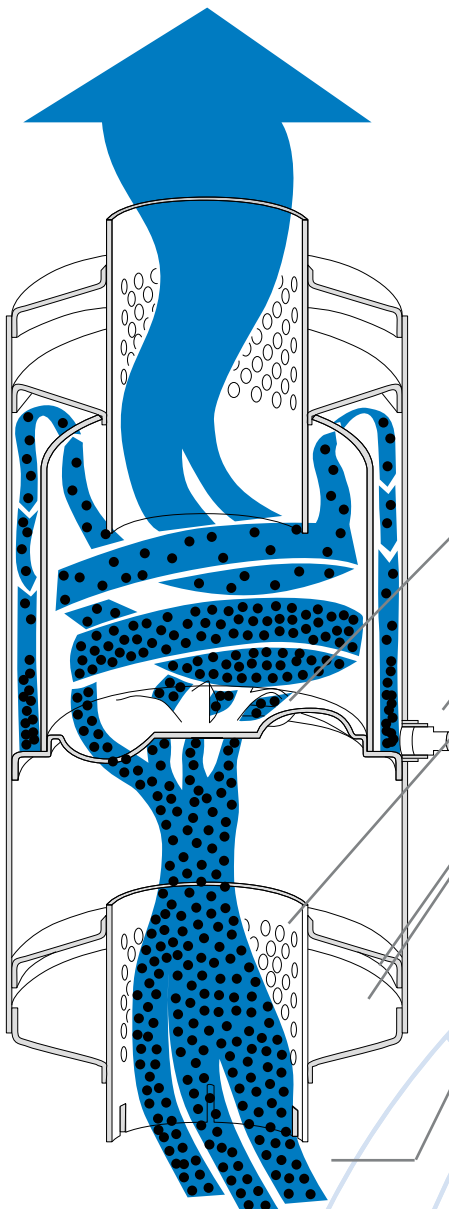
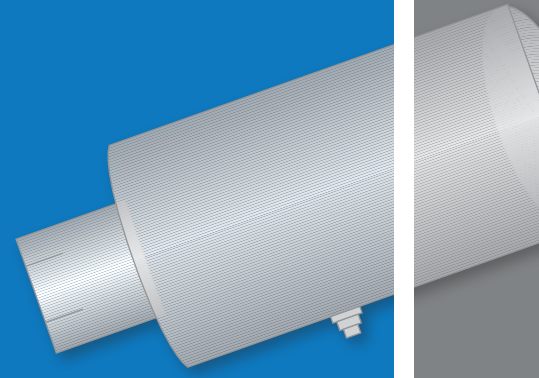




Spark Arresters and Spark Arresting Silencers

Reduce Fire and Explosion Hazards

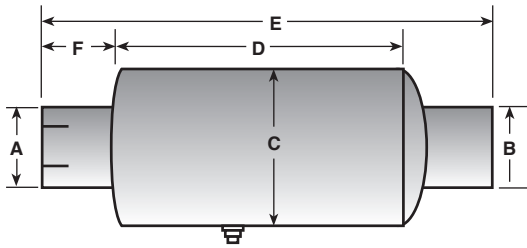
NGP Spark Arresters remove nearly all dangerous sparks from the exhaust gas. These Spark Arresting Silencers also provide industrial, residential and critical noise levels. Fire causing sparks are removed through centrifugal force within the spark arrester/silencer. The hot carbon particles are safely trapped within the arrester for later removal.



Performance Features

- NGP Spark Arresters can be installed either horizontally or vertically. Expected efficiency in either orientation exceeds 95% at rated flow.
- A unique vane arrangement resists heat and vibration, providing increased noise reduction and service life.
- A brass plug with a steel fitting makes cleaning the arrester easier and never rusts shut.
- Perforated tubes and resonator chambers reduce noise without restricting gas flow.
- Fully welded construction is standard on spark arresting silencers for maximum strength and service life.
- A variety of inlet and outlet connections, slotted tubs, male pipe thread, and mounting flanges are available.





