



HVAC Spiral Pipe Component Parts



Stamped Fittings

INCORPORATED

Yellow label union manufacturer of HVAC Spiral Pipe component parts

Stamped Fittings® HVAC component parts will save you time and money on your next spiral pipe job. In a market that is becoming more and more competitive, cutting costs is crucial and we have what you need to compete in the market. We do not manufacture everything for your spiral pipe system, however, we can supply you with the key parts that are readily available to make your job much faster, easier and cost effective.

We continue our commitment to provide quality products as well as prompt, courteous service. Please feel free to contact us if you have any questions or would like pricing and samples of our HVAC products.

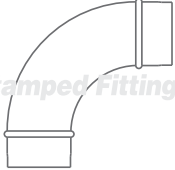
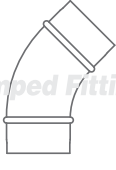
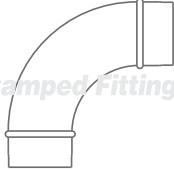
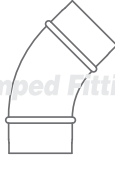
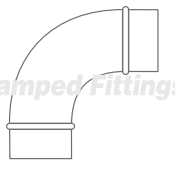
**It's Fast, It's Easy
It's Stamped Fittings®**


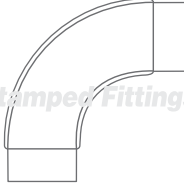
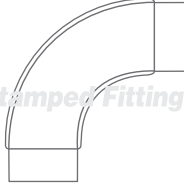
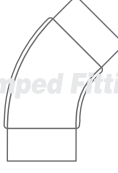

CONSTRUCTION STANDARD:

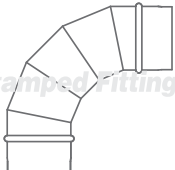
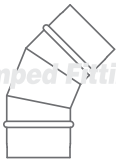
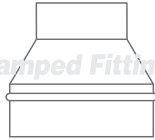
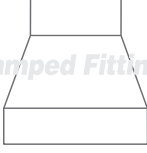
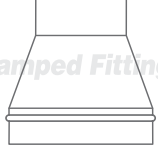
All duct and fittings are made per SMACNA's Duct Construction Standards (-2" W.G. / +10" W.G.)

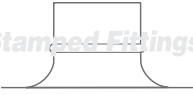
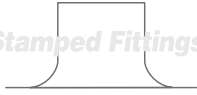


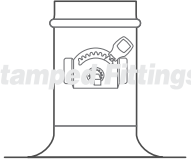
The following table shows diameter and gauges:

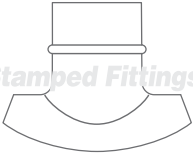
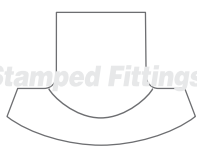
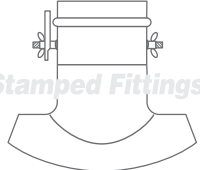
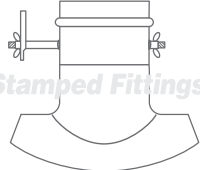

Diameter	Spiral Duct	Fabricated Fittings
4" - 14"	26 ga.	24 ga.
16" - 26"	24 ga.	22 ga.
28" - 36"	22 ga.	20 ga.

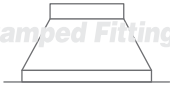
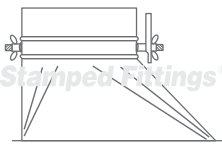
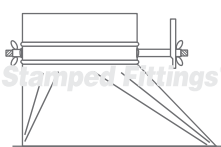

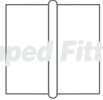
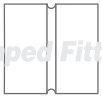
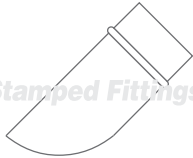
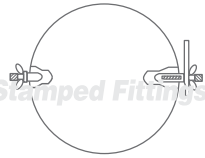
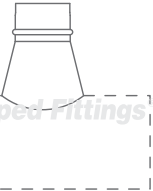
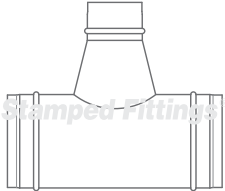
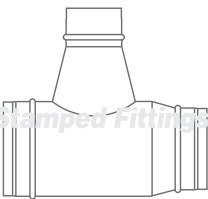
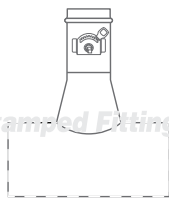
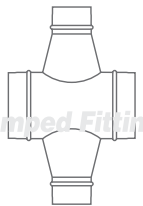
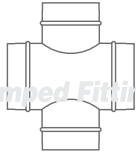
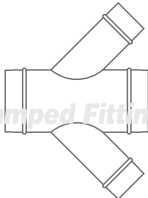

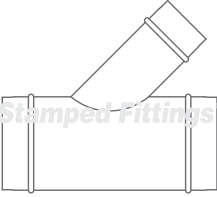
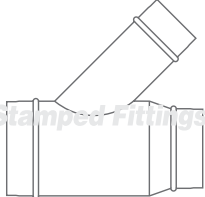
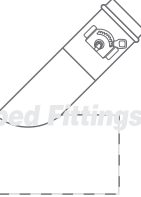
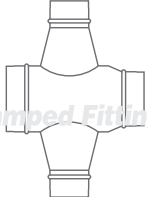
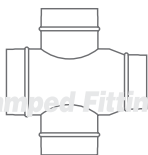
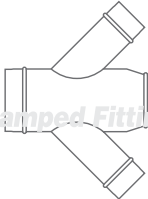


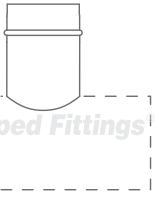
				
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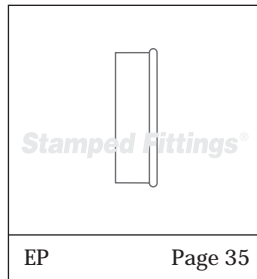
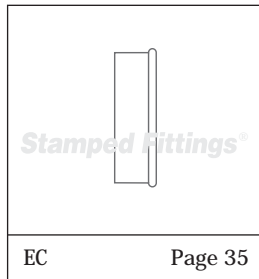
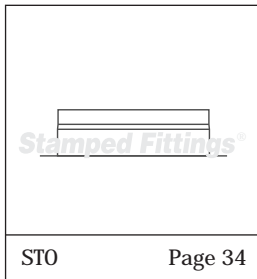
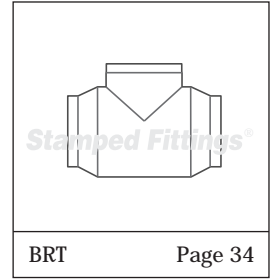
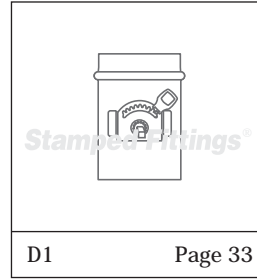
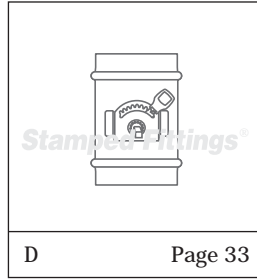
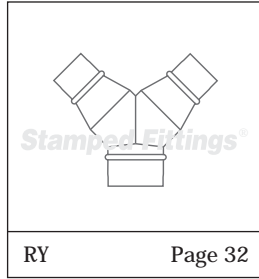
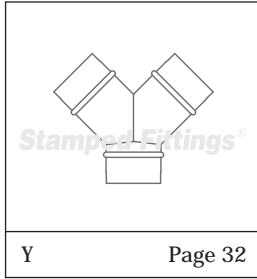
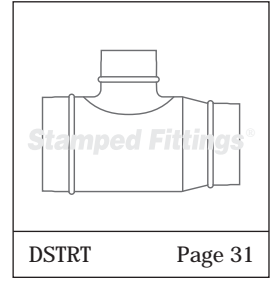
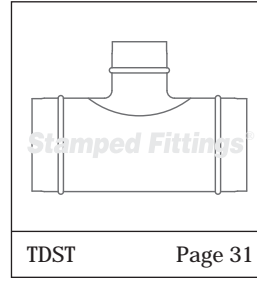
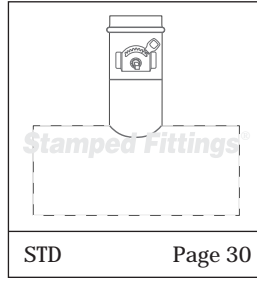
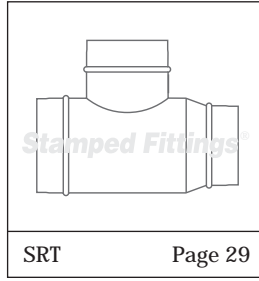
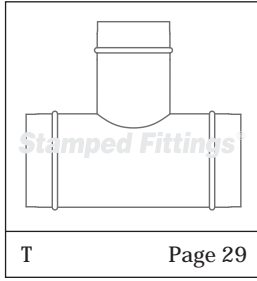
				
DSE145 Page 6	DSEF90 Page 7	DSEFU90 Page 7	DSEF45 Page 7	DSEFU45 Page 7

				
E90/E901 Page 8	E45/E451 Page 8	4SPR Page 9	CSPR Page 10	CSPRB Page 10

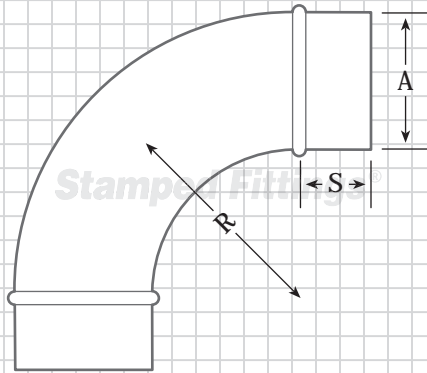
				
BTOB Page 11	BTONB Page 11	BTOBD Page 12	BTOD2S Page 12	BTOD Page 13

				
DSTB Page 14	DSTNB Page 14	DSTDC6 Page 15	DSTD2S Page 15	DSTD Page 16

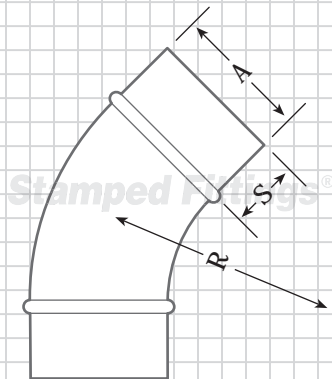
 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®
CTO Page 17	HETD Page 18	HETD2S Page 18	ECP Page 19	CM Page 20
 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®
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 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®
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 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®
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 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®	 Stamped Fittings®
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90° Die Stamped Flangeless Elbow
Galvanized (DSE90)
Galvaneal (NDSE90)



45° Die Stamped Flangeless Elbow
Galvanized (DSE45)
Galvaneal (NDSE45)



Key

A = Diameter
R = 1-1/2 A (centerline radius)
S = 2"

Materials Available

- n Galvanized (3" - 4"), 24 ga.
- n Galvanized (5" - 12"), 22 ga.
- n Galvaneal [paint grip] (4"), 24 ga.
- n Galvaneal [paint grip] (5" - 12"), 22 ga.

