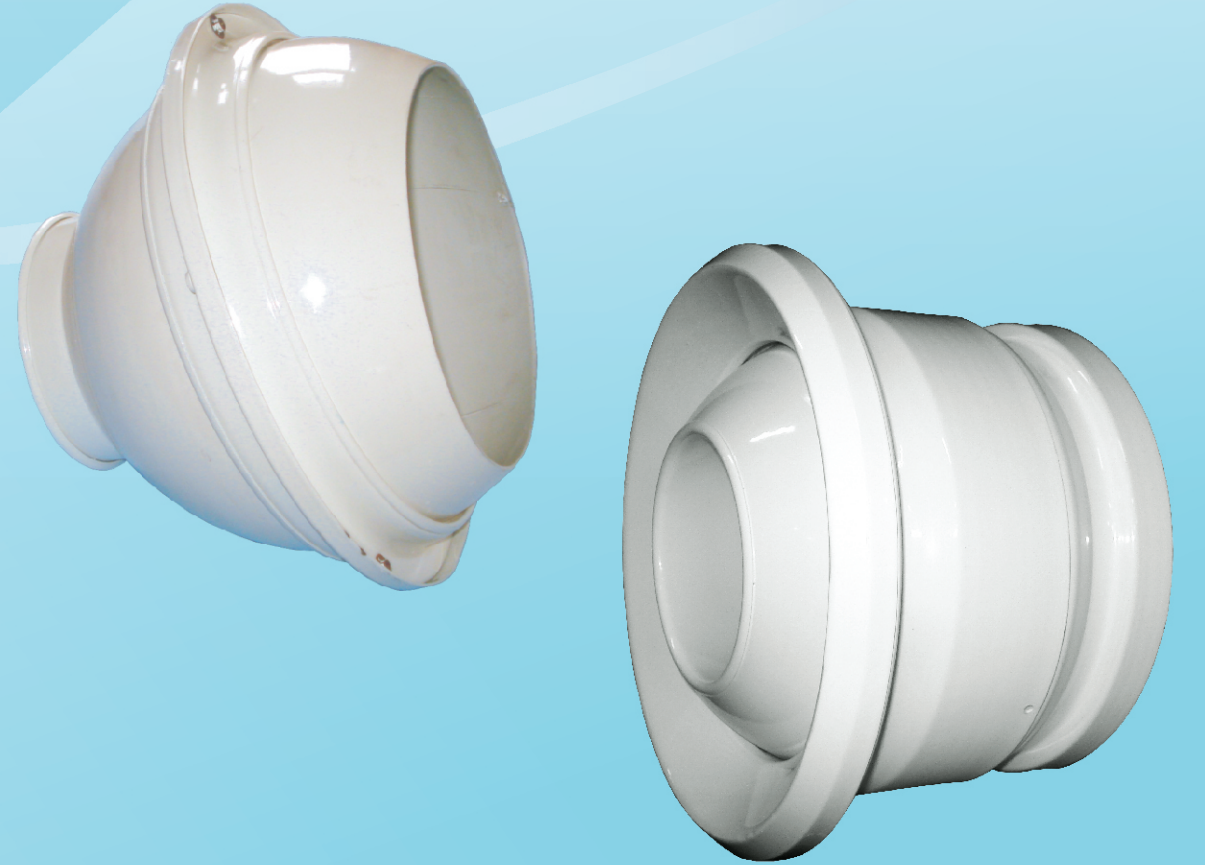




Jet Difüzör

Jet Diffuser



BSK HAVALANDIRMA EKİPMANLARI A.Ş.

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BSK HAVALANDIRMA EKİPMANLARI A.Ş.

JET DİFÜZÖR (BJD) JET DIFFUSER

Model:	* BJD : Manuel olarak ayarlanabilir iç gövdeli ve tek cidarlı jet difüzör. * BJD-DW : Manuel olarak ayarlanabilir iç gövdeli ve çift cidarlı jet difüzör.
Malzeme:	Ürün alüminyum sacdan sıvama yöntemiyle imal edilmektedir.
Kullanım:	Menfez ve difüzör kullanımının uygun olmadığı konser salonu, tiyatro ve müze gibi yüksek tavana sahip mekanlarda kullanıma uygundur. Uzun mesafelere yüksek debilerde yatay veya dikey noktasal hava atışları yapabilmektedirler. Yatayla $\pm 30^\circ$ açı yaparak üfleme yapabilirler. Bu sayede noktasal ısıtma ve soğutma yapabilirler.
Kaplama:	*Elektrostatik toz boya (Standart renkler RAL 9010 ve RAL 9016) *Alüminyum eloksal *İsteğe bağlı olarak diğer tüm RAL kodundaki renkler de temin edilmektedir.
Montaj:	*Duvara vidalı montaj *Kanallara uygun adaptör parçasının ayarlanması ve yaka açılmasıyla flanşlı, vidalı ve perçinli montaj. *Esnek kanal bağlantılarına askı tertibatıyla montaj.
Aksesuar:	*Kanal adaptörü.
Sipariş Kodu:	Model / Kaplama Tipi