Attenuation Level (5-9 dB(A) Reduction)*

- All arresters are qualified and tested for vertical and horizontal installation under U.S. Forestry Service Standard 5100-1b
- Inlets are slotted tube connections
- Outlets are O.D. tubing
- CFM rating is determined using a pressure drop of 1 PSI

A (O.D.) in (mm)	B (O.D.) in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	Max. Flow Rate		Part Number
						@ 2" Hg	@ 1" Hg	
1.05 (26.67)	1.25 (31.75)	4.24 (107.70)	3.20 (81.28)	5.90 (149.86)	1.30 (33.02)	88	62	49110U
1.50 (38.10)	1.50 (38.10)	4.24 (107.70)	3.10 (78.74)	5.90 (149.86)	1.40 (35.56)	130	92	49115U
2.00 (50.80)	2.00 (50.80)	5.62 (142.75)	6.40 (162.56)	11.00 (279.40)	2.00 (50.80)	238	168	49120B
2.50 (63.50)	2.63 (66.80)	5.62 (142.75)	8.60 (218.44)	12.80 (325.12)	2.00 (50.80)	420	296	49125A
3.00 (76.20)	3.13 (79.50)	6.62 (168.15)	10.20 (259.08)	14.90 (378.46)	2.50 (63.50)	602	425	49130A
3.50 (88.90)	3.63 (92.20)	7.62 (193.55)	12.00 (304.80)	17.60 (447.04)	3.00 (76.20)	817	576	49135A
4.00 (101.60)	4.13 (104.90)	8.50 (215.90)	14.60 (370.84)	21.20 (538.48)	3.40 (86.36)	1064	751	49140A
5.00 (127.00)	5.13 (130.30)	9.62 (244.35)	16.00 (406.40)	24.00 (609.60)	4.00 (101.60)	1658	1169	49150A
6.00 (152.40)	6.13 (155.70)	12.12 (307.85)	22.00 (558.80)	27.00 (685.80)	2.00 (50.80)	2355	1665	49160A

* Estimated

NGP Spark Arresters are designed for universal application with minimum restriction on the engine. They work well as add-on units to existing exhaust systems. Their light weight and small size reduce stress and vibration to the rest of the exhaust system. Typical applications include logging and construction equipment, agricultural machinery, over-the-road trucks, airport equipment, and forestry and military vehicles.

Material

Heavy gauge material is used with fully welded construction to provide maximum strength and service life.

Aluminized Steel/Mild Steel: NGP Spark Arresting Silencers are manufactured of aluminized steel and/or mild steel, depending on design.

Stainless Steel: NGP Spark Arresting Silencers are available in stainless steel by special request. Stainless steel provides excellent resistance to corrosion and has a maximum operating temperature of 1500 °F (816 °C).

Finish

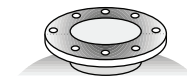
Silicone Aluminum Paint/Primer: NGP Spark Arresting Silencers are coated with high heat resistant silicone aluminum paint and/or a coat of high heat rust inhibiting primer.

How to Select the Proper Spark Arrester

If the diameter of the spark arrester inlet is as large as the exhaust pipe, restriction will generally be within engine guidelines. However, to be sure, check the exhaust CFM of the engine against the CFM rating of the spark arrester. Some applications (for example, turbo-charged and two-cycle diesel engines) may require larger arresters and an adapter is required to complete the installation.

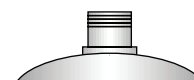
Additional Accessories

Companion Flanges are available in both cast iron threaded and mild steel weld-on versions. These come in kits that include all the nuts, bolts and gaskets necessary for proper installation.



"F" Mounting Flange

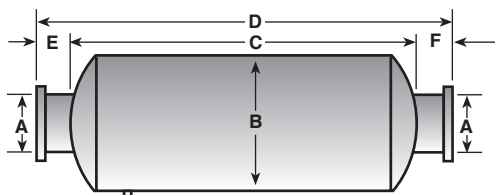
Standard in sizes 4"-22"
(102-559 mm). Drilling matches
125/150# ASA standard.



NPT Male Pipe Threads

NPT ends offered in sizes
0.25" (6.35 mm) through
3.5" (88.9 mm) (spark
arresting silencers only).

NGP Standard Spark Arresters



NGP Spark Arresters provide high efficiency spark arresting and good-to-excellent sound attenuation where fire hazards and noise must be minimized. Three attenuation levels - industrial, residential and critical - are available with **spark arresting efficiency expected to exceed 95%**. Applications include stationary and portable gen sets, oil field equipment, main propulsion engines on ships and gas compression equipment.

