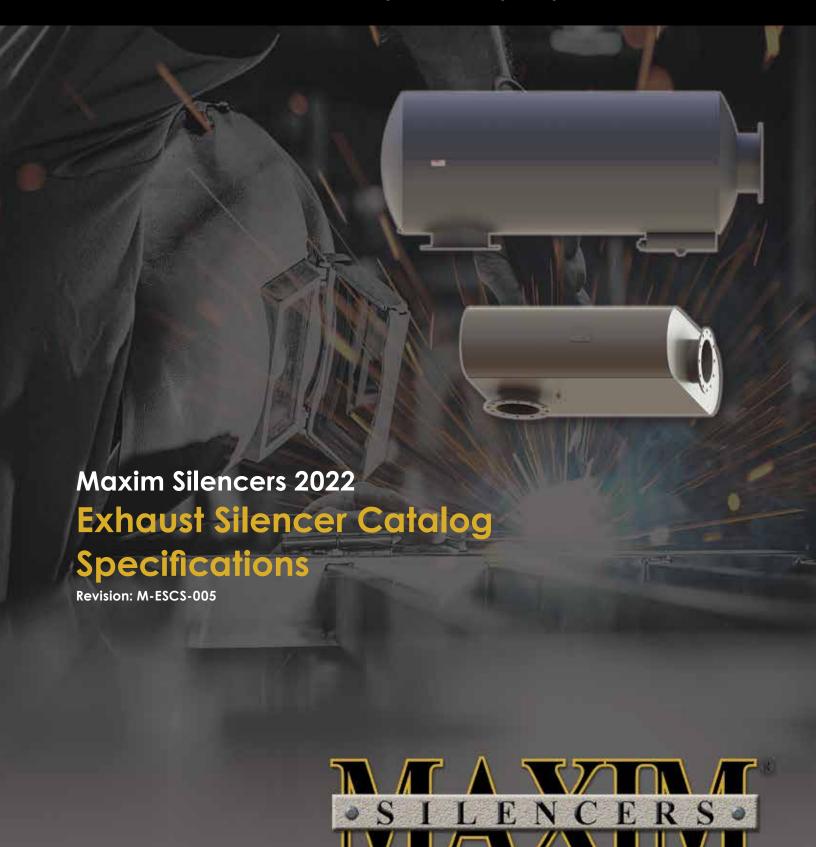
Industrial Silencer, Heat Recovery and Catalytic Specialists



Prices are subject to change without notice. Prices are in U.S. dollars

Minimum order \$50, expedited fees minimum \$50 Custom orders may require payment in advance. Custom items are non-returnable and non-refundable.

Returns must be approved by Maxim Silencers in advance. Upon approval an RMA will be issued.

Return shipments are prepaid by customer, unless otherwise authorized by Maxim Silencers. Restocking charges may be applied.

Maxim Silencers products are warranted for one year from date of purchase by the consumer against defects due to materials and workmanship only. In case of a defective product, Maxim Silencers shall be the sole judge in determining the nature of the defect. Maxim Silencers sole obligation shall be to repair, or at Maxim Silencers option, to replace said products providing the originals are returned to Maxim Silencers. All returned items must be pre-approved by Maxim Silencers. All return shipments must be prepaid by the consumer. Defects or failures due to improper or careless installation, storage, handling, or application shall be excluded from this warranty. Failure to comply or contrary usage to Maxim Silencers directions, specifications or design, of which Maxim Silencers shall be sole judge, voids this warranty and all said products are specifically excluded from this warranty. No liability for damage or loss of any nature arising from or out of the use of this product, whether or not defective, is assumed. No liability is accepted for return transportation charges, following the repair or replacement, as previously mentioned, or for reinstallation costs. No other expressed or implied warranties exist in the absence of special written agreement between the consumer and Maxim Silencers.

The attenuation curves outlined in the Maxim catalogs represent the dynamic insertion loss at each frequency using the respective size silencer as indicated in the curves. Actual silenced noise levels may vary due to several factors such as engine, speed, loading, unsilenced noise, temperature and environmental conditions. The Maxim curves in the sales literature represent the outlet dynamic insertion loss for noise only and does not include any structural, vibration, and/or flanking noise that may occur. The attenuation curves should be used as a guideline only due to countless variations.



TABLE OF CONTENTS Maxim Silencers Exhaust Silencer Catalog

	SILENCER EXHAUST CATALOG	Page
	Guides and Nomenclature	4-6
M Series	CHAMBER TYPE SILENCERS expected attenuation	Page
M11	Industrial Grade Chamber 15-20 dBA	7
M22	Residential Grade Chamber 20-25 dBA	8
M32	Critical Grade Chamber 25-32 dBA	9
M42	Super Critical Grade Chamber 30-38 dBA	10
M52	Hospital Grade Chamber 35-42 dBA	11
M62	Hospital Plus Grade Chamber 35-50 dBA	12
M72	Extreme Grade Chamber 40-55 dBA	13
M82	Super Extreme Grade Chamber 45-60 dBA	14
	SPARK ARRESTING	
MSA Series	CHAMBER TYPE SILENCERS expected attenuation	Page
MSA10	Industrial Grade Spark Arresting Chamber 12-20 dBA	15
MSA11	Residential Grade Spark Arresting Chamber 20-25 dBA	16
MSA22	Critical Grade Spark Spark Arresting Chamber 25-32 dBA	17
MSA33	Super Critical Grade Spark Arresting Chamber 30-38 dBA	18
MSA44	Hospital Grade Spark Arresting Chamber 35-42 dBA	19
MSA55	Hospital Plus Grade Spark Arresting Chamber 35-50 dBA	20
MT	LOW PRESSURE DROP/TURBO	
Series	STRAIGHT THROUGH	Page
MT22	Expected Attenuation: 13-16 dBA	21
MT32	Expected Attenuation: 16-19 dBA	22
MT42	Expected Attenuation: 19-22 dBA	23
MT52	Expected Attenuation: 23-25 dBA	24
MD	LOW PROFILE PANCAKE COMPACT	
Series	expected attenuation	Page
MD22	Residential Grade Compact Pancake Chamber 22-28 dBA	25
MD32	Critical Grade Compact Pancake Chamber 25-32 dBA	26
MD42	Super Critical Grade Compact Pancake Chamber 30-37 dBA	27
MD52	Hospital Grade Compact Pancake Chamber 35-42 dBA	28

	SPARK ARRESTING LOW PROFILE	
MDSA Series	PANCAKE COMPACT expected attenuation	Page
MDSA22	Residential Grade Pancake Spark Arresting 19-25 dBA	29
MDSA32	Critical Grade Pancake Spark Arresting 22-28 dBA	30
MDSA42	Super Critical Grade Pancake Spark Arresting 30-37 dBA	31
MR	THIN LINE	
Series	expected attenuation	Page
MR32	Critical Grade Thin Line 35-42 dBA	32
MR42	Hospital Grade Thin Line 39-46 dBA	33
MR62	Extreme Grade Thin Line 45-52 dBA	34
MP Series	MARINE ENGINE / WET EXHAUST	Page
MP11	Expected Attenuation: 15-18 dBA	35
MP31	Expected Attenuation: 20-25 dBA	36
MP41	Expected Attenuation: 30-35 dBA	37
MB Series	BLOWER SILENCERS expected attenuation	Page
MB11	Straight Through Acoustically Packed 15-30 dBA	38
MB21	Chamber Type Silencer 15-30 dBA	39
MB31	Combination Acoustically Packed 25-30 dBA	40
FP Series	ABSORPTIVE DESIGN INTAKE / EXHAUST SILENCERS	Page
FP-FPE	Straight Through Absorptive Design 15-20 dBA	41
FPC-FPCE	Internal Center Panel Absorptive Design 20-25 dBA	42
FPS-FPSE	Full Flow Area Absorptive Design 15-30 dBA	43
AFS Sories	ANNULAR FLOW	Dage
Series	INTAKE / EXHAUST SILENCERS	Page
AFS2-AFSE2	Residential Grade Annular Flow Silencer	44
AFS3-AFSE3	Critical Grade Annular Flow Silencer	45
	SILENCER	
	EXHAUST CATALOG	Page

Terms and Condition

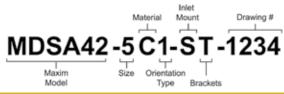


46-47

Guides - Nomenclature



Cylindric	al Sile	ncers Nomenclature		-Side	-Mounting		
Model	-Size	Material	Orientation Type	Inlet	Supports	Gussets	- #
M Series		C Carbon Steel	1 End in, End out		BS "B" Brackets	I On Inlet	
MSA Series		S Stainless Steel 304	2 Side in, End out	m Su	ES "E" Brackets	O On Outlet	ē
MT Series		T Stainless Steel 316	3 End in, Side out	minimum/ location	D3 "D" Legs (3)	X On Inlet and Outle	
	Size	L Stainless Steel 316L	4 Side in, Side out	<u> </u>	D4 "D" Legs (4)		o No
	S	A Aluminized Steel	5 Dual side in, End out	NOT dard	AS "A" Trunnions		_ yii√
			6 Dual mitered side in, End out	Add if stanc	SD "F" Saddles		Dra
			7 Dual end in, Side out	- \			



Disk/Panca	ke an	d Th	in Line Silencers No	omer	nclature					
Model	-Size	Mat	erial	Orie	entation Type	Inle	t Mount	Bre	ackets	- #
MD Series		С	Carbon Steel	1	Side in, End out	S	Standard Mount	В	Bottom	<u></u>
MDSA Series		S	Stainless Steel 304	2	Side in, Side out	F	Flush Mount	T	Тор	Jumper
MR Series	Size	T	Stainless Steel 316	3	End in, End out					N
	S.	L	Stainless Steel 316L	4	Dual side in, End out					ving
		Α	Aluminized Steel	5	Dual side in, Side out					Draw
				6	Dual end in, End out					Δ

Orientation: Orientation and mounting arrangements are viewed horizontally from Left/Inlet to Right/Outlet.

Drawing Numbers: Drawing numbers are usually reserved for customized products. Not all part numbers will have drawing numbers.

Side Inlet and Outlet Placement: Side inlet and outlet placements are viewed from the inlet end. Other placement options are available upon request. Mounting placement positions are noted as clock positions.

Side Inlet Manufactured Location: Side inlets are manufactured at the minimum/standard location ("N Min" dimension, see specs), but can be manufactured within noted min max range at no additional charge. The "N" dimension should be noted and added to nomenclature at time of order if other than the minimum/standard location. If location falls outside of Min Max range customizations may be possible, call for details and pricing.

Mounting Direction: Silencers may be mounted vertically or horizontally with the drain located accordingly. Specify prior to ordering if silencer is to be mounted vertically.

Dual Inlet: Specify engine model.



Guides - Nomenclature

Cylindrical Silencer Orientation Types M, MSA and MT Series



Disk/Pancake and Thin Line Silencer Orientation Types MD, MDSA and MR Series



Orientation: Orientation and mounting arrangements are viewed horizontally from Left/Inlet to Right/Outlet.



Guides - Nomenclature

Mounting Supports

Horizontal Support Options

Vertical Support Options



Mounting Direction: Silencers may be mounted vertically or horizontally with the drain located accordingly. Specify prior to ordering if silencer is to be mounted vertically.

Side Inlet and Outlet Directional Placement



End In, Side Out at 3 o'clock

Side In 3 o'clock, Side Out 12 o'clock

Side in 6 o'clock, Side Out 9 o'clock

Side Inlet and Outlet Placement: Side inlet and outlet placements are viewed from the inlet end. Other placement options are available upon request. Mounting placement positions are noted as clock positions.



INDUSTRIAL CHAMBER SILENCER

15 to 20 dBA Noise Reduction

M11 OVERVIEW

The M11 is engineered for light industrial areas where background noise is relatively high and constant. The need for higher degrees of silencing should be minimal, keeps engine exhaust noise within existing levels.

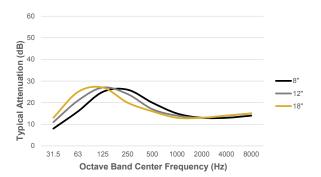
Typical application: Internal combustion engine exhausts in light industry areas with relatively constant background noise.

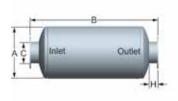
FEATURES

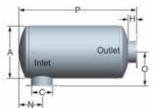
- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: Sizes 3.5 and under MNPT, 4 and up ANSI pattern flanged
- Two chambers
- Drain connection

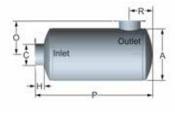
OPTIONS / ACCESSORIES

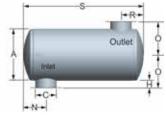
- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories











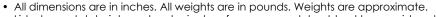
Type 1 - EIEO

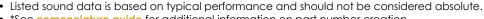
Type 2 - SIEO

Type 3 - EISO

Type 4 - SISO

M11												
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	R Min	R Max	S	Н	Est Wt
M11-1.5	1.5	6	20	3		6	17	3		14	3	10
M11-2	2	6	20	3.5		6	17	3.5		14	3	11
M11-2.5	2.5	7	20	4		6.5	17	4		14	3	15
M11-3	3	8	24	4		7	21	4		18	3	20
M11-3.5	3.5	9	26	4.5	Ļ	7.5	23	4.5	Ļ	20	3	26
M11-4	4	10	30	5	Factory	9	26	5	actory	22	4	40
M11-5	5	12	34	6	ခ္မ	10	30	6	Бac	26	4	51
M11-6	6	14	41	6.5	=	11	37	6.5	=	33	4	75
M11-8	8	16	48	8.5	ns	12	44	8.5	ısı	40	4	108
M11-10	10	18	50	9.5	ပို	13	46	9.5	ပို	42	4	138
M11-12	12	22	60	11.5	•	15	56	11.5	•	52	4	203
M11-14	14	30	70	13.5		20	65	13.5		60	5	394
M11-16	16	36	80	16.5		23	75	16.5		70	5	535
M11-18	18	40	90	17.5		25	85	17.5		80	5	858





• *See <u>nomenclature guide</u> for additional information on part number creation.



