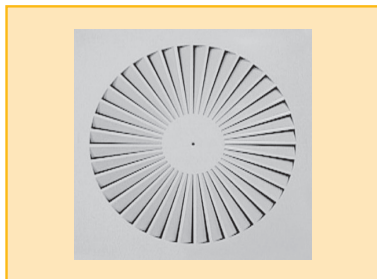


FIXED SWIRL DIFFUSERS

TYPE: WS400

Installation dimensions



Application

The fixed swirl diffuser type WS400 is used for the supply of cooled or heated air in facilities such as offices, shopping centres, schools. Diffusers for ceiling or exposed duct mounting.

A high induction is obtained by the exceptional swirl discharge, this quickly reduces the difference in temperature and velocity of the induced air, which makes this diffuser extremely suitable for VAV terminal boxes. This diffuser can also be used for exhaust.

Technical information

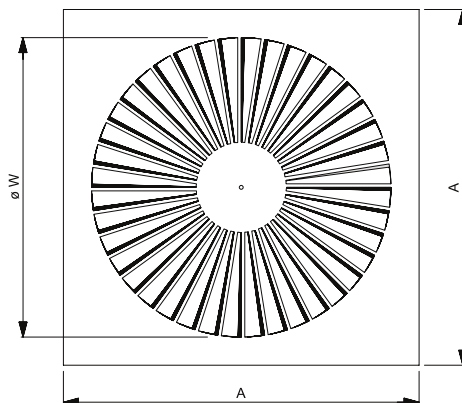
Characteristics:

- Fixed stamp-formed blades
- fixed horizontal air pattern
- available with plenum box with side or top entry, or with damper in top or side entry
- Plenum with perforated steel sheet
- For modular ceiling mounting: overall size 594 x 594 mm

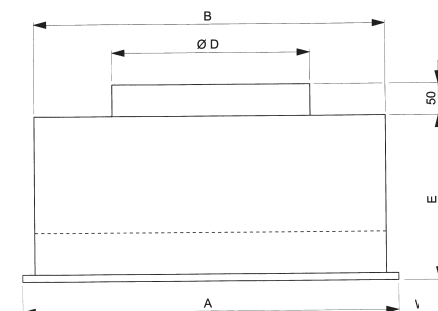
Construction:

- steel, painted white (RAL 9010)
- optional insulated plenum; galvanized steel sheet

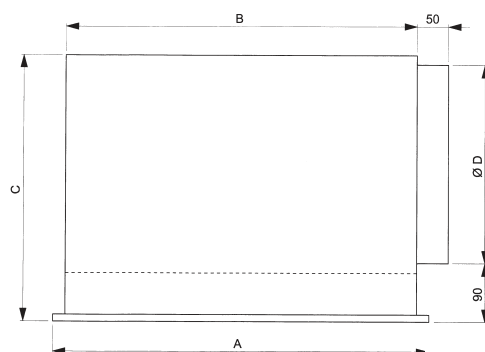
WS400



WS400T



WS400S



Size	A	B	C	Ø D	E	Ø W	
125	294	290	230	123	155	250	*
200	394	375	305	198	200	350	*
200	494	375	305	198	200	350	*
250	594	575	355	248	200	500	
315	594	575	420	313	260	500	

All dimensions in mm

* Available in 594x594 Format

FIXED SWIRL DIFFUSERS

TYPE: WS400

Specifications description

Example:

Square steel diffuser with fixed blades. Complete with a plenum box with side entry and damper. The diffuser is painted white (RAL 9010), plenum box in galvanised steel sheet.

Type: WS401S
size ... mm

Fixing

- provided with mounting eyes (Ø 7 mm), mounting straps available upon request
- modular ceiling mounting

Options

- **WS400**: square swirl diffuser with central screw fixing
- **WS400S**: swirl diffuser with plenum and side entry
- **WS401S**: WS400S with damper in side entry
- **WS400T**: swirl diffuser with plenum and top entry
- **WS401T**: WS400T with damper in top entry
- **WS400SG/WS401SG/WS400TG/WS400ST/WS401TG** : insulated plenum
- **WS400P**: swirl diffuser integrated in a false ceiling plate (Please call sales)
- **All sizes available** in 594sq overall
eg: WS400P 125 / 594
 160 / 594
 200 / 594

FIXED CIRCULAR SWIRL DIFFUSERS

TYPE: WR400

Installation dimensions



Application

The fixed swirl diffuser type WR400 is used for the supply of cooled or heated air in facilities such as offices, shopping centres, schools. Diffusers for ceiling or exposed duct mounting.