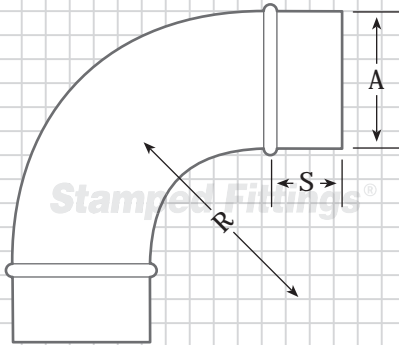
Welding Process

Flangeless elbows are continuously stitch welded on the throat and heel from end to end (past the bead).

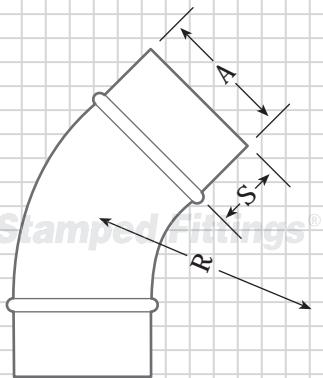
Dimensions

(A)	90° (R)	Wt. Per 90° Elbow (DSE90)	Wt. Per 90° Elbow (NDSE90)
3"	4.5"	0.8#	N/A
4"	6.0"	1.4#	1.4#
5"	7.5"	1.8#	2.5#
6"	9.0"	2.2#	3.4#
7"	10.5"	3.5#	4.4#
8"	12.0"	4.7#	5.4#
9"	13.5"	6.1#	5.9#
10"	15.0"	7.6#	6.4#
12"	18.0"	10.2#	9.0#
(A)	45° (R)	Wt. Per 45° Elbow (DSE45)	Wt. Per 45° Elbow (NDSE45)
3"	4.5"	0.6#	N/A
4"	6.0"	0.8#	0.8#
5"	7.5"	1.0#	1.5#
6"	9.0"	1.5#	2.0#
7"	10.5"	1.8#	2.6#
8"	12.0"	3.0#	3.2#
9"	13.5"	3.5#	4.0#
10"	15.0"	4.2#	4.8#
12"	18.0"	6.5#	6.6#

90° Die Stamped 1.0 CLR Flangeless Elbow (DSE190)



45° Die Stamped 1.0 CLR Flangeless Elbow (DSE145)



Key

A = Diameter
 R = 1A (centerline radius)
 S = 2"

Materials Available

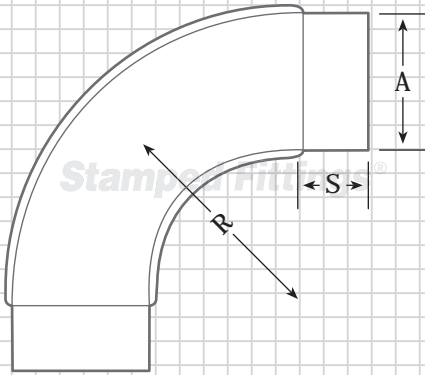
- n Galvanized (4" - 10"), 24 ga.
- n Galvanized (12"), 22 ga.

Flangeless elbows are continuously stitch welded on the throat and heel from end to end (past the bead).

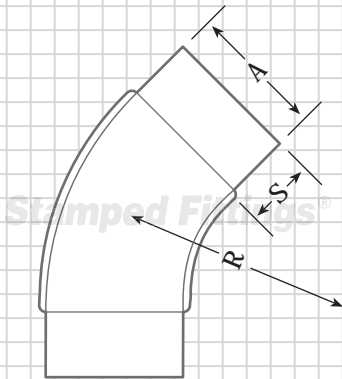
Dimensions

(A)	90° (R)	Wt. Per 90° Elbow	45° (R)	Wt. Per 45° Elbow
4"	4.0"	0.8#	4.0"	0.5#
5"	5.0"	1.0#	5.0"	0.6#
6"	6.0"	1.4#	6.0"	1.0#
7"	7.0"	2.0#	7.0"	1.2#
8"	8.0"	2.4#	8.0"	1.6#
9"	9.0"	3.0#	9.0"	2.0#
10"	10.0"	3.8#	10.0"	2.6#
12"	12.0"	7.0#	12.0"	4.0#

90° Die Stamped 20 Gauge Flanged Elbow (DSEF90)



45° Die Stamped 20 Gauge Flanged Elbow (DSEF45)



Key

A = Diameter
 R = 1-1/2 A (centerline radius)
 S = 2"

Materials Available

- n Galvanized, 20 ga.
- n Stainless steel 304L & 316L, 20 ga.
- n Aluminum 3003, 20 ga.
- n PVS 4x4 mill, 20 ga.

Options Available

- n Available assembled or unassembled

Welding Process

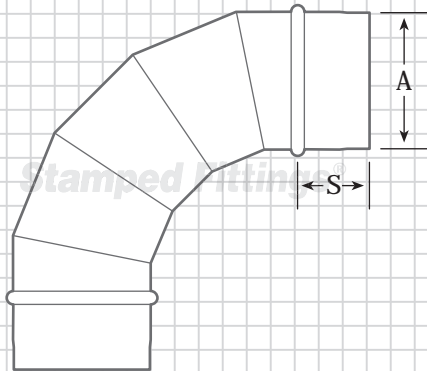
Galvanized and stainless steel are fully welded on the throat and heel by an automated welder. PVS and aluminum are assembled with rivets and sealed with silicone. Aluminum can also be fully tig welded on the throat and heel.

Dimensions

(A)	90° (R)	Wt. Per 90° Elbow	Wt. Per 90° Elbow (Alum.)	45° (R)	Wt. Per 45° Elbow	Wt. Per 45° Elbow (Alum.)
3"	4.5"	1.0#	0.5#	4.5"	0.7#	0.2#
4"	6.0"	1.5#	0.7#	6.0"	1.0#	0.5#
5"	7.5"	2.0#	1.0#	7.5"	1.5#	0.5#
6"	9.0"	3.5#	1.7#	9.0"	2.0#	1.0#
7"	10.5"	5.0#	2.0#	10.5"	2.5#	1.2#
8"	12.0"	5.7#	2.8#	12.0"	3.2#	1.5#
9"	13.5"	7.2#	3.5#	13.5"	4.0#	1.7#
10"	15.0"	8.5#	4.0#	15.0"	5.0#	2.2#
11"	16.5"	10.0#	5.0#	16.5"	6.0#	2.7#
12"	18.0"	13.0#	6.2#	18.0"	7.0#	3.2#
14"	21.0"	18.0#	N/A	21.0"	9.0#	4.2#

Gorelocked Elbows

90° 5-Piece 1.5 CLR Elbow (E90)
 90° 5-Piece 1.0 CLR Elbow (E901)



Options Available

- n Specify CLR (1.5, 1.0, etc.)
- n Specify Degree (15°, 22.5°, 30°, 45°, 60°, 90°, etc.)
- n Up to 30° = 2 Piece
- n 30°+ up to 60° = 3 Piece
- n 60°+ up to but not including 90° = 4 Piece
- n 90° = 5 Piece

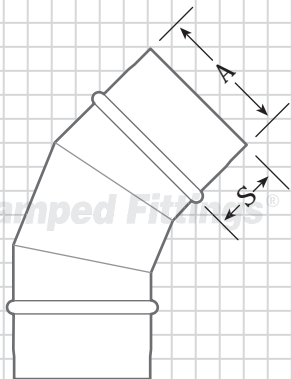
Key

A = Diameter
 S = 2"

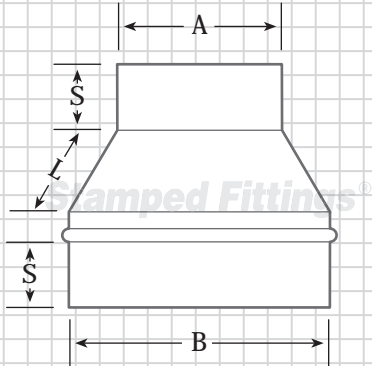
Materials Available

- n Galvanized
- n Galvaneal
- n Stainless Steel 304 & 316
- n Aluminum

45° 3-Piece 1.5 CLR Elbow (E45)
 45° 3-Piece 1.0 CLR Elbow (E451)



1-Piece Spun Reducer – Short (4SPR)



Key

- A = Small end diameter
- B = Large end diameter
- S = 1-1/2"
- L = 1-1/2"

Materials Available

n Galvanized, 20 ga.

- n Sizes 4" to 16"
- n Male (small ends) fit into spiral pipe
- n Bead on large end is standard

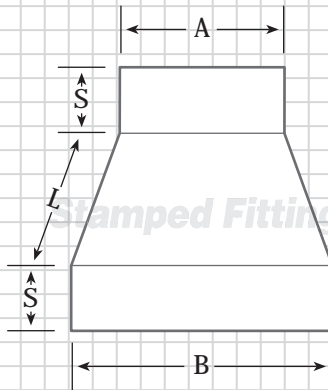
Dimensions

(B)	(A)	Weight Each
4"	3"	0.6#
5"	3"	0.6#
5"	4"	0.6#
6"	3"	0.7#
6"	4"	0.7#
6"	5"	0.7#
7"	3"	0.8#
7"	4"	0.8#
7"	5"	0.8#
7"	6"	0.8#
8"	4"	1.1#
8"	5"	1.1#
8"	6"	1.1#
8"	7"	1.1#
9"	5"	1.2#
9"	6"	1.2#
9"	7"	1.2#
9"	8"	1.2#
10"	5"	1.3#
10"	6"	1.3#
10"	7"	1.3#
10"	8"	1.3#
10"	9"	1.3#
11"	7"	1.6#
11"	8"	1.6#
11"	9"	1.6#
11"	10"	1.6#

Dimensions

(B)	(A)	Weight Each
12"	6"	1.8#
12"	7"	1.8#
12"	8"	1.8#
12"	9"	1.8#
12"	10"	1.8#
14"	8"	2.1#
14"	9"	2.1#
14"	10"	2.1#
14"	11"	2.1#
14"	12"	2.1#
14"	13"	2.1#
15"	9"	2.2#
15"	10"	2.2#
15"	11"	2.2#
15"	12"	2.2#
15"	13"	2.2#
15"	14"	2.2#
16"	10"	2.4#
16"	11"	2.4#
16"	12"	2.4#
16"	13"	2.4#
16"	14"	2.4#
16"	15"	2.4#

1-Piece Concentric Spun Reducer (CSPR/CSPRB)



Key

A = Small end diameter
 B = Large end diameter
 L = 4"
 S = 3"

Materials Available

n Galvanized, 20 ga.

n Sizes 4" to 24"
 n Male (small ends) fit into spiral pipe

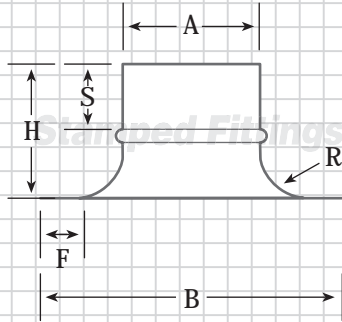
Options Available

n Bead available on large end upon request (CSPRB)