Model:	*BJD : Jet diffuser that has manually adjustable internal body and single wall. *BJD-DW : Jet diffuser that has manually adjustable internal body and double wall.
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Material:	Product is manufactured from aluminium sheet by spinning method.
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Usage:	They are suitable for usage in places that have high ceiling such as concert hall, theater and museum where grille and diffuser usage are not suitable. They can make horizontal or vertical point air throws to long distances at high air flow rates. They can blow by $\pm 30^\circ$ angle with horizontal. Therefore, they can achieve point heating and cooling.
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Coating:	*Electrostatic powder coating (Standard colors are RAL 9010 and RAL 9016) *Aluminium anodic oxidation *Depending on demand, all the colors in other RAL codes are provided too.
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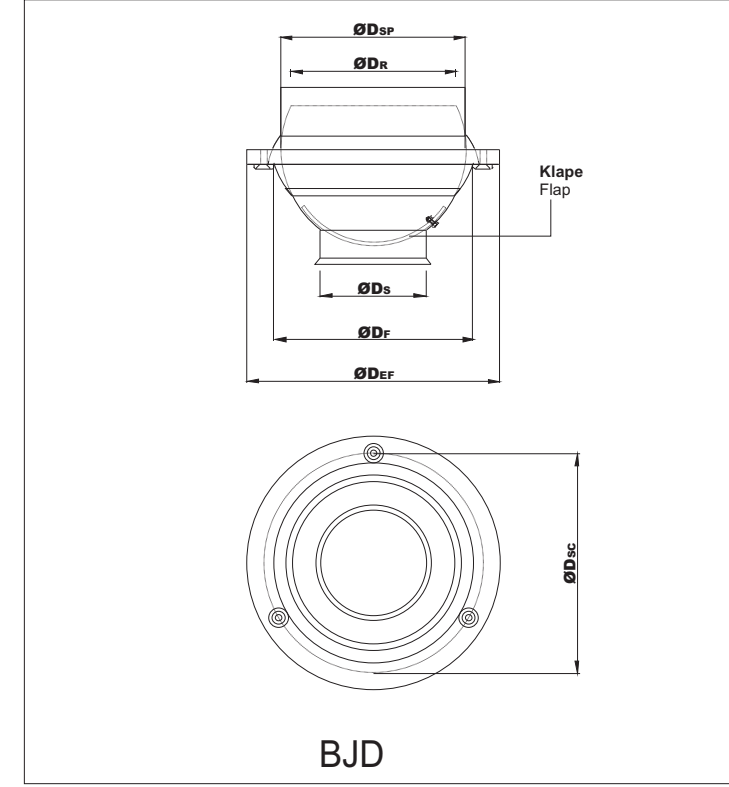
Installation:	* Installation with screw to wall. * Installation with flange, screw and rivet by adjustment of adaptor piece suitable for ducts and opening collar. * Installation with hanging mechanism to flexible duct connections.
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Accessory:	* Duct adaptor.
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Order Code:	Model / Coating Type
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Jet Difüzör Teknik Detayları Jet Diffusers Technical Details

Tek Cidarlı Jet Difüzör Teknik Detayları Single Walled Jet Diffuser Technical Details



Tek Cidarlı Jet Difüzör Standart Ölçüler Tablosu Single Walled Jet Diffuser Standard Dimensions Table

Model Model	$\varnothing D_S$	$\varnothing D_F$	$\varnothing D_{SC}$	$\varnothing D_{EF}$	$\varnothing D_{SP}$	$\varnothing D_R$
BJD80	40	83	95	115	76	65
BJD120	65	123	135	156	114	102
BJD160	80	156	168	193	144	115
BJD200	100	215	227	248	191	170
BJD250	125	271	283	304	239	209
BJD315	165	327	339	360	294	270
BJD400	203	421	433	454	375	339

