

PRODUCT BROCHURE

**SMARTEMP**<sup>®</sup>  
IN COMFORT



Linear Whirl Diffuser

**LWW-FD**

## DESCRIPTION

The SMARTEMP® Linear Whirl Diffuser, type LWW-FD (figure 1), has a row of rectangular chambers located in a recessed slot of galvanised sheet metal, which may optionally be powder coated. Air entry is from above (standard), or optionally from below (on request only).

Each rectangular chamber discharges a pair of highly inductive, counter rotating supply air vortices. High induction and intense mixing at the diffuser discharge surface strongly dilute the swirling supply air streams with large quantities of room air. Rapid temperature equalisation with room air temperature is achieved, preventing cold air dumping, thereby ensuring uniform temperature distribution (no cold and draughty or hot and stagnant spots) and high comfort levels in the space.

High induction also produces a strong increase in supply air stream mass flow rate, as well as rapid discharge velocity

decay. As a result, at any given airflow rate, the LWW-FD diffuser is suitable both for long throws (due to the high momentum of each supply air stream) as well as short throws (due to the supply air streams' low velocity).

The stable discharge characteristics of the LWW-FD diffuser operating at constant airflow over a wide range of supply air temperatures of up to  $\Delta T_{\text{supply-room}} = -12 \text{ K}$  ensure enhanced levels of comfort over horizontal throws of up to 16 m.

