

# CAP-F

## Square multi nozzle ceiling diffuser for T-bar ceiling



### Function

CAP-F is a ceiling diffuser with directionally adjustable nozzles. This enables functionality in a vast range of operation modes like horizontal, vertical, diagonal, single- or multi-directional and swirl for both, cooling and heating. Typical installation sites are offices, hospitals, public and business buildings etc. Exterior dimension 600×600 and 625×625. The installation height is up to 4m. It is possible to remove the diffuser face to access the duct system and for easy cleaning and service. Pull the front plate one step out from the main body to create an air gap around the diffuser increasing the flow capacity. Max temperature difference for cooled air  $\Delta T$  12 K.

### Design

The diffuser is made of powder paint coated galvanized steel sheet. The nozzles are ABS Plastics. The diffuser plate is adjustably attached to the base with circular tight connection.

### Dimensions

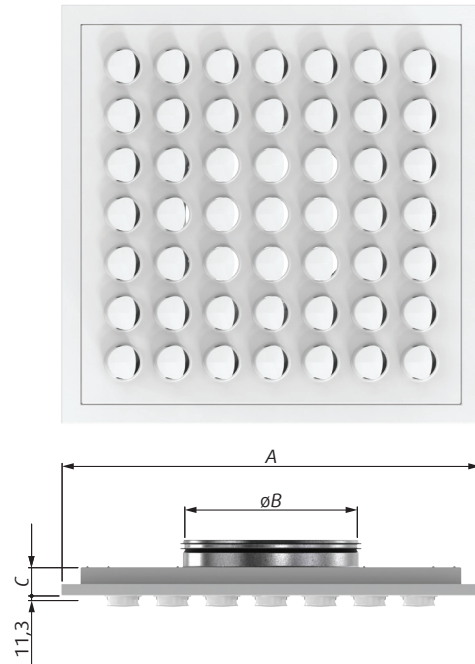


Fig. 1: CAP-F dimensions

Ordering code	A	$\varnothing B$	C	D	m
	(mm)				(kg)
CAP-F-125-600-16 *	595	124	40	40	5,3
CAP-F-125-625-16 *	620				5,7
CAP-F-160-600-25 *	595	159			5,2
CAP-F-160-625-25 *	620				5,6
CAP-F-200-600-36 *	595	199			5,1
CAP-F-200-625-36 *	620				5,5
CAP-F-250-600-49 *	595	249			5,0
CAP-F-250-625-49 *	620				5,4
CAP-F-315-600-81 *	595	314			4,9
CAP-F-315-625-81 *	620				5,3

Tab. 1: CAP-F dimensions and weight

NOTES: \* Number of nozzles

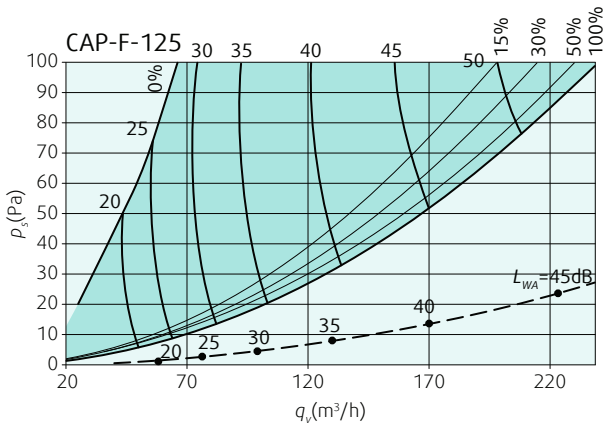


Diagram 1a: Pressure drop and sound power level measured with (continuous lines) and without (dashed line) Thor plenum box.

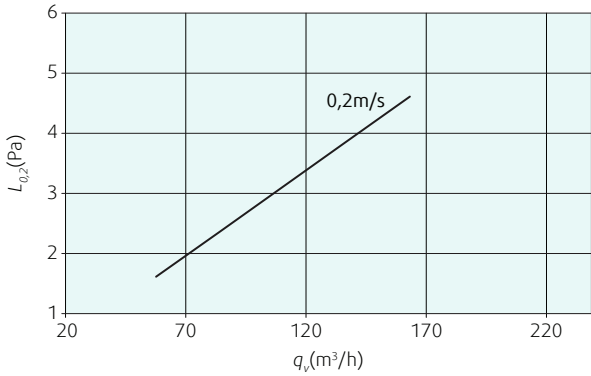


Diagram 1b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

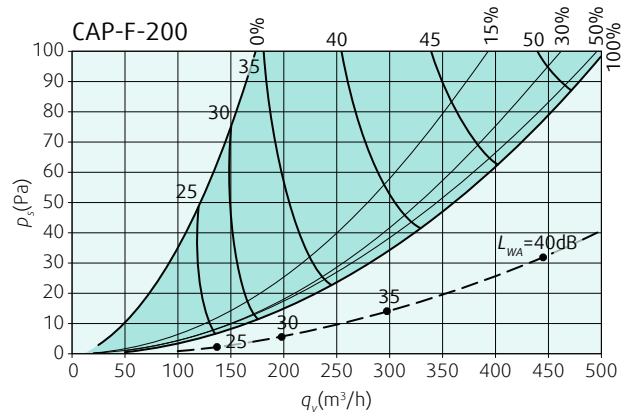


Diagram 3a: Pressure drop and sound power level measured with (continuous lines) and without (dashed line) Thor plenum box.

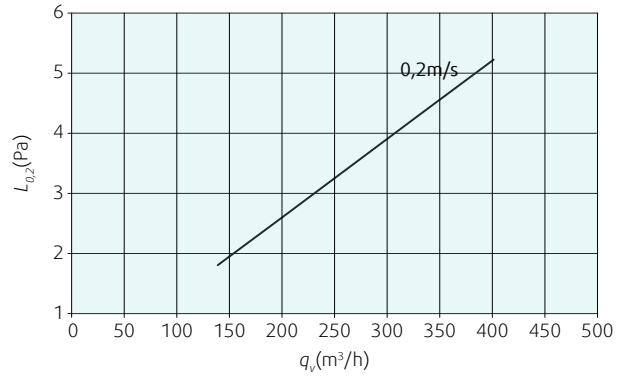


Diagram 3b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

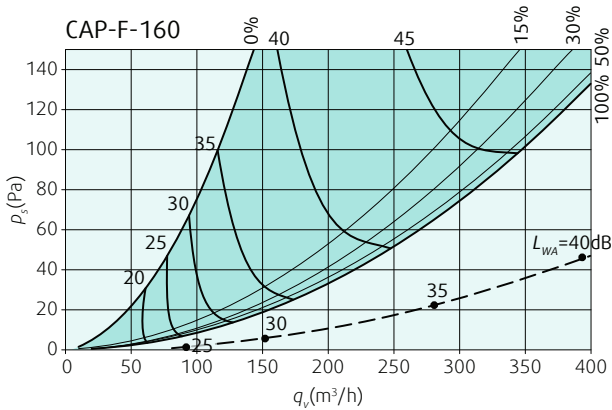


Diagram 2a: Pressure drop and sound power level measured with (continuous lines) and without (dashed line) Thor plenum box.

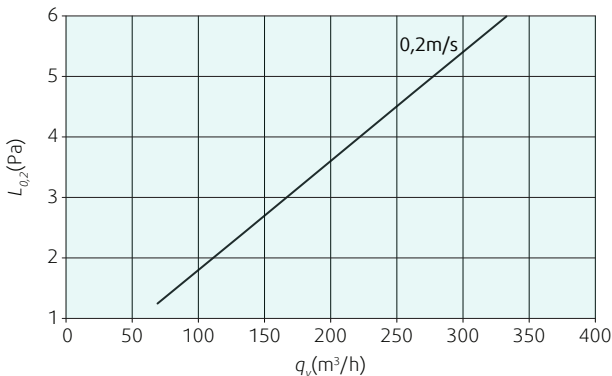


Diagram 2b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

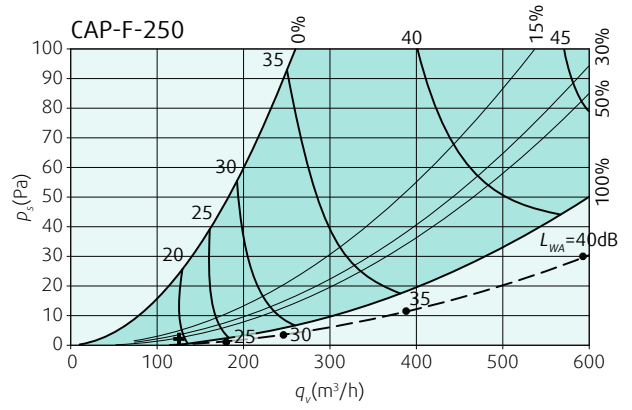


Diagram 4a: Pressure drop and sound power level measured with (continuous lines) and without (dashed line) Thor plenum box.

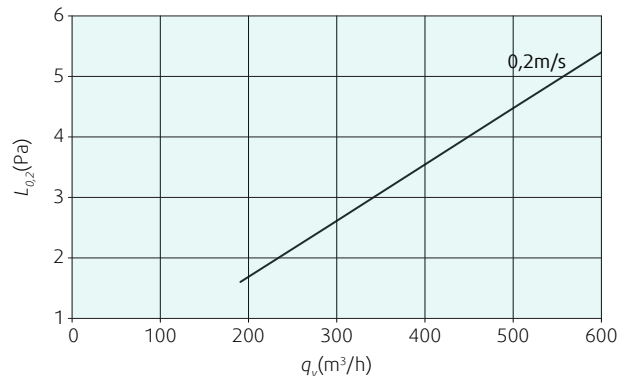
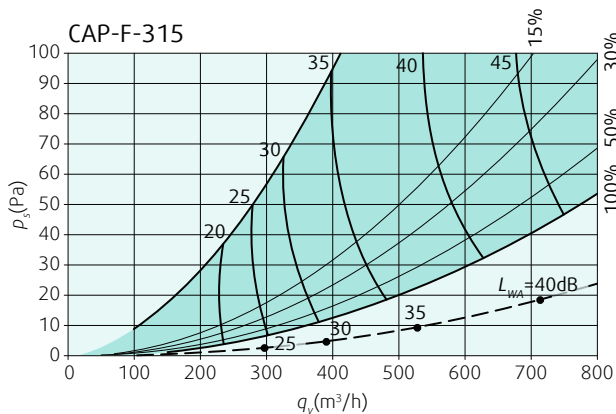


Diagram 4b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.



**Legend**

0%...100%	Zeus adjustment damper on Thor plenum box, opening position
—	CAP-F with Thor plenum box
- - -	CAP-F without plenum box

Diagram 5a: Pressure drop and sound power level measured with (continuous lines) and without (dashed line) Thor plenum box.

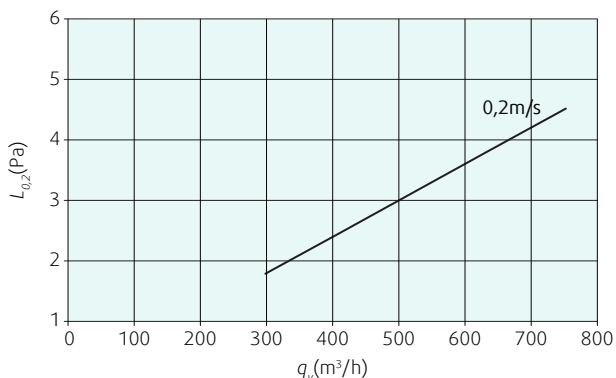


Diagram 5b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

## Mounting

The diffuser is specially designed for flush mounting in false ceiling and directly suspended in the T-bar framework carrying structure, and then fixed with the help of the connecting duct or plenum box THOR.