



MIRATECH Product List

Engineered to Perform™



MIRATECH (established 1992) is an industry leader that provides cost-effective, reliable, and mission critical emission and acoustical solutions for stationary natural gas and diesel reciprocating engines. Its reputation is associated with a customer centric consulting approach, advanced engineering expertise, extensive industry knowledge, project management, responsiveness, and quality products. These attributes have enabled MIRATECH to be highly adaptable, and thus, able to accommodate both small (HP < 300) and large stationary engine applications (up to 14,000 horsepower).

MIRATECH has a comprehensive customer offering that includes catalysts, housings, silencers, monitoring systems and related services that address and reduce engine exhaust pollutants such as NO_x CO, VOC, diesel particulate, HAPs, and noise. Along with its high quality products, MIRATECH's engineering team provides each customer technical customized solutions to their emission control requirements and installation configuration challenges.

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RELEASE NOTES

Q3 2018

You will note we have replaced the NEXT™ & VORTEX™ catalyst elements with the new MeC™ catalyst elements. There is a new part number legend for this new product line.

Q1 2017

You will note we have revised our part numbering system slightly from previous catalogs. We have done this to allow a configurable part number to be assembled from a set list of standard elements to create the higher level product part number that accurately captures the specific part detail.



Silencer Products

EM SILENCERS PART NUMBER LEGEND

Silencer Products

J

a

H

b

F

c

A

d

Ø

e

A

f

X

g

-D08PF14PF-2-XXXXXXX

Series

J Cylindrical

T Low Pressure

SU Spark Silencer

SA ATEX Spark Silencer

SAU Spark Arresting

DK Disk

DS Spark Arresting Disk

O Oval

CPJ* Compact Cylindrical

* Residential Grade only

Grade

I Industrial

R Residential

C Critical

SC Super Critical

H Hospital

SH Super Hospital

X Extreme

Blank SAU or CPJ Series

Inlet/Outlet Orientation Index

A 12:00

C 1:30

D 3:00

F 4:30

G 6:00

H 7:30

I 9:00

J 10:30

E End In/Out

B Bottom In/Out (O, DK, DS Only)

T Top In/Out (O, DK, DS Only)

P Parallel (CPJ Outlet Only)

Part Number Type

Blank Standard

X Configurable

Z Custom

J/T/SU/SA/SAU/CPJ

O/DK/DS

Mounting Type

A (3) Vertical Mounting Legs N/A

B (4) Vertical Mounting Legs Bottom Lugs

D Vertical Shell Supports Dual Lugs

E Horizontal Shell Supports N/A

F Saddle Supports N/A

T N/A Top Lugs

V Vertical Orientation - No Supports N/A

Blank No Mounts No Lugs

Internal Shell Insulation

0 No Insulation

1 1" Insulation

2 2" Insulation

3 3" Insulation

P Fully Insulated Applies to T Series

Cylindrical Silencers (J/T/SU/SA/SAU/CPJ)
Inlet and Outlet Orientation

Viewed from silencer inlet end
Drain and plug at 6:00

Disk Silencers (DK/DS)
Inlet and Outlet Orientation

Viewed from the top of silencer
Standard outlet location at 12:00
Drain on silencer bottom shell

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MIRATECH

EM SILENCERS PART NUMBER LEGEND (CONTINUED)

JHFA0AX- **D** **08** **PF** **14PF** - **2** - **XXXXXXXX**

h i j o p m n

Number of Inlets

Blank	1 Inlet
D	2 Inlets
T	3 Inlets
Q	4 Inlets

Inlet Size

##	Nominal Diameter - Ex. 8"
(Ex. 08)	
##	Nominal Diameter - Ex. 2.5"
(Ex. 25)	
###	Nominal Diameter - Ex. 50 mm
(Ex. 050)	

Inlet Connection

No Flange	PS	Pipe Stub
	TS	Tube Stub
Flange	TF	Tube
	PF	Pipe
	SR	Single Reducing
	DR	Double Reducing
	RF	Raised/Threaded
	TG	Tube Flange w/Gussets
	PG	Pipe Flange w/ Gussets
	CT	Custom
OEM Flange	CA	CAT
	CU	Cummins
	PK	Perkins
	MI	Mitsubishi
	DS	Doosan
	DF	Detroit
DIN Flange	A	PN6 Rating
	B	PN10 Rating
Other	CF	Slotted Cuff
	MN	Male NPT
	FN	Female NPT
	SB	Stack Breaker
	MT	Machined Turbo
	FR	20° Flare
	MA	Marman
	FM	Flush Mount

8-Digit Code

Standard and Configurable (X) Part Numbers	Encodes additional dimensional information
Custom (Z) Part Numbers	Code Generated by Engineering

Material

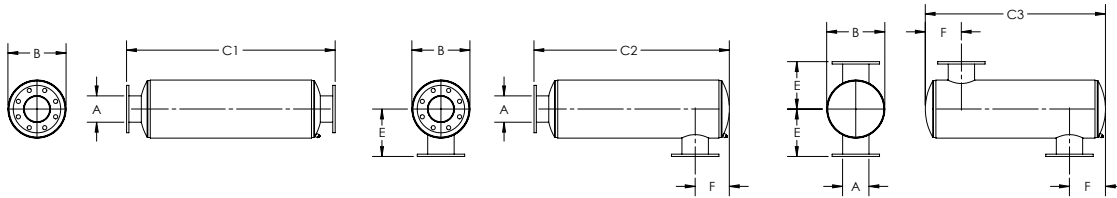
1	Aluminized
2	Carbon
3	304 Stainless
4	316 Stainless
5	321 Stainless
6	409 Stainless

Outlet Size and Connection

Blank	Outlet matches Inlet
Other	Same form as Inlet

JI – CYLINDRICAL INDUSTRIAL GRADE SILENCER TYPICAL ATTENUATION 12–18 dB(A)

This sturdy, robust silencer works well for equipment operating in environments where noise levels are high. Applications include commercial, industrial, mining, etc. [View Sales Drawings.](#)



A (Size)	B (Dia.)	End Inlet / End Outlet		Side Inlet / End Outlet		Side Inlet / Side Outlet		E	F	WT
		Part Number	C1 (OAL)	Part Number	C2 (OAL)	Part Number	C3 (OAL)			
2.0	6	JIEE0f-02MN-m-00000000	24.0	JIGE0f-02MN-m-0000000V	22.0	JIGA0f-02MN-m-00000Q3K	20.0	5.5	3.0	14
2.5	8	JIEE0f-25MN-m-00000000	24.0	JIGE0f-25MN-m-00000012	22.0	JIGA0f-25MN-m-00000VYK	20.0	6.5	3.7	20
3.0	8	JIEE0f-03MN-m-00000000	25.0	JIGE0f-03MN-m-00000017	22.0	JIGA0f-03MN-m-00001050	20.0	7.0	4.2	24
3.5	10	JIEE0f-35MN-m-00000000	31.0	JIGE0f-35MN-m-0000001F	29.0	JIGA0f-35MN-m-000016UA	26.0	8.0	5.0	31
4.0	10	JIEE0f-04PF-m-00000000	32.0	JIGE0f-04PF-m-0000001K	29.5	JIGA0f-04PF-m-00001B0Q	26.0	8.5	5.5	41
5.0	12	JIEE0f-05PF-m-00000000	44.0	JIGE0f-05PF-m-00000026	41.6	JIGA0f-05PF-m-00001TKQ	38.0	10.0	7.6	61
6.0	12	JIEE0f-06PF-m-00000000	44.0	JIGE0f-06PF-m-00000026	41.6	JIGA0f-06PF-m-00001TKQ	38.0	10.0	7.6	67
8.0	18	JIEE0f-08PF-m-00000000	56.0	JIGE0f-08PF-m-00000030	54.5	JIGA0f-08PF-m-00002HV0	50.5	13.0	10.5	129
10.0	22	JIEE0f-10PF-m-00000000	72.0	JIGE0f-10PF-m-0000004A	69.0	JIGA0f-10PF-m-00003KHV	55.5	15.0	15.0	197
12.0	26	JIEE0f-12PF-m-00000000	72.0	JIGE0f-12PF-m-0000004V	69.5	JIGA0f-12PF-m-0000428K	67.5	17.0	17.0	269
14.0	30	JIEE0f-14PF-m-00000000	84.0	JIGE0f-14PF-m-0000005Q	82.0	JIGA0f-14PF-m-00004SC5	77.5	19.0	20.0	477
16.0	36	JIEE0f-16PF-m-00000000	100.0	JIGE0f-16PF-m-0000006K	97.0	JIGA0f-16PF-m-00005HFQ	93.5	22.0	23.0	724
18.0	42	JIEE0f-18PF-m-00000000	104.0	JIGE0f-18PF-m-0000007K	101.0	JIGA0f-18PF-m-00006BQQ	97.0	25.0	26.5	1155
20.0	48	JIEE0f-20PF-m-00000000	103.0	JIGE0f-20PF-m-0000007F	101.5	JIGA0f-20PF-m-000067JA	97.0	28.0	26.0	1380
22.0	54	JIEE0f-22PF-m-00000000	108.0	JIGE0f-22PF-m-0000007Q	106.0	JIGA0f-22PF-m-00006FX5	103.5	31.0	27.0	1897
24.0	60	JIEE0f-24PF-m-00000000	120.0	JIGE0f-24PF-m-0000008K	117.0	JIGA0f-24PF-m-0000760Q	114.5	34.0	30.0	2321

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 12" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
- Connections:
 - Male NPT on 3.5" and smaller.
 - 125/150# ANSI bolt pattern flanges on 4" and larger.

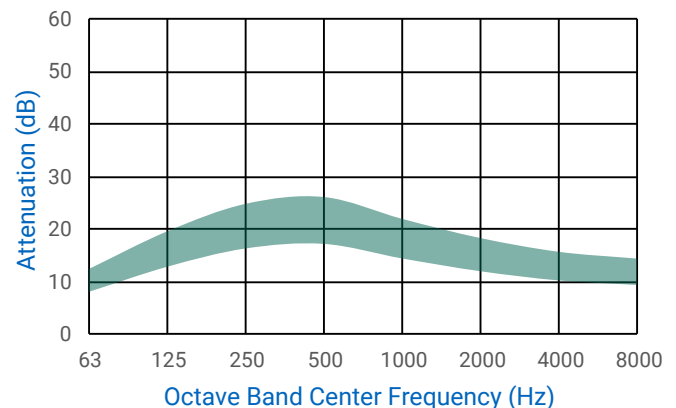
CONFIGURABLE OPTIONS

- Side inlet (c) and side outlet (d) orientation.
- Side inlet and side outlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

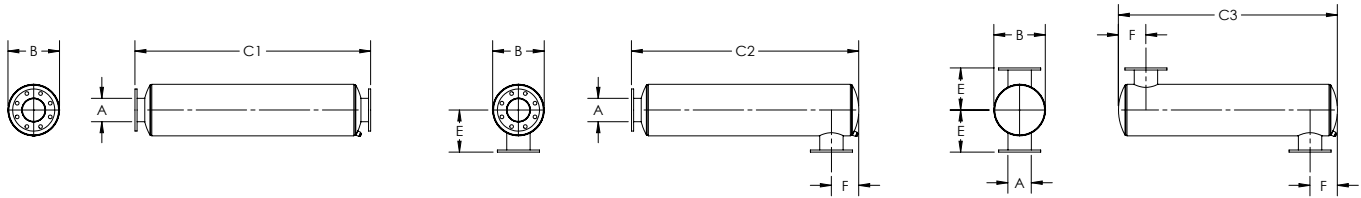
Typical Attenuation Curve



JR – CYLINDRICAL RESIDENTIAL GRADE SILENCER

TYPICAL ATTENUATION 18–25 dB(A)

This heavy-duty silencer offers practical attenuation for equipment operating in environments where noise levels are moderate. Applications include commercial, industrial, mining, etc. [View Sales Drawings.](#)



End Inlet / End Outlet		Side Inlet / End Outlet		Side Inlet / Side Outlet							
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	Part Number	C3 (OAL)	E	F	WT	
2.0	6	JREE0f-02MN-m-00000000	30.0	JRGE0f-02MN-m-0000000V	28.0	JRGA0f-02MN-m-00000Q3K	26.5	5.5	3.0	18	
2.5	8	JREE0f-25MN-m-00000000	30.0	JRGE0f-25MN-m-00000011	28.5	JRGA0f-25MN-m-00000V4A	26.5	6.5	3.6	25	
3.0	8	JREE0f-03MN-m-00000000	31.0	JRGE0f-03MN-m-00000016	29.0	JRGA0f-03MN-m-00000ZAQ	27.0	7.0	4.1	29	
3.5	10	JREE0f-35MN-m-00000000	43.0	JRGE0f-35MN-m-0000001F	41.0	JRGA0f-35MN-m-0000016UA	38.0	8.0	5.0	48	
4.0	10	JREE0f-04PF-m-00000000	44.0	JRGE0f-04PF-m-0000001K	41.5	JRGA0f-04PF-m-000001B0Q	38.0	8.5	5.5	55	
5.0	12	JREE0f-05PF-m-00000000	56.0	JRGE0f-05PF-m-0000001W	54.0	JRGA0f-05PF-m-000001K7V	52.0	10.0	6.6	83	
6.0	12	JREE0f-06PF-m-00000000	56.0	JRGE0f-06PF-m-00000026	54.0	JRGA0f-06PF-m-000001TKQ	52.0	10.0	7.6	89	
8.0	18	JREE0f-08PF-m-00000000	68.0	JRGE0f-08PF-m-00000030	66.5	JRGA0f-08PF-m-000002HV0	63.5	13.0	10.5	161	
10.0	22	JREE0f-10PF-m-00000000	84.0	JRGE0f-10PF-m-0000004A	81.0	JRGA0f-10PF-m-000003KHV	77.5	15.0	15.0	258	
12.0	26	JREE0f-12PF-m-00000000	96.0	JRGE0f-12PF-m-00000050	93.5	JRGA0f-12PF-m-0000046F0	90.5	17.0	17.5	356	
14.0	30	JREE0f-14PF-m-00000000	120.0	JRGE0f-14PF-m-0000005Q	118.0	JRGA0f-14PF-m-000004SC5	114.5	19.0	20.0	680	
16.0	36	JREE0f-16PF-m-00000000	136.0	JRGE0f-16PF-m-0000006K	133.0	JRGA0f-16PF-m-000005HFQ	130.5	22.0	23.0	987	
18.0	42	JREE0f-18PF-m-00000000	138.0	JRGE0f-18PF-m-00000090	135.5	JRGA0f-18PF-m-000007IK0	132.0	25.0	31.5	1190	
20.0	48	JREE0f-20PF-m-00000000	143.0	JRGE0f-20PF-m-000000A0	139.0	JRGA0f-20PF-m-000008CV0	135.0	28.0	35.0	1828	
22.0	54	JREE0f-22PF-m-00000000	160.0	JRGE0f-22PF-m-0000008A	157.0	JRGA0f-22PF-m-000006XMV	154.5	31.0	29.0	2738	
24.0	60	JREE0f-24PF-m-00000000	160.0	JRGE0f-24PF-m-0000008A	157.0	JRGA0f-24PF-m-000006XMV	154.5	34.0	29.0	3060	

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 12" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
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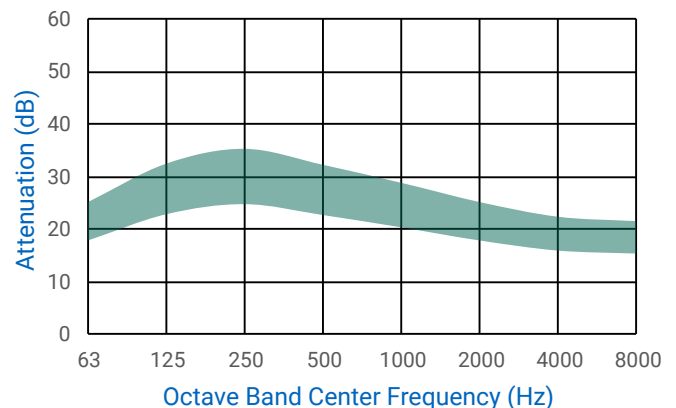
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- Side inlet (c) and side outlet (d) orientation.
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- Inlet size and connection type (i/j) and outlet connection type (p).
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- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

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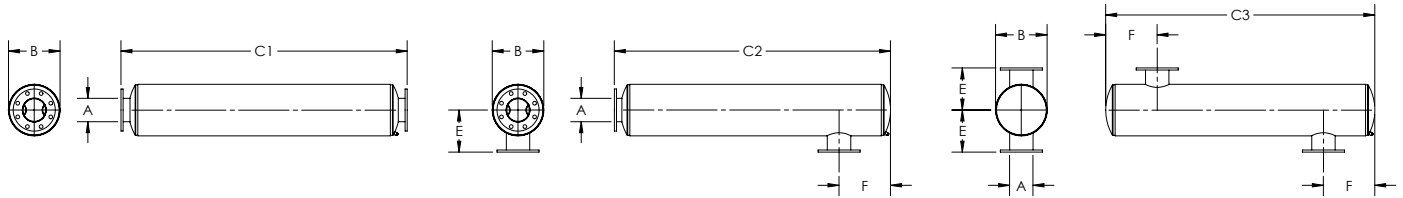
Typical Attenuation Curve



JC – CYLINDRICAL CRITICAL GRADE SILENCER

TYPICAL ATTENUATION 25–35 dB(A)

This silencer is designed for equipment operating in relatively quiet environments that require a high level of silencing. Applications include commercial, marine, stationary projects, etc. [View Sales Drawings.](#)



A (Size)	B (Dia.)	End Inlet / End Outlet		Side Inlet / End Outlet		Side Inlet / Side Outlet		E	F	WT
		Part Number	C1 (OAL)	Part Number	C2 (OAL)	Part Number	C3 (OAL)			
2.0	6	JCEE0f-02MN-m-00000000	42.0	JCGE0f-02MN-m-00000023	39.8	JCGA0f-02MN-m-00001R2V	38.5	5.5	7.3	28
2.5	8	JCEE0f-25MN-m-00000000	42.0	JCGE0f-25MN-m-00000024	39.9	JCGA0f-25MN-m-00001RX5	38.5	6.5	7.4	38
3.0	8	JCEE0f-03MN-m-00000000	43.0	JCGE0f-03MN-m-00000024	40.6	JCGA0f-03MN-m-00001RX5	39.0	7.0	7.4	41
3.5	10	JCEE0f-35MN-m-00000000	55.0	JCGE0f-35MN-m-0000002N	53.0	JCGA0f-35MN-m-000027TK	51.0	8.0	9.3	67
4.0	10	JCEE0f-04PF-m-00000000	56.0	JCGE0f-04PF-m-0000002N	53.5	JCGA0f-04PF-m-000027TK	51.0	8.5	9.3	75
5.0	12	JCEE0f-05PF-m-00000000	68.0	JCGE0f-05PF-m-0000003I	65.6	JCGA0f-05PF-m-00002XX5	64.0	10.0	12.3	106
6.0	12	JCEE0f-06PF-m-00000000	68.0	JCGE0f-06PF-m-0000003I	65.6	JCGA0f-06PF-m-00002XX5	64.0	10.0	12.3	119
8.0	18	JCEE0f-08PF-m-00000000	92.0	JCGE0f-08PF-m-0000004Q	90.5	JCGA0f-08PF-m-00003Y25	87.5	13.0	16.5	214
10.0	22	JCEE0f-10PF-m-00000000	108.0	JCGE0f-10PF-m-0000005Q	105.0	JCGA0f-10PF-m-00004SC5	102.5	15.0	20.0	311
12.0	26	JCEE0f-12PF-m-00000000	120.0	JCGE0f-12PF-m-00000065	117.5	JCGA0f-12PF-m-000054WF	115.5	17.0	21.5	431
14.0	30	JCEE0f-14PF-m-00000000	132.0	JCGE0f-14PF-m-0000006K	130.0	JCGA0f-14PF-m-00005HFQ	126.5	19.0	23.0	854
16.0	36	JCEE0f-16PF-m-00000000	160.0	JCGE0f-16PF-m-0000008A	157.0	JCGA0f-16PF-m-00006XMV	152.5	22.0	29.0	1267
18.0	42	JCEE0f-18PF-m-00000000	174.0	JCGE0f-18PF-m-0000009F	171.5	JCGA0f-18PF-m-00007W4A	166.0	25.0	33.0	1511
20.0	48	JCEE0f-20PF-m-00000000	203.0	JCGE0f-20PF-m-000000AA	199.0	JCGA0f-20PF-m-00008L7V	195.0	27.0	36.0	2718
22.0	54	JCEE0f-22PF-m-00000000	230.0	JCGE0f-22PF-m-000000BF	226.0	JCGA0f-22PF-m-00009JPA	221.0	30.0	40.0	3909
24.0	60	JCEE0f-24PF-m-00000000	226.0	JCGE0f-24PF-m-000000BQ	223.0	JCGA0f-24PF-m-00009T25	219.5	34.0	41.0	4830

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 12" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
- Connections:
 - Male NPT on 3.5" and smaller.
 - 125/150# ANSI bolt pattern flanges on 4" and larger.

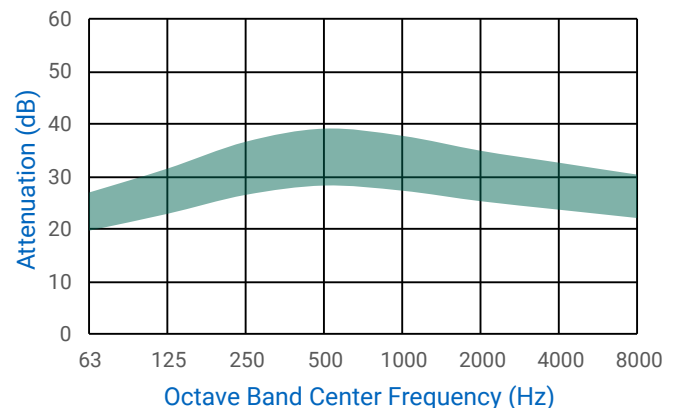
CONFIGURABLE OPTIONS

- Side inlet (c) and side outlet (d) orientation.
- Side inlet and side outlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

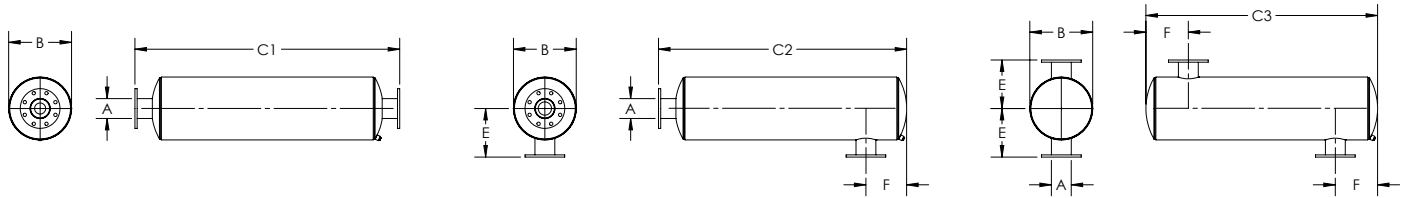
Typical Attenuation Curve



JH – CYLINDRICAL HOSPITAL GRADE SILENCER

TYPICAL ATTENUATION 35–40 dB(A)

For an exceptional level of performance, this silencer utilizes both absorptive and reactive designs to reach a high degree of attenuation. It is ideally suited for equipment operating in very quiet environments. [View Sales Drawings.](#)



End Inlet / End Outlet		Side Inlet / End Outlet		Side Inlet / Side Outlet							
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	Part Number	C3 (OAL)	E	F	WT	
2.0	10	JHEE0f-02MN-m-00000000	44.0	JHGE0f-02MN-m-0000001K	41.5	JHGA0f-02MN-m-00001B0Q	39.0	8.5	5.5	49	
2.5	12	JHEE0f-25MN-m-00000000	46.0	JHGE0f-25MN-m-00000028	42.5	JHGA0f-25MN-m-00001V9A	40.0	10.0	7.8	63	
3.0	12	JHEE0f-03MN-m-00000000	46.0	JHGE0f-03MN-m-00000028	42.5	JHGA0f-03MN-m-00001V9A	40.0	10.0	7.8	64	
3.5	14	JHEE0f-35MN-m-00000000	60.0	JHGE0f-35MN-m-0000002Q	56.5	JHGA0f-35MN-m-000029H5	52.3	11.0	9.5	92	
4.0	14	JHEE0f-04PF-m-00000000	60.0	JHGE0f-04PF-m-0000002Q	56.5	JHGA0f-04PF-m-000029H5	52.3	11.0	9.5	101	
5.0	18	JHEE0f-05PF-m-00000000	68.0	JHGE0f-05PF-m-00000030	66.5	JHGA0f-05PF-m-00002HV0	63.0	13.0	10.5	160	
6.0	18	JHEE0f-06PF-m-00000000	68.0	JHGE0f-06PF-m-00000030	66.5	JHGA0f-06PF-m-00002HV0	63.0	13.0	10.5	167	
8.0	26	JHEE0f-08PF-m-00000000	96.0	JHGE0f-08PF-m-00000050	93.5	JHGA0f-08PF-m-000046F0	89.5	17.0	17.5	358	
10.0	30	JHEE0f-10PF-m-00000000	110.0	JHGE0f-10PF-m-0000005Q	108.0	JHGA0f-10PF-m-00004SC5	102.5	19.0	20.0	633	
12.0	36	JHEE0f-12PF-m-00000000	126.0	JHGE0f-12PF-m-0000006K	122.0	JHGA0f-12PF-m-00005HFQ	118.5	22.0	23.0	938	
14.0	42	JHEE0f-14PF-m-00000000	138.0	JHGE0f-14PF-m-0000006V	135.0	JHGA0f-14PF-m-00005QTK	127.5	25.0	24.0	1270	
16.0	42	JHEE0f-16PF-m-00000000	162.0	JHGE0f-16PF-m-00000080	159.0	JHGA0f-16PF-m-00006PA0	154.0	25.0	28.0	1437	
18.0	48	JHEE0f-18PF-m-00000000	205.5	JHGE0f-18PF-m-000000AV	201.5	JHGA0f-18PF-m-000092YK	195.0	28.0	38.0	2575	
20.0	60	JHEE0f-20PF-m-00000000	220.0	JHGE0f-20PF-m-000000BF	216.0	JHGA0f-20PF-m-00009JPA	210.5	34.0	40.0	4347	
22.0	60	JHEE0f-22PF-m-00000000	230.0	JHGE0f-22PF-m-000000C0	227.0	JHGA0f-22PF-m-0000A1F0	224.5	33.0	42.0	4550	
24.0	66	JHEE0f-24PF-m-00000000	250.0	JHGE0f-24PF-m-000000FQ	247.0	JHGA0f-24PF-m-0000D575	240.0	38.0	55.0	6270	

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 8" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
- Connections:
 - Male NPT on 3.5" and smaller.
 - 125/150# ANSI bolt pattern flanges on 4" and larger.

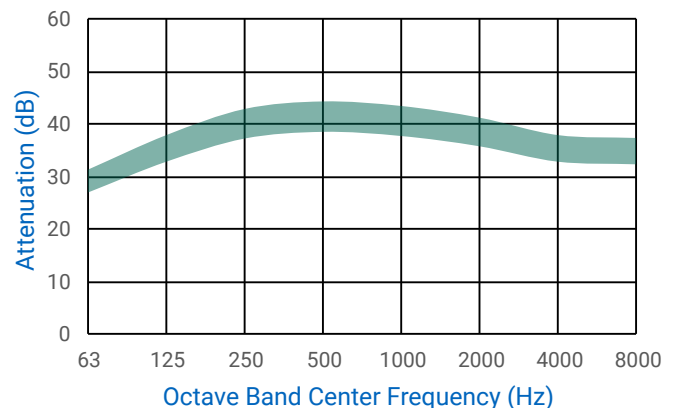
CONFIGURABLE OPTIONS

- Side inlet (c) and side outlet (d) orientation.
- Side inlet and side outlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

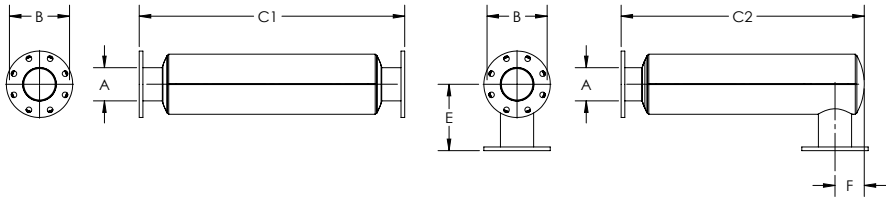
- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve



TR – LOW PRESSURE DROP RESIDENTIAL GRADE SILENCER
TYPICAL ATTENUATION 12–15 dB(A)

Designed for turbocharged engines, this heavy-duty silencer provides practical attenuation while keeping the backpressure to a minimum. It is ideally suited for equipment operating in environments where noise levels are moderate. [View Sales Drawings](#).



		End Inlet / End Outlet		Side Inlet / End Outlet				
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	WT
4.0	8	TREEPf-04PF-m-0000000	36.0	TRGEPf-04PF-m-000001F	33.0	8.0	5.0	24
5.0	10	TREEPf-05PF-m-0000000	51.0	TRGEPf-05PF-m-000001Q	48.0	9.0	6.0	49
6.0	10	TREEPf-06PF-m-0000000	60.0	TRGEPf-06PF-m-0000020	57.0	9.0	7.0	85
8.0	14	TREEPf-08PF-m-0000000	66.0	TRGEPf-08PF-m-000002A	63.0	11.0	8.0	115
10.0	16	TREEPf-10PF-m-0000000	70.0	TRGEPf-10PF-m-000002V	67.0	12.0	10.0	146
12.0	18	TREEPf-12PF-m-0000000	70.0	TRGEPf-12PF-m-0000035	67.0	13.0	11.0	174
14.0	20	TREEPf-14PF-m-0000000	88.0	TRGEPf-14PF-m-000003F	85.0	14.0	12.0	337
16.0	24	TREEPf-16PF-m-0000000	108.0	TRGEPf-16PF-m-0000040	105.0	16.0	14.0	487
18.0	26	TREEPf-18PF-m-0000000	108.0	TRGEPf-18PF-m-000004A	105.0	17.0	15.0	523
20.0	28	TREEPf-20PF-m-0000000	132.0	TRGEPf-20PF-m-000004V	129.0	18.0	17.0	724
22.0	36	TREEPf-22PF-m-0000000	136.0	TRGEPf-22PF-m-000005F	133.0	22.0	19.0	1140
24.0	36	TREEPf-24PF-m-0000000	196.0	TRGEPf-24PF-m-000005Q	193.0	22.0	20.0	1600

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Absorption silencer internally packed with acoustical fiberglass.
- Mounting options (f); see [Cylindrical Silencer Mounting Options](#) (p. 34).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 18" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

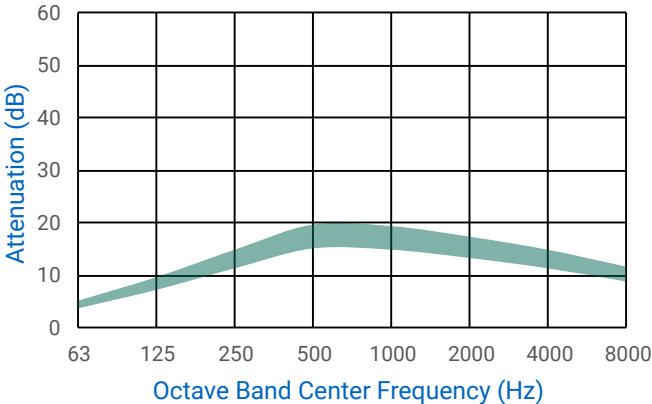
CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend](#) (p. 6); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

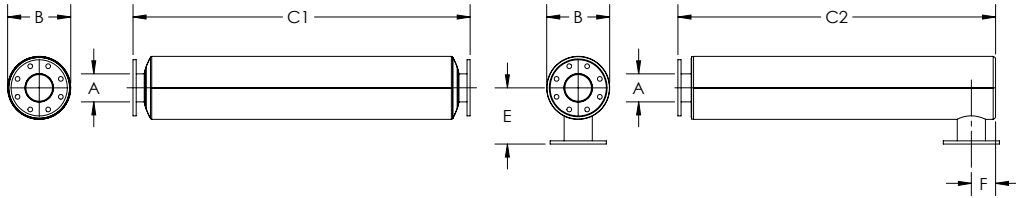
Typical Attenuation Curve



TC – LOW PRESSURE DROP CRITICAL GRADE SILENCER

TYPICAL ATTENUATION 17–22 dB(A)

Designed for turbocharged engines, this silencer provides a high level of attenuation while keeping the backpressure to a minimum. It is ideally suited for equipment operating in relatively quiet environments. [View Sales Drawings.](#)



End Inlet / End Outlet				Side Inlet / End Outlet				WT
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	
4.0	10	TCEEPf-04PF-m-00000000	54.0	TCGEPf-04PF-m-0000001Q	51.0	9.0	6.0	50
5.0	10	TCEEPf-05PF-m-00000000	54.0	TCGEPf-05PF-m-0000001Q	51.0	9.0	6.0	68
6.0	12	TCEEPf-06PF-m-00000000	66.0	TCGEPf-06PF-m-00000020	63.0	10.0	7.0	98
8.0	14	TCEEPf-08PF-m-00000000	78.0	TCGEPf-08PF-m-0000002A	75.0	11.0	8.0	135
10.0	16	TCEEPf-10PF-m-00000000	82.0	TCGEPf-10PF-m-0000002V	79.0	12.0	10.0	179
12.0	22	TCEEPf-12PF-m-00000000	89.0	TCGEPf-12PF-m-00000035	86.0	15.0	11.0	355
14.0	26	TCEEPf-14PF-m-00000000	110.0	TCGEPf-14PF-m-0000003F	107.0	17.0	12.0	475
16.0	26	TCEEPf-16PF-m-00000000	132.0	TCGEPf-16PF-m-00000040	129.0	17.0	14.0	575
18.0	36	TCEEPf-18PF-m-00000000	184.0	TCGEPf-18PF-m-00000055	181.0	22.0	18.0	1500
20.0	42	TCEEPf-20PF-m-00000000	198.0	TCGEPf-20PF-m-0000005F	195.0	25.0	19.0	1855
22.0	48	TCEEPf-22PF-m-00000000	200.0	TCGEPf-22PF-m-00000060	197.0	28.0	21.0	2577
24.0	54	TCEEPf-24PF-m-00000000	262.0	TCGEPf-24PF-m-0000006A	259.0	31.0	22.0	4000

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Absorption silencer internally packed with acoustical fiberglass.
- Mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 14" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

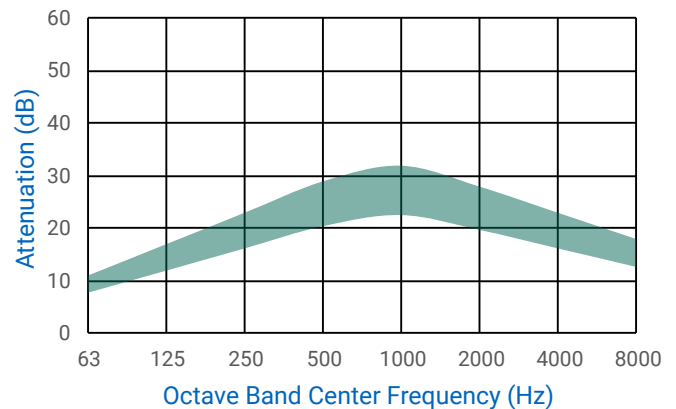
CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

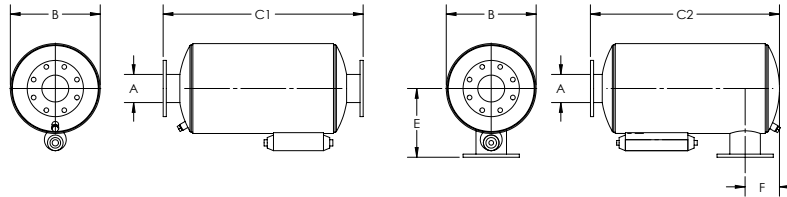
- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve



SUI – SPARK ARRESTING INDUSTRIAL GRADE SILENCER TYPICAL ATTENUATION 12–18 dB(A)

DNV certified spark arresting silencer designed for equipment operating in environments containing potentially combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark clean-out. Providing a minimal level of attenuation, it is designed for environments where noise levels are high. [View Sales Drawings.](#)



		End Inlet / End Outlet		Side Inlet / End Outlet				
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	WT
4.0	14	SUIEE0f-04PF-m-00000000	32.0	SUIGE0f-04PF-m-0000001K	30.3	11.0	5.5	65
5.0	14	SUIEE0f-05PF-m-00000000	42.0	SUIGE0f-05PF-m-00000020	39.8	11.0	7.0	76
6.0	18	SUIEE0f-06PF-m-00000000	49.0	SUIGE0f-06PF-m-0000002D	45.5	13.0	8.3	118
8.0	22	SUIEE0f-08PF-m-00000000	50.0	SUIGE0f-08PF-m-0000002T	46.5	17.0	9.8	170
10.0	26	SUIEE0f-10PF-m-00000000	63.0	SUIGE0f-10PF-m-0000003A	59.5	19.0	11.5	256
12.0	30	SUIEE0f-12PF-m-00000000	76.0	SUIGE0f-12PF-m-0000003T	73.0	20.0	13.3	482
14.0	36	SUIEE0f-14PF-m-00000000	78.0	SUIGE0f-14PF-m-0000004A	75.5	24.0	15.0	633
16.0	42	SUIEE0f-16PF-m-00000000	81.0	SUIGE0f-16PF-m-0000004Q	79.0	27.0	16.5	852
18.0	48	SUIEE0f-18PF-m-00000000	100.0	SUIGE0f-18PF-m-0000005F	97.0	33.0	19.0	1478
20.0	48	SUIEE0f-20PF-m-00000000	118.0	SUIGE0f-20PF-m-0000005Q	115.0	33.0	20.0	1360
22.0	54	SUIEE0f-22PF-m-00000000	120.0	SUIGE0f-22PF-m-0000006A	116.5	36.0	22.0	1974
24.0	60	SUIEE0f-24PF-m-00000000	132.0	SUIGE0f-24PF-m-0000006Q	129.5	39.0	23.5	2889

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 10" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

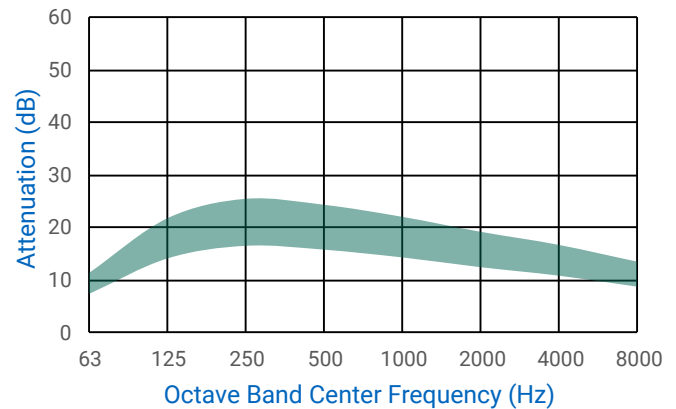
CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

CERTIFICATIONS

Complies with Det Norske Veritas and Germanischer Lloyd's Rules for Classification of Ships DNV's Offshore Standard DNV-OS-D101 "Marine and Machinery Systems and Equipment" NS-EN 1834-1.