RESIDENTIAL CHAMBER SILENCER

20 to 25 dBA Noise Reduction

M22 OVERVIEW

The M22 is engineered for residential and light industrial areas where background noise is relatively high and constant. The need for higher degrees of silencing should be minimal, keeps engine exhaust noise within existing levels.

Typical application: Internal combustion engine exhausts in neighborhoods having high traffic or light industry with relatively constant background noise. Residents in these areas are typically accustomed to the noise or make some efforts to shield themselves from the ever present background noise.

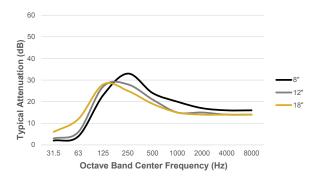
FEATURES

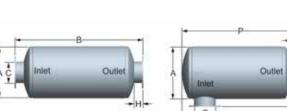
- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: ANSI pattern flanged

Type 1 - EIEO

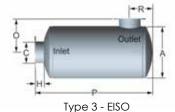
- Two chambers
- Drain connection

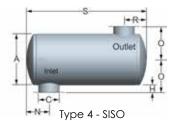
- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories











M22												
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	R Min	R Max	S	Н	Est Wt
M22-4	4	14	36	6	11	11	32	6		28	4	60
M22-5	5	16	43	7	15	12	39	7		35	4	80
M22-6	6	18	49	7.5	18	13	45	7.5		41	4	102
M22-8	8	22	59	9.5	23	15	55	9.5		51	4	170
M22-10	10	26	64	11.5	26	17	60	11.5		56	4	270
M22-12	12	30	77	13	32	19	73	13	Factory	69	4	415
M22-14	14	36	83	15.5	34	23	78	15.5	gc	73	5	550
M22-16	16	40	90	16.5	36	25	85	16.5	ř ±	80	5	784
M22-18	18	45	96	18	39	27.5	91	18	Consult	86	5	931
M22-20	20	50	109	20.5	47	30	104	20.5	Ö	99	5	1357
M22-22	22	54	119	22.5	50	32	114	22.5	ī	109	5	1764
M22-24	24	60	125	24	56	35	120	24		115	5	2105
M22-26	26	64	140	25.5	61	37	135	25.5		13	5	2477
M22-28	28	68	155	26.5	69	39	150	26.5		145	5	2856
M22-30	30	72	166	28	75	41	161	28		156	5	3259

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See nomenclature guide for additional information on part number creation.



CRITICAL CHAMBER SILENCER

25 to 32 dBA Noise Reduction

M32 OVERVIEW

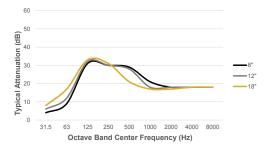
The M32 is engineered for residential areas where background noise is present, but not objectionable. In these areas, installation of an M32 on an engine exhaust is intended to bring the noise level down to match the ambient noise levels.

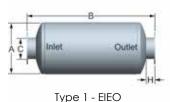
Typical application: Internal combustion engine exhausts in quieter residential area off main traffic areas and away from constant noise sources.

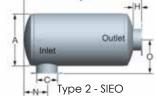
FEATURES

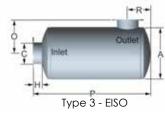
- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: Sizes 3.5 and under MNPT, 4 and up ANSI pattern flanged
- Two chambers
- Drain connection

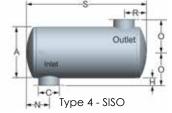
- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories











M32												
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	R Min	R Max	S	Н	Est Wt
M32-1	1	6	20	3	5	6	17	3		14	3	10
M32-1.5	1.5	9	30	4	11	7.5	27	4		24	3	23
M32-2	2	9	30	4.5	11	7.5	27	4.5		24	3	24
M32-2.5	2.5	10	34	5	12	8	31	5		28	3	33
M32-3	3	12	38	5.5	15	9	35	5.5		32	3	50
M32-3.5	3.5	14	42	6	16	10	39	6		36	3	65
M32-4	4	14	48	6	17	11	44	6		40	4	75
M32-5	5	16	57	7	23	12	53	7		49	4	100
M32-6	6	18	63	8	25	13	59	8	Factory	55	4	126
M32-8	8	22	74	9.5	32	15	70	9.5	<u>5</u>	66	4	203
M32-10	10	26	87	11.5	39	17	83	11.5		79	4	352
M32-12	12	30	102	13	45	19	98	13	5	94	4	519
M32-14	14	36	109	15.5	46	23	104	15.5	-Consult	99	5	674
M32-16	16	40	119	16.5	51	25	114	16.5	Ÿ	109	5	973
M32-18	18	45	127	18	56	27.5	122	18	•	117	5	1165
M32-20	20	50	137	20.5	61	30	132	20.5		127	5	1656
M32-22	22	54	149	22.5	67	32	144	22.5		139	5	2107
M32-24	24	60	162	24	74	35	157	24		152	5	2566
M32-26	26	64	183	25.5	85	37	178	25.5		173	5	3031
M32-28	28	68	200	26.5	93	39	195	26.5		190	5	3468
M32-30	30	72	216	28	102	41	211	28		206	5	3992

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



SUPER CRITICAL CHAMBER SILENCER

30 to 38 dBA Noise Reduction

M42 OVERVIEW

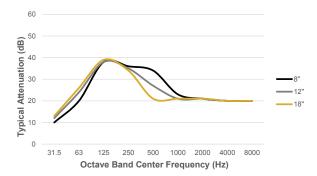
The M42 is engineered for quiet residential areas where background noise is relatively low, and super critical grade silencing is required.

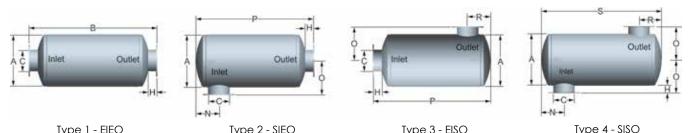
Typical application: Internal combustion engine exhausts in truly quiet residential areas where ambient noise levels are very low and the sound of birds singing and the soft hum of air conditioning units may be the noticeable noise features.

FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: ANSI pattern flanged
- Two chambers
- Drain connection

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories





	туре т - шео			1ype 2 - 31	EU		Type 3	- 5130		туре	4 - 3130	
M42												
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	R Min	R Max	S	Н	Est Wt
M42-4	4	16	51	6.5	18	12	47	6.5		43	4	90
M42-5	5	18	62	7	24	13	58	7		54	4	120
M42-6	6	22	69	8.5	26	15	65	8.5		61	4	175
M42-8	8	26	82	10	32	17	78	10		74	4	304
M42-10	10	30	102	12	45	19	98	12		94	4	484
M42-12	12	36	112	15	51	22	108	15	<u> </u>	104	4	659
M42-14	14	40	120	15.5	52	25	115	15.5	<u> </u>	110	5	930
M42-16	16	45	126	17	55	27.5	121	17	P	116	5	1140
M42-18	18	50	135	19.5	60	30	130	19.5	nsult	125	5	1623
M42-20	20	54	149	21.5	67	32	144	21.5	ō	139	5	2055
M42-22	22	60	157	23	72	35	152	23	Ÿ	147	5	2464
M42-24	24	64	164	24.5	75	37	159	24.5		154	5	2803
M42-26	26	68	184	25.5	85	39	179	25.5		174	5	3282
M42-28	28	72	205	27	97	41	200	27		195	5	3788
M42-30	30	78	220	28.5	104	44	215	28.5		210	5	5293

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See nomenclature guide for additional information on part number creation.



HOSPITAL CHAMBER SILENCER

35 to 42 dBA Noise Reduction

M52 OVERVIEW

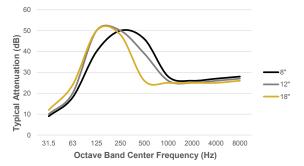
The M52 is engineered for reactive hospital grade noise reduction in heavy industrial areas where machinery operates continuously around a quiet locality. Suitable locations include hospitals, schools and quiet residential districts.

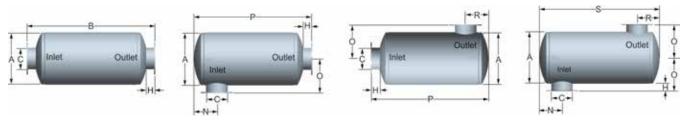
Typical application: Internal combustion engine exhausts in extremely low background noise areas, such as residential or hospital locations away from busy streets.

FEATURES

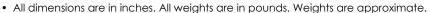
- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: ANSI pattern flanged
- Sizes 6 and under are two chambered, 8 and above are three chambers
- Drain connection

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories





	Type 1 - EIEO			ype 2 - SIE	0	Type 3 - EISO				Type 4 - SISO			
M52													
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	R Min	R Max	S	Н	Est Wt	
M52-4	4	18	62	7	26	13	58	7		54	4	177	
M52-5	5	22	74	9	32	15	70	9		66	4	271	
M52-6	6	26	85	11	38	17	81	11		77	4	342	
M52-8	8	30	103	12	26	19	99	12		95	4	548	
M52-10	10	36	118	14	32	22	114	14		110	4	783	
M52-12	12	36	130	14	36	22	126	14	<u></u>	122	4	870	
M52-14	14	40	145	17	37	25	140	17	cto	135	5	1242	
M52-16	16	45	156	19	39	27.5	151	19	굔	146	5	1543	
M52-18	18	50	171	21	44	30	166	21	onsult	161	5	2252	
M52-20	20	54	185	22	48	32	180	22	ons	175	5	2818	
M52-22	22	60	199	24	51	35	194	24	Ϋ	189	5	3429	
M52-24	24	64	212	26	54	37	207	26		202	5	3916	
M52-26	26	68	235	27	60	39	230	27		222	5	4576	
M52-28	28	72	268	29	71	41	263	29		258	5	5390	
M52-30	30	78	278	32	73	44	273	32		268	5	7246	



- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



HOSPITAL PLUS CHAMBER SILENCER

35 to 50 dBA Noise Reduction

M62 OVERVIEW

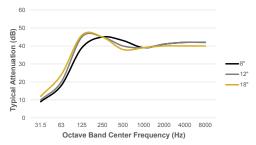
The M62 is engineered for a high degree of silencing in areas requiring hospital plus grade noise reductions. The M62 is a reactive silencer with absorptive type features without resorting to multiple silencers in series or custom designed silencers.

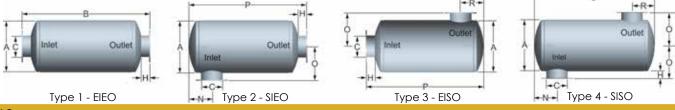
Typical application: Internal combustion engine exhausts in extremely low background noise areas, such as residential or hospital locations away from busy streets.

FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: Sizes 3.5 and under MNPT, 4 and up ANSI pattern flanged
- Sizes 6 and under are two chambered, 8 and above are three chambers
- Drain connection

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories





	Type I - EIEC)	-N-	Type 2 -	2IEO		Type 3	3 - EISO	1-	N- Type	4 - 3130	
M62												
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	R Min	R Max	S	Н	Est Wt
M62-1.5	1.5	9	36	3.5	14	7.5	33	3.5		30	3	60
M62-2	2	10	40	4.5	16	8	37	4.5		34	3	68
M62-2.5	2.5	12	46	5.5	20	9	43	5.5		40	3	98
M62-3	3	14	50	6	21	10	47	6		44	3	126
M62-3.5	3.5	16	54	7	23	11	51	7		48	3	154
M62-4	4	18	62	7	26	13	58	7		54	4	191
M62-5	5	22	74	9	32	15	70	9		66	4	271
M62-6	6	26	85	11	38	17	81	11	Š.	77	4	376
M62-8	8	30	103	12	26	19	99	12	Consult Factory	95	4	548
M62-10	10	36	118	14	32	22	114	14	윤	110	4	844
M62-12	12	36	130	14	36	22	126	14	sul	122	4	870
M62-14	14	40	145	17	37	25	140	17	Ö	135	5	1359
M62-16	16	45	156	19	39	27.5	151	19	Ÿ	146	5	1543
M62-18	18	50	171	21	44	30	166	21		161	5	2417
M62-20	20	54	185	22	48	32	180	22		175	5	2818
M62-22	22	60	199	24	51	35	194	24		189	5	3590
M62-24	24	64	212	26	54	37	207	26		202	5	3916
M62-26	26	68	235	27	60	39	230	27		225	5	4770
M62-28	28	72	268	29	71	41	263	29		258	5	5390
M62-30	30	78	278	32	73	44	273	32		268	5	7679

- All dimensions are in inches, All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



EXTREME CHAMBER SILENCER

40 to 55 dBA Noise Reduction

M72 OVERVIEW

The M72 is engineered for areas requiring extreme grade noise reductions and is a reactive and absorptive silencer designed to achieve maximum attenuation as well as minimize radiated noise from breakout, without resorting to multiple silencers in series or custom designed silencers.

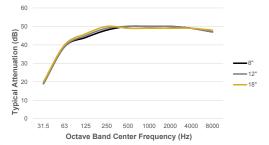
Typical application: Internal combustion engine exhausts in extremely low background noise areas, such as residential or hospital locations away from busy streets.