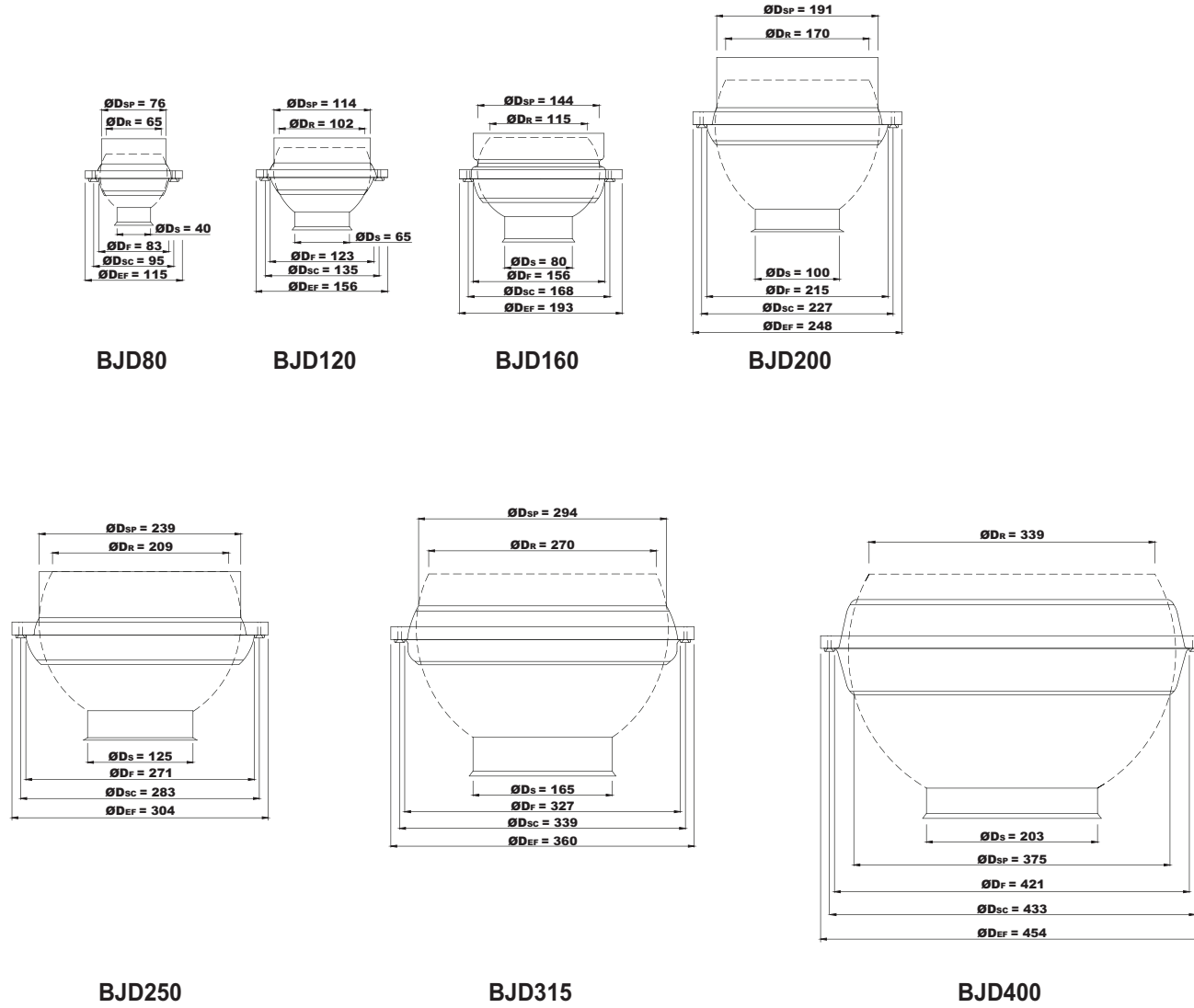
$\varnothing D_S$ (mm)	: Üfleme ağzı çapı (Supply opening diameter)
$\varnothing D_F$ (mm)	: Flanş çapı (Flange diameter)
$\varnothing D_{SC}$ (mm)	: Flanş montaj vidası eksen çapı (Flange fixing screw axis diameter)
$\varnothing D_{EF}$ (mm)	: Flanş dış çapı (Flange external diameter)
$\varnothing D_{SP}$ (mm)	: Küre iç çapı (Sphere internal diameter)
$\varnothing D_R$ (mm)	: Emiş ağzı çapı (Return opening diameter)