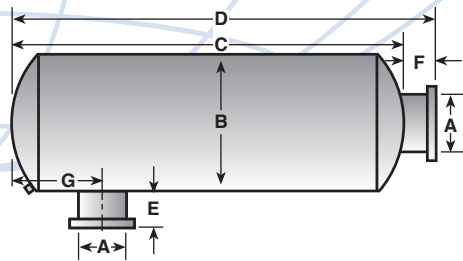
Type 1

	A Inlet Size in (mm)	B Body Diameter in (mm)	C Body Length in (mm)	D Overall Length in (mm)	E Inlet Length in (mm)	F Outlet Length in (mm)	Part Number
100 Residential Level	2.5 (63.5)	9.00 (228.60)	21.8 (553.7)	25.0 (635.0)	1.9 (48.3)	1.9 (48.3)	49325U
	3.0 (76.2)	9.00 (228.60)	24.3 (617.2)	29.5 (749.3)	2.6 (66.0)	2.6 (66.0)	49330U
	3.5 (88.9)	9.00 (228.60)	23.8 (604.5)	29.5 (749.3)	2.6 (66.0)	2.6 (66.0)	49335U
	4.0 (101.6)	10.12 (257.05)	23.7 (602.0)	31.5 (800.1)	3.9 (99.1)	3.9 (99.1)	49340U
	5.0 (127.0)	12.12 (307.85)	28.3 (718.8)	35.5 (901.7)	3.6 (91.4)	3.6 (91.4)	49350U
	6.0 (152.4)	14.12 (358.65)	31.5 (800.1)	38.0 (965.2)	2.7 (68.6)	2.7 (68.6)	49360U
	8.0 (203.2)	18.12 (460.25)	48.3 (1,226.8)	56.0 (1,422.4)	3.8 (96.5)	3.8 (96.5)	49380U
	10.0 (254.0)	22.12 (561.85)	53.6 (1,361.4)	60.0 (1,524.0)	3.2 (81.3)	3.2 (81.3)	49382U
	12.0 (304.8)	26.15 (664.21)	67.7 (1,719.6)	74.0 (1,879.6)	3.2 (81.3)	3.2 (81.3)	49384U
	14.0 (355.6)	36.21 (919.73)	72.2 (1,833.9)	77.0 (1,955.8)	2.4 (61.0)	2.4 (61.0)	49386U
	16.0 (406.4)	36.18 (918.97)	80.6 (2,047.2)	90.0 (2,286.0)	4.7 (119.4)	4.7 (119.4)	49388U
	18.0 (457.2)	42.23 (1,072.64)	92.2 (2,341.9)	100.0 (2,540.0)	3.9 (99.1)	3.9 (99.1)	49399U
20.0 (508.0)	48.12 (1,222.25)	103.9 (2,639.1)	109.9 (2,791.5)	3.0 (76.2)	3.0 (76.2)	49321U	
22.0 (558.8)	54.12 (1,374.65)	115.5 (2,933.7)	123.1 (3,126.7)	3.8 (96.5)	3.8 (96.5)	49322U	
200 Residential Level	1.5 (38.1)	7.00 (177.80)	16.4 (416.6)	20.0 (508.0)	1.6 (40.6)	1.6 (40.6)	49415U
	2.0 (50.8)	8.12 (206.25)	20.7 (525.8)	25.0 (635.0)	2.1 (53.3)	2.1 (53.3)	49420U
	2.5 (63.5)	9.59 (243.59)	25.0 (635.0)	30.0 (762.0)	2.5 (63.5)	2.5 (63.5)	49425U
	3.0 (76.2)	10.12 (257.05)	31.2 (792.5)	36.0 (914.4)	2.4 (61.0)	2.4 (61.0)	49430U
	3.5 (88.9)	11.12 (282.45)	33.0 (838.2)	38.0 (965.2)	2.9 (73.7)	2.9 (73.7)	49435U
	4.0 (101.6)	12.12 (307.85)	35.3 (896.6)	42.0 (1,066.8)	3.1 (78.7)	3.1 (78.7)	49440U
	5.0 (127.0)	14.11 (358.39)	41.5 (1,054.1)	48.0 (1,219.2)	3.3 (83.8)	3.3 (83.8)	49450U
	6.0 (152.4)	16.11 (409.19)	45.5 (1,155.7)	55.0 (1,397.0)	4.8 (121.9)	4.8 (121.9)	49460U
	8.0 (203.2)	18.12 (460.25)	62.3 (1,582.4)	72.0 (1,828.8)	4.9 (124.5)	4.9 (124.5)	49480U
	10.0 (254.0)	22.15 (562.61)	74.6 (1,894.8)	82.0 (2,082.8)	3.7 (94.0)	3.7 (94.0)	49482U
	12.0 (304.8)	26.12 (663.45)	86.7 (2,202.2)	93.0 (2,362.2)	3.1 (78.7)	3.1 (78.7)	49484U
14.0 (355.6)	36.21 (919.73)	90.2 (2,291.1)	95.0 (2,413.0)	2.4 (61.0)	2.4 (61.0)	49486U	
300 Critical Level	4.0 (101.6)	14.14 (359.16)	41.5 (1,054.1)	48.0 (1,219.2)	3.3 (83.8)	3.3 (83.8)	49540U
	5.0 (127.0)	16.12 (409.45)	47.0 (1,193.8)	54.0 (1,371.6)	3.8 (96.5)	3.8 (96.5)	49550U
	6.0 (152.4)	18.12 (460.25)	52.7 (1,338.6)	62.0 (1,574.8)	4.7 (119.4)	4.7 (119.4)	49560U
	8.0 (203.2)	22.18 (563.37)	66.6 (1,691.6)	72.0 (1,828.8)	2.7 (68.6)	2.7 (68.6)	49580U
	10.0 (254.0)	26.18 (664.97)	79.7 (2,024.4)	86.0 (2,184.4)	3.2 (81.3)	3.2 (81.3)	49582U
	12.0 (304.8)	30.18 (766.57)	86.8 (2,204.7)	92.0 (2,336.8)	2.6 (66.0)	2.6 (66.0)	49584U