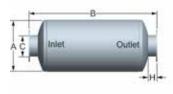
FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: Sizes 3.5 and under MNPT, 4 and up ANSI pattern flanged
- Sizes 6 and under are two chambered, 8 and above are three chambers
- Drain connection

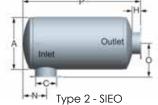
OPTIONS / ACCESSORIES

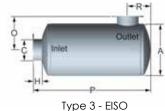
- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories





Type 1 - EIEO







M72												
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	Р	R Min	R Max	S	Н	Est Wt
M72-1.5	1.5	12	60	5		9	57	5		54	3	188
M72-2	2	12	64	6		9	61	6		58	3	204
M72-2.5	2.5	14	70	7		10	67	7		64	3	264
M72-3	3	16	74	7		11	71	7		68	3	329
M72-3.5	3.5	18	78	8		12	75	8		72	3	389
M72-4	4	22	84	8		15	80	8		76	4	498
M72-5	5	26	97	10		17	93	10		89	4	698
M72-6	6	30	110	12	ctory	19	106	12	ctory	102	4	944
M72-8	8	36	134	13	5	22	130	13	Ç	126	4	1511
M72-10	10	40	150	15	onsult Fa	24	146	15	δ.	144	4	1910
M72-12	12	40	158	15	Ę	24	154	15	Consult	150	4	2084
M72-14	14	45	174	18	ő	27.5	169	18	ö	164	5	2549
M72-16	16	50	194	21	Ϋ	30	189	21	Ÿ	184	5	3237
M72-18	18	54	208	23		32	203	23		198	5	3944
M72-20	20	60	226	25		35	221	25		216	5	5443
M72-22	22	64	228	26		37	223	26		218	5	6006
M72-24	24	68	233	27		39	228	27		223	5	6638
M72-26	26	72	234	29		41	229	29		224	5	7196
M72-28	28	78	244	30		44	239	30		234	5	9513
M72-30	30	84	254	32		47	249	32		244	5	10807



- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



SUPER EXTREME CHAMBER SILENCER 45 to 60 dBA Noise Reduction

M82 OVERVIEW

The M82 is engineered for the highest degree of silencing in areas requiring super extreme grade noise reductions. The M82 is presently the top-of-the-line reactive and absorptive silencer designed to achieve maximum attenuation as well as minimize radiated noise from breakout, without resorting to multiple silencers in series or custom designed silencers.

Typical application: Internal combustion engine exhausts in extremely low background noise areas, such as residential or hospital locations away from busy streets.

FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish

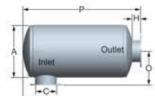
Type 1 - EIEO

28

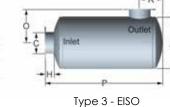
30

- Connections: Sizes 3.5 and under MNPT, 4 and up ANSI pattern flanged
- Sizes 6 and under are two chambered, 8 and above are three chambers
- Drain connection

M82



Type 2 - SIEO



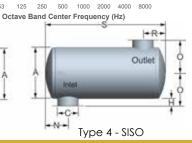
239

249

44

31

33



Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	R Min	R Max	S	Н	Est Wt
M82-1.5	1.5	18	70	6		12	67	6		64	3	384
M82-2	2	20	74	6		13	71	6		68	3	460
M82-2.5	2.5	20	80	7		13	77	7		74	3	504
M82-3	3	22	84	8		14	81	8		78	3	583
M82-3.5	3.5	24	88	9		15	85	9		82	3	695
M82-4	4	26	94	10		17	90	10		86	4	788
M82-5	5	26	108	11	خِ	17	104	11	<u> </u>	100	4	913
M82-6	6	30	118	13	ctory	19	114	13	ctory	110	4	1172
M82-8	8	36	134	14	윤	22	130	14	Б	126	4	1715
M82-10	10	40	150	16	onsult	24	146	16	5	142	4	2164
M82-12	12	40	158	16	ons	24	154	16	Consi	150	4	2356
M82-14	14	45	174	19	Ÿ	27.5	169	19	Ÿ	164	5	3017
M82-16	16	50	194	22		30	189	22		184	5	3805
M82-18	18	54	208	24		32	203	24		198	5	4502
M82-20	20	60	226	26		35	221	26		216	5	6185
M82-22	22	64	228	27		37	223	27		218	5	7086
M82-24	24	68	233	28		39	228	28		223	5	7810
M82-26	26	72	234	30		41	229	30		224	5	8419

• All dimensions are in inches. All weights are in pounds. Weights are approximate.

244

254

78

84

Listed sound data is based on typical performance and should not be considered absolute.

31

33

*See nomenclature guide for additional information on part number creation.

OPTIONS / ACCESSORIES

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings

50

40 Attenuation

30

20

63

Fypical

(dB)

- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories



11045

12545

5

5

234

244

M82-28

M82-30

INDUSTRIAL SPARK ARRESTING CHAMBER SILENCER 12 to 20 dBA Noise Reduction

MSA10 OVERVIEW

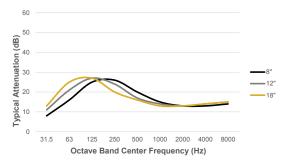
The MSA10 silencer is engineered to provide an industrial grade attenuation with a highly efficient spark arrestor. Designed for use on the exhaust system of internal combustion engines where a fire hazard or dirt nuisance would exist from particles of carbon or ash in the exhaust stream.

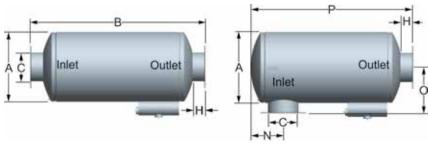
Typical Applications: Internal combustion engine exhausts, marine service, refineries/hazardous environments, and offshore drilling/production platforms

FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: ANSI pattern flanged
- Two chambers
- Drain connection

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories

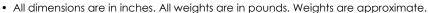




Type 1 - EIEO

Type 2 - SIEO

MSA10									
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	Н	Est Wt
MSA10-4	4	10	30	5		9	26	4	40
MSA10-5	5	12	34	6		10	30	4	51
MSA10-6	6	14	41	6.5	' >	11	37	4	75
MSA10-8	8	16	48	8.5	<u>5</u>	12	44	4	108
MSA10-10	10	18	50	9.5	Ř	13	46	4	138
MSA10-12	12	22	60	11.5	†	15	56	4	203
MSA10-14	14	30	70	13.5	Ö	20	65	5	394
MSA10-16	16	36	80	16.5	Ÿ	23	75	5	535
MSA10-18	18	40	90	17.5		25	85	5	858



- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



RESIDENTIAL SPARK ARRESTING CHAMBER SILENCER 20 to 25 dBA Noise Reduction

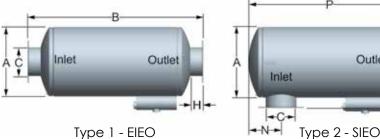
MSA11 OVERVIEW

The MSA11 silencer is engineered to provide a residential grade attenuation with a highly efficient spark arrestor. Designed for use on the exhaust system of internal combustion engines where a fire hazard or dirt nuisance would exist from particles of carbon or ash in the exhaust stream.

Typical Applications: Internal combustion engine exhausts, marine service, refineries/hazardous environments, and offshore drilling/production platforms

FEATURES

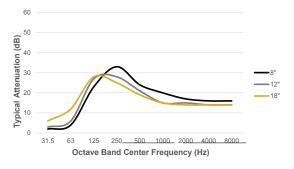
- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: Sizes 3.5 and under MNPT, 4 and up ANSI pattern flanged
- Two chambers
- Drain connection



Type 1 - EIEO

OPTIONS / ACCESSORIES

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories



	1,001 2.20			1,002	7.20				
MSA11									
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	Н	Est Wt
MSA11-1.5	1.5	9	20	3.5		7.5	1 <i>7</i>	3	20
MSA11-2	2	9	20	4		7.5	17	3	21
MSA11-2.5	2.5	10	24	4.5		8	21	3	28
MSA11-3	3	12	26	5		9	23	3	41
MSA11-3.5	3.5	14	30	5.5		10	27	3	55
MSA11-4	4	14	36	6		11	32	4	64
MSA11-5	5	16	43	7	<u> </u>	12	39	4	88
MSA11-6	6	18	49	7.5	Consult Factory-	13	45	4	110
MSA11-8	8	22	59	9.5	g	15	55	4	178
MSA11-10	10	26	64	11.5	₹	1 <i>7</i>	60	4	280
MSA11-12	12	30	77	13	nsu	19	73	4	416
MSA11-14	14	36	83	15.5	ပိ	23	78	5	558
MSA11-16	16	40	90	16.5	•	25	85	5	793
MSA11-18	18	45	96	18		27.5	91	5	950
MSA11-20	20	50	109	20.5		30	104	5	1392
MSA11-22	22	54	119	22.5		32	114	5	1806
MSA11-24	24	60	125	24		35	120	5	2187
MSA11-26	26	64	140	25.5		37	135	5	2586
MSA11-28	28	68	155	26.5		39	150	5	2984
MSA11-30	30	72	166	28		41	161	5	3445

Outlet

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



CRITICAL SPARK ARRESTING CHAMBER SILENCER 25 to 32 dBA Noise Reduction

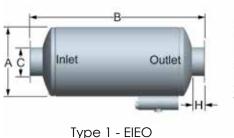
MSA22 OVERVIEW

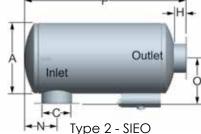
The MSA22 silencer is engineered to provide a critical grade attenuation with a highly efficient spark arrestor. Designed for use on the exhaust system of internal combustion engines where a fire hazard or dirt nuisance would exist from particles of carbon or ash in the exhaust stream.

Typical Applications: Internal combustion engine exhausts, marine service, refineries/hazardous environments, and offshore drilling/production platforms

FEATURES

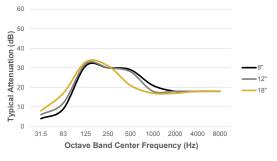
- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: Sizes 3.5 and under MNPT, 4 and up ANSI pattern flanged
- Two chambers
- Drain connection



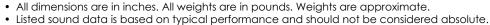


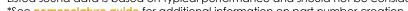
OPTIONS / ACCESSORIES

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories



MSA22	7.1			71					
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	н	Est Wt
MSA22-1.5	1.5	9	30	4		7.5	27	3	27
MSA22-2	2	9	30	4.5		7.5	27	3	28
MSA22-2.5	2.5	10	34	5		8	31	3	37
MSA22-3	3	12	38	5.5		9	35	3	54
MSA22-3.5	3.5	14	42	6		10	39	3	70
MSA22-4	4	14	48	6		11	44	4	77
MSA22-5	5	16	57	7	>	12	53	4	108
MSA22-6	6	18	63	8	Factory-	13	59	4	132
MSA22-8	8	22	74	9.5	ë	15	70	4	205
MSA22-10	10	26	87	11.5	Ę	17	83	4	356
MSA22-12	12	30	102	13	Consult	19	98	4	518
MSA22-14	14	36	109	15.5	ပိ	23	104	5	687
MSA22-16	16	40	119	16.5	•	25	114	5	976
MSA22-18	18	45	127	18		27.5	122	5	1169
MSA22-20	20	50	137	20.5		30	132	5	1676
MSA22-22	22	54	149	22.5		32	144	5	2127
MSA22-24	24	60	162	24		35	157	5	2627
MSA22-26	26	64	183	25.5		37	178	5	3106
MSA22-28	28	68	200	26.5		39	195	5	3561
MSA22-30	30	72	216	28		41	211	5	4140





• *See <u>nomenclature guide</u> for additional information on part number creation.



SUPER CRITICAL SPARK ARRESTING CHAMBER SILENCER 30 to 38 dBA Noise Reduction

MSA33 OVERVIEW

The MSA33 silencer is engineered to provide a super critical grade attenuation with a highly efficient spark arrestor. Designed for use on the exhaust system of internal combustion engines where a fire hazard or dirt nuisance would exist from particles of carbon or ash in the exhaust stream. Great for quiet residential areas where background noise is relatively low and super critical grade silencing with a spark arresting feature is required.

Typical Applications: Internal combustion engine exhausts, marine service, refineries/hazardous environments, and offshore drilling/production platforms

FEATURES

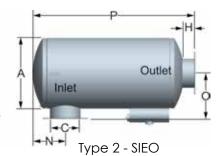
- Advanced acoustical design
- Heavy duty, all welded construction and long service life

Outlet

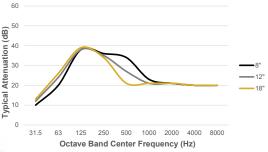
- Easily installed in any position
- High heat silicone black finish
- Connections: ANSI pattern flanged

Type 1 - EIEO

- Two chambers
- Drain connection



- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories



MSA33 Part No.* Size / ØC ØA B N Min N Max O P H MSA33-4 4 16 51 6.5 12 47 4 MSA33-5 5 18 62 7 13 58 4 MSA33-6 6 22 69 8.5 15 65 4	
MSA33-4 4 16 51 6.5 12 47 4 MSA33-5 5 18 62 7 13 58 4 MSA33-6 6 22 69 8.5 15 65 4	
MSA33-5 5 18 62 7 13 58 4 MSA33-6 6 22 69 8.5 15 65 4	Est Wt
MSA33-6 6 22 69 8.5 15 65 4	94
	130
	186
MSA33-8 8 26 82 10 17 78 4	318
MSA33-10 10 30 102 12 19 98 4	494
MSA33-12 12 36 112 15 5 22 108 4	690
MSA33-12 12 36 112 15 b 22 108 4 MSA33-14 14 40 120 15.5 b 25 115 5	968
	1155
MSA33-16 16 45 126 17 5 27.5 121 5 MSA33-18 18 50 135 19.5 6 30 130 5 MSA33-20 20 54 149 21.5 9 32 144 5	1636
MSA33-20 20 54 149 21.5 $\ref{9}$ 32 144 5	2086
MSA33-22 22 60 157 23 35 152 5	2492
MSA33-24 24 64 164 24.5 37 159 5	2831
MSA33-26 26 68 184 25.5 39 179 5	3316
MSA33-28 28 72 205 27 41 200 5	3821
MSA33-30 30 78 220 28.5 44 215 5	5324

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



HOSPITAL SPARK ARRESTING CHAMBER SILENCER 35 to 42 dBA Noise Reduction

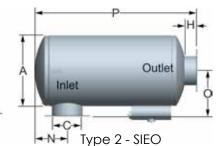
MSA44 OVERVIEW

The MSA44 silencer is engineered to provide a hospital grade attenuation with a highly efficient spark arrestor. Designed for use on the exhaust system of internal combustion engines where a fire hazard or dirt nuisance would exist from particles of carbon or ash in the exhaust stream. Suitable for use where background noise is extremely low, such as residential or hospital locations away from busy streets.