Jet Difüzör Teknik Detayları

Jet Diffuser Technical Details

Tek Cidarlı Jet Difüzör Modelleri

Single Walled Jet Diffuser Models



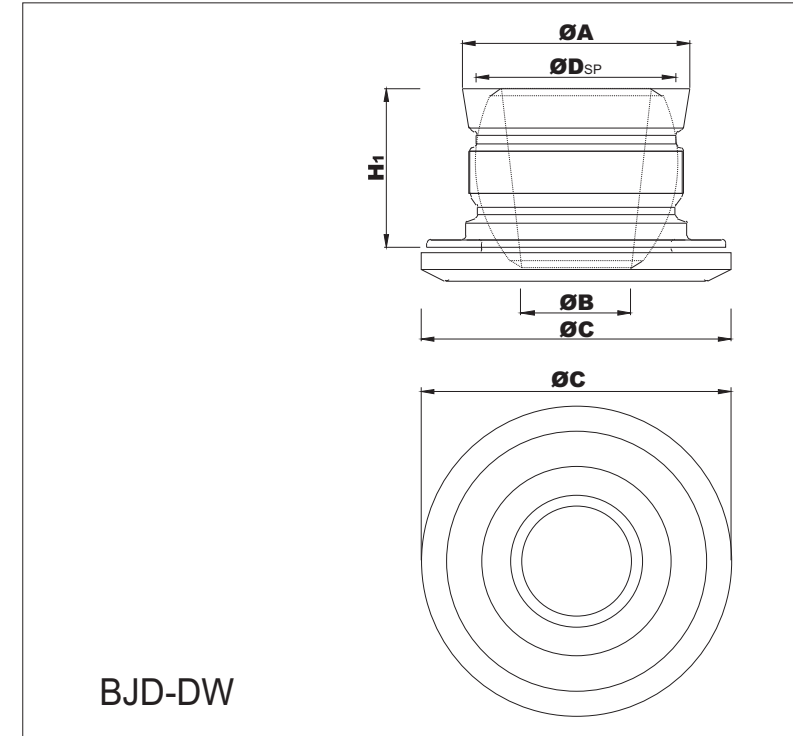
ØD_s (mm) : Üfleme ağız çapı (Supply opening diameter)
 ØD_f (mm) : Flanş çapı (Flange diameter)
 ØD_{sc} (mm) : Flanş montaj vidası eksen çapı (Flange fixing screw axis diameter)
 ØD_{ef} (mm) : Flanş dış çapı (Flange external diameter)
 ØD_{sp} (mm) : Küre iç çapı (Sphere internal diameter)
 ØD_r (mm) : Emiş ağız çapı (Return opening diameter)

Jet Difüzör Teknik Detayları

Jet Diffuser Technical Details

Çift Cidarlı Jet Difüzör Teknik Detayları

Double Walled Jet Diffuser Technical Details



Çift Cidarlı Jet Difüzör Standart Ölçüler Tablosu

Double Walled Jet Diffuser Standard Dimensions Table

Model Model	ØB	ØC	ØA	ØD _{sp}	H ₁	H ₂	ØD
BJD-DW80 (a)	40	110	68	76	43	80	200
BJD-DW80 (b)	40	112	82	72	59	80	200
BJD-DW120	60	169	124	109	89	90	250
BJD-DW160	82	198	151	141	93	110	315, 500, 630, 800
BJD-DW200	100	252	209	189	165	140	500, 630, 800
BJD-DW250	128	308	251	233	168	170	500, 630, 800
BJD-DW315	170	360	309	284	192	220	500, 630, 800
BJD-DW400	199	472	390	375	229	260	630, 800

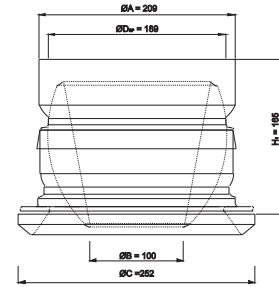
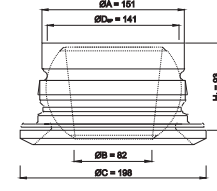
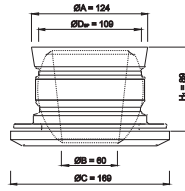
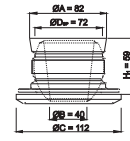
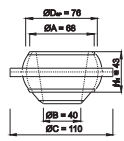
ØB (mm) : Üfleme ağız çapı (Supply opening diameter)
 ØC (mm) : Flanş dış çapı (Flange external diameter)
 ØA (mm) : Emiş ağız çapı (Return opening diameter)
 ØD_{sp} (mm) : Küre iç çapı (Sphere internal diameter)
 ØD (mm) : Jet difüzöre uygun yuvarlak kanal çapı (Round duct diameter suitable to jet diffuser)
 H_1 (mm) : Jet difüzör gövde yüksekliği (Jet diffuser body height)
 H_2 (mm) : Jet difüzör kanal adaptör uzunluğu (Jet diffuser duct adapter length)

