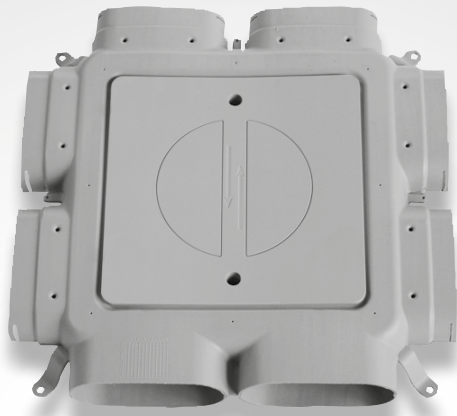


Zehnder manifold Flat 51

Technical specification for distribution and collection box



General

The manifold for the Zehnder ComfoTube Flat 51 flat oval tube can be installed quickly and easily in the insulation layer under the screed, in the wall or in the ceiling. The manifold can be extended depending on the air volume required, and also features low pressure loss. For each distribution tube, the air volume can be adjusted using an integrated air-volume control. Connectors that are not needed can easily be sealed. The manifold Flat 51 has an access panel for cleaning and for easy access to the distribution tubes and air-volume control.



Manifold Flat 51, 6-way



Manifold Flat 51, 4-way



Manifold Flat 51, 4-way with single connection



Frame with cover for manifold



Junction CK 300



Flexible element CK 300



End cap CK 300



ComfoSet Flat 51

Benefits

- Everything from a single source – with the air distribution system and comfort ventilation unit, all components are available for the complete ventilation system
- Easy installation owing to the modular structure, compact dimensions and connection of the components with sliding profiles

Technical specifications

Zehnder ComfoTube Flat 51

Exterior dimensions W/H	138 mm / 51 mm
Interior dimensions W/H	127 mm / 35 mm
Weight per metre in length	400 g/m

Metres per roll	20 m	50 m
Weight per roll	8 kg	20 kg
Roll height	30 cm	45 cm
Roll diameter	100 cm	135 cm

Article numbers

	Article number
Manifold Flat 51, 6-way	990 322 030
Manifold Flat 51, 4-way	990 322 031
Manifold Flat 51, 4-way with single connection	990 328 823
Manifold connection DN 160 for manifold Flat 51, 6-way	990 322 037
Frame with cover for 4-way manifold (50–80 mm floor)	990 322 040
Frame with cover for 4-way manifold (80–130 mm floor)	990 322 041
Frame with cover for 6-way manifold (50–80 mm floor)	990 322 042
Frame with cover for 6-way manifold (80–130 mm floor)	990 322 043
Junction CK 300 / DN 160	990 322 025
Junction CK 300 / DN 125	990 322 029
Flexible element CK 300	990 328 821
End cap CK 300	990 322 024
ComfoSet	990 322 015

Description

Manifold Flat 51, 6-way / Flat 51, 4-way

Air distribution/collection element made of HDPE with smooth internal hygienic surface for fitting on wall, ceiling or in the floor structure (insulation layer). The manifold has six/four connections for the ComfoTube Flat 51 ventilation tube. Connections that are not required are sealed using the end cap. If more than six connections are needed, two further connections can be added to the manifold by connecting to the manifold Flat 51, 4-way.

At the ventilation unit end, the manifold is connected to the ventilation tube CK 300 or through the junction CK 300 DN 125/160. The maximum air volume is 300 / 200 m³/h. ComfoTube Flat 51 ventilation tubes are connected using the supplied O-rings and locking slides for an airtight seal. The ventilation duct CK 300 connection features a lip seal. The manifold has a removable inspection opening for cleaning, inspection and inserting the optional air volume control into the respective ventilation shaft.

When the manifold is fitted in the floor structure, the frame with cover (accessory) is required to keep the inspection opening free.

Manifold, 4-way with single connection

HDPE air distribution/collection element with smooth internal hygienic surface for fitting on wall or ceiling. The manifold has four connections for the ComfoTube Flat 51 ventilation tube. Connections that are not required are simply sealed using an end cap. The manifold has a single CK 300 connection. When combining two manifolds, installations can be created with very low widths (e.g. in a corridor). In this case, the CK 300 must be used as the supply and extract air duct.

Manifold connection DN 160 for Flat 51:

HDPE connection to the ventilation unit, round, DN 160 as attachment for the manifold Flat 51, 6-way.

Frame with cover for manifold:

Frame for keeping access panel free near floor structure. The frame is made from a galvanised steel panel with height adjustment from 50–80 mm and has a cover to hold the top covering. Also for structure heights of 80–130 mm.

Junction CK 300:

Eccentric junction from duct CK 300 to round connection dimensions.

Flexible element CK 300:

Flexible element for flexible connection of the air duct CK 300. Narrow bends up to 45° can be created with the flexible connection piece. It also allows you to implement height offsets.