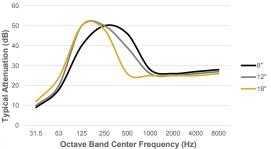
Typical Applications: Internal combustion engine exhausts, marine service, refineries/hazardous environments, and offshore drilling/production platforms

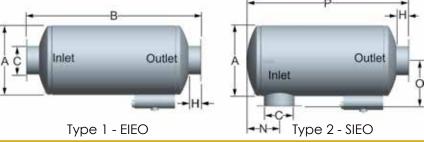
FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: ANSI pattern flanged
- Sizes 6 and under are two chambered, 8 and above are three chambers
- Drain connection

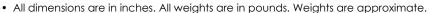


- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories





MSA44									
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	Н	Est Wt
MSA44-4	4	18	62	7		13	58	4	119
MSA44-5	5	22	74	9		15	70	4	189
MSA44-6	6	26	85	11		17	81	4	305
MSA44-8	8	30	103	12		19	99	4	517
MSA44-10	10	36	118	14		22	114	4	730
MSA44-12	12	36	130	14	<u>-</u>	22	126	4	820
MSA44-14	14	40	145	17	Consult Factory	25	140	5	1188
MSA44-16	16	45	156	19	ŭ ±	27.5	151	5	1461
MSA44-18	18	50	171	21	nsu	30	166	5	2111
MSA44-20	20	54	185	22	ပို	32	180	5	2664
MSA44-22	22	60	199	24		35	194	5	3237
MSA44-24	24	64	212	26		37	207	5	3693
MSA44-26	26	66	235	27		39	230	5	4313
MSA44-28	28	72	268	29		41	263	5	5053
MSA44-30	30	78	278	32		44	273	5	6866



- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



HOSPITAL PLUS SPARK ARRESTING CHAMBER SILENCER 35 to 50 dBA Noise Reduction

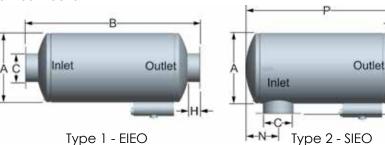
MSA55 OVERVIEW

The MSA55 silencer is engineered to provide the highest grade attenuation with a highly efficient spark arrestor. The MSA55 is a reactive silencer with absorptive type features without resorting to multiple silencers in series or custom designed silencers. Designed for use on the exhaust system of internal combustion engines where a fire hazard or dirt nuisance would exist from particles of carbon or ash in the exhaust stream. Suitable for use where background noise is extremely low, such as residential or hospital locations away from busy streets.

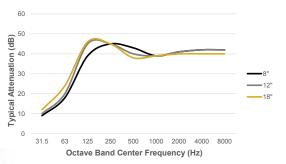
Typical Applications: Internal combustion engine exhausts, marine service, refineries/hazardous environments, and offshore drilling/production platforms

FEATURES

- Advanced acoustical design
- · Heavy duty, all welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Connections: ANSI pattern flanged
- Three chambers
- Drain connection



- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories



MSA55									
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	Н	Est Wt
MSA55-4	4	18	62	7		13	58	4	200
MSA55-5	5	22	74	9		15	70	4	314
MSA55-6	6	26	85	11		17	81	4	382
MSA55-8	8	30	103	12		19	99	4	590
MSA55-10	10	36	118	14	ż	22	114	4	829
MSA55-12	12	36	130	14	ţ	22	126	4	953
MSA55-14	14	40	145	17	onsult Factory	25	140	5	1345
MSA55-16	16	45	156	19	_ _ 5	27.5	151	5	1628
MSA55-18	18	50	171	21	ons	30	166	5	2371
MSA55-20	20	54	185	22	Ÿ	32	180	5	2969
MSA55-22	22	60	199	24		35	194	5	3562
MSA55-24	24	64	212	26		37	207	5	4048
MSA55-26	26	68	235	27		39	230	5	4737
MSA55-28	28	72	268	29		41	263	5	5692
MSA55-30	30	78	278	32		44	273	5	7573

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



LOW PRESSURE DROP/TURBO SILENCER 13 to 16 dBA Noise Reduction

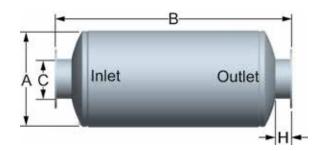
MT22 OVERVIEW

The MT22 silencer is engineered to provide silencing in areas where background noise is relatively high and moderate silencing is needed, and back pressure requirements call for a low pressure drop silencer.

Typical Applications: Internal combustion engine intakes and exhausts, as well as turbo charged reciprocating engines with low allowable back pressure

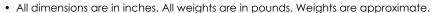
FEATURES

- Advanced acoustical design
- All welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Two chambers
- Drain connection



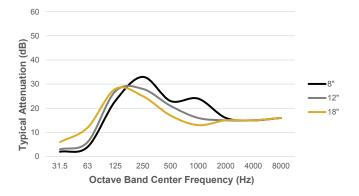
Type 1 - EIEO

MT22 Part No.* Size / ØC ØA В Н Est Wt MT22-4 4 14 36 4 64 MT22-5 5 16 43 4 87 MT22-6 18 49 4 109 6 MT22-8 22 59 8 4 181 MT22-10 10 26 64 4 290 MT22-12 12 30 77 4 440 MT22-14 14 36 83 5 593 MT22-16 16 40 90 5 813 MT22-18 18 45 96 5 963 MT22-20 20 50 109 5 1438 22 5 1845 MT22-22 54 119 2194 MT22-24 24 60 125 5 MT22-26 26 64 140 5 2573 MT22-28 28 68 155 5 2966 MT22-30 30 72 166 3381



Listed sound data is based on typical performance and should not be considered absolute.
*See nomenclature guide for additional information on part number creation.

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories





LOW PRESSURE DROP/TURBO SILENCER 16 to 19 dBA Noise Reduction

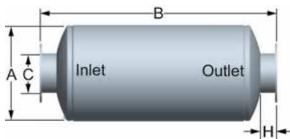
MT32 OVERVIEW

The MT32 silencer is engineered to provide average silencing in areas where some background noise is always present and effective, but not complete silencing is needed, and back pressure requirements call for a low pressure drop silencer.

Typical Applications: Internal combustion engine intakes and exhausts, as well as turbo charged reciprocating engines with low allowable back pressure

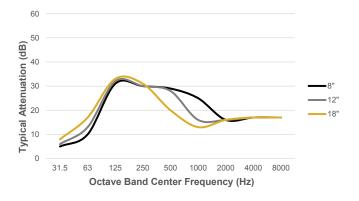
FEATURES

- Advanced acoustical design
- All welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Two chambers
- Drain connection



Type 1 - EIEO

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories



MT32					
Part No.*	Size / ØC	ØA	В	н	Est Wt
MT32-4	4	14	48	4	80
MT32-5	5	16	57	4	109
MT32-6	6	18	63	4	136
MT32-8	8	22	74	4	217
MT32-10	10	26	87	4	377
MT32-12	12	30	102	4	552
MT32-14	14	36	109	5	731
MT32-16	16	40	119	5	1013
MT32-18	18	45	127	5	1204
MT32-20	20	50	137	5	1754
MT32-22	22	54	149	5	2199
MT32-24	24	60	162	5	2660
MT32-26	26	64	183	5	3135
MT32-28	28	68	200	5	3589
MT32-30	30	72	216	5	4124

- All dimensions are in inches, All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



LOW PRESSURE DROP/TURBO SILENCER

19 to 22 dBA Noise Reduction

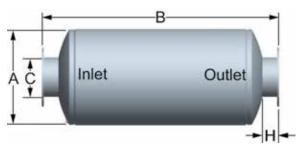
MT42 OVERVIEW

The MT42 silencer is engineered to provide better than average silencing in areas where ambient noise is relatively low, and back pressure requirements call for a low pressure drop silencer.

Typical Applications: Internal combustion engine intakes and exhausts, as well as turbo charged reciprocating engines with low allowable back pressure

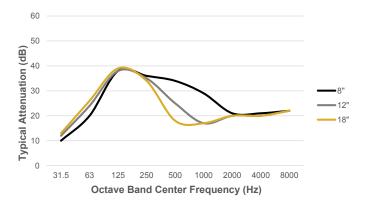
FEATURES

- Advanced acoustical design
- All welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Two chambers
- Drain connection



Type 1 - EIEO

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories



MT42					
Part No.*	Size / ØC	ØA	В	Н	Est Wt
MT42-4	4	16	51	4	96
MT42-5	5	18	62	4	129
MT42-6	6	22	69	4	185
MT42-8	8	26	82	4	318
MT42-10	10	30	102	4	509
MT42-12	12	36	112	4	691
MT42-14	14	40	120	5	989
MT42-16	16	45	126	5	1182
MT42-18	18	50	135	5	1663
MT42-20	20	54	149	5	2156
MT42-22	22	60	157	5	2563
MT42-24	24	64	164	5	2911
MT42-26	26	68	184	5	3399
MT42-28	28	72	205	5	3921
MT42-30	30	78	220	5	5437



- All dimensions are in inches. All weights are in pounds, Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.

LOW PRESSURE DROP/TURBO SILENCER

23 to 25 dBA Noise Reduction

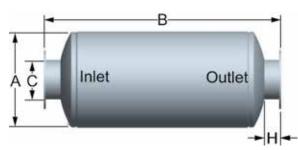
MT52 OVERVIEW

The MT52 silencer is engineered to provide silencing in areas where ambient noise is relatively low, and back pressure requirements call for a low pressure drop silencer.

Typical Applications: Internal combustion engine intakes and exhausts, as well as turbo charged reciprocating engines with low allowable back pressure.

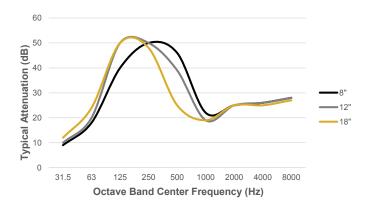
FEATURES

- Advanced acoustical design
- All welded construction and long service life
- Easily installed in any position
- High heat silicone black finish
- Sizes 6 and under have two chambers, 8 and above have three chambers
- Drain connection



Type 1 - EIEO

- Explosion relief cover
- Flexible connectors
- Companion flanges
- Cleanout openings
- Custom inlet/outlet size, location and multiple orientations available
- Horizontal or vertical support arrangements
- Aluminized steel, Stainless Steel 304 or 316 construction available
- Special paints and finishes available
- Complete range of exhaust accessories



MT52					
Part No.*	Size / ØC	ØA	В	н	Est Wt
MT52-4	4	18	62	4	120
MT52-5	5	22	74	4	188
MT52-6	6	26	85	4	308
MT52-8	8	30	103	4	525
MT52-10	10	36	118	4	755
MT52-12	12	36	130	4	835
MT52-14	14	40	145	5	1235
MT52-16	16	45	156	5	1500
MT52-18	18	50	171	5	2151
MT52-20	20	54	185	5	2777
MT52-22	22	60	199	5	3351
MT52-24	24	64	212	5	3811
MT52-26	26	68	235	5	4451
MT52-28	28	72	268	5	5221
MT52-30	30	78	278	5	7051

- All dimensions are in inches, All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



RESIDENTIAL LOW PROFILE PANCAKE CHAMBER 22 to 28 dBA Noise Reduction

MD22 OVERVIEW

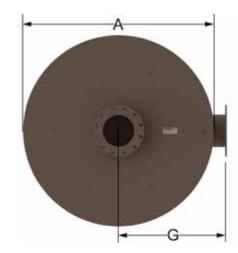
The MD22 is engineered to provide a residential grade attenuation while minimizing space usage. It is an excellent choice for packaged power and process skids where space is a premium. Dual inlets and other custom designs can be easily incorporated. Suitable for use where background noise is relatively high and constant. The need for higher degrees of silencing should be minimal.

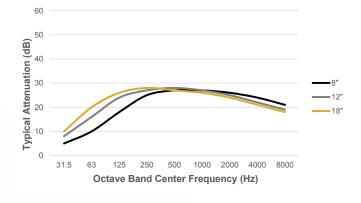
Typical Applications: Internal combustion engines, process skids, genset enclosures, as well as marine engines.

