



Diffuser DCE / Steel - Aluminium

DUCTS+GRILLES+DIFFUSERS+FILTERS+FITTINGS+LOUVERS+DAMPERS

Sphere Jet Ceiling Diffuser with an adjustable discharge nozzle designed to direct airflow precisely to the desired area. An optional volume damper is available for airflow regulation, making it suitable for a wide range of commercial and industrial HVAC applications.

1

Finishes

Baked electrostatic paint (polyester) white Vermont as standard finish.

2

Dimensions

Available in diameters from 4" to 10" in steel and from 4" to 16" in aluminum, with a round frame or mounted on a rectangular panel that can accommodate multiple diffuser units to meet the specific requirements of the installation.

3

Materials

Made entirely of Steel with an option in Aluminum

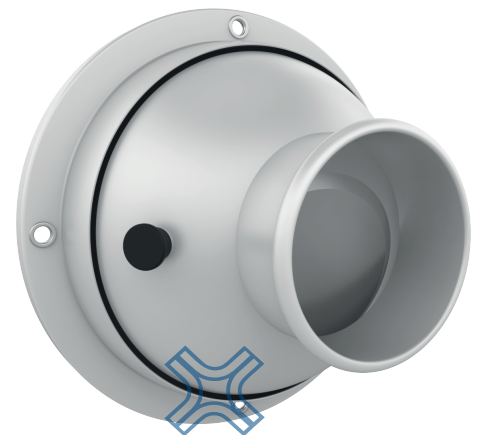
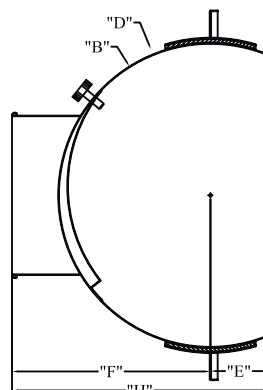
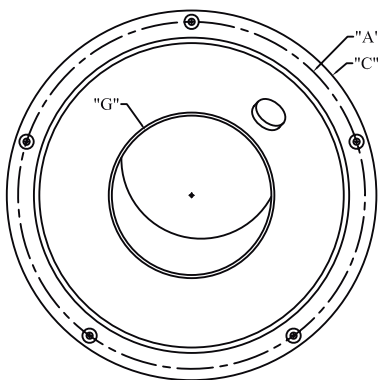
4

Applications

Recommended for open areas requiring high airflow volumes and long air throws, such as shopping malls, airports, department stores, commercial centers, and similar large commercial spaces.

5

View



LISTED Ø	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	NUMBER OF HOLES	MAXIMUM ROTATION	MATERIAL
4"	4-13/16"	3-15/16"	5-1/2"	4-7/32"	15/16"	2-9/16"	1-32/32"	3-1/2"	4	41°	STEEL / ALUMINUM
6"	6-25/32"	5-29/32"	7-15/32"	6-7/32"	1-1/2"	3-11/16"	2-15/16"	5-3/16"	5	43°	STEEL / ALUMINUM
8"	8-3/8"	7-7/8"	9-27/32"	8-1/32"	1-23/32"	4-23/32"	3-15/16"	6-7/16"	5	42°	STEEL / ALUMINUM
10"	11-31/32"	10-1/2"	12-3/4"	10-7/8"	1-31/32"	6-27/32"	5-1/2"	8-13/16"	5	40°	STEEL / ALUMINUM
12"	13-15/32"	12"	14-9/32"	12-3/8"	2-15/32"	7-7/8"	6-1/2"	10-11/32"	5	39°	ALUMINUM
14"	15-3/4"	14"	16-3/8"	14-3/8"	3"	9-5/16"	7-1/2"	12-5/16"	6	40°	ALUMINUM
16"	17-3/4"	16-5/32"	18-1/2"	16-1/2"	3-5/8"	9-3/4"	9-1/16"	13/3/8"	8	40°	ALUMINUM

PACKAGING:

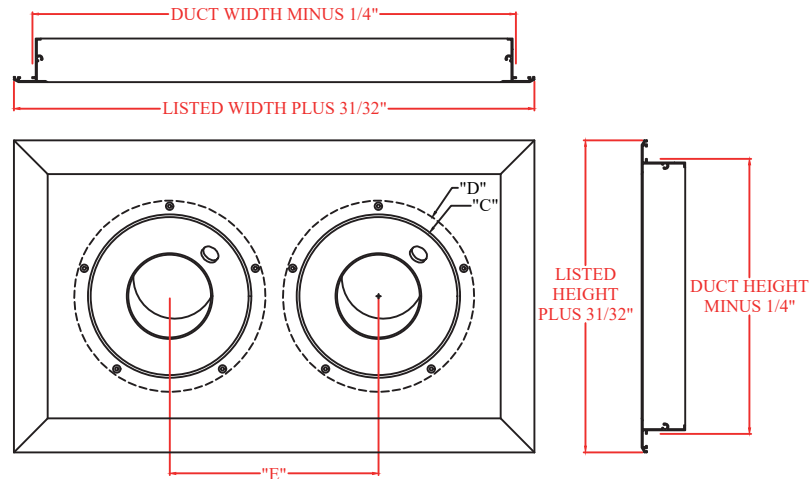
Airtight plastic individual packaging.



