 / 89	3.50 / 89	30.00 / 762	8.09 / 205
1000165	4.00 / 102	3.50 / 89	25.50 / 648	9.06 / 230
1000106	4.00 / 102	3.50 / 89	33.69 / 856	9.06 / 230
1000107	4.50 / 114	4.00 / 102	35.62 / 905	10.10 / 257
1000108	5.00 / 127	4.40 / 112	38.75 / 984	11.00 / 279
1000112	6.00 / 152	5.00 / 127	31.43 / 798	12.20 / 310
1000111	6.00 / 152	5.00 / 127	41.50 / 1,054	12.20 / 310
1000117	6.00 / 152	6.00 / 152	39.62 / 1,006	16.21 / 412
1000113	6.00 / 152	6.00 / 152	52.75 / 1,340	16.21 / 412
1000120	8.00 / 203	6.00 / 152	39.62 / 1,006	16.21 / 412
1000119	8.00 / 203	6.00 / 152	52.75 / 1,340	16.21 / 412

VERNATONE™ - ROUND

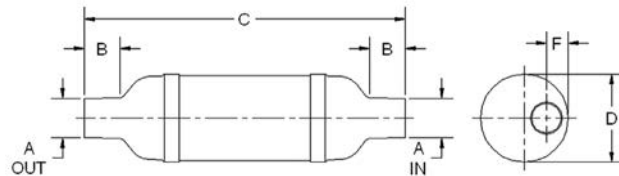


Application: All Inboards
 Fuel Type: Gas/Diesel
 Waterline: Above Only
 Sound Rating: Good



Note: For 10"-14" in/out range please reference our Vernatone™ MKII round or the MKII Dual Stage round. If you have any questions please contact our Engineering Department.

VERNATONE™ - ROUND PORT & STARBOARD



PORT SHOWN

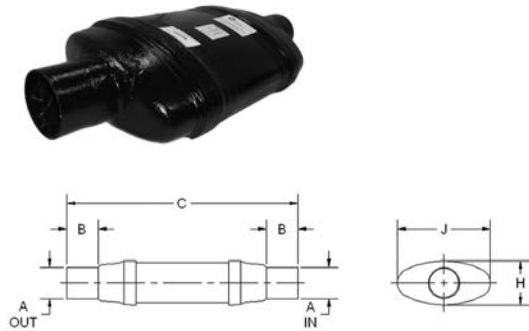
PART#	A	B	C	D	F
	IN/OUT	I/O LGH	LGTH	DIA	I/O OFFSET
	IN/MM	IN/MM	IN/MM	IN/MM	IN/MM
1000241 (PORT)	4.00 / 102	4.00 / 102	27.00 / 686	8.00 / 203	2.38 / 60
1000242 (STBD)	4.00 / 102	4.00 / 102	27.00 / 686	8.00 / 203	2.38 / 60
1000249 (PORT)	5.00 / 127	4.75 / 121	35.63 / 905	10.00 / 254	3.08 / 78
1000250 (STBD)	5.00 / 127	4.75 / 121	35.63 / 905	10.00 / 254	3.08 / 78

Application: All Inboards • Fuel type: Gas/Diesel
 Waterline: Above only • Sound rating: Good

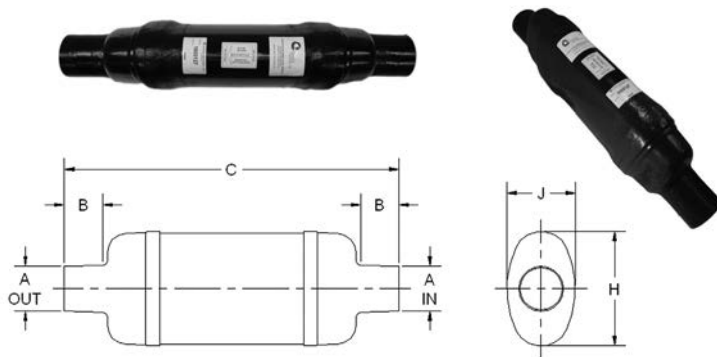
VERNATONE™ - OVAL HORIZONTAL MOUNT

PART#	A	B	C	H	J
	IN/OUT	I/O LGH	LGTH	HGT	WIDTH
	IN/MM	IN/MM	IN/MM	IN/MM	IN/MM
1000229	5.00 / 127	5.00 / 127	35.13 / 892	7.00 / 178	14.75 / 375
1000263	6.00 / 152	5.00 / 127	42.33 / 1,075	9.00 / 229	15.00 / 381
1000139	8.00 / 203	5.70 / 145	54.00 / 1,372	12.00 / 305	19.00 / 483
1000194	10.00 / 254	7.50 / 191	65.50 / 1,664	14.50 / 368	24.50 / 622

Application: All Inboards • Fuel type: Gas/Diesel
 Waterline: Above only • Sound rating: Good



VERNATONE™ OVAL VERTICAL MOUNT



Application: All Inboards • Fuel type: Gas/Diesel
 Waterline: Above only • Sound rating: Good

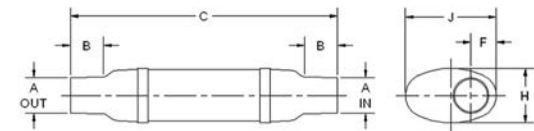
PART#	A	B	C	H	J
	IN/OUT	I/O LGH	LGTH	HGT	WIDTH
	IN/MM	IN/MM	IN/MM	IN/MM	IN/MM
1000127	4.50 / 114	5.25 / 133	35.62 / 905	14.75 / 375	7.00 / 178
1000269	5.00 / 127	5.25 / 133	35.62 / 905	14.75 / 375	7.00 / 178
1000115	6.00 / 152	5.00 / 127	42.50 / 1,080	15.12 / 384	9.00 / 229
1000118	6.00 / 152	5.00 / 127	32.00 / 813	15.12 / 384	9.00 / 229
1000121	8.00 / 203	5.70 / 145	54.00 / 1,372	19.00 / 483	12.00 / 305
1000122	8.00 / 203	5.70 / 145	39.00 / 991	19.00 / 483	12.00 / 305
1000123	10.00 / 254	7.50 / 191	65.50 / 1,664	24.50 / 622	14.50 / 368

VERNATONE™ - OVAL HORIZONTAL MOUNT (PORT & STARBOARD)

PART#	A	B	C	F	H	J
	IN/OUT IN/MM	I/O LGH IN/MM	LGTH IN/MM	I/O OFFSET IN/MM	HGT IN/MM	WIDTH IN/MM
1000162 (PORT)	6.00 / 152	5.00 / 127	42.50 / 1,080	4.25 / 108	9.00 / 229	15.12 / 384
1000163 (STBD)	6.00 / 152	5.00 / 127	42.50 / 1,080	4.25 / 108	9.00 / 229	15.12 / 384
1000149 (PORT)	6.00 / 152	5.00 / 127	52.50 / 1,334	6.31 / 160	12.00 / 305	19.00 / 483
1000150 (STBD)	6.00 / 152	5.00 / 127	52.50 / 1,334	6.31 / 160	12.00 / 305	19.00 / 483
1000140 (PORT)	8.00 / 203	5.32 / 135	54.50 / 1,384	6.31 / 160	12.00 / 305	19.00 / 483
1000141 (STBD)	8.00 / 203	5.32 / 135	54.50 / 1,384	6.31 / 160	12.00 / 305	19.00 / 483

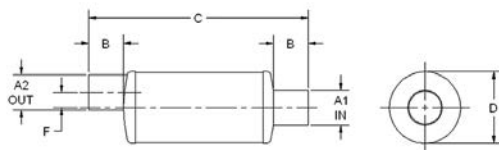


Application: All Inboards
 Fuel type: Gas/Diesel
 Waterline: Above only
 Sound rating: Good



PORT SHOWN

VERNATONE™ MKII ROUND

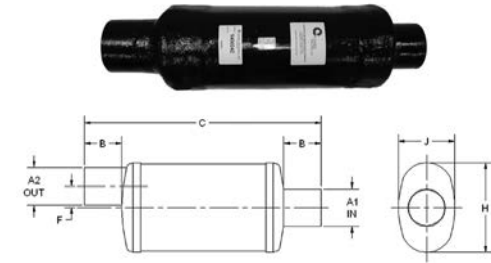


Application: All Inboards • Fuel type: Gas/Diesel
 Waterline: Above only • Sound rating: Better

PART#	A1	A2	B	C	D	F
	INLET IN/MM	OUTLET IN/MM	I/O LGTH IN/MM	LGTH IN/MM	DIA IN/MM	I/O OFFSET IN/MM
1400003	2.00 / 51	2.00 / 51	2.50 / 64	16.00 / 406	6.38 / 162	1.85 / 47
1400002	2.38 / 60	2.38 / 60	3.00 / 76	16.00 / 406	6.38 / 162	1.66 / 42
1400032	2.50 / 64	2.50 / 64	3.00 / 76	18.00 / 457	6.38 / 162	1.60 / 41
1400015	3.00 / 76	3.00 / 76	3.00 / 76	19.00 / 483	8.38 / 213	2.38 / 60
1400016	3.50 / 89	3.50 / 89	4.00 / 102	23.00 / 584	8.38 / 213	2.13 / 54
1400017	4.00 / 102	4.00 / 102	4.00 / 102	25.38 / 645	10.04 / 255	2.66 / 68
1400018	4.50 / 114	4.50 / 114	4.50 / 114	28.50 / 724	10.04 / 255	2.41 / 61
1400006	5.00 / 127	5.00 / 127	5.00 / 127	31.50 / 800	10.04 / 255	2.16 / 55
1400040	5.00 / 127	6.00 / 152	5.00 / 127	40.00 / 1,016	12.50 / 318	2.84 / 72
1400007	6.00 / 152	6.00 / 152	6.00 / 152	38.00 / 965	12.50 / 318	2.84 / 72
1400039	6.00 / 152	8.00 / 203	8.00 / 203	50.50 / 1,283	16.25 / 413	3.72 / 94
1400008	8.00 / 203	8.00 / 203	8.00 / 203	50.50 / 1,283	16.25 / 413	3.72 / 94
1400030	8.00 / 203	10.00 / 254	10.00 / 254	61.00 / 1,549	18.50 / 470	3.85 / 98
1400009	10.00 / 254	10.00 / 254	10.00 / 254	63.00 / 1,600	18.50 / 470	3.85 / 98
1400010	12.00 / 305	12.00 / 305	12.00 / 305	75.50 / 1,918	22.25 / 565	4.25 / 108
1400011	14.00 / 356	14.00 / 356	12.00 / 305	87.00 / 2,210	22.25 / 565	3.25 / 83

