

# NSCT

## FLOOR VENT



### Description:

Round steel swirl diffuser with perforated front panel for floor mounting.

### Intended use

The NSCT diffusers are designed to distribute air directly to the occupied zone. They are installed in the floor. The centrifugal air distribution method allows for increased induction and rapid equalization of air temperatures in the occupied zone. The air from the diffuser heats up spontaneously once it has encountered a heat source. The result is the so-called thermal chimney that lifts heated air and volatile pollution particles towards the ceiling. From there, the impurities are removed by a separate exhaust system.

### Design

The body of the NSCT is equipped with fixed vanes in a circle arrangement, adapted to swirl airflow. The front panel, masking the steering wheels, is round and made of perforated sheet (optionally stainless steel). The diffuser is made of steel powder coated in RAL9005 black. They can also be coated in another RAL colour on request.

### Operating principle

The air is supplied through the diffuser directly to the floor part of the occupied zone. Due to the swirl method of air distribution and air supply at a low effective speed, the air quickly obtains uniform thermal parameters in the zone where people are present. Heat sources in the environment cause the formation of natural thermal channels, lifting heated and polluted air up to the ceiling. The air lifted by thermal channels is then discharged from the ceiling by a separate exhaust system.

### Installation

Installation of the diffuser consists in mounting the mounting ring, appropriate for the given type of floor, and then embedding the diffuser in this ring.



Technical data of the diffusers, including pressure loss, noise level and airflow ranges, is available at [smay.eu](http://smay.eu), in the document Flow Characteristics for Grilles and Diffusers.

### Design and dimensions

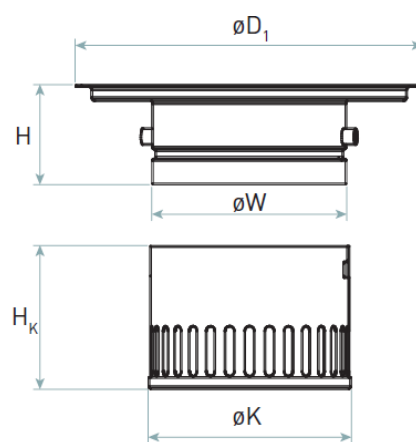


Figure 1. Dimensions of the NSCT diffuser

Table 1. Standard dimensions of the NSCT diffusers.

Size	$\varnothing D_1$	$\varnothing W$	H	$\varnothing K$	$H_k$
	[mm]	[mm]	[mm]	[mm]	[mm]
125	198	123	65	130	90
160	198	158	65	165	125
225	252	223	70	231	125



SL

SN

RAL



## NSCT – Floor diffuser

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

NSCT - <S> - <P><RAL> / <ADD>

Where:

**S** Diffuser size: 125,160 or 225

**P** Design variant\*

**SL** – Front panel and body made of powder coated steel in RAL colour

**SN** – Front panel made of stainless steel, body made of powder-coated steel in RAL colour

**RAL** Colour according to the RAL palette (RAL 9005 by default)\*

**ADD** Specify additional accessories here as follows

Accessories \*\*

**K** Dirt basket

**PK** Slot damper for installation in the dirt basket

**RMT** Mounting ring for technical floors

**RMB** Mounting ring for installing in concrete floors

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

Sample order: **NSCT-125-SL9005 / K, PK, RMT**



Revit blocks, selection program and approval documents available at [www.smay.pl](http://www.smay.pl)