Typical Attenuation Curve

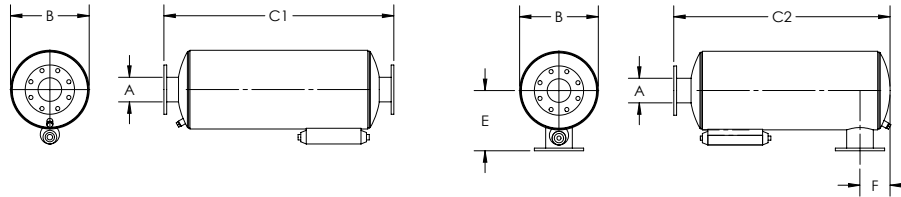


SUR – SPARK ARRESTING RESIDENTIAL GRADE SILENCER

TYPICAL ATTENUATION 18–25 dB(A)

DNV certified spark arresting silencer designed for equipment operating in environments containing potentially combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark clean-out. Providing a modest level of attenuation, it is designed for environments where noise levels are moderate.

[View Sales Drawings.](#)



End Inlet / End Outlet				Side Inlet / End Outlet				WT
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	
4.0	14	SUREE0f-04PF-m-00000000	42.0	SURGE0f-04PF-m-0000001K	39.5	11.0	5.5	76
5.0	14	SUREE0f-05PF-m-00000000	66.0	SURGE0f-05PF-m-00000020	63.5	11.0	7.0	106
6.0	18	SUREE0f-06PF-m-00000000	61.0	SURGE0f-06PF-m-0000002D	57.5	13.0	8.3	140
8.0	22	SUREE0f-08PF-m-00000000	73.0	SURGE0f-08PF-m-0000002T	69.5	17.0	9.8	220
10.0	26	SUREE0f-10PF-m-00000000	93.0	SURGE0f-10PF-m-0000003A	89.5	19.0	11.5	348
12.0	30	SUREE0f-12PF-m-00000000	112.0	SURGE0f-12PF-m-0000003T	109.0	20.0	13.3	588
14.0	36	SUREE0f-14PF-m-00000000	108.0	SURGE0f-14PF-m-0000004A	105.5	24.0	15.0	778
16.0	42	SUREE0f-16PF-m-00000000	111.0	SURGE0f-16PF-m-0000004Q	109.0	27.0	16.5	1023
18.0	48	SUREE0f-18PF-m-00000000	118.0	SURGE0f-18PF-m-0000005F	115.0	33.0	19.0	1571
20.0	48	SUREE0f-20PF-m-00000000	142.0	SURGE0f-20PF-m-0000005Q	139.0	33.0	20.0	1863
22.0	54	SUREE0f-22PF-m-00000000	144.0	SURGE0f-22PF-m-0000006A	140.5	36.0	22.0	2283
24.0	60	SUREE0f-24PF-m-00000000	144.0	SURGE0f-24PF-m-0000006Q	142.5	39.0	23.5	2995

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 10" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

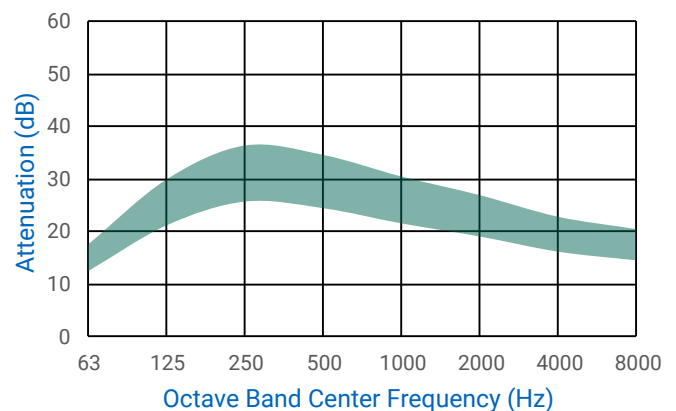
CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

CERTIFICATIONS

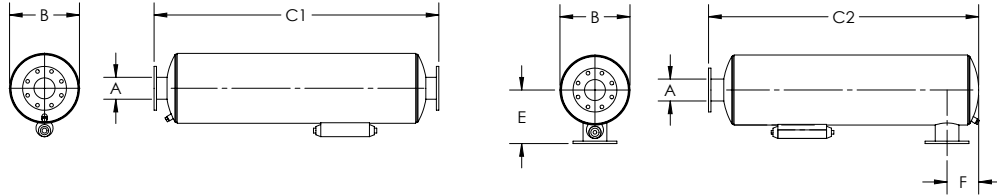
Complies with Det Norske Veritas and Germanischer Lloyd's Rules for Classification of Ships DNV's Offshore Standard DNV-OS-D101 "Marine and Machinery Systems and Equipment" NS-EN 1834-1.

Typical Attenuation Curve



SUC – SPARK ARRESTING CRITICAL GRADE SILENCER TYPICAL ATTENUATION 25–32 dB(A)

DNV certified spark arresting silencer designed for equipment operating in environments containing potentially combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark clean-out. Providing a high degree of attenuation, it is designed for relatively quiet environments. [View Sales Drawings](#).



		End Inlet / End Outlet		Side Inlet / End Outlet				
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	WT
4.0	14	SUCEE0f-04PF-m-00000000	58.5	SUCGE0f-04PF-m-0000001V	55.5	11.0	6.5	99
5.0	14	SUCEE0f-05PF-m-00000000	70.5	SUCGE0f-05PF-m-00000020	68.0	11.0	7.0	121
6.0	18	SUCEE0f-06PF-m-00000000	72.0	SUCGE0f-06PF-m-0000002D	68.5	13.0	8.3	167
8.0	22	SUCEE0f-08PF-m-00000000	85.0	SUCGE0f-08PF-m-0000002T	81.5	17.0	9.8	261
10.0	26	SUCEE0f-10PF-m-00000000	110.0	SUCGE0f-10PF-m-0000003A	106.5	19.0	11.5	420
12.0	30	SUCEE0f-12PF-m-00000000	123.0	SUCGE0f-12PF-m-0000003T	120.0	20.0	13.3	712
14.0	36	SUCEE0f-14PF-m-00000000	137.0	SUCGE0f-14PF-m-0000004A	134.5	24.0	15.0	1028
16.0	42	SUCEE0f-16PF-m-00000000	139.0	SUCGE0f-16PF-m-0000004Q	137.0	27.0	16.5	1245
18.0	48	SUCEE0f-18PF-m-00000000	141.0	SUCGE0f-18PF-m-0000005F	138.0	33.0	19.0	2027
20.0	48	SUCEE0f-20PF-m-00000000	153.0	SUCGE0f-20PF-m-0000005Q	150.0	33.0	20.0	2151
22.0	54	SUCEE0f-22PF-m-00000000	155.0	SUCGE0f-22PF-m-0000006A	151.5	36.0	22.0	2457
24.0	60	SUCEE0f-24PF-m-00000000	168.0	SUCGE0f-24PF-m-0000006Q	166.5	39.0	23.5	3621

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 10" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

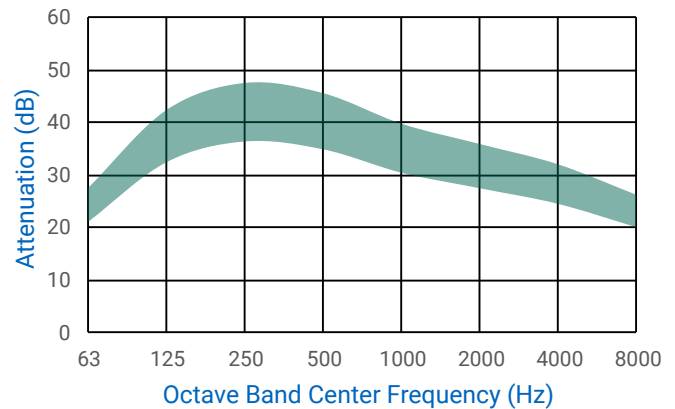
CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

CERTIFICATIONS

Complies with Det Norske Veritas and Germanischer Lloyd's Rules for Classification of Ships DNV's Offshore Standard DNV-OS-D101 "Marine and Machinery Systems and Equipment" NS-EN 1834-1.

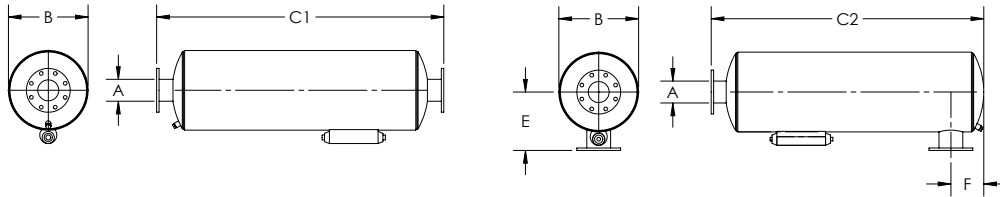
Typical Attenuation Curve



SUH – SPARK ARRESTING HOSPITAL GRADE SILENCER

TYPICAL ATTENUATION 32–38 dB(A)

DNV certified spark arresting silencer designed for equipment operating in environments containing potentially combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark clean-out. Providing an exceptional level of attenuation, it is designed for very quiet environments. [View Sales Drawings](#).



End Inlet / End Outlet				Side Inlet / End Outlet				
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	WT
4.0	16	SUHEE0f-04PF-m-00000000	59.0	SUHGE0f-04PF-m-0000001Y	56.0	12.0	6.8	120
5.0	18	SUHEE0f-05PF-m-00000000	72.0	SUHGE0f-05PF-m-00000028	69.0	13.0	7.8	163
6.0	18	SUHEE0f-06PF-m-00000000	80.0	SUHGE0f-06PF-m-0000002D	78.0	13.0	8.3	185
8.0	26	SUHEE0f-08PF-m-00000000	96.0	SUHGE0f-08PF-m-00000030	93.5	19.0	10.5	325
10.0	30	SUHEE0f-10PF-m-00000000	110.0	SUHGE0f-10PF-m-0000003I	108.0	20.0	12.3	619
12.0	36	SUHEE0f-12PF-m-00000000	126.0	SUHGE0f-12PF-m-00000045	122.0	24.0	14.5	906
14.0	42	SUHEE0f-14PF-m-00000000	138.0	SUHGE0f-14PF-m-0000004F	135.0	27.0	15.5	1207
16.0	42	SUHEE0f-16PF-m-00000000	163.0	SUHGE0f-16PF-m-0000004Q	159.0	27.0	16.5	1417
18.0	48	SUHEE0f-18PF-m-00000000	205.5	SUHGE0f-18PF-m-0000005F	201.5	33.0	19.0	2575
20.0	60	SUHEE0f-20PF-m-00000000	220.0	SUHGE0f-20PF-m-00000065	216.0	39.0	21.5	4500
22.0	60	SUHEE0f-22PF-m-00000000	220.0	SUHGE0f-22PF-m-0000006F	216.0	39.0	22.5	4970
24.0	66	SUHEE0f-24PF-m-00000000	244.0	SUHGE0f-24PF-m-0000006V	241.0	42.0	24.0	6670

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel, carbon steel, or 304 stainless steel construction (m); aluminized steel is only available for 8" and smaller.
- Aluminized and carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

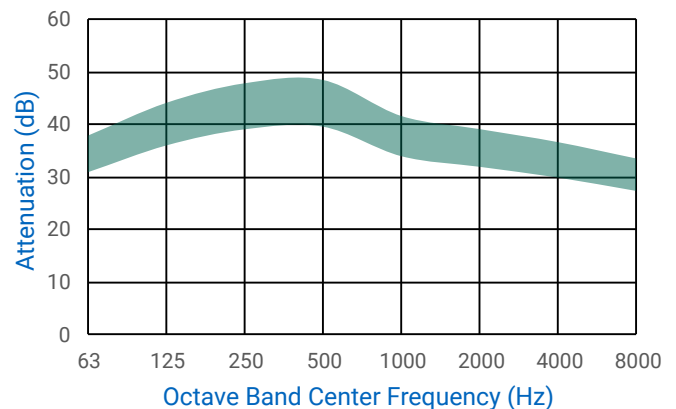
CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

CERTIFICATIONS

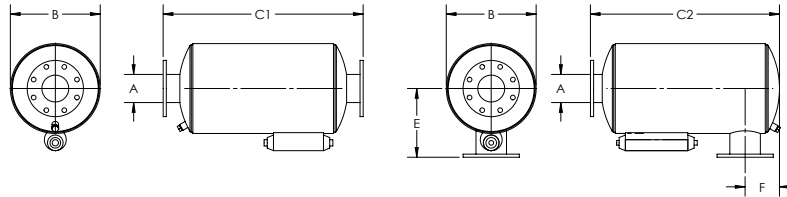
Complies with Det Norske Veritas and Germanischer Lloyd's Rules for Classification of Ships DNV's Offshore Standard DNV-OS-D101 "Marine and Machinery Systems and Equipment" NS-EN 1834-1.

Typical Attenuation Curve



SAI – ATEX SPARK ARRESTING INDUSTRIAL GRADE SILENCER TYPICAL ATTENUATION 12–18 dB(A)

ATEX spark arresting silencer designed for equipment operating in environments containing potentially explosive and combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark clean-out. Providing a minimal level of attenuation, it is designed for environments where noise levels are high. [View Sales Drawings](#).



End Inlet / End Outlet				Side Inlet / End Outlet				WT
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	
4.0	14	SAIEE0f-04PF-4-00000000	32.0	SAIGE0f-04PF-4-0000001K	30.3	11.0	5.5	82
5.0	14	SAIEE0f-05PF-4-00000000	42.0	SAIGE0f-05PF-4-00000020	39.8	11.0	7.0	102
6.0	18	SAIEE0f-06PF-4-00000000	49.0	SAIGE0f-06PF-4-0000002D	45.5	13.0	8.3	162
8.0	22	SAIEE0f-08PF-4-00000000	50.0	SAIGE0f-08PF-4-0000002T	46.5	17.0	9.8	245
10.0	26	SAIEE0f-10PF-4-00000000	63.0	SAIGE0f-10PF-4-0000003A	59.5	19.0	11.5	330
12.0	30	SAIEE0f-12PF-4-00000000	76.0	SAIGE0f-12PF-4-0000003T	73.0	20.0	13.3	555
14.0	36	SAIEE0f-14PF-4-00000000	78.0	SAIGE0f-14PF-4-0000004A	75.5	24.0	15.0	825
16.0	42	SAIEE0f-16PF-4-00000000	81.0	SAIGE0f-16PF-4-0000004Q	79.0	27.0	16.5	860
18.0	48	SAIEE0f-18PF-4-00000000	100.0	SAIGE0f-18PF-4-0000005F	97.0	33.0	19.0	1390
20.0	48	SAIEE0f-20PF-4-00000000	118.0	SAIGE0f-20PF-4-0000005Q	115.0	33.0	20.0	1540
22.0	54	SAIEE0f-22PF-4-00000000	120.0	SAIGE0f-22PF-4-0000006A	116.5	36.0	22.0	1900
24.0	60	SAIEE0f-24PF-4-00000000	132.0	SAIGE0f-24PF-4-0000006Q	129.5	39.0	23.5	2270

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- 316 stainless steel construction.
- Connections: 125/150# ANSI bolt pattern flanges.

CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

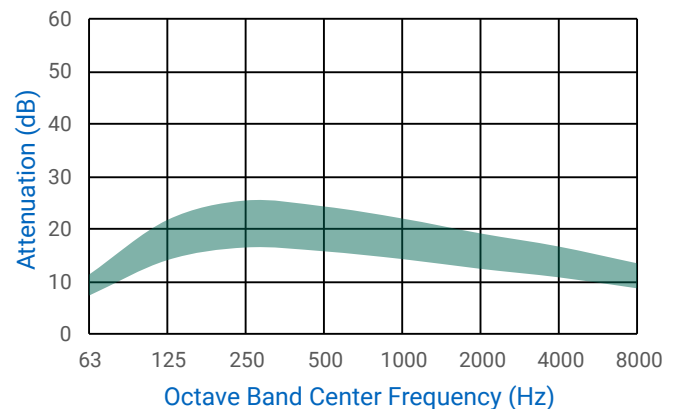
CUSTOM OPTIONS

- Custom configurations, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

CERTIFICATIONS

Complies with ATEX Directive (European Directive 94/9/EC) EN1834-1:2000, EN1834-2:2000, EN1834-3:2000.

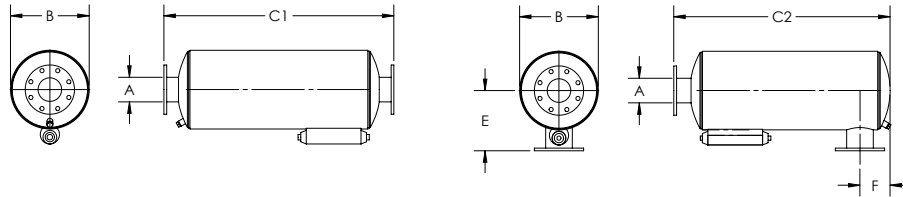
Typical Attenuation Curve



SAR – ATEX SPARK ARRESTING RESIDENTIAL GRADE SILENCER

TYPICAL ATTENUATION 18–25 dB(A)

ATEX spark arresting silencer designed for equipment operating in environments containing potentially explosive and combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark clean-out. Providing a modest level of attenuation, it is designed for environments where noise levels are moderate. [View Sales Drawings.](#)



End Inlet / End Outlet				Side Inlet / End Outlet				
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	WT
4.0	14	SAREE0f-04PF-4-00000000	42.0	SARGE0f-04PF-4-0000001K	39.5	11.0	5.5	102
5.0	14	SAREE0f-05PF-4-00000000	66.0	SARGE0f-05PF-4-00000020	63.5	11.0	7.0	152
6.0	18	SAREE0f-06PF-4-00000000	61.0	SARGE0f-06PF-4-0000002D	57.5	13.0	8.3	202
8.0	22	SAREE0f-08PF-4-00000000	73.0	SARGE0f-08PF-4-0000002T	69.5	17.0	9.8	325
10.0	26	SAREE0f-10PF-4-00000000	93.0	SARGE0f-10PF-4-0000003A	89.5	19.0	11.5	505
12.0	30	SAREE0f-12PF-4-00000000	112.0	SARGE0f-12PF-4-0000003T	109.0	20.0	13.3	755
14.0	36	SAREE0f-14PF-4-00000000	108.0	SARGE0f-14PF-4-0000004A	105.5	24.0	15.0	1005
16.0	42	SAREE0f-16PF-4-00000000	111.0	SARGE0f-16PF-4-0000004Q	109.0	27.0	16.5	1115
18.0	48	SAREE0f-18PF-4-00000000	118.0	SARGE0f-18PF-4-0000005F	115.0	33.0	19.0	1565
20.0	48	SAREE0f-20PF-4-00000000	142.0	SARGE0f-20PF-4-0000005Q	139.0	33.0	20.0	1805
22.0	54	SAREE0f-22PF-4-00000000	144.0	SARGE0f-22PF-4-0000006A	140.5	36.0	22.0	2195
24.0	60	SAREE0f-24PF-4-00000000	144.0	SARGE0f-24PF-4-0000006Q	142.5	39.0	23.5	2425

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- 316 stainless steel construction.
- Connections: 125/150# ANSI bolt pattern flanges.

CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet “F” dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and “F” dimension options require a part number from MIRATECH.

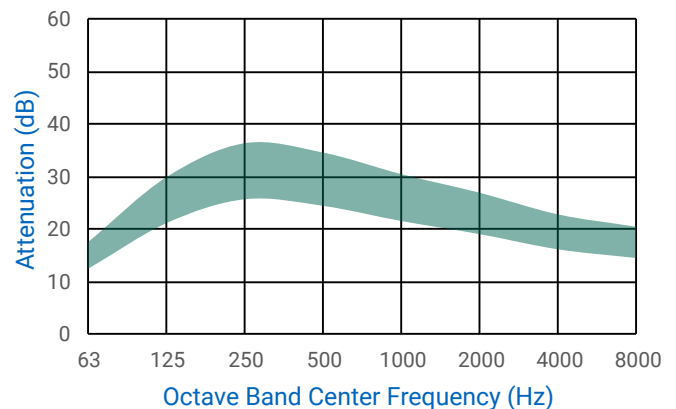
CUSTOM OPTIONS

- Custom configurations, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

CERTIFICATIONS

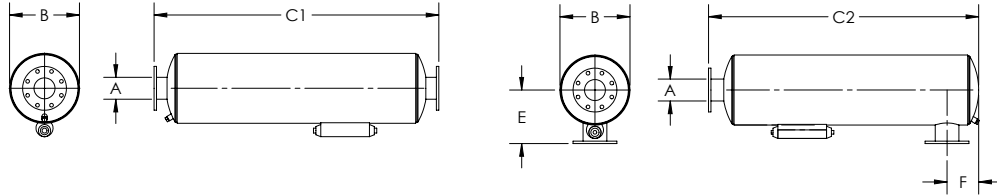
Complies with ATEX Directive (European Directive 94/9/EC) EN1834-1:2000, EN1834-2:2000, EN1834-3:2000.

Typical Attenuation Curve



SAC – ATEX SPARK ARRESTING CRITICAL GRADE SILENCER TYPICAL ATTENUATION 25–32 dB(A)

ATEX spark arresting silencer designed for equipment operating in environments containing potentially explosive and combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark cleanout. Providing a high degree of attenuation, it is designed for relatively quiet environments. [View Sales Drawings.](#)



End Inlet / End Outlet				Side Inlet / End Outlet				WT
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	
4.0	14	SACEE0f-04PF-4-00000000	58.5	SACGE0f-04PF-4-0000001V	55.5	11.0	6.5	120
5.0	14	SACEE0f-05PF-4-00000000	70.5	SACGE0f-05PF-4-00000020	68.0	11.0	7.0	150
6.0	18	SACEE0f-06PF-4-00000000	72.0	SACGE0f-06PF-4-0000002D	68.5	13.0	8.3	210
8.0	22	SACEE0f-08PF-4-00000000	85.0	SACGE0f-08PF-4-0000002T	81.5	17.0	9.8	295
10.0	26	SACEE0f-10PF-4-00000000	110.0	SACGE0f-10PF-4-0000003A	106.5	19.0	11.5	465
12.0	30	SACEE0f-12PF-4-00000000	123.0	SACGE0f-12PF-4-0000003T	120.0	20.0	13.3	700
14.0	36	SACEE0f-14PF-4-00000000	137.0	SACGE0f-14PF-4-0000004A	134.5	24.0	15.0	900
16.0	42	SACEE0f-16PF-4-00000000	139.0	SACGE0f-16PF-4-0000004Q	137.0	27.0	16.5	1425
18.0	48	SACEE0f-18PF-4-00000000	141.0	SACGE0f-18PF-4-0000005F	138.0	33.0	19.0	1725
20.0	48	SACEE0f-20PF-4-00000000	153.0	SACGE0f-20PF-4-0000005Q	150.0	33.0	20.0	1820
22.0	54	SACEE0f-22PF-4-00000000	155.0	SACGE0f-22PF-4-0000006A	151.5	36.0	22.0	1920
24.0	60	SACEE0f-24PF-4-00000000	168.0	SACGE0f-24PF-4-0000006Q	166.5	39.0	23.5	2500

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- 316 stainless steel construction.
- Connections: 125/150# ANSI bolt pattern flanges.

CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

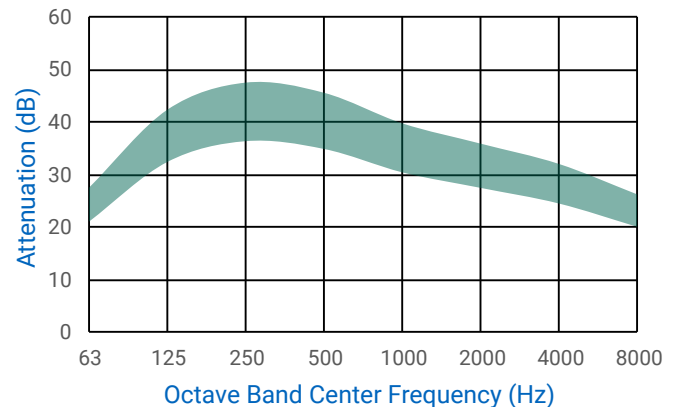
CUSTOM OPTIONS

- Custom configurations, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

CERTIFICATIONS

Complies with ATEX Directive (European Directive 94/9/EC) EN1834-1:2000, EN1834-2:2000, EN1834-3:2000.

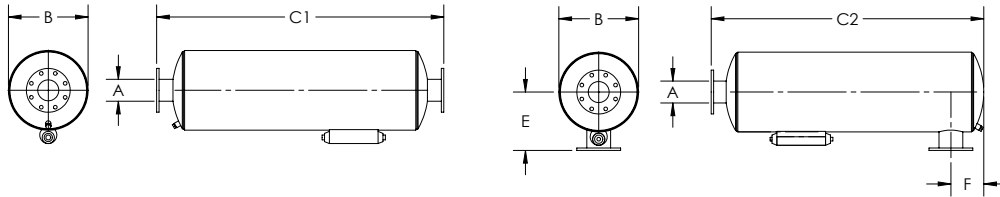
Typical Attenuation Curve



SAH – ATEX SPARK ARRESTING HOSPITAL GRADE SILENCER

TYPICAL ATTENUATION 32–38 dB(A)

ATEX spark arresting silencer designed for equipment operating in environments containing potentially explosive and combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark cleanout. Providing an exceptional degree of attenuation, it is designed for very quiet environments. [View Sales Drawings.](#)



End Inlet / End Outlet				Side Inlet / End Outlet				
A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	WT
4.0	16	SAHEE0f-04PF-4-00000000	59.0	SAHGE0f-04PF-4-0000001Y	56.0	12.0	6.8	150
5.0	18	SAHEE0f-05PF-4-00000000	72.0	SAHGE0f-05PF-4-00000028	69.0	13.0	7.8	195
6.0	18	SAHEE0f-06PF-4-00000000	80.0	SAHGE0f-06PF-4-0000002D	78.0	13.0	8.3	212
8.0	26	SAHEE0f-08PF-4-00000000	96.0	SAHGE0f-08PF-4-00000030	93.5	19.0	10.5	470
10.0	30	SAHEE0f-10PF-4-00000000	110.0	SAHGE0f-10PF-4-0000003I	108.0	20.0	12.3	700
12.0	36	SAHEE0f-12PF-4-00000000	126.0	SAHGE0f-12PF-4-00000045	122.0	24.0	14.5	870
14.0	42	SAHEE0f-14PF-4-00000000	138.0	SAHGE0f-14PF-4-0000004F	135.0	27.0	15.5	1380
16.0	42	SAHEE0f-16PF-4-00000000	163.0	SAHGE0f-16PF-4-0000004Q	159.0	27.0	16.5	1620
18.0	48	SAHEE0f-18PF-4-00000000	206.0	SAHGE0f-18PF-4-0000005F	201.5	33.0	19.0	2920
20.0	60	SAHEE0f-20PF-4-00000000	220.0	SAHGE0f-20PF-4-00000065	216.0	39.0	21.5	4950
22.0	60	SAHEE0f-22PF-4-00000000	220.0	SAHGE0f-22PF-4-0000006F	216.0	39.0	22.5	4970
24.0	66	SAHEE0f-24PF-4-00000000	244.0	SAHGE0f-24PF-4-0000006V	241.0	42.0	24.0	6670

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Dual shell construction to eliminate shell radiated noise and increase durability.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- 316 stainless steel construction.
- Connections: 125/150# ANSI bolt pattern flanges.

CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet “F” dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and “F” dimension options require a part number from MIRATECH.

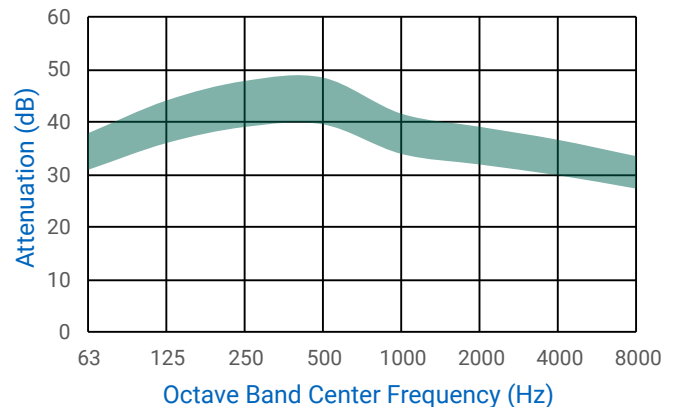
CUSTOM OPTIONS

- Custom configurations, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

CERTIFICATIONS

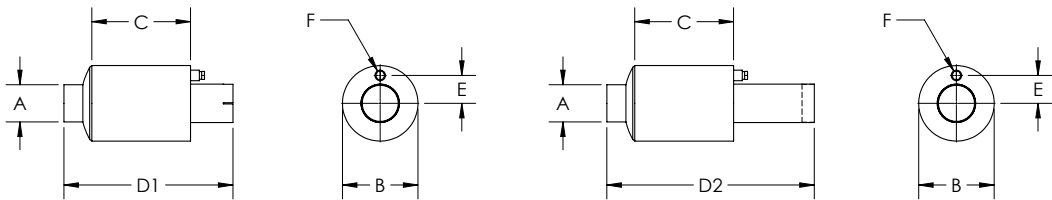
Complies with ATEX Directive (European Directive 94/9/EC) EN1834-1:2000, EN1834-2:2000, EN1834-3:2000.

Typical Attenuation Curve



SAU – SPARK ARRESTOR

Spark arrestor designed for equipment operating in environments with potentially combustible materials. It forces cyclonic action to separate particulates from exhaust. Collected particulates are removed via the spark cleanout.



Slotted Inlet / Tube Stub Outlet					Male NPT Inlet / Tube Stub Outlet				
A (Size)	B (Dia.)	C	Part Number	D1 (OAL)	Part Number	D2 (OAL)	E	F	WT
1.5	6.00	3.75	SAUEE0-15CF15TS-m-00000000	9.36	SAUEE0-15MN15TS-m-00000000	10.38	1.90	0.38	5
2.0	6.00	5.00	SAUEE0-02CF02TS-m-00000000	11.10	SAUEE0-02MN02TS-m-00000000	13.72	2.00	0.38	6
2.5	6.61	6.25	SAUEE0-25CF25TS-m-00000000	13.00	SAUEE0-25MN25TS-m-00000000	15.47	2.30	0.38	8
3.0	7.00	7.56	SAUEE0-03CF03TS-m-00000000	14.63	SAUEE0-03MN03TS-m-00000000	18.00	2.50	0.38	10
3.5	7.00	9.00	SAUEE0-35CF35TS-m-00000000	16.50	SAUEE0-35MN35TS-m-00000000	20.52	2.60	0.50	12
4.0	8.00	10.63	SAUEE0-04CF04TS-m-00000000	18.19	SAUEE0-04MN04TS-m-00000000	22.31	3.00	0.50	15
5.0	9.00	11.75	SAUEE0-05CF05TS-m-00000000	20.75	SAUEE0-05MN05TS-m-00000000	24.87	3.50	0.50	21
6.0	10.00	13.38	SAUEE0-06CF06TS-m-00000000	23.50	SAUEE0-06MN06TS-m-00000000	26.72	4.00	0.50	25

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Aluminized steel construction.
- Protective finish applied.

CONFIGURABLE OPTIONS

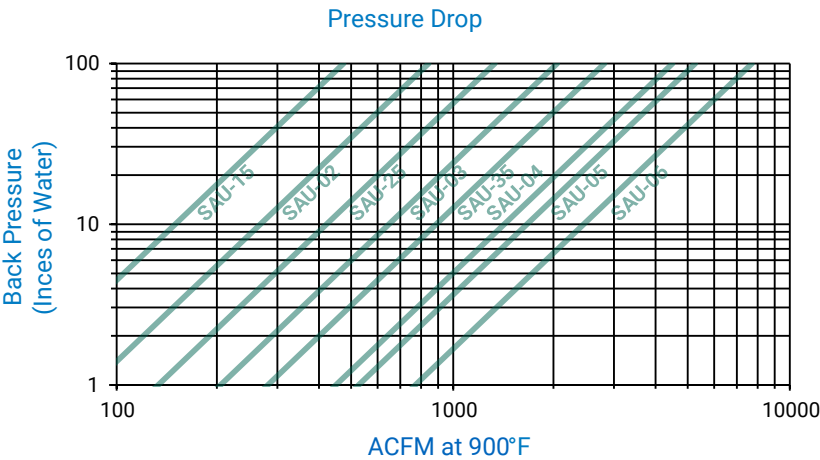
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and “F” dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

CERTIFICATIONS

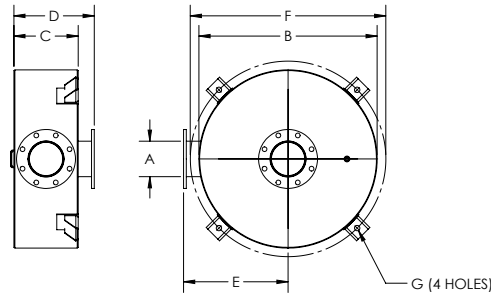
- U.S. Department of Agriculture (Forest Service) qualified.
- Efficiency rating of virtually 100% by the U.S. Forest Service.



DKC – DISK CRITICAL GRADE SILENCER

TYPICAL ATTENUATION 25–33 dB(A)

This disk silencer is designed for equipment operating in relatively quiet environments that require a high level of silencing. Its low profile lends itself towards projects with space limitations. Applications include stationary, marine, mobile, etc. [View Sales Drawings](#).



