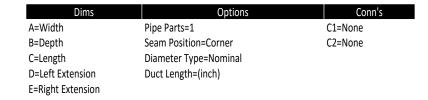
Flat Oval





Seams S1=None

Damper:



Pattern: 102

Flat Oval



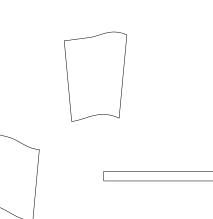
Dims	Options	Conn's
A=Major Axis	Diameter Type BE=Nominal	C1=None
B=Minor Axis	Diameter Type SE=Nominal	C2=None
C=Major Axis	Same Seams On Each Part=No	
D=Minor Axis		
E=Length		
F=Offset Width		
G=Offset Depth		
H=Collar		
I=Collar		
		Saame

Damper:

S1=None

Round/Flat Oval





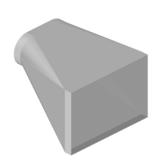
Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type BE=Nominal	C2=None
C=Diameter	Diameter Type SE=Nominal	
D=Length	Seam Position=Corner	
E=Offset Width	Inlet=1	
F=Offset Depth	Outlet=2	
G=Oval Collar	Same Seams On Each Part=No	
H=Round Collar		

Seams S1=None

Damper:

#### Pattern: 104 Rectangular/Flat Oval

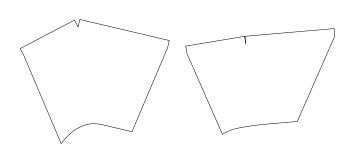
4/18/2016



Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Oval Width	Marker Type=Notch	
D=Oval Depth	Offset Width=Left In	
E=Length	Offset Depth=Bottom Up	
F=Offset Width	Seam Position=Corner	
G=Offset Depth	Inlet=1	
H=Rect Extension	Outlet=2	
I=Collar	Same Seams On Each Part=No	

Seams S1=None

Damper:



2

Flat Oval

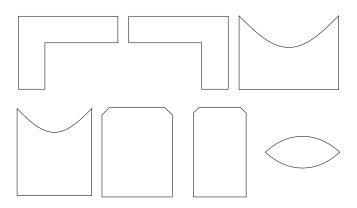


Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Splitters=0	C2=None
C=Corner Radius	Splitter Radius=Auto	C3=None
D=Bottom Extension	Splitter Adjust=0.000	
E=Right Extension	Inlet=2	
F=Bottom Collar	Outlet=3	
G=Right Collar		

Seams

S1=None

Damper:



Pattern: 106

Flat Oval



Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Nest Break Start Segment=0	C3=None
D=Angle	Nest Break End Segment=0	
E=Bottom Extension	Notch Angle For Seam=0	
F=Top Extension	Leg Lengths=No	
	Length Includes Extensions=No	
	Splitters=0	
	Splitter Adjust=0.000	
	Splitter Shape=Angled	
		Seams
		S1=None
		S2=None

Damper:

Flat Oval



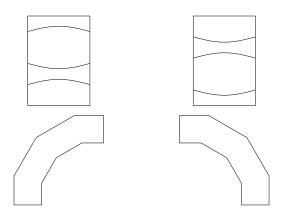
Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Seam Position=Throat	C3=None
D=Angle	Single Segments=No	
E=Bottom Extension	Nest Break Start Segment=0	
F=Top Extension	Nest Break End Segment=0	
	Cross Break=1	
	Notch Angle For Seam=0	
	Leg Lengths=No	
	Length Includes Extensions=No	
	Splitters=0	Seams
	Splitter Adjust=0.000	S1=None
	Splitter Shape=Angled	S2=None
	Automatic Nest Break If Oversize=No	

Damper:

Pattern: 108

Flat Oval





Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Nest Break Start Segment=0	C3=None
D=Angle	Nest Break End Segment=0	
E=Bottom Extension	Notch Angle For Seam=0	
F=Top Extension	Leg Lengths=No	
	Length Includes Extensions=No	

Seams S1=None S2=None

Damper:

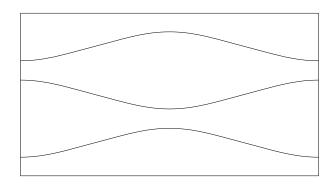
Flat Oval



Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Seam Position=Throat	C3=None
D=Angle	Single Segments=No	
E=Bottom Extension	Nest Break Start Segment=0	
F=Top Extension	Nest Break End Segment=0	
•	Cross Break=1	
	Notch Angle For Seam=0	
	Leg Lengths=No	
	Length Includes Extensions=No	
	-	Seams
		S1=None
		60. 11

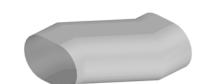
S2=None

Damper:



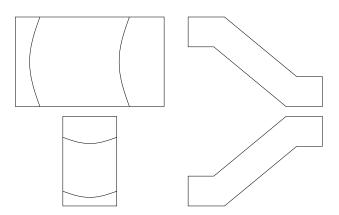
Pattern: 110 Flat Oval

4/18/2016



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	"	C2=None
C=Length		C3=None
D=Offset Width		
E=Left Extension		
F=Right Extension		
G=Left Collar		
H=Right Collar		
I=Offset Depth		
•		
		Seams
		S1=None

Damper:



courtesy of 5

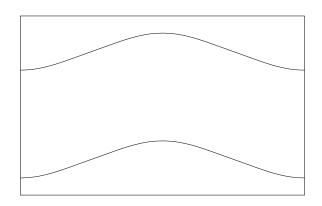
Flat Oval



Dims	Options	Conn's
A=Width	Seam Position=Bottom	C1=None
B=Depth	Single Segments=No	C2=None
C=Length	Diameter Type=Nominal	C3=None
D=Offset Width	Cross Break=1	
E=Left Extension	Automatic Nest Break If Oversize=No	
F=Right Extension		
G=Left Collar		
H=Right Collar		
I=Offset Depth		

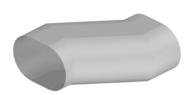
Seams S1=None

Damper:



## Pattern: 112

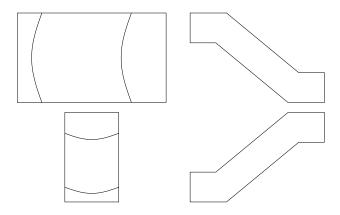
Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Marker Notches On Easy Flats=No	C2=None
C=Length		C3=None
D=Offset Width		
E=Left Extension		
F=Right Extension		
G=Left Collar		
H=Right Collar		
I=Offset Depth		
•		
		Seams

Damper:

S1=None



courtesy of 4/18/2016 6

Flat Oval

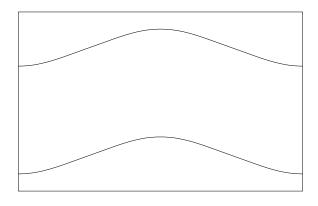


	Options	Conn's
Seam	Position=Bottom	C1=None
Single	Segments=No	C2=None
Diame	ter Type=Nominal	C3=None
Cross	Break=1	

Seams

S1=None

Damper:



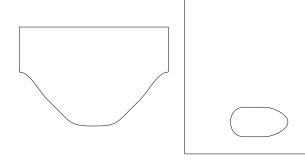
Pattern: 114

Flat Oval



Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Depth #1	True Oval Straight=No	
H=Branch Length #1		
I=Angle #1		
J=Inset #1		
K=Offset #1		Seams
L=Extension #1		S1=None
		S2=None

Damper:



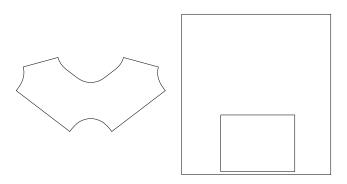
courtesy of Applied Software 4/18/2016

Flat Oval



Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=0.000	C3=None
D=Left Extension	Pipe Diameter Type=Nominal	
E=Right Extension	Branch Diameter Type=Nominal	
F=Major Axis	Round Allowance To Pipe=0.000	
G=Minor Axis	Flat Allowance To Pipe=0.000	
H=Branch Length	Hole Adjust=0.000	
I=Angle	Add Collars To Body=No	
J=Angle		
K=Inset		Seams
L=Collar		S1=None
		S2=None
		S3=None





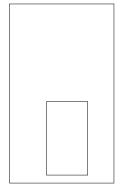
# Pattern: 116

Flat Oval



Dims	Options	Conn's
A=Minor Axis	Pipe Parts=1	C1=None
B=Major Axis	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=0.000	C3=None
D=Left Extension	Pipe Diameter Type=Nominal	
E=Right Extension	Branch Diameter Type=Nominal	
F=Minor Axis	Round Allowance To Pipe=0.000	
G=Major Axis	Flat Allowance To Pipe=0.000	
H=Branch Length	Hole Adjust=0.000	
I=Angle		
J=Angle		
K=Inset		Seams
L=Collar		S1=None
		S2=None





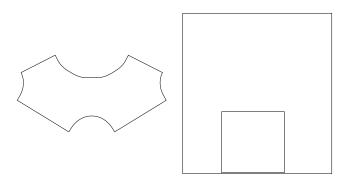


Flat Oval



Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=0.000	C3=None
D=Left Extension	Pipe Diameter Type=Nominal	
E=Right Extension	Branch Diameter Type=Nominal	
F=Minor Axis	Round Allowance To Pipe=0.000	
G=Major Axis	Flat Allowance To Pipe=0.000	
H=Branch Length	Hole Adjust=0.000	
I=Angle		
J=Angle		
K=Inset		Seams
L=Collar		S1=None
		S2=None
		S3=None

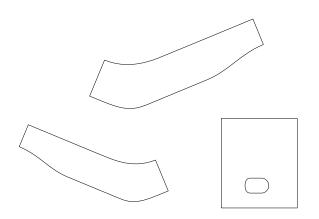
Damper:



# Pattern: 118

Flat Oval





Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Plate Border=0.000	
I=Angle #1	Plate Type=Rectangular	
J=Inset #1	Sides=Yes	
K=Offset #1	Branch Seam Position=0.000	Seams
L=Rotation #1	Branch Only=No	S1=None
M=Collar #1	Allow Branches On Flats=No	S2=None

Damper:

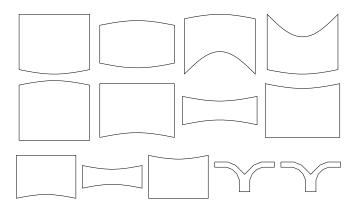
Flat Oval



Dims	Options	Conn's
A=Btm Width	Diameter Type=Nominal	C1=None
B=Depth	Add Collars To Body=Yes	C2=None
C=Top Diameter		C3=None
D=Inner Radius		C4=None
E=Bottom Extension		
F=Left Extension		
G=Right Extension		
H=Bottom Collar		
I=Left Collar		
J=Right Collar		
-		Seams

S1=None

Damper:



Pattern: 120

Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Duct Length=(inch)	C2=None
C=Length	Area Adjust (%)=0.000	
D=Left Extension		
F=Right Extension		

Seams

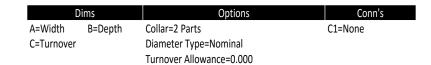
S1=None

Damper:



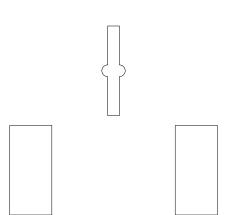
courtesy of 4/18/2016 10

Flat Oval









Damper:

Pattern: 122



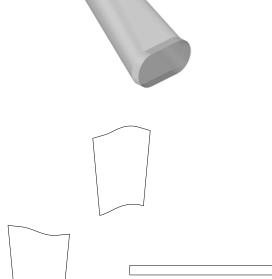
Dims	Options	Conn's
A=Major Axis	Diameter Type BE=Nominal	C1=None
B=Minor Axis	Diameter Type SE=Nominal	C2=None
C=Major Axis	Same Seams On Each Part=No	
D=Minor Axis		
E=Length		
F=Offset Width		
G=Offset Depth		
H=Collar		
I=Collar		
		Seams

S1=None

Damper:

Round/Flat Oval





Dims	Options	Conn's
A=Width	Diameter Type BE=Nominal	C1=None
B=Depth	Diameter Type SE=Nominal	C2=None
C=Diameter	Seam Position=Major Axis	
D=Length	Inlet=1	
E=Offset Width	Outlet=2	
F=Offset Depth	Same Seams On Each Part=No	
G=Oval Collar		
H=Round Collar		

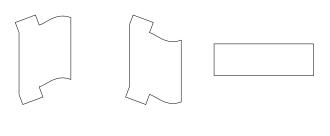
Seams S1=None

Damper:

Pattern: 132 Flat Oval



Dims	Options	Conn's
A=Major Axis	Cross Break=2	C1=None
B=Minor Axis	Diameter Type BE=Nominal	C2=None
C=Major Axis	Diameter Type SE=Nominal	
D=Minor Axis	Collar Arcs - Lap=0.000	
E=Length	Collar Arcs - Allowance=0.000	
F=Offset Width	Same Seams On Each Part=No	
G=Offset Depth	Oval Half Collar=Yes	
H=Extension In		
I=Extension Out		
J=Collar		
K=Collar		Seams
		S1=None



Damper:

courtesy of Applied Software 4/18/2016 12

Round/Flat Oval

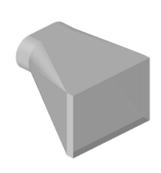


Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type BE=Nominal	C2=None
C=Diameter	Diameter Type SE=Nominal	
D=Length	Collar Arcs - Lap=0.000	
E=Offset Width	Collar Arcs - Allowance=0.000	
F=Offset Depth	Seam Position=Corner	
G=Oval Extension	Inlet=1	
H=Oval Collar	Outlet=2	
I=Round Collar	Same Seams On Each Part=No	
	Oval Half Collar=Yes	

Seams S1=None

Damper:

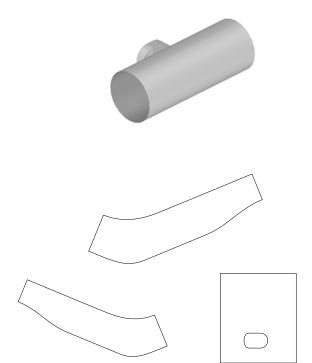
#### Pattern: 134 Rectangular/Flat Oval



Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Oval Width	Marker Type=Notch	
D=Oval Depth	Offset Width=Left In	
E=Length	Offset Depth=Bottom Up	
F=Offset Width	Seam Position=Corner	
G=Offset Depth	Collar Arcs - Lap=0.000	
H=Rect Extension	Collar Arcs - Allowance=0.000	
I=Oval Extension	Inlet=1	
J=Collar	Outlet=2	
	Same Seams On Each Part=No	Seams
	Oval Half Collar=Yes	S1=None