Male pipe thread connections through 3.5", 4" and larger are 125/150# ASA drilled flanges.

Drains are standard on all silencers with a 9" body diameter or larger.

Note: Side-in end-out configuration is designed for side inlet flow only. Unit cannot be run backwards.



Male pipe thread connections through 3.5" (88.9 mm), 4" (101.6 mm) and larger are 125/150# ASA drilled flanges. Drains are standard on all silencers with a 9" (228.6 mm) body diameter or larger.

Note: Side-in end-out configuration is designed for side inlet flow only. Unit cannot be run backwards.

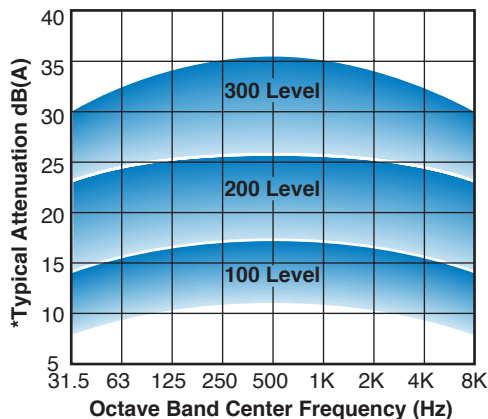
Type 3

	A Inlet Size in (mm)	B Body Diameter in (mm)	C Body Length in (mm)	D Overall Length in (mm)	E Inlet Length in (mm)	F Outlet Length in (mm)	G Offset to C/L in (mm)	Part Number
100 Residential Level	4.0 (101.6)	10.12 (257.05)	23.7 (602.0)	27.8 (706.1)	3.0 (76.2)	3.7 (94.0)	4.8 (121.9)	49640U
	5.0 (127.0)	12.12 (307.85)	28.9 (734.1)	32.2 (817.9)	3.0 (76.2)	3.3 (83.8)	5.7 (144.8)	49650U
	6.0 (152.4)	14.12 (358.65)	31.6 (802.6)	34.8 (883.9)	4.0 (101.6)	3.2 (81.3)	6.8 (172.7)	49660U
	8.0 (203.2)	18.11 (459.99)	48.6 (1,234.4)	52.3 (1,328.4)	4.0 (101.6)	3.7 (94.0)	7.8 (198.1)	49680U
	10.0 (254.0)	22.15 (562.61)	56.6 (1,437.6)	58.3 (1,480.8)	4.0 (101.6)	1.7 (43.2)	10.8 (274.3)	49682U
	12.0 (304.8)	26.15 (664.21)	67.8 (1,722.1)	70.9 (1,800.9)	4.0 (101.6)	3.1 (78.7)	11.9 (302.3)	49684U
	14.0 (355.6)	36.21 (919.73)	73.6 (1,869.4)	75.3 (1,912.6)	4.0 (101.6)	1.7 (43.2)	15.3 (388.6)	49686U
200 Residential Level	4.0 (101.6)	12.11 (307.59)	35.4 (899.2)	38.7 (983.0)	3.0 (76.2)	3.3 (83.8)	5.2 (132.1)	49740U
	5.0 (127.0)	14.11 (358.39)	41.6 (1,056.6)	44.8 (1,137.9)	4.0 (101.6)	3.2 (81.3)	6.3 (160.0)	49750U