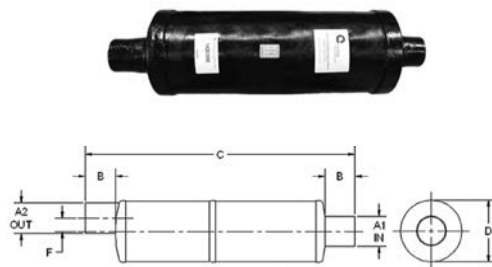
VERNATONE™ MKII OVAL VERTICAL MOUNT

PART#	A1	A2	B	C	H	J	F
	INLET IN/MM	OUTLET IN/MM	I/O LGTH IN/MM	LGTH IN/MM	HGT IN/MM	WIDTH IN/MM	I/O OFFSET IN/MM
1400042	5.00 / 127	5.00 / 127	5.50 / 140	31.50 / 800	15.00 / 381	9.00 / 229	4.56 / 116
1400037	5.00 / 127	6.00 / 152	6.00 / 152	38.00 / 965	15.00 / 381	9.00 / 229	4.06 / 103
1400043	6.00 / 152	6.00 / 152	6.00 / 152	32.38 / 822	15.00 / 381	9.00 / 229	4.06 / 103
1400014	6.00 / 152	8.00 / 203	8.00 / 203	50.50 / 1,283	19.00 / 483	12.00 / 305	5.06 / 129
1400044	8.00 / 203	8.00 / 203	8.00 / 203	50.50 / 1,283	19.00 / 483	12.00 / 305	4.81 / 122
1400045	10.00 / 254	10.00 / 254	10.00 / 254	63.00 / 1,600	24.50 / 622	14.50 / 368	6.85 / 174
1400046	12.00 / 305	12.00 / 305	12.00 / 305	75.50 / 1,918	30.00 / 762	18.00 / 457	8.25 / 210
1400047	12.00 / 305	14.00 / 356	12.00 / 305	77.13 / 1,959	30.00 / 762	18.00 / 457	7.25 / 184
1400028	14.00 / 356	14.00 / 356	12.00 / 305	77.00 / 1,956	30.00 / 762	18.00 / 457	7.25 / 184



Application: All Inboards • Fuel type: Gas/Diesel
Waterline: Above only • Sound rating: Better

VERNATONE™ MKII DUAL STAGE ROUND



Application: All Inboards • Fuel type: Gas/Diesel
Waterline: Above only • Sound rating: Best

PART#	A1	A2	B	C	D	F
	INLET IN/MM	OUTLET IN/MM	I/O LGTH IN/MM	LGTH IN/MM	DIA IN/MM	I/O OFFSET IN/MM
1420300	3.00 / 76	3.00 / 76	3.00 / 76	29.00 / 737	8.38 / 213	2.13 / 54
1420350	3.50 / 89	3.50 / 89	3.50 / 89	30.00 / 762	8.38 / 213	1.88 / 48
1420400	4.00 / 102	4.00 / 102	4.00 / 102	38.50 / 978	10.06 / 256	2.50 / 64
1420500	5.00 / 127	5.00 / 127	5.00 / 127	46.00 / 1,168	10.06 / 256	2.00 / 51
1420600	6.00 / 152	6.00 / 152	6.00 / 152	54.00 / 1,372	12.38 / 314	2.63 / 67
1420800	8.00 / 203	8.00 / 203	8.00 / 203	66.00 / 1,676	16.25 / 413	3.50 / 89
1421000	10.00 / 254	10.00 / 254	8.00 / 203	81.00 / 2,057	18.50 / 470	3.63 / 92
1421200	12.00 / 305	12.00 / 305	10.00 / 254	94.00 / 2,388	22.25 / 565	4.50 / 114
1421400	14.00 / 356	14.00 / 356	10.00 / 254	113.00 / 2,870	22.25 / 565	3.50 / 89