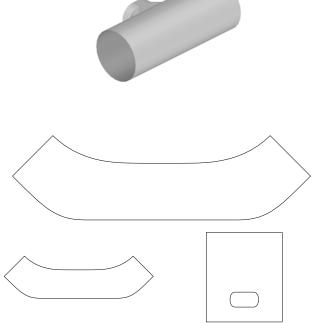
Damper:

Flat Oval



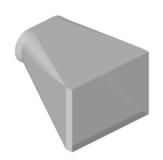
Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Plate Border=0.000	
I=Angle #1	Plate Type=Rectangular	
J=Inset #1	Branch Seam Position=0.000	
K=Offset #1	Collar Arcs - Lap=0.000	Seams
L=Rotation #1	Collar Arcs - Allowance=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Oval Half Extension	Branch Seam Position=All	
	Same Seams On Each Part=No	
	Allow Branches On Flats=No	Damper:

#### Pattern: 136 Flat Oval



Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Plate Border=0.000	
I=Angle #1	Plate Type=Rectangular	
J=Inset #1	Branch Seam Position=0.000	
K=Offset #1	Collar Arcs - Lap=0.000	Seams
L=Rotation #1	Collar Arcs - Allowance=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Oval Half Extension	Branch Seam Position=All	
	Same Seams On Each Part=No	
		Damper:

Rectangular/Flat Oval

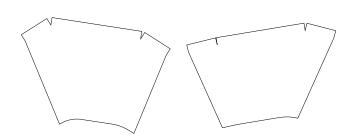


Dims	Options	Conn's
A=Width	Cross Break=2	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Oval Width	Marker Type=Notch	
D=Oval Depth	Offset Width=Left In	
E=Length	Offset Depth=Bottom Up	
F=Offset Width	Seam Position=Depth	
G=Offset Depth	Inlet=1	
H=Rect Extension	Outlet=2	
I=Collar	Same Seams On Each Part=No	

Seams

S1=None

Damper:



Pattern: 139

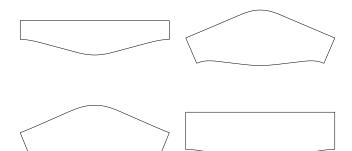
Flat Oval



umber Of Segments=4 ottom Diameter Type=Nominal	C1=None C2=None
ottom Diameter Type=Nominal	C2-None
	CZ-NOTIE
pp Diameter Type=Nominal	C3=None
am Position=Throat	
oss Break=1	
	am Position=Throat oss Break=1

S1=None

Damper:



courtesy of Applied Software 4/18/2016 15

Flat Oval







Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Branch Width #1	Branch Diameter Type=Nominal	
G=Branch Depth #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Btm Width #1	Branch Parts=1	
J=Angle #1	Plate Border=0.000	
K=Inset #1	Plate Type=Rectangular	Seams
L=Offset #1	Branch Seam Position=0.000	S1=None
M=Rotation #1	Branch Only=No	S2=None
N=Collar #1	Allow Branches On Flats=No	S3=None
O=Branch Width #2	Input=Angle	
P=Branch Depth #2		Damper:
Q=Branch Length #2		
R=Btm Width #2		
S=Angle #2		
T=Inset #2		
U=Offset #2		
V=Rotation #2		
W=Collar #2		
1		
ı		

Pattern: 147 Flat Oval



Dims	Options	Conn's
A=Width In	Seam Position=Major Axis	C1=None
B=Depth In	Cross Break=1	C2=None
C=Width Out	Diameter Type In=Nominal	C3=None
D=Depth Out	Diameter Type Out=Nominal	
E=Length	Mitred=None	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Extension In		
I=Extension Out		
J=Collar In		
K=Collar Out		Seams S1=None

Damper:

Flat Oval

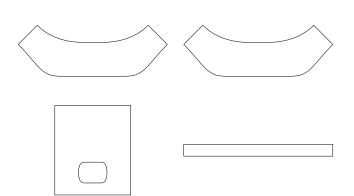


Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Plate Border=0.000	
I=Angle #1	Plate Type=Rectangular	
J=Inset #1	Branch Seam Position=0.000	
K=Offset #1	Branch Only=No	Seams
L=Rotation #1		S1=None
M=Collar #1		S2=None

Damper:

Conn's

C1=None



## Pattern: 159

Flat Oval



.,.	In the second se	
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Branch Width #1	Branch Diameter Type=Nominal	
G=Branch Depth #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Branch Width #2	Allow Branches On Flats=No	S3=None
O=Branch Depth #2		
P=Branch Length #2		Damper:
Q=Angle #2		·
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		

Options

Pipe Parts=1



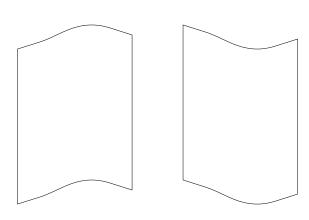


Dims

A=Major Axis

Flat Oval





Dims	Options	Conn's
A=Major Axis	Cross Break=2	C1=None
B=Minor Axis	Diameter Type BE=Nominal	C2=None
C=Major Axis	Diameter Type SE=Nominal	
D=Minor Axis	Seam Position=Major Axis	
E=Length	Same Seams On Each Part=No	
F=Offset Width		
G=Offset Depth		
H=Collar		
I=Collar		

Seams S1=None

Damper:

Pattern: 165

Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Duct Length=(inch)	C2=None
C=Length	Area Adjust (%)=0.000	
D=Left Extension		
E=Right Extension		

Seams

S1=None

Damper:

4/18/2016 courtesy of software 18

Round/Flat Oval

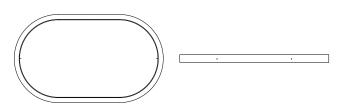


Di	ms	Options	Conn's
A=Diameter	B=Depth	Diameter Type=Nominal	
C=Flange	D=Collar	Adjustment=0.200	
E=Gaps	F=Hole #1	Vee Notch Depth=0.120	
G=Hole #2	H=Hole Inset	Vee Notch Angle=10.000	
		Collar Marker Notches=No	
		Collar Seam Position=Major Axis	

Seams

S1=None

Damper:



Pattern: 318

Flat Oval



Dims	Options	Conn's
A=Radius	Six Parts Left Lap=None	C1=None
B=Depth	Six Parts Right Lap=None	C2=None
C=Length	Vee Depth Female=0.000	C3=None
D=Front Hole Diameter	Vee Angle Female=30.000	
=Six Parts Left Height	Allowance=Left	
=Six Parts Right Height		
G=Turnover Allowance		

Seams S1=None

Damper:

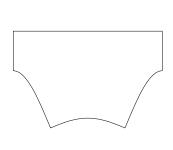
Flat Oval

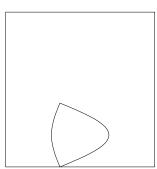


Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Length #1	True Oval Straight=No	
H=Angle #1		
I=Inset #1		
J=Extension #1		
		Seams

S1=None S2=None

Damper:

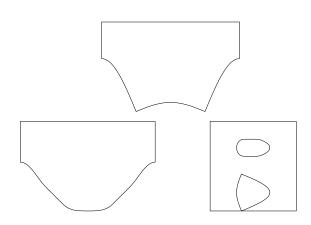




Pattern: 357

Flat Oval

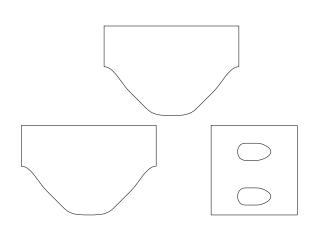




Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Length #1	True Oval Straight=No	
H=Angle #1		
I=Inset #1		
J=Extension #1		
K=Branch Width #2		Seams
L=Branch Depth #2		S1=None
M=Branch Length #2		S2=None
N=Angle #2		S3=None
O=Inset #2		
P=Extension #2		Damper:

Flat Oval



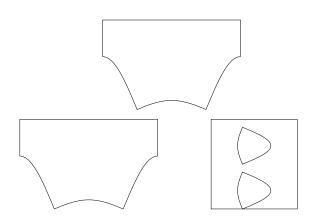


Options	Conn's
Pipe Parts=1	C1=None
Branch Parts=1	C2=None
Pipe Diameter Type=Nominal	C3=None
Branch Diameter Type=Nominal	C4=None
Seam Position=0.000	
Branch Allowance To Pipe=0.000	
True Oval Straight=No	
	Seams
	S1=None
	S2=None
	S3=None
	Damper:
	Damper.
	Pipe Parts=1 Branch Parts=1 Pipe Diameter Type=Nominal Branch Diameter Type=Nominal Seam Position=0.000 Branch Allowance To Pipe=0.000

Pattern: 359

Flat Oval





Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Length #1	True Oval Straight=No	
H=Angle #1		
I=Inset #1		
J=Extension #1		
K=Branch Width #2		Seams
L=Branch Length #2		S1=None
M=Angle #2		S2=None
N=Inset #2		S3=None
O=Extension #2		
		Damper:

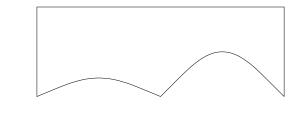
Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth		C2=None
C=Length In		C3=None
D=Length Out		C4=None
E=Angle		C5=None
F=Bottom Extension		
G=Left Extension		
H=Right Extension		

Seams

S1=None







Damper:

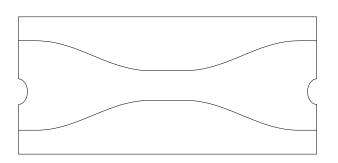
Pattern: 365

Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth	Seam Position=Throat	C2=None
C=Inner Radius	Single Segments=No	C3=None
D=Bottom Extension	Nest Break Start Segment=0	C4=None
E=Top Extension	Nest Break End Segment=0	
F=Branch Width	Notch Angle For Seam=0	
G=Branch Depth	Leg Lengths=No	
H=Branch Inset	Length Includes Extensions=No	
I=Branch Offset	Branch Parts=No	
J=Branch Length	Branch Seam Position=Width	
K=Branch Angle	Branch Origin=C3 Inline	Seams S1=None
		S2=None

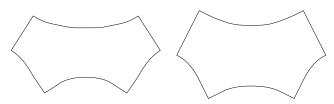
Damper:



Flat Oval



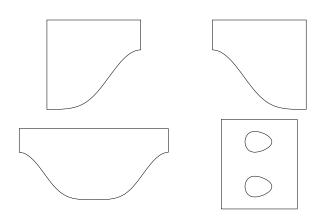
Dims Option	s Conn's
A=Btm Width Bottom Diameter Type=N	Nominal C1=None
B=Btm Depth Left Diameter Type=Nom	ninal C2=None
C=Left Width Right Diameter Type=No	minal C3=None
D=Left Depth Seam Position=Throat	C4=None
E=Right Width	C5=None
F=Right Depth	
G=Left Angle	
H=Right Angle	
I=Height	
J=Left Offset	
K=Right Offset	Seams
L=Left Height	S1=None
M=Right Height	
N=Left Offset	
O=Right Offset	
P=Bottom Collar	Damper:
Q=Left Collar	Sumper.
R=Right Collar	



Pattern: 377

Flat Oval



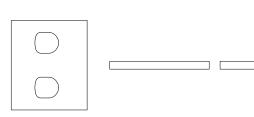


Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Branch Width #1	Branch Diameter Type=Nominal	
G=Branch Depth #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Collar Arcs - Lap=0.000	S2=None
N=Branch Width #2	Collar Arcs - Allowance=0.000	S3=None
O=Branch Depth #2	Branch Only=No	
P=Branch Length #2	Branch Seam Position=All	Damper:
Q=Angle #2	Same Seams On Each Part=No	24po
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		
V=Oval Half Extension		

Flat Oval







Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Major Axis #2	Allow Branches On Flats=No	S3=None
O=Minor Axis #2		
P=Branch Length #2		Damper:
Q=Angle #2		bumper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		

Pattern: 385

Flat Oval



_	

Dims	Options	Conn's
A=Major Axis	Pipe Diameter Type=Nominal	C1=None
B=Minor Axis	Round Allowance To Pipe=0.000	C2=None
C=Pipe Length	Flat Allowance To Pipe=0.000	C3=None
D=Left Extension	Pipe Parts=1	C4=None
E=Right Extension	Branch Parts=1	
F=Branch Width	Pipe Seam Position=0.000	
G=Branch Depth	Hole Adjust=0.000	
H=Branch Length	Plate Border=0.000	
I=Inset	Castle Width=0.000	
J=Rotation	Castle Angle=30.000	
K=Extension	Plate Border (Width)=Auto	Seams
L=Branch Width		S1=None
M=Branch Depth		S2=None
N=Branch Length		
O=Inset		
P=Rotation		Damper:
Q=Extension		bumper.

Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Install Type=Plain	C1=None
B=Length	Sex Type=Male	C2=None
C=Inset	Control Type=None	
D=Sides	Type=Single	
E=Top	Draw Type=None	
F=Bottom	Temperature Type=None	
G=Oval Depth	Draw Type=None	
	Lines=No	
	Cost Supports=No	
	Lines Type=Quantity	
	Lines=3.000	Seams

Damper:

#### Pattern: 522 Round/Flat Oval/Equipment



Options	Conn's
Sex Type=Male	C1=None
	C2=None

Seams

S1=None

Damper:

Round/Flat Oval/Equipment



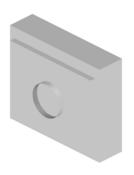
Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Extension includes Diameter=No	C2=None
C=Length	Type=None	
D=Offset	Circles=0	
E=Oval Depth	Cost Supports=No	

Seams

S1=None

Damper:

Pattern: 533 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Install Type=Plain	C1=None
B=Width	Sex Type=Male	C2=None
C=Depth	Control Type=None	
D=Length	Type=Single	
E=Inset	Draw Type=None	
F=Inset	Temperature Type=None	
G=Sides	Draw Type=None	
H=Top	Lines=No	
I=Bottom	Cost Supports=No	
J=Collar	Lines Type=Quantity	
K=Right Collar	Lines=3.000	Seams
L=Oval Depth		

Damper:

Pattern: 555 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Type=Plain	C1=None
B=Collar	Sex Type=Male	C2=None
C=Length	Pattern=Single	
D=Oval Depth	Mirror=No	
	Mirror View=No	
	X-Offset=0.000	
	Y-Offset=0.000	
	Cost Supports=No	
		Seams
		S1=None

Pattern: 556 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Draw Type=Plain	C2=None
C=Length	Lines Type=Quantity	
D=Offset	Lines=3.000	
E=Oval Depth		

Seams S1=None

Damper:

Damper:

Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Type=Plain	C1=None
B=Collar	Sex Type=Male	
C=Length	Pattern=Single	
D=Oval Depth	Mirror=No	
	Mirror View=No	
	X-Offset=0.000	
	Y-Offset=0.000	
	Cost Supports=No	

Seams

Damper:

Pattern: 820
Round/Flat Oval



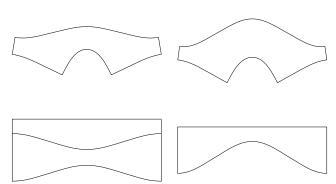
Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		
		Damper:

Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		





Pattern: 823
Round/Flat Oval

4/18/2016



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Seams
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		
		Damner

courtesy of Applied Software 29

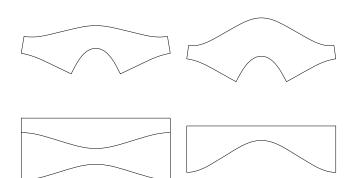
Damper:

Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Radius	Single Segments=No	
H=Left Radius	Marker Type=Notch	
I=Right Angle		
J=Left Angle		
K=Bottom Extension		Seams
L=Right Extension		S1=None
M=Left Extension		



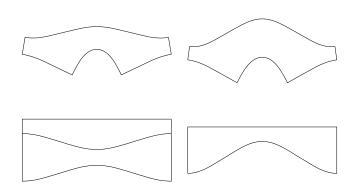


# Pattern: 825 Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Right Diameter Type=Nominal	C2=None
C=Right Width	Left Diameter Type=Nominal	C3=None
D=Right Depth	Number Of Segments=2	C4=None
E=Left Width	Number Of Segments=1	C5=None
F=Left Depth	Single Segments=No	C6=None
G=Right Radius	Marker Type=Notch	
H=Left Radius		
I=Right Angle		
J=Left Angle		
K=Bottom Extension		Seams
L=Right Extension		S1=None
M=Left Extension		

Damper:



Round/Flat Oval



Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Top Diameter Type=Nominal	C2=None
C=Right Width	Right Diameter Type=Nominal	C3=None
D=Right Depth	Left Diameter Type=Nominal	C4=None
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Right Radius	Marker Type=Notch	
I=Left Radius		
J=Right Angle		
K=Left Angle		Seams
L=Bottom Extension		S1=None
M=Right Extension		
N=Left Extension		

Options

Bottom Diameter Type=Nominal

Top Diameter Type=Nominal

Right Diameter Type=Nominal

Left Diameter Type=Nominal



Conn's

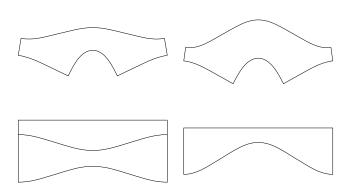
Seams

C1=None

C2=None

C3=None

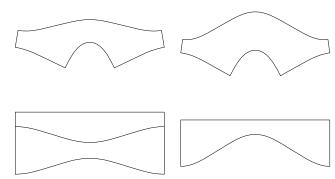
C4=None



Pattern: 827 Round/Flat Oval



o	2010 2101110001 1,700 1101111101	0
E=Left Width	Number Of Segments=2	C5=None
F=Left Depth	Number Of Segments=1	C6=None
G=Right Height	Single Segments=No	
H=Left Height	Marker Type=Notch	
I=Right Radius		
J=Left Radius		
K=Right Angle		Sea
L=Left Angle		S1=None
M=Bottom Extension		
N=Right Extension		
O=Left Extension		
		Damper:
		Damper.



courtesy of 4/18/2016 31

Dims

A=Btm Width

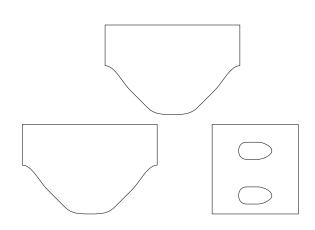
B=Btm Depth

C=Right Width

D=Right Depth

Round/Flat Oval





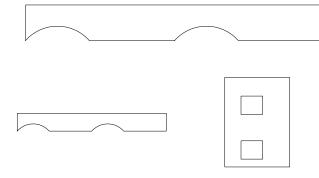
Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	
F=Branch Width #1	Branch Allowance To Pipe=0.000	
G=Branch Depth #1	True Oval Straight=No	
H=Branch Length #1		
I=Angle #1		
J=Inset #1		
K=Offset #1		Seams
L=(Hole) Rotation #1		S1=None
M=Extension #1		S2=None
N=Branch Width #2		S3=None
O=Branch Depth #2		
P=Branch Length #2		Damper:
Q=Angle #2		bumper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Extension #2		

# Pattern: 842

Flat Oval

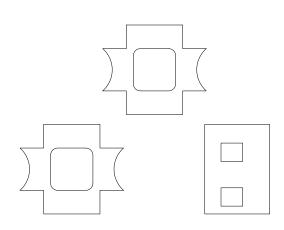


Dims	Options	Conn's
A=Major Axis	Pipe Diameter Type=Nominal	C1=None
B=Minor Axis	Round Allowance To Pipe=0.000	C2=None
C=Pipe Length	Flat Allowance To Pipe=0.000	C3=None
D=Left Extension	Pipe Parts=1	C4=None
E=Right Extension	Branch Parts=1	
F=Branch Width	Pipe Seam Position=0.000	
G=Branch Depth	Hole Adjust=0.000	
H=Branch Length	Plate Border=0.000	
I=Inset	Castle Width=0.000	
J=Offset	Castle Angle=30.000	
K=Rotation	Plate Border (Width)=Auto	Seams
L=Branch Width	Allow Branches On Flats=No	S1=None
M=Branch Depth		S2=None
N=Branch Length		
O=Inset		
P=Offset		Damper:
Q=Rotation		bumper.



Flat Oval



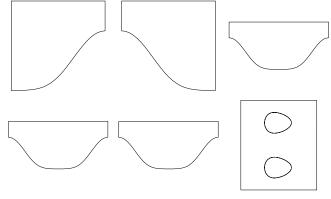


Dims	Options	Conn's
A=Major Axis	Pipe Diameter Type=Nominal	C1=None
B=Minor Axis	Round Allowance To Pipe=0.000	C2=None
C=Pipe Length	Flat Allowance To Pipe=0.000	
D=Left Extension	Pipe Parts=1	
E=Right Extension	Pipe Seam Position=0.000	
=Branch Width	Hole Adjust=0.000	
G=Branch Depth	Plate Border=0.000	
H=Branch Length	Castle Width=0.000	
=Inset	Castle Angle=30.000	
=Rotation	Plate Border (Width)=Auto	
<=Hole Width	Fold Notch Depth=0.000	Seams
_=Hole Depth		S1=None
M=Hole Radius		S2=None
N=Branch Width		
D=Branch Depth		
P=Branch Length		Damper:
Q=Inset		Damper.
R=Rotation		
S=Hole Width		
Γ=Hole Depth		
J=Hole Radius		

Pattern: 844

Flat Oval

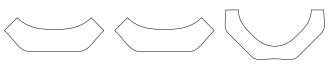


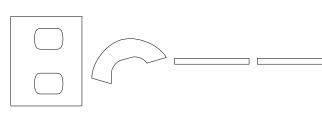


Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Branch Width #1	Branch Type=Straight Branch	C6=None
G=Branch Depth #1	Branch Diameter Type=Nominal	
H=Branch Length #1	Branch Parts=2	
I=Angle #1	Branch Type=Straight Branch	
J=Inset #1	Branch Diameter Type=Nominal	
K=Offset #1	Branch Parts=1	Seams
L=Rotation #1	Branch Type=Straight Branch	S1=None
M=Collar #1	Branch Diameter Type=Nominal	S2=None
N=Branch Width #2	Branch Parts=1	S3=None
O=Branch Depth #2	Branch Type=Straight Branch	S4=None
P=Branch Length #2	Branch Diameter Type=Nominal	S5=None Damper:
Q=Angle #2	Branch Parts=1	24
R=Inset #2	Plate Border=0.000	
S=Offset #2	Plate Type=Rectangular	
T=Rotation #2	Branch Seam Position=0.000	
U=Collar #2	Branch Only=No	
V=Branch Width #3		
W=Branch Depth #3		
X=Branch Length #3		
Y=Angle #3		
Z=Inset #3		
a=Offset #3		
b=Rotation #3		

