

Elegant VT

Adjustment instruction



Cleaning

The diffuser can be cleaned with lukewarm water and a mild detergent.

Pull the diffuser from the duct and then remove the front by loosening the centre screw situated behind the plastic cover.

Adjustment

Insert necessary number of plastic plugs in the pressure distribution plate in the back of the diffuser to obtain the desired airflow. See k-factor table below.

K-factor Size	Number of plugs																	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Elegant VT-100	2,67	2,59	2,51	2,4	2,28	2,16	2,08	1,96	1,89	1,77	1,65	1,57	1,41	1,30	1,14	1,02	0,86	0,71
Elegant VT-125*	3,14	3,02	2,91	2,75	2,63	2,47	2,32	2,12	1,96	1,77	1,57	1,37	1,14	0,82				

*For Elegant VT-125 a maximum number of 13 plugs are used for adjustment.

Example

Formula

$$\left(\frac{q}{k}\right)^2 = P_t$$

q = airflow (l/s)
k = k-factor
N = number of plugs
P_t = total pressure in duct

Calculate the pressure

Size Elegant VT-125
Airflow 15 l/s
K-factor 2,47 (5 plugs)

Using the formula:

$$\left(\frac{15}{2,47}\right)^2 = 36,9 Pa$$

Alternatively

For Elegant VT-100

$$q = (-0,18 \cdot N + 2,7) \cdot \sqrt{P_t}$$

$$P_t = \left(\frac{q}{-0,18 \cdot N + 2,7}\right)^2$$

For Elegant VT-125

$$q = (-0,18 \cdot N + 3,3) \cdot \sqrt{P_t}$$

$$P_t = \left(\frac{q}{-0,18 \cdot N + 3,3}\right)^2$$

Adjusting the airflow by applying plugs



Measure the pressure

The pressure is measured by inserting the measuring probe gently behind Elegant VT diffuser. This is done by creating a small gap between the wall and the front plate.