Jet Difüzör Teknik Detayları

Jet Diffuser Technical Details

Çift Cidarlı Jet Difüzör Modelleri

Double Walled Jet Diffuser Models

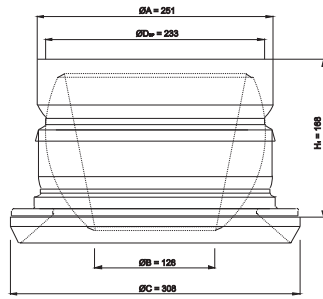


BJD-DW80(a) BJD-DW80(b)

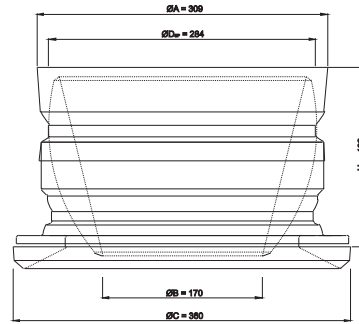
BJD-DW120

BJD-DW160

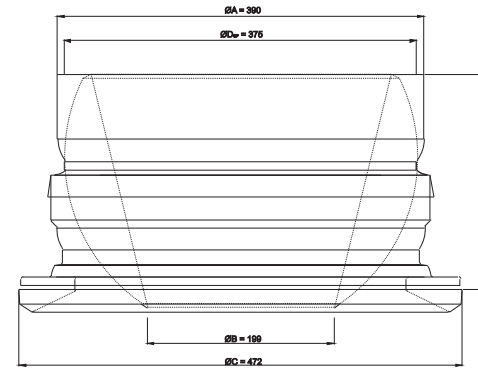
BJD-DW200



BJD-DW250



BJD-DW315



BJD-DW400

- ØB (mm) : Üfleme ağız çapı (Supply opening diameter)
 ØC (mm) : Flanş dış çapı (Flange external diameter)
 ØA (mm) : Emiş ağız çapı (Return opening diameter)
 ØD_{SP} (mm) : Küre iç çapı (Sphere internal diameter)
 ØD (mm) : Jet difüzöre uygun yuvarlak kanal çapı (Round duct diameter suitable to jet diffuser)
 H₁ (mm) : Jet difüzör gövde yüksekliği (Jet diffuser body height)
 H₂ (mm) : Jet difüzör kanal adaptör uzunluğu (Jet diffuser duct adaptor length)

