

HAPCO Spark Arresting Silencers
Spark Arresting Muffler (SAM)
Industrial Grade

U.S.F.S. qualified under Std. 5100-1 and Dept. of Defense spec. MIL A-27302A.

SIZE MODEL	DWG #	CFM (MAX.)	DIA.	LENGTH	I.D. (INLET)	O.D. (OUTLET)	WT (Lbs.)
SAM 13	3200A-1	96	3.50	10	.5 - 1	1.25	4
SAM 24	3201A-1	167	4.50	12	1.25 - 1.75	1.75	6
SAM 36	3202A-1	205	6.00	19	1.75 - 2.5	2.50	10
SAM 48	3203A-1	485	7.50	22	2.5 - 3	3.00	14
SAM 59	3204A-1	705	8.25	24	3 - 3.75	4.00	19
SAM 69	3205A-1	1168	8.25	29	3.5 - 5	5.00	23

Meets or exceeds U.S.F.S. Std. 5100-1 and Dept. of Defense spec. MIL A-237302A.

SIZE MODEL	DWG #	A	B	C	D	E & F	WT (Lbs.)
SAM 13	3200A-1	.5 - 1.25	3.50	6	10	2	4
SAM 24	3201A-1	1.25 - 1.75	4.50	8.25	12	1.875	6
SAM 36	3202A-1	1.75 - 2.5	6.00	14	19	2.5	10
SAM 48	3203A-1	2.5 - 3	7.50	14.75	22	3.625	14
SAM 59	3204A-1	3 - 3.5	8.25	20	24	2	19
SAM 69	3205A-1	3.5 - 5	8.25	22	29	3.5	23
SAM 712	3206A-1	4 - 6	10.00	24	32	4	42
SAM 817	3207A-1	6 - 8.5	17.00	27	38	5.5	125
SAM 1024	3208A-1	8 - 12	24.00	36.5	50	6.75	195
SAM 1228	3209A-1	12 - 14	28.00	60	75.75	7.875	240

**For price information see Section 2 Page 2*

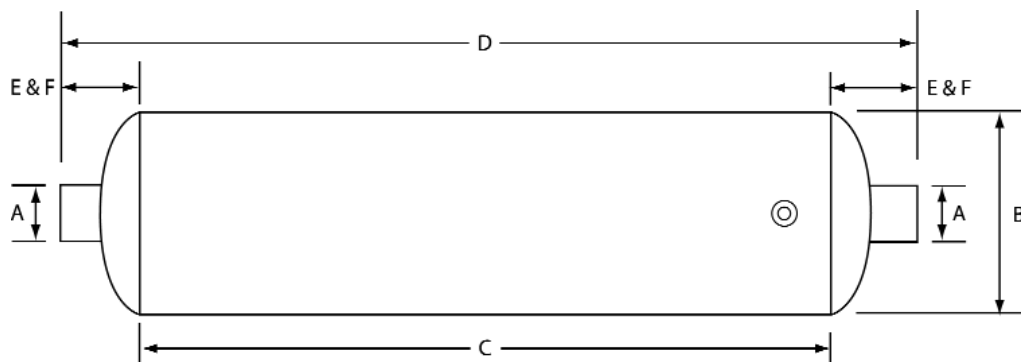
**Note Estimated weight only*

Features:

- Attenuation 8 - 19 dBA
- U.S.F.S. approved most sizes - *if required please specify when ordering*
- When ordering specify vertical or horizontal installation
- Optional side inlets and outlets, pipe threads, flanges and rain caps available, call for quote on sizes

Accessories:

- Rain cap
- Exhaust Elbows
- Mounting Bands
- Flange & Gasket Kits
- High Temp Blankets



HAPCO
Spark Arresting Silencer (SASR)
Residential Grade

U.S.F.S. qualified under Std. 5100-1 and Dept. of Defense spec. MIL A-27302A.

SIZE MODEL	DWG #	CFM (MAX.)	DIA.	LENGTH	I.D. (INLET)	O.D. (OUTLET)	WT (Lbs.)
SASR 13	3210A-1	96	3.5	13	.5 - 1.25	1.25	6
SASR 24	3211A-1	167	4.5	15	1.25 - 1.75	1.75	7
SASR 36	3212A-1	205	6	22	1.75 - 2.5	2.50	12
SASR 48	3213A-1	485	7.5	26	2.5 - 3	3.00	17
SASR 59	3214A-1	705	8.25	30	3 - 3.5	4.00	25
SASR 69	3215A-1	1168	8.25	36	3.5 - 5	5.00	27

Meets or exceeds U.S.F.S. Std. 5100-1 and Dept. of Defense spec. MIL A-237302A.