Part Number	A (Size)	B (Dia.)	C	D	E	F	G	WT
DKCBA2f-04PF-m-0000C7K0	4	28	9	12	17.0	32.5	0.875	137
DKCBA2f-05PF-m-0000C7K0	5	32	10	13	19.0	36.5	0.875	176
DKCBA2f-06PF-m-0000C7K0	6	36	12	15	21.0	40.5	0.875	232
DKCBA2f-08PF-m-0000C7K0	8	45	14	17	25.5	49.5	0.875	359
DKCBA2f-10PF-m-0000C7K0	10	52	16	19	29.0	56.5	0.875	480
DKCBA2f-12PF-m-0000C7K0	12	59	18	21	32.5	63.5	0.875	623
DKCBA2f-14PF-m-0000C7K0	14	65	23	26	35.5	69.5	0.875	854
DKCBA2f-16PF-m-0000C7K0	16	70	25	28	38.0	74.5	0.875	999
DKCBA2f-18PF-m-0000C7K0	18	76	27	30	41.0	80.5	0.875	1277
DKCBA2f-20PF-m-0000C7K0	20	84	28	31	45.0	88.5	0.875	1530
DKCBA2f-22PF-m-0000C7K0	22	90	30	33	48.0	94.5	0.875	1876
DKCBA2f-24PF-m-0000C7K0	24	96	32	35	51.0	100.5	0.875	2140

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds and are approximate.

STANDARD PRODUCT

- Shell packed with 2" of fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- Bottom, top, and no mounting lug options (f).
- Carbon steel or 304 stainless steel construction (m).
- Carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

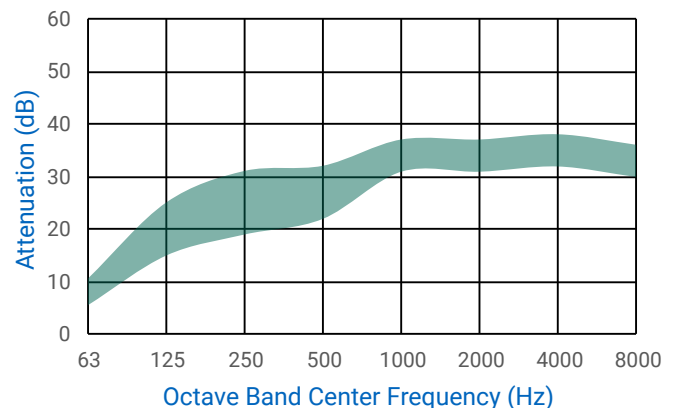
CONFIGURABLE OPTIONS

- Side outlet (d) orientation.
- Bottom inlet "E" dimensions (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- Flush mount inlet (j).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "E" dimensions options require a part number from MIRATECH.

CUSTOM OPTIONS

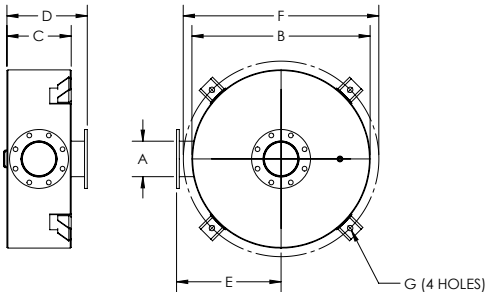
- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve



DKSC – DISK SUPER CRITICAL GRADE SILENCER
TYPICAL ATTENUATION 30–40 dB(A)

This disk silencer is designed for equipment operating in relatively quiet environments that require a high level of silencing. Its low profile lends itself towards projects with space limitations. Applications include stationary, marine, mobile, etc. [View Sales Drawings](#).



Part Number	A (Size)	B (Dia.)	C	D	E	F	G	WT
DKSCBA2f-04PF-m-0000C7K0	4	32	10	13	19.0	36.5	0.875	175
DKSCBA2f-05PF-m-0000C7K0	5	36	12	15	21.0	40.5	0.875	230
DKSCBA2f-06PF-m-0000C7K0	6	42	14	17	25.0	46.5	0.875	312
DKSCBA2f-08PF-m-0000C7K0	8	52	16	19	29.0	56.5	0.875	466
DKSCBA2f-10PF-m-0000C7K0	10	59	18	21	32.5	63.5	0.875	602
DKSCBA2f-12PF-m-0000C7K0	12	70	20	23	38.0	74.5	0.875	890
DKSCBA2f-14PF-m-0000C7K0	14	74	24	27	40.0	78.5	0.875	1156
DKSCBA2f-16PF-m-0000C7K0	16	78	28	31	42.0	82.5	0.875	1341
DKSCBA2f-18PF-m-0000C7K0	18	84	30	33	45.0	88.5	0.875	1543
DKSCBA2f-20PF-m-0000C7K0	20	90	32	35	48.0	94.5	0.875	1889
DKSCBA2f-22PF-m-0000C7K0	22	96	34	37	51.0	100.5	0.875	2176
DKSCBA2f-24PF-m-0000C7K0	24	98	38	41	52.0	102.5	0.875	2939

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds and are approximate.

STANDARD PRODUCT

- Shell packed with 2" of fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- Bottom, top, and no mounting lug options (f).
- Carbon steel or 304 stainless steel construction (m).
- Carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

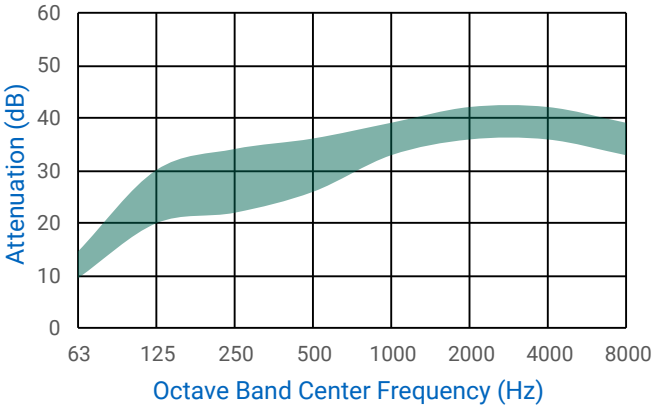
CONFIGURABLE OPTIONS

- Side outlet (d) orientation.
- Bottom inlet "E" dimensions (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- Flush mount inlet (j).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "E" dimensions options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

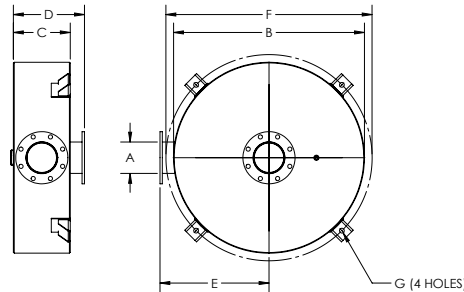
Typical Attenuation Curve



DKH – DISK HOSPITAL GRADE SILENCER

TYPICAL ATTENUATION 34–43 dB(A)

This disk silencer is designed for equipment operating in very quiet environments that require an exceptional level of attenuation. Its low profile lends itself towards projects with space limitations. Applications include stationary, marine, mobile, etc. [View Sales Drawings.](#)



Part Number	A (Size)	B (Dia.)	C	D	E	F	G	WT
DKHBA2f-04PF-m-0000C7K0	4	38	12	15	22.0	42.5	0.875	242
DKHBA2f-05PF-m-0000C7K0	5	44	14	17	25.0	48.5	0.875	334
DKHBA2f-06PF-m-0000C7K0	6	50	15	18	28.0	54.5	0.875	414
DKHBA2f-08PF-m-0000C7K0	8	60	17	20	33.0	64.5	0.875	614
DKHBA2f-10PF-m-0000C7K0	10	70	20	23	38.0	74.5	0.875	856
DKHBA2f-12PF-m-0000C7K0	12	76	23	26	41.0	80.5	0.875	1161
DKHBA2f-14PF-m-0000C7K0	14	80	27	30	43.0	84.5	0.875	1355
DKHBA2f-16PF-m-0000C7K0	16	86	30	33	46.0	90.5	0.875	1689
DKHBA2f-18PF-m-0000C7K0	18	92	33	36	49.0	96.5	0.875	1952
DKHBA2f-20PF-m-0000C7K0	20	98	35	38	52.0	102.5	0.875	2784
DKHBA2f-22PF-m-0000C7K0	22	104	37	40	55.0	108.5	0.875	3163
DKHBA2f-24PF-m-0000C7K0	24	110	40	43	58.0	114.5	0.875	3587

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds and are approximate.

STANDARD PRODUCT

- Shell packed with 2" of fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- Bottom, top, and no mounting lug options (f).
- Carbon steel or 304 stainless steel construction (m).
- Carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

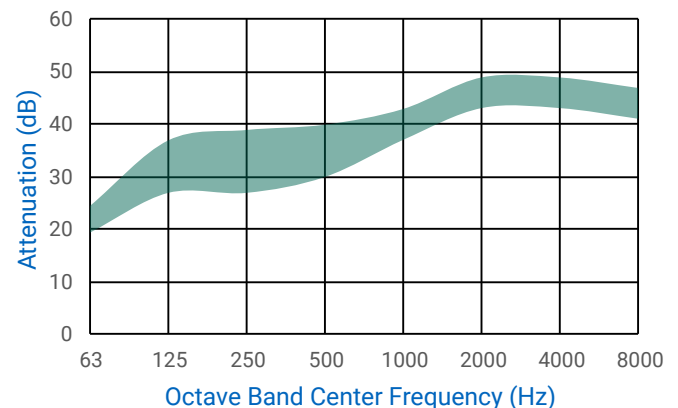
CONFIGURABLE OPTIONS

- Side outlet (d) orientation.
- Bottom inlet "E" dimensions (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- Flush mount inlet (j).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "E" dimensions options require a part number from MIRATECH.

CUSTOM OPTIONS

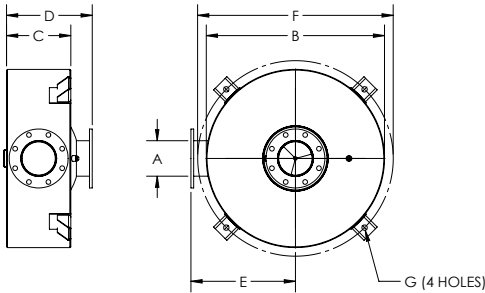
- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve



DSC – DISK SPARK ARRESTING CRITICAL GRADE SILENCER
TYPICAL ATTENUATION 22–36 dB(A)

Spark arresting, disk silencer designed for equipment operating in environments containing potentially combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark clean out. Providing a high degree of attenuation in a low profile design, it is ideally suited for space limited applications operating in relatively quiet environments.



	Part Number	A (Size)	B (Dia.)	C	D	E	F	G	WT
Carbon Steel	DSCBA2f-06PF-2-0000C7K0	6	33	12	16	19.5	36.5	1.00	277
	DSCBA2f-08PF-2-0000C7K0	8	47	14	20	26.5	50.5	1.00	516
	DSCBA2f-10PF-2-0000C7K0	10	53	16	23	29.5	56.5	1.00	765
	DSCBA2f-12PF-2-0000C7K0	12	62	18	26	34.0	66.5	1.25	1027

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds and are approximate.

STANDARD PRODUCT

- Shell packed with 2" of fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- Bottom, top, and no mounting lug options (f).
- Carbon steel steel construction (m).
- Coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

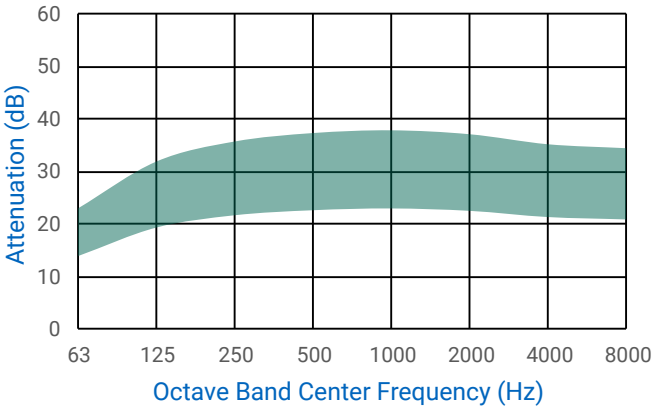
CONFIGURABLE OPTIONS

- Side outlet (d) orientation.
- Bottom inlet "E" dimensions (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- Flush mount inlet (j).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "E" dimensions options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

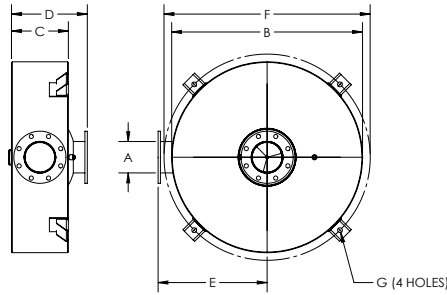
Typical Attenuation Curve



DSH – DISK SPARK ARRESTING HOSPITAL GRADE SILENCER

TYPICAL ATTENUATION 26–43 dB(A)

Spark arresting, disk silencer designed for equipment operating in environments containing potentially combustible materials. The silencer forces cyclonic action to separate particulates from exhaust. The collected particulates are removed via the spark clean out. Providing an exceptional degree of attenuation in a low profile design, it is ideally suited for space limited applications operating in very quiet environments.



	Part Number	A (Size)	B (Dia.)	C	D	E	F	G	WT
Carbon Steel	DSHBA2B-06PF-2-0000C7K0	6	40	12	16	23.0	43.5	1.00	353
	DSHBA2B-08PF-2-0000C7K0	8	53	14	20	29.5	56.5	1.00	605
	DSHBA2B-10PF-2-0000C7K0	10	59	16	23	32.5	62.5	1.00	958
	DSHBA2B-12PF-2-0000C7K0	12	71	20	28	38.5	75.5	1.25	1278

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds and are approximate.

STANDARD PRODUCT

- Shell packed with 2" of fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- Bottom, top, and no mounting lug options (f).
- Carbon steel steel construction (m).
- Coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

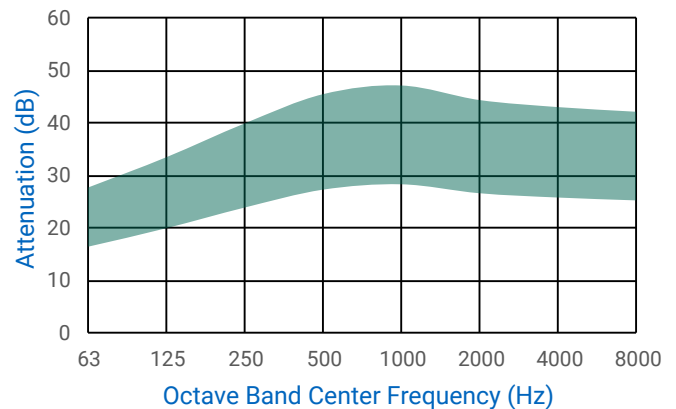
CONFIGURABLE OPTIONS

- Side outlet (d) orientation.
- Bottom inlet "E" dimensions (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- Flush mount inlet (j).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "E" dimensions options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve

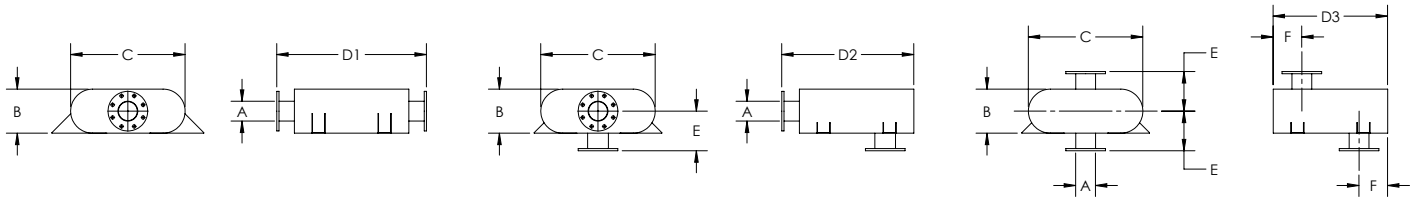


OC – OVAL CRITICAL GRADE SILENCER

TYPICAL ATTENUATION 28–36 dB(A)

NO INTERNAL INSULATION

This oval silencer is designed for equipment operating in relatively quiet environments. The unique oval design gives the silencer a low profile while maintaining the volume necessary for a high degree of attenuation. It is ideally suited for space limited applications: stationary, marine, mobile, etc. [View Sales Drawings.](#)



A (Size)	B	C	End Inlet / End Outlet		Bottom Inlet / End Outlet		Bottom Inlet / Top Outlet		E	F	WT
			Part Number	D1 (OAL)	Part Number	D2 (OAL)	Part Number	D3 (OAL)			
4	8	24	OCCE0f-04PF-m-00000000	32	OCBE0f-04PF-m-0000001V	28	OCBT0f-04PF-m-00001JDK	24	8	6.5	110
5	8	26	OCCE0f-05PF-m-00000000	34	OCBE0f-05PF-m-00000020	30	OCBT0f-05PF-m-00001NK0	26	8	7.0	145
6	10	30	OCCE0f-06PF-m-00000000	38	OCBE0f-06PF-m-0000002A	34	OCBT0f-06PF-m-00001WXV	30	9	8.0	196
8	12	42	OCCE0f-08PF-m-00000000	50	OCBE0f-08PF-m-0000002K	46	OCBT0f-08PF-m-000025AQ	42	10	9.0	364
10	14	48	OCCE0f-10PF-m-00000000	56	OCBE0f-10PF-m-0000002Q	52	OCBT0f-10PF-m-000029H5	48	11	9.5	520
12	18	58	OCCE0f-12PF-m-00000000	66	OCBE0f-12PF-m-00000030	62	OCBT0f-12PF-m-00002HV0	58	13	10.5	720
14	20	62	OCCE0f-14PF-m-00000000	70	OCBE0f-14PF-m-00000035	66	OCBT0f-14PF-m-00002M1F	62	14	11.0	870
16	22	70	OCCE0f-16PF-m-00000000	78	OCBE0f-16PF-m-0000003F	74	OCBT0f-16PF-m-00002VEA	70	15	12.0	1195
18	24	82	OCCE0f-18PF-m-00000000	90	OCBE0f-18PF-m-0000003Q	86	OCBT0f-18PF-m-000033S5	82	16	13.0	1472
20	26	86	OCCE0f-20PF-m-00000000	94	OCBE0f-20PF-m-00000040	90	OCBT0f-20PF-m-00003C50	86	17	14.0	1784
22	28	86	OCCE0f-24PF-m-00000000	106	OCBE0f-24PF-m-0000004A	102	OCBT0f-24PF-m-00003KHV	98	18	15.0	2000
24	30	86	OCCE0f-24PF-m-00000000	118	OCBE0f-24PF-m-0000004K	114	OCBT0f-24PF-m-00003TVQ	110	19	16.0	2256

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Bottom, top, and no mounting lug options (f).
- Carbon steel or 304 stainless steel construction (m).
- Carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

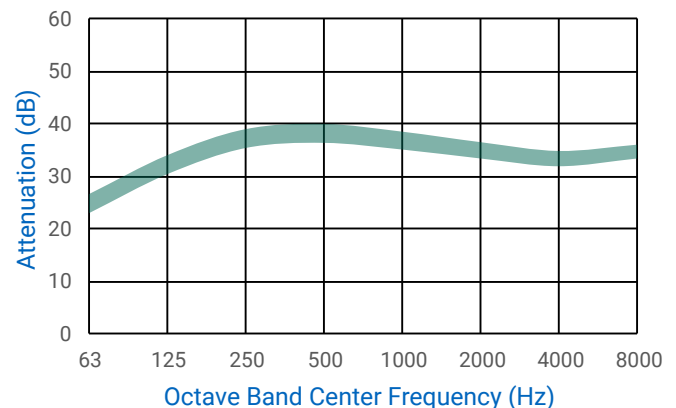
CONFIGURABLE OPTIONS

- Side outlet (d) orientation.
- Bottom inlet and top outlet "F" dimensions (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- Flush mount inlet (j).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve

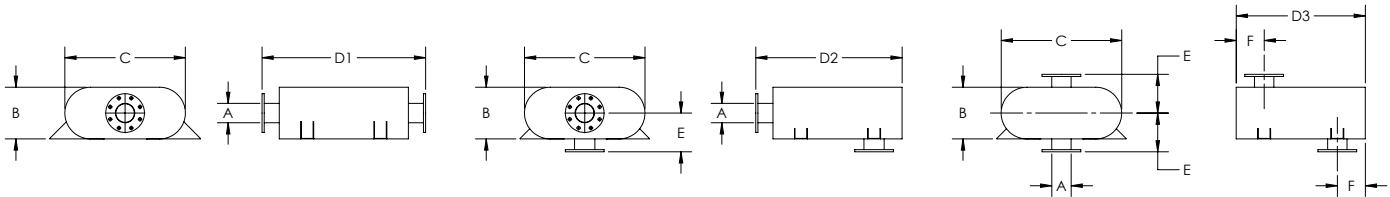


OSC – OVAL SUPER CRITICAL GRADE SILENCER

TYPICAL ATTENUATION 34–42 dB(A)

2" INTERNAL INSULATION

This oval silencer is designed for equipment operating in very quiet environments. The unique oval design gives the silencer a low profile while maintaining the volume necessary for an outstanding level of attenuation. It is ideally suited for space limited applications: stationary, marine, mobile, etc. [View Sales Drawings.](#)



A (Size)	B	C	End Inlet / End Outlet		Bottom Inlet / End Outlet		Bottom Inlet / Top Outlet		E	F	WT
			Part Number	D1 (OAL)	Part Number	D2 (OAL)	Part Number	D3 (OAL)			
4	12	28	OSCEE2f-04PF-m-00000000	38	OSCB2f-04PF-m-0000001V	34	OSCBT2f-04PF-m-00001JDK	30	10	6.5	137
5	12	30	OSCEE2f-05PF-m-00000000	40	OSCB2f-05PF-m-00000020	36	OSCBT2f-05PF-m-00001NKO	32	10	7.0	172
6	14	32	OSCEE2f-06PF-m-00000000	48	OSCB2f-06PF-m-00000025	44	OSCBT2f-06PF-m-00001SRF	40	11	7.5	232
8	16	44	OSCEE2f-08PF-m-00000000	56	OSCB2f-08PF-m-0000002F	52	OSCBT2f-08PF-m-0000214A	48	12	8.5	423
10	18	52	OSCEE2f-10PF-m-00000000	60	OSCB2f-10PF-m-0000002Q	56	OSCBT2f-10PF-m-000029H5	52	13	9.5	607
12	22	62	OSCEE2f-12PF-m-00000000	68	OSCB2f-12PF-m-00000030	64	OSCBT2f-12PF-m-00002HV0	60	15	10.5	823
14	24	64	OSCEE2f-14PF-m-00000000	74	OSCB2f-14PF-m-00000035	70	OSCBT2f-14PF-m-00002M1F	66	16	11.0	1002
16	26	74	OSCEE2f-16PF-m-00000000	80	OSCB2f-16PF-m-0000003F	76	OSCBT2f-16PF-m-00002VEA	72	17	12.0	1339
18	28	84	OSCEE2f-18PF-m-00000000	92	OSCB2f-18PF-m-0000003Q	88	OSCBT2f-18PF-m-000033S5	84	18	13.0	1698
20	30	88	OSCEE2f-20PF-m-00000000	104	OSCB2f-20PF-m-00000040	100	OSCBT2f-20PF-m-00003C50	96	19	14.0	2062
22	32	88	OSCEE2f-22PF-m-00000000	118	OSCB2f-22PF-m-0000004A	114	OSCBT2f-22PF-m-00003KHV	110	20	15.0	2849
24	34	88	OSCEE2f-24PF-m-00000000	128	OSCB2f-24PF-m-0000004K	124	OSCBT2f-24PF-m-00003TVQ	120	21	16.0	3146

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Shell packed with 2" of fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- Bottom, top, and no mounting lug options (f).
- Carbon steel or 304 stainless steel construction (m).
- Carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

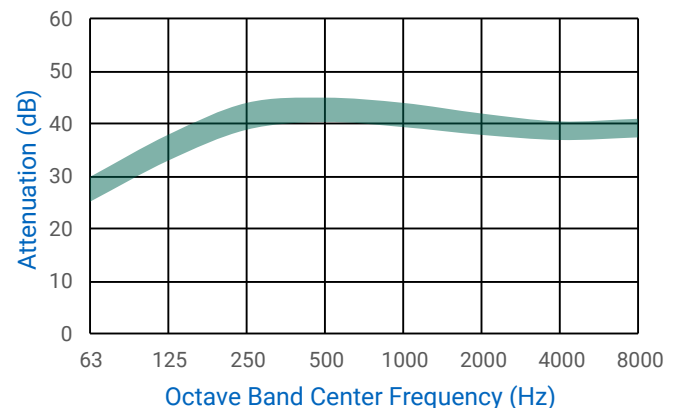
CONFIGURABLE OPTIONS

- Side outlet (d) orientation.
- Bottom inlet and top outlet "F" dimensions (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- Flush mount inlet (j).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve

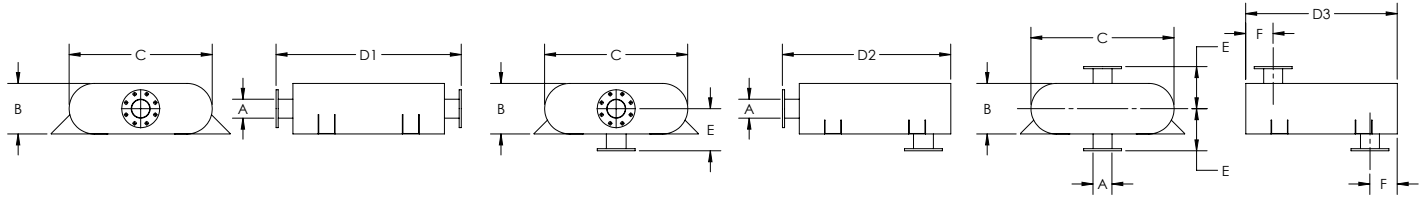


OH – OVAL HOSPITAL GRADE SILENCER

TYPICAL ATTENUATION 38–46 dB(A)

2" INTERNAL INSULATION

This oval silencer is designed for equipment operating in extremely quiet environments. The unique oval design gives the silencer a low profile while maintaining the volume necessary for an exceptional level of attenuation. It is ideally suited for space limited applications: stationary, marine, mobile, etc. [View Sales Drawings.](#)



A (Size)	B	C	End Inlet / End Outlet		Bottom Inlet / End Outlet		Bottom Inlet / Top Outlet		E	F	WT
			Part Number	D1 (OAL)	Part Number	D2 (OAL)	Part Number	D3 (OAL)			
4	12	34	OHEE2f-04PF-m-00000000	44	OHBE2f-04PF-m-0000001V	40	OHBT2f-04PF-m-00001JDK	36	10	6.5	319
5	12	36	OHEE2f-05PF-m-00000000	50	OHBE2f-05PF-m-00000020	46	OHBT2f-05PF-m-00001NK0	42	10	7.0	366
6	14	38	OHEE2f-06PF-m-00000000	54	OHBE2f-06PF-m-0000002A	50	OHBT2f-06PF-m-00001WXV	46	11	8.0	450
8	16	52	OHEE2f-08PF-m-00000000	60	OHBE2f-08PF-m-0000002K	56	OHBT2f-08PF-m-000025AQ	52	12	9.0	710
10	18	60	OHEE2f-10PF-m-00000000	68	OHBE2f-10PF-m-0000002Q	64	OHBT2f-10PF-m-000029H5	60	13	9.5	946
12	22	70	OHEE2f-12PF-m-00000000	78	OHBE2f-12PF-m-00000030	74	OHBT2f-12PF-m-00002HV0	70	15	10.5	1325
14	24	72	OHEE2f-14PF-m-00000000	80	OHBE2f-14PF-m-00000035	76	OHBT2f-14PF-m-00002M1F	72	16	11.0	1553
16	28	72	OHEE2f-16PF-m-00000000	84	OHBE2f-16PF-m-0000003F	80	OHBT2f-16PF-m-00002VEA	76	18	12.0	1744
18	30	84	OHEE2f-18PF-m-00000000	96	OHBE2f-18PF-m-0000003Q	92	OHBT2f-18PF-m-000033S5	88	19	13.0	2217
20	34	92	OHEE2f-20PF-m-00000000	104	OHBE2f-20PF-m-00000040	100	OHBT2f-20PF-m-00003C50	96	21	14.0	2689
22	36	94	OHEE2f-22PF-m-00000000	114	OHBE2f-22PF-m-0000004A	110	OHBT2f-22PF-m-00003KHV	106	22	15.0	3038
24	38	96	OHEE2f-24PF-m-00000000	122	OHBE2f-24PF-m-0000004K	118	OHBT2f-24PF-m-00003TVQ	114	23	16.0	3376

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Shell packed with 2" of fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- Bottom, top, and no mounting lug options (f).
- Carbon steel or 304 stainless steel construction (m).
- Carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

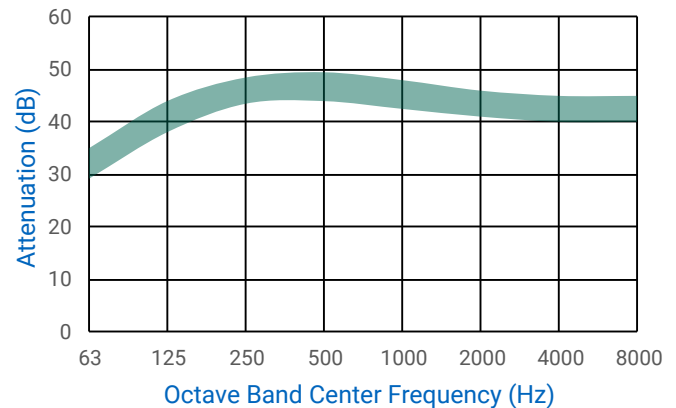
CONFIGURABLE OPTIONS

- Side outlet (d) orientation.
- Bottom inlet and top outlet "F" dimensions (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- Flush mount inlet (j).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve

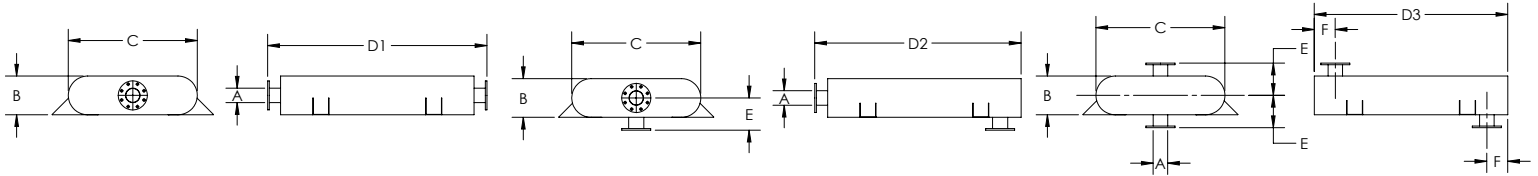


OX – OVAL EXTREME GRADE SILENCER

TYPICAL ATTENUATION 44–52 dB(A)

2" INTERNAL INSULATION

This oval silencer is designed for equipment operating in ultra-quiet environments. The unique oval design gives the silencer a low profile while maintaining the volume necessary for an extreme level of attenuation. It is ideally suited for space limited applications: stationary, marine, mobile, etc. [View Sales Drawings.](#)



A (Size)	B	C	End Inlet / End Outlet		Bottom Inlet / End Outlet		Bottom Inlet / Top Outlet		E	F	WT
			Part Number	D1 (OAL)	Part Number	D2 (OAL)	Part Number	D3 (OAL)			
4	12	40	OXEE2f-04PF-m-00000000	68	OXBE2f-04PF-m-0000001V	64	OXBT2f-04PF-m-00001JDK	60	10	6.5	517
5	14	40	OXEE2f-05PF-m-00000000	68	OXBE2f-05PF-m-00000020	64	OXBT2f-05PF-m-00001NK0	60	11	7.0	562
6	14	44	OXEE2f-06PF-m-00000000	80	OXBE2f-06PF-m-0000002A	76	OXBT2f-06PF-m-00001WXV	72	11	8.0	692
8	16	62	OXEE2f-08PF-m-00000000	104	OXBE2f-08PF-m-0000002K	100	OXBT2f-08PF-m-000025AQ	96	12	9.0	1280
10	18	68	OXEE2f-10PF-m-00000000	116	OXBE2f-10PF-m-0000002Q	112	OXBT2f-10PF-m-000029H5	108	13	9.5	1588
12	22	70	OXEE2f-12PF-m-00000000	128	OXBE2f-12PF-m-00000030	124	OXBT2f-12PF-m-00002HV0	120	15	10.5	1889
14	28	76	OXEE2f-14PF-m-00000000	128	OXBE2f-14PF-m-00000035	124	OXBT2f-14PF-m-00002M1F	120	18	11.0	2265
16	32	86	OXEE2f-16PF-m-00000000	128	OXBE2f-16PF-m-0000003F	124	OXBT2f-16PF-m-00002VEA	120	20	12.0	2732
18	34	94	OXEE2f-18PF-m-00000000	152	OXBE2f-18PF-m-0000003Q	148	OXBT2f-18PF-m-000033S5	144	21	13.0	3339
20	36	98	OXEE2f-20PF-m-00000000	152	OXBE2f-20PF-m-00000040	148	OXBT2f-20PF-m-00003C50	144	22	14.0	3779
22	38	102	OXEE2f-22PF-m-00000000	158	OXBE2f-22PF-m-0000004A	154	OXBT2f-22PF-m-00003KHV	150	23	15.0	—
24	40	108	OXEE2f-24PF-m-00000000	168	OXBE2f-24PF-m-0000004K	164	OXBT2f-24PF-m-00003TVQ	160	24	16.0	—

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Shell packed with 2" of fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- Bottom, top, and no mounting lug options (f).
- Carbon steel or 304 stainless steel construction (m).
- Carbon steel housings coated with satin black paint rated to 1200°F
- Connections: 125/150# ANSI bolt pattern flanges.

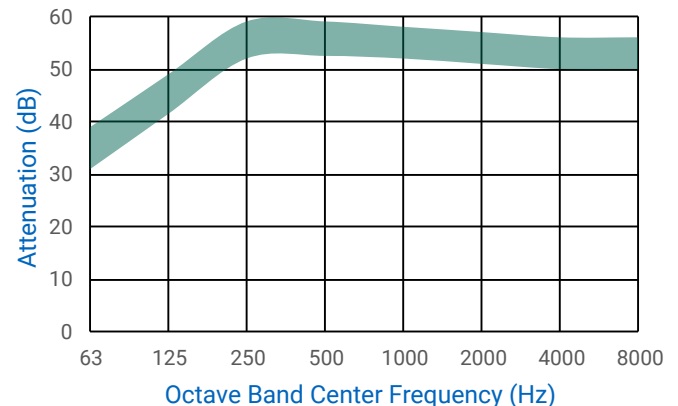
CONFIGURABLE OPTIONS

- Side outlet (d) orientation.
- Bottom inlet and top outlet "F" dimensions (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- Flush mount inlet (j).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

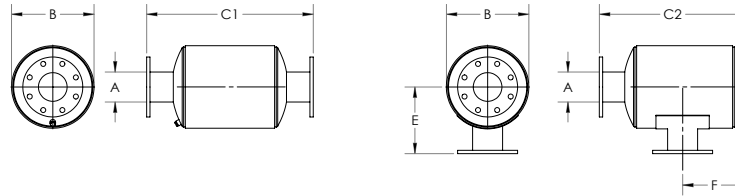
- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve



CPJ – COMPACT RESIDENTIAL GRADE SILENCER TYPICAL ATTENUATION 19–25 dB(A)

This compact silencer provides a modest level of attenuation in a compressed design by utilizing both absorptive and reactive designs. It is ideally suited for equipment operating in environments where noise levels are moderate.



	End Inlet / End Outlet				Side Inlet / End Outlet				WT
	A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	E	F	
Aluminized Steel	2.0	8	CPJEE1-02MN-1-00000000	15.50	CPJGE1-02MN-1-0000001K	13.25	6.75	5.50	33
	2.5	8	CPJEE1-25MN-1-00000000	15.50	CPJGE1-25MN-1-0000001K	13.25	6.75	5.50	34
	3.0	12	CPJEE1-03MN-1-00000000	17.00	CPJGE1-03MN-1-0000001V	15.00	9.50	6.50	65
	3.5	12	CPJEE1-35MN-1-00000000	20.00	CPJGE1-35MN-1-00000028	18.00	10.00	7.75	86
	4.0	12	CPJEE1-04PF-1-00000000	25.00	CPJGE1-04PF-1-0000002Q	22.00	10.00	9.50	110
	5.0	16	CPJEE1-05PF-1-00000000	26.50	CPJGE1-05PF-1-0000002X	23.50	12.00	10.25	161
	6.0	18	CPJEE1-06PF-1-00000000	38.50	CPJGE1-06PF-1-0000004M	35.50	14.00	16.25	269
	8.0	22	CPJEE1-08PF-1-00000000	38.50	CPJGE1-08PF-1-0000004M	35.50	15.00	16.25	343
	10.0	26	CPJEE1-10PF-1-00000000	46.00	CPJGE1-10PF-1-0000005Q	43.00	18.00	20.00	546

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Shell packed with fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options](#) (p. 34).
- Aluminized steel construction.
- Coated with satin black paint rated to 1200°F
- Connections:
 - Male NPT on 3.5" and smaller.
 - 125/150# ANSI bolt pattern flanges on 4" and larger.