A high induction is obtained by the exceptional swirl discharge, this quickly reduces the difference in temperature and velocity of the induced air, which makes this diffuser extremely suitable for VAV terminal boxes. This diffuser can also be used for exhaust.

Technical information

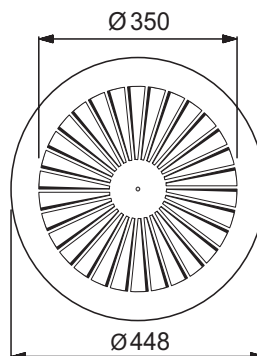
Characteristics:

- Fixed stamp-formed blades
- Fixed horizontal air pattern
- available with plenum box with side entry, or with damper in side
- plenum with perforated steel sheet

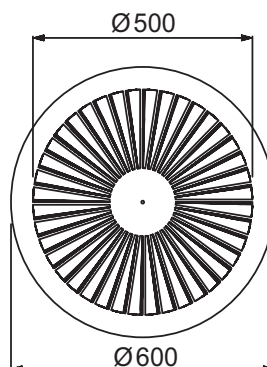
Construction:

- steel, painted white (RAL 9010)
- optional insulated plenum; galvanised steel sheet

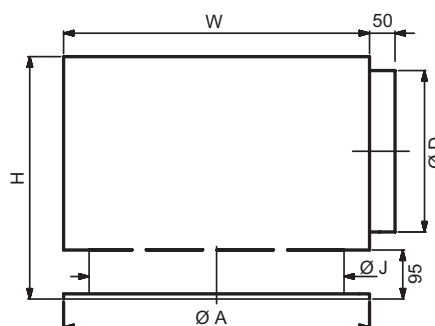
WR400 Size 200-448 mm



WR400 Size 315-600 mm



WR400S



Size	Ø A	W	H	Ø D	Ø J	Nom. size
200	448	450 x 476	365	198	354	360
250	600	600 x 626	405	248	504	510
315	600	600 x 626	470	313	504	510

All dimensions in mm

FIXED CIRCULAR SWIRL DIFFUSERS

TYPE: WR400

Specifications description

Example:

Circular steel diffuser with fixed blades. Complete with a plenum box with side entry and damper. The diffuser is white (RAL 9010), plenum box in galvanised steel sheet.

Type: WR401S
size ... mm

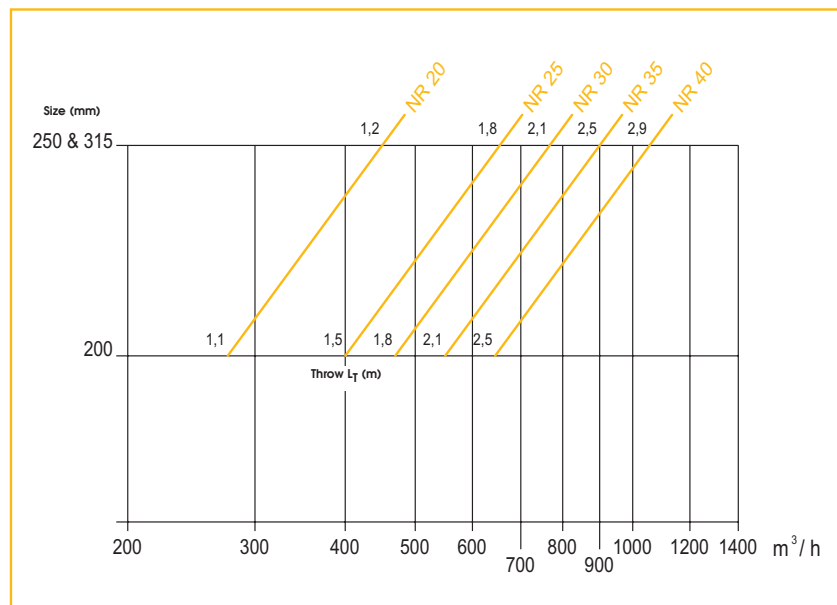
Fixing

provided with mounting eyes (ø 7 mm), mounting straps available upon request

Options

- **WR400:** circular swirl diffuser with central screw fixing
- **WR400S:** WR400 with plenum and side entry
- **WR401S:** WR400S with damper in side entry
- **WR400SG/WR401SG:** with insulated plenum