Flat Oval



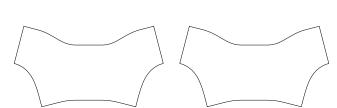




Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Major Axis #2	Reducer Seam Position=Corner	S3=None
O=Minor Axis #2	Reducer Parts=1	
P=Branch Length #2		Damper:
Q=Angle #2		bumper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		
V=Reducer Width		
W=Reducer Depth		
X=Reducer Length		
_		

Pattern: 854
Rectangular/Round/Flat Oval



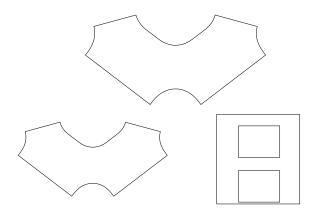


Dims	Options	Conn's
A=Btm Width	Bottom Diameter Type=Nominal	C1=None
B=Btm Depth	Left Diameter Type=Nominal	C2=None
C=Bottom Radius	Right Diameter Type=Nominal	C3=None
D=Left Width	Seam Position=Top	C4=None
E=Left Depth		
F=Left Radius		
G=Right Width		
H=Right Depth		
I=Right Radius		
J=Left Angle		
K=Right Angle		Seams
L=Height		S1=None
M=Left Offset		
N=Right Offset		
O=Bottom Collar		
P=Left Collar		Damper:
Q=Right Collar		Bumpen
R=Left Offset Depth		
S=Right Offset Depth		

4/18/2016 courtesy of software. 34

Flat Oval



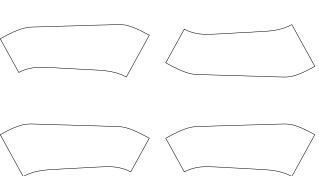


A=Major Axis	Pipe Parts=1	04 11
	riperulto-1	C1=None
B=Minor Axis	Branch Parts=1	C2=None
C=Pipe Length	Pipe Seam Position=0.000	C3=None
D=Left Extension	Pipe Diameter Type=Nominal	C4=None
E=Right Extension	Branch Diameter Type=Nominal	
F=Width #1	Round Allowance To Pipe=0.000	
G=Depth #1	Flat Allowance To Pipe=0.000	
H=Branch Length #1	Hole Adjust=0.000	
=Angle #1		
I=Angle #1		
K=Inset #1		Seams
L=Offset #1		S1=None
M=Rotation #1		S2=None
N=Collar #1		S3=None
O=Width #2		
P=Depth #2		Damper:
Q=Branch Length #2		bumper.
R=Angle #2		
S=Angle #2		
T=Inset #2		
U=Offset #2		
V=Rotation #2		
W=Collar #2		

Pattern: 888

Flat Oval

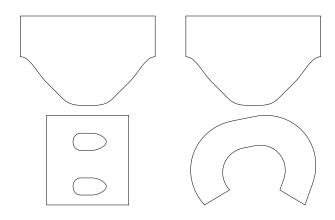




	Dims	Options	Conn's
	A=Width In	Pipe Parts=No Pipe	C1=None
	B=Depth In	Diameter Type In=Nominal	C2=None
	C=Width Out	Diameter Type Out=Nominal	C3=None
	D=Depth Out	Branch Diameter Type=Nominal	C4=None
	E=Length	Seam Position=Major Axis	
	F=Offset Width	Offset Width=Left In	
	G=Offset Depth	Offset Depth=Bottom Up	
	H=Left Collar	Hole Adjust=0.000	
	I=Right Collar	Branch Allowance To Pipe=0.000	
	J=Branch Width #1	Branch Offset=Centres	
	K=Branch Depth #1	Branch Inset=Throat	Seams
	L=Branch Length #1	Branch Length=Throat	S1=None
	M=Inset #1	Branch Parts=2	S2=None
	N=Offset #1	Develop Branch Collars=No	
	O=Extension #1		
	P=Hole Width #1		Damper:
	Q=Hole Depth #1		Damper.
	R=Branch Width #2		
	S=Branch Depth #2		
,	T=Branch Length #2		
	U=Inset #2		
	V=Offset #2		
	W=Extension #2		
	X=Hole Width #2		
,	Y=Hole Depth #2		
	•		

Round/Flat Oval



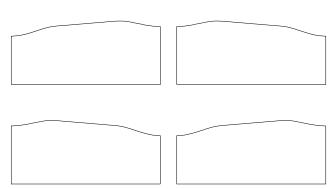


Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Branch Parts=1	C2=None
C=Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Branch Diameter Type=Nominal	C4=None
E=Right Extension	Seam Position=0.000	C5=None
F=Branch Width #1	Right Diameter Type=Nominal	
G=Branch Depth #1	Branch Allowance To Pipe=0.000	
H=Branch Length #1	Reducer Parts=1	
I=Angle #1	True Oval Straight=No	
J=Inset #1		
K=Offset #1		Seams
L=(Hole) Rotation #1		S1=None
M=Extension #1		S2=None
N=Branch Width #2		S3=None
O=Branch Depth #2		
P=Branch Length #2		Damper:
Q=Angle #2		bumper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Extension #2		
V=Right Width		
W=Right Depth		
X=Right Length		
Y=Offset Width		
Z=Offset Depth		

Pattern: 894

Flat Oval



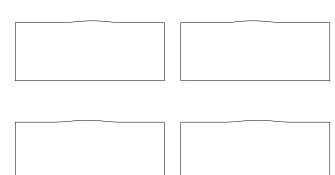


Dims	Options	Conn's
A=Major Axis	Pipe Parts=No Pipe	C1=None
B=Minor Axis	Diameter Type In=Nominal	C2=None
C=Major Axis	Diameter Type Out=Nominal	C3=None
D=Minor Axis	Branch Diameter Type=Nominal	C4=None
E=Length	Seam Position=Major Axis	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Left Collar	Hole Adjust=0.000	
I=Right Collar	Branch Allowance To Pipe=0.000	
J=Branch Major Axis #1	Branch Offset=Centres	
K=Branch Minor Axis #1	Branch Inset=Throat	Seams
L=Branch Length #1	Branch Length=Throat	S1=None
M=Angle #1	Branch Parts=2	S2=None
N=Inset #1	Develop Branch Collars=No	
O=Offset #1		
P=Extension #1		Damper:
Q=Branch Major Axis #2		Damper.
R=Branch Minor Axis #2		
S=Branch Length #2		
T=Angle #2		
U=Inset #2		
V=Offset #2		
W=Extension #2		

4/18/2016 courtesy of software. 36

Flat Oval



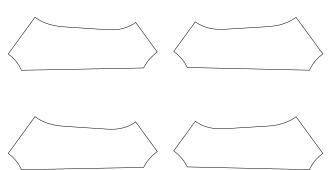


Dims	Options	Conn's
A=Minor Axis	Pipe Parts=No Pipe	C1=None
B=Major Axis	Diameter Type In=Nominal	C2=None
C=Minor Axis	Diameter Type Out=Nominal	C3=None
D=Major Axis	Branch Diameter Type=Nominal	C4=None
E=Length	Seam Position=Major Axis	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Left Collar	Hole Adjust=0.000	
I=Right Collar	Branch Allowance To Pipe=0.000	
J=Branch Width #1	Branch Offset=Centres	
K=Branch Depth #1	Branch Inset=Throat	Seams
L=Branch Length #1	Branch Length=Throat	S1=None
M=Angle #1	Branch Parts=2	S2=None
N=Inset #1	Develop Branch Collars=No	
O=Offset #1		
P=Extension #1		Damper:
Q=Branch Width #2		bumper.
R=Branch Depth #2		
S=Branch Length #2		
T=Angle #2		
U=Inset #2		
V=Offset #2		
W=Extension #2		

