

NT/NTQ

ROUND DIFFUSER WITH A THERMOSTATIC ACTUATOR



Description:

A round diffuser made of aluminium with movable vanes set automatically by a thermostatic actuator.

Intended use

NT and NTQ ceiling diffusers are designed for use in low- and medium-pressure ventilation systems in public and industrial premises. Adjustable vanes, which make it possible to shape the supply airflow individually, are the distinctive feature of these devices.

Design

NT and NTQ diffusers have round movable vanes that are set by means of a thermostatic actuator. The NT diffuser has a round front panel, whereas the NTQ version has a rectangular panel – suitable for mounting in a 600 x 600 suspended ceiling panel. The diffusers are made of powder-coated aluminium in RAL 9010 white. They can also be coated on request in another RAL colour.

Vane adjustment

The vanes of NT and NTQ diffusers are adjusted with a thermostatic actuator, which does not require an electric power supply. When the air supplied through the diffuser is cold, the actuator sets the diffuser vanes to horizontal supply. When the air flowing through the diffuser is warm, the vanes are set to vertical supply.

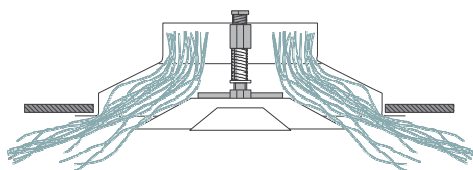


Figure 1. Air supply and cooling.

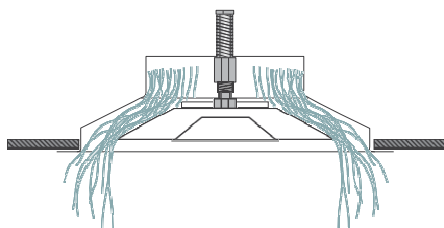


Figure 2. Air supply and heating.



Technical data of the diffusers, including pressure drop, noise level and stream ranges, is available at www.smax.eu, in the "Flow Characteristics for Grilles and Diffusers" document.

Dimensions

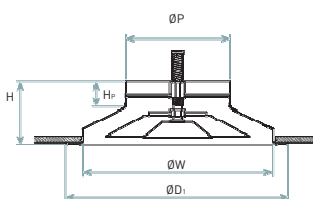


Figure 3. NT diffuser dimensions.

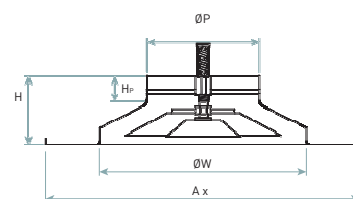


Figure 4. NTQ diffuser dimensions.

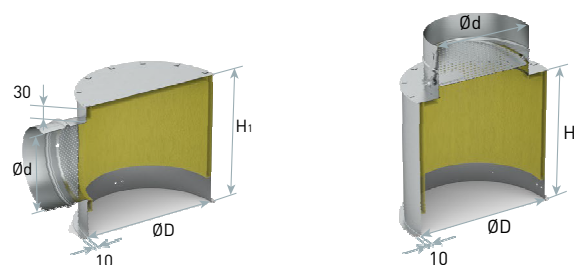


Figure 5. Dimensions of SRR round plenum boxes for NT and NTQ diffusers.

Table 1. Standard dimensions of NT diffusers and plenum boxes.

Size	ØD ₁ [mm]	ØW [mm]	ØP [mm]	H [mm]	H _n [mm]	Ød [mm]	ØD [mm]	H ₁ [mm]	H ₂ [mm]
160	335	280	158	105	45	98	160	200	200
200	423	360	198	118	48	123	200	270	200
250	517	445	248	130	48	158	250	270	200
315	640	560	313	146	48	198	315	280	300
355	730	640	353	185	65	248	355	350	300
400	776	700	398	185	65	248	400	350	300
450	825	755	448	185	65	313	450	420	300
500	917	825	498	185	65	313	500	420	300

Table 2. Standard dimensions of NTQ diffusers and plenum boxes.

size	A [mm]	ØW [mm]	ØP [mm]	H [mm]	H _n [mm]	Ød [mm]	ØD [mm]	H ₁ [mm]	H ₂ [mm]
160	596	280	158	105	45	98	160	200	200
200	596	360	198	118	48	123	200	270	200
250	596	445	248	130	48	158	250	270	200
315	596	560	313	146	48	198	315	280	300



AL

RAL



Installation

The diffusers may be mounted to a plenum box or ventilation duct by means of $\varnothing 5$ screws arranged around the connection pipe, with no more than 125 mm spacing. If the diffuser is mounted directly to the ventilation duct (without a plenum box), a straight pipe segment of minimum length equal to $1.5 \cdot \varnothing P$ should be placed upstream of the diffuser.

NT/ NTQ – Round diffuser with a thermostatic actuator

When ordering, please provide information in accordance with the following pattern:

NT/NTQ - <W> - AL <RAL> / <ADD>

Where:

- W** Diffuser size: 160, 200, 250, 315, 355, 400, 450, 500
- AL** Finish: painted aluminium
- RAL** colour according to RAL colour chart *
- ADD** Specify additional accessories here, as below:

* Optional values – if not specified, default values will be used

** For more information on accessories see the accessories sheet

Sample order: **NT-200-AL9010/SRRt-270-b123P**



- Blocks for REVIT software
- Selection range and
- certificates,

available at www.smay.pl.

Accessories **

Plenum box as per the configuration below:

SRR <I> - <H> - <K> <D> <R>

I Insulation
*

None – No insulation

t – Insulated

H Plenum box height *

K Connection pipe position *

b – Side

g – Top

D Connection pipe diameter in mm*

R Damper in a connection pipe*

None – No damper

P – Damper adjusted from outside the box

Pc – Damper adjusted from inside the box with a cord

Pd – Damper adjusted from inside the box with a lever (for the boxes with no deflector only)