	6.0 (152.4)	16.11 (409.19)	46.0 (1,168.4)	50.5 (1,282.7)	4.0 (101.6)	4.5 (114.3)	6.0 (152.4)	49760U
	8.0 (203.2)	18.15 (461.01)	62.6 (1,590.0)	67.3 (1,709.4)	4.0 (101.6)	4.7 (119.4)	8.3 (210.8)	49780U
	10.0 (254.0)	22.15 (562.61)	74.6 (1,894.8)	78.3 (1,988.8)	4.0 (101.6)	3.7 (94.0)	10.3 (261.6)	49782U
	12.0 (304.8)	26.15 (664.21)	85.7 (2,176.8)	88.9 (2,258.1)	4.0 (101.6)	3.1 (78.7)	11.9 (302.3)	49784U
	14.0 (355.6)	36.21 (919.73)	94.6 (2,402.8)	97.8 (2,484.1)	4.0 (101.6)	3.2 (81.3)	15.3 (388.6)	49786U
300 Critical Level	4.0 (101.6)	14.12 (358.65)	41.5 (1,054.1)	44.5 (1,130.3)	4.0 (101.6)	3.5 (88.9)	5.3 (134.6)	49840U
	5.0 (127.0)	16.12 (409.45)	47.0 (1,193.8)	50.5 (1,282.7)	4.0 (101.6)	3.5 (88.9)	6.0 (152.4)	49850U
	6.0 (152.4)	18.12 (460.25)	52.6 (1,336.0)	57.3 (1,455.4)	4.0 (101.6)	4.7 (119.4)	6.3 (160.0)	49860U
	8.0 (203.2)	22.15 (562.61)	66.6 (1,691.6)	69.3 (1,760.2)	4.0 (101.6)	2.7 (68.6)	10.3 (261.6)	49880U
	10.0 (254.0)	26.18 (664.97)	79.8 (2,026.9)	85.9 (2,181.9)	4.0 (101.6)	6.1 (154.9)	10.9 (276.9)	49882U
	12.0 (304.8)	30.18 (766.57)	86.4 (2,194.6)	89.2 (2,265.7)	4.0 (101.6)	2.8 (71.1)	12.2 (309.9)	49884U
	14.0 (355.6)	42.23 (1,072.64)	108.2 (2,748.3)	111.6 (2,834.6)	4.0 (101.6)	3.4 (86.4)	15.1 (383.5)	49886U

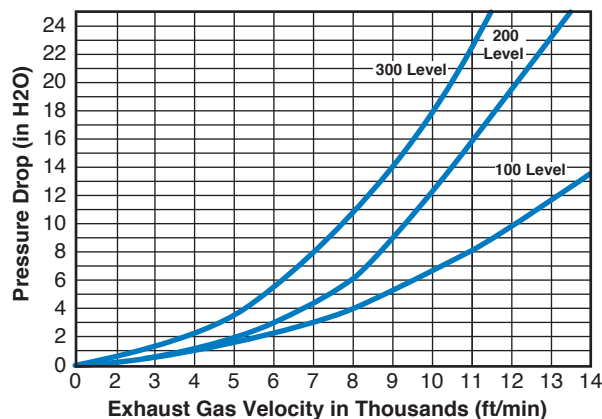
Specifications

Typical Attenuation Curve db(A)*

Actual attenuation may vary according to application.



Pressure Drop*



When figuring pressure drop for side inlet or middle side inlet, add 3" H₂O to the back pressure shown on the curve in this chart.

*Estimated



Nelson Global Products
P.O. Box 511
Stoughton, WI 53589

NGP018
Printed in U.S.A 2/14
©2014 Nelson Global Products, Inc.

nelsonglobalproducts.com