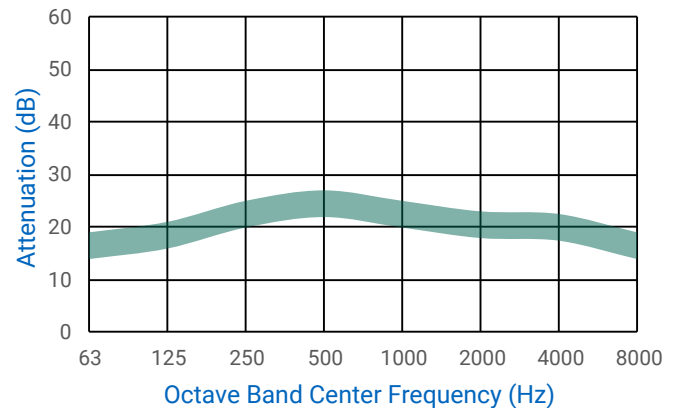
CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend](#) (p. 6); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

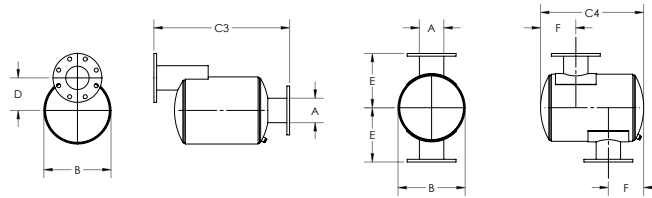
Typical Attenuation Curve



CPJ – COMPACT RESIDENTIAL GRADE SILENCER

TYPICAL ATTENUATION 19–25 dB(A)

This compact silencer provides a modest level of attenuation in a compressed design by utilizing both absorptive and reactive designs. It is ideally suited for equipment operating in environments where noise levels are moderate.



	End Inlet / End Outlet Parallel to Body				Side Inlet / Side Outlet				WT
	A (Size)	B (Dia.)	Part Number	C1 (OAL)	Part Number	C2 (OAL)	D	E	
Aluminized Steel	2.0	8	CPJEP1-02MN-1-00000000	15.50	CPJGA1-02MN-1-00001050	11.00	4.00	6.75	33
	2.5	8	CPJEP1-25MN-1-00000000	15.50	CPJGA1-25MN-1-00001A6F	11.00	4.00	6.75	34
	3.0	12	CPJEP1-03MN-1-00000000	17.00	CPJGA1-03MN-1-000012MV	13.00	6.00	9.50	65
	3.5	12	CPJEP1-35MN-1-00000000	20.00	CPJGA1-35MN-1-00001BV0	15.50	6.00	10.00	86
	4.0	12	CPJEP1-04PF-1-00000000	25.00	CPJGA1-04PF-1-00001JDK	19.00	6.00	10.00	110
	5.0	16	CPJEP1-05PF-1-00000000	26.50	CPJGA1-05PF-1-00001WXV	20.50	8.00	12.00	161
	6.0	18	CPJEP1-06PF-1-00000000	38.50	CPJGA1-06PF-1-00002DNK	32.50	9.00	14.00	269
	8.0	22	CPJEP1-08PF-1-00000000	38.50	CPJGA1-08PF-1-00002R7V	32.50	11.00	15.00	343
	10.0	26	CPJEP1-10PF-1-00000000	46.00	CPJGA1-10PF-1-00002ZKQ	40.00	13.00	18.00	546

Connections sizes are nominal. Dimensions are in inches. Weights are in pounds, depend on selected options, and are approximate.

STANDARD PRODUCT

- Shell packed with fiberglass insulation to absorb high frequency sound waves and reduce outer surface temperature.
- No mounting or integrated mounting options (f); see [Cylindrical Silencer Mounting Options \(p. 34\)](#).
- Aluminized steel construction.
- Coated with satin black paint rated to 1200°F
- Connections:
 - Male NPT on 3.5" and smaller.
 - 125/150# ANSI bolt pattern flanges on 4" and larger.

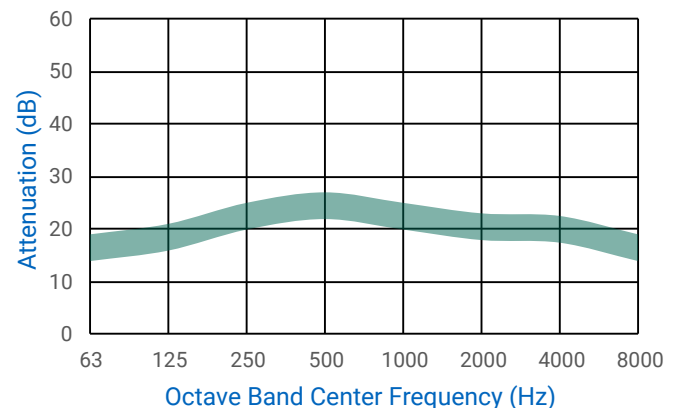
CONFIGURABLE OPTIONS

- Side inlet (c) orientation.
- Side inlet "F" dimension (n).
- Inlet size and connection type (i/j) and outlet connection type (p).
- Dual inlet (h/n).
- See [EM Silencers Part Number Legend \(p. 6\)](#); dual inlet and "F" dimension options require a part number from MIRATECH.

CUSTOM OPTIONS

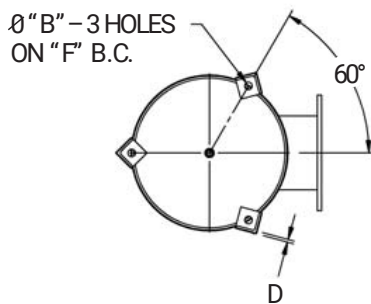
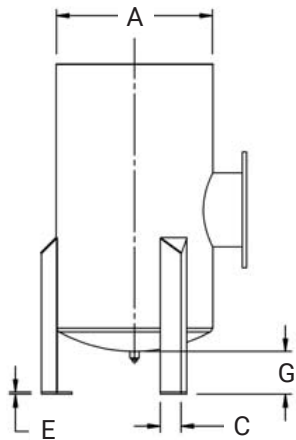
- Custom configurations, materials, connections, overall dimensions, etc.
- Part numbers will be confirmed upon receipt of project design requirements, specifications, or order.

Typical Attenuation Curve

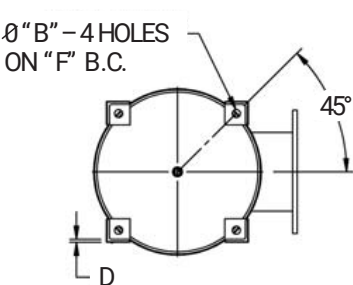
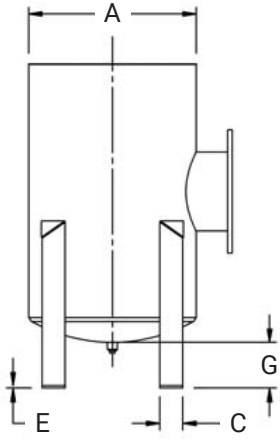


CYLINDRICAL SILENCER MOUNTING OPTIONS
VERTICAL ORIENTATION: LEGS

TYPE A



TYPE B



A (Body Dia.)	B	C	D	E	F
10	0.875	2.0	0.250	0.250	10
12	0.875	2.0	0.250	0.250	12
14	0.875	2.0	0.250	0.250	14
16	0.875	2.0	0.250	0.250	16
18	0.875	2.0	0.250	0.250	18
20	0.875	2.0	0.250	0.250	20
22	1.000	4.0	0.375	0.375	22
24	1.000	4.0	0.375	0.375	24
26	1.000	4.0	0.375	0.375	26
28	1.000	4.0	0.375	0.375	28
30	1.000	4.0	0.375	0.375	30
36	1.000	4.0	0.375	0.375	36
42	1.250	6.0	0.375	0.500	42
48	1.250	6.0	0.375	0.500	48
54	1.375	6.0	0.375	0.750	54
60	1.375	6.0	0.375	0.750	60

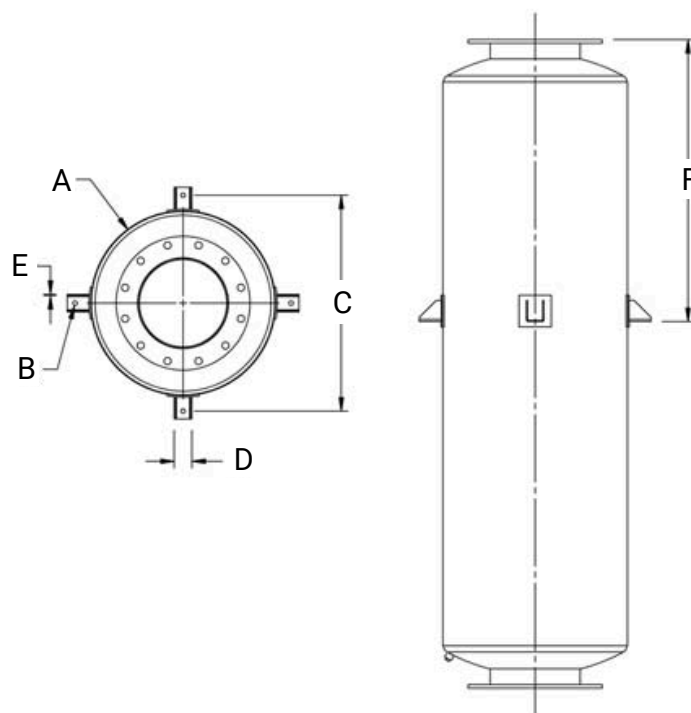
Standard G dimension = 6 inches or per customer specifications.

Standard legs are designed to support silencer weight only. Longer legs or additional structural mounting options available on request.

CYLINDRICAL SILENCER MOUNTING OPTIONS

VERTICAL ORIENTATION: BRACKETS (4 PIECES)

TYPE D



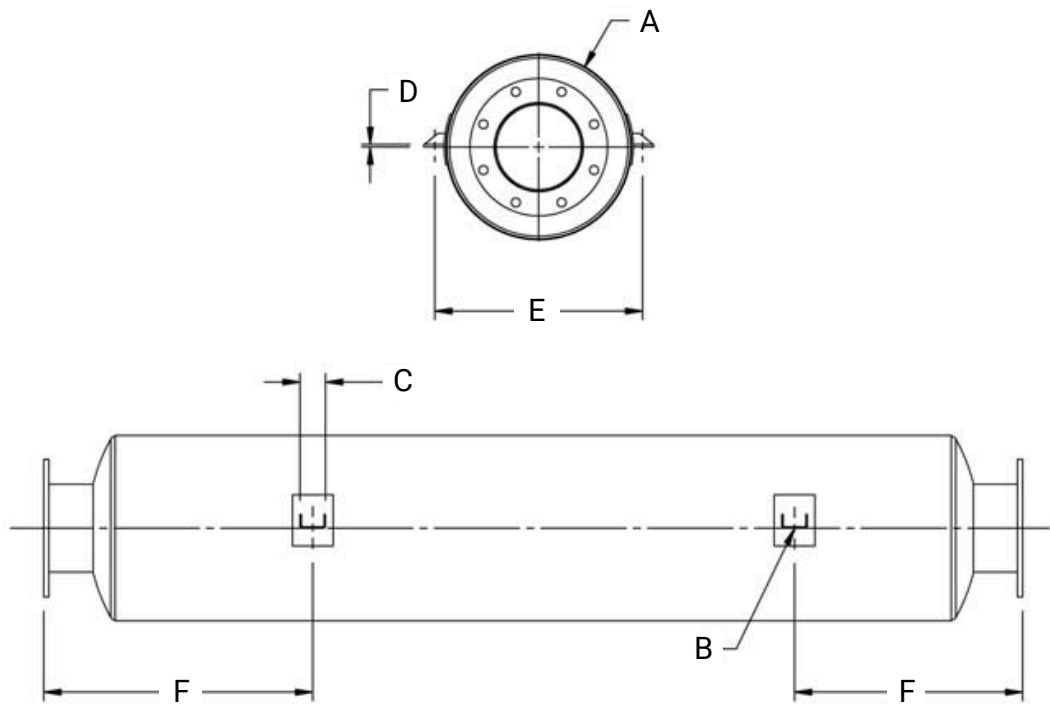
A (Body Dia.)	B	C	D	E
10	0.875	13.250	2.0	0.1345
12	0.875	15.250	2.0	0.1345
14	0.875	17.250	2.0	0.1345
16	0.875	19.375	2.0	0.1345
18	0.875	21.375	2.0	0.1345
20	1.000	23.375	2.5	0.1793
22	1.000	25.375	2.5	0.1793
24	1.000	27.375	2.5	0.1793
26	1.000	30.625	2.5	0.1793
28	1.000	32.625	2.5	0.1793
30	1.000	34.625	3.5	0.1793
36	1.250	40.625	3.5	0.1793
42	1.250	46.625	3.5	0.1793
48	1.250	52.875	3.5	0.1793
54	1.375	59.750	4.0	0.25
60	1.375	65.750	4.0	0.25

Standard F dimension is ¼ the overall length of the silencer or per customer specifications.

Standard brackets are designed to support silencer weight only. Additional structural mounting options available on request.

CYLINDRICAL SILENCER MOUNTING OPTIONS
HORIZONTAL ORIENTATION: BRACKETS (4 PIECES)

TYPE E



A (Body Dia.)	B	C	D	E
10	0.875	2.0	0.1345	13.250
12	0.875	2.0	0.1345	15.250
14	0.875	2.0	0.1345	17.250
16	0.875	2.0	0.1345	19.375
18	0.875	2.0	0.1345	21.375
20	1.000	2.5	0.1793	23.375
22	1.000	2.5	0.1793	25.375
24	1.000	2.5	0.1793	27.375
26	1.000	2.5	0.1793	30.625
28	1.000	2.5	0.1793	32.625
30	1.000	3.5	0.1793	34.625
36	1.250	3.5	0.1793	40.625
42	1.250	3.5	0.1793	46.625
48	1.250	3.5	0.1793	52.875
54	1.375	4.0	0.25	59.750
60	1.375	4.0	0.25	65.750

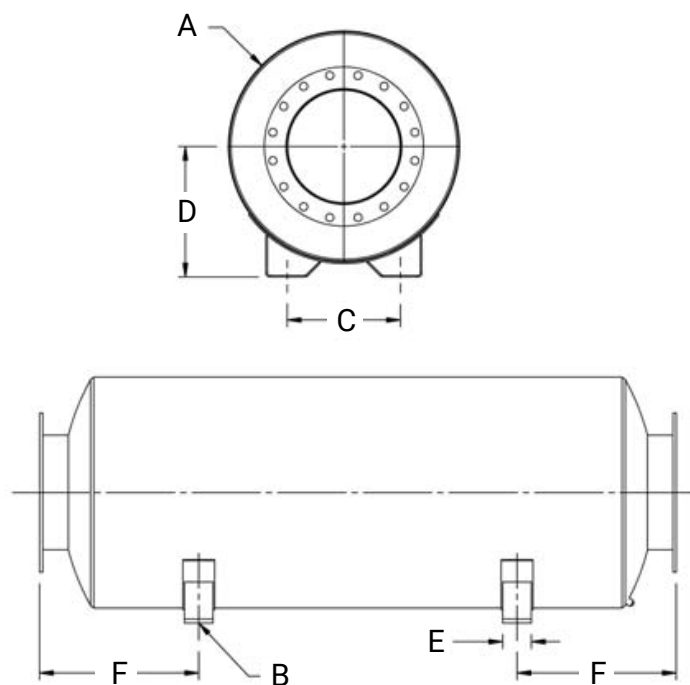
Standard F dimension is ¼ the overall length of the silencer or per customer specifications.

Standard brackets are designed to support silencer weight only. Additional structural mounting options available on request.

CYLINDRICAL SILENCER MOUNTING OPTIONS

HORIZONTAL ORIENTATION: WELDED SADDLE SUPPORTS (2 PIECES)

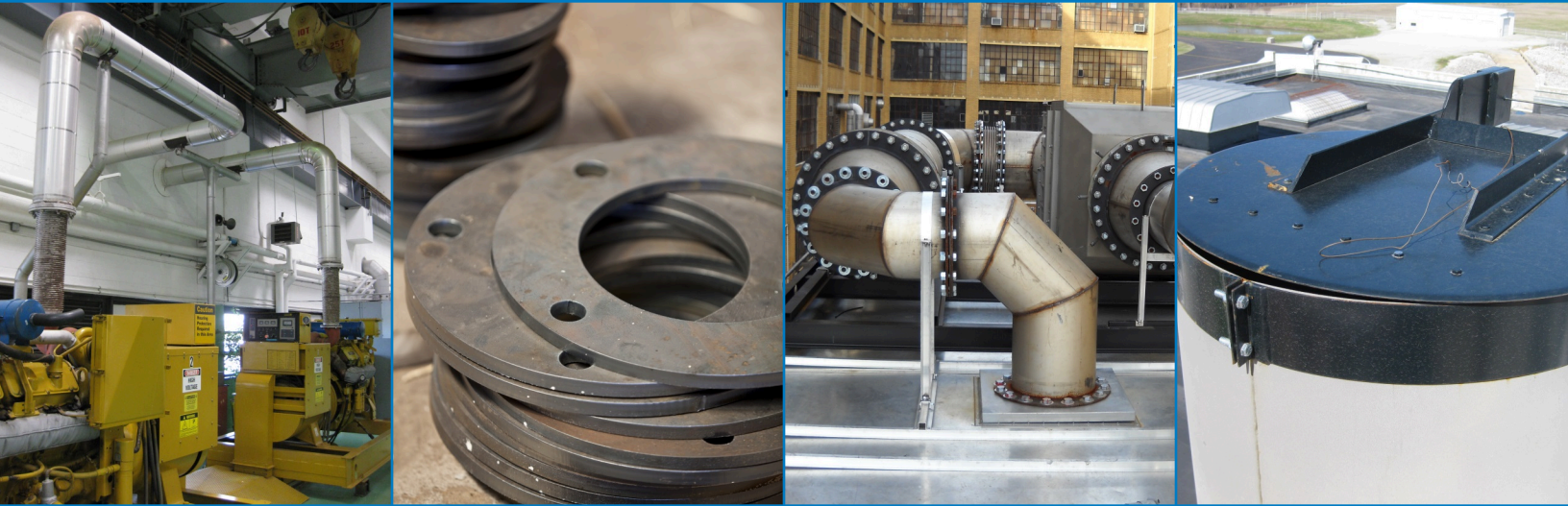
TYPE F



A (Body Dia.)	B	C	D	E
10	0.500	5.0	7.0	2.5
12	0.500	6.0	8.0	2.5
14	0.500	7.0	9.0	2.5
16	0.500	8.0	10.0	2.5
18	0.500	9.0	10.5	2.5
20	0.500	10.0	11.5	2.5
22	0.625	11.0	12.5	2.5
24	0.625	12.0	14.5	2.5
26	0.625	13.0	15.5	2.5
28	0.625	14.0	17.0	2.5
30	0.625	15.0	18.0	2.5
36	1.125	18.0	20.5	4.0
42	1.125	21.0	24.0	4.0
48	1.125	24.0	28.0	4.0
54	1.125	27.0	30.5	4.0
60	1.125	30.0	33.0	4.0

Standard F dimension is ¼ the overall length of the silencer or per customer specifications.

Standard supports are designed to support silencer weight only. Additional structural mounting options available on request.



Accessories

ACCESSORIES TYPE 1 PART NUMBER LEGEND

RFT Z 0800 08 2 YYMMZZZZ

a g s t u m n

Accessory Type

xxFL	Flange (See Prefix Table)
G	Ring Gasket
FFG	Full Faced Gasket
BNG	Bolt, Nut, Ring Gasket Kit
BNFFG	Bolt, Nut, Full Faced Gasket Kit
TC	Tube Connector
SB	Stack Breakers
VC	V-Clamp
VBC	V-Band Clamp
FCC	Full Circle Clamp
UBC	Heavy Duty U-Bolt Clamp
SSC	Sure Seal Clamp
TSC	True Seal Clamp
OMB	Oval Mounting Band
RMB	Round Mounting Band (1 pc.)
RMB2	Round Mounting Band (2 pc.)
PIPE	Pipe
TUBE	Tube
FLEX	Flex Hose
RC	Rain Cap
RCHD	Rain Cap (Heavy Duty)
RGF	Flanged Rain Guard
RGS	Slotted Cuff Rain Guard
RFT	Roof Thimble
WT	Wall Thimble
ERP	Explosion Relief Covers
PH	Pipe Hanger
DV	Drain Valve

Part Number Type

Blank	Standard
X	Configurable (RFT & WT Only)
Z	Custom (All except PH & DV)

Dimensions

##	Nominal Diameter - Ex. 4"
(Ex. 04)	Applies to FL, G/FFG/BNG/BNFFG (ANSI), RMB(2), RGF, WT,
##X####	Reducing Flange Nominal Diameter - Ex. 4" x 3.5"
(Ex. 04X0350)	Applies to REFL, DREFL
###	Nominal Diameter - Ex. 2.50"
(Ex. 250)	Applies to SB, VC, FCC, UBC, SSC, TSC
###	V-Band Nominal Diameter & Type - Ex. 3.0", Type 1
(Ex. 301)	Applies to VBC
####	Nominal Diameter - Ex. 8.62"
(Ex. 0862)	Applies to PIPE, TUBE, FLEX, RC, RCHD, RGS, RFT, PH, DV
##X##	Oval I.D. Height x Width - Ex. 12" x 18"
(Ex. 12X18)	Applies to OMB
##xx	Nominal Diameter & Engine Make - Ex. 10", Caterpillar
(Ex. 10CA)	Applies to G/FFG/BNG/BNFFG (Engine Flange)
###x	Nominal Diameter & DIN Flange Rating - Ex. 50 mm PN6
(Ex. 050A)	Applies to FL, G, FFG, BNG, BNFFG (See DIN Flange Rating
####xx	Nominal Diameter & Connection Type - Ex. 2.25" Slotted Cuff
(Ex. 0225CF)	Applies to TC (See Tube Connection Type table)

8-Digit Code

Applies to Custom Part Numbers Only
Code Generated by Engineering

Material

Blank	Carbon - Applies to Standard Part Numbers Only
1	Aluminized
2	Carbon - Applies to Custom and Configurable Part Numbers Only
3	304 Stainless
4	316 Stainless
5	321 Stainless
6	409 Stainless

Second Dimension

##	Wall Thickness - Ex. 8"
(Ex. 08)	Applies to RFT, WT (Blank if Custom)
####	Overall Length - Ex. 120.0"
(Ex. 1200)	Applies to PIPE, TUBE, FLEX
####xx	Nominal Diameter & Connection Type
(Ex. 0225CF)	Ex. 2.25" Slotted Cuff - Applies to TC (See Tube Connection Type table)
Blank	All other accessory types

Flange Prefixes (in format xxFL)

Flange	T	Tube
	P	Pipe
	RE	Single Reducing
	DRE	Double Reducing
	R	Raised/Threaded
OEM Flange	CT	Custom
	DIN	DIN Flange
	CA	CAT
	CU	Cummins
	PK	Perkins
Other	MI	Mitsubishi
	DS	Doosan
	DF	Detroit
	MT	Machined Turbo
	FR	20° Flare

Tube Connection Type

TS	Tube Stub (dimension refers to O.D.)
CF	Slotted Cuff (dimension refers to I.D.)

DIN Flange Rating

A	PN6 Rating
B	PN10 Rating

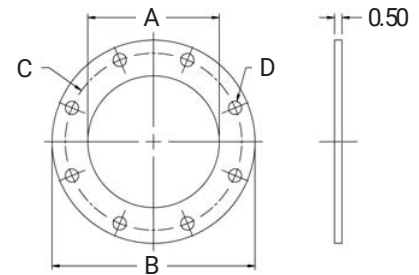
At MIRATECH, everyone strives to give our customers an exceptional end-to-end experience – even if they never talk directly to the customer. We believe in Total Customer Experience management, because satisfaction is more than just a well-engineered, field-proven product.

ANSI FLANGES

MIRATECH loose flanges are manufactured to demanding industry standards. All flanges are drilled to suit ANSI 125/150# pattern, and are flat faced. Corresponding flange gasket and hardware kits are also available.

Tube & Pipe ANSI Drilled Flanges 125/150#

Part Number	Style	A (ID)	B (OD)	C (BC)	D (Hole Dia.)	No. of Holes	WT
TFL-02-m	TUBE	2.06	6.00	4.75	0.75	4	4
PFL-02-m	PIPE	2.44	6.00	4.75	0.75	4	4
TFL-25-m	TUBE	2.56	7.00	5.50	0.75	4	5
PFL-25-m	PIPE	2.94	7.00	5.50	0.75	4	5
TFL-03-m	TUBE	3.06	7.50	6.00	0.75	4	5
PFL-03-m	PIPE	3.56	7.50	6.00	0.75	4	5
TFL-35-m	TUBE	3.56	8.50	7.00	0.75	8	6
PFL-35-m	PIPE	4.06	8.50	7.00	0.75	8	6
TFL-04-m	TUBE	4.06	9.00	7.50	0.75	8	7
PFL-04-m	PIPE	4.56	9.00	7.50	0.75	8	6
TFL-05-m	TUBE	5.06	10.00	8.50	0.88	8	8
PFL-05-m	PIPE	5.66	10.00	8.50	0.88	8	7
TFL-06-m	TUBE	6.06	11.00	9.50	0.88	8	9
PFL-06-m	PIPE	6.72	11.00	9.50	0.88	8	8
TFL-08-m	TUBE	8.06	13.50	11.75	0.88	8	13
PFL-08-m	PIPE	8.72	13.50	11.75	0.88	8	11
TFL-10-m	TUBE	10.06	16.00	14.25	1.00	12	16
PFL-10-m	PIPE	10.88	16.00	14.25	1.00	12	15
TFL-12-m	TUBE	12.06	19.00	17.00	1.00	12	23
PFL-12-m	PIPE	12.88	19.00	17.00	1.00	12	22
PFL-14-m	PIPE	14.19	21.00	18.75	1.13	12	27
PFL-16-m	PIPE	16.19	23.50	21.25	1.13	16	31
PFL-18-m	PIPE	18.19	25.00	22.75	1.25	16	32
PFL-20-m	PIPE	20.19	27.50	25.00	1.25	20	38
PFL-22-m	PIPE	22.19	29.50	27.25	1.38	20	39
PFL-24-m	PIPE	24.19	32.00	29.50	1.38	20	51
PFL-26-m	PIPE	26.19	34.25	31.75	1.38	24	55
PFL-28-m	PIPE	28.19	36.50	34.00	1.38	28	60
PFL-30-m	PIPE	30.19	38.80	36.00	1.38	28	62



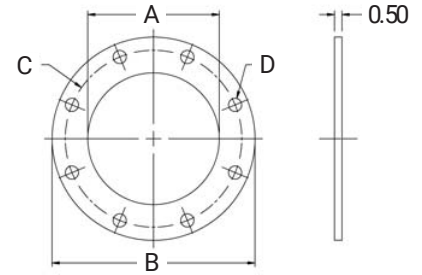
Dimensions are in inches. Weights are in pounds and are approximate. Standard material carbon steel or 304 SS. Custom applications available, contact factory.

ANSI REDUCING FLANGES

MIRATECH loose flanges are manufactured to demanding industry standards. All flanges are drilled to suit ANSI 125/150# pattern, are flat faced and manufactured from carbon steel. Corresponding flange gasket and hardware kits are also available.

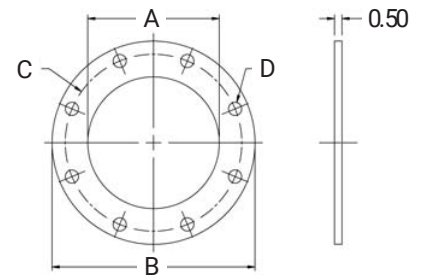
Single Reducing Flanges

Part Number	A (ID)	B (OD)	C (BC)	D (Hole Dia.)	No. of Holes	WT
REFL-05X0400	4.06	10.00	8.50	0.88	8	9
REFL-05X0450	4.56	10.00	8.50	0.88	8	8
REFL-06X0500	5.06	11.00	9.50	0.88	8	11
REFL-06X0563	5.63	11.00	9.50	0.88	8	10
REFL-08X0600	6.06	13.50	11.75	0.88	8	16
REFL-08X0663	6.75	13.50	11.75	0.88	8	15
REFL-10X0800	8.06	16.00	14.25	1.00	12	20
REFL-10X0863	8.75	16.00	14.25	1.00	12	19
REFL-12X1000	10.06	19.00	17.00	1.00	12	29
REFL-12X1075	10.88	19.00	17.00	1.00	12	28
REFL-14X1200	12.06	21.00	18.75	1.13	12	32
REFL-14X1275	12.88	21.00	18.75	1.13	12	31
REFL-16X1400	14.13	23.50	21.25	1.13	16	37
REFL-18X1600	16.13	25.00	22.75	1.25	16	38



Double Reducing Flanges

Part Number	A (ID)	B (OD)	C (BC)	D (Hole Dia.)	No. of Holes	WT
DREFL-04X0300	3.06	9.00	7.50	0.75	8	8
DREFL-04X0350	3.56	9.00	7.50	0.75	8	7
DREFL-06X0400	4.06	11.00	9.50	0.88	8	12
DREFL-06X0450	4.56	11.00	9.50	0.88	8	11
DREFL-08X0500	5.06	13.50	11.75	0.88	8	17
DREFL-08X0556	5.63	13.50	11.75	0.88	8	16
DREFL-10X0600	6.06	16.00	14.25	1.00	12	27
DREFL-10X0663	6.75	16.00	14.25	1.00	12	26
DREFL-12X0800	8.06	19.00	17.00	1.00	12	32
DREFL-12X0875	8.75	19.00	17.00	1.00	12	30
DREFL-14X1000	10.06	21.00	18.75	1.13	12	36
DREFL-14X1075	10.88	21.00	18.75	1.13	12	34
DREFL-16X1200	12.06	23.50	21.25	1.13	16	41
DREFL-16X1275	12.88	23.50	21.25	1.13	16	39



Dimensions are in inches. Weights are in pounds and are approximate. Standard material carbon steel, available in stainless steel. Custom applications available, contact factory.

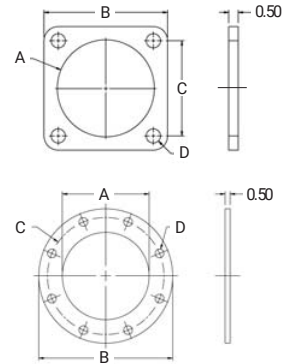
ENGINE FLANGES

MIRATECH loose flanges are manufactured to demanding industry standards. Corresponding flange gasket and hardware kits are also available.

Caterpillar Flanges

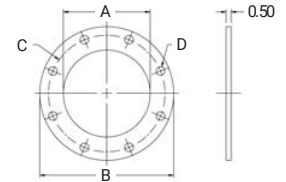
Part Number	A (ID)	B (OD)	C (BC)	D (Hole Dia.)	No. of Holes	WT
CAFL-04*	4.10	5.5 X 5.5	4.13	0.56	4	3
CAFL-05*	5.10	6.5 X 6.5	5.0	0.75	4	3
CAFL-06*	6.10	7.75 X 7.75	6.0	0.75	4	5
CAFL-08-m	8.10	11.00	9.88	0.56	8	6
CAFL-10-m	10.13	13.50	12.44	0.50	12	9
CAFL-12-m	12.10	16.00	14.80	0.56	12	7
CAFL-14-m	14.10	18.00	17.00	0.56	12	15
CAFL-16-m	16.10	23.50	21.25	0.84	16	31
CAFL-18-m	18.10	21.85	20.88	0.63	16	19

* Square CAT Flange



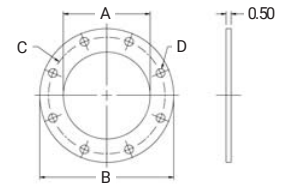
Cummins Flanges

Part Number	A (ID)	B (OD)	C (BC)	D (Hole Dia.)	No. of Holes	WT
CUFL-05-m	5.13	8.00	7.19	0.56	8	3
CUFL-06-m	6.13	8.00	7.19	0.56	8	3



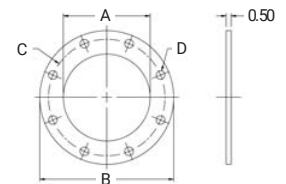
Mitsubishi Flanges

Part Number	A (ID)	B (OD)	C (BC)	D (Hole Dia.)	No. of Holes	WT
MIFL-08-m	8.06	12.50	11.02	0.88	8	10
MIFL-10-m	10.06	15.16	13.58	0.88	12	13
MIFL-12-m	12.06	16.93	15.35	0.88	12	15



Detroit Diesel Flanges

Part Number	A (ID)	B (OD)	C (BC)	D (Hole Dia.)	No. of Holes	WT
DFFL-06-m	6.06	9.50	8.19	0.43	6	6
DFFL-08-m	8.13	11.00	9.88	0.50	8	6
DFFL-10-m	10.06	13.00	11.88	0.56	8	8

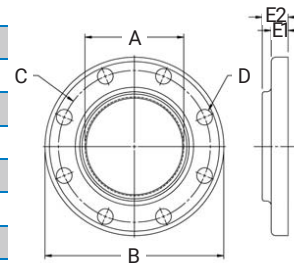


Dimensions are in inches. Weights are in pounds and are approximate. Standard material carbon steel or 304 SS. Custom applications available, contact factory.

THREADED RAISED, FLARED, & MACHINED TURBO FLANGES

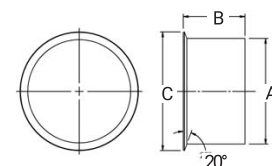
Threaded Raised Flanges

Part Number	A (ID)	B (OD)	C (BC)	D (Hole Dia.)	E1	E2	No. of Holes	WT
RFL-02	2.00	6.00	4.75	0.75	0.62	1.00	4	4
RFL-25	2.50	7.00	5.50	0.75	0.69	1.12	4	6
RFL-03	3.00	7.50	6.00	0.75	0.75	1.19	4	8
RFL-04	4.00	9.00	7.50	0.75	0.94	1.31	8	12
RFL-05	5.00	10.00	8.50	0.88	0.94	1.44	8	14
RFL-06	6.00	11.00	9.50	0.88	1.00	1.56	8	16
RFL-08	8.00	13.50	11.75	0.88	1.12	1.75	8	28
RFL-10	10.00	16.00	14.25	1.00	1.19	1.94	12	38



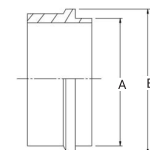
20° Flared Flanges

Part Number	A (ID)	B	C (Flare)
FRFL-03	3.00	1.50	3.63
FRFL-35	3.50	1.50	4.25
FRFL-04	4.00	1.50	4.63
FRFL-05	5.00	3.00	5.75
FRFL-06	6.00	3.00	6.75



Machined Turbo Flanges

Part Number	A	B
MTFL-05	4.50	5.00
MTFL-06	5.30	6.20



Dimensions are in inches. Weights are in pounds and are approximate. Standard material carbon steel, available in stainless steel. Custom applications available, contact factory.

FLANGE GASKETS

MIRATECH offers gaskets in two high temperature formats for your convenience. Full Faced Gaskets are designed to cover the full flange face and include bolt holes. Ring Gaskets are designed to provide an inner flange face seal only and do not include bolt holes. Both high temperature gaskets are manufactured from carbon steel and offer excellent exhaust system sealability. Gaskets are shipped flat packed without hardware, available separately.

ANSI Flange Gaskets

Full Faced Gasket		Ring Gasket
Size	Part Number	Part Number
2.00	FFG-02	G-02
2.50	FFG-25	G-25
3.00	FFG-03	G-03
3.50	FFG-35	G-35
4.00	FFG-04	G-04
5.00	FFG-05	G-05
6.00	FFG-06	G-06
8.00	FFG-08	G-08
10.00	FFG-10	G-10
12.00	FFG-12	G-12
14.00	FFG-14	G-14
16.00	FFG-16	G-16
18.00	FFG-18	G-18
20.00	FFG-20	G-20
22.00	FFG-22	G-22
24.00	FFG-24	G-24
26.00	FFG-26	G-26
28.00	FFG-28	G-28
30.00	FFG-30	G-30
34.00	FFG-34	G-34
36.00	FFG-36	G-36

Caterpillar Gaskets

Full Faced Gasket	
Size	Part Number
4.00	FFG-04CA*
5.00	FFG-05CA*
6.00	FFG-06CA*
8.00	FFG-08CA
10.00	FFG-10CA
12.00	FFG-12CA
14.00	FFG-14CA
16.00	FFG-16CA
18.00	FFG-18CA

* Square CAT Flange

Cummins Gaskets

Full Faced Gasket	
Size	Part Number
5.00	FFG-05CU
6.00	FFG-06CU

Detroit Diesel Gaskets

Full Faced Gasket	
Size	Part Number
6.00	FFG-06DF
8.00	FFG-08DF
10.00	FFG-10DF

Gaskets rated up to 1800°F for continuous use. Consult factory for higher temperature requirement. Dimensions are in inches. Standard material carbon steel, available in stainless steel. Custom applications available, contact factory.