End cap CK 300:

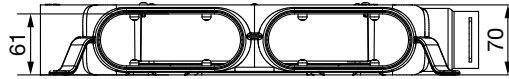
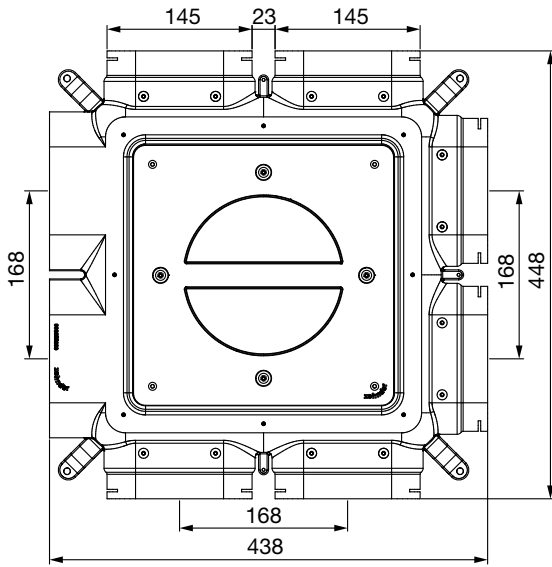
End cap for closing off the connections not required on the manifold.

ComfoSet Flat 51:

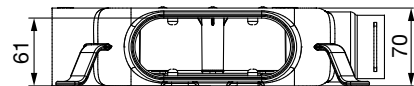
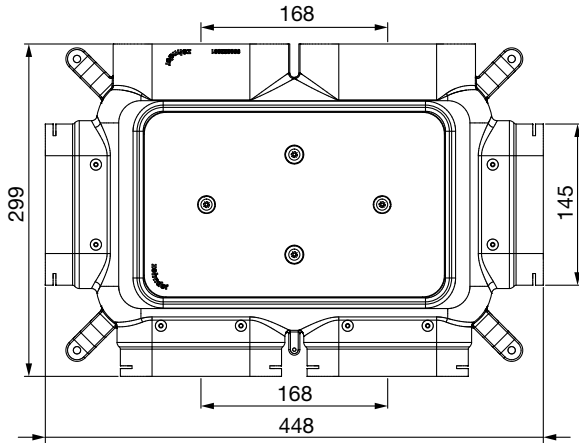
Airflow regulator to regulate the volume flow of air circulating.