Sizes For CSPR/CSPRB Only

(B)	(A)	Weight Each	(B)	(A)	Weight Each
4"	3"	1.0#	12"	7"	2.8#
5"	3"	1.3#	12"	8"	2.8#
5"	4"	1.3#	12"	9"	2.8#
6"	3"	1.5#	12"	10"	2.8#
6"	4"	1.5#	14"	9"	3.3#
6"	5"	1.5#	14"	10"	3.3#
7"	3"	1.8#	14"	12"	3.3#
7"	4"	1.8#	16"	12"	3.9#
7"	5"	1.8#	16"	14"	3.9#
7"	6"	1.8#	16"	15"	3.9#
8"	4"	2.0#	18"	14"	4.3#
8"	5"	2.0#	18"	16"	4.3#
8"	6"	2.0#	20"	16"	4.8#
8"	7"	2.0#	20"	18"	4.8#
9"	5"	2.2#	22"	18"	5.5#
9"	6"	2.2#	22"	20"	5.5#
9"	7"	2.2#	24"	20"	6.0#
9"	8"	2.2#	24"	22"	6.0#
10"	5"	2.6#			
10"	6"	2.6#			
10"	7"	2.6#			
10"	8"	2.6#			
10"	9"	2.6#			

Bellmouth Take-Off (BTOB & BTONB)



Key

A = Diameter
 B = Overall width
 R = Radius
 H = Overall height
 F = Flange length
 T = Flange thickness (gauge)

Materials Available

- n Galvanized (4" - 12"), 24 ga., stamped
- n Galvanized (14" - 36"), 20 ga., spun

Options Available

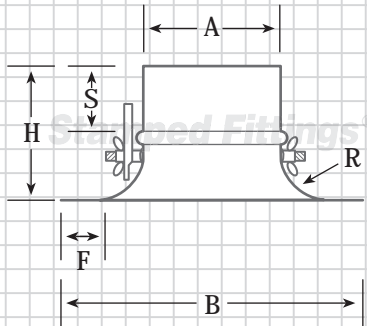
- n Sizes 4" to 36"
- n Dampers (see BTOBD spec)
- n Peel & stick gasket is standard on BTOB (4" - 14")
- n 2" Stand-off (see BTOBD spec)
- n Bead or no bead

Dimensions

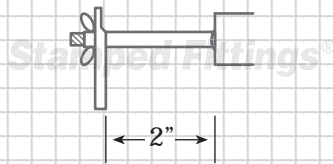
(A)	(B)	(R)	(F)	(H)	(S)	Weight Each
4"	6.5"	.394"	1"	2-1/4"	2"	0.4#
5"	8.25"	.472"	1"	2-1/2"	2"	0.7#
6"	8.5"	.787"	1"	4-1/4"	2"	0.8#
7"	10.5"	1.0"	1"	3-1/2"	2"	0.7#
8"	11"	1.0"	1"	4-1/2"	2"	1.1#
9"	13"	1.0"	1"	3-1/2"	2"	0.9#
10"	13.5"	1.0"	1"	4-3/4"	2"	1.5#
12"	14.5"	1.0"	1"	5-1/2"	2"	2.0#
14"	17"	2.0"	1"	6-1/2"	2"	3.2#
16"	20"	2.0"	1.5"	8-1/2"	2"	4.4#
18"	22"	2.0"	1.5"	8-1/2"	2"	5.4#
20"	24"	2.0"	1.5"	8-1/2"	2"	6.2#
22"	26"	2.0"	1.5"	8-1/2"	2"	7.0#
24"	28"	2.0"	1.5"	8-1/2"	2"	7.4#
26"	30"	2.0"	1.5"	8-1/2"	2"	8.0#
28"	32"	2.0"	1.5"	8-1/2"	2"	8.0#
30"	34"	2.0"	1.5"	8-1/2"	2"	10.0#
32"	36"	2.0"	1.5"	8-1/2"	2"	10.0#
34"	38"	2.0"	1.5"	8-1/2"	2"	11.0#
36"	40"	2.0"	1.5"	8-1/2"	2"	11.0#

- n 4", 5", 7" & 9" are short BTO's
- n Peel & stick gasket is not available on 16"-36"

Bellmouth Take-Off with Damper (BTOBD)



OPTION: 2" Shaft Extension Handle (BTOD2S)



Key

- A = Diameter
- B = Overall width
- R = Radius
- H = Overall height
- F = Flange length
- T = Flange thickness (gauge)

Materials Available

- n Galvanized (4" - 12"), 24 ga., stamped
- n Galvanized (14" - 36"), 20 ga., spun

Options Available

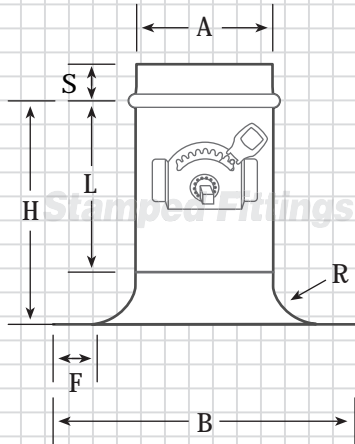
- n Sizes 4" to 36"
- n Peel & stick gasket is standard on BTOBD (4" - 14")
- n 2" Stand-off, BTOD2S (see shaft extension handle drawing to the left)
- n See Volume Damper (VD) spec

Dimensions

(A)	(B)	(R)	(F)	(H)	(S)	Weight Each
4"	6.5"	.394"	1"	8"	2"	1.0#
5"	8.25"	.472"	1"	8-1/2"	2"	1.2#
6"	8.5"	.787"	1"	4-1/4"	2"	1.0#
7"	10.5"	1.0"	1"	9"	2"	2.4#
8"	11"	1.0"	1"	4-1/2"	2"	1.4#
9"	13"	1.0"	1"	9"	2"	3.0#
10"	13.5"	1.0"	1"	4-3/4"	2"	2.1#
12"	14.5"	1.0"	1"	5-1/2"	2"	2.6#
14"	17"	2.0"	1"	6-1/2"	2"	4.2#
16"	20"	2.0"	1.5"	8-1/2"	2"	6.4#
18"	22"	2.0"	1.5"	8-1/2"	2"	7.4#
20"	24"	2.0"	1.5"	8-1/2"	2"	8.2#
22"	26"	2.0"	1.5"	8-1/2"	2"	9.0#
24"	28"	2.0"	1.5"	8-1/2"	2"	9.4#
26"	30"	2.0"	1.5"	8-1/2"	2"	13.0#
28"	32"	2.0"	1.5"	8-1/2"	2"	13.0#
30"	34"	2.0"	1.5"	8-1/2"	2"	17.0#
32"	36"	2.0"	1.5"	8-1/2"	2"	17.0#
34"	38"	2.0"	1.5"	8-1/2"	2"	21.0#
36"	40"	2.0"	1.5"	8-1/2"	2"	21.0#

- n 4", 5", 7" & 9" are short BTO's
- n Peel & stick gasket is not available on 16"-36"

Bellmouth Take-Off with Damper (BTOD)



Dimensions

(A)	(S)	(R)	(F)	(L)	(B)	(H)
4"	2"	.394"	1"	4"	6.5"	7.875"
5"	2"	.472"	1"	4"	8.25"	8.25"
6"	2"	.787"	1"	4"	8.5"	9.875"
7"	2"	1.0"	1"	4"	10.5"	9.125"
8"	2"	1.0"	1"	4"	11"	10.125"
9"	2"	1.0"	1"	4"	13"	9.125"
10"	2"	1.0"	1"	4"	13.5"	10.375"
12"	2"	1.0"	1"	4"	14.5"	11.125"
14"	2"	2.0"	1"	4"	17"	12.125"
16"	2"	2.0"	1.5"	4"	20"	14.125"
18"	2"	2.0"	1.5"	4"	22"	14.125"
20"	2"	2.0"	1.5"	4"	24"	14.125"
22"	2"	2.0"	1.5"	4"	26"	14.125"
24"	2"	2.0"	1.5"	4"	28"	14.125"
26"	2"	2.0"	1.5"	4"	30"	14.125"
28"	2"	2.0"	1.5"	4"	32"	14.125"
30"	2"	2.0"	1.5"	4"	34"	14.125"
32"	2"	2.0"	1.5"	4"	36"	14.125"
34"	2"	2.0"	1.5"	4"	38"	14.125"
36"	2"	2.0"	1.5"	4"	40"	14.125"

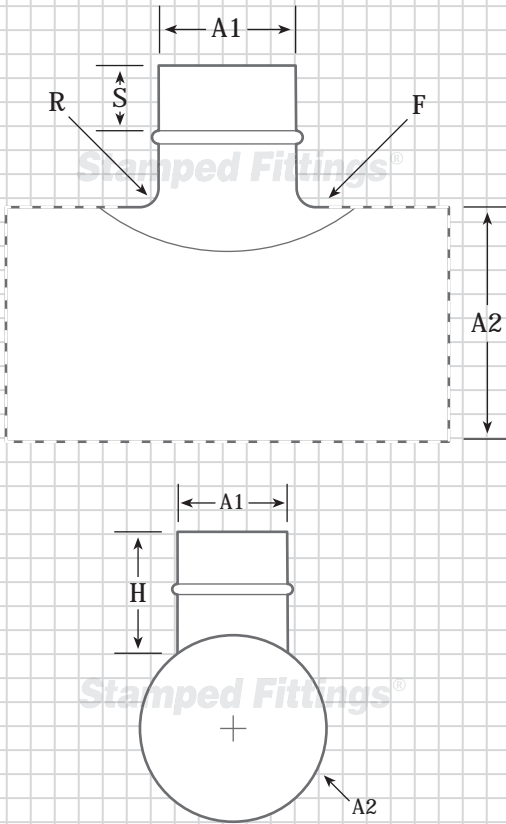
Features

- n 22 Gauge galvanized body

Low-Leakage Dampers

- n 2" Stand-off (20 ga.)
- n Nylon bushings with O-ring for sealing of holes
- n Locking handle for adjustment of damper - ease of balancing
- n 3/8" Continuous square rod through damper
- n 4" - 22" Standard dampers (22 ga.)
- n 24" - 36" Standard dampers (20 ga.)

90° Die Stamped Saddle Tap (DSTB & DSTNB)



Key

A1 = Branch (nominal) size R = Radius
 A2 = Pipe (nominal) size F = Flange on pipe

R = 0.787" (4 on 4 – 6 on 20/22/24),
 1.0" (8 on 8 – 12 on 22/24)
 F = 1.0" (4 on 4 – 8 on 20/22/24),
 2.0" (10 on 10 – 12 on 22/24)
 S = 1-1/4" (4 on 4 – 5 on 16/24),
 1-1/2" (6 on 6 – 12 on 22/24)

Materials Available

n Galvanized, 24 ga.