BOLTS, NUTS, GASKETS KITS

MIRATECH packages a complete flange hardware kit consisting of the nuts, bolts, and gasket type of your choosing. BNG Kits are suitable for a single flanged connection. Gaskets (full faced or ring) included are of our standard high temperature specification.

ANSI Gaskets BNG Kit		
	Full Faced Gasket BNG	Ring Gasket BNG
Size	Part Number	Part Number
2.00	BNFFG-02	BNG-02
2.50	BNFFG-25	BNG-25
3.00	BNFFG-03	BNG-03
3.50	BNFFG-35	BNG-35
4.00	BNFFG-04	BNG-04
5.00	BNFFG-05	BNG-05
6.00	BNFFG-06	BNG-06
8.00	BNFFG-08	BNG-08
10.00	BNFFG-10	BNG-10
12.00	BNFFG-12	BNG-12
14.00	BNFFG-14	BNG-14
16.00	BNFFG-16	BNG-16
18.00	BNFFG-18	BNG-18
20.00	BNFFG-20	BNG-20
22.00	BNFFG-22	BNG-22
24.00	BNFFG-24	BNG-24
26.00	BNFFG-26	BNG-26
28.00	BNFFG-28	BNG-28
30.00	BNFFG-30	BNG-30
34.00	BNFFG-34	BNG-34
36.00	BNFFG-36	BNG-36

Caterpillar Gaskets BNG Kit	
	Full Faced Gasket BNG
Size	Part Number
4.00	BNFFG-04CA*
5.00	BNFFG-05CA*
6.00	BNFFG-06CA*
8.00	BNFFG-08CA
10.00	BNFFG-10CA
12.00	BNFFG-12CA
14.00	BNFFG-14CA
16.00	BNFFG-16CA
18.00	BNFFG-18CA

* Square CAT Flange

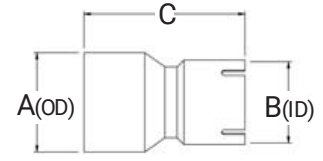
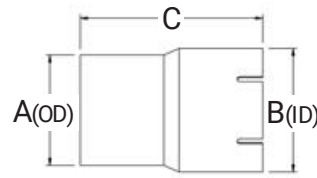
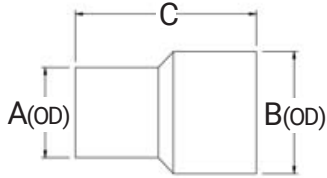
Cummins Gaskets BNG Kit	
	Full Faced Gasket BNG
Size	Part Number
5.00	BNFFG-05CU
6.00	BNFFG-06CU

Detroit Diesel Gaskets BNG Kit	
	Full Faced Gasket BNG
Size	Part Number
6.00	BNFFG-06DF
8.00	BNFFG-08DF
10.00	BNFFG-10DF

Gaskets rated up to 1800°F for continuous use. Consult factory for higher temperature requirement. Dimensions are in inches. Custom applications available, contact factory.

TUBE CONNECTORS & SLOTTED CUFFS

Tube Connectors are used to connect tubing of similar or different sizes. Fittings can be welded or clamped as required. MIRATECH also offers clamps separately for various tube fittings.



Tube Connectors – Style 1

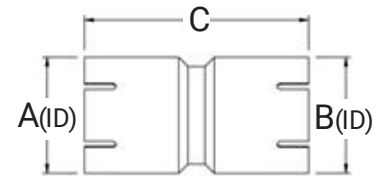
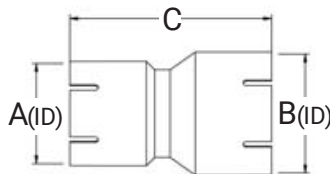
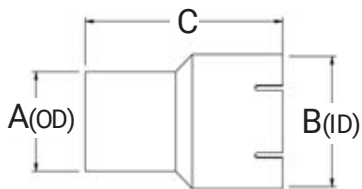
Part Number	A (OD)	B (OD)	C
TC-0200TS-0225TS	2.00	2.25	6.00
TC-0200TS-0250TS	2.00	2.50	6.00
TC-0250TS-0300TS	2.50	3.00	6.00
TC-0300TS-0350TS	3.00	3.50	6.00
TC-0300TS-0400TS	3.00	4.00	6.50
TC-0350TS-0400TS	3.50	4.00	6.00
TC-0350TS-0450TS	3.50	4.50	7.00
TC-0350TS-0500TS	3.50	5.00	8.00
TC-0400TS-0450TS	4.00	4.50	6.50
TC-0400TS-0500TS	4.00	5.00	8.00
TC-0500TS-0550TS	5.00	5.50	6.50
TC-0500TS-0600TS	5.00	6.00	8.00

Slotted Cuff – Style 1

Part Number	A (OD)	B (ID)	C
TC-0200TS-0200CF	2.00	2.00	4.50
TC-0250TS-0250CF	2.50	2.50	4.50
TC-0300TS-0300CF	3.00	3.00	5.00
TC-0350TS-0350CF	3.50	3.50	5.50
TC-0400TS-0400CF	4.00	4.00	6.00
TC-0500TS-0500CF	5.00	5.00	6.00
TC-0550TS-0550CF	5.50	5.50	6.00
TC-0600TS-0600CF	6.00	6.00	6.00
TC-0800TS-0800CF	8.00	8.00	8.00
TC-1000TS-1000CF	10.00	10.00	8.00
TC-1200TS-1200CF	12.00	12.00	10.00

Slotted Cuff – Style 2

Part Number	A (OD)	B (ID)	C
TC-0200CF-0225TS	2.25	2.00	6.00
TC-0200CF-0250TS	2.50	2.00	6.00
TC-0250CF-0300TS	3.00	2.50	6.00
TC-0300CF-0350TS	3.50	3.00	6.00
TC-0300CF-0400TS	4.00	3.00	6.50
TC-0350CF-0400TS	4.00	3.50	6.00
TC-0350CF-0450TS	4.50	3.50	7.00
TC-0350CF-0500TS	5.00	3.50	8.00
TC-0400CF-0450TS	4.50	4.00	6.50
TC-0400CF-0500TS	5.00	4.00	8.00
TC-0450CF-0500TS	5.00	4.50	8.00
TC-0500CF-0550TS	5.50	5.00	6.50
TC-0500CF-0600TS	6.00	5.00	8.00



Slotted Cuff – Style 3

Part Number	A (OD)	B (ID)	C
TC-0200TS-0225CF	2.00	2.25	6.00
TC-0200TS-0250CF	2.00	2.50	6.00
TC-0250TS-0300CF	2.50	3.00	6.00
TC-0300TS-0350CF	3.00	3.50	6.00
TC-0300TS-0400CF	3.00	4.00	6.50
TC-0350TS-0400CF	3.50	4.00	6.00
TC-0350TS-0450CF	3.50	4.50	7.00
TC-0350TS-0500CF	3.50	5.00	8.00
TC-0400TS-0450CF	4.00	4.50	6.50
TC-0400TS-0500CF	4.00	5.00	8.00
TC-0450TS-0500CF	4.50	5.00	8.00
TC-0500TS-0550CF	5.00	5.50	6.50
TC-0500TS-0600CF	5.00	6.00	8.00

Slotted Cuff – Style 4

Part Number	A (ID)	B (ID)	C
TC-0200CF-0225CF	2.00	2.25	6.00
TC-0200CF-0250CF	2.00	2.50	6.00
TC-0250CF-0300CF	2.50	3.00	6.00
TC-0300CF-0350CF	3.00	3.50	6.00
TC-0300CF-0400CF	3.00	4.00	6.50
TC-0350CF-0400CF	3.50	4.00	6.00
TC-0350CF-0450CF	3.50	4.50	7.00
TC-0350CF-0500CF	3.50	5.00	8.00
TC-0400CF-0450CF	4.00	4.50	6.50
TC-0400CF-0500CF	4.00	5.00	8.00
TC-0500CF-0550CF	5.00	5.50	6.50
TC-0500CF-0600CF	5.00	6.00	8.00

Slotted Cuff – Style 5

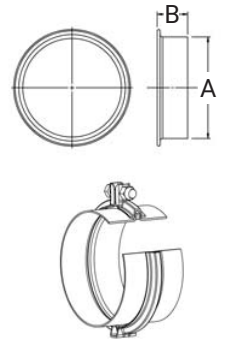
Part Number	A (ID)	B (ID)	C
TC-0200CF-0200CF	2.00	2.00	4.50
TC-0250CF-0250CF	2.50	2.50	4.50
TC-0300CF-0300CF	3.00	3.00	5.00
TC-0350CF-0350CF	3.50	3.50	5.50
TC-0400CF-0400CF	4.00	4.00	6.50
TC-0450CF-0450CF	4.50	4.50	6.50
TC-0500CF-0500CF	5.00	5.00	6.50
TC-0550CF-0550CF	5.50	5.50	6.50
TC-0600CF-0600CF	6.00	6.00	6.50
TC-0800CF-0800CF	8.00	8.00	8.50
TC-1000CF-1000CF	10.00	10.00	8.50
TC-1200CF-1200CF	12.00	12.00	8.50

Dimensions are in inches. Standard material carbon steel, available in aluminized and stainless steel. Contact factory for custom applications.

STACK BREAKERS

MIRATECH stack breakers are flared tube connections designed to be joined using standard V-Clamps, allowing for an exhaust system to be broken down or assembled easily. Mating flange and clamp sold separately.

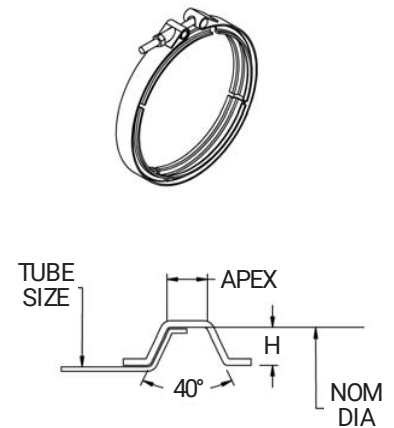
Stack Breakers					
Stack Breaker				Clamp	
Part Number	A (OD)	B	WT	Part Number	WT
SB-200-1	2.00	2.50	0.23	VC-200-1	0.17
SB-250-1	2.50	2.50	0.29	VC-250-1	0.20
SB-300-1	3.00	2.50	0.34	VC-300-1	0.22
SB-350-1	3.50	2.50	0.40	VC-350-1	0.25
SB-400-1	4.00	2.50	0.45	VC-400-1	0.28
SB-450-1	4.50	1.50	0.51	VC-450-1	0.31
SB-500-1	5.00	1.50	0.56	VC-500-1	0.33
SB-600-1	6 (ID)	1.50	0.66	VC-600-1	0.39



Leak tight, no gasket required. Dimensions are in inches. Weight is in pounds and is approximate. Standard material aluminized steel for stack breaker and carbon steel for clamp, available in stainless steel. Contact factory for custom applications.

CLAMPS

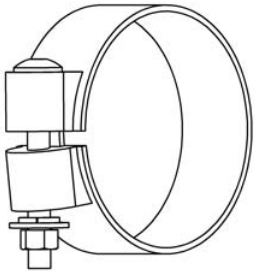
V-Band Manifold Clamps				
Part Number	Tube Size	Apex	Nom Dia	H
VBC-220-3	2.20	0.207	2.88	0.27
VBC-300-3	3.00	0.425	3.87	0.31
VBC-301-3	3.00	0.207	3.82	0.28
VBC-302-3	3.00	0.400	3.88	0.28
VBC-303-3	3.00	0.400	3.88	0.28
VBC-338-3	3.38	0.239	4.06	0.29
VBC-350-3	3.50	0.207	4.50	0.28
VBC-351-3	3.50	0.400	4.19	0.28
VBC-352-3	3.50	0.400	4.25	0.28
VBC-353-3	3.50	0.262	4.12	0.14
VBC-400-3	4.00	0.406	4.75	0.28
VBC-401-3	4.00	0.207	4.81	0.28
VBC-402-3	4.00	0.181	4.94	0.28
VBC-403-3	4.00	0.156	4.61	0.10
VBC-404-3	4.00	0.158	4.75	0.31
VBC-450-3	4.50	0.262	5.25	0.14
VBC-500-3	5.00	0.400	5.88	0.28
VBC-501-3	5.00	0.262	5.65	0.14
VBC-502-3	5.00	0.280	5.92	0.30
VBC-503-3	5.00	0.262	5.30	0.14
VBC-600-3	6.00	0.400	6.88	0.30



Dimensions are in inches. Standard material stainless steel.

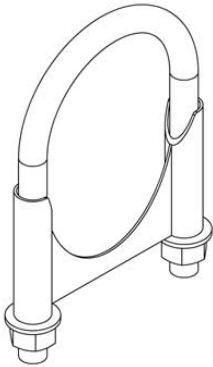
CLAMPS

Full Circle Clamps	
Part Number	Size
FCC-313	3.13
FCC-363	3.63
FCC-413	4.13
FCC-513	5.13
FCC-550	5.50
FCC-600	6.00
FCC-613	6.13
FCC-800	8.00
FCC-813	8.13



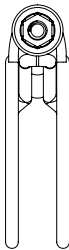
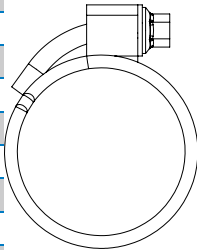
Dimensions are in inches. Standard material carbon steel, zinc plated. Recommended for use over slotted connectors.

Heavy Duty Round U-Bolts		
Part Number	Size	Bolt Size
UBC-150	1.50	0.31
UBC-163	1.63	0.31
UBC-175	1.75	0.31
UBC-200	2.00	0.31
UBC-225	2.25	0.31
UBC-250	2.50	0.31
UBC-300	3.00	0.38
UBC-350	3.50	0.38
UBC-400	4.00	0.38
UBC-450	4.50	0.38
UBC-500	5.00	0.38
UBC-550	5.50	0.38
UBC-600	6.00	0.38



Dimensions are in inches. Standard material carbon steel. Custom applications available, contact factory.

Sure-Seal Clamps	
Part Number	Size
SSC-175	1.75
SSC-200	2.00
SSC-225	2.25
SSC-250	2.50
SSC-275	2.75
SSC-300	3.00
SSC-325	3.25
SSC-350	3.50
SSC-400	4.00
SSC-450	4.50
SSC-500	5.00
SSC-550	5.50
SSC-600	6.00
SSC-662	6.62
SSC-800	8.00

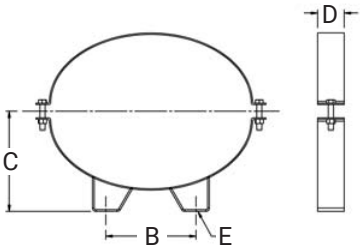


Dimensions are in inches. Standard material plain steel finish. Custom applications available, contact factory.

OVAL MOUNTING BANDS

Mounting Bands are designed to support the silencer weight while mounted to a horizontal flat surface. For example, the roof of a genset enclosure.

Oval Bands						
Part Number	Size	B	C	D	E (Hole Dia.)	WT
OMB-10X15	10x15	6.75	7.50	2.00	0.50	4
OMB-12X18	12x18	6.75	8.50	2.00	0.50	4
OMB-14X21	14x21	6.75	9.50	2.00	0.50	5
OMB-16X24	16x24	6.75	10.75	2.00	0.50	6



Oval Bands are a two-piece design complete with hardware. Suitable for slight variation in silencer outside dimensions. Sold individually.

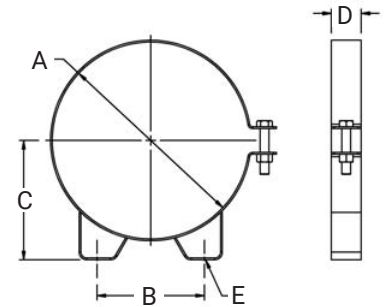
Dimensions are in inches. Weight is in pounds and is approximate. Standard material carbon steel painted high temp black or 304 SS. Custom applications available, contact factory.

ROUND MOUNTING BANDS

Mounting Bands are designed to support the silencer weight while mounted to a horizontal flat surface. For example, the roof of a genset enclosure.

Round Bands – 1 Piece

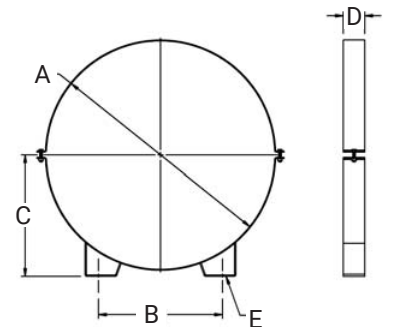
Part Number	Size	B	C	D	E (Hole Dia.)	WT
RMB-45	4.38	3.25	2.06	0.75	0.31	1
RMB-06	6.38	3.25	3.56	0.75	0.31	1
RMB-07	7.00	4.50	4.13	0.75	0.31	1
RMB-85	8.25	4.50	5.00	1.25	0.44	1
RMB-105	10.19	5.00	6.00	1.25	0.44	1
RMB-12	12.19	5.00	6.88	1.25	0.44	2
RMB-14	14.19	7.00	8.00	1.25	0.44	3
RMB-18	18.25	9.00	11.13	2.00	0.50	6
RMB-20	20.25	10.00	12.06	2.00	0.50	7
RMB-22	22.25	11.00	13.63	2.00	0.63	8
RMB-24	24.25	12.00	14.56	2.00	0.63	8
RMB-26	26.25	13.00	15.44	3.00	0.63	14
RMB-28	28.25	14.00	16.31	3.00	0.63	15
RMB-30	30.31	15.00	17.25	4.00	0.63	19
RMB-36	36.31	18.00	20.13	4.00	0.63	23
RMB-42	42.38	28.00	22.50	4.00	0.88	36
RMB-48	48.50	24.00	26.50	3.00	0.69	32



Round one-piece bands are complete with hardware. Suitable for smaller silencers with slight variation in silencer outside dimensions. Sold individually.

Round Bands – 2 Piece

Part Number	Size	B	C	D	E (Hole Dia.)	WT
RMB2-16	16.19	8.00	9.00	2.00	0.50	5
RMB2-18	18.25	9.00	11.13	2.00	0.50	6
RMB2-20	20.25	10.00	12.06	2.50	0.50	9
RMB2-22	22.25	11.00	13.63	2.50	0.63	9
RMB2-24	24.50	12.00	14.56	2.50	0.63	10
RMB2-26	26.25	13.00	15.44	3.00	0.63	13
RMB2-28	28.25	14.00	16.31	3.00	0.63	14
RMB2-30	30.31	15.00	17.25	4.00	0.63	20
RMB2-34	34.31	16.00	18.50	4.00	0.63	22
RMB2-36	36.31	18.00	20.13	4.00	0.63	22
RMB2-42	42.38	23.00	22.50	4.00	0.88	35
RMB2-48	48.50	24.00	26.50	4.00	0.88	46
RMB2-50-m	50.00	25.00	29.00	4.00	1.00	42
RMB2-54-m	54.00	27.00	30.50	4.00	1.00	50
RMB2-60-m	60.00	30.00	34.50	6.00	1.00	78
RMB2-62-m	62.00	32.00	35.00	6.00	1.00	104



Round two-piece bands are complete with hardware and suitable for larger diameter silencers. Suitable for slight variation in silencer outside dimensions. Sold individually.

Dimensions are in inches. Weight is in pounds and is approximate. Standard material carbon steel painted high temp black or 304 SS. Custom applications available, contact factory.

STRAIGHT PIPES & TUBES

Straight Pipes & Tubes					
Carbon Steel		304 Stainless Steel			
Part Number	Part Number	Size (OD)	Schedule/ Gauge	Wall Thickness	Tube/Pipe WT per FT
TUBE-0150-XXXX	TUBE-0150-XXXX-3	1.50	16GA	0.065	0.9
TUBE-0200-XXXX	TUBE-0200-XXXX-3	2.00	16GA	0.065	1.3
TUBE-0225-XXXX	TUBE-0225-XXXX-3	2.25	16GA	0.065	1.5
TUBE-0250-XXXX	TUBE-0250-XXXX-3	2.50	16GA	0.065	1.7
TUBE-0275-XXXX	TUBE-0275-XXXX-3	2.75	16GA	0.065	1.9
TUBE-0300-XXXX	TUBE-0300-XXXX-3	3.00	16GA	0.065	2.0
TUBE-0350-XXXX	TUBE-0350-XXXX-3	3.50	16GA	0.065	2.4
TUBE-0400-XXXX	TUBE-0400-XXXX-3	4.00	16GA	0.065	2.7
TUBE-0450-XXXX	TUBE-0450-XXXX-3	4.50	16GA	0.065	3.1
TUBE-0500-XXXX	TUBE-0500-XXXX-3	5.00	16GA	0.065	3.4
TUBE-0550-XXXX	TUBE-0550-XXXX-3	5.50	16GA	0.065	3.8
TUBE-0600-XXXX	TUBE-0600-XXXX-3	6.00	14GA	0.083	4.7
PIPE-0663-XXXX	PIPE-0663-XXXX-3	6.63	SCH10	0.134	10.2
TUBE-0700-XXXX	TUBE-0700-XXXX-3	7.00	14GA	0.083	5.5
TUBE-0800-XXXX	TUBE-0800-XXXX-3	8.00	14GA	0.083	6.3
PIPE-0863-XXXX	PIPE-0863-XXXX-3	8.63	SCH10	0.148	13.3
TUBE-1000-XXXX	TUBE-1000-XXXX-3	10.00	14GA	0.083	14.9
PIPE-1075-XXXX	PIPE-1075-XXXX-3	10.75	SCH10	0.165	16.5
TUBE-1200-XXXX	TUBE-1200-XXXX-3	12.00	10GA	0.134	17.0
PIPE-1275-XXXX	PIPE-1275-XXXX-3	12.75	SCH10	0.180	19.8
PIPE-1400-XXXX	PIPE-1400-XXXX-3	14.00	SCH10	0.250	38.5
PIPE-1600-XXXX	PIPE-1600-XXXX-3	16.00	SCH10	0.250	43.0
PIPE-1800-XXXX	PIPE-1800-XXXX-3	18.00	SCH10	0.250	47.1
PIPE-2000-XXXX	PIPE-2000-XXXX-3	20.00	SCH10	0.250	52.5
PIPE-2200-XXXX	PIPE-2200-XXXX-3	22.00	SCH10	0.250	57.8

Dimensions are in inches. Weight is in pounds and is approximate. Custom materials, sizes and thicknesses available, contact factory. Exhaust tube/ducting available up to 36 inch diameter as rolled/seam welded in various material and thickness options.

CORRUGATED FLEX HOSE

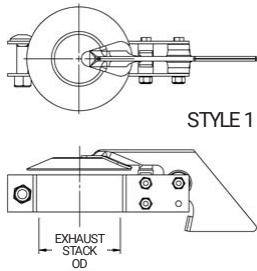
Single Ply Corrugated 321 Stainless Steel Hose suitable for exhaust applications and pressures. Available in cut-to-suit lengths for customer specific project requirements. Larger sizes available upon request.

Corrugated Flex Hose			
Part Number	ID	OD	WT per FT
FLEX-0150-xxxx-5	1.50	2.19	0.8
FLEX-0200-xxxx-5	2.00	2.75	1.0
FLEX-0250-xxxx-5	2.50	3.17	1.2
FLEX-0300-xxxx-5	3.00	3.75	1.2
FLEX-0350-xxxx-5	3.50	4.38	1.4
FLEX-0400-xxxx-5	4.00	4.82	1.7
FLEX-0500-xxxx-5	5.00	5.87	2.5
FLEX-0600-xxxx-5	6.00	6.94	3.5
FLEX-0800-xxxx-5	8.00	9.00	5.6
FLEX-1000-xxxx-5	10.00	11.00	6.8
FLEX-1200-xxxx-5	12.00	13.00	9.0

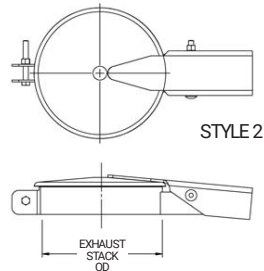
Dimensions are in inches. Weight is in pounds and is approximate. Standard material 321 stainless steel, larger sizes available, contact factory.

RAIN CAPS

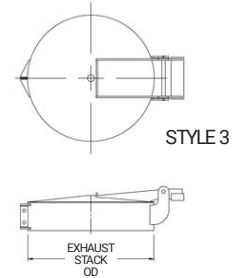
Exhaust Rain Caps are intended for vertical orientation discharge and are balanced for lower backpressure.



STYLE 1



STYLE 2



STYLE 3

Tube Rain Caps – Style 1

Part Number	Exhaust (OD)	Style
RC-0150-m	1.50	1
RC-0200-m	2.00	1
RC-0250-m	2.50	1
RC-0300-m	3.00	1
RC-0350-m	3.50	1
RC-0400-m	4.00	1
RC-0500-m	5.00	1
RC-0600-m	6.00	1

Tube Rain Caps – Style 2

Part Number	Exhaust (OD)	Style
RC-0800-m	8.00	2
RC-1000-m	10.00	2
RC-1200-m	12.00	2

Pipe Rain Caps – Style 2

Part Number	Exhaust (OD)	Style
RC-0863-m	8.63	2
RC-1075-m	10.75	2
RC-1275-m	12.75	2
RC-1400-m	14.00	2
RC-1600-m	16.00	2
RC-1800-m	18.00	2
RC-2000-m	20.00	2

Heavy Duty Rain Caps – Style 3

Part Number	Exhaust (OD)	Style
RCHD-1000-m	10.00	3
RCHD-1075-m	10.75	3
RCHD-1200-m	12.00	3
RCHD-1275-m	12.75	3
RCHD-1400-m	14.00	3
RCHD-1600-m	16.00	3
RCHD-1800-m	18.00	3
RCHD-2000-m	20.00	3
RCHD-2200-m	22.00	3
RCHD-2400-m	24.00	3
RCHD-2600-m	26.00	3
RCHD-2800-m	28.00	3
RCHD-3000-m	30.00	3
RCHD-3200-m	32.00	3

Pipe Rain Caps – Style 1

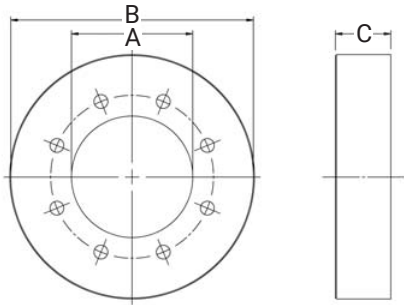
Part Number	Exhaust (OD)	Style
RC-0188-m	1.88	1
RC-0238-m	2.38	1
RC-0288-m	2.88	1
RC-0350-m	3.50	1
RC-0400-m	4.00	1
RC-0450-m	4.50	1
RC-0550-m	5.50	1
RC-0663-m	6.63	1

Dimensions are in inches. Standard material carbon steel painted high temp black or 304 SS. Custom applications available, contact factory.

RAIN GUARDS

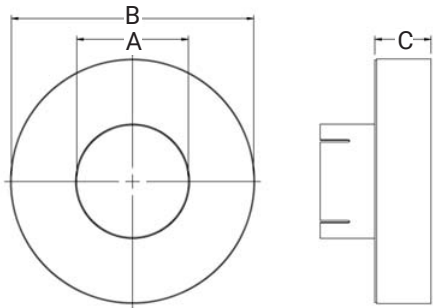
ANSI Flanged Rain Guards

Part Number	A (ID)	B (OD)	C
RGF-0200	2.00	10.00	4.00
RGF-0300	3.00	11.65	4.00
RGF-0400	4.00	13.00	4.00
RGF-0500	5.00	14.00	4.00
RGF-0600	6.00	15.00	4.00
RGF-0800	8.00	17.50	4.00
RGF-1000	10.00	20.00	4.00
RGF-1200	12.00	23.00	4.00
RGF-1400	14.00	25.00	4.00
RGF-1600	16.00	27.50	4.00



Slotted Rain Guards for Wall and Roof Thimbles

Part Number	A (ID)	B (OD)	C
RGS-0200	2.00	10.00	4.00
RGS-0250	2.50	10.00	4.00
RGS-0300	3.00	11.65	4.00
RGS-0400	4.00	13.00	4.00
RGS-0450	4.50	13.00	4.00
RGS-0500	5.00	14.00	4.00
RGS-0556	5.56	14.00	4.00
RGS-0600	6.00	15.00	4.00
RGS-0663	6.63	15.00	4.00
RGS-0800	8.00	17.50	4.00
RGS-0863	8.63	17.50	4.00
RGS-1000	10.00	20.00	4.00
RGS-1075	10.75	20.00	4.00
RGS-1200	12.00	23.00	4.00
RGS-1275	12.75	23.00	4.00
RGS-1400	14.00	25.00	4.00
RGS-1600	16.00	27.50	4.00



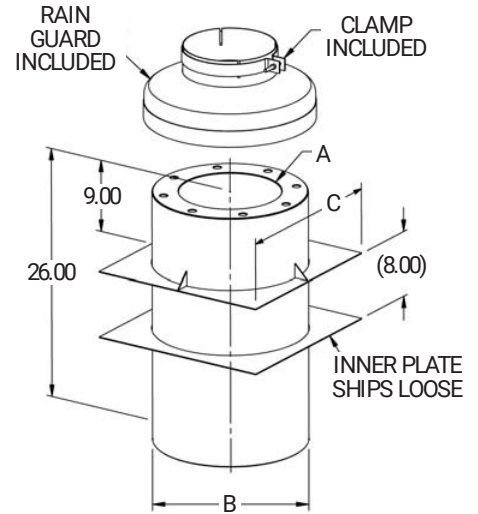
Slotted rain guards include pest screen.

Special flange patterns are available.

Dimensions are in inches. Standard material carbon steel painted high temp black, available in stainless steel. Custom applications available, contact factory.

ROOF & NON-COMBUSTIBLE WALL THIMBLES

Carbon Steel					
Pipe/Tube OD	Part Number	A (ID)	B (OD)	C	WT
2.00	RFT-0200-08	3.50	10.00	14.00	52
2.38	RFT-0238-08	3.50	10.00	14.00	53
2.50	RFT-0250-08	3.50	10.00	14.00	53
2.88	RFT-0288-08	3.50	10.00	14.00	57
3.00	RFT-0300-08	4.50	10.00	14.00	57
3.50	RFT-0350-08	4.50	10.00	14.00	58
4.00	RFT-0400-08	6.00	12.00	16.00	66
4.50	RFT-0450-08	6.00	12.00	16.00	68
5.00	RFT-0500-08	7.00	12.00	16.00	88
5.50	RFT-0550-08	7.00	12.00	16.00	90
6.00	RFT-0600-08	8.00	14.00	18.00	98
6.63	RFT-0662-08	8.00	14.00	18.00	100
8.00	RFT-0800-08	10.00	16.00	20.00	114
8.63	RFT-0862-08	10.00	16.00	20.00	117
10.00	RFT-1000-08	12.00	18.00	22.00	130
10.75	RFT-1075-08	12.00	18.00	22.00	136
12.00	RFT-1200-08	14.00	20.00	24.00	146
12.75	RFT-1275-08	14.00	20.00	24.00	150
14.00	RFT-1400-08	16.00	22.00	26.00	159
16.00	RFT-1600-08	18.00	24.00	28.00	175
18.00	RFT-1800-08	20.00	26.00	30.00	218



Roof thimbles have been designed for standard 8" thick roof applications.

Meets or exceeds NFPA37 & NFPA110. Pitched roof thimbles available, contact factory for more details.

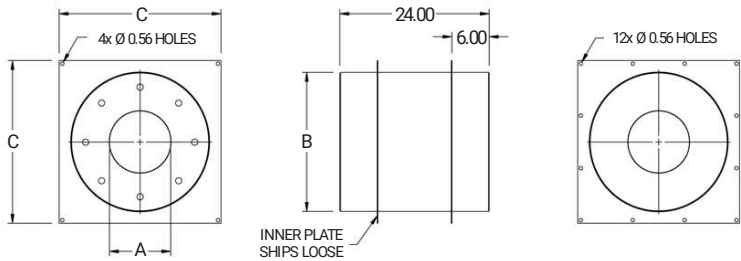
Dimensions are in inches. Weight is in pounds and is approximate.

Standard material carbon steel painted high temp black, or 304 stainless steel. Custom applications available, contact factory.

Custom roof thimble lengths are available upon request.

INSULATED WALL THIMBLES

Insulated thimbles are designed per NFPA Standard 37 and 110. Standard thimbles are 24 inches long and are designed for thick walls. Thimbles are shipped with one plate shipped loose. Exterior wall plate welded. Thimble rain guard available separately. See Thimble user guide for additional instructions.



Carbon Steel		304 Stainless Steel				
Pipe/Tube OD	Part Number	Part Number	A (ID)	B (OD)	C	WT
3.00	WT-03-12	WT-03-12-3	4.50	16.00	20.00	35
4.00	WT-04-12	WT-04-12-3	6.00	18.00	22.00	40
5.00	WT-05-12	WT-05-12-3	7.00	18.00	22.00	63
6.00	WT-06-12	WT-06-12-3	8.00	20.00	24.00	82
8.00	WT-08-12	WT-08-12-3	10.00	22.00	26.00	121
10.00	WT-10-12	WT-10-12-3	12.00	24.00	28.00	124
12.00	WT-12-12	WT-12-12-3	14.00	26.00	30.00	143
14.00	WT-14-12	WT-14-12-3	16.00	26.00	30.00	157
16.00	WT-16-12	WT-16-12-3	18.00	28.00	32.00	175
18.00	WT-18-12	WT-18-12-3	20.00	30.00	34.00	200
20.00	WT-20-12	WT-20-12-3	22.00	30.00	34.00	250

Meets or exceeds NFPA37 & NFPA110.

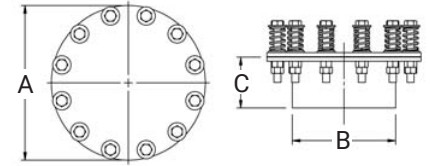
Dimensions are in inches. Weight is in pounds and is approximate. Standard material carbon steel painted high temp black, or 304 stainless steel. Custom applications available, contact factory.

EXPLOSION RELIEF COVERS & INSPECTION PORTS

Explosion Relief Covers and Inspection Ports are available as options for appropriate silencer sizes. Explosion Relief Covers are intended to assist in protecting downstream exhaust systems in the event of system backfire. Inspection Ports are designed for limited visibility to silencers' internals as part of a preventative maintenance program.

Explosion Relief Covers

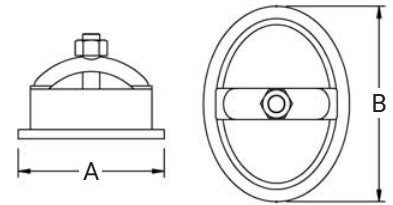
Silencer Body Size (Diameter)	Part Number	A	B	C
10-18	ERP-06	11.00	6.63	3.00
20-30	ERP-12	19.00	12.75	3.00
32-54	ERP-16	23.50	16.00	4.00
60 and Larger	ERP-20	27.50	20.00	4.00



Designed for 5-10psi. Must be located in silencers first chamber opposite the inlet.

Inspection Ports

Silencer Body Size (Diameter)	Part Number	A	B
12-18	15701801	3.00	4.00
20-30	15701802	4.00	6.00
32-54	15701803	6.00	8.00
60 and Larger	15701804	11.00	15.00

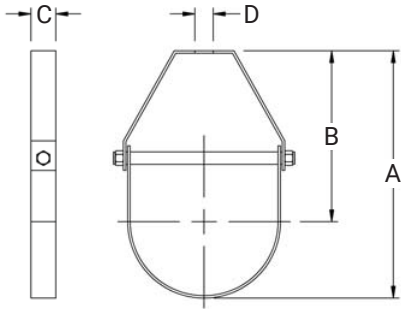


Includes the elliptical ring, cover, high temp gasket, yoke, bolt and nut.

Dimensions are in inches. Standard material carbon steel, available in stainless steel.

