NOISE SUPPRESSOR

for SERVICE to 500°F
Sizes 3/8" to 8"

- **Effective over a broad frequency band** (up to 12,000 Hz)
- **Noise attenuation** up to 20 dBA
- **Additional noise reduction** available with multiple Suppressors and/or Silencing Orifice Plates
- **Expansion fittings not required**
- **Straight through design** minimizes pressure drop, permitting normal valve sizing

OPTIONS

- Sizes larger than 8"

NOISE SUPPRESSORS

APPLICATION DATA

- Steam Pressure Reduction Stations where Noise Reduction is Desired

SUPPRESSOR ENDS

INLET ANSI	OUTLET ANSI
NPT	NPT
NPT	150#
NPT	300#
150#	150#
300#	150#
300#	300#

NOTE: ANSI 150# Flanges are flat faced.
It is recommended that the Noise Suppressor be insulated to reduce condensation formation in the acoustic material.

DIMENSIONS inches (mm) **AND WEIGHTS** pounds (kg)
INLET SIZE 2½" TO 8"

NOMINAL PIPE SIZE			D[1] — INSTALLED LENGTH			APPROX. WEIGHT			Average Attenuation dBa[2]
A INLET	B OUTLET	C SHELL	150# X 150#	300# X 150#	300# X 300#	150# X 150#	300# X 150#	300# X 300#	
2½ (65)	4 (100)	5 (125)	39¾ (1010)	40 (1016)	40⅜ (1025)	73 (33)	75 (34)	85 (39)	12
2½ (65)	5 (125)	6 (150)	47¼ (1200)	47½ (1207)	47⅞ (1216)	105 (48)	108 (49)	123 (56)	16
3 (80)	4 (100)	5 (125)	39¾ (1009)	40⅛ (1019)	40½ (1028)	76 (35)	82 (37)	91 (41)	10
3 (80)	5 (125)	6 (150)	47¼ (1200)	47⅝ (1210)	48 (1219)	108 (49)	114 (52)	129 (59)	14
3 (80)	6 (150)	8 (200)	58¼ (1480)	58⅝ (1489)	59 (1499)	174 (798)	180 (82)	199 (90)	19
4 (100)	5 (125)	6 (150)	47½ (1206)	47⅞ (1216)	48¼ (1225)	113 (51)	123 (56)	138 (63)	12
4 (100)	6 (150)	8 (200)	54½ (1384)	54⅞ (1393)	55¼ (1403)	175 (80)	185 (84)	204 (93)	15
4 (100)	8 (200)	10 (250)	66 (1676)	66⅜ (1686)	66¾ (1695)	284 (129)	294 (134)	321 (146)	21
5 (125)	6 (150)	8 (200)	55 (1397)	55⅜ (1406)	55¾ (1416)	180 (82)	195 (87)	214 (97)	14
5 (125)	8 (200)	10 (250)	66½ (1689)	66⅞ (1698)	67¼ (1708)	289 (131)	304 (138)	331 (150)	19
5 (125)	10 (250)	12 (300)	89 (2261)	89⅜ (2280)	90 (2286)	455 (207)	470 (214)	516 (235)	26
6 (150)	8 (200)	10 (350)	66½ (1689)	66⅞ (1698)	67¼ (1708)	295 (134)	314 (143)	341 (155)	17
6 (150)	10 (250)	12 (300)	83½ (2121)	83⅞ (2130)	84½ (2146)	451 (205)	470 (214)	516 (235)	24
8 (200)	10 (250)	12 (300)	84 (2134)	84⅜ (2143)	85 (2159)	468 (213)	495 (225)	541 (246)	21

1. ±1/4" for 8" Shell and under, otherwise ± 3/8".
2. Consult factory for specifics.