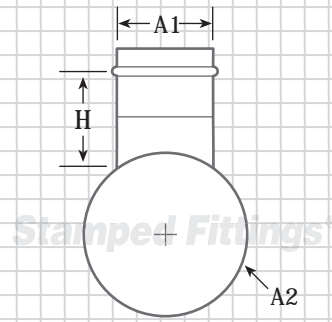
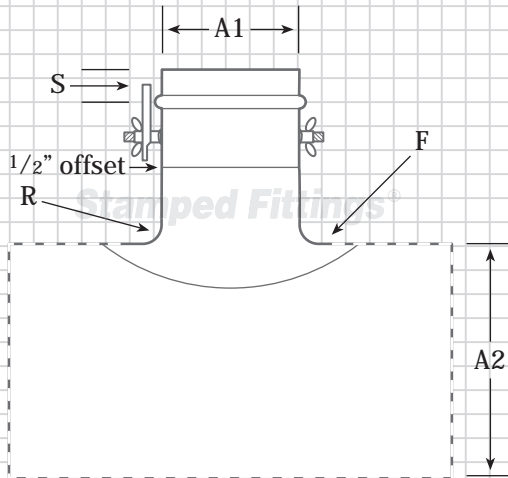
Options Available

n Damper collars in 6" lengths (see DSTDC6 spec)
 n Bead or no bead

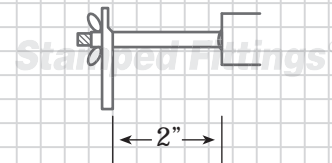
Dimensions

(A1)	(A2)	Weight Each	(H)
4"	4"	0.4#	2"
4"	5"	0.4#	2"
4"	6" - 7"	0.4#	2"
4"	8"	0.4#	2"
4"	9" - 10"	0.4#	2"
4"	12" - 14"	0.4#	2"
4"	16" - 24"	0.4#	2"
5"	5"	0.7#	2-1/8"
5"	6" - 7"	0.7#	2-1/8"
5"	8" - 9"	0.7#	2-1/8"
5"	10"	0.7#	2-1/8"
5"	12" - 14"	0.7#	2-1/8"
5"	16" - 24"	0.7#	2-1/8"
6"	6"	0.8#	3-1/8"
6"	8"	0.8#	3-1/8"
6"	10" - 12"	0.7#	3-1/8"
6"	14" - 18"	0.7#	3-1/8"
6"	20" - 24"	0.6#	3-1/8"
8"	8"	1.1#	3-3/8"
8"	10"	1.3#	3-3/8"
8"	12" - 14"	1.1#	3-3/8"
8"	16" - 18"	1.1#	3-3/8"
8"	20" - 24"	1.0#	3-3/8"
10"	10"	1.8#	3-3/8"
10"	12"	2.0#	3-3/8"
10"	14" - 16"	1.8#	3-3/8"
10"	18" - 20"	1.8#	3-3/8"
10"	22" - 24"	1.7#	3-3/8"
12"	12"	2.3#	3-1/2"
12"	14" - 16"	2.0#	3-1/2"
12"	18" - 20"	2.3#	3-1/2"
12"	22" - 24"	2.1#	3-1/2"

90° Die Stamped Saddle Tap with Damper (DSTDC6)



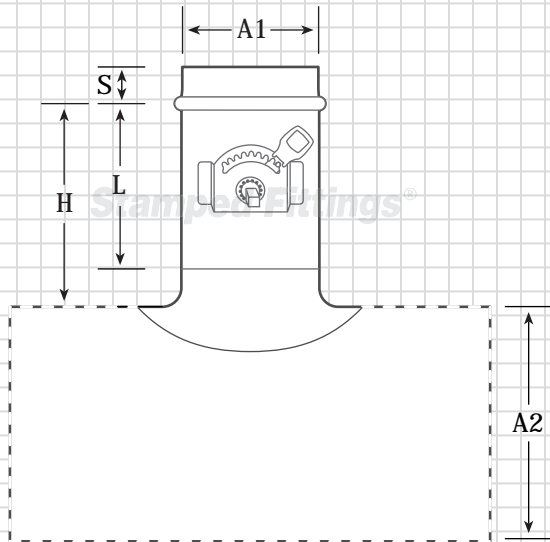
OPTION: 2" Shaft Extension Handle (DSTD2S)



Key
A1 = Branch size
A2 = Pipe size
F = Flange on pipe
H = Height
R = Radius
R = 0.787" (4 on 4 – 6 on 20/22/24), 1.0" (8 on 8 – 12 on 22/24)
F = 1.0" (4 on 4 – 8 on 20/22/24), 2.0" (10 on 10 – 12 on 22/24)
S = 1-1/4" (4 on 4 – 5 on 16/24), 1-1/2" (6 on 6 – 12 on 22/24)
H = 6" (where A1 is 4" - 5") 7" (where A1 is 6" - 12")
Materials Available
n Galvanized, 24 ga.
Options Available
n 2" Stand-offs, DSTD2S (see shaft extension handle drawing above)

Dimensions					
(A1)	(A2)	Weight Each	(A1)	(A2)	Weight Each
4"	4"	0.8#	6"	14" - 18"	1.4#
4"	5"	0.8#	6"	20" - 24"	1.4#
4"	6"-7"	0.8#	8"	8"	2.1#
4"	8"	0.8#	8"	10"	2.3#
4"	9" - 10"	0.8#	8"	12" - 14"	2.1#
4"	12" - 14"	0.8#	8"	16" - 18"	2.1#
4"	16" - 24"	0.8#	8"	20" - 24"	2.0#
5"	5"	1.3#	10"	10"	3.0#
5"	6" - 7"	1.3#	10"	12"	3.2#
5"	8" - 9"	1.3#	10"	14" - 16"	3.0#
5"	10"	1.3#	10"	18" - 20"	3.0#
5"	12" - 14"	1.3#	10"	22" - 24"	2.9#
5"	16" - 24"	1.3#	12"	12"	3.7#
6"	6"	1.6#	12"	14" - 16"	3.4#
6"	8"	1.6#	12"	18" - 20"	3.7#
6"	10" - 12"	1.5#	12"	22" - 24"	3.5#

90° Die Stamped Saddle Tap with Damper (DSTD)



* Field installed fitting

Key (DSTD)

A1 = 4", 5", 6", 8", 10", 12"
 A2 = Up to 24" (A2 is greater than or equal to A1)
 S = 2"
 H = see chart
 L = 4"

Features

- n 22 Gauge galvanized body

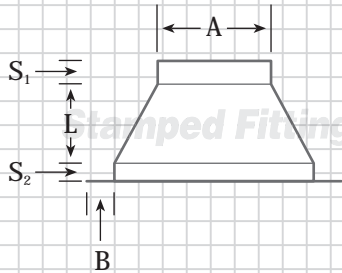
Low-Leakage Dampers

- n 2" Stand-off (20 ga.)
- n Nylon bushings with O-ring for sealing of holes
- n Locking handle for adjustment of damper - ease of balancing
- n 3/8" Continuous square rod through damper
- n 4" - 22" Standard dampers (22 ga.)
- n 24" - 36" Standard dampers (20 ga.)

Dimensions

(A1)	(H)
4"	7-3/4"
5"	7-7/8"
6"	8-3/4"
8"	9"
10"	9"
12"	9-1/8"

Conical Take-Off (CTO)



Key

A = Diameter
 B = 3/4" (flange length)
 L = 4"
 S₁ = 2"
 S₂ = 1-1/4"

Materials Available

n Galvanized (3" - 22"), 20 ga., spun

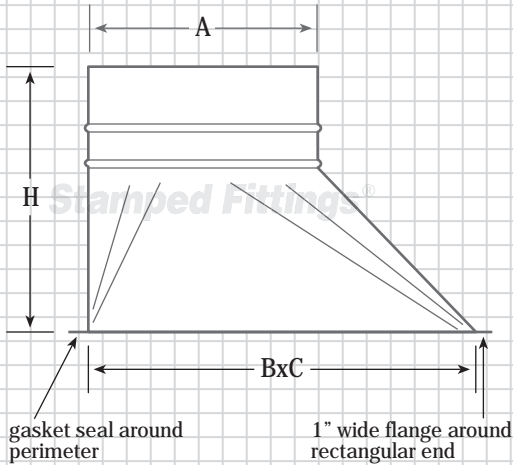
Options Available

n Sizes 3" to 22"
 n Total length = 7-1/4"
 n Male (small ends) to fit into spiral pipe

Dimensions

(A)	(B)	(L)	(S ₁)	(S ₂)	Weight Each
3"	3/4"	4"	2"	1-1/4"	1.0#
4"	3/4"	4"	2"	1-1/4"	1.3#
5"	3/4"	4"	2"	1-1/4"	1.5#
6"	3/4"	4"	2"	1-1/4"	1.7#
7"	3/4"	4"	2"	1-1/4"	1.8#
8"	3/4"	4"	2"	1-1/4"	1.9#
9"	3/4"	4"	2"	1-1/4"	2.0#
10"	3/4"	4"	2"	1-1/4"	2.1#
12"	3/4"	4"	2"	1-1/4"	2.2#
14"	3/4"	4"	2"	1-1/4"	2.5#
16"	3/4"	4"	2"	1-1/4"	2.7#
18"	3/4"	4"	2"	1-1/4"	2.8#
20"	3/4"	4"	2"	1-1/4"	3.3#
22"	3/4"	4"	2"	1-1/4"	3.7#

High Efficiency Take-Off (HET)



Key

- A = Diameter
- BxC = Base
- H = Height
- HET - No damper
- HETD - With damper

Construction

- n Togglelock seam

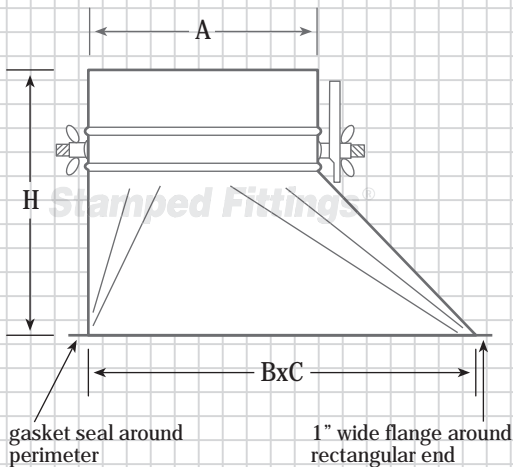
Materials Available

- n Galvanized, 26 ga.
- n Complete with peel & stick neoprene gasket

Options Available

- n 2" Stand-off, HETD2S (see shaft extension handle drawing to the left)

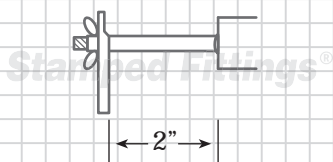
High Efficiency Take-Off (HETD)



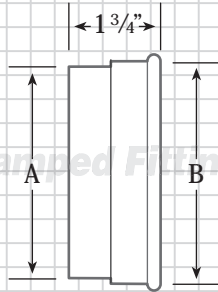
Dimensions

(A)	(BxC)	(H)	26 Ga. Weight
4"	10"x5"	9-1/4"	1.04#
5"	10"x5"	9-1/2"	1.60#
6"	12"x6"	9-1/4"	1.80#
7"	12"x6"	9-1/4"	2.00#
8"	12"x6"	9-1/4"	2.20#
9"	15"x6"	10-1/2"	2.80#
10"	16"x6-3/4"	10-1/4"	3.00#
12"	18"x8-1/2"	10-1/4"	3.60#
14"	20"x9-1/2"	10-1/2"	4.20#
16"	22"x14"	13"	6.60#

OPTION: 2" Shaft Extension Handle (HETD2S)



End Cap/Plug (ECP)



Key

A = Small end to fit in spiral pipe, - 1/8" (Plug)
 B = Large end to fit over spiral pipe, + 1/8" (Cap)

Materials Available

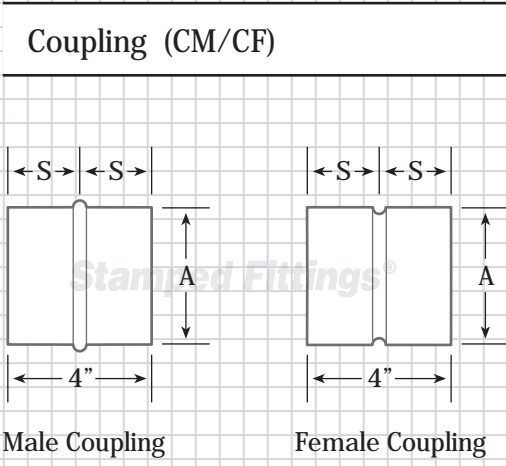
n Galvanized, 24 ga.