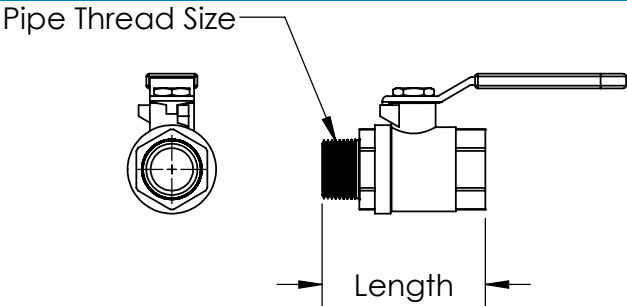
PIPE HANGERS & DRAIN VALVES

Pipe Hangers						
Part Number	Pipe (OD)	A	B	C	C	Max Load (lbs.)
PH-0150	1.50	3.81	2.81	1.00	0.375	730
PH-0200	2.00	4.50	3.31	1.00	0.375	730
PH-0250	2.50	5.50	4.06	1.00	0.500	1350
PH-0300	3.00	6.50	4.75	1.00	0.500	1350
PH-0350	3.50	7.06	5.06	1.25	0.500	1350
PH-0400	4.00	7.81	5.56	1.25	0.625	1430
PH-0550	5.50	8.94	6.65	1.19	0.625	1430
PH-0663	6.63	10.25	6.93	1.44	0.750	1940
PH-0863	8.63	12.69	8.38	1.44	0.750	2000
PH-1075	10.75	15.25	9.88	1.75	0.875	3600
PH-1275	12.75	17.94	11.56	2.00	0.875	3800
PH-1400	14.00	19.56	12.56	2.00	1.000	4200
PH-1600	16.00	22.00	14.00	2.50	1.000	4600
PH-1800	18.00	24.94	15.94	2.50	1.000	4800
PH-2000	20.00	27.56	17.56	3.00	1.250	4800



Sizes 5" and up have threaded rod and two nuts instead of bolt and nut. Dimensions are in inches. Standard material carbon steel, available in stainless steel.

Drain Valves		
Part Number	Pipe Thread Size	Length (End to End)
DV-0050	0.50	2.75
DV-0075	0.75	3.00
DV-0100	1.00	3.63
DV-0150	1.50	4.44



Dimensions are in inches. Standard material carbon steel, available in stainless steel.

Our team is dedicated to solving problems, based on one-of-a-kind needs. No project or challenge is too large or too small. Because we know that being highly engaged with the customer means keeping their engine, job site, and company running at its best.

ACCESSORIES TYPE 2 PART NUMBER LEGEND

Y 08 X - D 08 CA 1 - 14PF1 - EL080x180 - 2 - YYMMZZZZ
a f g h i j k

Accessory Type

CN	Cone
EXT	Extension
ME	Mitered Exhaust
STK	Stack
EL	Short Radius 90° Elbow
ELL	Long Radius 90° Elbow
EB	Short Radius 45° Elbow
EBL	Long Radius 45° Elbow
FL	Flex
BL1	Bellow (Single Ply)
BL2	Bellow (Dual Ply)
Y	Wye

Flex Diameter

Applies to FL, BL, & Y Only

(Ex. 02) Nominal Whole Diameter - Ex. 2"

(Ex. 25) Nominal Half Diameter - Ex. 2.5"

Part Number Type

Blank	Standard
X	Configurable
Z	Custom

Number of Inlets

Applies to Y Only

D	2 Inlets
T	3 Inlets

Inlet Size

(Ex. 02) Nominal Whole Diameter - Ex. 2"

(Ex. 25) Nominal Half Diameter - Ex. 2.5"

(Ex. 100) Nominal Diameter - Ex. 100 mm

Flange Mounting Type

1	Fixed
2	Floating
3	Shipped Loose
Blank	Non-Flange Connection

Inlet Connection

No Flange	PS	Pipe Stub
	TS	Tube Stub
Flange	TF	Tube
	PF	Pipe
	SR	Single Reducing
	DR	Double Reducing
	RF	Raised/Threaded
	CT	Custom
OEM Flange	CA	CAT
	CU	Cummins
	PK	Perkins
	MI	Mitsubishi
	DS	Doosan
	DF	Detroit
DIN Flange	A	PN6 Rating
	B	PN10 Rating
Other	CF	Slotted Cuff
	MN	Male NPT
	FN	Female NPT
	SB	Stack Breaker
	MT	Machined Turbo
	FR	20° Flare
	MA	Marman

ACCESSORIES TYPE 2 PART NUMBER LEGEND (CONTINUED)

Y08X - D08CA1 - 14PF1 - EL 080x180 - 2 - YYMMZZZZ

o p q r s t u m n

Outlet Connection

Blank	No Outlet Connection (ME & STK)
Other	Same form as Inlet

Elbow Type

Applies to Flex with Elbow Only

xx	Radius Definition
(Ex. EL)	Ex. Short Radius 90° Elbow
Blank	Custom Part Number

Dimensions

###	Overall Length* - Ex. 12.0"
(Ex. 120)	Applies to CN, ME, FL, BL1, BL2
####	Overall Length - Ex. 12.0"
(Ex. 0120)	Applies to EXT, STK
###X###	Leg Lengths* - Ex. 8.0" x 18.0"
(Ex. 080X180)	Applies to Flex with Elbow
###X####	Leg Lengths - Ex. 8.0" x 10.0"
(Ex. 080X0100)	Applies to EL, ELL, EB, EBL
###-###-##	Spread, Length, and Length Offset*
(Ex. 207-360-10)	Ex. 20.7" - 36.0" - 1.0" - Applies to Y
Blank	Custom Part Number

* Accessories over 99.9" will need to be Engineer Sized

Material

1	Aluminized
2	Carbon
3	304 Stainless
4	316 Stainless
5	321 Stainless
6	409 Stainless

8-Digit Code

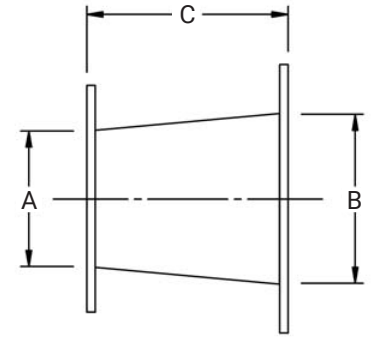
Applies to Custom Part Numbers Only

Code Generated by Engineering

CONES & EXTENSIONS

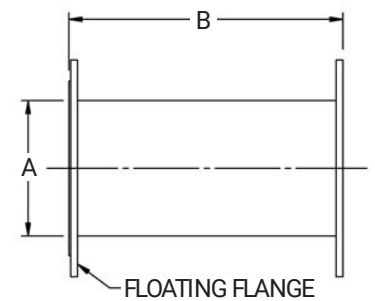
Reducing Cones - Flanged

Part Number	A (OD)	B (OD)	C (Length)	WT
CN-04TF1-06TF1-120-m	4.00	6.00	12.00	20
CN-04TF1-08TF1-120-m	4.00	8.00	12.00	24
CN-06TF1-08TF1-120-m	6.00	8.00	12.00	27
CN-06TF1-10TF1-120-m	6.00	10.00	12.00	31
CN-08TF1-10TF1-120-m	8.00	10.00	12.00	35
CN-08TF1-12TF1-120-m	8.00	12.00	12.00	43
CN-10TF1-12TF1-140-m	10.00	12.00	14.00	48
CN-10TF1-14PF1-140-m	10.00	14.00	14.00	52
CN-12TF1-14PF1-140-m	12.00	14.00	14.00	59
CN-12TF1-16PF1-140-m	12.00	16.00	14.00	65
CN-14PF1-16PF1-160-m	14.00	16.00	16.00	70
CN-14PF1-18PF1-160-m	14.00	16.00	16.00	71
CN-16PF1-18PF1-160-m	16.00	18.00	16.00	77
CN-16PF1-20PF1-160-m	16.00	20.00	16.00	84
CN-18PF1-20PF1-180-m	18.00	20.00	18.00	87
CN-18PF1-22PF1-180-m	18.00	22.00	18.00	91
CN-20PF1-22PF1-180-m	20.00	22.00	18.00	97
CN-20PF1-24PF1-180-m	20.00	24.00	18.00	105



Exhaust Extensions - Flanged

Part Number	A (OD)	B (Length)	WT
EXT-04TF1-04TF2-0120-m	4.00	12.00	16
EXT-45TF1-45TF2-0120-m	4.50	12.00	17
EXT-05TF1-05TF2-0160-m	5.00	16.00	20
EXT-06TF1-06TF2-0180-m	6.00	18.00	26
EXT-08TF1-08TF2-0180-m	8.00	18.00	34
EXT-10TF1-10TF2-0200-m	10.00	20.00	50
EXT-12TF1-12TF2-0240-m	12.00	24.00	80
EXT-14PF1-14PF2-0280-m	14.00	28.00	135
EXT-16PF1-16PF2-0320-m	16.00	32.00	172
EXT-18PF1-18PF2-0360-m	18.00	36.00	201
EXT-20PF1-20PF2-0400-m	20.00	40.00	215
EXT-22PF1-22PF2-0480-m	22.00	48.00	241
EXT-24PF1-24PF2-0480-m	24.00	48.00	271
EXT-26PF1-26PF2-0480-m	26.00	48.00	344
EXT-28PF1-28PF2-0480-m	28.00	48.00	380
EXT-30PF1-30PF2-0480-m	30.00	48.00	405



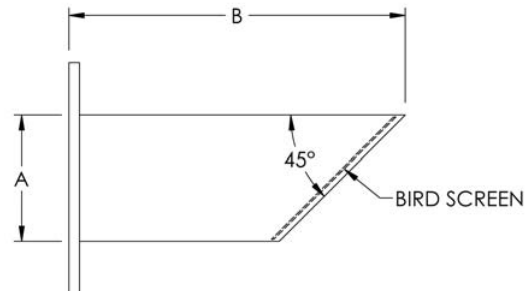
Dimensions are in inches. Weight is in pounds and is approximate. Standard material carbon steel painted high temp black or 304 SS. Custom applications available, contact factory.

45° MITERED W/ BIRD SCREEN

Mitered outlets are intended to provide protection from unwanted debris from entering the exhaust system.

Mitered Outlet

Part Number	A (OD)	B (Length)	WT
ME-04TF1-120-m	4.00	12.00	12
ME-45TF1-120-m	4.50	12.00	13
ME-05TF1-160-m	5.00	16.00	13
ME-06TF1-180-m	6.00	18.00	20
ME-08TF1-180-m	8.00	18.00	26
ME-10TF1-200-m	10.00	20.00	35
ME-12TF1-240-m	12.00	24.00	50
ME-14PF1-280-m	14.00	28.00	90
ME-16PF1-320-m	16.00	32.00	116
ME-18PF1-360-m	18.00	36.00	138
ME-20PF1-400-m	20.00	40.00	153
ME-22PF1-480-m	22.00	48.00	185
ME-24PF1-480-m	24.00	48.00	220
ME-26PF1-480-m	26.00	48.00	289
ME-28PF1-480-m	28.00	48.00	320
ME-30PF1-480-m	30.00	48.00	343

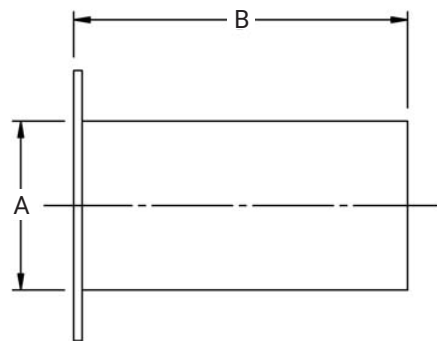


STACKS

Flanged Exhaust Stacks are intended to connect tubing or other exhaust components and can also be used to discharge.

Exhaust Stacks

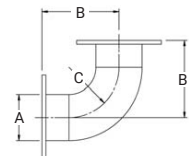
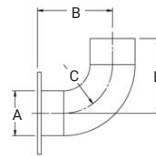
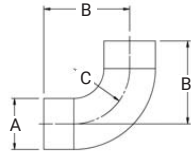
Part Number	A (OD)	B (Length)	WT
STK-04TF1-0120-m	4.00	12.00	10
STK-45TF1-0120-m	4.50	12.00	11
STK-05TF1-0160-m	5.00	16.00	13
STK-06TF1-0180-m	6.00	18.00	18
STK-08TF1-0180-m	8.00	18.00	18
STK-10TF1-0200-m	10.00	20.00	34
STK-12TF1-0240-m	12.00	24.00	57
STK-14PF1-0280-m	14.00	28.00	108
STK-16PF1-0320-m	16.00	32.00	141
STK-18PF1-0360-m	18.00	36.00	169
STK-20PF1-0400-m	20.00	40.00	177
STK-22PF1-0480-m	22.00	48.00	202
STK-24PF1-0480-m	24.00	48.00	220
STK-26PF1-0480-m	26.00	48.00	389
STK-28PF1-0480-m	28.00	48.00	320
STK-30PF1-0480-m	30.00	48.00	343



Dimensions are in inches. Weight is in pounds and is approximate. Standard material carbon steel painted high temp black or 304 SS. Custom applications available, contact factory.

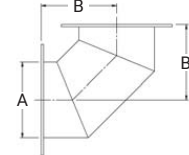
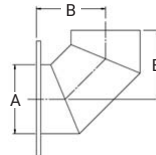
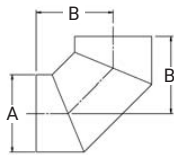
90° SHORT RADIUS ELBOWS

90° Short Radius Elbows – Smooth



			No Flange		Flanged One End		Flanged Both Ends	
A (OD)	B	C	Part Number	WT	Part Number	WT	Part Number	WT
3.00	6.00	4.00	EL-03TS-03TS-060X0060-m	2	EL-03TF1-03TS-060X0060-m	7	EL-03TF1-03TF1-060X0060-m	12
3.50	8.00	4.00	EL-35TS-35TS-080X0080-m	3	EL-35TF1-35TS-080X0080-m	8	EL-35TF1-35TF1-080X0080-m	13
4.00	8.00	4.00	EL-04TS-04TS-080X0080-m	4	EL-04TF1-04TS-080X0080-m	10	EL-04TF1-04TF1-080X0080-m	16
5.00	10.00	5.50	EL-05TS-05TS-100X0100-m	5	EL-05TF1-05TS-100X0100-m	13	EL-05TF1-05TF1-100X0100-m	20
6.00	10.00	6.00	EL-06TS-06TS-100X0100-m	6	EL-06TF1-06TS-100X0100-m	15	EL-06TF1-06TF1-100X0100-m	23

90° Short Radius Elbows – Mitered

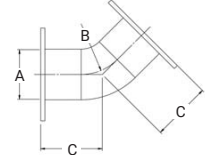
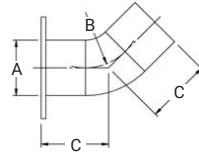
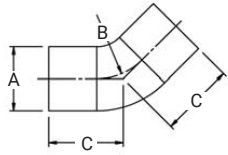


			No Flange		Flanged One End		Flanged Both Ends	
A (OD)	B		Part Number	WT	Part Number	WT	Part Number	WT
8.00	8.00		EL-08TS-08TS-080X0080-m	8	EL-08TF1-08TS-080X0080-m	20	EL-08TF1-08TF1-080X0080-m	32
10.00	10.00		EL-10TS-10TS-100X0100-m	12	EL-10TF1-10TS-100X0100-m	28	EL-10TF1-10TF1-100X0100-m	44
12.00	12.00		EL-12TS-12TS-120X0120-m	28	EL-12TF1-12TS-120X0120-m	50	EL-12TF1-12TF1-120X0120-m	73
14.00	14.00		EL-14PS-14PS-140X0140-m	71	EL-14PF1-14PS-140X0140-m	95	EL-14PF1-14PF1-140X0140-m	120
16.00	16.00		EL-16PS-16PS-160X0160-m	93	EL-16PF1-16PS-160X0160-m	122	EL-16PF1-16PF1-160X0160-m	151
18.00	18.00		EL-18PS-18PS-180X0180-m	117	EL-18PF1-18PS-180X0180-m	146	EL-18PF1-18PF1-180X0180-m	175
20.00	20.00		EL-20PS-20PS-200X0200-m	145	EL-20PF1-20PS-200X0200-m	179	EL-20PF1-20PF1-200X0200-m	213
22.00	22.00		EL-22PS-22PS-220X0220-m	128	EL-22PF1-22PS-220X0220-m	164	EL-22PF1-22PF1-220X0220-m	201
24.00	24.00		EL-24PS-24PS-240X0240-m	152	EL-24PF1-24PS-240X0240-m	195	EL-24PF1-24PF1-240X0240-m	240

Dimensions are in inches. Weight is in pounds and is approximate. Standard material aluminized steel for smooth and carbon steel for mitered or 304 SS for either. Flanged assemblies in aluminized or carbon steel are painted high temp black. Custom applications available, contact factory.

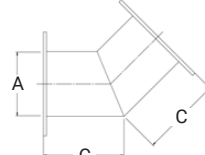
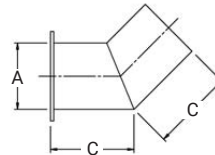
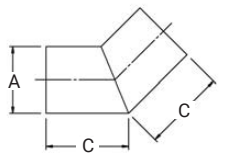
45° SHORT RADIUS ELBOWS

45° Short Radius Elbows – Smooth



			No Flange		Flanged One End		Flanged Both Ends	
A (OD)	B	C	Part Number	WT	Part Number	WT	Part Number	WT
3.00	3.00	4.00	EB-03TS-03TS-040X0040-m	1	EB-03TF1-03TS-040X0040-m	6	EB-03TF1-03TF1-040X0040-m	10
3.50	3.50	4.50	EB-35TS-35TS-045X0045-m	2	EB-35TF1-35TS-045X0045-m	8	EB-35TF1-35TF1-045X0045-m	13
4.00	4.00	5.00	EB-04TS-04TS-050X0050-m	2	EB-04TF1-04TS-050X0050-m	8	EB-04TF1-04TF1-050X0050-m	13
5.00	5.00	6.00	EB-05TS-05TS-060X0060-m	3	EB-05TF1-05TS-060X0060-m	10	EB-05TF1-05TF1-060X0060-m	17
6.00	6.00	7.00	EB-06TS-06TS-070X0070-m	5	EB-06TF1-06TS-070X0070-m	13	EB-06TF1-06TF1-070X0070-m	21

45° Short Radius Elbows – Mitered



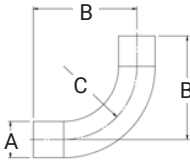
			No Flange		Flanged One End		Flanged Both Ends	
A (OD)	C		Part Number	WT	Part Number	WT	Part Number	WT
8.00	8.00		EB-08TS-08TS-080X0080-m	8	EB-08TF1-08TS-080X0080-m	20	EB-08TF1-08TF1-080X0080-m	32
10.00	10.00		EB-10TS-10TS-100X0100-m	12	EB-10TF1-10TS-100X0100-m	28	EB-10TF1-10TF1-100X0100-m	44
12.00	12.00		EB-12TS-12TS-120X0120-m	28	EB-12TF1-12TS-120X0120-m	50	EB-12TF1-12TF1-120X0120-m	73
14.00	14.00		EB-14PS-14PS-140X0140-m	71	EB-14PF1-14PS-140X0140-m	95	EB-14PF1-14PF1-140X0140-m	120
16.00	16.00		EB-16PS-16PS-160X0160-m	93	EB-16PF1-16PS-160X0160-m	122	EB-16PF1-16PF1-160X0160-m	151
18.00	18.00		EB-18PS-18PS-180X0180-m	117	EB-18PF1-18PS-180X0180-m	146	EB-18PF1-18PF1-180X0180-m	175
20.00	20.00		EB-20PS-20PS-200X0200-m	145	EB-20PF1-20PS-200X0200-m	179	EB-20PF1-20PF1-200X0200-m	213
22.00	22.00		EB-22PS-22PS-220X0220-m	128	EB-22PF1-22PS-220X0220-m	164	EB-22PF1-22PF1-220X0220-m	201
24.00	24.00		EB-24PS-24PS-240X0240-m	152	EB-24PF1-24PS-240X0240-m	195	EB-24PF1-24PF1-240X0240-m	240

Dimensions are in inches. Weight is in pounds and is approximate. Standard material aluminized steel for smooth and carbon steel for mitered or 304 SS for either. Flanged assemblies in aluminized or carbon steel are painted high temp black. Custom applications available, contact factory.

90° & 45° LONG RADIUS ELBOWS

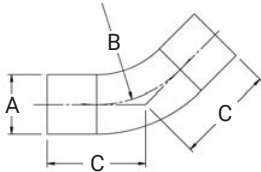
90° Long Radius Elbows – Smooth

No Flange				
A (OD)	B	C	Part Number	WT
3.00	8.50	6.00	ELL-03TS-03TS-085X0085-m	2
3.50	10.00	7.00	ELL-35TS-35TS-100X0100-m	4
4.00	11.50	8.00	ELL-04TS-04TS-115X0115-m	4
5.00	14.00	10.00	ELL-05TS-05TS-140X0140-m	7
6.00	17.00	12.00	ELL-06TS-06TS-170X0170-m	10



45° Long Radius Elbows – Smooth

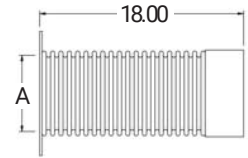
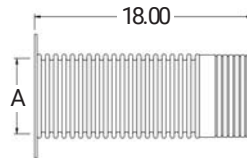
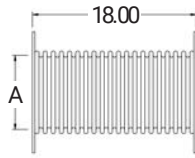
No Flange				
A (OD)	B	C	Part Number	WT
3.00	6.00	5.50	EBL-03TS-03TS-055X0055-m	2
3.50	7.00	6.50	EBL-35TS-35TS-065X0065-m	2
4.00	8.00	7.00	EBL-04TS-04TS-070X0070-m	3
5.00	10.00	8.00	EBL-05TS-05TS-080X0080-m	4
6.00	12.00	10.00	EBL-06TS-06TS-100X0100-m	7



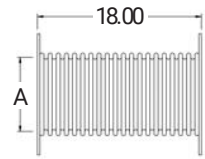
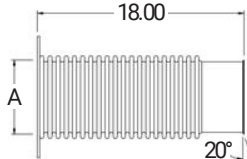
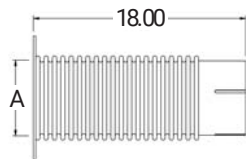
Dimensions are in inches. Weight is in pounds and is approximate. Standard material aluminized steel or 304 SS. Flanged assemblies in aluminized or carbon steel are painted high temp black. Custom applications available, contact factory.

FLEX ASSEMBLIES

Flex Connections are designed to isolate engine vibration from the remaining exhaust system but are not designed for pipe growth or connection misalignment. Flex hose sections are manufactured from 321SS while connections are mild steel. MIRATECH offers a wide variety of flex connections including OEM engine specific flange types.



A (OD)	ANSI Floating Flange/ANSI Flange		Flange/Male NPT		Flange/Female NPT	
	Part Number	WT	Part Number	WT	Part Number	WT
2.00	FL02-02TF1-02TF2-180-m	10	FL02-02MN-02TF1-180-m	6	FL02-02FN-02TF1-180-m	6
2.50	FL25-25TF1-25TF2-180-m	12	FL25-25MN-25TF1-180-m	8	FL25-25FN-25TF1-180-m	8
3.00	FL03-03TF1-03TF2-180-m	12	FL03-03MN-03TF1-180-m	8	FL03-03FN-03TF1-180-m	8
3.50	FL35-35TF1-35TF2-180-m	14	FL35-35MN-35TF1-180-m	10	FL35-35FN-35TF1-180-m	10
4.00	FL04-04TF1-04TF2-180-m	16	FL04-04MN-04TF1-180-m	11	FL04-04FN-04TF1-180-m	11
5.00	FL05-05TF1-05TF2-180-m	21	FL05-05MN-05TF1-180-m	15	FL05-05FN-05TF1-180-m	15
6.00	FL06-06TF1-06TF2-180-m	24	FL06-06MN-06TF1-180-m	19	FL06-06FN-06TF1-180-m	19
8.00	FL08-08TF1-08TF2-180-m	33	FL08-08MN-08TF1-180-m	23		—
10.00	FL10-10TF1-10TF2-180-m	41	FL10-10MN-10TF1-180-m	29		—
12.00	FL12-12TF1-12TF2-180-m	58	FL12-12MN-12TF1-180-m	41		—
14.00	FL14-14PF1-14PF2-180-m	67		—		—
16.00	FL16-16PF1-16PF2-180-m	77		—		—



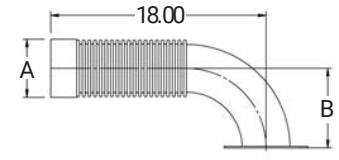
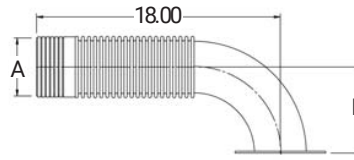
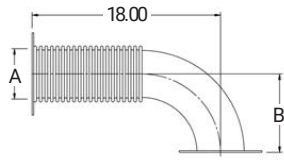
A (OD)	Flange/Slotted Cuff		Flange/20° Flare		ANSI Floating Flange/CAT Flange	
	Part Number	WT	Part Number	WT	Part Number	WT
2.00	FL02-02CF-02TF1-180-m	6		—		—
2.50	FL25-25CF-25TF1-180-m	7		—		—
3.00	FL03-03CF-03TF1-180-m	7	FL03-03FR-03TF1-180-m	8		—
3.50	FL35-35CF-35TF1-180-m	8	FL35-35FR-35TF1-180-m	9		—
4.00	FL04-04CF-04TF1-180-m	10	FL04-04FR-04TF1-180-m	10	FL04-04CA1-04TF2-180-m*	16
5.00	FL05-05CF-05TF1-180-m	13	FL05-05FR-05TF1-180-m	13	FL05-05CA1-05TF2-180-m*	21
6.00	FL06-06CF-06TF1-180-m	16	FL06-06FR-06TF1-180-m	16	FL06-06CA1-06TF2-180-m*	24
8.00	FL08-08CF-08TF1-180-m	23		—	FL08-08CA1-08TF2-180-m	33
10.00	FL10-10CF-10TF1-180-m	27		—	FL10-10CA1-10TF2-180-m	41
12.00	FL12-12CF-12TF1-180-m	35		—	FL12-12CA1-12TF2-180-m	58
14.00	FL14-14CF-14PF1-180-m	40		—	FL14-14CA1-14PF2-180-m	67
16.00	FL16-16CF-16PF1-180-m	49		—	FL16-16CA1-16PF2-180-m	77

* Square CAT Flange

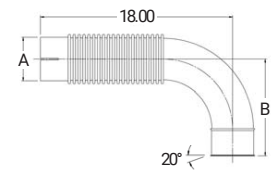
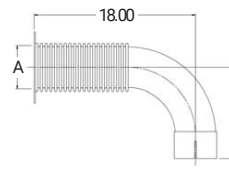
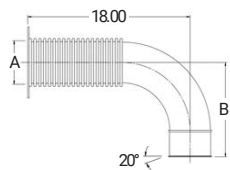
Dimensions are in inches. Weight is in pounds and is approximate. Standard material carbon steel painted high temp black, available in stainless steel. Custom applications available, contact factory.

FLEX ASSEMBLIES W/ 90° ELBOW

Flex Connections are designed to isolate engine vibration from the remaining exhaust system but are not designed for pipe growth or connection misalignment. Flex hose sections are manufactured from 321SS while connections are mild steel. MIRATECH offers a wide variety of flex connections including OEM engine specific flange types.



		Flanged/Flanged 90° Elbow		Male NPT/Flanged 90° Elbow		Female NPT/Flanged 90° Elbow	
A (OD)	B	Part Number	WT	Part Number	WT	Part Number	WT
3.00	6.00	FL03-03TF2-03TF2-EL060X180-m	13	FL03-03MN-03TF2-EL060X180-m	9	FL03-03FN-03TF2-EL060X180-m	9
3.50	8.00	FL35-35TF2-35TF2-EL080X180-m	15	FL35-35MN-35TF2-EL080X180-m	11	FL35-35FN-35TF2-EL080X180-m	11
4.00	8.00	FL04-04TF2-04TF2-EL080X180-m	18	FL04-04MN-04TF2-EL080X180-m	13	FL04-04FN-04TF2-EL080X180-m	13
5.00	10.00	FL05-05TF2-05TF2-EL100X180-m	23	FL05-05MN-05TF2-EL100X180-m	16	FL05-05FN-05TF2-EL100X180-m	16
6.00	10.00	FL06-06TF2-06TF2-EL100X180-m	26	FL06-06MN-06TF2-EL100X180-m	18	FL06-06FN-06TF2-EL100X180-m	18
8.00	8.00	FL08-08TF2-08TF2-EL080X180-m	38	FL08-08MN-08TF2-EL080X180-m	27		—
10.00	10.00	FL10-10TF2-10TF2-EL100X180-m	48	FL10-10MN-10TF2-EL100X180-m	34		—
12.00	12.00	FL12-12TF2-12TF2-EL120X180-m	79	FL12-12MN-12TF2-EL120X180-m	55		—
14.00	14.00	FL14-14PF2-14PF2-EL140X180-m	127		—		—
16.00	16.00	FL16-16PF2-16PF2-EL160X180-m	159		—		—



		Flanged/20° Flare 90° Elbow		Flanged/Slotted Cuff 90° Elbow		Slotted Cuff/20° Flare 90° Elbow	
A (OD)	B	Part Number	WT	Part Number	WT	Part Number	WT
3.00	6.00	FL03-03TF2-03FR-EL060X180-m	9	FL03-03TF2-03CF-EL060X180-m	9	FL03-03CF-03FR-EL060X180-m	4
3.50	8.00	FL35-35TF2-35FR-EL080X180-m	11	FL35-35TF2-35CF-EL080X180-m	10	FL35-35CF-35FR-EL080X180-m	5
4.00	8.00	FL04-04TF2-04FR-EL080X180-m	12	FL04-04TF2-04CF-EL080X180-m	12	FL04-04CF-04FR-EL080X180-m	8
5.00	10.00	FL05-05TF2-05FR-EL100X180-m	16	FL05-05TF2-05CF-EL100X180-m	15	FL05-05CF-05FR-EL100X180-m	12
6.00	10.00	FL06-06TF2-06FR-EL100X180-m	18	FL06-06TF2-06CF-EL100X180-m	18	FL06-06CF-06FR-EL100X180-m	15

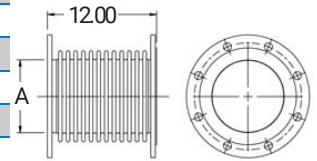
Dimensions are in inches. weight is in pounds and is approximate. Standard material carbon steel painted high temp black, available in stainless steel. Custom applications available, contact factory. All ANSI flanges floating.

BELLOWS EXPANSION JOINTS

Expansion Joints are intended to reduce stress on exhaust pipe systems due to thermal growth as well as vibration or misalignment. MIRATECH bellows are available as single or dual ply with ANSI pattern or OEM Engine Flanges on each end.

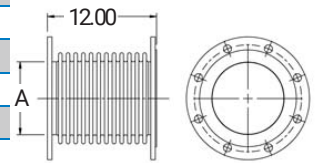
Single Ply Bellows

Part Number	A (OD)	Non-Concurrent Allowable Movements		Spring Rates		Cycle Life		WT
		Axial (in)	Lateral (in)	Axial (lbs/in)	Lateral (lbs/in)	Axial	Lateral	
BL103-03TF1-03TF2-120-m	3.00	2	0.50	49	14	10,000	10,000	12
BL104-04TF1-04TF2-120-m	4.00	2	0.50	69	33	10,000	10,000	15
BL105-05TF1-05TF2-120-m	5.00	3	0.50	64	46	10,000	10,000	20
BL106-06TF1-06TF2-120-m	6.00	3	0.50	68	68	10,000	10,000	21
BL108-08TF1-08TF2-120-m	8.00	3	0.50	87	141	10,000	10,000	30
BL110-10TF1-10TF2-120-m	10.00	3	0.25	121	311	10,000	10,000	40
BL112-12TF1-12TF2-120-m	12.00	3	0.25	143	502	10,000	10,000	52
BL114-14PF1-14PF2-120-m	14.00	3	0.25	206	877	10,000	10,000	65
BL116-16PF1-16PF2-120-m	16.00	3	0.25	235	1,280	10,000	10,000	75
BL118-18PF1-18PF2-120-m	18.00	3	0.25	264	1,790	10,000	10,000	80
BL120-20PF1-20PF2-120-m	20.00	3	0.25	292	2,420	10,000	10,000	95
BL122-22PF1-22PF2-120-m	22.00	3	0.25	321	3,182	10,000	10,000	100
BL124-24PF1-24PF2-120-m	24.00	3	0.25	349	4,088	10,000	10,000	125



Dual Ply Bellows

Part Number	A (OD)	Non-Concurrent Allowable Movements		Spring Rates		Cycle Life		WT
		Axial (in)	Lateral (in)	Axial (lbs/in)	Lateral (lbs/in)	Axial	Lateral	
BL203-03TF1-03TF2-120-m	3.00	2	0.50	98	28	10,000	10,000	13
BL204-04TF1-04TF2-120-m	4.00	3	0.50	60	29	10,000	10,000	17
BL205-05TF1-05TF2-120-m	5.00	3	0.50	57	42	10,000	10,000	22
BL206-06TF1-06TF2-120-m	6.00	3	0.50	66	66	10,000	10,000	23.5
BL208-08TF1-08TF2-120-m	8.00	3	0.50	84	135	10,000	10,000	24
BL210-10TF1-10TF2-120-m	10.00	3	0.25	130	330	10,000	10,000	44
BL212-12TF1-12TF2-120-m	12.00	3	0.25	152	529	10,000	10,000	57
BL214-14PF1-14PF2-120-m	14.00	3	0.25	162	671	10,000	10,000	68
BL216-16PF1-16PF2-120-m	16.00	3	0.25	184	979	10,000	10,000	79
BL218-18PF1-18PF2-120-m	18.00	3	0.25	206	1,371	10,000	10,000	84
BL220-20PF1-20PF2-120-m	20.00	3	0.25	174	1,285	10,000	10,000	100
BL222-22PF1-22PF2-120-m	22.00	3	0.25	191	1,689	10,000	10,000	109
BL224-24PF1-24PF2-120-m	24.00	3	0.25	208	2,170	10,000	10,000	132



Maximum Working Pressure @ 1000°F is 5 PSIG. All tabulated movements are non-concurrent.

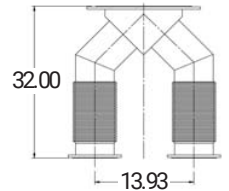
Dimensions are in inches. Weight is in pounds and is approximate. Flanges carbon steel painted high temp black, available in stainless steel. Bellows material standard stainless steel. Larger sizes and custom applications available, contact factory.

EXHAUST WYE CONNECTION CUMMINS ENGINE MODELS

Designed for OEM dual outlet engines, wye connectors are intended to combine dual outlets into a single connection point. Wye connectors reduce vibration and noise transmission to the remainder of the exhaust system. Flex sections are 321 stainless steel while the remainder is carbon steel. Inlet flanges are matched to engine outlet flanges as noted. Outlet flanges are drilled to ANSI 150#. Both inlet and outlet flanges are floating for ease of bolt hole alignment.

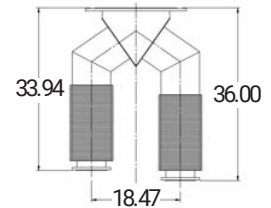
Cummins QST30

kW Rating	Part Number	Outlet	Inlets	WT
750, 800	Y06-D06CU2-10PF2-139-320-00- 	10" ANSI	6" CUFL	57
900	Y06-D06CU2-12PF2-139-320-00- 	12" ANSI	6" CUFL	69
1000	Y06-D06CU2-14PF2-139-320-00- 	14" ANSI	6" CUFL	75



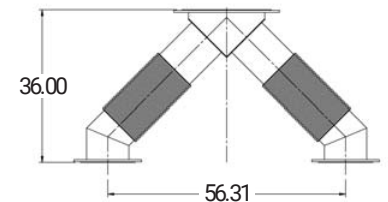
Cummins QSK50

kW Rating	Part Number	Outlet	Inlets	WT
1250	Y06-D06CU2-12PF2-184-360-21- 	12" ANSI	6" CUFL	72
1250, 1500	Y06-D06CU2-14PF2-184-360-21- 	14" ANSI	6" CUFL	78
1500	Y08-D08TF2-14PF2-184-360-21- 	14" ANSI	8" ANSI	91



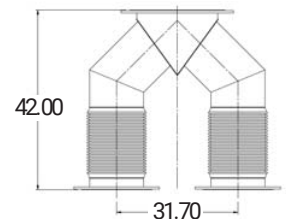
Cummins QSK60

kW Rating	Part Number	Outlet	Inlets	WT
1750, 2000	Y10-D10TF2-16PF2-563-360-00- 	16" ANSI	10" ANSI	162
2000, 2250	Y10-D10TF2-18PF2-563-360-00- 	18" ANSI	10" ANSI	163
2000, 2250	Y10-D10TF2-20PF2-563-360-00- 	20" ANSI	10" ANSI	176



Cummins QSK78

kW Rating	Part Number	Outlet	Inlets	WT
2500	Y12-D12TF2-18PF2-317-420-00- 	18" ANSI	12" ANSI	187
2500	Y12-D12TF2-20PF2-317-420-00- 	20" ANSI	12" ANSI	203
2500	Y12-D12TF2-22PF2-317-420-00- 	22" ANSI	12" ANSI	212
2500	Y12-D12TF2-24PF2-317-420-00- 	24" ANSI	12" ANSI	226

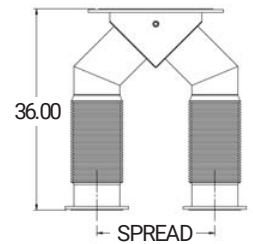


EXHAUST WYE CONNECTION CATERPILLAR ENGINE MODELS

Designed for OEM dual outlet engines, wye connectors are intended to combine dual outlets into a single connection point. Wye connectors reduce vibration and noise transmission to the remainder of the exhaust system. Flex sections are 321 stainless steel while the remainder is carbon steel. Inlet flanges are matched to engine outlet flanges as noted. Outlet flanges are drilled to ANSI 150#. Both inlet and outlet flanges are floating for ease of bolt hole alignment.

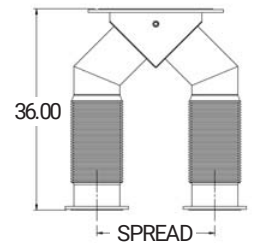
Caterpillar 3508B

kW Rating	Part Number	Outlet	Inlets	Spread	WT
910, 1000	Y08-D08CA2-12PF2-205-360-00- 	12" ANSI	8" CAT	20.47	90



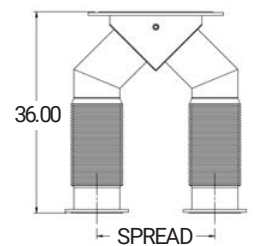
Caterpillar 3512B

kW Rating	Part Number	Outlet	Inlets	Spread	WT
1275, 1360, 1400	Y08-D08CA2-14PF2-207-360-00- 	14" ANSI	8" CAT	20.65	102
1360, 1400	Y08-D08CA2-16PF2-207-360-00- 	16" ANSI	8" CAT	20.65	113
1500	Y10-D10CA2-16PF2-207-360-00- 	16" ANSI	10" CAT	20.65	126



Caterpillar 3512C

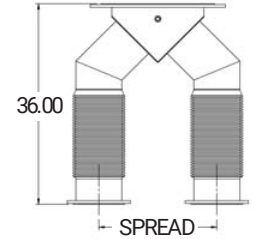
kW Rating	Part Number	Outlet	Inlets	Spread	WT
1275, 1360, 1400	Y08-D08CA2-14PF2-205-360-00- 	14" ANSI	8" CAT	20.50	102
1360, 1400	Y08-D08CA2-16PF2-205-360-00- 	16" ANSI	8" CAT	20.50	113
1500	Y10-D10CA2-16PF2-205-360-00- 	16" ANSI	10" CAT	20.50	126



WYE CONNECTORS CATERPILLAR ENGINE MODELS

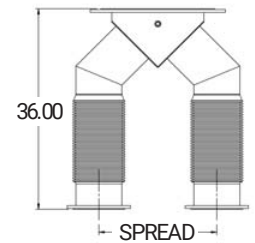
Caterpillar 3516B

kW Rating	Part Number	Outlet	Inlets	Spread	WT
1640	Y08-D08CA2-12PF2-205-360-00- 	12" ANSI	8" CAT	20.50	90
1640	Y08-D08CA2-16PF2-205-360-00- 	16" ANSI	8" CAT	20.50	113
1640	Y08-D08CA2-18PF2-205-360-00- 	18" ANSI	8" CAT	20.50	121
1640, 1825, 2000	Y10-D10CA2-16PF2-205-360-00- 	16" ANSI	10" CAT	20.50	126
1640, 1825, 2000	Y10-D10CA2-18PF2-205-360-00- 	18" ANSI	10" CAT	20.50	128
2000	Y12-D12CA2-18PF2-205-360-00- 	18" ANSI	12" CAT	20.50	156



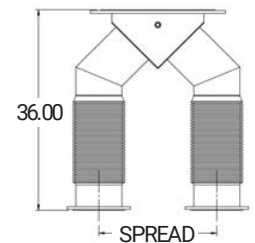
Caterpillar 3516C

kW Rating	Part Number	Outlet	Inlets	Spread	WT
1640, 1825, 2000	Y10-D10CA2-16PF2-205-360-00- 	16" ANSI	10" CAT	20.50	126
1640, 1825, 2000	Y10-D10CA2-18PF2-205-360-00- 	18" ANSI	10" CAT	20.50	128



Caterpillar 3516B Quad Turbo

kW Rating	Part Number	Outlet	Inlets	Spread	WT
1400, 1640	Y08-D08CA2-14PF2-205-360-00- 	14" ANSI	8" CAT	20.47	102
1400, 1640	Y08-D08CA2-16PF2-205-360-00- 	16" ANSI	8" CAT	20.47	113
1500, 1640, 1750	Y10-D10CA2-16PF2-205-360-00- 	16" ANSI	10" CAT	20.47	126
1750, 1825	Y10-D10CA2-18PF2-205-360-00- 	18" ANSI	10" CAT	20.47	128

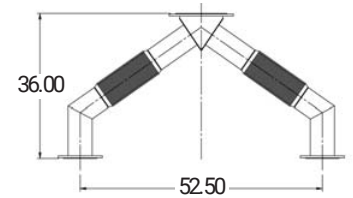


EXHAUST WYE CONNECTION DETROIT DIESEL/MTU ENGINE MODELS

Designed for OEM multi outlet engines, wye connectors are intended to combine dual outlets into a single connection point. Wye connectors reduce vibration and noise transmission to the remainder of the exhaust system. Flex sections are 321 stainless steel while the remainder is carbon steel. Inlet flanges are matched to engine outlet flanges as noted. Outlet flanges are drilled to ANSI 150#. Both inlet and outlet flanges are floating for ease of bolt hole alignment.

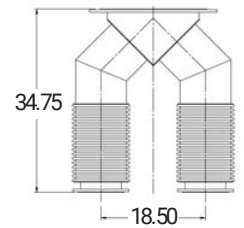
MTU 12V2000 & 16V2000

kW Rating	Part Number	Outlet	Inlets	WT
650, 750	Y06-D06DF2-10PF2-525-360-00-m	10" ANSI	6" DFL	70
900, 1000	Y06-D06DF2-12PF2-525-360-00-m	12" ANSI	6" DFL	82



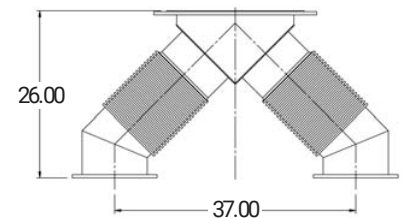
MTU 12V4000

kW Rating	Part Number	Outlet	Inlets	WT
1250, 1350, 1500, 1750	Y10-D10DF2-14PF2-185-348-00-m	14" ANSI	10" DFL	118
1250, 1350, 1500, 1750	Y10-D10DF2-16PF2-185-348-00-m	16" ANSI	10" DFL	127



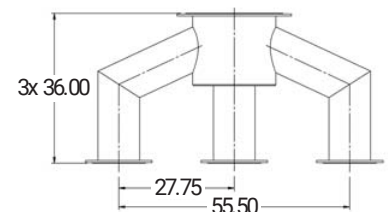
MTU 16V4000

kW Rating	Part Number	Outlet	Inlets	WT
2000	Y10-D10DF2-14PF2-370-260-00-m	14" ANSI	10" DFL	115
2000	Y10-D10DF2-16PF2-370-260-00-m	16" ANSI	10" DFL	117
2000	Y10-D10DF2-18PF2-370-260-00-m	18" ANSI	10" DFL	132



MTU 20V4000

kW Rating	Part Number	Outlet	Inlets	WT
2500-3250	Y10-T10TF2-20PF2-278-360-00-m	20" ANSI	10" ANSI	222
2500-3250	Y10-T10DF2-20PF2-278-360-00-m	20" ANSI	10" DFL	222



THERMAL WRAP PART NUMBER DEFINITION

The part numbers for silencer and accessory thermal wraps are defined as follows:

EM Silencers

The silencer thermal wrap part numbers will be the same as defined in the *EM Silencer Part Number Legend* but with the following changes:

Standard and Configurable Part Numbers

- Remove the number and associated hyphen defining the material
- Remove the "X" on configurable part numbers
- Add the following to the beginning of the part number:
 - For wire tied connection blankets add "W-" (standard)
 - For spring clip connection blankets add "WS-"

Example Thermal Wrap Part Numbers

- Silencer Part Number: JHFA0A**X**-D08PF14PF-**2**-XXXXXXXXXX
- Thermal Wrap w/ Wire: **W**-JHFA0A-D08PF14PF-XXXXXXXXXX
- Thermal Wrap w/ Springs: **WS**-JHFA0A-D08PF14PF-XXXXXXXXXX

Custom Part Numbers

- Remove the number and associated hyphen defining the material
- Remove the mounting type designation
- Add the following to the beginning of the part number:
 - For wire tied connection blankets add "W-" (standard)
 - For spring clip connection blankets add "WS-"

Example Part Numbers

- Silencer Part Number: JHFA0A**Z**-D08PF14PF-**2**-YYMMZZZZ
- Thermal Wrap w/ Wire: **W**-JHFA0Z-D08PF14PF-YYMMZZZZ
- Thermal Wrap w/ Springs: **WS**-JHFA0Z-D08PF14PF-YYMMZZZZ

Accessories Group 1 & 2

- Remove the number and associated hyphen defining the material
- Remove the number associated with each connection defining the mounting type
- For Bellows, remove the number defining single or dual ply
- Add the following to the beginning of the part number:
 - For wire tied connection blankets add "W-" (standard)
 - For spring clip connection blankets add "WS-"

Example Part Numbers

- Accessory Part Number: Y08X-D08CA**1**-14PF**1**-207-360-00-**2**
- Thermal Wrap w/ Wire: **W**-Y08X-D08CA-14PF-207-360-00
- Thermal Wrap w/ Springs: **WS**-Y08X-D08CA-14PF-207-360-00

We deliver results. We have a strong commitment to do everything necessary to solve a customer's problem. We have a passion for excellence, performance, and quality in everything we do.

SILENCERS THERMAL WRAPS

JI – Cylindrical Industrial Grade Thermal Wraps

Part Number	Silencer Part Number
W-JIEE0f-02MN-0000000	JIEE0f-02MN-m-0000000
W-JIEE0f-25MN-0000000	JIEE0f-25MN-m-0000000
W-JIEE0f-03MN-0000000	JIEE0f-03MN-m-0000000
W-JIEE0f-35MN-0000000	JIEE0f-35MN-m-0000000
W-JIEE0f-04PF-0000000	JIEE0f-04PF-m-0000000
W-JIEE0f-05PF-0000000	JIEE0f-05PF-m-0000000
W-JIEE0f-06PF-0000000	JIEE0f-06PF-m-0000000
W-JIEE0f-08PF-0000000	JIEE0f-08PF-m-0000000
W-JIEE0f-10PF-0000000	JIEE0f-10PF-m-0000000
W-JIEE0f-12PF-0000000	JIEE0f-12PF-m-0000000
W-JIEE0f-14PF-0000000	JIEE0f-14PF-m-0000000
W-JIEE0f-16PF-0000000	JIEE0f-16PF-m-0000000
W-JIEE0f-18PF-0000000	JIEE0f-18PF-m-0000000
W-JIEE0f-20PF-0000000	JIEE0f-20PF-m-0000000
W-JIEE0f-22PF-0000000	JIEE0f-22PF-m-0000000
W-JIEE0f-24PF-0000000	JIEE0f-24PF-m-0000000
W-JIGE0f-02MN-000000V	JIGE0f-02MN-m-000000V
W-JIGE0f-25MN-00000012	JIGE0f-25MN-m-00000012
W-JIGE0f-03MN-00000017	JIGE0f-03MN-m-00000017
W-JIGE0f-35MN-0000001F	JIGE0f-35MN-m-0000001F
W-JIGE0f-04PF-0000001K	JIGE0f-04PF-m-0000001K
W-JIGE0f-05PF-00000026	JIGE0f-05PF-m-00000026
W-JIGE0f-06PF-00000026	JIGE0f-06PF-m-00000026
W-JIGE0f-08PF-00000030	JIGE0f-08PF-m-00000030
W-JIGE0f-10PF-0000004A	JIGE0f-10PF-m-0000004A
W-JIGE0f-12PF-0000004V	JIGE0f-12PF-m-0000004V
W-JIGE0f-14PF-0000005Q	JIGE0f-14PF-m-0000005Q
W-JIGE0f-16PF-0000006K	JIGE0f-16PF-m-0000006K
W-JIGE0f-18PF-0000007K	JIGE0f-18PF-m-0000007K
W-JIGE0f-20PF-0000007F	JIGE0f-20PF-m-0000007F
W-JIGE0f-22PF-0000007Q	JIGE0f-22PF-m-0000007Q
W-JIGE0f-24PF-0000008K	JIGE0f-24PF-m-0000008K
W-JIGA0f-02MN-00000Q3K	JIGA0f-02MN-m-00000Q3K
W-JIGA0f-25MN-00000VYK	JIGA0f-25MN-m-00000VYK
W-JIGA0f-03MN-00001050	JIGA0f-03MN-m-00001050
W-JIGA0f-35MN-000016UA	JIGA0f-35MN-m-000016UA
W-JIGA0f-04PF-00001B0Q	JIGA0f-04PF-m-00001B0Q
W-JIGA0f-05PF-00001TKQ	JIGA0f-05PF-m-00001TKQ
W-JIGA0f-06PF-00001TKQ	JIGA0f-06PF-m-00001TKQ
W-JIGA0f-08PF-00002HV0	JIGA0f-08PF-m-00002HV0
W-JIGA0f-10PF-00003KHV	JIGA0f-10PF-m-00003KHV
W-JIGA0f-12PF-0000428K	JIGA0f-12PF-m-0000428K
W-JIGA0f-14PF-00004SC5	JIGA0f-14PF-m-00004SC5
W-JIGA0f-16PF-00005HFQ	JIGA0f-16PF-m-00005HFQ
W-JIGA0f-18PF-00006BQQ	JIGA0f-18PF-m-00006BQQ
W-JIGA0f-20PF-000067JA	JIGA0f-20PF-m-000067JA
W-JIGA0f-22PF-00006FX5	JIGA0f-22PF-m-00006FX5
W-JIGA0f-24PF-0000760Q	JIGA0f-24PF-m-0000760Q

JR – Cylindrical Residential Grade Thermal Wraps

Part Number	Silencer Part Number
W-JREE0f-02MN-0000000	JREE0f-02MN-m-0000000
W-JREE0f-25MN-0000000	JREE0f-25MN-m-0000000
W-JREE0f-03MN-0000000	JREE0f-03MN-m-0000000
W-JREE0f-35MN-0000000	JREE0f-35MN-m-0000000
W-JREE0f-04PF-0000000	JREE0f-04PF-m-0000000
W-JREE0f-05PF-0000000	JREE0f-05PF-m-0000000
W-JREE0f-06PF-0000000	JREE0f-06PF-m-0000000
W-JREE0f-08PF-0000000	JREE0f-08PF-m-0000000
W-JREE0f-10PF-0000000	JREE0f-10PF-m-0000000
W-JREE0f-12PF-0000000	JREE0f-12PF-m-0000000
W-JREE0f-14PF-0000000	JREE0f-14PF-m-0000000
W-JREE0f-16PF-0000000	JREE0f-16PF-m-0000000
W-JREE0f-18PF-0000000	JREE0f-18PF-m-0000000
W-JREE0f-20PF-0000000	JREE0f-20PF-m-0000000
W-JREE0f-22PF-0000000	JREE0f-22PF-m-0000000
W-JREE0f-24PF-0000000	JREE0f-24PF-m-0000000
W-JRGE0f-02MN-000000V	JRGE0f-02MN-m-000000V
W-JRGE0f-25MN-00000011	JRGE0f-25MN-m-00000011
W-JRGE0f-03MN-00000016	JRGE0f-03MN-m-00000016
W-JRGE0f-35MN-0000001F	JRGE0f-35MN-m-0000001F
W-JRGE0f-04PF-0000001K	JRGE0f-04PF-m-0000001K
W-JRGE0f-05PF-0000001W	JRGE0f-05PF-m-0000001W
W-JRGE0f-06PF-00000026	JRGE0f-06PF-m-00000026
W-JRGE0f-08PF-00000030	JRGE0f-08PF-m-00000030
W-JRGE0f-10PF-0000004A	JRGE0f-10PF-m-0000004A
W-JRGE0f-12PF-00000050	JRGE0f-12PF-m-00000050
W-JRGE0f-14PF-0000005Q	JRGE0f-14PF-m-0000005Q
W-JRGE0f-16PF-0000006K	JRGE0f-16PF-m-0000006K
W-JRGE0f-18PF-00000090	JRGE0f-18PF-m-00000090
W-JRGE0f-20PF-000000A0	JRGE0f-20PF-m-000000A0
W-JRGE0f-22PF-0000008A	JRGE0f-22PF-m-0000008A
W-JRGE0f-24PF-0000008A	JRGE0f-24PF-m-0000008A
W-JRGA0f-02MN-00000Q3K	JRGA0f-02MN-m-00000Q3K
W-JRGA0f-25MN-00000V4A	JRGA0f-25MN-m-00000V4A
W-JRGA0f-03MN-00000ZAQ	JRGA0f-03MN-m-00000ZAQ
W-JRGA0f-35MN-000016UA	JRGA0f-35MN-m-000016UA
W-JRGA0f-04PF-00001B0Q	JRGA0f-04PF-m-00001B0Q
W-JRGA0f-05PF-00001K7V	JRGA0f-05PF-m-00001K7V
W-JRGA0f-06PF-00001TKQ	JRGA0f-06PF-m-00001TKQ
W-JRGA0f-08PF-00002HV0	JRGA0f-08PF-m-00002HV0
W-JRGA0f-10PF-00003KHV	JRGA0f-10PF-m-00003KHV
W-JRGA0f-12PF-000046F0	JRGA0f-12PF-m-000046F0
W-JRGA0f-14PF-00004SC5	JRGA0f-14PF-m-00004SC5
W-JRGA0f-16PF-00005HFQ	JRGA0f-16PF-m-00005HFQ
W-JRGA0f-18PF-00007IK0	JRGA0f-18PF-m-00007IK0
W-JRGA0f-20PF-00008CV0	JRGA0f-20PF-m-00008CV0
W-JRGA0f-22PF-00006XMV	JRGA0f-22PF-m-00006XMV
W-JRGA0f-24PF-00006XMV	JRGA0f-24PF-m-00006XMV

SILENCERS THERMAL WRAPS

JC – Cylindrical Critical Grade Thermal Wraps	
Part Number	Silencer Part Number
W-JCEE0f-02MN-0000000	JCEE0f-02MN-m-0000000
W-JCEE0f-25MN-0000000	JCEE0f-25MN-m-0000000
W-JCEE0f-03MN-0000000	JCEE0f-03MN-m-0000000
W-JCEE0f-35MN-0000000	JCEE0f-35MN-m-0000000
W-JCEE0f-04PF-0000000	JCEE0f-04PF-m-0000000
W-JCEE0f-05PF-0000000	JCEE0f-05PF-m-0000000
W-JCEE0f-06PF-0000000	JCEE0f-06PF-m-0000000
W-JCEE0f-08PF-0000000	JCEE0f-08PF-m-0000000
W-JCEE0f-10PF-0000000	JCEE0f-10PF-m-0000000
W-JCEE0f-12PF-0000000	JCEE0f-12PF-m-0000000
W-JCEE0f-14PF-0000000	JCEE0f-14PF-m-0000000
W-JCEE0f-16PF-0000000	JCEE0f-16PF-m-0000000
W-JCEE0f-18PF-0000000	JCEE0f-18PF-m-0000000
W-JCEE0f-20PF-0000000	JCEE0f-20PF-m-0000000
W-JCEE0f-22PF-0000000	JCEE0f-22PF-m-0000000
W-JCEE0f-24PF-0000000	JCEE0f-24PF-m-0000000
W-JCGE0f-02MN-0000023	JCGE0f-02MN-m-0000023
W-JCGE0f-25MN-0000024	JCGE0f-25MN-m-0000024
W-JCGE0f-03MN-0000024	JCGE0f-03MN-m-0000024
W-JCGE0f-35MN-000002N	JCGE0f-35MN-m-000002N
W-JCGE0f-04PF-000002N	JCGE0f-04PF-m-000002N
W-JCGE0f-05PF-000003I	JCGE0f-05PF-m-000003I
W-JCGE0f-06PF-000003I	JCGE0f-06PF-m-000003I
W-JCGE0f-08PF-000004Q	JCGE0f-08PF-m-000004Q
W-JCGE0f-10PF-000005Q	JCGE0f-10PF-m-000005Q
W-JCGE0f-12PF-0000065	JCGE0f-12PF-m-0000065
W-JCGE0f-14PF-000006K	JCGE0f-14PF-m-000006K
W-JCGE0f-16PF-000008A	JCGE0f-16PF-m-000008A
W-JCGE0f-18PF-000009F	JCGE0f-18PF-m-000009F
W-JCGE0f-20PF-00000AA	JCGE0f-20PF-m-00000AA
W-JCGE0f-22PF-00000BF	JCGE0f-22PF-m-00000BF
W-JCGE0f-24PF-00000BQ	JCGE0f-24PF-m-00000BQ
W-JCGA0f-02MN-00001R2V	JCGA0f-02MN-m-00001R2V
W-JCGA0f-25MN-00001RX5	JCGA0f-25MN-m-00001RX5
W-JCGA0f-03MN-00001RX5	JCGA0f-03MN-m-00001RX5
W-JCGA0f-35MN-000027TK	JCGA0f-35MN-m-000027TK
W-JCGA0f-04PF-000027TK	JCGA0f-04PF-m-000027TK
W-JCGA0f-05PF-00002XX5	JCGA0f-05PF-m-00002XX5
W-JCGA0f-06PF-00002XX5	JCGA0f-06PF-m-00002XX5
W-JCGA0f-08PF-00003Y25	JCGA0f-08PF-m-00003Y25
W-JCGA0f-10PF-00004SC5	JCGA0f-10PF-m-00004SC5
W-JCGA0f-12PF-000054WF	JCGA0f-12PF-m-000054WF
W-JCGA0f-14PF-00005HFQ	JCGA0f-14PF-m-00005HFQ
W-JCGA0f-16PF-00006XMV	JCGA0f-16PF-m-00006XMV
W-JCGA0f-18PF-00007W4A	JCGA0f-18PF-m-00007W4A
W-JCGA0f-20PF-00008L7V	JCGA0f-20PF-m-00008L7V
W-JCGA0f-22PF-00009JPA	JCGA0f-22PF-m-00009JPA
W-JCGA0f-24PF-00009T25	JCGA0f-24PF-m-00009T25

JH – Cylindrical Hospital Grade Thermal Wraps	
Part Number	Silencer Part Number
W-JHEE0f-02MN-0000000	JHEE0f-02MN-m-0000000
W-JHEE0f-25MN-0000000	JHEE0f-25MN-m-0000000
W-JHEE0f-03MN-0000000	JHEE0f-03MN-m-0000000
W-JHEE0f-35MN-0000000	JHEE0f-35MN-m-0000000
W-JHEE0f-04PF-0000000	JHEE0f-04PF-m-0000000
W-JHEE0f-05PF-0000000	JHEE0f-05PF-m-0000000
W-JHEE0f-06PF-0000000	JHEE0f-06PF-m-0000000
W-JHEE0f-08PF-0000000	JHEE0f-08PF-m-0000000
W-JHEE0f-10PF-0000000	JHEE0f-10PF-m-0000000
W-JHEE0f-12PF-0000000	JHEE0f-12PF-m-0000000
W-JHEE0f-14PF-0000000	JHEE0f-14PF-m-0000000
W-JHEE0f-16PF-0000000	JHEE0f-16PF-m-0000000
W-JHEE0f-18PF-0000000	JHEE0f-18PF-m-0000000
W-JHEE0f-20PF-0000000	JHEE0f-20PF-m-0000000
W-JHEE0f-22PF-0000000	JHEE0f-22PF-m-0000000
W-JHEE0f-24PF-0000000	JHEE0f-24PF-m-0000000
W-JHGE0f-02MN-000001K	JHGE0f-02MN-m-000001K
W-JHGE0f-25MN-0000028	JHGE0f-25MN-m-0000028
W-JHGE0f-03MN-0000028	JHGE0f-03MN-m-0000028
W-JHGE0f-35MN-000002Q	JHGE0f-35MN-m-000002Q
W-JHGE0f-04PF-000002Q	JHGE0f-04PF-m-000002Q
W-JHGE0f-05PF-0000030	JHGE0f-05PF-m-0000030
W-JHGE0f-06PF-0000030	JHGE0f-06PF-m-0000030
W-JHGE0f-08PF-0000050	JHGE0f-08PF-m-0000050
W-JHGE0f-10PF-000005Q	JHGE0f-10PF-m-000005Q
W-JHGE0f-12PF-000006K	JHGE0f-12PF-m-000006K
W-JHGE0f-14PF-000006V	JHGE0f-14PF-m-000006V
W-JHGE0f-16PF-0000080	JHGE0f-16PF-m-0000080
W-JHGE0f-18PF-00000AV	JHGE0f-18PF-m-00000AV
W-JHGE0f-20PF-00000BF	JHGE0f-20PF-m-00000BF
W-JHGE0f-22PF-00000C0	JHGE0f-22PF-m-00000C0
W-JHGE0f-24PF-00000FQ	JHGE0f-24PF-m-00000FQ
W-JHGA0f-02MN-00001B0Q	JHGA0f-02MN-m-00001B0Q
W-JHGA0f-25MN-00001V9A	JHGA0f-25MN-m-00001V9A
W-JHGA0f-03MN-00001V9A	JHGA0f-03MN-m-00001V9A
W-JHGA0f-35MN-000029H5	JHGA0f-35MN-m-000029H5
W-JHGA0f-04PF-000029H5	JHGA0f-04PF-m-000029H5
W-JHGA0f-05PF-00002HV0	JHGA0f-05PF-m-00002HV0
W-JHGA0f-06PF-00002HV0	JHGA0f-06PF-m-00002HV0
W-JHGA0f-08PF-000046F0	JHGA0f-08PF-m-000046F0
W-JHGA0f-10PF-00004SC5	JHGA0f-10PF-m-00004SC5
W-JHGA0f-12PF-00005HFQ	JHGA0f-12PF-m-00005HFQ
W-JHGA0f-14PF-00005QTK	JHGA0f-14PF-m-00005QTK
W-JHGA0f-16PF-00006PA0	JHGA0f-16PF-m-00006PA0
W-JHGA0f-18PF-000092YK	JHGA0f-18PF-m-000092YK
W-JHGA0f-20PF-00009JPA	JHGA0f-20PF-m-00009JPA
W-JHGA0f-22PF-0000A1F0	JHGA0f-22PF-m-0000A1F0
W-JHGA0f-24PF-0000D575	JHGA0f-24PF-m-0000D575

SILENCERS THERMAL WRAPS

TR – Low Pressure Drop Residential Grade Thermal Wraps

Part Number	Silencer Part Number
W-TREEPf-04PF-0000000	TREEPf-04PF-1-0000000
W-TREEPf-05PF-0000000	TREEPf-05PF-1-0000000
W-TREEPf-06PF-0000000	TREEPf-06PF-1-0000000
W-TREEPf-08PF-0000000	TREEPf-08PF-1-0000000
W-TREEPf-10PF-0000000	TREEPf-10PF-1-0000000
W-TREEPf-12PF-0000000	TREEPf-12PF-1-0000000
W-TREEPf-14PF-0000000	TREEPf-14PF-1-0000000
W-TREEPf-16PF-0000000	TREEPf-16PF-1-0000000
W-TREEPf-18PF-0000000	TREEPf-18PF-1-0000000
W-TREEPf-20PF-0000000	TREEPf-20PF-2-0000000
W-TREEPf-22PF-0000000	TREEPf-22PF-2-0000000
W-TREEPf-24PF-0000000	TREEPf-24PF-2-0000000
W-TRGEPf-04PF-000001F	TRGEPf-04PF-1-000001F
W-TRGEPf-05PF-000001Q	TRGEPf-05PF-1-000001Q
W-TRGEPf-06PF-0000020	TRGEPf-06PF-1-0000020
W-TRGEPf-08PF-000002A	TRGEPf-08PF-1-000002A
W-TRGEPf-10PF-000002V	TRGEPf-10PF-1-000002V
W-TRGEPf-12PF-0000035	TRGEPf-12PF-1-0000035
W-TRGEPf-14PF-000003F	TRGEPf-14PF-1-000003F
W-TRGEPf-16PF-0000040	TRGEPf-16PF-1-0000040
W-TRGEPf-18PF-000004A	TRGEPf-18PF-1-000004A
W-TRGEPf-20PF-000004V	TRGEPf-20PF-2-000004V
W-TRGEPf-22PF-000005F	TRGEPf-22PF-2-000005F
W-TRGEPf-24PF-000005Q	TRGEPf-24PF-2-000005Q

TC – Low Pressure Drop Critical Grade Thermal Wraps

Part Number	Silencer Part Number
W-TCEEPf-04PF-0000000	TCEEPf-04PF-1-0000000
W-TCEEPf-05PF-0000000	TCEEPf-05PF-1-0000000
W-TCEEPf-06PF-0000000	TCEEPf-06PF-1-0000000
W-TCEEPf-08PF-0000000	TCEEPf-08PF-1-0000000
W-TCEEPf-10PF-0000000	TCEEPf-10PF-1-0000000
W-TCEEPf-12PF-0000000	TCEEPf-12PF-1-0000000
W-TCEEPf-14PF-0000000	TCEEPf-14PF-1-0000000
W-TCEEPf-16PF-0000000	TCEEPf-16PF-2-0000000
W-TCEEPf-18PF-0000000	TCEEPf-18PF-2-0000000
W-TCEEPf-20PF-0000000	TCEEPf-20PF-2-0000000
W-TCEEPf-22PF-0000000	TCEEPf-22PF-2-0000000
W-TCEEPf-24PF-0000000	TCEEPf-24PF-2-0000000
W-TCGEPf-04PF-000001Q	TCGEPf-04PF-1-000001Q
W-TCGEPf-05PF-000001Q	TCGEPf-05PF-1-000001Q
W-TCGEPf-06PF-0000020	TCGEPf-06PF-1-0000020
W-TCGEPf-08PF-000002A	TCGEPf-08PF-1-000002A
W-TCGEPf-10PF-000002V	TCGEPf-10PF-1-000002V
W-TCGEPf-12PF-0000035	TCGEPf-12PF-1-0000035
W-TCGEPf-14PF-000003F	TCGEPf-14PF-1-000003F
W-TCGEPf-16PF-0000040	TCGEPf-16PF-2-0000040
W-TCGEPf-18PF-0000055	TCGEPf-18PF-2-0000055
W-TCGEPf-20PF-000005F	TCGEPf-20PF-2-000005F
W-TCGEPf-22PF-0000060	TCGEPf-22PF-2-0000060
W-TCGEPf-24PF-000006A	TCGEPf-24PF-2-000006A

SILENCERS THERMAL WRAPS

DKC – Disk Critical Grade Thermal Wraps

Part Number	Silencer Part Number
W-DKCBA2f-04PF-0000C7K0	DKCBA2f-04PF-m-0000C7K0
W-DKCBA2f-05PF-0000C7K0	DKCBA2f-05PF-m-0000C7K0
W-DKCBA2f-06PF-0000C7K0	DKCBA2f-06PF-m-0000C7K0
W-DKCBA2f-08PF-0000C7K0	DKCBA2f-08PF-m-0000C7K0
W-DKCBA2f-10PF-0000C7K0	DKCBA2f-10PF-m-0000C7K0
W-DKCBA2f-12PF-0000C7K0	DKCBA2f-12PF-m-0000C7K0
W-DKCBA2f-14PF-0000C7K0	DKCBA2f-14PF-m-0000C7K0
W-DKCBA2f-16PF-0000C7K0	DKCBA2f-16PF-m-0000C7K0
W-DKCBA2f-18PF-0000C7K0	DKCBA2f-18PF-m-0000C7K0
W-DKCBA2f-20PF-0000C7K0	DKCBA2f-20PF-m-0000C7K0
W-DKCBA2f-22PF-0000C7K0	DKCBA2f-22PF-m-0000C7K0
W-DKCBA2f-24PF-0000C7K0	DKCBA2f-24PF-m-0000C7K0

DKSC – Disk Super Critical Grade Thermal Wraps

Part Number	Silencer Part Number
W-DKSCBA2f-04PF-0000C7K0	DKSCBA2f-04PF-m-0000C7K0
W-DKSCBA2f-05PF-0000C7K0	DKSCBA2f-05PF-m-0000C7K0
W-DKSCBA2f-06PF-0000C7K0	DKSCBA2f-06PF-m-0000C7K0
W-DKSCBA2f-08PF-0000C7K0	DKSCBA2f-08PF-m-0000C7K0
W-DKSCBA2f-10PF-0000C7K0	DKSCBA2f-10PF-m-0000C7K0
W-DKSCBA2f-12PF-0000C7K0	DKSCBA2f-12PF-m-0000C7K0
W-DKSCBA2f-14PF-0000C7K0	DKSCBA2f-14PF-m-0000C7K0
W-DKSCBA2f-16PF-0000C7K0	DKSCBA2f-16PF-m-0000C7K0
W-DKSCBA2f-18PF-0000C7K0	DKSCBA2f-18PF-m-0000C7K0
W-DKSCBA2f-20PF-0000C7K0	DKSCBA2f-20PF-m-0000C7K0
W-DKSCBA2f-22PF-0000C7K0	DKSCBA2f-22PF-m-0000C7K0
W-DKSCBA2f-24PF-0000C7K0	DKSCBA2f-24PF-m-0000C7K0

DKH – Disk Hospital Grade Thermal Wraps

Part Number	Silencer Part Number
W-DKHBA2f-04PF-0000C7K0	DKHBA2f-04PF-m-0000C7K0
W-DKHBA2f-05PF-0000C7K0	DKHBA2f-05PF-m-0000C7K0
W-DKHBA2f-06PF-0000C7K0	DKHBA2f-06PF-m-0000C7K0
W-DKHBA2f-08PF-0000C7K0	DKHBA2f-08PF-m-0000C7K0
W-DKHBA2f-10PF-0000C7K0	DKHBA2f-10PF-m-0000C7K0
W-DKHBA2f-12PF-0000C7K0	DKHBA2f-12PF-m-0000C7K0
W-DKHBA2f-14PF-0000C7K0	DKHBA2f-14PF-m-0000C7K0
W-DKHBA2f-16PF-0000C7K0	DKHBA2f-16PF-m-0000C7K0
W-DKHBA2f-18PF-0000C7K0	DKHBA2f-18PF-m-0000C7K0
W-DKHBA2f-20PF-0000C7K0	DKHBA2f-20PF-m-0000C7K0
W-DKHBA2f-22PF-0000C7K0	DKHBA2f-22PF-m-0000C7K0
W-DKHBA2f-24PF-0000C7K0	DKHBA2f-24PF-m-0000C7K0

DSC – Disk Spark Arresting Critical Grade Thermal Wraps

Part Number	Silencer Part Number
W-DSCBA2f-06PF-0000C7K0	DSCBA2f-06PF-m-0000C7K0
W-DSCBA2f-08PF-0000C7K0	DSCBA2f-08PF-m-0000C7K0
W-DSCBA2f-10PF-0000C7K0	DSCBA2f-10PF-m-0000C7K0
W-DSCBA2f-12PF-0000C7K0	DSCBA2f-12PF-m-0000C7K0

DSH – Disk Spark Arresting Hospital Grade Thermal Wraps

Part Number	Silencer Part Number
W-DSHBA2f-06PF-0000C7K0	DSHBA2f-06PF-m-0000C7K0
W-DSHBA2f-08PF-0000C7K0	DSHBA2f-08PF-m-0000C7K0
W-DSHBA2f-10PF-0000C7K0	DSHBA2f-10PF-m-0000C7K0
W-DSHBA2f-12PF-0000C7K0	DSHBA2f-12PF-m-0000C7K0