Diffuser DCE / Steel - Aluminium

DUCTS+GRILLES+DIFFUSERS+FILTERS+FITTINGS+LOUVERS+DAMPERS

6 View



LINEAR CONFIGURATION					
Ø X QUANTITY	"C"	"D"	"E"	DUCT SIZE	MATERIAL
4X1	4-5/8"	5-5/8"	N/A	10"X10"	STEEL / ALUMINUM
6X1	6-5/8"	7-15/16"	N/A	12"X12"	STEEL / ALUMINUM
8X1	8-5/8"	10-1/8"	N/A	14"X14"	STEEL / ALUMINUM
10X1	11-3/4"	12-11/16"	N/A	16"X16"	STEEL / ALUMINUM
12X1	12-3/4"	14-3/16"	N/A	18"X18"	ALUMINUM
14X1	14-3/4"	16-3/8"	N/A	20"X20"	ALUMINUM
16X1	16-13/16"	18-3/4"	N/A	22"X22"	ALUMINUM
4X2	4-5/8"	5-5/8"	7-21/32"	10"X18"	STEEL / ALUMINUM
6X2	6-5/8"	7-15/16"	9-3/4"	12"X22"	STEEL / ALUMINUM
8X2	8-5/8"	10-1/8"	11-27/32"	14"X26"	STEEL / ALUMINUM
10X12	11-3/4"	12-11/16"	14-11/16"	16"X32"	STEEL / ALUMINUM
12X2	12-3/4"	14-3/16"	15-27/32"	18"X34"	ALUMINUM
14X2	14-3/4"	16-3/8"	17-29/32"	20"X38"	ALUMINUM
16X2	16-13/16"	18-3/4"	20-1/32"	22"X42"	ALUMINUM
4X3	4-5/8"	5-5/8"	7-1/4"	10"X24"	STEEL / ALUMINUM
6X3	6-5/8"	7-15/16"	9-13/16"	12"X32"	STEEL / ALUMINUM
8X3	8-5/8"	10-1/8"	11-7/8"	14"X38"	STEEL / ALUMINUM
10X3	11-3/4"	12-11/16"	14-1/2"	16"X46"	STEEL / ALUMINUM
12X3	12-3/4"	14-3/16"	15-7/8"	18"X50"	ALUMINUM
14X3	14-3/4"	16-3/8"	18-7/16"	20"X58"	ALUMINUM
16X3	16-13/16"	18-3/4"	20-17/32"	22"X64"	ALUMINUM
4X4	4-5/8"	5-5/8"	7-13/32"	10"X32"	STEEL / ALUMINUM
6X4	6-5/8"	7-15/16"	9-7/8"	12"X42"	STEEL / ALUMINUM
8X4	8-5/8"	10-1/8"	11-7/8"	14"X50"	STEEL / ALUMINUM
10X4	11-3/4"	12-11/16"	14-13/32"	16"X60"	STEEL / ALUMINUM
12X4	12-3/4"	14-3/16"	15-29/32"	18"X66"	ALUMINUM
14X4	14-3/4"	16-3/8"	18-11/32"	20"X76"	ALUMINUM
16X4	16-13/16"	18-3/4"	20-13/16"	22"X86"	ALUMINUM



Diffuser DCE / Steel - Aluminium

DUCTS+GRILLES+DIFFUSERS+FILTERS+FITTINGS+LOUVERS+DAMPERS

7

Nomenclature

DCE A B 10 V
PRODUCT MATERIAL PAINT COLOR DIAMETER CONTROL

DCE PRODUCT	A MATERIAL	B PAINT COLOR	10 DIAMETER	V CONTROL
DCE SPHERE JET CIRCULAR CEILING DIFFUSER	A STEEL	B WHITE	04	S WITHOUT CONTROL
	L ALUMINUM	A NATURAL ALUMINUM	06	V WITH CONTROL
		N BLACK	08	
			10	

DCE L B 10 V
PRODUCT MATERIAL PAINT COLOR DIAMETER CONTROL

DCE PRODUCT	L MATERIAL	B PAINT COLOR	10 DIAMETER	V CONTROL
DCE SPHERE JET CIRCULAR CEILING DIFFUSER	A STEEL	B WHITE	04	S WITHOUT CONTROL
	L ALUMINUM	A NATURAL ALUMINUM	06	V WITH CONTROL
		N BLACK	08	
			10	
			12	
			14	
			16	