SIZE MODEL	DWG #	A	B	C	D	E & F	WT (Lbs.)
SASR 13	3210A-1	.5 - 1.25	3.5	10	13	1.5	6
SASR 24	3211A-1	1.25 - 1.75	4.5	11	15	2	7
SASR 36	3212A-1	1.75 - 2.5	6	18	22	2	12
SASR 48	3213A-1	2.5 - 3	7.5	22	26	2	17
SASR 59	3214A-1	3 - 3.5	8.25	23	30	3.5	25
SASR 69	3215A-1	3.5 - 5	8.25	29	36	3.5	27
SASR 712	3216A-1	4 - 6	10	38	48	5	50
SASR 817	3217A-1	6 - 8.5	17	38	48	6	165
SASR 1024	3218A-1	8 - 12	24	54	68	7	325
SASR 1228	3219A-1	12 - 14	28	55	72	8.5	450

**For price information see Section 2 Page 2*

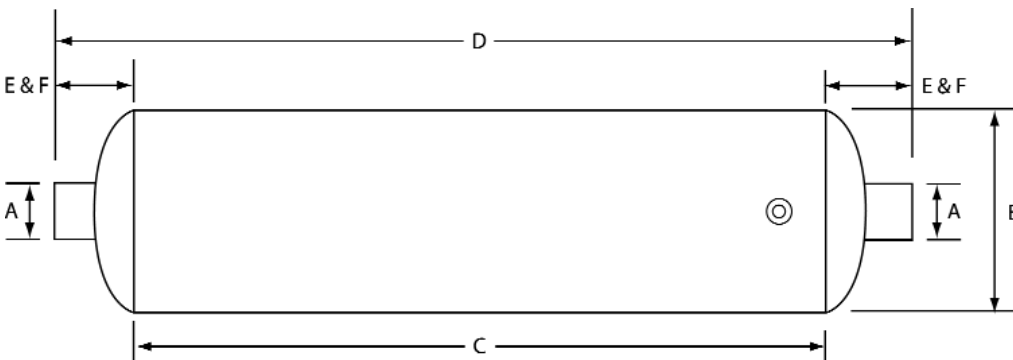
**Note Estimated weight only*

Features:

- Attenuation 8 - 19 dBA
- U.S.F.S. approved most sizes
- When ordering specify vertical or horizontal installation
- Optional side inlets and outlets, pipe threads, flanges and rain caps available, call for quote on sizes

Accessories:

- Rain cap
- Exhaust Elbows
- Mounting Bands
- Flange & Gasket Kits
- High Temp Blankets

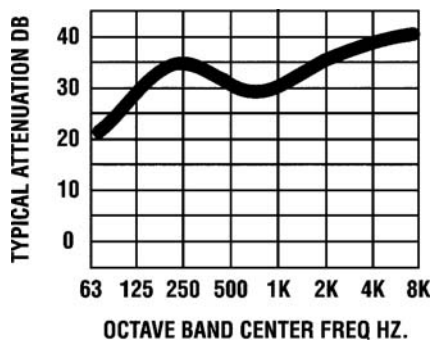


HAPCO**Super Critical Grade - Spark Arresting Silencer****Side Inlet - End Outlet**