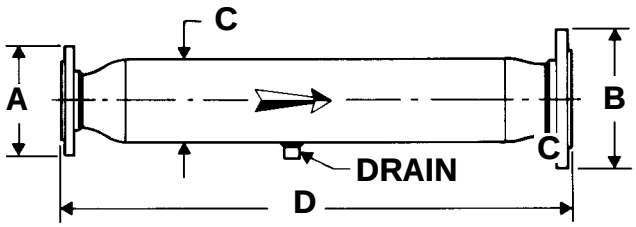
NOISE SUPPRESSOR

Specification

Noise Suppression equipment shall be of the dissipative reactive type. It shall have expanded outlet flange for attachment to downstream piping. Equipment shall provide a minimum of 10 dBA reduction in noise. Installation must be insulated.

MATERIALS OF CONSTRUCTION

Pressure Shell .....Welded Steel Components
Acoustic Material .....Stainless Steel



MAXIMUM VELOCITY feet per minute (meters per minute)

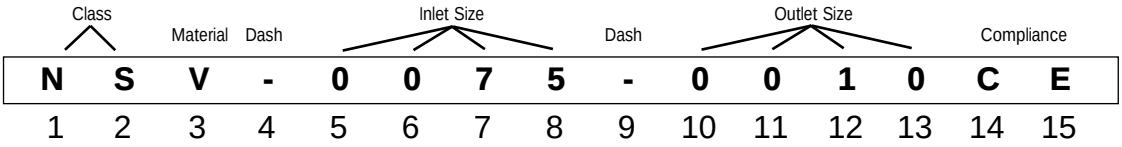
NOMINAL PIPE SIZE	MAXIMUM VELOCITY
0 - 2 (0 - 51)	17,000 (5182)
21/2 - 8 (64 - 203)	11,000 (3353)
>8 (>203)	9,000 (2734)

DIMENSIONS inches (mm) **AND WEIGHTS** pounds (kg)
INLET SIZES 3/8" TO 2"

NOMINAL PIPE SIZE			D[1] — INSTALLED LENGTH			APPROX. WEIGHT						Average Attenuation dBa[2]
A INLET	B OUTLET	C SHELL	NPTxNPT NPTx300# 300#x300#	NPTx150# 300#x150#	150#x150#	NPT x NPT	NPT x 150#	NPT x 300#	150# x 150#	300# x 150#	300# x 300#	
3/8 (10)	3/4 (20)	2 (50)	19 13/16 (502)	19 5/8 (498)	— —	8 (3.6)	9 (4.1)	10 (4.5)	— —	— —	— —	16
3/8 (10)	1 (25)	2 (50)	20 (508)	19 3/4 (502)	— —	8 (3.6)	10 (4.5)	11 (5)	— —	— —	— —	16
3/8 (10)	1 1/2 (40)	2 1/2 (65)	22 3/4 (578)	22 1/2 (572)	— —	12 (5.4)	15 (6.8)	18 (8.2)	— —	— —	— —	19
1/2 (15)	1 (25)	2 (50)	20 (508)	19 3/4 (502)	19 9/16 (140)	8 (3.6)	10 (4.5)	11 (5)	12 (5.4)	12 (5.4)	13 (5.9)	13
1/2 (15)	1 1/4 (32)	2 1/2 (65)	22 5/8 (574)	22 5/16 (565)	22 1/8 (562)	12 (5.4)	13 (5.9)	16 (7.3)	15 (6.8)	15 (6.8)	17 (7.7)	16
1/2 (15)	1 1/2 (40)	2 1/2 (65)	22 3/4 (578)	22 1/2 (572)	22 5/16 (565)	12 (5.45)	15 (6.8)	18 (8.2)	16 (7.3)	16 (7.3)	19 (8.6)	16
3/4 (20)	1 1/4 (32)	2 1/2 (65)	23 5/16 (591)	23 (584)	22 13/16 (578)	12 (5.4)	14 (6.4)	16 (7.3)	15 (6.8)	16 (7.3)	18 (8.2)	12
3/4 (20)	2 (50)	3 (80)	26 1/2 (673)	26 1/4 (667)	26 1/16 (664)	16 (7.3)	21 (9.5)	23 (10.4)	22 (10)	23 (10.4)	25 (11.4)	16
1 (25)	1 1/2 (40)	2 1/2 (65)	21 1/8 (537)	20 7/8 (530)	20 5/8 (524)	13 (5.9)	16 (7.3)	19 (8.6)	18 (8.2)	19 (8.6)	22 (10	9
1 (25)	2 (50)	3 (80)	23 11/16 (603)	26 7/16 (683)	26 3/16 (666)	16 (7.3)	21 (9.5)	23 (10.4)	23 (10.4)	24 (10.9)	26 (11.8)	12
1 1/4 (32)	2 (50)	3 (80)	24 5/16 (616)	24 1/16 (613)	23 3/4 (603)	16 (7.3)	21 (9.5)	23 (10.4)	23 (10.4)	25 (11.4)	27 (12.3)	9
1 1/4 (32)	3 (80)	4 (100)	34 11/16 (882)	34 5/16 (879)	34 (864)	— —	40 (18)	47 (21.4)	42 (19)	45 (20.5)	51 (23)	15
1 1/2 (40)	3 (80)	4 (100)	31 13/16 (807)	31 7/16 (800)	31 3/16 (791)	— —	39 (17.7)	44 (20)	43 (19.5)	46 (21)	52 (23.6)	13
2 (50)	3 (80)	4 (100)	31 7/8 (810)	31 1/2 (800)	31 1/4 (794)	— —	40 (18)	46 (21)	45 (20.5)	47 (21.4)	53 (24)	10
2 (50)	4 (100)	5 (125)	40 1/8 (1019)	39 3/4 (1010)	39 1/2 (1003)	— —	66 (30)	76 (34.5)	72 (32.7)	74 (33.6)	84 (38.2)	14