Diffuser DCE / Steel - Aluminium

DUCTS+GRILLES+DIFFUSERS+FILTERS+FITTINGS+LOUVERS+DAMPERS

8

Data

Size	Approx. Nozzle Velocity		500				1000				1500				2000				2500				3000				3500				4000			
	Terminal Velocity		50	100	200	400	50	100	200	400	50	100	200	400	50	100	200	400	50	100	200	400	50	100	200	400	50	100	200	400	50	100	200	400
4"	Nozzle Area Sq. Feet 0.021	CFM	10				20				30				40				50				60				70				80			
		SP (in. wg)	0.01				0.05				0.14				0.25				0.39				0.56				0.8				1.05			
		NC	-				-				<20				<20				21				24				28				32			
		Thorw (ft.)	7	5	2	-	18	10	5	-	27	14	7	3	36	18	9	5	44	23	12	6	53	28	14	7	65	32	16	8	75	37	18	9
		Thorw (ft.)	7	5	2	-	18	10	5	-	27	14	7	3	36	18	9	5	44	23	12	6	53	28	14	7	65	32	16	8	75	37	18	9
6"	Nozzle Area Sq. Feet 0.036	CFM	25				50				80				100				120				150				170				190			
		SP (in. wg)	0.02				0.07				0.18				0.29				0.44				0.62				0.82				0.93			
		NC	-				-				<20				20				21				27				30				33			
		Thorw (ft.)	19	10	5	-	30	15	8	2	50	25	13	8	62	31	17	9	80	37	20	10	100	45	23	12	110	55	28	14	125	50	30	15
		Thorw (ft.)	19	10	5	-	30	15	8	2	50	25	13	8	62	31	17	9	80	37	20	10	100	45	23	12	110	55	28	14	125	50	30	15
8"	Nozzle Area Sq. Feet 0.085	CFM	45				90				130				170				220				260				300				340			
		SP (in. wg)	0.016				0.06				0.17				0.27				0.38				0.64				0.92				1.2			
		NC	-				<20				<20				22				27				33				35				39			
		Thorw (ft.)	25	12	7	4	40	20	12	6	62	30	16	9	85	39	20	11	105	52	27	13	125	62	30	17	150	72	35	19	162	80	38	20
		Thorw (ft.)	25	12	7	4	40	20	12	6	62	30	16	9	85	39	20	11	105	52	27	13	125	62	30	17	150	72	35	19	162	80	38	20
10"	Nozzle Area Sq. Feet 0.165	CFM	85				170				250				330				420				500				580				660			
		SP (in. wg)	0.014				0.06				0.14				0.24				0.44				0.63				0.92				1.2			
		NC	-				<20				<20				20				26				30				34				38			
		Thorw (ft.)	30	15	8	5	55	30	14	7	90	42	22	10	112	55	29	14	148	72	36	17	162	84	42	21	190	100	48	24	225	112	55	28
		Thorw (ft.)	30	15	8	5	55	30	14	7	90	42	22	10	112	55	29	14	148	72	36	17	162	84	42	21	190	100	48	24	225	112	55	28
12"	Nozzle Area Sq. Feet 0.230	CFM	115				230				350				460				580				690				810				920			
		SP (in. wg)	0.012				0.055				0.12				0.22				0.43				0.6				0.92				1.2			
		NC	-				<20				<20				23				28				32				36				40			
		Thorw (ft.)	35	17	9	6	66	35	17	7	100	50	27	13	137	65	34	17	162	82	42	22	187	100	50	26	220	112	57	29	250	130	70	34
		Thorw (ft.)	35	17	9	6	66	35	17	7	100	50	27	13	137	65	34	17	162	82	42	22	187	100	50	26	220	112	57	29	250	130	70	34
16"	Nozzle Area Sq. Feet 0.814	CFM	224				448				658				900				1119				1349				1568				1800			
		SP (in. wg)	0.012				0.05				0.12				0.21				0.41				0.61				0.9				1.2			
		NC	-				20				21				25				28				36				40				43			
		Thorw (ft.)	46	25	12	6	89	46	24	11	138	65	35	18	175	94	47	22	225	111	55	27	250	136	64	34	275	159	80	41	350	174	94	46
		Thorw (ft.)	46	25	12	6	89	46	24	11	138	65	35	18	175	94	47	22	225	111	55	27	250	136	64	34	275	159	80	41	350	174	94	46

+ The throw value is based on a 50 FPM terminal velocity.

+ Script in static pressure indicates that the value is less than 0.01 inches W.G.

+ Script in noise level indicates that the value is less than 20.

+ Noise level is based in a room attenuation of 10 dB with an operating diffuser.

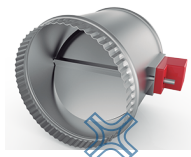
9

Accesories (Optional)



Compuerta COMPC

Circular Damper with reinforced construction and an adjustable quadrant.



Compuerta COREC

Circular Damper with reinforced, airtight construction and a circumferential neoprene seal.



Compuerta Mariposa CVM

Circular Damper with two opposed blades for airflow volume control.