Pattern: 896

Flat Oval





Dims	Options	Conn's
A=Major Axis	Pipe Parts=No Pipe	C1=None
B=Minor Axis	Diameter Type In=Nominal	C2=None
C=Major Axis	Diameter Type Out=Nominal	C3=None
D=Minor Axis	Branch Diameter Type=Nominal	C4=None
E=Length	Seam Position=Major Axis	
F=Offset Width	Offset Width=Left In	
G=Offset Depth	Offset Depth=Bottom Up	
H=Left Collar	Hole Adjust=0.000	
I=Right Collar	Branch Allowance To Pipe=0.000	
J=Branch Major Axis #1	Branch Offset=Centres	
K=Branch Minor Axis #1	Branch Inset=Throat	Seams
L=Branch Length #1	Branch Length=Throat	S1=None
M=Inset #1	Branch Parts=2	S2=None
N=Offset #1	Develop Branch Collars=No	
O=Extension #1		
P=Hole Width #1		Damper:
Q=Hole Depth #1		Damper.
R=Branch Major Axis #2		
S=Branch Minor Axis #2		
T=Branch Length #2		
U=Inset #2		
V=Offset #2		
W=Extension #2		
X=Hole Width #2		
Y=Hole Depth #2		
FF -		

Rectangular/Round/Flat Oval/Standard/Equipment

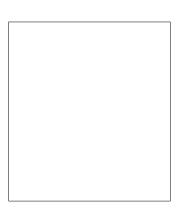
Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Pipework=No	
	Show Boundaries=No	

Seams

Damper:

Pattern: 911 Round/Flat Oval



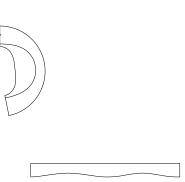


Dims	Options	Conn's
A=Pipe Width	Pipe Diameter Type=Nominal	C1=None
B=Pipe Depth	Reducer Diameter Type=Nominal	C2=None
C=Pipe Length	Pipe Parts=1	C3=None
D=Reducer Width	Pipe Seam Position=0.000	
E=Reducer Depth	Offset Width=Left In	
F=Reducer Length	Offset Depth=Bottom Up	
G=Offset Width	Diameter Reduction=0.000	
H=Offset Depth		
I=Left Extension		
J=Right Extension		
-		Seams
		S1=None

Damper:

Flat Oval



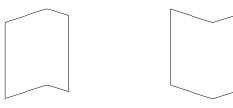


Dims	Options	Conn's
A=Bottom Diameter	Seam Position=180.000	C1=None
B=Height	Cross Break=1	C2=None
C=Offset	Pipe Diameter Type=Nominal	
D=Height	Branch Diameter Type=Nominal	
E=Left Height	Hole Adjust=0.000	
F=Right Height	Stitch Gap=0.000	
G=Branch Height #1	Number Of Stitches=0	
H=Branch Diameter #1		
I=Branch Length #1		
J=Rotation #2		
K=Branch Diameter #2		Seams
L=Branch Length #2		
M=Centre Point #2		
N=Angle #2		
O=Split Vertical		
P=Top Diameter		Damner:
•		Damper:

Pattern: 967

Flat Oval





Dims	Options	Conn's
A=Left Width	Cross Break=2	C1=None
B=Left Depth	Diameter Type BE=Nominal	C2=None
C=Right Width	Diameter Type SE=Nominal	
D=Right Depth	Same Seams On Each Part=No	
E=Length	Seam Position=Major Axis	
F=Offset Width		
G=Offset Depth		
H=Left Collar		
I=Right Collar		
J=Corner Radius		
		Seams
		S1=None

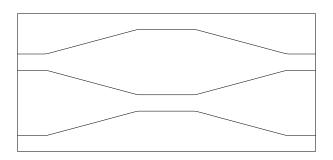
Damper:

Flat Oval



Dims	Options	Conn's
A=Width	Number Of Segments=4	C1=None
B=Depth	Diameter Type=Nominal	C2=None
C=Inner Radius	Seam Position=Throat	C3=None
D=Angle	Single Segments=No	
E=Bottom Extension	Nest Break Start Segment=0	
F=Top Extension	Nest Break End Segment=0	
G=Corner Radius	Cross Break=1	
	Notch Angle For Seam=0	
	Leg Lengths=No	
	Length Includes Extensions=No	
	-	Seams
		S1=None
		S2=None

Damper:



Pattern: 977

Flat Oval



Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Seam Position=Corner	C2=None
C=Length	Diameter Type=Nominal	
D=Left Extension	Duct Length=(inch)	
E=Right Extension		
F=Corner Radius		

Seams S1=None

Damper:

Flat Oval



Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Seam Position=Corner	C2=None
C=Length	Diameter Type=Nominal	
D=Left Extension	Duct Length=(inch)	
E=Right Extension		
F=Corner Radius		

Seams

S1=None

Damper:



Pattern: 988

Flat Oval

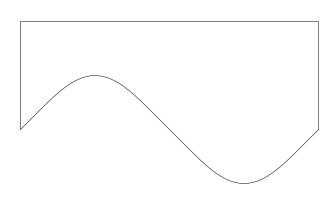


Dims	Options	Conn's
A=Branch Width	Branch Diameter Type=Nominal	C1=None
B=Branch Depth	Branch Allowance To Pipe=0.000	C2=None
C=Branch Length		
D=Angle		
E=Extension		

Seams

S1=None

Damper: None



courtesy of Applied Software 4/18/2016 41

Pattern: 995 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter B=Collar C=Length D=Offset E=Oval Depth	Sex Type=Male	C1=None C2=None
_		

Seams

S1=None

Damper:

Pattern: 1101

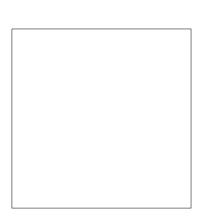
4/18/2016

Rectangular/Round/Flat Oval/Standard/Equipment

Dims	Options	Conn's
	Inlet=1	
	Outlet=1	
	Pipework=No	
	Show Boundaries=No	
	Faces=No	

Seams

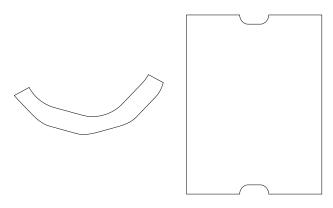
Damper:



42

Flat Oval





Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Pipe Seam Position=Depth	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Branch Width #1	Plate Border=0.000	C6=None
G=Branch Depth #1	Plate Type=Rectangular	
H=Branch Length #1	Branch Only=No	
I=Inset #1	Branch Seam Position=Corner	
J=Offset #1	Number Of Branches=1	
K=Rotation #1	Branch Diameter Type=Nominal	Seams
L=Angle #1	Branch Parts=1	S1=None
M=Collar #1	Inlet=1	S2=None
	Outlet=2	S3=None
		S4=None
		S5=None Damper:

Pattern:	11	13
Flat Oval		

Flat Oval

4/18/2016



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar	Marker Notches=No	C2=None
C=Length		
D=Offset		
E=Oval Depth		