1. ±1/4" for 8" Shell and under, otherwise ± 3/8".
2. Consult factory for specifics.

NOISE SUPPRESSOR ORDER CODE



CLASS - Position 1 & 2
NS = Noise Suppressor

Material - Position 3
C = Carbon Steel
L = Low Temp Carbon Steel
V = 304 SST
T = 316 SST
R = Chrome Moly

Dash - Position 4

Inlet Size* - Position 5 - 8
0038 = 0.375"
0050 = 0.5"
0075 = 0.75"
0100 = 1"
0125 = 1.25"
0150 = 1.5"
0200 = 2"
0250 = 2.5"
0300 = 3"
0400 = 4"
0500 = 5"
0600 = 6"
0800 = 8"

Dash - Position 9

Outlet Size* - Position 10 - 13
0075 = 0.75"
0100 = 1"
0125 = 1.25"
0150 = 1.5"
0200 = 2"
0250 = 2.5"
0300 = 3"
0400 = 4"
0500 = 5"
0600 = 6"
0800 = 8"
1000 = 10"

Compliance - Position 14 & 15
CE = European Compliance

* Refer to sales literature for the standard inlet vs outlet configuration available.

NOTES:

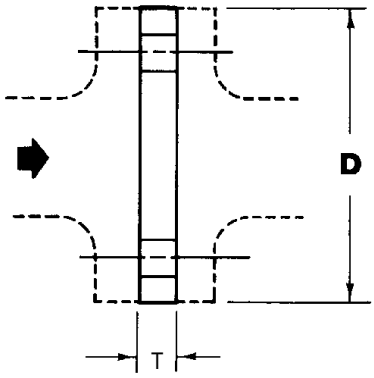
LES-SONIC SILENCING ORIFICE

SILENCING ORIFICE

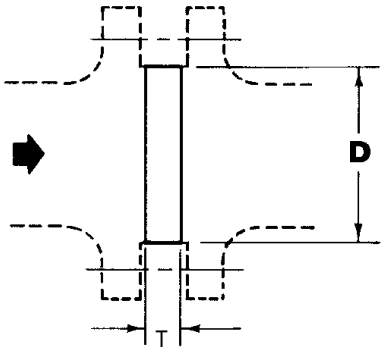
- **Economical** noise reduction
- **Single plate** reduces noise by 6 to 12 dBA
- **Additional noise reduction** available with multiple plates and/or Noise Suppressors
- **Engineered** for each application
- **Designed** to fit between ANSI flanges (DIN upon request)
- **For noise reduction estimates,** consult your Representative

Application Data

- Pressure Regulators or Control Valves where noise reduction or velocity control is desired.



ANSI 125 FLANGED



ANSI 150, 250, 300 & 600 FLANGED

Materials of Construction

Plate .....300 Series Stainless Steel

Specification

A Silencing Orifice Plate to be constructed of materials suitable for the installation and compatible with the piping. Generally, it is to be of stainless steel construction. The silencing orifice plate shall be of one piece construction with drilled holes. The holes shall be stepped in diameter for optimum d/I ratio and spaced for noise cancellation considering the specific parameters of the application. Orifice plates are to be designed for installation between two ANSI flanges in the enlarged piping downstream of the regulator or control valve. Silencing Orifice Plates are to be designed to provide between 6 to 12 dBA of noise reduction.

DIMENSIONS inches (mm)

NOMINAL PIPE SIZE	DIMEN-SION T	DIMENSION D			
		ANSI 125	ANSI 150	ANSI 300	ANSI 600
2	*	6	3⅞	4⅛	4⅛
2½	*	7	4⅝	4⅞	4⅞
3	*	7½	5⅛	5⅝	5⅝
4	*	9	6⅝	6⅞	7⅜
5	*	10	7½	8¼	9¼
6	*	11	8½	9⅝	10¼
8	*	13½	10¾	11⅞	12⅜
10	*	16	13⅛	14	15½
12	*	19	15⅞	16⅜	17¾
14	*	21	17½	18⅛	19¼
16	*	23½	20	21	22

* Consult factory.

SILENCING PLATES ORDERING CODE

Product Type	Pipe Size	ANSI Class			Plate Thickness	Plate Mat'l	Plate Type	Pressure Drop Ratio	Cv[1]				Other	
S	O	K	0	6	0	0	A	1	W	B	1	0	0	0	C	E
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Product Type - Positions 1 & 2
- SO = Silencing Orifice

Pipe Size - Position 3
- C = 1"
- E = 1½"
- F = 2"
- H = 3"
- J = 4"
- K = 6"
- L = 8"
- M = 10"
- N = 12"
- P = 14"
- Q = 16"
- R = 18"
- T = 20"
- U = 22"
- W = 24"
- X = Other

ANSI Class - Positions 4 - 7
- 0125 = ANSI Class 125
- 0150 = ANSI Class 150
- 0300 = ANSI Class 300
- 0600 = ANSI Class 600
- 0900 = ANSI Class 900
- 1500 = ANSI Class 1500
- 2500 = ANSI Class 2500
- XXXX = Other

Plate Thickness - Position 8
- A = 3/8" thick
- B = 1/2" thick
- C = 3/4" thick
- D = 1" thick
- E = 1¼" thick
- F = 1½" thick
- G = 1¾" thick
- H = 2" thick
- X = Other

Plate Material - Position 9
- 1 = 300 Series
- X = Other

Plate Type - Position 10
- W = Wafer
- F = Flanged
- X = Other

Pressure Drop Ratio - Position 11
(See Note 2)
- A = 0 and .65
- B = Between .66 and .75
- C = Between .76 and .85
- D = Over .85

Cv[1] - Positions 12 - 15
- 0010 = Cv 10
- 0100 = Cv 100
- 1000 = Cv 1000

Other - Positions 16 & 17
- CE = CE marking for PED
- XX = None

1. Actual Cv will be ±5%.
2. Pressure drop ratio is ΔP/P1 of the plate only.