Fast selection diagram



Throw factor is based on a v_R of 0,17 m/s in the occupied zone.

See following pages for a detailed selection.

How to order

WR401S size 315 mm with plenum with side entry and damper, non insulated

W	R	4	0	1	S	-	0	3	1	5	0	6	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Size Dimension A

- : non insulated plenum
G: insulated plenum

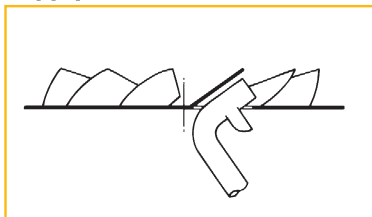
- : without plenum
S: plenum with side entry

0: without damper
1: with damper in inlet spigot of plenum

FIXED SWIRL DIFFUSERS

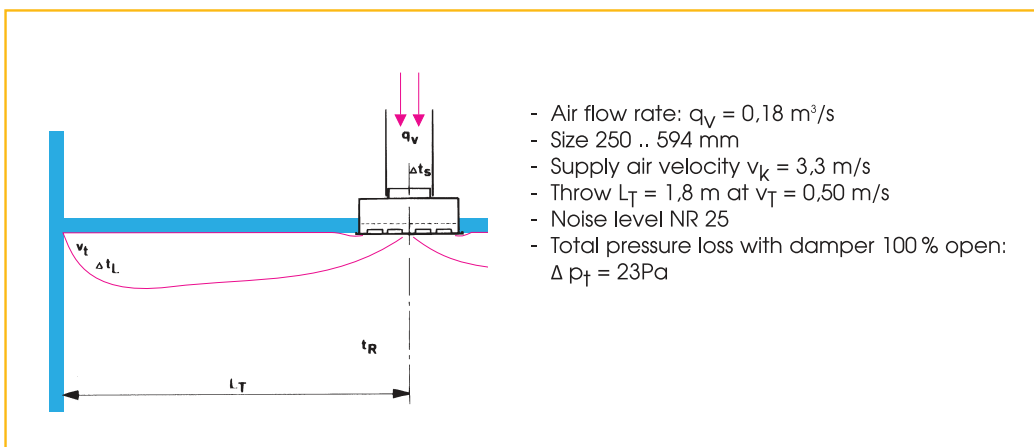
TYPE: WS400 • WR400

supply

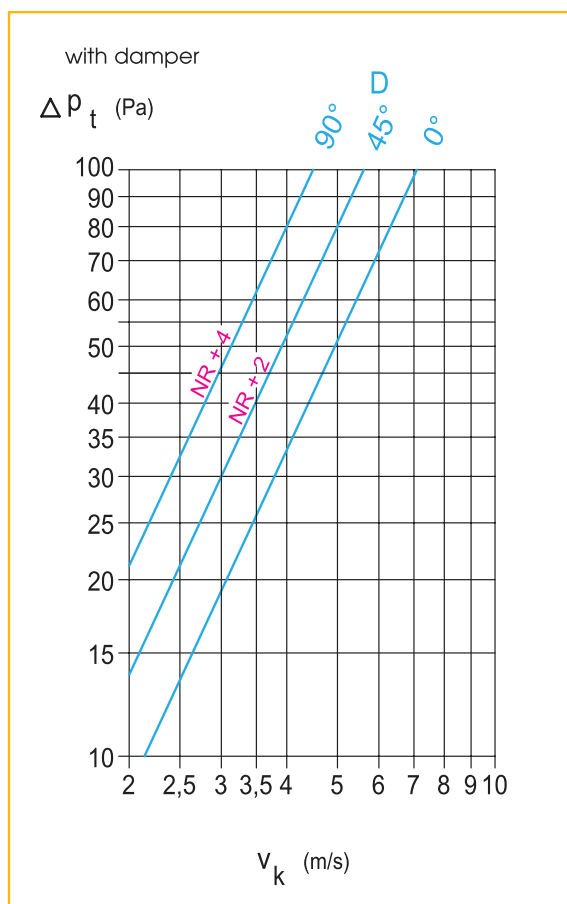


Velometer jet 2220 A or 6070

Example



Pressure loss



FIXED SWIRL DIFFUSERS

TYPE: WR400 • WS400 SELECTION DATA

CODE	DESCRIPTION	PATTERN X OVERALL SIZE		SPIGNOT DIA	VOLUME L/S	VELOCITY L/S	THROW METERS	P.A.	NR
WS400S	fixed blade swirl	225	294		23	2.03	0.2	7.9	15.0
				125		1.87			
WS400S	fixed blade swirl	225	294		25	2.20	0.5	9.3	18.0
				125		2.04			
WS400S	fixed blade swirl	225	294		30	2.65	0.6	13.4	22.0
				125		2.44			
WS400S	fixed blade swirl	225	294		35	3.09	0.7	18.3	24.0
				125		2.85			
WS400S	fixed blade swirl	225	294		40	3.53	0.8	23.9	25.0
				125		3.26			
WS400S	fixed blade swirl	225	294		45	3.97	0.9	30.2	27.0
				125		3.67			
WS400S	fixed blade swirl	225	294		50	4.41	1.0	37.3	32.0
				125		4.07			
WS400S	fixed blade swirl	225	294		55	4.85	1.1	45.2	35.0
				125		4.48			

FIXED SWIRL DIFFUSERS