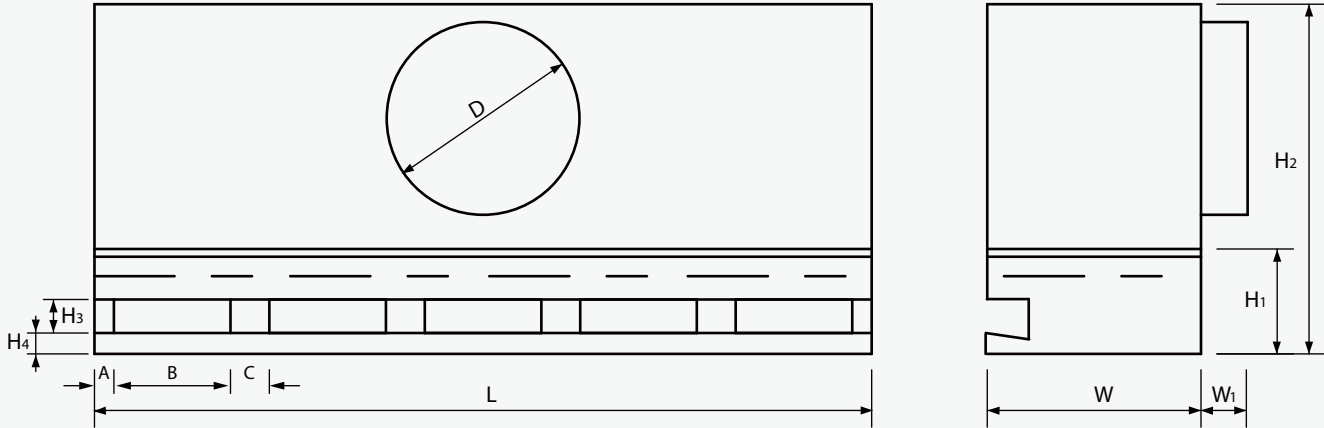


Figure 1: Typical installation behind wall



# TECHNICAL DATA

## DIMENSIONS

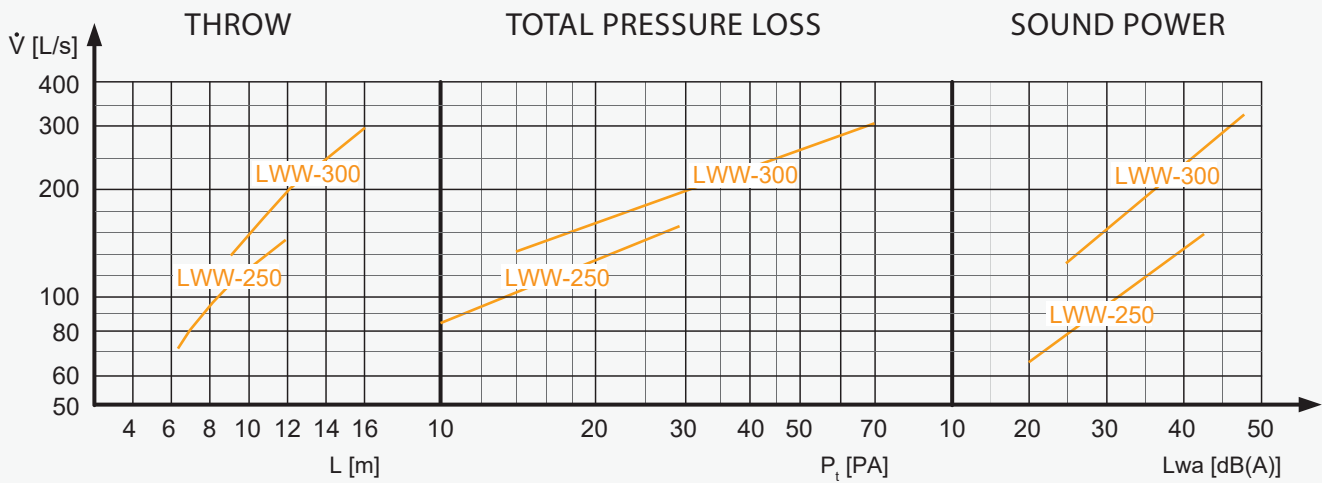


| MODEL      | A  | B   | C  | L    | W   | W1 | H1  | H2  | H3 | H4 | D   |
|------------|----|-----|----|------|-----|----|-----|-----|----|----|-----|
| LWW-FD-250 | 25 | 150 | 50 | 1000 | 250 | 60 | 135 | 450 | 46 | 35 | 248 |
| LWW-FD-300 | 25 | 150 | 50 | 1050 | 290 | 60 | 160 | 500 | 66 | 35 | 298 |

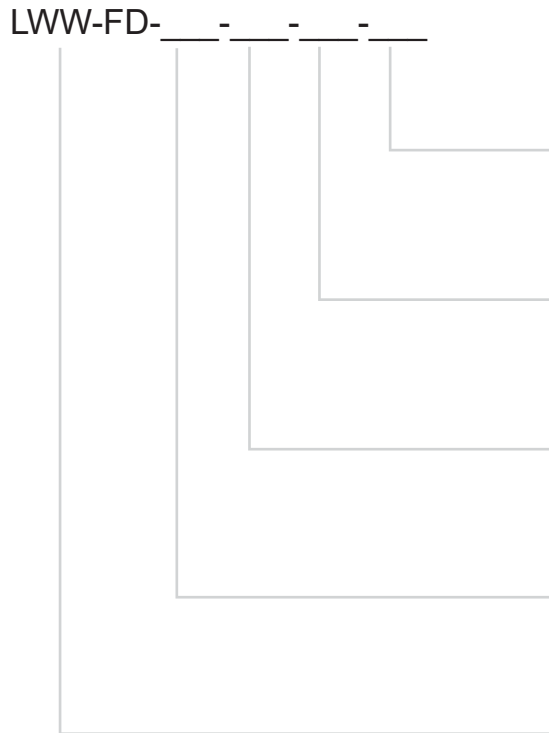
All dimensions in mm.

Products supplied may differ slightly from those described in this technical brochure due to on-going product development.

## PERFORMANCE



# ORDER DETAILS



## CONNECTION BOX:

- 0\* - Diffuser only
- K - With connection box

## AIR ENTRY:

- AA\* - From above
- AB - From below

## COLOUR:

- 0\* - Unpainted
- RAL\_\_\_\_\_

## NOMINAL SIZE:

- 250 (250 mm)
- 300 (290 mm)\*

## MODEL:

- Linear Whirl Wall Diffuser - Fixed Direction

## Note:

\* Standard, if no type code entered.

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