SILENCERS THERMAL WRAPS

CPJ – Compact Residential Grade Thermal Wraps

Part Number	Silencer Part Number
W-CPJEE1f-02MN-0000000	CPJEE1f-02MN-m-0000000
W-CPJEE1f-25MN-0000000	CPJEE1f-25MN-m-0000000
W-CPJEE1f-03MN-0000000	CPJEE1f-03MN-m-0000000
W-CPJEE1f-35MN-0000000	CPJEE1f-35MN-m-0000000
W-CPJEE1f-04PF-0000000	CPJEE1f-04PF-m-0000000
W-CPJEE1f-05PF-0000000	CPJEE1f-05PF-m-0000000
W-CPJEE1f-06PF-0000000	CPJEE1f-06PF-m-0000000
W-CPJEE1f-08PF-0000000	CPJEE1f-08PF-m-0000000
W-CPJEE1f-10PF-0000000	CPJEE1f-10PF-m-0000000
W-CPJGE1f-02MN-0000001K	CPJGE1f-02MN-m-0000001K
W-CPJGE1f-25MN-0000001K	CPJGE1f-25MN-m-0000001K
W-CPJGE1f-03MN-0000001V	CPJGE1f-03MN-m-0000001V
W-CPJGE1f-35MN-00000028	CPJGE1f-35MN-m-00000028
W-CPJGE1f-04PF-0000002Q	CPJGE1f-04PF-m-0000002Q
W-CPJGE1f-05PF-0000002X	CPJGE1f-05PF-m-0000002X
W-CPJGE1f-06PF-0000004M	CPJGE1f-06PF-m-0000004M
W-CPJGE1f-08PF-0000004M	CPJGE1f-08PF-m-0000004M
W-CPJGE1f-10PF-0000005Q	CPJGE1f-10PF-m-0000005Q
W-CPJEP1f-02MN-0000000	CPJEP1f-02MN-m-0000000
W-CPJEP1f-25MN-0000000	CPJEP1f-25MN-m-0000000
W-CPJEP1f-03MN-0000000	CPJEP1f-03MN-m-0000000
W-CPJEP1f-35MN-0000000	CPJEP1f-35MN-m-0000000
W-CPJEP1f-04PF-0000000	CPJEP1f-04PF-m-0000000
W-CPJEP1f-05PF-0000000	CPJEP1f-05PF-m-0000000
W-CPJEP1f-06PF-0000000	CPJEP1f-06PF-m-0000000
W-CPJEP1f-08PF-0000000	CPJEP1f-08PF-m-0000000
W-CPJEP1f-10PF-0000000	CPJEP1f-10PF-m-0000000
W-CPJGA1f-02MN-00001050	CPJGA1f-02MN-m-00001050
W-CPJGA1f-25MN-00001A6F	CPJGA1f-25MN-m-00001A6F
W-CPJGA1f-03MN-000012MV	CPJGA1f-03MN-m-000012MV
W-CPJGA1f-35MN-00001BV0	CPJGA1f-35MN-m-00001BV0
W-CPJGA1f-04PF-00001JDK	CPJGA1f-04PF-m-00001JDK
W-CPJGA1f-05PF-00001WXV	CPJGA1f-05PF-m-00001WXV
W-CPJGA1f-06PF-00002DNK	CPJGA1f-06PF-m-00002DNK
W-CPJGA1f-08PF-00002R7V	CPJGA1f-08PF-m-00002R7V
W-CPJGA1f-10PF-00002ZKQ	CPJGA1f-10PF-m-00002ZKQ

SILENCERS THERMAL WRAPS

OC – Oval Critical Grade Thermal Wraps	
Part Number	Silencer Part Number
W-OCCE0f-04PF-0000000	OCCE0f-04PF-m-0000000
W-OCCE0f-05PF-0000000	OCCE0f-05PF-m-0000000
W-OCCE0f-06PF-0000000	OCCE0f-06PF-m-0000000
W-OCCE0f-08PF-0000000	OCCE0f-08PF-m-0000000
W-OCCE0f-10PF-0000000	OCCE0f-10PF-m-0000000
W-OCCE0f-12PF-0000000	OCCE0f-12PF-m-0000000
W-OCCE0f-14PF-0000000	OCCE0f-14PF-m-0000000
W-OCCE0f-16PF-0000000	OCCE0f-16PF-m-0000000
W-OCCE0f-18PF-0000000	OCCE0f-18PF-m-0000000
W-OCCE0f-20PF-0000000	OCCE0f-20PF-m-0000000
W-OCCE0f-22PF-0000000	OCCE0f-22PF-m-0000000
W-OCCE0f-24PF-0000000	OCCE0f-24PF-m-0000000
W-OCBE0f-04PF-000001V	OCBE0f-04PF-m-000001V
W-OCBE0f-05PF-0000020	OCBE0f-05PF-m-0000020
W-OCBE0f-06PF-000002A	OCBE0f-06PF-m-000002A
W-OCBE0f-08PF-000002K	OCBE0f-08PF-m-000002K
W-OCBE0f-10PF-000002Q	OCBE0f-10PF-m-000002Q
W-OCBE0f-12PF-0000030	OCBE0f-12PF-m-0000030
W-OCBE0f-14PF-0000035	OCBE0f-14PF-m-0000035
W-OCBE0f-16PF-000003F	OCBE0f-16PF-m-000003F
W-OCBE0f-18PF-000003Q	OCBE0f-18PF-m-000003Q
W-OCBE0f-20PF-0000040	OCBE0f-20PF-m-0000040
W-OCBE0f-22PF-000004A	OCBE0f-22PF-m-000004A
W-OCBE0f-24PF-000004K	OCBE0f-24PF-m-000004K
W-OCBT0f-04PF-00001JDK	OCBT0f-04PF-m-00001JDK
W-OCBT0f-05PF-00001NK0	OCBT0f-05PF-m-00001NK0
W-OCBT0f-06PF-00001WXV	OCBT0f-06PF-m-00001WXV
W-OCBT0f-08PF-000025AQ	OCBT0f-08PF-m-000025AQ
W-OCBT0f-10PF-000029H5	OCBT0f-10PF-m-000029H5
W-OCBT0f-12PF-00002HV0	OCBT0f-12PF-m-00002HV0
W-OCBT0f-14PF-00002M1F	OCBT0f-14PF-m-00002M1F
W-OCBT0f-16PF-00002VEA	OCBT0f-16PF-m-00002VEA
W-OCBT0f-18PF-000033S5	OCBT0f-18PF-m-000033S5
W-OCBT0f-20PF-00003C50	OCBT0f-20PF-m-00003C50
W-OCBT0f-22PF-00003KHV	OCBT0f-22PF-m-00003KHV
W-OCBT0f-24PF-00003TVQ	OCBT0f-24PF-m-00003TVQ

OSC – Oval Super Critical Grade Thermal Wraps	
Part Number	Silencer Part Number
W-OSCEE2f-04PF-0000000	OSCEE2f-04PF-m-0000000
W-OSCEE2f-05PF-0000000	OSCEE2f-05PF-m-0000000
W-OSCEE2f-06PF-0000000	OSCEE2f-06PF-m-0000000
W-OSCEE2f-08PF-0000000	OSCEE2f-08PF-m-0000000
W-OSCEE2f-10PF-0000000	OSCEE2f-10PF-m-0000000
W-OSCEE2f-12PF-0000000	OSCEE2f-12PF-m-0000000
W-OSCEE2f-14PF-0000000	OSCEE2f-14PF-m-0000000
W-OSCEE2f-16PF-0000000	OSCEE2f-16PF-m-0000000
W-OSCEE2f-18PF-0000000	OSCEE2f-18PF-m-0000000
W-OSCEE2f-20PF-0000000	OSCEE2f-20PF-m-0000000
W-OSCEE2f-22PF-0000000	OSCEE2f-22PF-m-0000000
W-OSCEE2f-24PF-0000000	OSCEE2f-24PF-m-0000000
W-OSCB2f-04PF-000001V	OSCB2f-04PF-m-000001V
W-OSCB2f-05PF-0000020	OSCB2f-05PF-m-0000020
W-OSCB2f-06PF-0000025	OSCB2f-06PF-m-0000025
W-OSCB2f-08PF-000002F	OSCB2f-08PF-m-000002F
W-OSCB2f-10PF-000002Q	OSCB2f-10PF-m-000002Q
W-OSCB2f-12PF-0000030	OSCB2f-12PF-m-0000030
W-OSCB2f-14PF-0000035	OSCB2f-14PF-m-0000035
W-OSCB2f-16PF-000003F	OSCB2f-16PF-m-000003F
W-OSCB2f-18PF-000003Q	OSCB2f-18PF-m-000003Q
W-OSCB2f-20PF-0000040	OSCB2f-20PF-m-0000040
W-OSCB2f-22PF-000004A	OSCB2f-22PF-m-000004A
W-OSCB2f-24PF-000004K	OSCB2f-24PF-m-000004K
W-OSCBT2f-04PF-00001JDK	OSCBT2f-04PF-m-00001JDK
W-OSCBT2f-05PF-00001NK0	OSCBT2f-05PF-m-00001NK0
W-OSCBT2f-06PF-00001SRF	OSCBT2f-06PF-m-00001SRF
W-OSCBT2f-08PF-0000214A	OSCBT2f-08PF-m-0000214A
W-OSCBT2f-10PF-000029H5	OSCBT2f-10PF-m-000029H5
W-OSCBT2f-12PF-00002HV0	OSCBT2f-12PF-m-00002HV0
W-OSCBT2f-14PF-00002M1F	OSCBT2f-14PF-m-00002M1F
W-OSCBT2f-16PF-00002VEA	OSCBT2f-16PF-m-00002VEA
W-OSCBT2f-18PF-000033S5	OSCBT2f-18PF-m-000033S5
W-OSCBT2f-20PF-00003C50	OSCBT2f-20PF-m-00003C50
W-OSCBT2f-22PF-00003KHV	OSCBT2f-22PF-m-00003KHV
W-OSCBT2f-24PF-00003TVQ	OSCBT2f-24PF-m-00003TVQ

SILENCERS THERMAL WRAPS

OH – Oval Hospital Grade Thermal Wraps

Part Number	Silencer Part Number
W-OHEE2f-04PF-00000000	OHEE2f-04PF-m-00000000
W-OHEE2f-05PF-00000000	OHEE2f-05PF-m-00000000
W-OHEE2f-06PF-00000000	OHEE2f-06PF-m-00000000
W-OHEE2f-08PF-00000000	OHEE2f-08PF-m-00000000
W-OHEE2f-10PF-00000000	OHEE2f-10PF-m-00000000
W-OHEE2f-12PF-00000000	OHEE2f-12PF-m-00000000
W-OHEE2f-14PF-00000000	OHEE2f-14PF-m-00000000
W-OHEE2f-16PF-00000000	OHEE2f-16PF-m-00000000
W-OHEE2f-18PF-00000000	OHEE2f-18PF-m-00000000
W-OHEE2f-20PF-00000000	OHEE2f-20PF-m-00000000
W-OHEE2f-22PF-00000000	OHEE2f-22PF-m-00000000
W-OHEE2f-24PF-00000000	OHEE2f-24PF-m-00000000
W-OHBE2f-04PF-0000001V	OHBE2f-04PF-m-0000001V
W-OHBE2f-05PF-00000020	OHBE2f-05PF-m-00000020
W-OHBE2f-06PF-0000002A	OHBE2f-06PF-m-0000002A
W-OHBE2f-08PF-0000002K	OHBE2f-08PF-m-0000002K
W-OHBE2f-10PF-0000002Q	OHBE2f-10PF-m-0000002Q
W-OHBE2f-12PF-00000030	OHBE2f-12PF-m-00000030
W-OHBE2f-14PF-00000035	OHBE2f-14PF-m-00000035
W-OHBE2f-16PF-0000003F	OHBE2f-16PF-m-0000003F
W-OHBE2f-18PF-0000003Q	OHBE2f-18PF-m-0000003Q
W-OHBE2f-20PF-00000040	OHBE2f-20PF-m-00000040
W-OHBE2f-22PF-0000004A	OHBE2f-22PF-m-0000004A
W-OHBE2f-24PF-0000004K	OHBE2f-24PF-m-0000004K
W-OHBT2f-04PF-00001JDK	OHBT2f-04PF-m-00001JDK
W-OHBT2f-05PF-00001NK0	OHBT2f-05PF-m-00001NK0
W-OHBT2f-06PF-00001WXV	OHBT2f-06PF-m-00001WXV
W-OHBT2f-08PF-000025AQ	OHBT2f-08PF-m-000025AQ
W-OHBT2f-10PF-000029H5	OHBT2f-10PF-m-000029H5
W-OHBT2f-12PF-00002HV0	OHBT2f-12PF-m-00002HV0
W-OHBT2f-14PF-00002M1F	OHBT2f-14PF-m-00002M1F
W-OHBT2f-16PF-00002VEA	OHBT2f-16PF-m-00002VEA
W-OHBT2f-18PF-000033S5	OHBT2f-18PF-m-000033S5
W-OHBT2f-20PF-00003C50	OHBT2f-20PF-m-00003C50
W-OHBT2f-22PF-00003KHV	OHBT2f-22PF-m-00003KHV
W-OHBT2f-24PF-00003TVQ	OHBT2f-24PF-m-00003TVQ

OX – Oval Extreme Grade Thermal Wraps

Part Number	Silencer Part Number
W-OXEE2f-04PF-00000000	OXEE2f-04PF-m-00000000
W-OXEE2f-05PF-00000000	OXEE2f-05PF-m-00000000
W-OXEE2f-06PF-00000000	OXEE2f-06PF-m-00000000
W-OXEE2f-08PF-00000000	OXEE2f-08PF-m-00000000
W-OXEE2f-10PF-00000000	OXEE2f-10PF-m-00000000
W-OXEE2f-12PF-00000000	OXEE2f-12PF-m-00000000
W-OXEE2f-14PF-00000000	OXEE2f-14PF-m-00000000
W-OXEE2f-16PF-00000000	OXEE2f-16PF-m-00000000
W-OXEE2f-18PF-00000000	OXEE2f-18PF-m-00000000
W-OXEE2f-20PF-00000000	OXEE2f-20PF-m-00000000
W-OXEE2f-22PF-00000000	OXEE2f-22PF-m-00000000
W-OXEE2f-24PF-00000000	OXEE2f-24PF-m-00000000
W-OXBE2f-04PF-0000001V	OXBE2f-04PF-m-0000001V
W-OXBE2f-05PF-00000020	OXBE2f-05PF-m-00000020
W-OXBE2f-06PF-0000002A	OXBE2f-06PF-m-0000002A
W-OXBE2f-08PF-0000002K	OXBE2f-08PF-m-0000002K
W-OXBE2f-10PF-0000002Q	OXBE2f-10PF-m-0000002Q
W-OXBE2f-12PF-00000030	OXBE2f-12PF-m-00000030
W-OXBE2f-14PF-00000035	OXBE2f-14PF-m-00000035
W-OXBE2f-16PF-0000003F	OXBE2f-16PF-m-0000003F
W-OXBE2f-18PF-0000003Q	OXBE2f-18PF-m-0000003Q
W-OXBE2f-20PF-00000040	OXBE2f-20PF-m-00000040
W-OXBE2f-22PF-0000004A	OXBE2f-22PF-m-0000004A
W-OXBE2f-24PF-0000004K	OXBE2f-24PF-m-0000004K
W-OXBT2f-04PF-00001JDK	OXBT2f-04PF-m-00001JDK
W-OXBT2f-05PF-00001NK0	OXBT2f-05PF-m-00001NK0
W-OXBT2f-06PF-00001WXV	OXBT2f-06PF-m-00001WXV
W-OXBT2f-08PF-000025AQ	OXBT2f-08PF-m-000025AQ
W-OXBT2f-10PF-000029H5	OXBT2f-10PF-m-000029H5
W-OXBT2f-12PF-00002HV0	OXBT2f-12PF-m-00002HV0
W-OXBT2f-14PF-00002M1F	OXBT2f-14PF-m-00002M1F
W-OXBT2f-16PF-00002VEA	OXBT2f-16PF-m-00002VEA
W-OXBT2f-18PF-000033S5	OXBT2f-18PF-m-000033S5
W-OXBT2f-20PF-00003C50	OXBT2f-20PF-m-00003C50
W-OXBT2f-22PF-00003KHV	OXBT2f-22PF-m-00003KHV
W-OXBT2f-24PF-00003TVQ	OXBT2f-24PF-m-00003TVQ

Insulation Typical Properties		Thermal Conductivity “K” Factor	
Property	Temperature	Temperature	K [(BTU·in)/(hr·ft ² ·°F)]
Melting Point	1523°F	300°F	0.40
Max. Temp.	1200°F	500°F	0.50
Continuous Temp	1000°F	700°F	0.60

Standard blankets are made with 1" insulation composed of 100% type “E” glass fibers in mat form, 32oz Silicone impregnated fiberglass cloth, stainless steel wire mesh, lacing anchors and Kevlar thread.

Components meet military specifications MILF-24244 Type 11 & Coast Guard specifications for incombustible material #164.009.

Custom applications available, contact factory.

Spring Clips available in lieu of lacing wire.

PIPES, TUBES, FLEX, & BELLOWS THERMAL WRAPS

Pipes & Tubes Thermal Wraps

Part Number	Pipe/Tube (OD)
W-TUBE-0150-xxxx	1.50
W-TUBE-0200-xxxx	2.00
W-TUBE-0225-xxxx	2.25
W-TUBE-0250-xxxx	2.50
W-TUBE-0275-xxxx	2.75
W-TUBE-0300-xxxx	3.00
W-TUBE-0350-xxxx	3.50
W-TUBE-0400-xxxx	4.00
W-TUBE-0450-xxxx	4.50
W-TUBE-0500-xxxx	5.00
W-TUBE-0550-xxxx	5.50
W-TUBE-0600-xxxx	6.00
W-PIPE-0663-xxxx	6.63
W-TUBE-0700-xxxx	7.00
W-TUBE-0800-xxxx	8.00
W-PIPE-0863-xxxx	8.63
W-TUBE-1000-xxxx	10.00
W-PIPE-1075-xxxx	10.75
W-TUBE-1200-xxxx	12.00
W-PIPE-1275-xxxx	12.75
W-PIPE-1400-xxxx	14.00
W-PIPE-1600-xxxx	16.00
W-PIPE-1800-xxxx	18.00
W-PIPE-2000-xxxx	20.00
W-PIPE-2200-xxxx	22.00

Corrugated Flex Hose Thermal Wraps

Part Number	Pipe/Tube (OD)
W-FLEX-0150-xxxx	2.19
W-FLEX-0200-xxxx	2.75
W-FLEX-0250-xxxx	3.17
W-FLEX-0300-xxxx	3.75
W-FLEX-0350-xxxx	4.38
W-FLEX-0400-xxxx	4.82
W-FLEX-0500-xxxx	5.87
W-FLEX-0600-xxxx	6.94
W-FLEX-0800-xxxx	9.00
W-FLEX-1000-xxxx	11.00
W-FLEX-1200-xxxx	13.00

Bellows Thermal Wraps

Part Number	Pipe/Tube (OD)
W-BL03-03TF-03TF-120	3.00
W-BL04-04TF-04TF-120	4.00
W-BL05-05TF-05TF-120	5.00
W-BL06-06TF-06TF-120	6.00
W-BL08-08TF-08TF-120	8.00
W-BL10-10TF-10TF-120	10.00
W-BL12-12TF-12TF-120	12.00
W-BL14-14PF-14PF-120	14.00
W-BL16-16PF-16PF-120	16.00
W-BL18-18PF-18PF-120	18.00
W-BL20-20PF-20PF-120	20.00
W-BL22-22PF-22PF-120	22.00
W-BL24-24PF-24PF-120	24.00

Insulation Typical Properties		Thermal Conductivity "K" Factor	
Property	Temperature	Temperature	K [(BTU·in)/(hr·ft ² ·°F)]
Melting Point	1523°F	300°F	0.40
Max. Temp.	1200°F	500°F	0.50
Continuous Temp	1000°F	700°F	0.60

Standard blankets are made with 1" insulation composed of 100% type "E" glass fibers in mat form, 32oz Silicone impregnated fiberglass cloth, stainless steel wire mesh, lacing anchors and Kevlar thread.

Components meet military specifications MIL-24244 Type 11 & Coast Guard specifications for incombustible material #164.009.

Length is in inches. Custom applications available, contact factory.

Spring Clips available in lieu of lacing wire.

FLANGE THERMAL WRAPS

ANSI Flange Thermal Wraps

Part Number

W-TFL-02
W-PFL-02
W-TFL-25
W-PFL-25
W-TFL-03
W-PFL-03
W-TFL-35
W-PFL-35
W-TFL-04
W-PFL-04
W-TFL-05
W-PFL-05
W-TFL-06
W-PFL-06
W-TFL-08
W-PFL-08
W-TFL-10
W-PFL-10
W-TFL-12
W-PFL-12
W-PFL-14
W-PFL-16
W-PFL-18
W-PFL-20
W-PFL-22
W-PFL-24
W-PFL-26
W-PFL-28
W-PFL-30

CAT Engine Flange Thermal Wraps

Part Number

W-CAFL-04
W-CAFL-05
W-CAFL-05
W-CAFL-06
W-CAFL-08
W-CAFL-10
W-CAFL-12
W-CAFL-14
W-CAFL-16
W-CAFL-18

Cummins Engine Flange Thermal Wraps

Part Number

W-CUFL-05
W-CUFL-06

Mitsubishi Engine Flange Thermal Wraps

Part Number

W-MIFL-08
W-MIFL-10
W-MIFL-12

Detroit Diesel Engine Flange Thermal Wraps

Part Number

W-DFFL-08
W-DFFL-06
W-DFFL-10

Insulation Typical Properties		Thermal Conductivity "K" Factor	
Property	Temperature	Temperature	K [(BTU·in)/(hr·ft ² ·°F)]
Melting Point	1523°F	300°F	0.40
Max. Temp.	1200°F	500°F	0.50
Continuous Temp	1000°F	700°F	0.60

Standard blankets are made with 1" insulation composed of 100% type "E" glass fibers in mat form, 32oz Silicone impregnated fiberglass cloth, stainless steel wire mesh, lacing anchors and Kevlar thread.

Components meet military specifications MIL-24244 Type 11 & Coast Guard specifications for incombustible material #164.009.

Dimensions are in inches. Custom applications available, contact factory.

Spring Clips available in lieu of lacing wire.

90° & 45° ELBOW THERMAL WRAPS

90° Short Radius Elbow (Smooth) Thermal Wraps

Part Number	Size (OD)
W-EL-03TS-03TS-060X0060	3.00
W-EL-35TS-35TS-080X0080	3.50
W-EL-04TS-04TS-080X0080	4.00
W-EL-05TS-05TS-100X0100	5.00
W-EL-06TS-06TS-100X0100	6.00

90° Long Radius Elbow (Smooth) Thermal Wraps

Part Number	Size (OD)
W-ELL-03TS-03TS-060X0060	3.00
W-ELL-35TS-35TS-070X0070	3.50
W-ELL-04TS-04TS-080X0080	4.00
W-ELL-05TS-05TS-100X0100	5.00
W-ELL-06TS-06TS-120X0120	6.00

45° Short Radius Elbow (Smooth) Thermal Wraps

Part Number	Size (OD)
W-EB-03TS-03TS-040X0040	3.00
W-EB-35TS-35TS-045X0045	3.50
W-EB-04TS-04TS-050X0050	4.00
W-EB-05TS-05TS-060X0060	5.00
W-EB-06TS-06TS-070X0070	6.00

45° Long Radius Elbow (Smooth) Thermal Wraps

Part Number	Size (OD)
W-EBL-03TS-03TS-055X0055	3.00
W-EBL-35TS-35TS-065X0065	3.50
W-EBL-04TS-04TS-070X0070	4.00
W-EBL-05TS-05TS-080X0080	5.00
W-EBL-06TS-06TS-100X0100	6.00

90° Short Radius Elbow (Mitered) Thermal Wraps

Part Number	Size (OD)
W-EL-08TS-08TS-080X0080	8.00
W-EL-10TS-10TS-100X0100	10.00
W-EL-12TS-12TS-120X0120	12.00
W-EL-14PS-14PS-140X0140	14.00
W-EL-16PS-16PS-160X0160	16.00
W-EL-18PS-18PS-180X0180	18.00
W-EL-20PS-20PS-200X0200	20.00
W-EL-22PS-22PS-220X0220	22.00
W-EL-24PS-24PS-240X0240	24.00

45° Short Radius Elbow (Mitered) Thermal Wraps

Part Number	Size (OD)
W-EB-08TS-08TS-080X0080	8.00
W-EB-10TS-10TS-100X0100	10.00
W-EB-12TS-12TS-120X0120	12.00
W-EB-14PS-14PS-140X0140	14.00
W-EB-16PS-16PS-160X0160	16.00
W-EB-18PS-18PS-180X0180	18.00
W-EB-20PS-20PS-200X0200	20.00
W-EB-22PS-22PS-220X0220	22.00
W-EB-24PS-24PS-240X0240	24.00

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Documents

TEMPERATURE LIMITS OF VARIOUS MATERIALS USED IN CATALYST HOUSINGS, SILENCERS, PIPING, AND EXHAUST ACCESSORIES

MIRATECH manufactures equipment from various materials (e.g., carbon steel, aluminized steel, stainless, etc.). These materials have different temperature limits depending on the application.

In general, carbon steel and aluminized steel are suitable for typical engine exhaust temperatures ($< 1250^{\circ}\text{F}$ / 675°C) where the product is not covered with insulation or a heat shield, allowing heat to radiate from the material. When continuous operating temperatures exceed 1250°F / 675°C or where corrosion is a concern, stainless steel (generally 304SS) should be considered. Note that in emission control exhaust systems, the operating temperature limits of the catalyst may be lower than that of the housing material; please see the application-specific data sheet for details.

Often, exhaust components are covered with insulation or a heat shield for personnel protection, to prevent radiated heat into the engine room or enclosure, or to preserve temperature for waste heat recovery. In those cases the material temperature limits vary by application.

[Silencers, piping, and exhaust accessories](#)

Carbon steel is suitable for temperatures up to 1100°F / 593°C in intermittent use, i.e., less than 500 hours per year, when covered with external insulation or a heat shield.

Aluminized steel is suitable for temperatures up to 1100°F / 593°C continuously when covered with insulation or a heat shield.

Silencers (plain carbon steel or aluminized) with internal insulation, and without external insulation or heat shield, are suitable for temperatures up to 1100°F / 593°C continuously. Stainless steel should be used when the exhaust temperature will exceed 1100°F / 593°C continuously and product is internally or externally insulated.

[Emission control products \(catalyst housings, combination catalyst/silencers, etc.\)](#)

Carbon steel is suitable for temperatures up to 900°F / 482°C continuously, when covered with external insulation or a heat shield. For continuous operation above 900°F / 482°C , where the equipment is externally insulated or has a heat shield, stainless steel should be used.

REMOVABLE INSULATION BLANKETS FOR EXHAUST SYSTEMS

Pre-fabricated removable thermal insulation (blankets) is a cost effective way to reduce surface temperatures of exhaust components and limit the heat radiated into an engine room or enclosure. Standard blankets are available for most emissions products, silencers, piping, and accessories.

Standard blankets are composed of 1" thick fiberglass insulation with a stainless steel mesh liner facing the hot surface, and a silicone impregnated outer jacket. The blanket has good UV resistance as well as being resistant to oil and fuels. Blankets are secured using stainless steel lacing hooks with either stainless tie wire and/or spring clips. See the "Thermal Wrap" section of the catalog for more details on temperature ratings, agency approvals, etc.

Custom blankets are available in a variety of thicknesses and jacketing material. If you need to limit the maximum surface temperature (e.g., for personnel protection), let us know and we can specify a blanket based on your application conditions. Personnel protection may require very thick blankets, which may not be available in some cases due to space constraints (e.g., flange covers), difficulty of installation (thicker blankets are less flexible), etc.

FLEXIBLE CONNECTORS AND BELLOWS EXPANSION JOINTS

Sometimes the term “flexible connector” or “flex” is used interchangeably with “expansion joint” or “bellows”. They are different devices meant to perform specific functions.

Flex Connectors are intended to absorb or isolate high frequency, low amplitude engine vibration from the rest of the exhaust piping. They are not designed to compensate for or absorb pipe expansion, nor are they designed to “make up” for mis-aligned piping. Flex hose is typically constructed of a single ply of relatively small corrugations that allow the material to move with vibration. The corrugations aren’t designed to compress; over time the flex will fail if it is operated under compression. Likewise the inlet and outlet must be aligned. If a flex is installed in misaligned piping, it will fail after a short period of time. Custom flexes can be made with offset inlet/outlet to make up for misalignment. In general the optimum length of a flex connector is 18”. In some cases shorter flex connectors can be built but their performance and life will be compromised. Standard flex connectors are available from 2” to 16” diameter. Bellows are required above 16”.

Bellows Expansion Joints are more flexible than Flex Connectors and are designed to absorb pipe expansion. The corrugations are larger and therefore able to compress more. They are generally better able to handle lateral movement as well, so can better tolerate pipe misalignment. Because they are more flexible, they can provide expansion absorption and vibration isolation in a shorter length than a Flex Connector.

Bellows Expansion Joints come in single-ply and dual-ply versions, referring to the number of layers of steel forming the bellows. Dual ply bellows (constructed of two thinner layers of steel) are more flexible than single-ply, can absorb more expansion and vibration, and will have better durability than a single-ply bellow. However the cost is higher than single-ply so the cost/benefit must be evaluated. For prime power or mission critical applications dual-ply bellows are preferred.

The corrugations in the flexible section of a Flex Connector or a Bellows create turbulence which increases the pressure drop through the device. Bellows can be built with flow liners which smooth out the flow and make the pressure drop closer to smooth pipe. The liner is welded on one end, with the other floating so that the bellows can still compress. Flow liners restrict lateral movement, so a bellows with a liner will not be able to tolerate misalignment or lateral deflection to the same degree as an unlined bellows.

Standard Flex Connectors and Bellows are manufactured from 321SS in the flexible section, with the connectors (flange, pipe, etc.) of carbon steel or stainless. We offer custom Flex Connectors and Bellows Expansion Joints tailored to your application. Contact us with your application criteria and we will help you arrive at the best solution.

GENERAL SILENCER INQUIRY APPLICATION DATA FORM

Project Name

Date

Required Fields

Contact Information

Contact Name

Company Name

Contact Location

RSM

Telephone Number

Fax Number

Email Address

Required Proposal Response Date

Engine Information

Engine Make

Engine Model

Engine Displacement

Number of Engines

Number of Exhaust Outlets

Exhaust Outlet Connection

Design Back Pressure*

Rated Power*

Exhaust Flow Rate (Wet)*

Exhaust Temperature*

Engine Exhaust Sound Output

Octave Band Center Frequency

31.5

63

125

250

500

1000

2000

4000

8000

dBA

Sound Power (dB)

Sound Pressure (dB @ _____ distance)

Exhaust sound power –OR– sound pressure at a known distance are needed

Silencer Information

Sound Requirement

Inlet Connection Size

Outlet Connection Size

Material of Construction

Paint Specification

Additional Specifications or Requirements

* Please include units

INTAKE SILENCER APPLICATION DATA FORM

Project Name		Required Fields
Date		
Contact Information		
Contact Name		
Company Name		
Contact Location		
RSM		
Telephone Number		
Fax Number		
Email Address		
Required Proposal Response Date		
Engine Information		
Engine Make		
Engine Model		
Engine Displacement		
Number of Intake Manifolds		
Intake Air Flow Rate*		
Intake Air Temperature*		
Intake Sound Level		
Octave Band Center Frequency	31.5	63
Sound Power (dB)		
Sound Pressure (dB @ _____ distance)		
	125	250
	500	1000
	2000	4000
	8000	dBA
Intake sound power –OR– sound pressure at a known distance are needed		
Silencer Information		
Sound Requirement		
Inlet Connection Size		
Outlet Connection Size		
Material of Construction		
Paint Specification		
Additional Specifications or Requirements		

* Please include units



BLOW DOWN SILENCER
APPLICATION DATA FORM

Project Name		Required Fields
Date		
Contact Information		
Contact Name		
Company Name		
Contact Location		
RSM		
Telephone Number		
Fax Number		
Email Address		
Required Proposal Response Date		
Site Information		
Vessel Volume*		
Upstream Pressure*		
Upstream Temperature*		
Ambient Pressure*		
Ambient Air Temperature*		
Fluid Information		
Type of Gas		
Molecular Weight		
Desired Blow Down Time*		
Silencer Information		
Sound Target		
Inlet Connection Size		
Vertical or Horizontal Orientation		
Material of Construction		
Maximum Wind Loading		
Paint Specification		
Additional Specifications or Requirements		

* Please include units

EXHAUST WASTE HEAT RECOVERY – HOT WATER (WHRs) APPLICATION DATA FORM

Project Name		Required Fields
Date		
Contact Information		
Contact Name		
Company Name		
Contact Location		
RSM		
Telephone Number		
Fax Number		
Email Address		
Required Proposal Response Date		
Identify any other proposals for project		(catalyst, silencers, accessories, etc.)
Engine Information		
Engine Make		
Engine Model		
RPM		
Fuel Type		(natural gas, diesel, biogas, etc.)
Max Allowable Back Pressure*		
Number of Engines		
Engine Exhaust Noise (dBA)		
Rated Power*		
Exhaust Flow Rate (Wet)*		
Exhaust Temperature*		
Engine Type		(Rich burn, lean burn, dual fuel)
Water Flow*		
Water Inlet Temperature		
Percent Glycol (if any)		
Product Requirements		
Unit Orientation	☐ Vertical ☐ Horizontal	
Max Exhaust Pressure Drop for WHRS*		(if unknown use 6 inches wc)
Maximum Water Side Pressure Drop*		(if unknown use 3 psig)
Attach all specifications pertaining to the exhaust waste heat recovery silencer including specification on insulation, drawings showing installations of exhaust waste heat recovery silencer. Additional Specifications or Requirements		

* Please include units



EXHAUST WASTE HEAT RECOVERY – STEAM (WHRs)
APPLICATION DATA FORM

Project Name

Date

Required Fields

Contact Information

Contact Name

Company Name

Contact Location

RSM

Telephone Number

Fax Number

Email Address

Required Proposal Response Date

Identify any other proposals for project

(catalyst, silencers, accessories, etc.)

Engine Information

Engine Make

Engine Model

RPM

Fuel Type

(natural gas, diesel, biogas, etc.)

Max Allowable Back Pressure*

Number of Engines

Engine Exhaust Noise (dBA)

Rated Power*

Exhaust Flow Rate (Wet)*

Exhaust Temperature*

Engine Type

(Rich burn, lean burn, dual fuel)

Product Requirements

Unit Orientation

☐ Vertical

☐ Horizontal

Max Exhaust Pressure Drop for WHRS*

(if unknown use 6 inches wc)

Actual Operating Steam Pressure*

Feed Water Temperature*

(min 180F, use 200F if unknown)

Required Design Pressure

(15 / 150 / 250 psig standard)

Design pressure is the pressure at which the safety valves are set and is about 10-15% above the operating pressure:

- 15 PSIG units can only operate at about 12 PSIG and below.
- 150 PSIG units can only operate at about 135 PSIG and below.
- 250 PSIG units can only operate at about 225 PSIG and below.

Attach all specifications pertaining to the exhaust waste heat recovery silencer including specification on insulation, drawings showing installations of exhaust waste heat recovery silencer.

Additional Specifications or Requirements

* Please include units

PLATFORM APPLICATION DATA FORM

Project Name

Date

Required Fields

Contact Information

Contact Name

Company Name

Contact Location

RSM

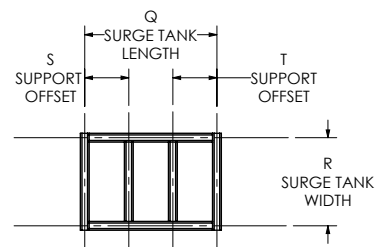
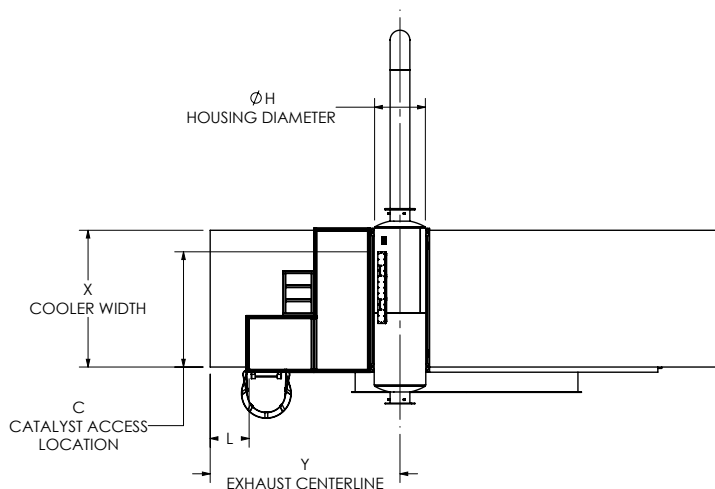
Telephone Number

Fax Number

Email Address

Required Proposal Response Date

Platform Dimensions



Cooler Width, X*

Exhaust Centerline, Y*

Catalyst Access Location, C*

Housing Diameter, H*

Ladder Offset, L*

Surge Tank Supports

☐ Yes

☐ No

Surge Tank Length, Q*

Surge Tank Width, R*

Support Offset, S*

Support Offset, T*

Q, R, S, and T are required when this is Yes

Additional Specifications or Requirements

* Please include units