TYPE: WR400 • WS400 SELECTION DATA

CODE	DESCRIPTION	PATTERN X OVERALL SIZE		SPIGNOT DIA	VOLUME L/S	VELOCITY L/S	THROW METERS	P.A.	NR
WS400S	fixed blade swirl	350	594		55	2.00	0.2	7.7	15.0
				200		1.75			
WS400S	fixed blade swirl	350	594		65	2.37	0.9	10.8	18.0
				200		2.07			
WS400S	fixed blade swirl	350	594		75	2.73	1.0	14.3	20.0
				200		2.39			
WS400S	fixed blade swirl	350	594		85	3.10	1.1	18.4	22.0
				200		2.71			
WS400S	fixed blade swirl	350	594		95	3.46	1.3	23.0	25.0
				200		3.02			
WS400S	fixed blade swirl	350	594		115	4.19	1.5	33.7	27.0
				200		3.66			
WS400S	fixed blade swirl	350	594		125	4.56	1.7	39.8	30.0
				200		3.98			
WS400S	fixed blade swirl	350	594		150	5.47	2.0	57.4	35.0
				200		4.77			

FIXED SWIRL DIFFUSERS

TYPE: WR400 • WS400 SELECTION DATA

CODE	DESCRIPTION	PATTERN X OVERALL SIZE		SPIGNOT DIA	VOLUME L/S	VELOCITY L/S	THROW METERS	P.A.	NR
WS400S	fixed blade swirl	500	594		110	1.96	0.3	7.4	15.0
				250		2.24			
WS400S	fixed blade swirl	500	594		125	2.23	1.2	9.6	20.0
				250		2.55			
WS400S	fixed blade swirl	500	594		135	2.41	1.3	11.2	22.0
				250		2.75			
WS400S	fixed blade swirl	500	594		150	2.68	1.4	13.8	24.0
				250		3.06			
WS400S	fixed blade swirl	500	594		175	3.13	1.6	18.8	25.0
				250		3.56			
WS400S	fixed blade swirl	500	594		200	3.57	1.9	24.5	28.0
				315		2.57			
WS400S	fixed blade swirl	500	594		225	4.02	2.1	31.0	33.0
				315		2.89			
WS400S	fixed blade swirl	500	594		250	4.46	2.3	38.3	35.0
				315		3.21			