Seams S1=None

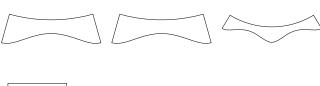
Damper:

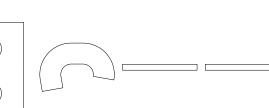


43

Flat Oval





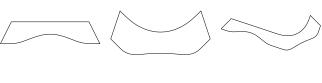


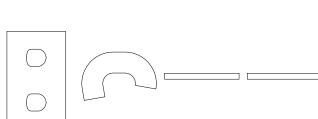
	Dims	Options	Conn's
	A=Major Axis	Pipe Parts=1	C1=None
	B=Minor Axis	Pipe Seam Position=0.000	C2=None
	C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
	D=Left Extension	Hole Adjust=0.000	C4=None
	E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
	F=Branch Width #1	Branch Diameter Type=Nominal	
	G=Branch Depth #1	Branch Parts=2	
	H=Branch Length #1	Branch Diameter Type=Nominal	
	I=Btm Width #1	Branch Parts=1	
	J=Slope Angle #1	Plate Border=0.000	
	K=Inset #1	Plate Type=Rectangular	Seams
	L=Offset #1	Branch Seam Position=0.000	S1=None
	M=Rotation #1	Branch Only=No	S2=None
	N=Collar #1	Input=Angle	S3=None
	O=Tilt Angle #1	Reducer Seam Position=Corner	
	P=Branch Width #2	Reducer Parts=1	Damper:
	Q=Branch Depth #2		bamper.
	R=Branch Length #2		
7	S=Btm Width #2		
	T=Slope Angle #2		
	U=Inset #2		
	V=Offset #2		
	W=Rotation #2		
	X=Collar #2		
_	Y=Tilt Angle #2		
	Z=Reducer Width		
	a=Reducer Depth		
	b=Reducer Length		

Pattern: 1116

Flat Oval



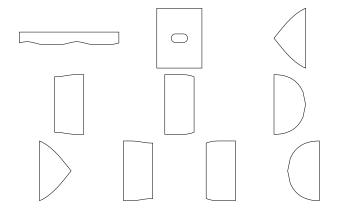




Dims	Options	Conn's
A=Major Axis	Pipe Parts=1	C1=None
B=Minor Axis	Pipe Seam Position=0.000	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Major Axis #1	Branch Diameter Type=Nominal	
G=Minor Axis #1	Branch Parts=2	
H=Branch Length #1	Branch Diameter Type=Nominal	
I=Angle #1	Branch Parts=1	
J=Inset #1	Plate Border=0.000	
K=Offset #1	Plate Type=Rectangular	Seams
L=Rotation #1	Branch Seam Position=0.000	S1=None
M=Collar #1	Branch Only=No	S2=None
N=Major Axis #2	Reducer Seam Position=Corner	S3=None
O=Minor Axis #2	Reducer Parts=1	
P=Branch Length #2		Damper:
Q=Angle #2		Damper.
R=Inset #2		
S=Offset #2		
T=Rotation #2		
U=Collar #2		
V=Reducer Width		
W=Reducer Depth		
X=Reducer Length		
ŭ		

Flat Oval



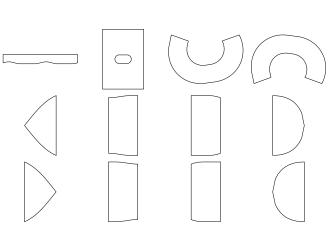


Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Pipe Seam Position=Depth	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	
E=Right Extension	Branch Allowance To Pipe=0.000	
F=Branch Width	Plate Border=0.000	
G=Branch Depth	Plate Type=Rectangular	
H=Branch Length	Branch Only=No	
I=Inset	Branch Seam Position=Corner	
J=Offset	Branch Diameter Type=Nominal	
K=Collar	Branch Parts=1	Seams
	Splitters=4	S1=None
	Splitter Radius=Auto	S2=None
	Splitter Adjust=0.000	
	Inlet=1	
	Outlet=2	Damper:
		bamper.

Pattern: 1118

Flat Oval





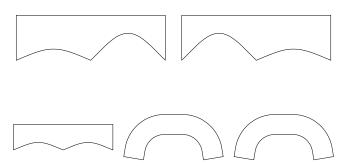
Dims	Options	Conn's
A=Width	Pipe Parts=1	C1=None
B=Depth	Pipe Seam Position=Depth	C2=None
C=Pipe Length	Pipe Diameter Type=Nominal	C3=None
D=Left Extension	Hole Adjust=0.000	C4=None
E=Right Extension	Branch Allowance To Pipe=0.000	C5=None
F=Branch Width	Plate Border=0.000	
G=Branch Depth	Plate Type=Rectangular	
H=Branch Length	Branch Only=No	
I=Inset	Branch Seam Position=Corner	
J=Offset	Branch Diameter Type=Nominal	
K=Collar	Branch Parts=1	Seams
L=Left Reducer Width	Splitters=4	S1=None
M=Left Reducer Depth	Splitter Radius=Auto	S2=None
N=Left Reducer Length	Splitter Adjust=0.000	
O=Right Reducer Width	Left Reducer Seam Position=Corner	
P=Right Reducer Depth	Left Reducer Parts=1	Damper:
Q=Right Reducer Length	Right Reducer Seam Position=Corner	
	Right Reducer Parts=1	
	Inlet=1	
	Outlet=2	

Flat Oval



Dims	Options	Conn's
A=Width	Diameter Type=Nominal	C1=None
B=Depth		C2=None
C=Length In		C3=None
D=Length Out		C4=None
E=Angle		C5=None
F=Bottom Extension		C6=None
G=Left Extension		
H=Right Extension		
I=Left Reducer Major Axis		
J=Left Reducer Minor Axis		
K=Left Reducer Length		Seams
L=Right Reducer Major Axis		S1=None
M=Right Reducer Minor		
N=Right Reducer Length		

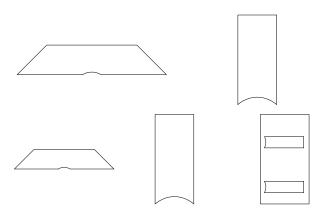
Damper:



Pattern: 1204

Flat Oval





Dims	Options	Conn's
A=Pipe Width	Pipe Diameter Type=Nominal	C1=None
B=Pipe Depth	Pipe Seam Position=Corner	C2=None
C=Pipe Length	Pipe Parts=1	C3=None
D=Left Extension	Branch Parts=2	C4=None
E=Right Extension	Round Allowance To Pipe=0.000	
F=Branch Width #1	Flat Allowance To Pipe=0.000	
G=Branch Depth #1	Hole Adjust=0.000	
H=Branch Length #1	Plate Border (Width)=0.000	
I=Angle #1	Plate Border (Depth)=Same	
J=Inset #1	Throat Clearance=0.000	
K=Offset #1	Castle Width=0.000	Seams
L=Rotation #1	Castle Angle=30.000	S1=None
M=Extension #1	•	S2=None
N=Branch Width #2		S3=None
O=Branch Depth #2		
P=Branch Length #2		Dominari Nana
Q=Angle #2		Damper: None None
R=Inset #2		None
S=Offset #2		
T=Rotation #2		
U=Extension #2		
2		

Pattern: 1522 Round/Flat Oval/Equipment



Dims	Options	Conn's
A=Diameter	Sex Type=Male	C1=None
B=Collar		C2=None
C=Length		
D=Offset		
E=Oval Depth		

Seams S1=None

Damper: