

All Spark Arresting Exhaust Silencers can be installed horizontally or vertically. Efficiency in either position can exceed 95% of rated flow. Spark Arresting Exhaust Silencers receive a coat of high heat-resistant silicone aluminum paint and/or a coat of high heat rust-inhibiting primer.

See the standard silencer specification sheet for finish details. Companion flanges are available in both cast iron threaded and mild steel weld-on versions. They are packaged in kits containing nuts, bolts, and gaskets for complete installation.

# Product Specifications

## Spark Arresting Exhaust Silencers

**Application**

	Industrial	Residential	Critical
Attenuation Level	12–18 dB	18–25 dB	25–35 dB
Silencing Required	minimum	moderate	maximum

**Fitting**

Orientation	horizontal or vertical	horizontal or vertical	horizontal or vertical
Flanged	•	•	•
Pipe Threads	•	•	•
Pipe Threads	•	•	•
Companion Flanges Offered	•	•	•

**Construction**

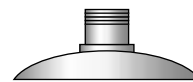
	Industrial	Residential	Critical
Material	4"–22"	4"–22"	4"–22"
Type 1	aluminized steel or mild steel*	aluminized steel or mild steel*	aluminized steel or mild steel*
Type 2	aluminized steel or mild steel*	aluminized steel or mild steel*	aluminized steel or mild steel*
Type 3	aluminized steel or mild steel*	aluminized steel or mild steel*	aluminized steel or mild steel*
Type 4	aluminized steel or mild steel*	aluminized steel or mild steel*	aluminized steel or mild steel*

\*Also available in stainless steel which provides exceptional resistance to corrosion and has a maximum operating temperature of 1,500°F.



**“A” Mounting Flange:**

Standard in sizes 4" to 22". Drilling matches 125/150# ASA standard. Companion flanges available for 4" to 22".



**“B” Male Pipe Threads:**

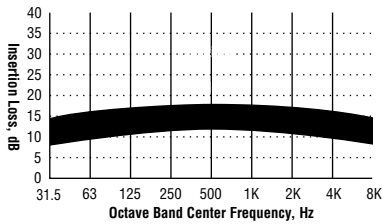
NPT ends offered in sizes .75" through 3.5" (spark arresting silencer only).

# Spark Arresting Silencer Performance

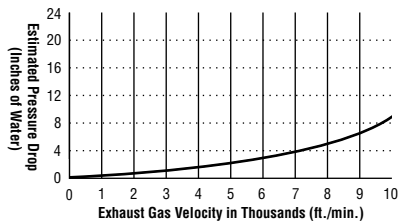
## Engine Exhaust Silencers

See page 1.1 for ordering information | www.universalsilencer.com

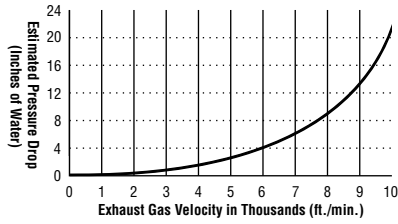
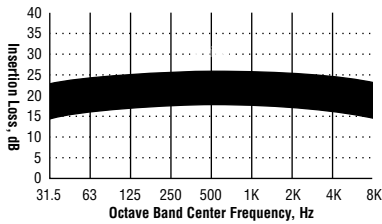
**Typical Attenuation Curve**



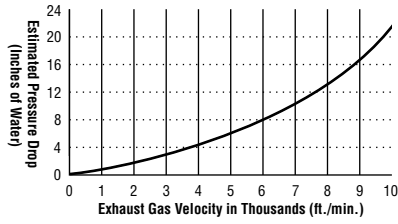
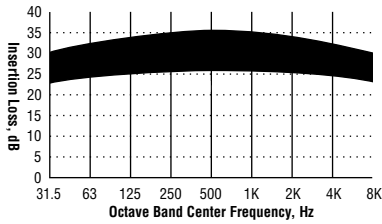
**Pressure Drop**



**Industrial**



**Residential**



**Critical**

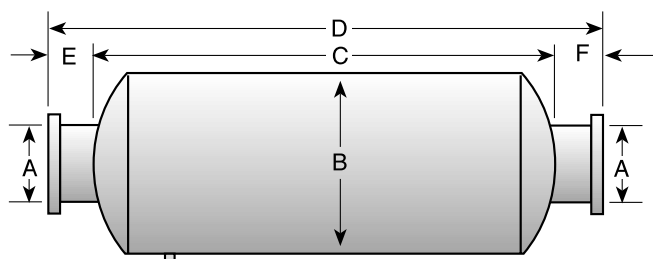
**Note:** When determining back pressure, velocity should not exceed 10,000 ft/min regardless of allowable back pressure. Specifications are subject to change without notice.

**Note:** When figuring pressure drop for side or middle side inlet, add 4" H<sub>2</sub>O to back pressure shown on curve.

Standard Spark Arresting Exhaust Silencers provide high efficiency spark arresting and exceptional sound attenuation where fire hazards must be eliminated and noise must be minimized. Three attenuation grades (industrial, residential, and critical) are available with spark arresting efficiencies

exceeding 95%. Heavy gauge material and fully welded construction provide maximum strength and longer service life in these units. Applications include stationary and portable gen sets, oil field equipment, propulsion engines on ships, and gas compression equipment.

## Type 1 Spark Arresting Exhaust Silencers



End-In, End-Out Design

Part Number	A Nominal Inlet Diameter	B Outside Body Diameter	C Body Length	D Overall Length	E Inlet Length	F Outlet Length
49325U	2.5	9.00	21.8	25.0	1.9	1.9
49330U	3.0	9.00	24.3	29.5	2.7	2.7
49335U	3.5	9.00	23.8	29.1	2.6	2.6
49340U	4.0	10.12	23.7	31.5	3.9	3.9
49350U	5.0	12.12	28.3	35.5	3.6	3.6
49360U	6.0	14.12	31.5	38.0	2.7	2.7
49380U	8.0	18.12	48.3	56.0	3.8	3.8
49382U	10.0	22.12	52.6	60.0	3.2	3.2
49384U	12.0	26.12	67.7	74.0	3.1	3.1
49386U	14.0	36.21	72.2	77.0	2.4	2.4
49388U	16.0	36.18	80.6	90.0	4.7	4.7
49399U	18.0	42.12	92.2	100.0	3.9	3.9
49321U	20.0	48.12	103.9	109.9	3.0	3.0
49322U	22.0	54.12	115.5	123.1	3.8	3.8
49415U	1.5	7.00	16.4	20.0	1.6	1.6
49420U	2.0	8.12	20.7	25.0	2.1	2.1
49425U	2.5	9.63	25.0	30.0	2.2	2.2
49430U	3.0	10.12	31.2	36.0	2.2	2.2
49435U	3.5	11.12	33.0	38.0	2.9	2.9
49440U	4.0	12.12	35.3	42.0	3.1	3.1
49450U	5.0	14.12	41.5	48.0	3.3	3.3
49460U	6.0	16.12	45.5	55.0	4.5	4.5
49480U	8.0	18.12	62.3	72.0	4.9	4.9
49482U	10.0	22.12	74.6	82.0	3.7	3.7
49484U	12.0	26.12	86.7	93.0	3.1	3.1
49486U	14.0	36.21	90.2	95.0	2.0	2.0
49540U	4.0	14.12	41.5	48.0	3.2	3.2
49550U	5.0	16.12	47.0	54.0	3.8	3.8
49560U	6.0	18.12	52.7	62.0	5.1	5.1
49580U	8.0	22.12	66.6	76.0	3.0	3.0
49582U	10.0	26.12	72.1	86.1	3.4	3.4
49584U	12.0	30.18	86.8	92.0	2.9	2.9

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. Side-in end-out configuration is designed for side inlet flow only. Unit cannot be run backward. All dimensions are in inches.

Industrial

Residential

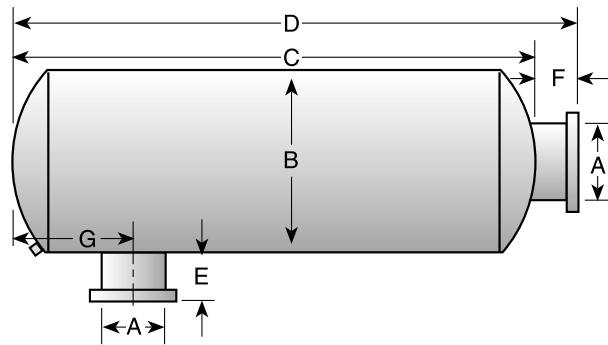
Critical

## Type 3

### Spark Arresting Exhaust Silencers

Standard Spark Arresting Exhaust Silencers provide high efficiency spark arresting and exceptional sound attenuation where fire hazards must be eliminated and noise must be minimized. Three attenuation grades (industrial, residential, and critical) are available with spark arresting efficiencies

exceeding 95%. Heavy gauge material and fully welded construction provide maximum strength and longer service life in these units. Applications include stationary and portable gen sets, oil field equipment, propulsion engines on ships, and gas compression equipment.



Side-In, End-Out Design

Part	A Nominal Inlet Diameter	B Outside Body Diameter	C Body Length	D Overall Length	E Inlet Length	F Outlet Length	G Offset to C/L	
Industrial	49640U	4.0	10.12	23.7	27.8	3.0	3.7	4.8
	49650U	5.0	12.12	28.8	32.2	3.0	3.3	5.7
	49660U	6.0	14.12	31.5	34.8	4.0	3.2	6.8
	49680U	8.0	18.12	48.3	52.3	4.0	3.8	7.7
	49682U	10.0	22.12	56.6	58.3	4.0	1.7	10.8
	49684U	12.0	26.12	67.7	70.9	4.0	3.1	11.9
Residential	49686U	14.0	36.21	73.6	75.3	4.0	1.7	15.3
	49740U	4.0	12.12	35.3	38.7	3.0	3.3	5.2
	49750U	5.0	14.12	41.5	44.8	4.0	3.2	6.3
	49760U	6.0	16.12	46.0	50.5	4.0	4.5	6.0
	49780U	8.0	18.12	62.3	67.3	4.0	4.8	8.2
	49782U	10.0	22.12	74.6	78.3	4.0	3.1	10.3
Critical	49784U	12.0	26.12	85.7	88.9	4.0	3.1	11.9
	49786U	14.0	36.21	94.6	97.8	4.0	3.2	15.3
	49840U	4.0	14.12	41.5	44.8	4.0	3.2	5.3
	49850U	5.0	16.12	47.0	50.5	4.0	3.5	6.0
	49860U	6.0	18.12	52.3	57.3	4.0	4.8	6.2
	49880U	8.0	22.12	66.6	69.3	4.0	2.7	10.3
49882U	10.0	26.12	79.7	85.9	4.0	6.1	10.9	
49884U	12.0	30.12	86.8	89.2	4.0	2.6	12.4	
49886U	14.0	42.23	108.2	111.6	4.0	3.4	15.1	

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. Side-in end-out configuration is designed for side inlet flow only. Unit cannot be run backward. All dimensions are in inches.