SIZE MODEL	DWG #	A	B	C	D	E	F	G	H	I	WT (Lbs.)
930VCSA3 SI	600A-1	3	9	30	34.625	0.75	3.875	3.375	3	31.25	48
1139VCSA3-8 SI	601A-1	3.5	11	39	43.75	0.875	3.875	3.5	3.5	40.25	73
1254VCSA4 SI	602A-1	4	12	54	58.75	0.875	3.875	4	3.5	54.75	98
1460VCSA5 SI	603A-1	5	14	60	64.75	0.875	3.875	5	3.5	59.75	197
2064VCSA6 SI	604A-1	6	20	64	74	3.25	6.75	8	5	66	321
2470VCSA8 SI	605A-1	8	24	70	81	3.75	7.25	9	4	72	435
2680VCSA10 SI	606A-1	10	26	80	92	4	8	11	4	81	612
2892VCSA12 SI	607A-1	12	28	92	104.75	4.375	8.375	13	4	91.75	760
30102VCSA14 SI	608A-1	14	30	102	115	4.5	8.5	13	4	102	995
36118VCSA16 SI	609A-1	16	36	118	132.5	5.25	9.25	14	5	118.5	1327
42120VCSA18 SI	610A-1	18	42	120	137.25	6.625	10.625	16.75	5	120.5	2075
42130VCSA20 SI	611A-1	20	42	130	148.25	6.625	11.625	18.625	5	129.625	2300
42140VCSA22 SI	612A-1	22	42	140	158.25	6.625	11.625	19.625	5	138.625	2500
48154VCSA24 SI	613A-1	24	48	154	175.5	8.25	13.255	22.25	5	153.25	3100
54174VCSA26 SI	614A-1	26	54	174	198	10	14	25	5	173.75	3700
60202VCSA28 SI	615A-1	28	60	202	227	10	15	26	6	203	6200
66218VCSA30 SI	616A-1	30	66	218	244.5	11	15.5	28.5	6	216.5	7600
72246VCSA32 SI	617A-1	32	72	246	275.37	12.12	17.25	30.87	6	245	10000

*For price information see Section 2 Page 7

*Note Estimated weight only

**Recommended Applications:**

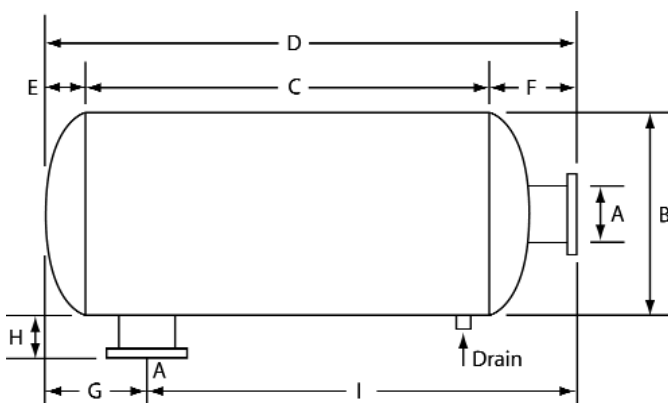
- Suitable for Diesel or N.G. Engine Power Systems

Features:

- Attenuation 30 - 42 dBA - 95 to 99% efficiency
- All welded steel construction
- High heat primer and paint
- Available in stainless steel
- Internally insulated for low shell temperature
- Noise reduction is accomplished by a combination of absorption and annulling of noise waves
- Exhaust gases flow through the silencer in a vortex motion
- This design allows for a reduction in silencer diameter
- Refer to Section 2 Page 4 for mounting brackets

Accessories:

- Flexible Connectors
- Mounting Bands
- Hanger Brackets
- High Temp Blankets



**Super Critical Grade - Spark Arresting Silencer
End Inlet - End Outlet**

SIZE MODEL	DWG #	A	B	C	D	E & F	WT (Lbs.)
7520VCSA2	700A-1	2	7.5	20	26	3	22
924VCSA2-8	701A-1	2.5	9	24	30.75	3.375	41
928VCSA3	702A-1	3	9	28	34.75	3.375	46
1138VCSA3-8	703A-1	3.5	11	38	45.75	3.875	76
1248VCSA4	704A-1	4	12	48	55.75	3.875	107
1454VCSA5	705A-1	5	14	54	61.75	3.875	138
2052VCSA6	706A-1	6	20	52	65.5	6.75	299
2472VCSA8	707A-1	8	24	72	85.5	6.75	420
2678VCSA10	708A-1	10	26	78	94	8	531
2882VCSA12	709A-1	12	28	82	98.75	8.375	712
3088VCSA14	710A-1	14	30	88	105	8.5	887
3698VCSA16	711A-1	16	36	98	118.5	10.25	1281
4298VCSA18	712A-1	18	42	98	121.25	11.625	1789
42106VCSA20	713A-1	20	42	106	129.25	11.625	1920
48118VCSA22	714A-1	22	48	118	144.5	13.25	2410
48130VCSA24	715A-1	24	48	130	156.5	13.25	2600
54152VCSA26	716A-1	26	54	152	182	15	3500
60172VCSA28	717A-1	28	60	172	202	15	5500
66198VCSA30	718A-1	30	66	198	229	15.5	7000
72256VCSA32	719A-1	32	72	256	290.5	17.25	11500

*For price information see Section 2 Page 7

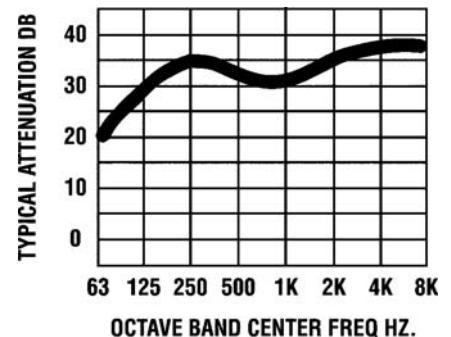
*Note Estimated weight only

Features:

- Attenuation 30-42 dBA **velocity not to exceed 9000 FPM**
- Spark Arrestor 95 to 99% efficient
- All welded steel construction
- High heat primer and paint
- Available in stainless steel
- Internally insulated for low and annulling of noise waves
- Exhaust gases flow through the silencer in a vortex motion, this design allows for a reduction in silencer diameter

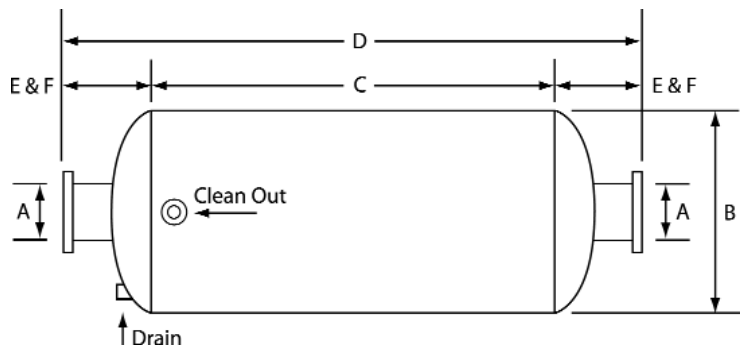
Recommended Applications:

- Suitable for Diesel or N. G. Engine Power Systems



Accessories:

- Flexible Connectors
- Mounting Bands
- Hanger Brackets
- High Temp Blankets



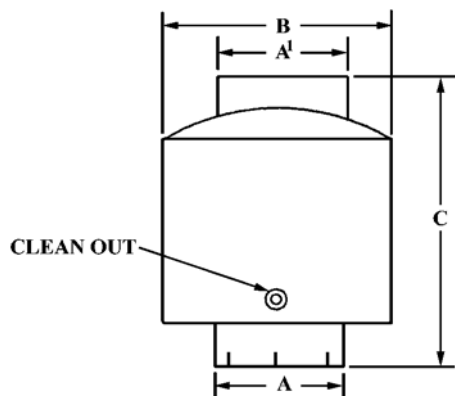
HAPCO
Spark Arrestor

SIZE MODEL	DWG #	A INLET	A1 OUTLET	B	C	WT (Lbs.)	CFM MAX.
1AA	3300A-1	.75 - 1.5 ID	1.75 OD	3.5	6	3	96
1AAXH	3301A-1	.75 - 1.5 ID	1.25 OD	3.5	6	3	76
2AA	3302A-1	1.0 - 1.75 ID	2 OD	4.5	6.5	3	167
2AAH	3303A-1	1.0 - 1.75 ID	1.75 OD	4.5	6	3	112
3AA	3304A-1	1.50 - 2.5 ID	2.5 OD	6	9.5	5	265
3AAXH	3305A-1	1.50 - 2.5 ID	2.5 OD	6	9	5	258
4AA	3306A-1	1.75 - 3 ID	3 OD	7	11.5	8	485
4AAH	3307A-1	1.75 - 2.625 ID	3 OD	7	11	8	417
5AA	3308A-1	2.50 - 4 ID	4 OD	9.25	12	10.5	705
5AAH	3309A-1	2.50 - 4 ID	4 OD	9.25	11.5	11	620
6AA	3310A-1	3.50 - 4.5 ID	4 OD	9.25	14	12	717
6AAH	3311A-1	3.50 - 4.5 ID	4 OD	9.25	14	12	848
6AB	3312A-1	3.50 - 5 ID	5 OD	9.25	14	13	1168
7AC1	3313A-1	4.0 - 6.75 ID	6 OD	10	12.5	26	1555
8AC *	3314A-1	6 - 8 ID	8 OD	16	16	42	2930
10AC *	3315A-1	8 - 12 ID	12 OD	18	14	89	5000
12AC	3316A-1	12 - 16 ID	14 OD	20	15	131	8000

*For price information see Section 2 Page 9

*Note Estimated weight only

***Tested At The Factory Only**



Recommended Applications:

- All models listed are rated and qualified by U.S. Forest Service Test Center under STD. 5100-1 and Department of Defense SPEC. MIL. A-27302A

Features:

- Attenuation 6 - 10 dBA
- All sizes with (H) indicates horizontal position except for 7AC, this model is qualified in vertical and horizontal position
- All sizes are available in 304 / 316 S.S.
- Available in pipe thread, slip fit and flanged connections
- Clamp included
- Outlet can be reduced to match inlet

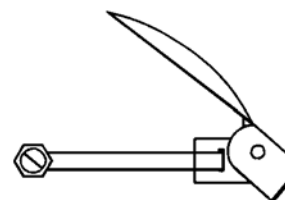
Accessories:

- Weather Stops

OPTIONAL WEATHER STOPS

WEATHER STOP PART#	STACK SIZE	SPARK ARRESTOR SIZE
#32	UP TO 2-1/2	1AA - 2AA
#44	2-9/16 TO 3-1/8	3AA - 4AA
#64	3-3/16 TO 4-3/4	5AA
#80	4-7/8 TO 5-1/2	6AB
#96	5-5/8 TO 6-1/2	7AC1
#104	6-5/8 TO 7	
#120	7-1/8 TO 7-7/8	
#132	8 TO 8-3/4	

- Stainless Steel Clamp
- Aluminized Steel Cap
- Brass Bushing Hinge
- Adjustable Clamp
- Lightweight
- Adjustable Sizes



*For price information see Section 2 Page 9

HAPCO
Locomotive Spark Arrestor

MODEL	# CYL	# STACK	CID	PART CFM	NUMBER
EMD SW-1	6	1	3402	5500	10AC8 (1)
EMD NW-2	12	2	6804	11000	10AC10 (2)
EMD NW-5	12	2	6804	11000	10AC10 (2)
EMD SW-8	8	1	4540	8250	10AC12 (2)
EMD SW7/9	12	2	6804	11000	10AC10 (2)
EMD SW-900	8	1	4540	8250	10AC12LP (1)
EMD SW-1200	12	2	6810	12000	10AC12LP (2)
EMD SD-7	16	2	9080	16000	12AC12LP (2)
EMD SD-9	16	2	9080	16000	12AC12LP (2)
EMD E-7	24	2	13620	22000	12AC12LP (2)
EMD E-8	24	2	13620	22000	12AC12LP (2)
EMD E-9	24	2	13620	24000	12AC12LP (2)
EMD GP7	16	2	9080	14800	12AC12LP (2)
EMD GP9	16	2	9080	16000	12AC12LP (2)
EMD GP10	16	4	9080	16000	10AC10 (4)
EMD GP18	16	2	10320	19600	12AC12LP (2)
EMD GP28	16	2	10320	19600	12AC12LP (2)
EMD GP38	16	2	10320	19600	12AC12LP (2)

**For price information see Section 2 Page 9*

Features:

- LP represents low profile design for under hood applications
- All sizes available in T304 and T316 stainless steel
- Prices include mating flange & gasket
- When ordering or requesting a quote indicate: make, model number, size of stacks, diameter & height
- For larger size engine requirements consult the factory

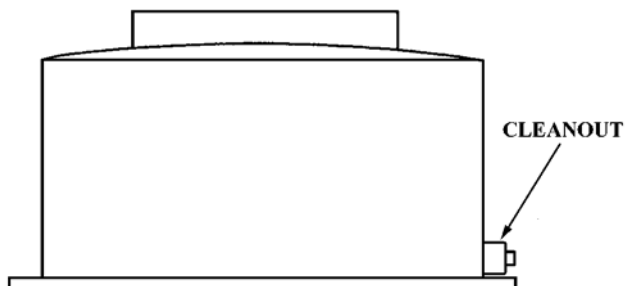
Recommended Applications:

- For ALCO or Baldwin Locomotives that require spark arrestors

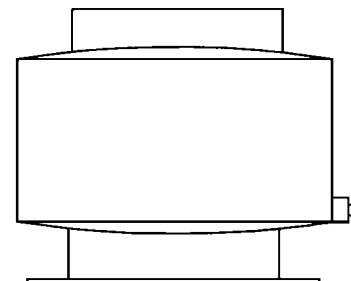
Accessories:

- Flexible Connectors
- Mounting Bands
- Hanger Brackets

12AC 12 LP



10AC 10

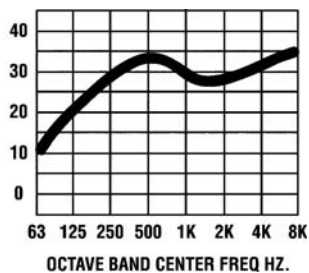


HAPCO
Critical Grade - Spark Arresting Silencer
End Inlet - End Outlet

SIZE MODEL	DWG #	A	B	C	D	E & F	WT (Lbs.)
58VRSA-1	850A-1	1	5	8	13	2.5	10
58VRSA1-4	851A-1	1.25	5	8	13	2.5	10
68VRSA1-8	852A-1	1.5	6	8	13	2.5	12
712VRSA2	853A-1	2	7	12	18	3	15
822VRSA2-8	854A-1	2.5	8	22	28.75	3.375	25
824VRSA3	855A-1	3	8	24	30.75	3.375	27
924VRSA3-8	856A-1	3.5	9	24	31.75	3.875	35
1030VRSA4	856B-1	4	10	30	37.5	3.75	45
1220VRSA4	857A-1	4	12	20	28.5	4.25	43
1224VRSA5	858A-1	5	12	24	32.5	4.25	45
1236VRSA5	859A-1	5	12	36	45.5	4.75	58
1438VRSA6	860A-1	6	14	38	47.5	4.75	81
1442VRSA6	861A-1	6	14	42	51.5	4.75	85
1648VRSA6	862A-1	6	16	48	57.5	4.75	160
1844VRSA8	863A-1	8	18	44	56	6	222
2248VRSA8	864A-1	8	22	48	63.5	7.75	365
2458VRSA10	865A-1	10	24	58	73.5	7.75	401
2468VRSA12	866A-1	12	24	68	85.5	8.75	460
2874VRSA12	867A-1	12	28	74	92.75	9.375	516
3080VRSA14	868A-1	14	30	80	99	9.5	791
3690VRSA16	869A-1	16	36	90	110.5	10.25	932
36102VRSA18	870A-1	18	36	102	122.5	10.25	1275
7296VRSA20	871A-1	20	42	96	121.25	12.625	1390
42104VRSA22	872A-1	22	42	104	129.25	12.625	1840
48112VRSA24	873A-1	24	48	112	140.5	14.25	2192
54126VRSA26	874A-1	26	54	126	154.5	14.25	2489
54140VRSA28	875A-1	28	54	140	168.5	14.25	2822
60160VRSA30	876A-1	30	60	160	188.5	14.25	3561
66180VRSA32	877A-1	32	66	180	214	17	4484
72242VRSA34	878A-1	34	72	242	278	18	6500
74242VRSA36	878A-1	36	74	242	278	18	7500

*For price information see Section 2 Page 5

*Note Estimated weight only



Recommended Applications:

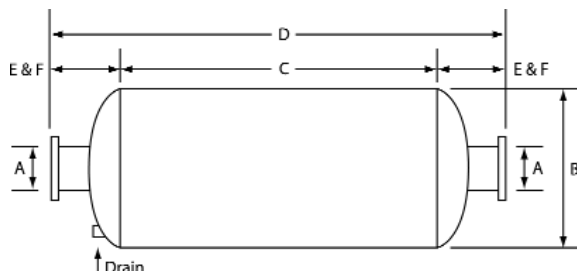
- Hospitals
- Tug and Fishing Boats
- Where the surrounding noise level is low

Features:

- Attenuation 18 - 32 dBA
- Listed sound data is based on average sound curves and is not to be used as absolute
- Noise reduction is accomplished by a combination of absorption and annulling of noise waves
- Exhaust gases flow through the silencer in a vortex motion
- This design allows for a reduction in silencer diameter
- Heavy duty all welded steel or stainless steel
- Inlet size 1" - 3.50" MPT
- 95 to 99% efficiency
- Sizes 1" to 10" Alum Steel Wrapper

Accessories:

- Flexible Connectors
- Hanger Brackets
- Mounting Bands
- High Temp Blankets



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HAPCO
Critical Grade - Spark Arresting Silencer
Side Inlet

SIZE MODEL	DWG #	A	B	C	D	E	F	G	H	I	WT (Lbs.)
514VRSA1-SI	950A-1	1	5	14	16.5	0.5	2	1.75	1.5	14.75	9
516VRSA1-4SI	951A-1	1.25	5	16	18.5	0.5	2	2	2	16.5	10
620VRSA1-8SI	952A-1	1.5	6	20	22.5	0.5	2	2.5	2.5	20	14
720VRSA2-SI	953A-1	2	7	20	24.125	0.5	3.375	2.375	2.5	21.75	15
824VRSA2-8SI	954A-1	2.5	8	24	28.625	0.75	3.875	2.875	2.5	25.75	28
827VRSA3-SI	955A-1	3	8	27	31.625	0.75	3.875	2.875	2.5	28.75	33
926VRSA3-8SI	956A-1	3.5	9	26	30.625	0.75	3.875	3.875	3	26.75	41
1036VRSA4-SI	957A-1	4	10	36	40.75	0.875	3.875	4	4	36.75	70
1230VRSA4-SI	958A-1	4	12	30	34.75	0.875	3.875	4.5	4	30.25	83
1236VRSA5-SI	959A-1	5	12	36	40.75	0.875	3.875	5	4	35.75	101
1439VRSA5-SI	960A-1	5	14	39	43.75	0.875	3.875	5	4	38.75	125
1448VRSA6-SI	961A-1	6	14	48	52.75	0.875	3.875	6	4	46.75	161
1644VRSA6-SI	962A-1	6	16	44	49.375	1	4.375	6.125	4	43.25	186
1860VRSA8-SI	963A-1	8	18	60	69.5	3	6.5	11	4	58.5	265
2268VRSA10-SI	964A-1	10	22	68	79	3.5	7.5	10.75	4	68.25	361
2676VRSA12-SI	965A-1	12	26	76	88	4	8	12.5	4	75.5	473
3096VRSA16-SI	966A-1	14	30	96	109.5	4.5	9	15.5	4	94	744
36103VRSA16-SI	967A-1	16	36	103	117.75	5.25	9.5	16.75	4	101	950
36112VRSA18-SI	968A-1	18	36	112	127	5.25	9.75	19	5	108	1472
42120VRSA20-SI	969A-1	20	42	120	137.375	6.625	10.75	20.875	5	116.5	1626
42129VRSA22-SI	970A-1	22	42	129	146.875	6.625	11.25	22.875	5	124	1988
48136VRSA24-SI	971A-1	24	48	136	157.5	8.25	13.25	23	5	134.5	2375
54146VRSA26-SI	972A-1	26	54	146	167.5	10	13.25	25.25	5	142.25	2890
60160VRSA28-SI	973A-1	28	60	160	185	10	15	28	5	157	3487
60176VRSA30-SI	974A-1	30	60	176	201	10	15	29	5	172	4110
66218VRSA32-SI	975A-1	32	66	218	245	11	16	28	6	217	5375
72296VRSA34-SI	976A-1	34	72	296	324.12	12.12	16	31.12	6	293	7000
74296VRSA36-SI	977A-1	36	74	296	324.12	12.12	16	31.12	6	293	8000

**For price information see Section 2 Page 5*

**Note Estimated weight only*

Features:

- Attenuation 18-32 dBA **velocity not to exceed 9000 FPM**
- Spark Arrestor 95 to 99% efficient
- All welded steel construction
- High heat primer and paint
- Available in stainless steel
- Internally insulated for low and annulling of noise waves
- Exhaust gases flow through the silencer in a vortex motion, this design allows for a reduction in silencer diameter

Accessories:

- Flexible Connectors
- Mounting Bands
- Hanger Brackets
- High Temp Blankets

Recommended Applications:

- Suitable for Diesel or N. G. Engine Power Systems