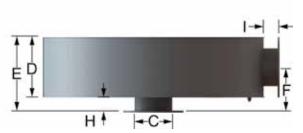
OPTIONS / ACCESSORIES

- Low surface temperature design
- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" to 2" internal insulation available
- Complete range of exhaust accessories

- Heavy duty, welded construction
- Unpacked/Non-insulated design
- ANSI drilled 125/150 lb. flanges on inlet and outlet
- High-temperature, prime coated black finish
- Lift lugs







MD22									
Part No.*	Size / ØC	ØA	D	E	F	G	Н	1	Est Wt
MD22-4	4	22	7	11	7.5	15	4	4	103
MD22-5	5	24	8	12	8	16	4	4	119
MD22-6	6	28	8.5	12.5	8.25	18	4	4	147
MD22-8	8	33	13	17	10.5	20.5	4	4	242
MD22-10	10	41	13	17	10.5	24.5	4	4	329
MD22-12	12	45	17	21	12.5	26.5	4	4	464
MD22-14	14	52	18	22	13	30	4	4	539
MD22-16	16	59	21	25	14.5	33.5	4	4	716
MD22-18	18	65	23	27	15.5	36.5	4	4	825

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.
- Low Profile Orientations Available: Side In-End Out, Side In-Side Out, End In-End Out or Dual In options.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



CRITICAL LOW PROFILE PANCAKE CHAMBER

25 to 32 dBA Noise Reduction

MD32 OVERVIEW

The MD32 is engineered to provide a critical grade attenuation while minimizing space usage. It is an excellent choice for packaged power and process skids where space is a premium. Dual inlets and other custom designs can be easily incorporated. Design not only reduces surface temperature, but also radiated noise. Suitable for use where background noise is extremely low, such as residential or hospital locations away from busy streets.

Typical Applications: Internal combustion engines, process skids, genset enclosures, as well as marine engines.

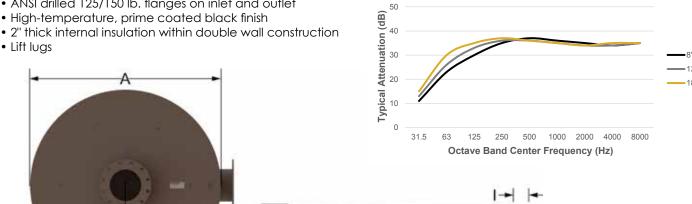
OPTIONS / ACCESSORIES

- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" internal insulation available
- Complete range of exhaust accessories

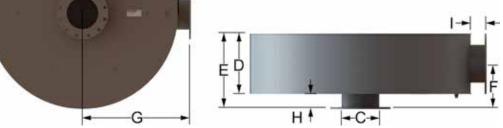
FEATURES

- Heavy duty, welded construction
- Low surface temperature design
- ANSI drilled 125/150 lb. flanges on inlet and outlet

- Lift lugs



60



MD32									
Part No.*	Size / ØC	ØA	D	E	F	G	Н	1	Est Wt
MD32-4	4	28	9	13	8.5	18	4	4	130
MD32-5	5	29	11	15	9.5	18.5	4	4	150
MD32-6	6	33	12	16	10	20.5	4	4	192
MD32-8	8	45	14	18	11	26.5	4	4	341
MD32-10	10	52	16	20	12	30	4	4	561
MD32-12	12	62	18	22	13	35	4	4	816
MD32-14	14	64	23	28	16.5	37	5	5	950
MD32-16	16	74	25	30	17.5	42	5	5	1388
MD32-18	18	84	27	32	18.5	47	5	5	1856
MD32-20	20	92	28	33	19	51	5	5	2186

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.
- Low Profile Orientations Available: Side In-End Out, Side In-Side Out, End In-End Out or Dual In options.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See nomenclature guide for additional information on part number creation.



SUPER CRITICAL LOW PROFILE PANCAKE CHAMBER 30 to 37 dBA Noise Reduction

MD42 OVERVIEW

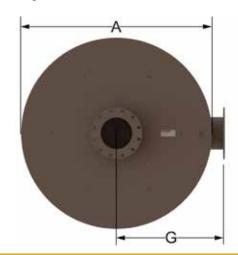
The MD42 is engineered to provide a super critical grade attenuation while minimizing space usage. It is an excellent choice for packaged power and process skids where space is a premium. Dual inlets and other custom designs can be easily incorporated. Design not only reduces surface temperature, but also radiated noise. Suitable for use where background noise is extremely low, such as residential or hospital locations away from busy streets.

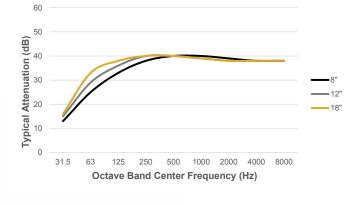
Typical Applications: Internal combustion engines, process skids, genset enclosures, as well as marine engines.

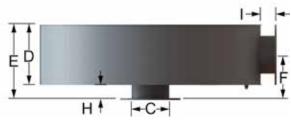
OPTIONS / ACCESSORIES

- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" internal insulation available
- Complete range of exhaust accessories

- Heavy duty, welded construction
- Low surface temperature design
- ANSI drilled 125/150 lb. flanges on inlet and outlet
- High-temperature, prime coated black finish
- 2" thick internal insulation within double wall construction
- Lift lugs







MD42									
Part No.*	Size / ØC	ØA	D	E	F	G	Н	1	Est Wt
MD42-4	4	32	10	14	9	20	4	4	165
MD42-5	5	32	11	15	9.5	20	4	4	174
MD42-6	6	38	12	16	10	23	4	4	238
MD42-8	8	52	14	18	11	30	4	4	518
MD42-10	10	59	16	20	12	33.5	4	4	701
MD42-12	12	70	18	22	13	39	4	4	984
MD42-14	14	70	24	29	17	40	5	5	1104
MD42-16	16	75	28	33	19	42.5	5	5	1518
MD42-18	18	86	30	35	20	48	5	5	2006
MD42-20	20	94	32	37	21	52	5	5	2375

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.
- Low Profile Orientations Available: Side In-End Out, Side In-Side Out, End In-End Out or Dual In options.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



HOSPITAL LOW PROFILE PANCAKE CHAMBER 35 to 42 dBA Noise Reduction

MD52 OVERVIEW

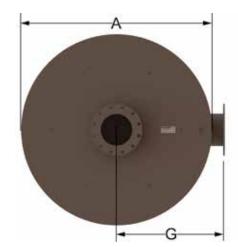
The MD52 is engineered to provide a hospital grade attenuation while minimizing space usage. It is an excellent choice for packaged power and process skids where space is a premium. Dual inlets and other custom designs can be easily incorporated. Design not only reduces surface temperature, but also radiated noise. Suitable for use where background noise is extremely low, such as residential or hospital locations away from busy streets.

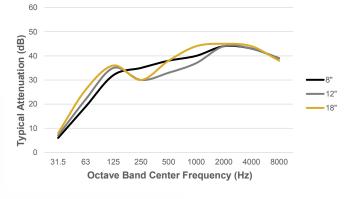
Typical Applications: Internal combustion engines, process skids, genset enclosures, as well as marine engines.

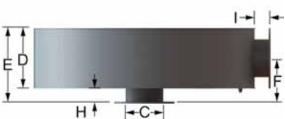
OPTIONS / ACCESSORIES

- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" internal insulation available
- Complete range of exhaust accessories

- Heavy duty, welded construction
- Low surface temperature design
- ANSI drilled 125/150 lb. flanges on inlet and outlet
- High-temperature, prime coated black finish
- 2" thick internal insulation within double wall construction
- Lift lugs







MD52									
Part No.*	Size / ØC	ØA	D	E	F	G	Н	1	Est Wt
MD52-4	4	40	12	16	10	24	4	4	259
MD52-5	5	49	14	18	11	28.5	4	4	413
MD52-6	6	58	15	19	11.5	33	4	4	653
MD52-8	8	68	17	21	12.5	38	4	4	906
MD52-10	10	78	20	24	14	43	4	4	1373
MD52-12	12	80	23	27	15.5	44	4	4	1544
MD52-14	14	86	27	32	18.5	48	5	5	1961
MD52-16	16	100	30	33	20	55	5	5	2598
MD52-18	18	112	33	38	21.5	61	5	5	3359
MD52-20	20	120	35	39	22.5	65	5	5	3864
MD52-16 MD52-18	16 18	100 112	30 33	33 38	20 21.5	55 61	5 5	5 5	2598 3359

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.
- Low Profile Orientations Available: Side In-End Out, Side In-Side Out, End In-End Out or Dual In options.
- · Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



RESIDENTIAL SPARK ARRESTING LOW PROFILE CHAMBER 19 to 25 dBA Noise Reduction

MDSA22 OVERVIEW

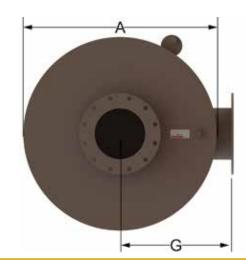
The MDSA22 is engineered to provide a spark arresting residential grade attenuation while minimizing space usage fire hazards exist. Centrifugal force separates solids from the exhaust gas stream in an easily accessible cleanout. It is an excellent choice for packaged power and process skids where space is a premium. Dual inlets and other custom designs can be easily incorporated. Suitable for use where background noise is extremely low, such as residential or industrial locations away from busy streets.

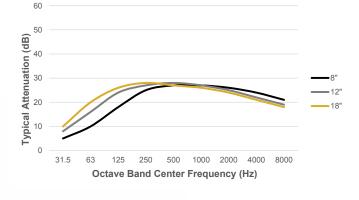
Typical Applications: Internal combustion engines, process skids, genset enclosures, as well as marine engines.

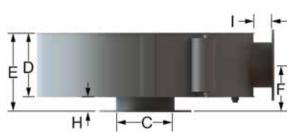
OPTIONS / ACCESSORIES

- Low surface temperature design
- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" to 2" internal insulation available
- Complete range of exhaust accessories

- Heavy duty, welded construction
- Unpacked/Non-insulated design
- Low surface temperature design
- ANSI drilled 125/150 lb. flanges on inlet and outlet
- High-temperature, prime coated black finish
- Lift lugs







MDSA22									
Part No.*	Size / ØC	ØA	D	E	F	G	Н	1	Est Wt
MDSA22-4	4	22	7	11	7.5	15	4	4	105
MDSA22-5	5	24	8	12	8	16	4	4	121
MDSA22-6	6	28	8.5	12.5	8.25	18	4	4	149
MDSA22-8	8	33	12	16	10	20.5	4	4	239
MDSA22-10	10	41	13	17	10.5	24.5	4	4	335
MDSA22-12	12	45	17	21	12.5	26.5	4	4	475
MDSA22-14	14	52	18	22	13	30	4	4	550
MDSA22-16	16	59	21	23	14.5	33.5	4	4	728
MDSA22-18	18	65	23	27	15.5	36.5	4	4	838

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



CRITICAL SPARK ARRESTING LOW PROFILE CHAMBER 22 to 28 dBA Noise Reduction

MDSA32 OVERVIEW

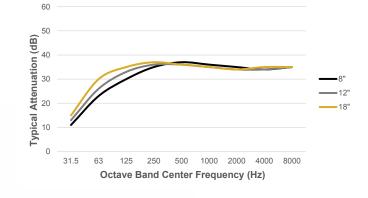
The MDSA32 is engineered to provide a spark arresting critical grade attenuation while minimizing space usage fire hazards exist. Centrifugal force separates solids from the exhaust gas stream in an easily accessible cleanout. It is an excellent choice for packaged power and process skids where space is a premium. Dual inlets and other custom designs can be easily incorporated. Design not only reduces surface temperature, but also radiated noise.

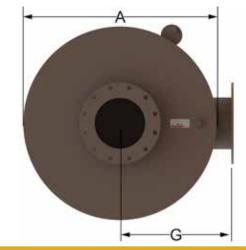
Typical Applications: Internal combustion engines, process skids, genset enclosures, as well as marine engines.

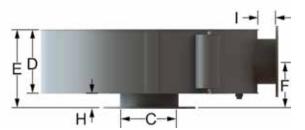
OPTIONS / ACCESSORIES

- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" internal insulation available
- Complete range of exhaust accessories

- Heavy duty, welded construction
- Low surface temperature design
- ANSI drilled 125/150 lb. flanges on inlet and outlet
- High-temperature, prime coated black finish
- 2" thick internal insulation within double wall construction
- Lift lugs







MDSA32									
Part No.*	Size / ØC	ØA	D	E	F	G	Н	1	Est Wt
MDSA32-4	4	28	9	13	8.5	18	4	4	130
MDSA32-5	5	29	11	15	9.5	18.5	4	4	150
MDSA32-6	6	33	12	16	10	20.5	4	4	192
MDSA32-8	8	45	14	18	11	26.5	4	4	341
MDSA32-10	10	52	16	20	12	30	4	4	561
MDSA32-12	12	62	18	22	13	35	4	4	816
MDSA32-14	14	64	23	28	16.5	37	5	5	950
MDSA32-16	16	74	25	30	17.5	42	5	5	1388
MDSA32-18	18	84	27	32	18.5	47	5	5	1856
MDSA32-20	20	92	28	33	19	51	5	5	2186

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See nomenclature guide for additional information on part number creation.



SUPER CRITICAL SPARK ARRESTING LOW PROFILE CHAMBER 30 to 37 dBA Noise Reduction

MDSA42 OVERVIEW

The MDSA42 is engineered to provide a spark arresting super critical grade attenuation while minimizing space usage fire hazards exist. Centrifugal force separates solids from the exhaust gas stream in an easily accessible cleanout. It is an excellent choice for packaged power and process skids where space is a premium. Dual inlets and other custom designs can be easily incorporated. Design not only reduces surface temperature, but also radiated noise. Suitable for use where background noise is extremely low, such as residential or hospital locations away from busy streets.

Typical Applications: Internal combustion engines, process skids, genset enclosures, as well as marine engines.

