

Application

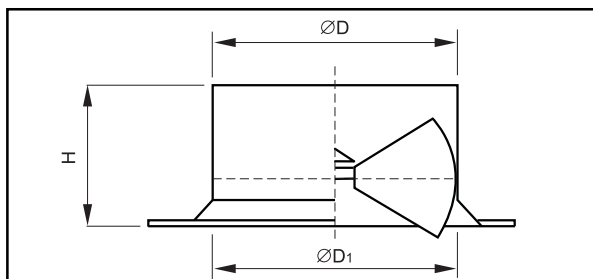
Adjustable NSDZ swirl air supply units are used for air conditioning in rooms whose height ranges from 3 to 12 m. Movable parallel vanes permit a high degree of induction and precise air stream control both during heating (maximum recommended angle 75°) and cooling (maximum recommended angle 20°). The unit frame ends in an accurately shaped bell which ensures the optimum airflow angle during cooling. The unit is controlled manually **NR** or by an actuator **NS** (recommended actuator type: LM24 SR for sizes up to Ø400, NM24 SR for sizes larger than Ø400).

Material and finish

The frame and blades of the unit are made of steel sheet, the bell is made of deep-drawing steel sheet and the drive components are metal.

The NSDZ air supply unit is powder coated in RAL 9010.

The NSDZ air supply unit has the Hygienic Certificate No. HK/P/0888/01/2002.



Order

Product code: **NSDZ / a / b / c**

Type _____
 Size _____
 Control unit _____
 Accessories _____

Standard dimensions

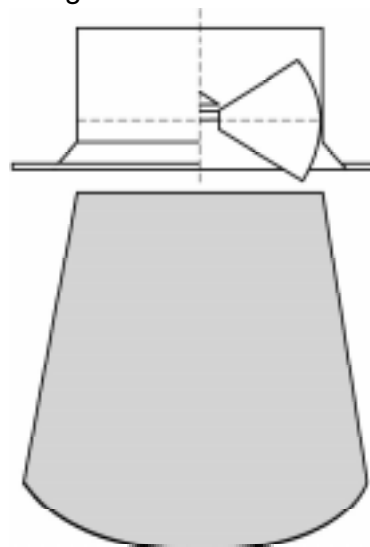
Size	ØD	ØD ₁	H	A _{eff} [m ²]
1	315	465	300	0,039
2	355	555	300	0,050
3	400	570	300	0,062
4	500	700	400	0,098
5	600	800	400	0,141

Accessories:

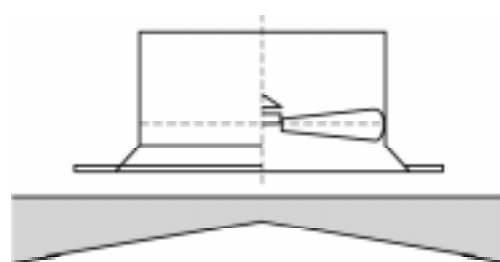
- Plenum box **SR**
- Plenum box with damper in connector pipe **SR+P**
- Plenum box with acoustic insulation **SR_t**
- Plenum box with acoustic insulation and damper in connector pipe **SR_t+P**

Recommended air supply modes:

For heating:



For cooling:



General
Symbols:

V_t	[m ³ /h]	total airflow
A, B	[m]	Air Supply Unit spacing
H_1	[m]	distance between ceiling and occupied zone
V_{H1}	[m/s]	air velocity at height H1
L	[m]	air stream range
V_L	[m/s]	air velocity at distance L
Δt_z	[K]	temperature difference between supplied air and room temperature
Δt_L	[K]	temperature difference between air stream and room temperature at L,
		where $L = \frac{A}{2} + H_1$
		or $L = \frac{B}{2} + H_1$
		or $L = X + H_1$
Δp	[Pa]	pressure loss
ΔL_w	[dB _(A)]	sound intensity level
V_{eff}	[m/s]	effective outflow velocity
A_{eff}	[m ²]	effective air supply unit surface area

Stream dispersion diagram:
