# **SVT**LONG RANGE NOZZLE WITH THERMOSTATIC ACTUATOR







#### **Description:**

Long range aluminium nozzle with variable airflow angle regulated by a thermostatic actuator.

#### Intended use

Air supply nozzles are designed for use in low- and medium-pressure ventilation systems of large public or industrial facilities where it is required to supply large amounts of air over long distances. Thanks to the thermostatic actuator, the SVTs can change the geometry of the air supply depending on the temperature of the supply air. In cooling mode, the nozzle generates airflow towards the ceiling of the room. In heating mode, the air flow is directed towards the floor. This is done automatically and without an external power supply or control.

# Design

The SVTs are equipped with a mounting stub inside which there is a movable element supplying air. The whole set is made of satin aluminium in a natural colour. Other RAL colours are available upon request.

The movable element of the nozzle has a range of movement of 30 degrees from the central axis and can be adjusted in the up-down direction. The thermostatic drive built into the body of the nozzle enables automatic change of the airflow direction for heating and cooling modes.

## Nozzle position adjustment

SVT - Long range nozzle with thermostatic actuator

The SVT uses an automatic thermostatic drive to set the airflow direction, which does not require electrical power. When cool air is supplied through the nozzle, the drive positions the SVT to blow air towards the ceiling. When warm air is flowing through the nozzle, the SVT is set to blow towards the floor.

The maximum inclination angle of the nozzle, for heating and cooling mode, can be determined thanks to two stops located on the side of the mounting flange. The operating range of the drive is from +15°C to +40°C. The zero angle of the nozzle inclination is obtained at an air temperature of +25°C.

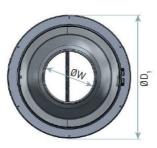


Figure 1. SVT nozzle dimensions (front view)

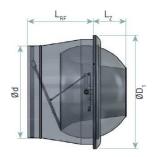


Figure 2. SVT nozzle dimensions (side view)

Table 1. SVT nozzle dimensions.

Size	øD₁ [mm]	øW [mm]	ød [mm]	L <sub>RF</sub>	Lz [mm]
80	249	80	158	220	52
110	289	110	198	220	82
150	389	150	248	290	128
200	489	200	398	290	172
230	489	230	398	290	160

Table 2. SVT Nozzle Accessory Dimensions.

Size	L <sub>R</sub> [mm]	DN [mm]
80	270	≥200
110	270	≥200
150	340	≥315
200	340	≥400
230	340	≥450

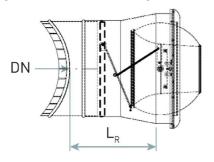


Technical data of the diffusers, including pressure loss, noise level and airflow ranges, is available at smay.eu, in the document Flow Characteristics for Grilles and Diffusers.



## **Installation**

As standard, the nozzles are supplied with stubs for mounting on the ends of round ducts. The SVT nozzles can optionally be equipped with a saddle cap type R made of galvanized steel, for mounting on the side of a round duct.



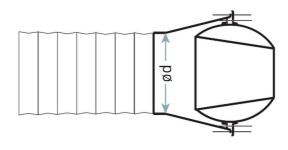


Figure 3. Installing the SVT on a circular duct with an R-type cap.

Figure 4. Installing the SVT at the end of the round duct.

# **SVT** - Long range nozzle with thermostatic actuator

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

SVT - <S> - <W> - <P><RAL>

#### Where:

S	Nominal diameter: 80, 110, 150, 200, 230						
W	Installation method:*						
	None	- Stub for mounting at the end of a round duct					
	R	– Cap for mounting on the side of the round duct					
Р	Finish:*						
	AS	- Satin aluminium					
	AL	– Painted aluminium					
RAL	Colour according to the RAL palette (only for <p>=AL., RAL9010 by default)*</p>						

<sup>\*</sup> Optional values – if not specified, default values will be used

Sample order: SVT-150-R-AL9010

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Revit blocks, selection program and approval documents available at www.smay.pl