Options Available

n Sizes 3" to 30"

Dimensions

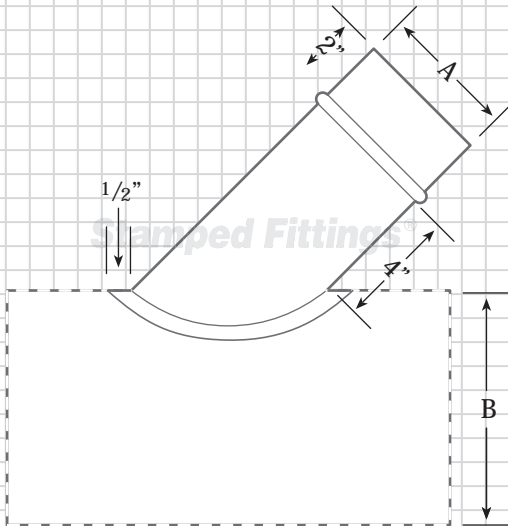
Nominal Size	(A)	(B)	Weight Each
3"	2-7/8"	3-1/8"	.20#
4"	3-7/8"	4-1/8"	.20#
5"	4-7/8"	5-1/8"	.35#
6"	5-7/8"	6-1/8"	.50#
7"	6-7/8"	7-1/8"	.60#
8"	7-7/8"	8-1/8"	.70#
9"	8-7/8"	9-1/8"	.85#
10"	9-7/8"	10-1/8"	1.05#
12"	11-7/8"	12-1/8"	1.40#
14"	13-7/8"	14-1/8"	1.80#
16"	15-7/8"	16-1/8"	2.20#
18"	17-7/8"	18-1/8"	2.70#
20"	19-7/8"	20-1/8"	3.40#
22"	21-7/8"	22-1/8"	4.00#
24"	23-7/8"	24-1/8"	4.50#
26"	25-7/8"	26-1/8"	5.20#
28"	27-7/8"	28-1/8"	5.88#
30"	29-7/8"	30-1/8"	6.60#



Dimensions		
(A)	(S)	Weight Each
3"	2"	0.8#
4"	2"	1.0#
5"	2"	1.3#
6"	2"	1.5#
7"	2"	1.7#
8"	2"	2.0#
9"	2"	2.2#
10"	2"	2.5#
12"	2"	3.0#
14"	2"	3.5#
16"	2"	3.9#
18"	2"	4.5#
20"	2"	4.9#
22"	2"	5.7#
24"	2"	6.7#
26" - 30"	2"	N/A

Key
A = Diameter S = 2"
<ul style="list-style-type: none"> n 4" overall length is standard n Stitch welded construction
<p>Male Coupling – For pipe, the ends are 1/8" undersize to fit inside spiral pipe. Bead is located at 2".</p> <p>Female Coupling – For pipe, the ends are 1/8" oversize to fit over spiral pipe. Reverse bead located at 2".</p>
Materials Available
<ul style="list-style-type: none"> n Galvanized n Galvaneal n Stainless Steel 304 & 316 n Aluminum

Fabricated 45° Saddle Tap (ST45)



Key

A = Branch size
B = Pipe size

Materials Available

- n Galvanized (24 ga.), Galvaneal, Stainless Steel 304 & 316, Aluminum
- n SE x +/- 1/2" flange out

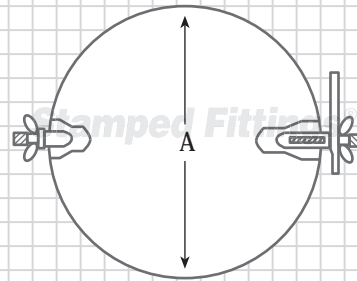
Dimensions

(A)	Weight Each
3"	0.92#
4"	1.08#
5"	1.23#
6"	1.54#
7"	1.85#
8"	2.16#
9"	2.77#
10"	3.08#
11"	3.39#
12"	3.70#
13"	4.01#
14"	4.32#

Dimensions

(A)	Weight Each
16"	4.93#
18"	5.55#
20"	6.16#
22"	6.78#
24"	7.40#
26"	9.94#
28"	10.70#
30"	11.47#
32"	12.23#
34"	13.00#
36"	13.76#

Volume Damper (VD)



Shown with hardware installed
5/16" hardware and handle are included (loose)

Key

A = Diameter

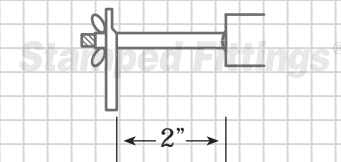
Materials Available

- n 4" to 12" – Galvanized, 26 ga.
- n 14" to 36" – Galvanized, 24 ga.

Options Available

- n 2" Stand-off with loose hardware (see spec below)
- n Sizes 4" to 10" (all sizes), 12" to 36" (even sizes only)
- n VD Kit which includes:
 - 1 - Volume Damper blade
 - 1 - 5/16" washer
 - 2 - 5/16" wingnut washers
 - 1 - Damper handle

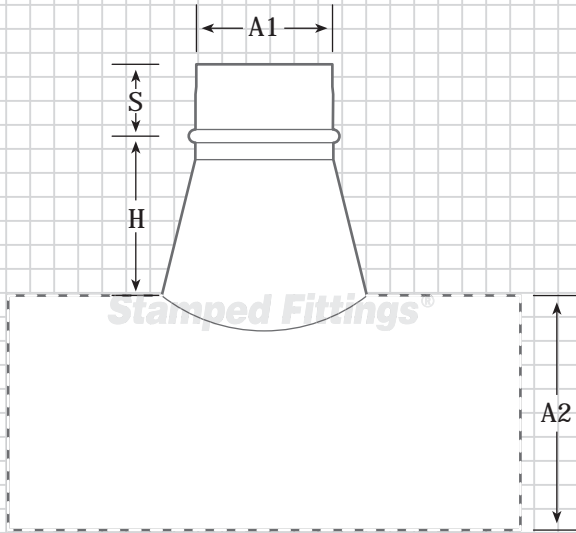
OPTION: 2" Shaft Extension



Specs

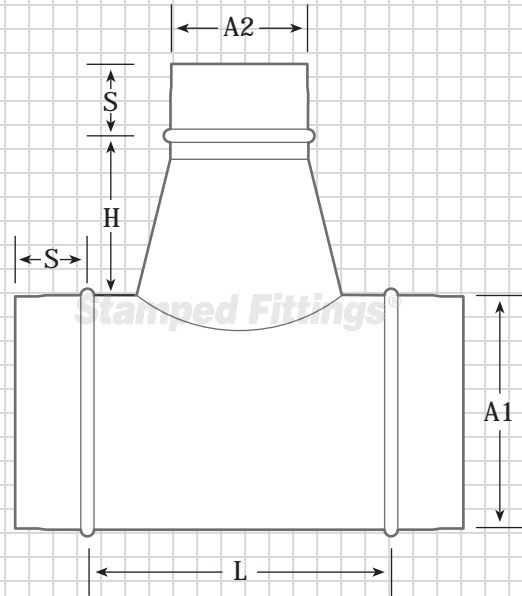
- n 5/16" OD shaft extension
- n 1 - 3/4" plastic sleeve (.875" OD x .75" ID x 1.75" length)

90° Conical (C)

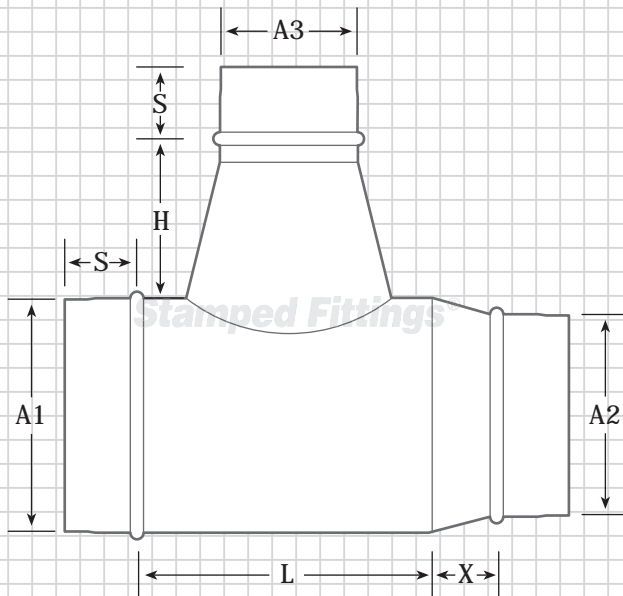


* Field installed fitting

90° Conical Tee (CT)



90° Conical Reducing Tee (CRT)



Key (C)

A1 & A2 = Diameter
 A2 is greater than A1
 S = 2"
 H = 6"

Key (CT)

A1 & A2 = Diameter
 A1 is greater than A2
 S = 2"
 H = 5-1/4"
 L = A2 + 4"

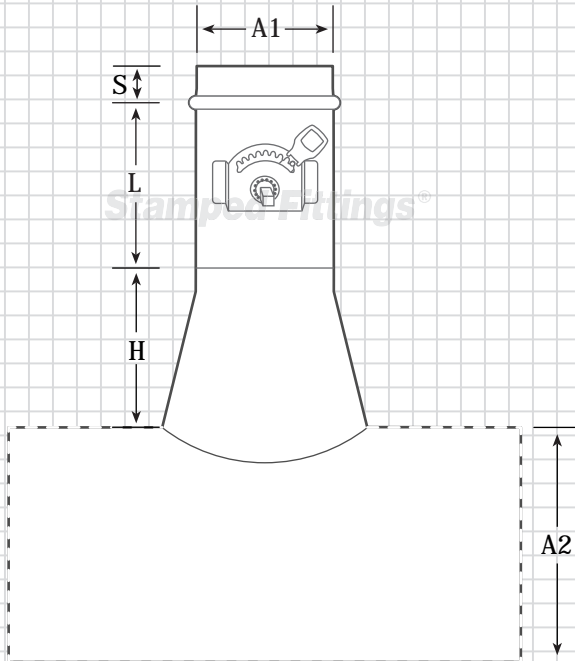
Key (CRT)

A1, A2 & A3 = Diameter
 A1 is greater than A3
 A2 is less than A1
 S = 2"
 H = 5-1/4"
 L = A3 + 4"
 X = A1 - A2 (4" minimum)

Materials Available

n Galvanized, Galvaneal, Stainless Steel
 304 & 316, Aluminum

90° Conical with Damper (CD)



* Field installed fitting

Key (CD)

Sizes Available for A1:

4" - 10" (all sizes), 12" - 36" (even sizes only)

A2 is greater than A1

S = 2"

H = 6"

L = 4"

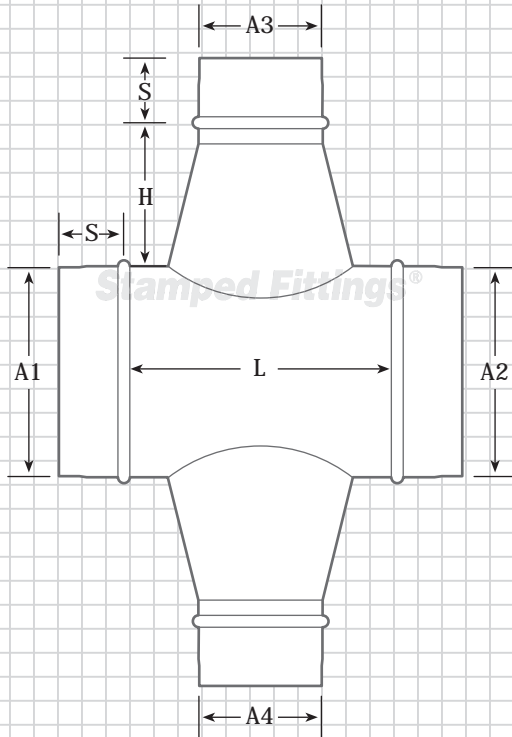
Features

- n 22 Gauge galvanized body

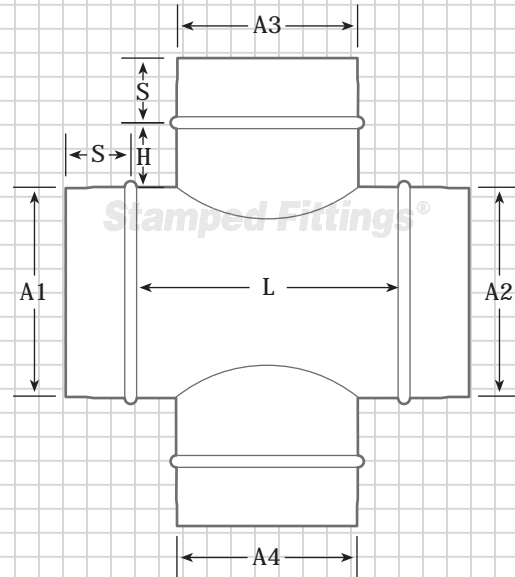
Low-Leakage Dampers

- n 2" Stand-off (20 ga.)
- n Nylon bushings with O-ring for sealing of holes
- n Locking handle for adjustment of damper - ease of balancing
- n 3/8" Continuous square rod through damper
- n 4" - 22" Standard dampers (22 ga.)
- n 24" - 36" Standard dampers (20 ga.)

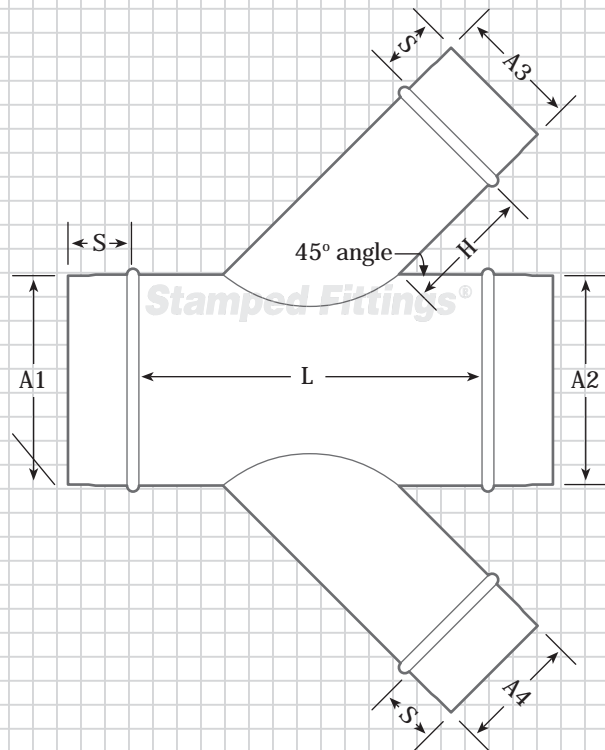
Conical Cross (CROSC)



Straight Cross (CROSS)



45° Lateral Cross (CROSL)



Key (All)

A1, A2, A3 & A4 = Diameter
 A3 is greater than or equal to A4
 S = 2"
 H = 4"

Key (CROSC)

A1 & A2 are greater than A3 & A4 (= 2" min.)
 L = A3 + 4"

Key (CROSS)

A1 & A2 are greater than or equal to A3 & A4
 L = A3 + 4"

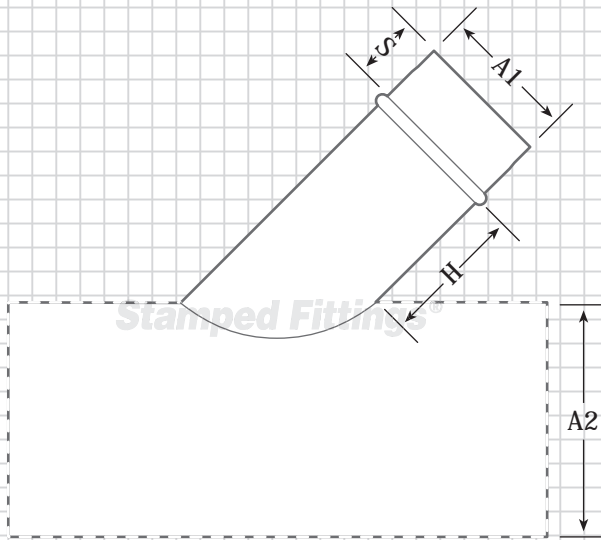
Key (CROSL)

A1 & A2 are greater than or equal to A3 & A4
 L = (A3 x 1.414) + 4"

Materials Available

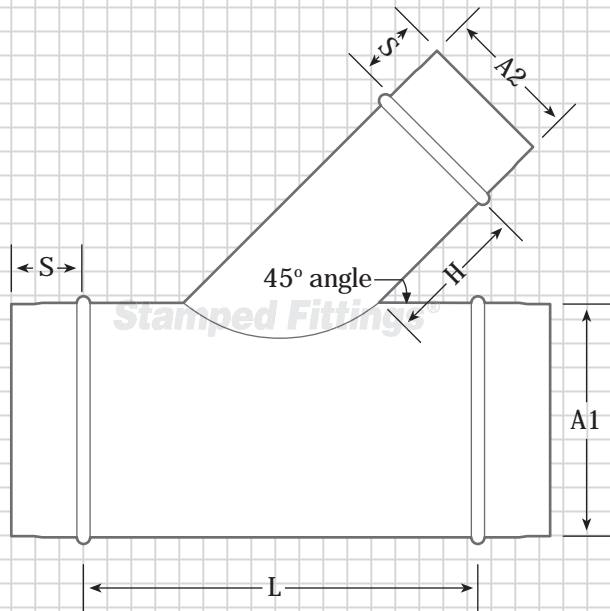
n Galvanized, Galvaneal, Stainless Steel
 304 & 316, Aluminum

45° Lateral (L)

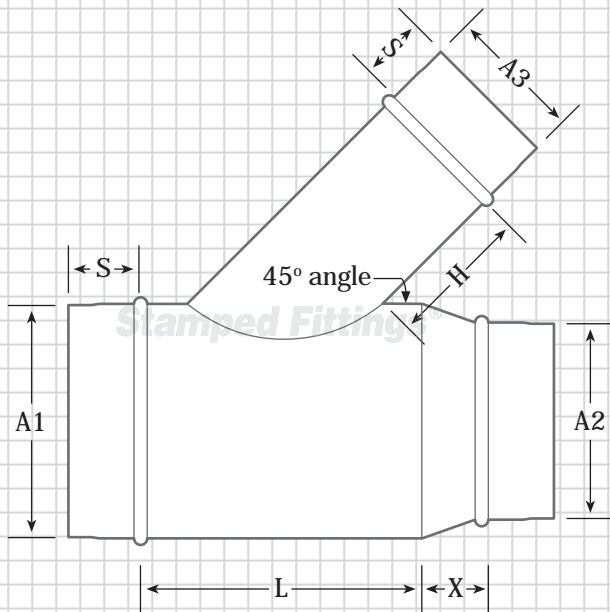


* Field installed fitting

45° Lateral Tee (LT)



45° Lateral Reducing Tee (LRT)



Key (L)

A1 & A2 = Diameter
 A2 is greater than or equal to A1
 S = 2"
 H = 4"

Key (LT)

A1 & A2 = Diameter
 A1 is greater than or equal to A2
 S = 2"
 H = 4"
 L = A2 + 4"

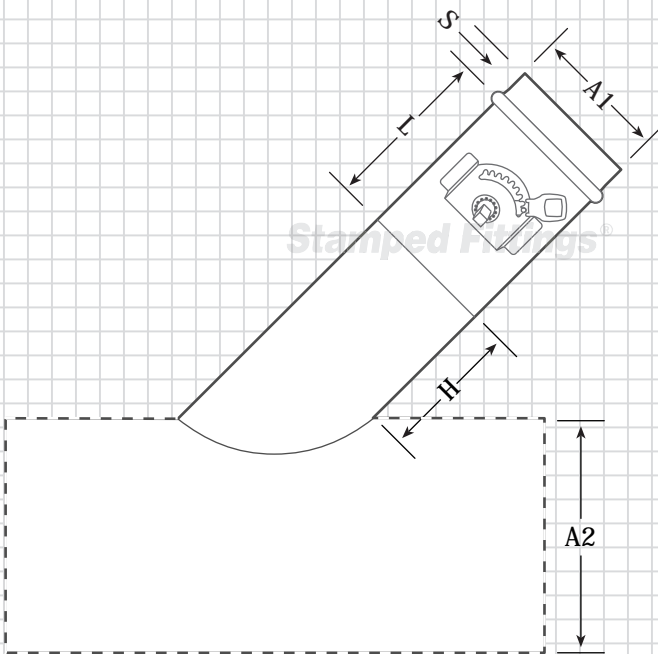
Key (LRT)

A1, A2 & A3 = Diameter
 A1 is greater than or equal to A3
 A2 is less than A1
 S = 2"
 H = 4"
 L = A3 + 4"
 X = A1 - A2 (4" minimum)

Materials Available

n Galvanized, Galvaneal, Stainless Steel
 304 & 316, Aluminum

45° Lateral with Damper (LD)



* Field installed fitting

Key (LD)

Sizes Available for A1:
 4" - 10" (all sizes), 12" - 36" (even sizes only)
 A2 is greater than or equal to A1
 S = 2"
 H = 4"
 L = 4"

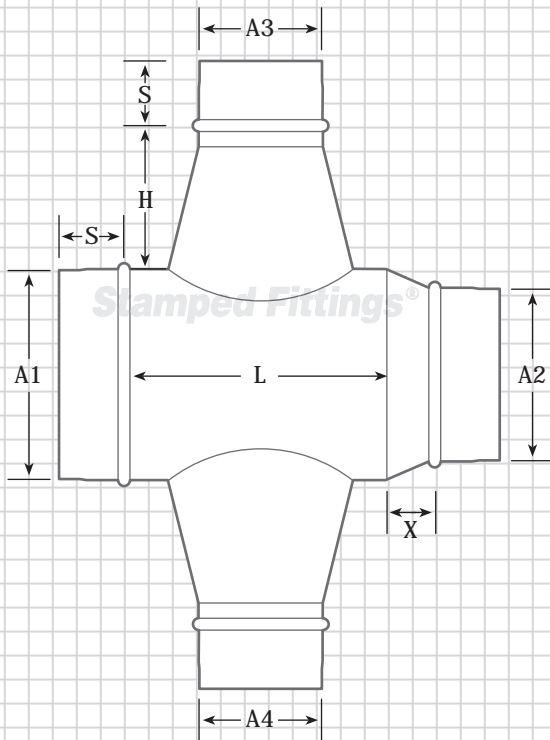
Features

n 22 Gauge galvanized body

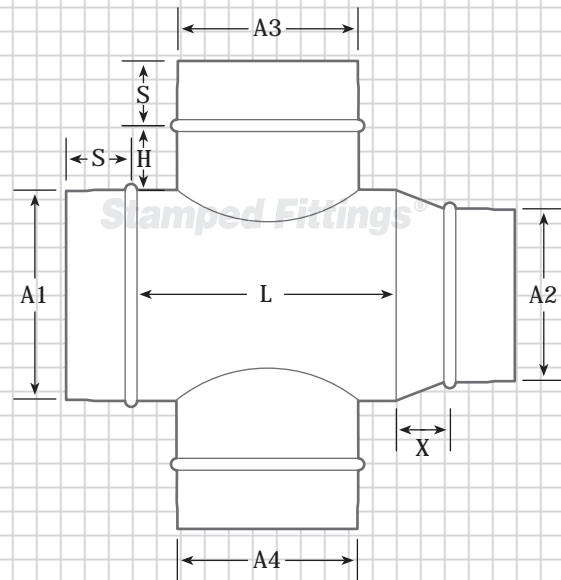
Low-Leakage Dampers

- n 2" Stand-off (20 ga.)
- n Nylon bushings with O-ring for sealing of holes
- n Locking handle for adjustment of damper - ease of balancing
- n 3/8" Continuous square rod through damper
- n 4" - 22" Standard dampers (22 ga.)
- n 24" - 36" Standard dampers (20 ga.)

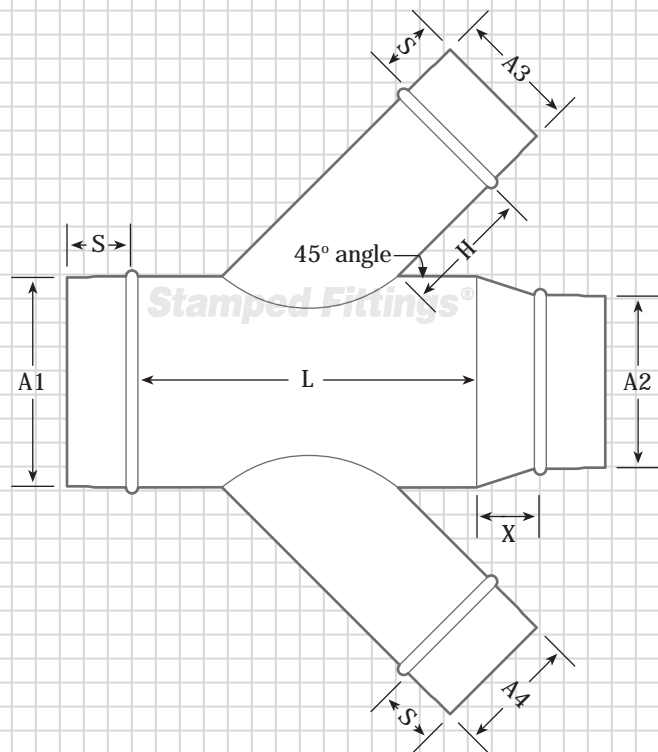
Reducing Conical Cross (RCC)



Reducing Straight Cross (RCS)



Reducing 45° Lateral Cross (RCL)



Key (All)

A1, A2, A3 & A4 = Diameter
 A2 is less than A1
 A3 is greater than or equal to A4
 S = 2"
 H = 4"
 X = A1 - A2 (4" min.)

Key (RCC)

A1 is greater than A3 & A4 (= 2" min.)
 L = A3 + 4"

Key (RCS)

A1 is greater than or equal to A3 & A4
 L = A3 + 4"

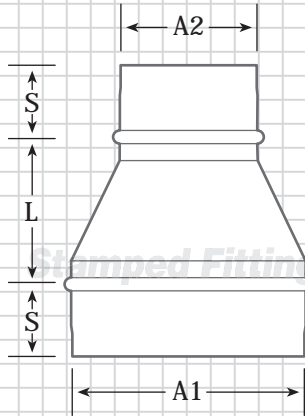
Key (RCL)

A1 is greater than or equal to A3 & A4
 L = (A3 x 1.414) + 4"

Materials Available

n Galvanized, Galvaneal, Stainless Steel
 304 & 316, Aluminum

Concentric Reducer (R)



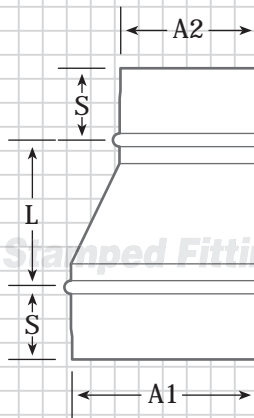
Key (R)

- A1 = Diameter
- A2 = Diameter
- S = 2"
- L = 4" if the change in diameter (A1 - A2) is less than 6"
- n If the change in diameter (A1 - A2) is greater than or equal to 6" then L= A1 - A2.
- n Please specify any other length, if not the standard.

Materials Available

- n Galvanized
- n Galvaneal
- n Stainless Steel 304 & 316
- n Aluminum

Eccentric Reducer (ER)



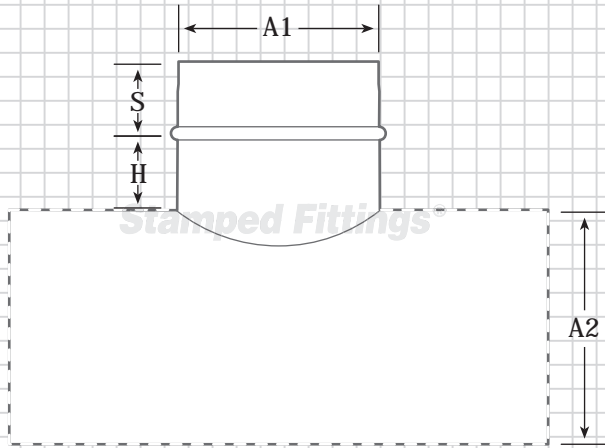
Key (ER)

- A1 = Diameter
- A2 = Diameter
- S = 2"
- L = (A1 - A2) x 2 + 2"
- n L minimum = 7- 3/4"
- n Please specify any other length, if not the standard.

Materials Available

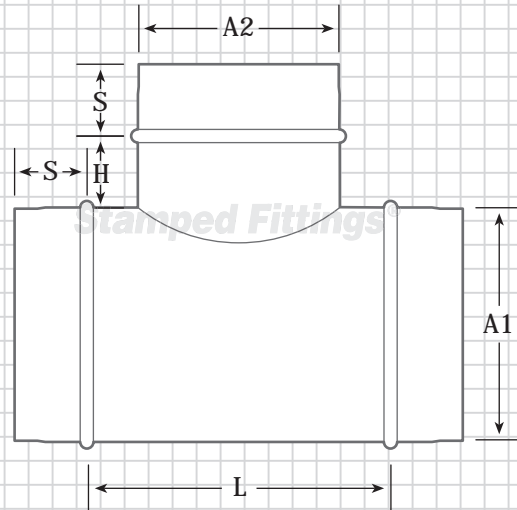
- n Galvanized
- n Galvaneal
- n Stainless Steel 304 & 316
- n Aluminum

Straight Tap (ST)

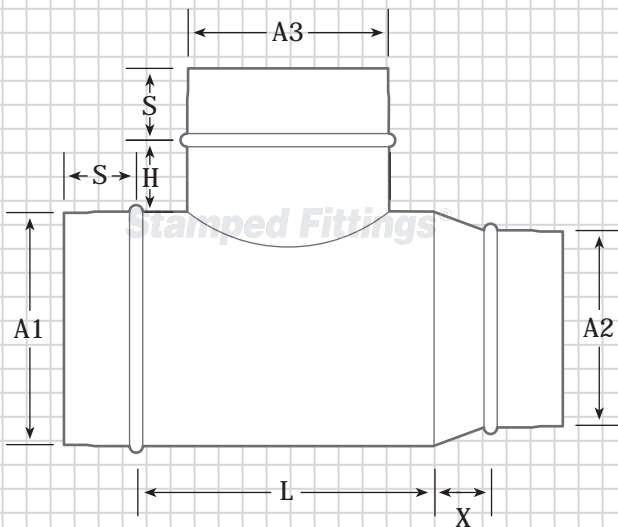


* Field installed fitting

90° Tee (T)



90° Straight Reducing Tee (SRT)



Key (ST)

A1 & A2 = Diameter
 A2 is greater than or equal to A1
 S = 2"
 H = 2"

Key (T)

A1 & A2 = Diameter
 A1 is greater than or equal to A2
 S = 2"
 H = 2"
 L = A2 + 4"

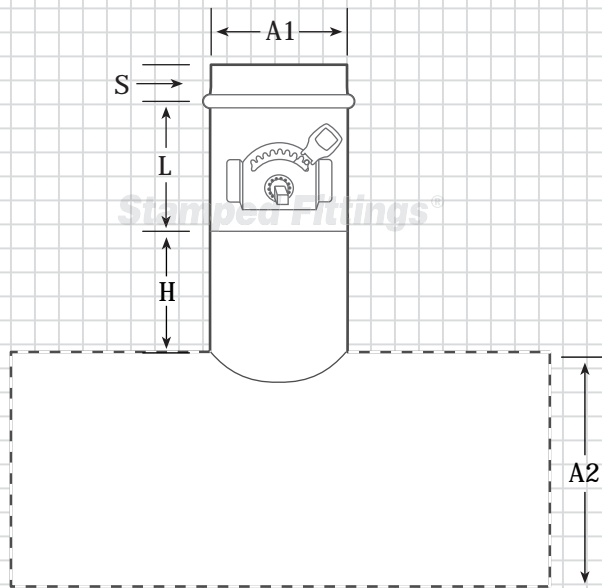
Key (SRT)

A1, A2 & A3 = Diameter
 A1 is greater than or equal to A3
 A2 is less than A1
 S = 2"
 H = 2"
 L = A3 + 4"
 X = A1 - A2 (4" minimum)

Materials Available

n Galvanized, Galvaneal, Stainless Steel
 304 & 316, Aluminum

90° Straight Tap with Damper (STD)



* Field installed fitting

Key (STD)

Sizes Available for A1:

4" - 10" (all sizes), 12" - 36" (even sizes only)

A2 is greater than or equal to A1

S = 2"

H = 4"

L = 4"

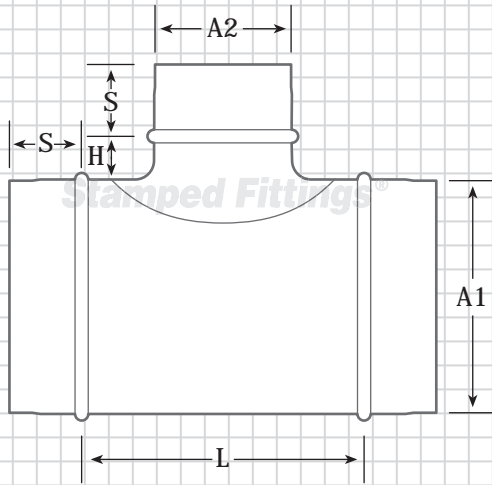
Features

- n 22 Gauge galvanized body

Low-Leakage Dampers

- n 2" Stand-off (20 ga.)
- n Nylon bushings with O-ring for sealing of holes
- n Locking handle for adjustment of damper - ease of balancing
- n 3/8" Continuous square rod through damper
- n 4" - 22" Standard dampers (22 ga.)
- n 24" - 36" Standard dampers (20 ga.)

90° Tee with Die Stamped Saddle Tap (TDST)



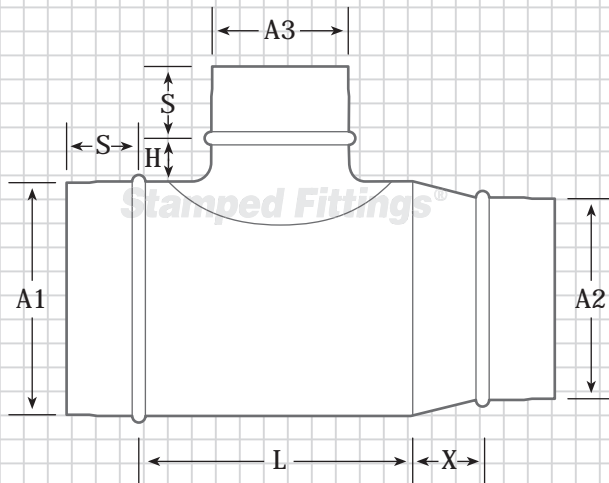
Key (TDST)

A1 = Up to 24" (A1 is greater than or equal to A2)
 A2 = 4", 5", 6", 8", 10", 12"
 S = 2"
 H = 3/4" (where A1 = 6" or less),
 1" (where A1 = 8" or more)
 L = A2 + 4"

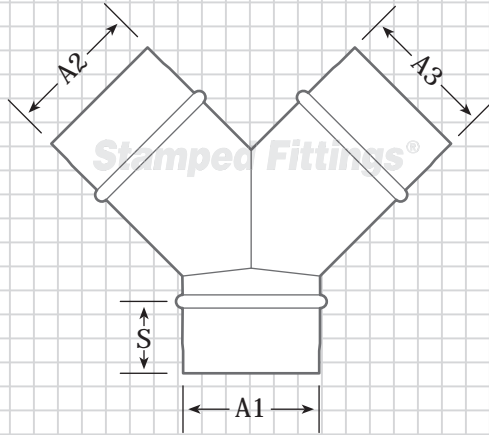
Key (DSTRT)

A1 = Up to 24" (A1 is greater than or equal to A3)
 A2 = Up to 24" (A2 is less than A1)
 A3 = 4", 5", 6", 8", 10", 12"
 S = 2"
 H = 3/4" (where A3 = 6" or less),
 1" (where A3 = 8" or more)
 L = A3 + 4"
 X = A1 - A2 (4" minimum)

90° Reducing Tee with Die Stamped Saddle Tap (DSTRT)



Y Branch (Y)



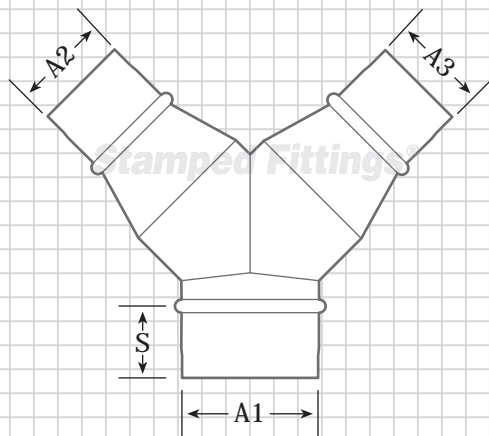
Key

A1, A2 & A3 = Diameter
S = 2"

Materials Available

- n Galvanized
- n Galvaneal
- n Stainless Steel 304 & 316
- n Aluminum

Reducing Y Branch (RY)



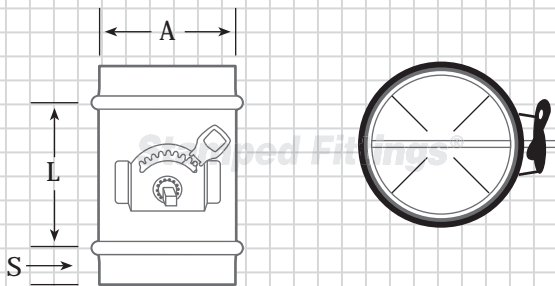
Key

A1, A2 & A3 = Diameter
A2 & A3 are less than A1
S = 2"

Materials Available

- n Galvanized
- n Galvaneal
- n Stainless Steel 304 & 316
- n Aluminum

Balancing Damper Section (D)



Key

A = 4" - 10" (all sizes), 12" - 36" (even sizes only)
 S = 2"
 L = 4"

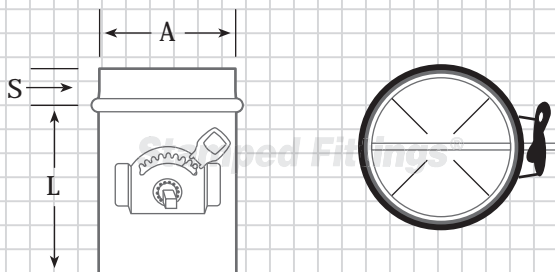
Materials Available

n Galvanized (22 ga.), Galvaneal, Stainless Steel 304 & 316, Aluminum

Low-Leakage Dampers

- n 2" Stand-off (20 ga.)
- n Nylon bushings with O-ring for sealing of holes
- n Locking handle for adjustment of damper - ease of balancing
- n 3/8" Continuous square rod through damper
- n 4" - 22" Standard dampers (22 ga.)
- n 24" - 36" Standard dampers (20 ga.)

Balancing Damper Section - Large End/Small End (D1)



Key

A = 4" - 10" (all sizes), 12" - 36" (even sizes only)
 S = 2"
 L = 6"

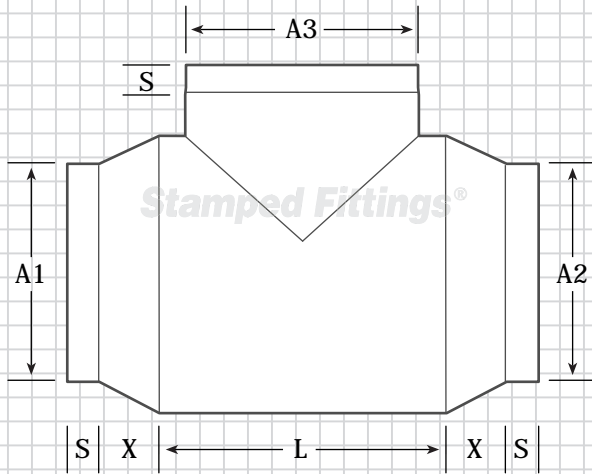
Materials Available

n Galvanized (22 ga.), Galvaneal, Stainless Steel 304 & 316, Aluminum

Low-Leakage Dampers

- n 2" Stand-off (20 ga.)
- n Nylon bushings with O-ring for sealing of holes
- n Locking handle for adjustment of damper - ease of balancing
- n 3/8" Continuous square rod through damper
- n 4" - 22" Standard dampers (22 ga.)
- n 24" - 36" Standard dampers (20 ga.)

Reducing Bull Head Tee (BRT)



Key

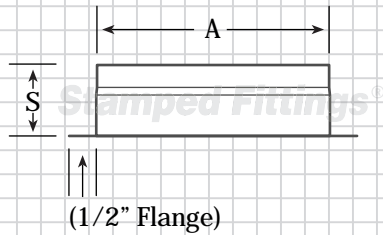
$S = 2"$
 $L = A + 4"$
 $X = 4"$ minimum
 $A3 > A1$ or $A2$

Order as: in, out, branch (A1, A2, A3)

Materials Available

- n Galvanized
- n Galvaneal
- n Stainless Steel 304 & 316
- n Aluminum

Straight Take-off (STO)



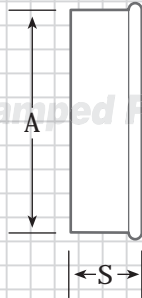
Key

$A = 4" - 36"$
 $S = 2"$

Materials Available

- n Galvanized
- n Galvaneal
- n Stainless Steel 304 & 316
- n Aluminum

End Cap (EC)



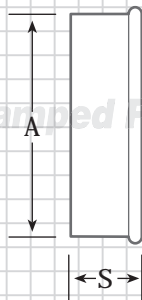
Key

A = Large end to fit over spiral pipe
S = 2"

Materials Available

- n Galvanized
- n Galvaneal
- n Stainless Steel 304 & 316
- n Aluminum

End Plug (EP)



Key

A = Small end to fit in spiral pipe
S = 2"

Materials Available

- n Galvanized
- n Galvaneal
- n Stainless Steel 304 & 316
- n Aluminum