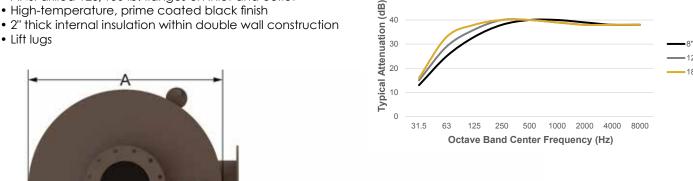
OPTIONS / ACCESSORIES

- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" internal insulation available
- Complete range of exhaust accessories

FEATURES

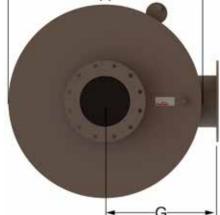
- Heavy duty, welded construction
- Low surface temperature design
- ANSI drilled 125/150 lb. flanges on inlet and outlet

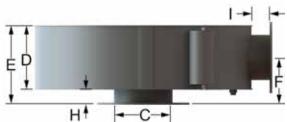
- Lift lugs



60

50





MDSA42									
Part No.*	Size / ØC	ØA	D	E	F	G	Н	1	Est Wt
MDSA42-4	4	32	10	14	9	20	4	4	165
MDSA42-5	5	32	11	15	9.5	20	4	4	174
MDSA42-6	6	38	12	16	10	23	4	4	238
MDSA42-8	8	52	14	18	11	30	4	4	518
MDSA42-10	10	59	16	20	12	33.5	4	4	701
MDSA42-12	12	70	18	22	13	39	4	4	984
MDSA42-14	14	70	24	29	17	40	5	5	1104
MDSA42-16	16	75	28	33	19	42.5	5	5	1518
MDSA42-18	18	86	30	35	20	48	5	5	2006
MDSA42-20	20	94	32	37	21	52	5	5	2375

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



CRITICAL THIN LINE SILENCER

35 to 42 dBA Noise Reduction

MR32 OVERVIEW

The MR32 is engineered to provide a critical grade attenuation while minimizing space usage. It is designed specifically for enclosures and marine applications where silencer height is critical. Dual inlets and other custom designs can be easily incorporated. Design not only reduces surface temperature, but also radiated noise.

Typical Applications: Enclosures, as well as marine engines.

FEATURES

MR32

MR32-18

MR32-20

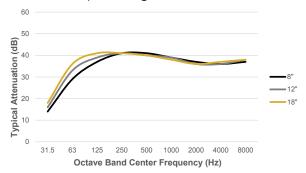
18

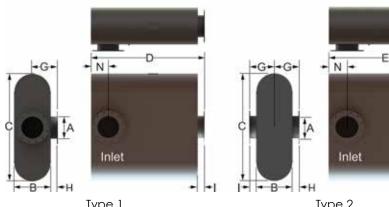
20

- Low surface temperature design
- Heavy duty, welded construction
- ANSI drilled 125/150 lb. flanges on inlet and outlet
- High-temperature, prime coated black finish
- 2" thick internal insulation within double wall construction

OPTIONS / ACCESSORIES

- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" internal insulation available
- Complete range of exhaust accessories







Inlet

Type 3 EIEO (End In-End Out)

Part No.*	Size / ØA	В	С	D	E	F	N Min	N Max	G	H and I	w/ brackets
MR32-4	4	11	28	32	28	36	6	15	9.5	4	207
MR32-5	5	12	29	33	29	37	6.5	15	10	4	238
MR32-6	6	13	33	37	33	41	7	17	10.5	4	299
MR32-8	8	15	45	50	46	54	8	24	11.5	4	584
MR32-10	10	18	52	56	52	60	9	27	13	4	772
MR32-12	12	21	62	66	62	70	10	33	14.5	4	1279
MR32-14	14	23	65	70	66	74	11	34	15.5	4	1449
MR32-16	16	25	74	79	75	83	12	39	16.5	4	1841

86

90

94

98

14

15

46

47

17.5

19

4

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.

27

30

Thin Line Orientations Available: Side In-End Out, Side In-Side Out, End In-End Out or Dual In options.

90

94

Listed sound data is based on typical performance and should not be considered absolute.

84

88

*See <u>nomenclature guide</u> for additional information on part number creation.



Est Wt

2405

2702

HOSPITAL THIN LINE SILENCER

39 to 46 dBA Noise Reduction

MR42 OVERVIEW

The MR42 is engineered to provide a hospital grade attenuation while minimizing space usage. It is designed specifically for enclosures and marine applications where silencer height is critical. Dual inlets and other custom designs can be easily incorporated. Design not only reduces surface temperature, but also radiated noise.

Typical Applications: Enclosures, as well as marine engines.

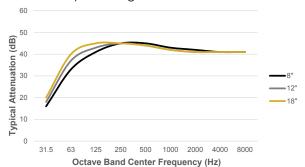
FEATURES

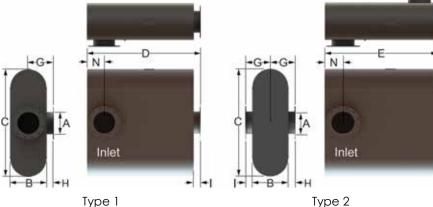
- Low surface temperature design
- Heavy duty, welded construction
- ANSI drilled 125/150 lb. flanges on inlet and outlet
- High-temperature, prime coated black finish

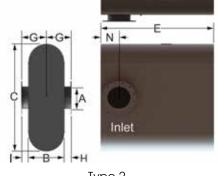
SIEO (Side In-End Out)

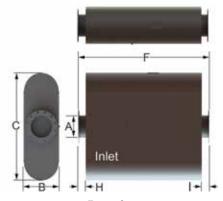
• 2" thick internal insulation within double wall construction

- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" internal insulation available
- Complete range of exhaust accessories









Type 2 SISO (Side In-Side Out)

Type 3 EIEO (End In-End Out)

MR42											Est Wt
Part No.*	Size / ØA	В	С	D	E	F	N Min	N Max	G	H and I	w/ brackets
MR42-4	4	11	34	38	34	42	6	11	9.5	4	283
MR42-5	5	12	34	38	34	42	6.5	18	10	4	299
MR42-6	6	13	38	42	38	46	7	20	10.5	4	374
MR42-8	8	15	52	56	52	60	8	28	11.5	4	729
MR42-10	10	18	59	63	59	67	9	31	13	4	950
MR42-12	12	21	70	74	70	78	10	38	14.5	4	1568
MR42-14	14	24	70	74	70	78	11	37	16	4	1674
MR42-16	16	28	75	80	76	84	12	40	18	4	2044
MR42-18	18	30	86	92	88	96	14	47	19	4	2623
MR42-20	20	34	92	98	94	102	15	50	21	4	3054

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.
- Thin Line Orientations Available: Side In-End Out, Side In-Side Out, End In-End Out or Dual In options.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



EXTREME THIN LINE SILENCER

45 to 52 dBA Noise Reduction

MR62 OVERVIEW

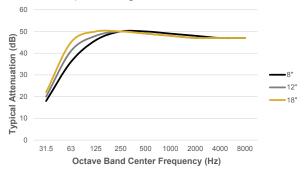
The MR62 is engineered to provide an extreme grade attenuation while minimizing space usage. It is designed specifically for enclosures and marine applications where silencer height is critical. Dual inlets and other custom designs can be easily incorporated. Design not only reduces surface temperature, but also radiated noise.

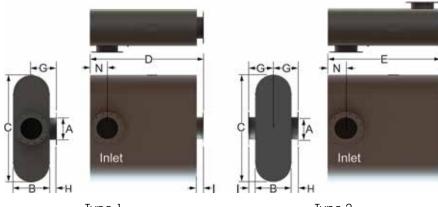
Typical Applications: Enclosures, as well as marine engines.

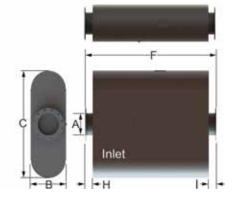
FEATURES

- Low surface temperature design
- Heavy duty, welded construction
- ANSI drilled 125/150 lb. flanges on inlet and outlet
- High-temperature, prime coated black finish
- 2" thick internal insulation within double wall construction
- Lift lugs

- Stainless steel construction: 304 or 316
- Custom inlet/outlet size, location and multiple orientations available
- Support brackets
- Special paints and finishes available
- 1" internal insulation available
- Lift lugs
- Complete range of exhaust accessories







Type 1 SIEO (Side In-End Out)

Type 2 SISO (Side In-Side Out)

Type 3
EIEO (End In-End Out)

`	3120 (31de 111-211d 001) 3130 (31de 111-31de 001)						1	LIEO (ENGIN-ENG OOI)				
MR62											Est Wt	
Part No.*	Size / ØA	В	С	D	E	F	N Min	N Max	G	H and I	w/ brackets	
MR62-4	4	12	38	66	62	70	8	18	10	4	512	
MR62-5	5	13	40	66	62	70	9	18	10.5	4	554	
MR62-6	6	14	42	78	74	82	9	22	11	4	703	
MR62-8	8	16	62	102	98	106	10	31	12	4	1473	
MR62-10	10	18	70	108	104	112	11	32	13	4	1795	
MR62-12	12	22	74	120	116	124	12	36	15	4	2598	
MR62-14	14	28	78	120	116	124	13	35	18	4	2971	
MR62-16	16	32	82	126	122	130	14	36	20	4	3411	
MR62-18	18	34	92	150	146	154	15	45	21	4	4400	
MR62-20	20	36	96	150	146	154	16	44	22	4	4685	

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- A minimum 3" gap is recommended between the silencer and enclosure roof.
- Thin Line Orientations Available: Side In-End Out, Side In-Side Out, End In-End Out or Dual In options.
- · Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



MARINE ENGINE / WET EXHAUST SILENCERS 15 to 18 dBA Noise Reduction

MP11 OVERVIEW

Constructed of 316L stainless steel, the MP11 offers good noise attenuation with low pressure drop in marine exhaust systems where water is injected upstream of the silencer. Mixed exhaust flow temperature not to exceed 200° F at silencer inlet.

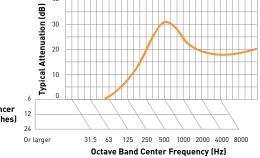
Typical Applications: Internal combustion engines using wet type exhaust

OPTIONS / ACCESSORIES

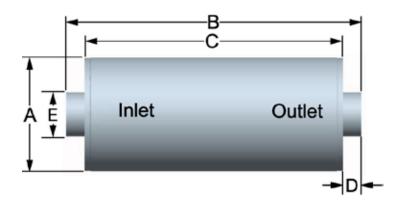
- Monel construction
- Flanged connections
- Horizontal or vertical support arrangements
- Complete range of exhaust accessories

FEATURES

- Advanced acoustical design
- Reduces noxious fumes and odors
- Thick wall construction for high transmission loss
- All welded construction and long service life
- Standard pipe size O.D. stubs
- Easy installation in any position



Silencer Size (inches)



MP11						
Part No.*	Size / ØE	ØA	В	С	D	Est Wt
MP11-4	4	10.75	24	18	3	43
MP11-4.5	4.5	10.75	24	18	3	43
MP11-5	5	12.75	30	24	3	63
MP11-6	6	12.75	30	24	3	65
MP11-8	8	14.5	48	36	6	123
MP11-10	10	16.75	60	48	6	191
MP11-12	12	18.75	72	60	6	225



- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.

MARINE ENGINE / WET EXHAUST SILENCERS 20 to 25 dBA Noise Reduction

MP31 OVERVIEW

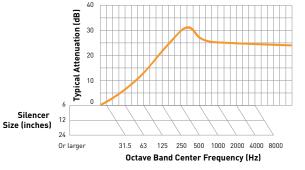
Constructed of 316L stainless steel, the MP31 offers very good noise attenuation with medium pressure drop in marine exhaust systems where water is injected upstream of the silencer. Mixed exhaust flow temperature not to exceed 200° F at silencer inlet.

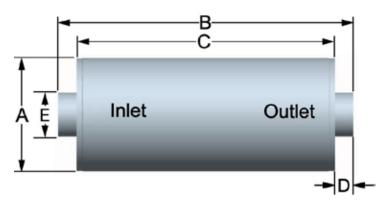
Typical Applications: Internal combustion engines using wet type exhaust

OPTIONS / ACCESSORIES

- Monel construction
- Flanged connections
- Horizontal or vertical support arrangements
- Complete range of exhaust accessories

- Advanced acoustical design
- Reduces noxious fumes and odors
- Thick wall construction for high transmission loss
- All welded construction and long service life
- Standard pipe size O.D. stubs
- Easy installation in any position





Size / ØE	ØA	В	С	D	Est Wt
4	8.75	30	24	3	39
4.5	10.75	36	30	3	61
5	10.75	36	30	3	61
6	12.75	42	36	3	94
8	16.75	60	48	6	143
10	20.25	70	58	6	230
12	24.25	82	70	6	327
	4 4.5 5 6 8 10	4 8.75 4.5 10.75 5 10.75 6 12.75 8 16.75 10 20.25	4 8.75 30 4.5 10.75 36 5 10.75 36 6 12.75 42 8 16.75 60 10 20.25 70	4 8.75 30 24 4.5 10.75 36 30 5 10.75 36 30 6 12.75 42 36 8 16.75 60 48 10 20.25 70 58	4 8.75 30 24 3 4.5 10.75 36 30 3 5 10.75 36 30 3 6 12.75 42 36 3 8 16.75 60 48 6 10 20.25 70 58 6

- All dimensions are in inches, All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



MARINE ENGINE / WET EXHAUST SILENCERS 30 to 35 dBA Noise Reduction

MP41 OVERVIEW

Constructed of 316L stainless steel, the MP41 offers very high noise attenuation in marine exhaust systems where water is injected upstream of the silencer. Mixed exhaust flow temperature not to exceed 200° F at silencer inlet.