Jet Difüzör Montaj Tipleri

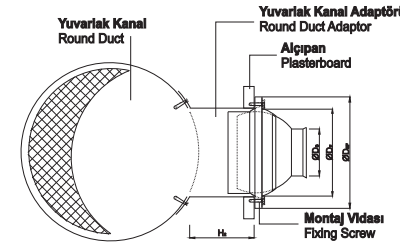
Jet Diffuser Fixing Types

Tek Cidarlı Jet Difüzör Montaj Tipleri

Double Walled Jet Diffuser Technical Details

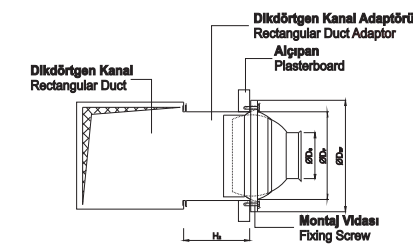
YUVARLAK KANALA MONTAJ DETAYI

INSTALLATION DETAIL TO ROUND DUCT



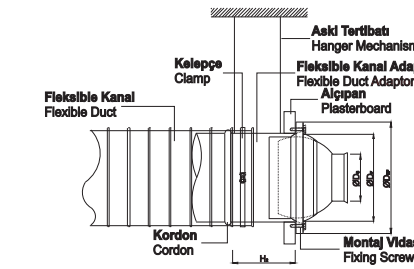
DİKDÖRTGEN KANALA MONTAJ DETAYI

INSTALLATION DETAIL TO RECTANGULAR DUCT



FLEKSİBLE KANALA MONTAJ DETAYI

INSTALLATION DETAIL TO FLEXIBLE DUCT

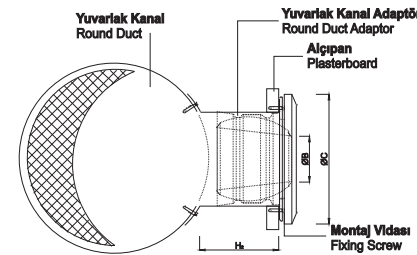


Çift Cidarlı Jet Difüzör Montaj Tipleri

Double Walled Jet Diffuser Fixing Types

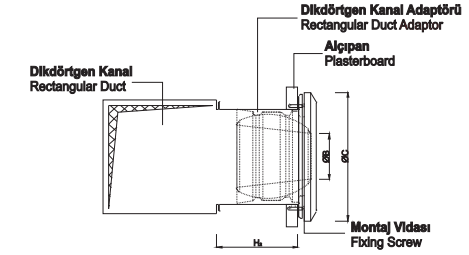
YUVARLAK KANALA MONTAJ DETAYI

INSTALLATION DETAIL TO ROUND DUCT



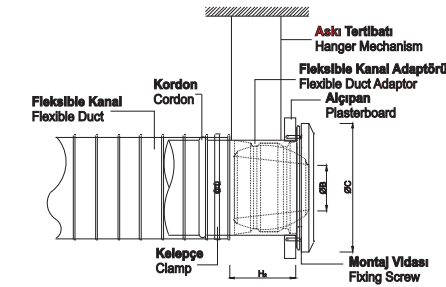
DİKDÖRTGEN KANALA MONTAJ DETAYI

INSTALLATION DETAIL TO RECTANGULAR DUCT



FLEKSİBLE KANALA MONTAJ DETAYI

INSTALLATION DETAIL TO FLEXIBLE DUCT



- ØB (mm) : Çift cidarlı jet difüzör üfleme ağız çapı (Double walled jet diffuser supply opening diameter)
 ØC (mm) : Çift cidarlı jet difüzör flanş dış çapı (Double walled jet diffuser flange external diameter)
 ØD_s (mm) : Tek cidarlı jet difüzör üfleme ağız çapı (Single walled jet diffuser supply opening diameter)
 ØD_r (mm) : Tek cidarlı jet difüzör flanş çapı (Single walled jet diffuser flange diameter)
 ØD_{EF} (mm) : Tek cidarlı jet difüzör flanş dış çapı (Single walled jet diffuser flange external diameter)
 H₂ (mm) : Jet difüzör kanal adaptör uzunluğu (Jet diffuser duct adaptor length)

Tek Cidarlı Jet Difüzör Seçim Tablosu

Single Walled Jet Diffuser Selection Table

Model	ØD _s (mm) A _{eff.} (m ²)	V (m ³ /h)	100	150	200	300	400	500	600	800	1000	1500
BJD80	40 0,0013	u _{eff.} (m/s)	21,4									
		D _{t0,5} - D _{t0,3} (m)	8 - 13,4									
		ΔP _{tot.} (Pa)	274									
		SPL (dBA)	43									
BJD120	65 0,0033	u _{eff.} (m/s)	8,4	12,6	16,8	25,3						
		D _{t0,5} - D _{t0,3} (m)	5 - 8,4	7,5 - 12,6	10,1 - 16,8	15,1 - 25,1						
		ΔP _{tot.} (Pa)	43	96	170	383						
		SPL (dBA)	19	31	40	52						
BJD160	80 0,0050	u _{eff.} (m/s)	5,6	8,3	11,1	16,6						
		D _{t0,5} - D _{t0,3} (m)	4,2 - 6,9	6,2 - 10,4	8,3 - 13,8	12,5 - 20,7						
		ΔP _{tot.} (Pa)	25	57	100	225						
		SPL (dBA)	<19	20	29	41						
BJD200	100 0,0079	u _{eff.} (m/s)	3,5	5,3	7	10,5	14,1	17,6	21,1			
		D _{t0,5} - D _{t0,3} (m)	3,3 - 5,4	4,9 - 8,1	6,5 - 10,8	9,8 - 16,3	13,0 - 21,7	16,3 - 27,1	19,5 - 32,5			
		ΔP _{tot.} (Pa)	7,4	17	30	67	119	186	267			
		SPL (dBA)	<19	9	17	30	38	45	51			
BJD250	125 0,012	u _{eff.} (m/s)		3,5	4,6	6,9	9,3	11,6	13,9			
		D _{t0,5} - D _{t0,3} (m)		3,9 - 6,5	5,2 - 8,7	7,9 - 13,1	10,5 - 17,5	13,1 - 21,8	15,7 - 26,1			
		ΔP _{tot.} (Pa)		9,5	17	38	68	106	152			
		SPL (dBA)		<9	<17	17	25	32	38			
BJD315	165 0,021	u _{eff.} (m/s)		2	2,7	4	5,3	6,6	7,9	10,6	13,2	19,8
		D _{t0,5} - D _{t0,3} (m)		3 - 4,9	3,9 - 6,6	5,9 - 9,9	7,9 - 13,2	9,9 - 16,5	11,8 - 19,7	15,8 - 26,3	19,7 - 32,9	29,6 - 49,4
		ΔP _{tot.} (Pa)		2,3	4	9	16	25	36	65	101	228
		SPL (dBA)		<9	<17	4	12	19	25	33	40	53
BJD400	203 0,032	u _{eff.} (m/s)			1,7	2,6	3,5	4,3	5,2	6,9	8,7	13
		D _{t0,5} - D _{t0,3} (m)			3,4 - 5,7	5,1 - 8,5	6,8 - 11,4	8,5 - 14,2	10,2 - 16,9	13,6 - 22,6	16,9 - 28,3	25,5 - 42,5
		ΔP _{tot.} (Pa)			2,6	5,8	10	16	23	41	64	145
		SPL (dBA)			-	<4	<12	<16	16	25	32	44

ØD_s (mm) : Tek cidarlı jet difüzör üfleme ağız çapı (Single walled jet diffuser supply opening diameter)
 A_{eff.} (m²) : Efektif alan (Effective area)
 u_{eff.} (m/s) : Efektif hız (Effective velocity)
 D_{t0,5} (m) : Nihai hız 0,5 m/s olduğu andaki atış mesafesi (Throw distance when the final velocity is 0,5 m/s)
 D_{t0,3} (m) : Nihai hız 0,3 m/s olduğu andaki atış mesafesi (Throw distance when the final velocity is 0,3 m/s)
 ΔP_{tot.} (Pa) : Toplam basınç kaybı (Total pressure drop)
 SPL (dBA) : Ses güç seviyesi (Sound power level)
 V (m³/h) : Hava debisi (Air flow rate)

Çift Cidarlı Jet Difüzör Seçim Tablosu

Double Walled Jet Diffuser Selection Table

			Δt (°C)				
Model	$\frac{\varnothing B \text{ (mm)}}{A_{eff. \text{ (m}^2\text{)}}}$	V (m³/h)		5	10	15	20
BJD-DW120	$\frac{60}{0,0028}$	100	D _t (m)	6,70	5,00	4,15	3,65
		150		9,25	6,90	5,80	5,10
		200		11,4	8,60	7,25	6,35
		250		13,9	10,5	8,70	7,80
BJD-DW160	$\frac{82}{0,0053}$	150		6,57	4,89	4,11	3,68
		250		10,5	7,90	6,60	5,80
		300		12,7	9,60	8,00	7,00
		400		15,6	11,6	9,80	8,70
BJD-DW200	$\frac{100}{0,0079}$	250		8,50	6,20	5,20	4,60
		400		11,9	8,95	7,60	6,60
		500		14,5	11,0	9,15	8,00
		600		16,5	12,4	10,4	9,15
BJD-DW250	$\frac{128}{0,013}$	200		5,40	4,05	3,40	3,00
		450		10,6	7,95	6,70	5,85
		700		5,10	11,4	9,60	8,50
		1000		20,0	15,0	13,0	11,0
BJD-DW315	$\frac{170}{0,023}$	400		7,30	5,45	4,55	4,00
		750		12,2	9,15	7,65	6,80
		1000		14,5	10,8	9,08	8,03
		1500		21,0	15,8	13,3	11,8
BJD-DW400	$\frac{199}{0,031}$	800		10,2	7,60	6,43	5,66
		1000		12,6	9,40	7,98	7,00
		1500		16,1	12,9	10,8	9,56
		2000		20,5	15,4	12,9	11,5

ØB (mm) : Çift cidarlı jet difüzör üfleme ağız çapı (Double walled jet diffuser supply opening diameter)
 V (m³/h) : Hava debisi (Air flow rate)
 A_{eff.} (m²) : Efektif alan (Effective area)
 D_t (m) : Atış mesafesi (Throw distance)
 Δt (°C) : Ortama giren hava ile konfor bölgesindeki hava arasındaki sıcaklık farkı
 (The temperature difference between the air entering the ambiance and the air in the comfort zone)

Çift Cidarlı Jet Difüzör Seçim Tablosu

Double Walled Jet Diffuser Selection Table

Model	$\frac{\text{ØB (mm)}}{\text{Aeff. (m}^2\text{)}}$	V (m³/h)	$\Delta P_{\text{tot. (Pa)}}$	$\alpha = 0^\circ$	$\alpha = 10^\circ$	$\alpha = 15^\circ$	$\alpha = 20^\circ$	$\alpha = 25^\circ$	$\alpha = 30^\circ$
				SPL (dBA)	SPL (dBA)	SPL (dBA)	SPL (dBA)	SPL (dBA)	SPL (dBA)
BJD-DW120	$\frac{60}{0,0028}$	100	37	<25	<26	<27	<28	<29	<30
		150	113	32	33	34	35	36	37
		200	162	38	39	40	41	42	43
		250	231	43	44	45	46	47	48
BJD-DW160	$\frac{82}{0,0053}$	150	35	<26	<27	<28	<28	<29	<29
		250	105	33	34	35	35	36	36
		300	150	40	41	42	42	43	43
		400	260	47	48	49	49	50	50
BJD-DW200	$\frac{100}{0,0079}$	250	34	<23	<24	<25	<25	<26	<26
		400	86	33	34	35	35	36	36
		500	143	41	42	43	43	44	44
		600	200	<49	<50	<51	<51	<52	<52
BJD-DW250	$\frac{128}{0,013}$	200	8	<20	<20	<20	<20	<20	<20
		450	41	26	26	27	27	28	28
		700	100	39	39	40	40	41	41
		1000	190	49	49	50	50	51	51
BJD-DW315	$\frac{170}{0,023}$	400	13	<20	<20	<20	<20	<20	<20
		750	44	28	28	29	29	30	30
		1000	70	34	34	35	35	36	36
		1500	188	50	50	51	51	52	52
BJD-DW400	$\frac{199}{0,031}$	800	20	<20	<20	<20	<20	<20	<20
		1000	23	<28	<28	<28	<28	<29	<29
		1500	53	34	34	34	34	35	35
		2000	96	43	43	43	43	44	44

ØB (mm) : Çift cidarlı jet difüzör üfleme ağız çapı (Double walled jet diffuser supply opening diameter)
V (m³/h) : Hava debisi (Air flow rate)
A_{eff.} (m²) : Efektif alan (Effective area)
 $\Delta P_{\text{tot.}}$ (Pa) : Toplam basınç kaybı (Total pressure drop)
SPL (dBA) : Ses güç seviyesi (Sound power level)
 α (°) : Jet difüzörün yatayla olan üfleme açısı (The supply angle of jet diffuser with horizontal)

Jet Difüzör Sipariş Kodu

Jet Diffuser Order Code

Model	Boğaz Ölçüsü	Kaplama
Model	Neck Size	Coating
BJD	80	EPC 9010
BJD	MANUEL OLARAK AYARLANABİLİR İÇ GÖVDELİ VE TEK CİDARLI JET DİFÜZÖR JET DIFFUSER THAT HAS MANUALLY ADJUSTABLE INTERNAL BODY AND SINGLE WALL.	80 120 160 200 250 315 400
BJD-DW	MANUEL OLARAK AYARLANABİLİR İÇ GÖVDELİ VE ÇİFT CİDARLI JET DİFÜZÖR JET DIFFUSER THAT HAS MANUALLY ADJUSTABLE INTERNAL BODY AND DOUBLE WALL.	80 (a) 80 (b) 120 160 200 250 315 400
EPC	ELEKTROSTATİK TOZ BOYA ELECTROSTATIC POWDER COATING	**Lütfen RAL renk kodunu belirtiniz. ** Please mention RAL color code.
NA	ALÜMİNYUM ELOKSAL ALUMINIUM ANODIC OXIDATION	

Örnek Sipariş Kodu

Sample Order Code

Model / Boğaz Ölçüsü / Kaplama /
 Model / Neck Size / Coating /
 BJD / 80 / EPC 9010 /

Bu föy sürekli olarak güncellenmektedir.
 Dolayısıyla teknik değişiklikler ve adaptasyonlar mümkündür!
 Uygulamanızı birlikte belirleyebilmemiz için lütfen bizimle iletişim kurunuz!

This booklet is updated constantly.
 Therefore, technical changes and adaptations are possible!
 Please contact us, in order to define your application together!