

NOZZLES





Description

The SJN Series jet nozzles are designed to ventilate large indoor spaces such as exhibitions halls, theatres, museums , foyers etc., outlets with long jet throws are needed.

The discharge direction is determined by the outlet angle, ($\pm 30^\circ$ around the outlet axis) and can be adjusted manually or motorized.

The jet nozzle can be installed on walls, bulk heads and pillars.

It also has extra ordinary good acoustic characteristics and is therefore well suited for air distribution in indoor spaces and critical areas such as stages, conference rooms, theatres , museums and broadcasting studios and concert halls.

Standard Construction

Materials:

The face cover and the nozzle are made of aluminum with natural finish and can be painted or powder coated (RAL 9010) or to any other color.

Two plastic rings (color RAL 9010) are used for mounting of the eyeball. All duct connections, spigots, collar saddles and flanges are supplied in galvanized steel finish.

Finish:

The standard coating finish is polyester powder coating, white color RAL 9010 (**Code: Z0**).

Optional Finish:

1. Natural anodized aluminium finish (**Code: Z1**).
2. The powder coating can be of any color if requested as specified (**Code: Z2**).

Dimensions

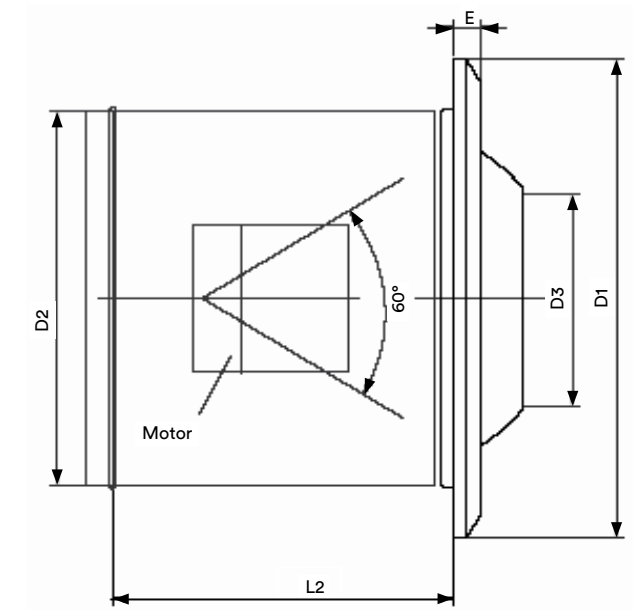
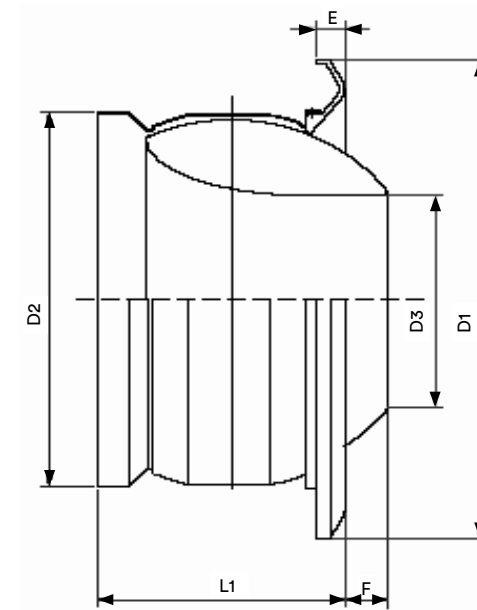
SJN consist of a spherical discharge nozzle mounted in a housing and is complete with a front mounting flange and circular spigot for direct connection to circular duct.

A rear duct connection with a spigot or a saddle with flange are available as option for fixing to the side of rectangular or circular ducts.

SIZE	D1	D2	D3	E	F	L1	L2
100	162	98	50	10	2	78	80
125	185	123	64	10	4	89	90
160	216	158	82	11	10	106	110
200	273	198	108	16	14	127	140
250	318	248	136	16	23	159	170
315	400	313	174	23	29	189	220
400	483	398	230	24	47	223	260
500	596	498	286	27.5	60	290	340

SIZE	Duct Diameter						
	200	250	315	500	630	800	1000
100	●						
125		●					
160			●	●	●	●	
200				●	●	●	
250				●	●	●	
315				●	●	●	
400					●	●	
500						●	●

For supply with actuator, L2= 365mm for all sizes.



Technical Selection

SIZES	Throw (m)									Air Velocity V_L (m/s)
	10m			20m			30m			
	Volume flow rate (M ³ /h)	Pressure loss (Pa)	L _{WA} dB(A)	Volume flow rate (M ³ /h)	Pressure loss (Pa)	L _{WA} dB(A)	Volume flow rate (M ³ /h)	Pressure loss (Pa)	L _{WA} dB(A)	
100	---	---	---	93.6	86	29	140	175	41	0.25
125	---	---	---	122	71	25	180	136	36	
160	82.8	11	<20	165	26	<20	250	98	35	
200	104	---	<20	220	29	<20	306	67	27	
250	133	---	<20	272	8.3	<20	382	34	22	
315	180	---	<20	350	11	<20	540	36	20	
400	234	---	<20	465	8	<20	702	13	<20	
500	310	---	<20	601	---	<20	932	---	<20	
100	93.6	86	29	187	300	50	---	---	---	0.5
125	122	71	25	245	265	46	---	---	---	
160	165	26	<20	330	113	44	497	200	55	
200	220	29	<20	435	123	38	655	218	50	
250	274	8.3	<20	548	63	34	825	112	45	
315	350	11	<20	690	57	28	1055	104	40	
400	464	8	<20	930	32	20	1394	69	33	
500	601	---	<20	1253	---	20	1872	26	26	
100	187	300	50	---	---	---	---	---	---	1.0
125	245	265	46	---	---	---	---	---	---	
160	330	113	44	---	---	---	---	---	---	
200	435	123	38	870	312	---	---	---	---	
250	548	63	34	1100	160	53	---	---	---	
315	700	57	28	1400	150	48	2106	243	---	
400	930	32	20	1860	123	42	2783	273	53	
500	1253	---	20	2419	38	36	3744	100	52	

NOTE

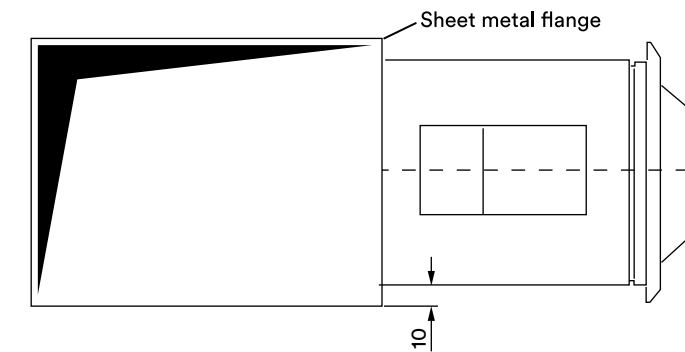
The above table provides a guide for selecting the size of the SJN Jet Nozzle. For selection outside the limits of above table, please contact SAFID.

Installation Details

The jet nozzles can be installed on rectangular or circular ducts as nozzles can be supplied with flanges, collar saddles and spigots.

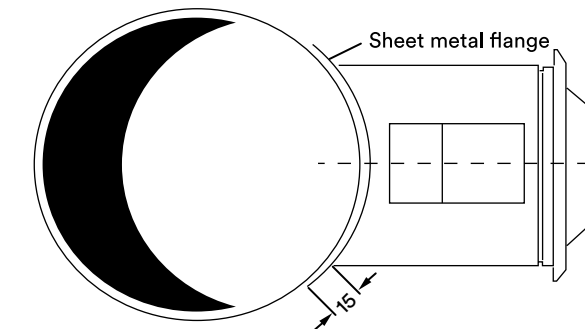
SJN - R

Example of a rectangular duct connection.



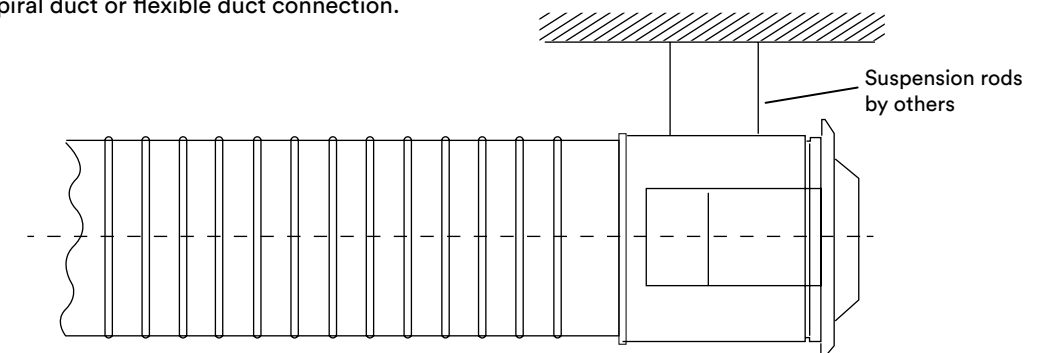
SJN - C

Example of a circular duct.



SJN - S

Example of a spiral duct or flexible duct connection.



Order Details

Order Code: SJN-R - M - Z0 / 250 Ø

Model:
 SJN-R : Rectangular duct
 SJN-C : Circular duct
 SJN-S : Spiral duct or Flexible duct

Control Method:
 M : Manual
 A1 : Actuator 220V or 230V
 A2 : Actuator 24V
 A3 : Modulating actuator (0...10V)

Coating Finish:
 Z0 = Powder coated, white color RAL 9010 (standard)
 Z1 = Natural anodized aluminium finish
 Z2 = Any other color if requested as specified

Sizes (mm)
 100, 125, 160, 200, 250, 315, 400, 500

Order Example

Order Code:

Ordering
 Make : SAFID
 Type : SJN-R-M-Z01/250Ø
 Qty. : 1pc.

JET NOZZLES

RJN SERIES



Description

The RJN jet nozzle series is designed for areas where a long throw is needed. The large free area allows handling of large air flow rates with low pressure loss. Available with one, two, three or four elements per panel.

Ajustable core can be rotated through 360° and tilted up to a maximum of 30° from mid position to produce a wide variation in airjet angles.

Fully directional jet nozzles for high air flow rates and long throws.

RJN S

Single element without panel for installation in a round duct.

Standard Construction

Materials:
 The face cover (panel) and nozzle are fabricated using 22 gauge galvanized steel sheet and are powder coated to a white color, RAL 9010.

Finish:

The standard coating finish is polyester powder coating, white color RAL 9010 (**Code: Z0**).

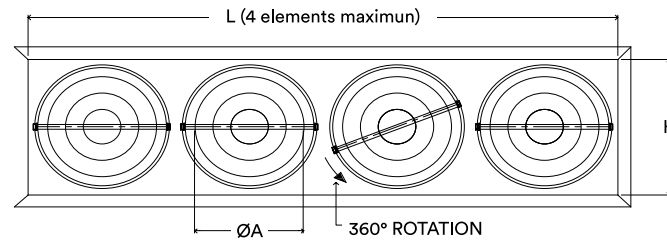
Optional Finish:

1. The powder coating can be of any color if requested as specified (**Code: Z2**).

Dimensions: Jet Nozzles With Panel

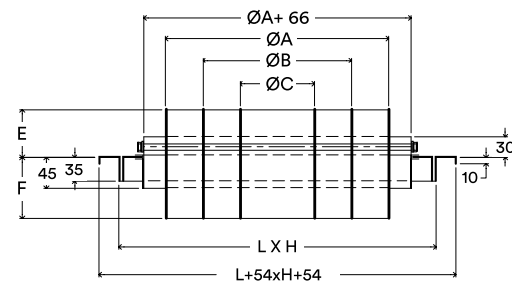
Standard Sizes (n=number of elements)

SIZE	MODEL	n	L	H	Ø A	Ø B	Ø C	E	F
Ø200	RJN 1	1	300	300	200	150	100	70	90
	RJN 2	2	600						
	RJN 3	3	900						
	RJN 4	4	1200						
Ø250	RJN 1	1	350	350	250	175	100	70	90
	RJN 2	2	700						
	RJN 3	3	1050						
	RJN 4	4	1400						
Ø300	RJN 1	1	400	400	300	200	100	70	90
	RJN 2	2	800						
	RJN 3	3	1200						
	RJN 4	4	1600						
Ø350	RJN 1	1	450	450	350	225	100	70	90
	RJN 2	2	900						
	RJN 3	3	1350						
	RJN 4	4	1800						

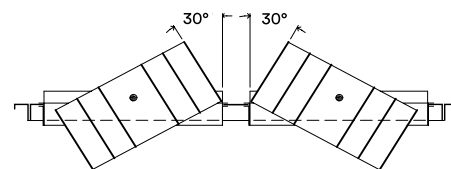


MODEL: RJN 4

MODEL : RJN



1 ELEMENT



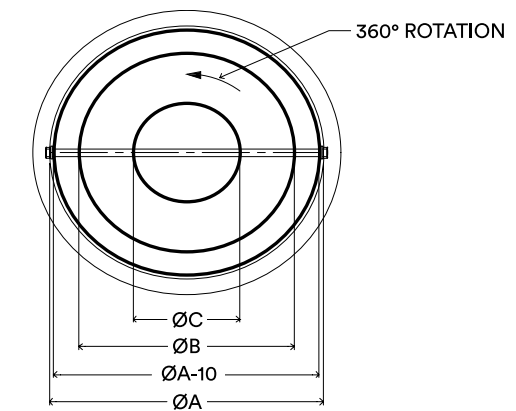
2 ELEMENT

Dimensions: Jet Nozzles Without Panel

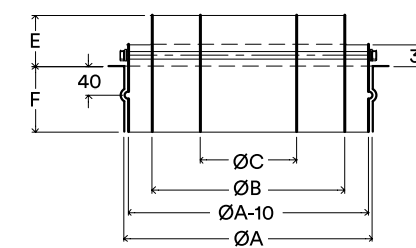
Standard Sizes (n=number of elements)

SIZE	MODEL	n	Ø A	Ø B	Ø C	E	F
Ø200	RJNS	1	200	-	129	70	90
Ø250	RJNS	1	250	178	100	70	90
Ø315	RJNS	1	315	244	122	70	90
Ø400	RJNS	1	400	329	165	70	90

MODEL : RJN S

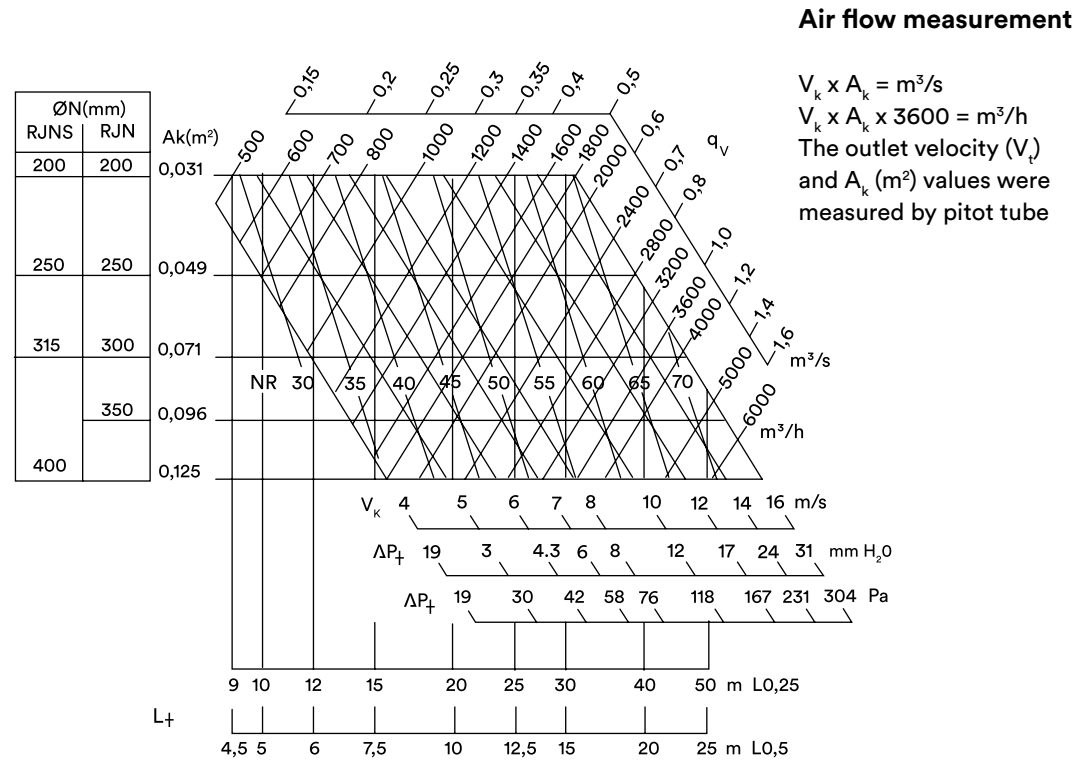


TOP VIEW



SECTION VIEW

Selection Diagram



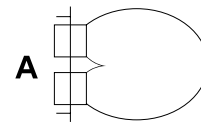
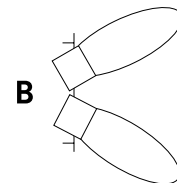
Correction for concentrated jet

Models	n	L _t A	L _t B	NR
RJN 2	2	x 1,14	x 1	+ 3
RJN 3	3	x 1,20	x 1	+ 5
RJN 4	4	x 1,25	x 1	+ 6

q total : Total air flow per unit
qv : Air flow per elements (diagram data).
n : Number of elements.

A = Concentrated jet
B = Separate jet

(1) Enter diagram with $q_v = \frac{q_{total}}{n}$



Order Details

Order Code: RJN - 1 - Z0 - Ø

Model:

RJN-1: With 1 elements _____

RJN-2: With 2 elements _____

RJN-3: With 3 elements _____

RJN-4: With 4 elements _____

RJN S: Single element without panel. _____

Coating Finish:

Z0 = Powder coated, white color RAL 9010 (standard). _____

Z1 = Powder coated of any color as requested. _____

Sizes (mm)

Model: RJN - ø200, ø250, ø300, ø350 _____

Model: RJNS - ø200, ø250, ø315, ø400 _____

Order Example

Ordering

Make : SAFID
Type : Jet Nozzle with panel and with one element.
Coating finish : Powder coated, white color RAL 9010
Model : RJN-1-Z0 / ø350
Qty. : 1 pc.

Make : SAFID
Type : Jet Nozzle without panel for installation in round duct.
Coating finish : Powder coated, white color RAL 9010
Model : RJN-S-Z0 / ø315
Qty. : 1 pc.