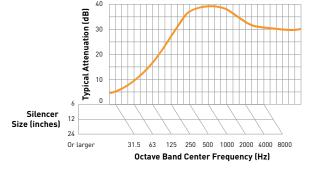
Typical Applications: Internal combustion engines using wet type exhaust

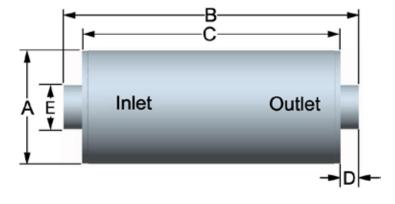
OPTIONS / ACCESSORIES

- Monel construction
- Flanged connections
- Horizontal or vertical support arrangements
- Complete range of exhaust accessories

FEATURES

- Advanced acoustical design
- Reduces noxious fumes and odors
- Thick wall construction for high transmission loss
- All welded construction and long service life
- Standard pipe size O.D. stubs
- Easy installation in any position





MP41						
Part No.*	Size / ØE	ØA	В	С	D	Est Wt
MP41-4	4	10.75	54	48	3	83
MP41-4.5	4.5	12.75	54	48	3	103
MP41-5	5	12.75	54	48	3	103
MP41-6	6	14.75	54	48	3	118
MP41-8	8	18.75	60	48	6	167
MP41-10	10	22.25	70	58	6	235
MP41-12	12	26.25	82	70	6	334



- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.

STRAIGHT THROUGH ACOUSTICALLY PACKED BLOWER 15 to 30 dBA Noise Reduction

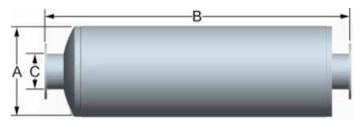
MB11 OVERVIEW

Use for a high degree of high frequency noise attenuation on blower intakes or discharges. This is ideal for residential areas where background noise is relatively low.

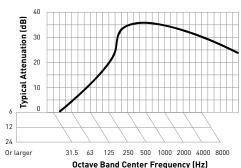
Typical applications: Rotary positive blower intake and discharge, vacuum pump intake and discharge, and centrifugal blower intake and discharge

FEATURES

- Advanced acoustical design
- High quality sound absorbing material
- Extra heavy wall, all welded construction
- Prime coated exterior finish
- Sizes 1" through 3.5" have MNPT connections



- Flexible connectors
- Companion flanges
- Horizontal or vertical support arrangements
- Special paint
- Stainless steel construction
- Complete range of exhaust accessories



Silencer	
Size (inches)	

WRII				
Part No.*	Size / ØC	ØA	В	Est Wt
MB11-1	1	4.625	16	10
MB11-1.5	1.5	4.625	20	15
MB11-2	2	5.75	24	20
MB11-2.5	2.5	5.75	26	25
MB11-3	3	7	30	40
MB11-3.5	3.5	7	34	45
MB11-4	4	10.25	38	90
MB11-5	5	12	42	120
MB11-6	6	12	48	145
MB11-8	8	14	54	200
MB11-10	10	16	67	315
MB11-12	12	18	79	420
MB11-14	14	20	91	670
MB11-16	16	22	103	840
MB11-18	18	30	71	980
MB11-20	20	36	83	1370
MB11-22	22	36	89	1505
MB11-24	24	40	98	1920
MB11-26	26	45	106	2325
MB11-28	28	45	111	2495
MB11-30	30	50	121	2995
A II . II				

- All dimensions are in inches, All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



CHAMBER TYPE BLOWER SILENCER

15 to 30 dBA Noise Reduction

MB21 OVERVIEW

An efficient economical design, the MB21 is useful on blower intakes or discharges. Use an MB21 where some background noise is always present and high degrees of silencing is not required.

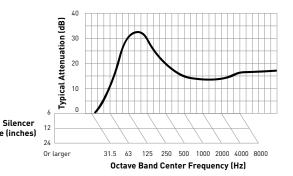
Typical applications: Rotary positive blower intake and discharge (10" size and below)

FEATURES

- Advanced acoustical design
- Prime coated exterior finish

Silencer Size (inches) Outlet Inlet Outlet Outlet Outlet

- Stainless steel or monel construction
- Flanged connections
- Standard pipe size necks
- Horizontal or vertical support arrangements
- Special paint
- Complete range of exhaust accessories



MB21								
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	Est Wt
MB21-4	4	14	48	5.5	22	10	45	110
MB21-5	5	16	55	6.5	25	11	52.25	120
MB21-6	6	18	63	7	29.5	12	60.25	170
MB21-8	8	22	76	8.5	36.5	14	73.5	285
MB21-10	10	26	91	10.5	43	16.5	88	460
MB21-12	12	30	109	12	53	18.5	106.25	745
MB21-14	14	36	102	14	48	21.5	99.25	965
MB21-16	16	40	119	17	56	23.5	116.5	1340
MB21-18	18	45	127	19	60	26.5	124	1850
MB21-20	20	50	144	21	69	29	141.25	2175
MB21-22	22	54	161	22	78	31	158.5	2650
MB21-24	24	60	165	24	79	34	162.25	3400
MB21-26	26	64	183	26	89	36	180.5	3850
MB21-28	28	68	200	27	98	38	197.75	4840
MB21-30	30	72	216	29	107	40	213.75	5150



- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.

COMBINATION ACOUSTICALLY PACKED CHAMBER BLOWER 25 to 30 dBA Noise Reduction

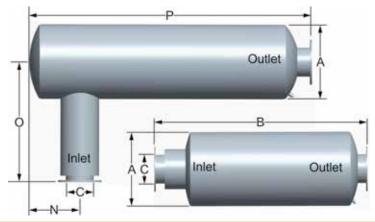
MB31 OVERVIEW

The MB31 provides the highest degree of overall noise attenuation on blower intakes or discharges. Use an MB31 where background noise is extremely low and the best degree of silencing is required.

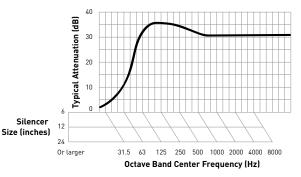
Typical applications: Rotary positive blower intake and discharge

FEATURES

- Advanced acoustical design
- High quality sound absorbing material
- Packed inlet
- Prime coated exterior finish



- Stainless steel or monel construction
- Flanged connections
- Standard pipe size necks
- Horizontal or vertical support arrangements
- Special paint
- Complete range of exhaust accessories



MB31								
Part No.*	Size / ØC	ØA	В	N Min	N Max	0	P	Est Wt
MB31-4	4	14	52	8.5	19	23	45	150
MB31-5	5	16	60	10	21.5	26	52.25	195
MB31-6	6	18	69	10	26.5	30	60.25	250
MB31-8	8	22	84	11	33.5	36	73.5	380
MB31-10	10	26	101	13.5	40	43	88	620
MB31-12	12	30	121	15	50	51	106.25	1030
MB31-14	14	36	115	18	44	52	99.25	1230
MB31-16	16	40	135	20	53	59	116.5	1815
MB31-18	18	45	140	25	54	58	124	2750
MB31-20	20	50	159	26	64	59	141.25	3210
MB31-22	22	54	177	29	71	60	154.25	3895
MB31-24	24	60	184	30	73	60	162.25	4330
MB31-26	26	64	204	31	84	60	180.5	5005
MB31-28	28	68	223	33	92	62	197.75	6625
MB31-30	30	72	241	34	102	62	213.75	7315
MB31-32	32	76	250	36.5	102.5	64	220.75	8415
MB31-34	34	82	252	37.5	102.5	64	220.5	8995
MB31-36	36	86	254	37.5	102.5	65	221	9485

- All dimensions are in inches, All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



STRAIGHT THROUGH ABSORPTIVE DESIGN

15 to 20 dBA Noise Reduction

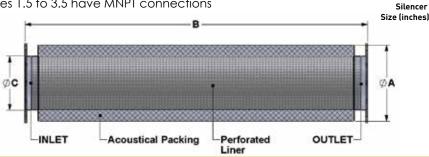
FP-FPE OVERVIEW

Straight through design without a center panel offers good attenuation of high frequency noise with low pressure drop. Applications include small atmospheric vent applications. It can also serve as an add-on to boost overall attenuation when installed in series with an M-line chamber type silencer. FP is for intake service and the FPE for exhaust service.

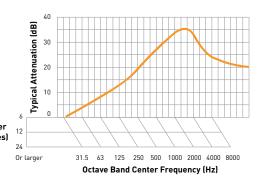
Typical Applications: Internal combustion engine intakes and exhaust, compressor intakes or fan intakes and discharges

FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- Prime coated exterior finish
- Sizes 1.5 to 3.5 have MNPT connections



- Horizontal or vertical support arrangements
- Special paint
- Stainless steel construction
- Complete range of exhaust accessories



FP - FPE						
Part No.*	ØA FP	Part No.*	ØA FPE	Size / ØC	В	Est Wt
FP-1.5	4.75	FPE-1.5	4.75	1.5	20	8
FP-2	5	FPE-2	5	2	24	12
FP-2.5	6	FPE-2.5	6	2.5	26	14
FP-3	6.5	FPE-3	6.5	3	30	20
FP-3.5	7	FPE-3.5	7	3.5	34	28
FP-4	10	FPE-4	11	4	38	55
FP-5	11.125	FPE-5	12	5	42	63
FP-6	12.125	FPE-6	13	6	48	80
FP-8	14.125	FPE-8	15	8	54	120
FP-10	16.125	FPE-10	17	10	67	180
FP-12	18.125	FPE-12	19	12	79	290
FP-14	20	FPE-14	20	14	91	330
FP-16	22	FPE-16	22	16	103	440
FP-18	24	FPE-18	24	18	116	570
FP-20	26	FPE-20	26	20	128	700
FP-22	28	FPE-22	28	22	140	820
FP-24	30	FPE-24	30	24	152	1100
FP-26	32	FPE-26	32	26	164	1370
FP-28	34	FPE-28	34	28	176	1560
FP-30	36	FPE-30	36	30	188	1770



- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.

INTERNAL CENTER PANEL ABSORPTIVE DESIGN 20 to 25 dBA Noise Reduction

FPC-FPCE OVERVIEW

Use for a medium to high degree of high frequency noise attenuation. FPC is for intake service and the FPCE for exhaust service.

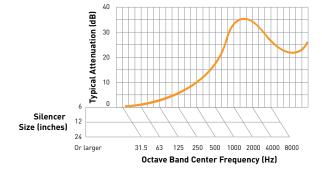
Typical Applications: Internal combustion engine intakes and exhaust, compressor intakes or fan intakes and discharges

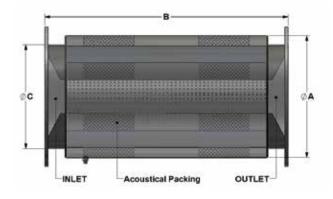
OPTIONS / ACCESSORIES

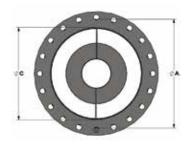
- Horizontal or vertical support arrangements
- Special paint
- Stainless steel construction
- Complete range of exhaust accessories

FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- Prime coated exterior finish







FPC - FPCE					
Part No.*	Part No.*	Size / ØC	ØA	В	Est Wt
FPC-14	FPCE-14	14	18	35	200
FPC-16	FPCE-16	16	20	39	240
FPC-18	FPCE-18	18	22	44	300
FPC-20	FPCE-20	20	24	48	360
FPC-22	FPCE-22	22	26	52	430
FPC-24	FPCE-24	24	28	56	590
FPC-26	FPCE-26	26	30.375	60	700
FPC-28	FPCE-28	28	32.5	64	800
FPC-30	FPCE-30	30	35.375	68	900
FPC-32	FPCE-32	32	37	72	1200
FPC-34	FPCE-34	34	39.5	76	1330
FPC-36	FPCE-36	36	42	80	1490

- All dimensions are in inches, All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u>for additional information on part number creation.



FULL FLOW INTERNAL CENTER PANEL ABSORPTIVE DESIGN 15 to 30 dBA Noise Reduction

FPS-FPSE OVERVIEW

Designed for a high degree of high frequency noise attenuation. FPS is for intake service and the FPSE for exhaust service.

Typical Applications: Internal combustion engine intakes and exhaust, compressor intakes or fan intakes and discharges

OPTIONS / ACCESSORIES

• Horizontal or vertical support arrangements

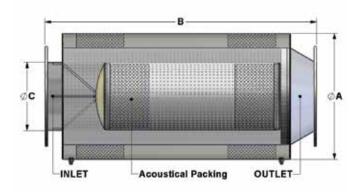
Octave Band Center Frequency (Hz)

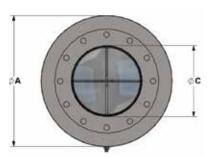
- Special paint
- Stainless steel construction
- Complete range of exhaust accessories

Silencer Size (inches) 24 Or larger 31.5 63 125 250 500 1000 2000 4000 8000

FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- Easily installed in any position
- Prime coated exterior finish





FPS-FPSE					
Part No.*	Part No.*	Size / ØC	ØA	В	Est Wt
FPS-6	FPSE-6	6	14.625	27	75
FPS-8	FPSE-8	8	18	35	130
FPS-10	FPSE-10	10	20.75	44	190
FPS-12	FPSE-12	12	23.375	51	270
FPS-14	FPSE-14	14	26.375	57	370
FPS-16	FPSE-16	16	29.125	66	490
FPS-18	FPSE-18	18	32.125	71	565
FPS-20	FPSE-20	20	34.875	83	820
FPS-22	FPSE-22	22	37.75	89	1000
FPS-24	FPSE-24	24	40.5	98	1280
FPS-26	FPSE-26	26	43.375	106	1530
FPS-28	FPSE-28	28	46.25	111	1700
FPS-30	FPSE-30	30	49	121	1900

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



RESIDENTIAL GRADE ANNULAR FLOW SILENCER

AFS2-AFSE2 OVERVIEW

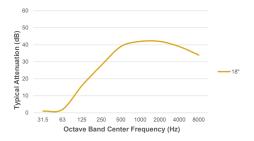
Designed for a variety of intake (AFS2) and exhaust (AFSE2) applications ranging from 500-5,000 hp, or mass flow of 2.5 thru 65 lbs/sec. Approximate capacities are based on average gas velocity through silencer of approximately 10,000 ft/min, and will vary depending on pressure drop criteria. Special bullet designed internals consist of acoustic fiberglass packing adjacent to concentric perforated cylinders, creating an annular flow design. Air intake unit internals are made of stainless steel, tig welded, cleaned and sealed for shipping.

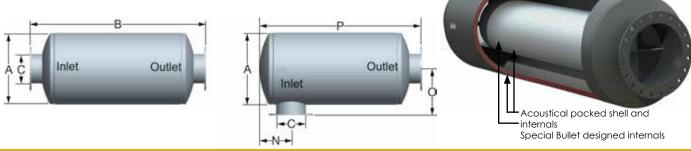
Typical Applications: Gas turbine, Internal combustion engine intakes and exhaust, compressor intakes or fan intakes and discharges.

FEATURES

- Advanced acoustical design
- Heavy duty, all welded construction and long service life
- High heat black paint finish
- Connections: ANSI pattern flanged

- Custom inlet/outlet size, location and multiple orientations available
- Special paints and finishes available
- Stainless steel construction
- Complete range of exhaust accessories





AFS2 - AFS	E2							
Part No.*	Part No.*	Size / ØC	ØA	В	N	0	P	Est Wt
AFS2-10	AFSE2-10	10	20	56	12	14	70	310
AFS2-12	AFSE2-12	12	24	60	11	16	71	405
AFS2-14	AFSE2-14	14	26	66	13	17	83	520
AFS2-16	AFSE2-16	16	28	80	14	18	96	650
AFS2-18	AFSE2-18	18	36	91	18	22	109	810
AFS2-20	AFSE2-20	20	36	103	20	22	126	965
AFS2-22	AFSE2-22	22	36	110	18	22	126	1200
AFS2-24	AFSE2-24	24	42	115	24	25	136	1340
AFS2-26	AFSE2-26	26	42	129	22	25	153	1625
AFS2-28	AFSE2-28	28	48	141	26	29	174	2075
AFS2-30	AFSE2-30	30	48	144	26	29	174	2550
AFS2-32	AFSE2-32	32	54	150	call	call	call	2900
AFS2-34	AFSE2-34	34	54	156	call	call	call	3500
AFS2-36	AFSE2-36	36	60	164	call	call	call	3650
AFS2-40	AFSE2-40	40	66	176	call	call	call	4400
AFS2-42	AFSE2-42	42	66	204	call	call	call	4700

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



CRITICAL GRADE ANNULAR FLOW SILENCER

AFS3-AFSE3 OVERVIEW

Designed for a variety of intake (AFS3) and exhaust (AFSE3) applications ranging from 500-5,000 hp, or mass flow of 2.5 thru 65 lbs/sec. Approximate capacities are based on average gas velocity through silencer of approximately 10,000 ft/min, and will vary depending on pressure drop criteria. Special bullet designed internals consist of acoustic fiberglass packing adjacent to concentric perforated cylinders, creating an annular flow design. Air intake unit internals are made of stainless steel, tig welded, cleaned and sealed for shipping.

Typical Applications: Gas turbine, Internal combustion engine intakes and exhaust, compressor intakes or fan intakes and discharges.

FEATURES

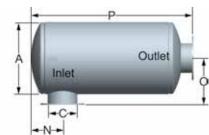
- Advanced acoustical design
- Heavy duty, all welded construction and long service life

Outlet

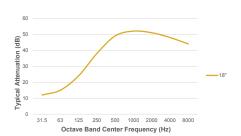
• High heat black paint finish

Inlet

Connections: ANSI pattern flanged



- Custom inlet/outlet size, location and multiple orientations available
- Special paints and finishes available
- Stainless steel construction
- Complete range of exhaust accessories





AFS3 - AFSI	E3							
Part No.*	Part No.*	Size / ØC	ØA	В	N	0	P	Est Wt
AFS3-4	AFSE3-4	4	14	54	6	11	56	105
AFS3-5	AFSE3-5	5	16	56	6	12	62	135
AFS3-6	AFSE3-6	6	16	56	7	12	62	145
AFS3-8	AFSE3-8	8	18	60	8	13	70	200
AFS3-10	AFSE3-10	10	20	68	10	14	77	365
AFS3-12	AFSE3-12	12	24	80	12	16	95	525
AFS3-14	AFSE3-14	14	26	96	14	1 <i>7</i>	106	665
AFS3-16	AFSE3-16	16	28	104	14	18	115	800
AFS3-18	AFSE3-18	18	36	114	18	22	132	1060
AFS3-20	AFSE3-20	20	36	126	18	22	154	1200
AFS3-22	AFSE3-22	22	36	140	19	23	159	1475
AFS3-24	AFSE3-24	24	42	158	24	24	184	1625
AFS3-26	AFSE3-26	26	42	168	24	25	189	1995
AFS3-28	AFSE3-28	28	48	176	24	29	210	2500
AFS3-30	AFSE3-30	30	48	188	26	29	221	3100
AFS3-32	AFSE3-32	32	54	204	call	call	call	3625
AFS3-34	AFSE3-34	34	54	216	call	call	call	4300
AFS3-36	AFSE3-36	36	60	228	call	call	call	4500
AFS3-40	AFSE3-40	40	66	248	call	call	call	5300
AFS3-42	AFSE3-42	42	66	258	call	call	call	5800

- All dimensions are in inches. All weights are in pounds. Weights are approximate.
- Listed sound data is based on typical performance and should not be considered absolute.
- *See <u>nomenclature guide</u> for additional information on part number creation.



Maxim Silencers Standard Terms and Conditions

QUOTATIONS: All quotations are made subject to the following Standard Terms and Conditions, unless otherwise specified within the body of the formal quotation, in which case that section or paragraph only would be superseded. (In the case of a catalytic silencer, all Standard Terms and Conditions apply except that the LIMITED WARRANTY provision is superseded by the provisions contained in the document entitled "LIMITED WARRANTY AS APPLIED TO CATALYTIC SILENCER.") No deviations from or changes to these Terms and Conditions will be honored or recognized without prior negotiation and written agreement between the Seller and Purchaser.

PRICING: All quotations are made for immediate acceptance and are subject to change without notice, unless otherwise noted. Prices quoted are based on the current costs of material and labor and are subject to escalation. Said escalation shall be determined by the cost of material to Seller on the date of shipment of said material from Supplier, and the costs of labor during the fabrication cycle. Prices do not include handling charges, transportation or related costs. Buyer agrees to pay the prices quoted by Seller, and is responsible for freight and handling charges, special packaging beyond the Sellers' standard packaging, taxes and duties. Handling, prepaid freight and special packing costs will be added to the purchase price and invoiced separately.

ORDER ACCEPTANCE, DELIVERY: No order is binding on Seller until accepted and acknowledged in writing by Seller by mail or electronic communication. All delivery dates are approximate and is the date goods leave Sellers dock. The time period for delivery begins when all documentation and release required to fill the order are present, and not before clarification of all details. All delivery promises are subject to prior commitment of shop capacity before the receipt of a firm purchase order by Seller. If shipment is delayed by Purchaser, payment shall become due when Purchaser is notified that equipment is ready for shipment and equipment will henceforth be held at Purchaser's risk and expense.

SHIPMENT, RISK OF LOSS: Buyer's purchase order must specify preferred carrier or goods will ship best way, prepaid and added to the invoice. Shipment is Free Carrier, FCA Sellers facility or origin of shipment, Incoterms 2010, unless otherwise agreed in writing. Risk of loss and title to goods shall pass to the Purchaser as soon as goods are deposited with the carrier for shipment. Buyer assumes both risk of loss and damage to the goods as well as title to the goods on Sellers dock; and Buyer is responsible for all freight, sales and other taxes, customs duties, insurance costs and other expenses relating to the shipment of goods. Buyer is responsible for all costs, reporting, and compliance with export control laws related to the goods' export.

CREDIT and PAYMENT: Credit accounts will be opened only with firms or individuals approved by the Seller's Credit Department. Purchaser with approved payment terms agrees to pay invoiced amount to Seller on or before thirty (30) days from date of invoice unless otherwise specified and/or agreed upon in writing. All past due accounts are subject to interest at the rate of one percent (1 %) per month on the unpaid balance. Seller reserves the right at any time upon notice to purchaser, to alter or suspend credit, when in its sole opinion the financial condition of the Purchaser so warrants. In such cases, cash payment or satisfactory security from the Purchaser may be required by the Seller before credit is restored or Seller continues performance.

CANCELLATION: Cancellation shall be affected only by a written agreement and Purchaser will assume full liability for payment of any and all cancellation charges.

RETURNED GOODS: A RMA packing slip must be received and included with any returns. No material will be accepted for replacement or credit without Seller's written consent and then only under the terms of such consent. Returns for credit will include a restocking fee, unless otherwise specified and/or agreed upon in writing.

LIMITED WARRANTY: Seller warrants only goods of its own manufacture and then only to the extent that they are free from defects in material and workmanship under normal use and service for the purpose for which they were manufactured and when correctly installed and maintained within one (1) year from the date of shipment. This warranty is limited to repair or replacement of the goods FCA point of manufacture at the Seller's option. Seller does not warrant secondhand material. THESE WARRANTIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Purchaser waives any warranties of any kind whatsoever including but not limited to a waiver of any warranties of fitness, any warranties as to the suitability of the product for its intended use, and any warranties as to the return of the purchase price. It is further understood and agreed that this is Purchaser's only remedy for all claims arising or relating to the goods purchased hereunder for breach of contract and tort including negligence and strict liability and any other legal theory. Seller shall not be responsible for deterioration occurs, after leaving the manufacturer's premises. No allowance will be granted for repairs or alterations made by Purchaser or at Purchaser's direction without Seller's written consent. Seller shall not



Maxim Silencers Standard Terms and Conditions

be liable for consequential, incidental or any damages other than repair or replacement of defective goods at Seller's option. It is understood that Seller makes no warranty except as expressly stipulated herein and Seller's liability is limited as above set forth. NOT WARRANTED: Maxim Silencers offers no paint guarantees other than preparation and application in accordance with manufacturer's instructions. The primary purpose of "factory black" standard coating is not aesthetic but for corrosion resistance and shipping protection. No heat curing is available. If required, curing must be done in service at the direction of others.

No representative has the authority to make any representation, promise or agreement except as stated herein.

TAXES: The Purchaser shall pay to the Seller in addition to the purchase price, the amount of any excise, sales, privilege, or use tax, local, state or federal, which is payable by the Seller because of the execution of this contract or sale or delivery of the apparatus covered hereby. Seller shall collect applicable taxes in states where Seller has nexus, unless Buyer submits a valid tax exemption certificate.

PATENTS: Notwithstanding any language to the contrary in specifications, purchase orders or elsewhere, Seller shall not be responsible for any patent infringement, or claim of patent infringement with respect to products furnished in accordance with the Purchaser's specifications or design requirements, and Purchaser shall indemnify and save Seller harmless from all claims, demands or suits growing out of or based on any patent infringement or claim thereof, arising there from.

FORCE MAJEURE: Seller shall not be liable for any delay in delivery or for non-delivery, in whole or in part caused by the occurrence of any contingency beyond the control either of Seller or suppliers to the Seller, including but not limited to war (whether an actual declaration thereof is made or not), sabotage, insurrection, rebellion, riot or other act of civil disobedience, act of a public enemy, failure or delay in transportation, act of any government or any agency or subdivision thereof, judicial action, labor dispute, fire, accident explosion, epidemic, quarantine, restrictions, storm, flood, earthquake, or other act of God, shortage of labor, fuel, raw material or machinery or technical failure, where Seller has exercised ordinary care in the prevention thereof. If any contingency occurs, Seller may allocate production and deliveries among Seller's customers.

CONFIDENTIAL INFORMATION: All drawings, diagrams, specifications and other materials furnished by Seller and identified as confidential relating to the use and service of articles furnished hereunder and the information therein are proprietary to Seller. Such materials have been developed at great expense and they contain trade secrets of the Seller. Buyer may not reproduce or distribute such materials except to Buyer's employees who may use the articles as part of their duties. All such materials relating to the article supplied directly by Seller (except information as may be established to be in the public domain or disclosed pursuant to judicial government action) shall be received in confidence and Buyer shall exercise reasonable care to hold such information in confidence.

TECHNICAL ASSISTANCE: Seller's warranty shall not be enlarged and no obligation or liability shall arise out of Seller's rendering of technical advice, facilities or services in connection with Buyer's order for the goods furnished.

DISPUTES: This agreement is deemed to be entered into in Texas and to be a Texas contract and shall be governed and construed in accordance with the laws of the State of Texas. Except as otherwise specifically provided for herein Seller and Buyer specifically agree that any legal action brought relating to goods purchased or relating to this contract will be brought and tried in Texas. All objections to venue are hereby waived by the Buyer, and the Buyer consents to service of process by certified mail addressed to the same address as that address designated for delivery of the goods purchased hereunder. In the event of any suit for the collection of funds instituted by the Seller, the prevailing party with respect to such collection matter shall be entitled to reasonable attorney's fees as determined by the court to prevail in Texas.



Industrial Silencer, Heat Recovery and Catalytic Specialists