Dimensional drawings

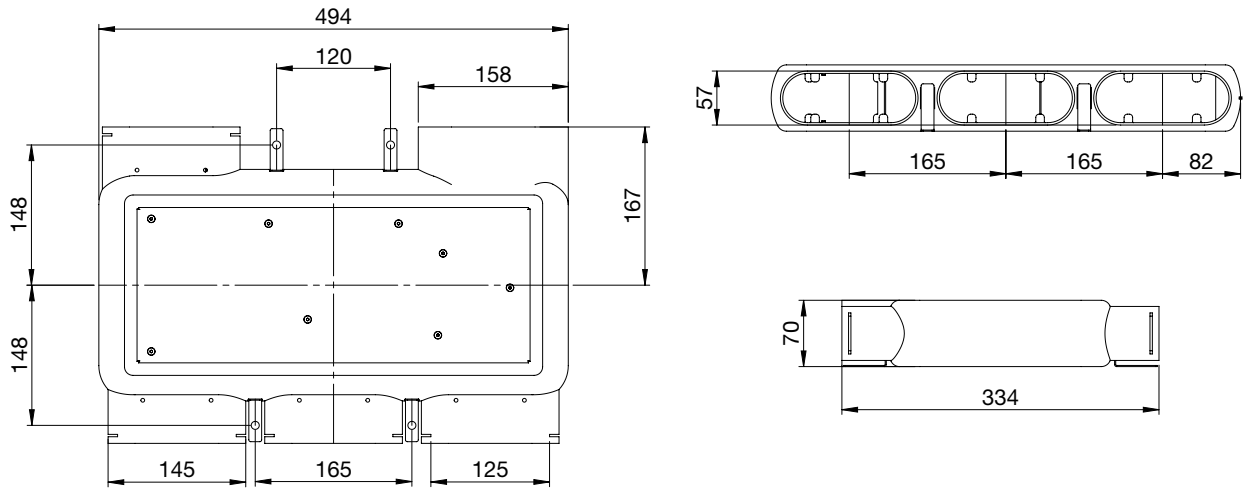
Manifold Flat 51, 6-way



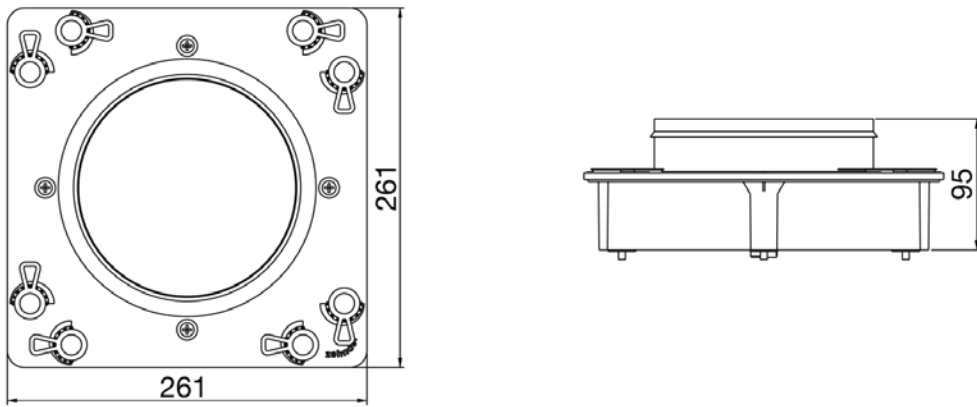
Manifold Flat 51, 4-way



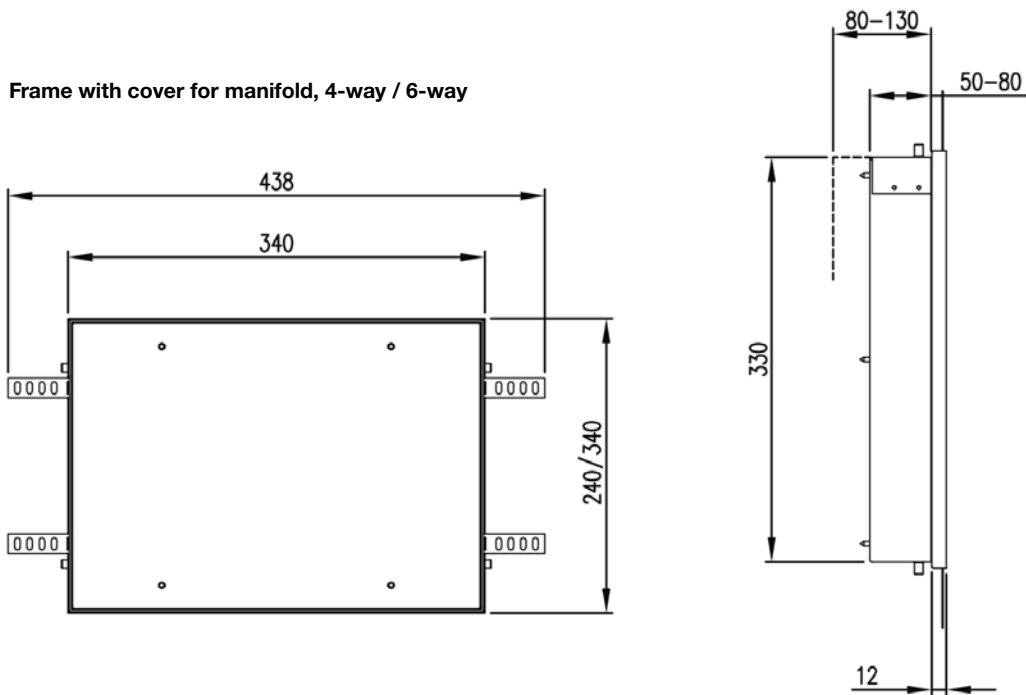
Manifold, 4-way with single connection



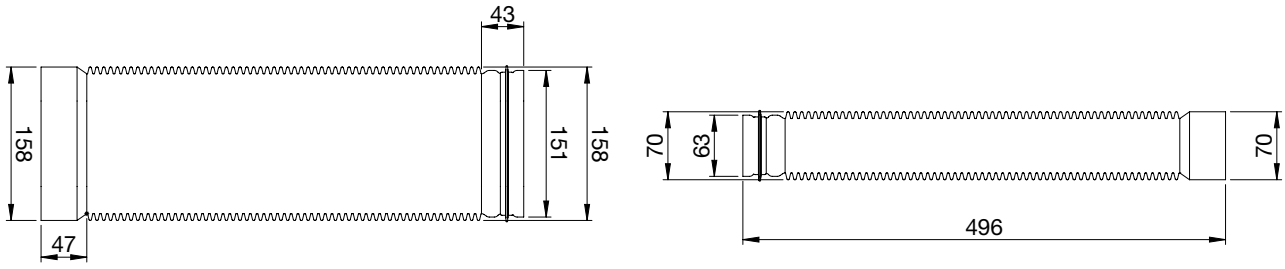
Manifold connection DN 160 for manifold Flat 51, 6-way



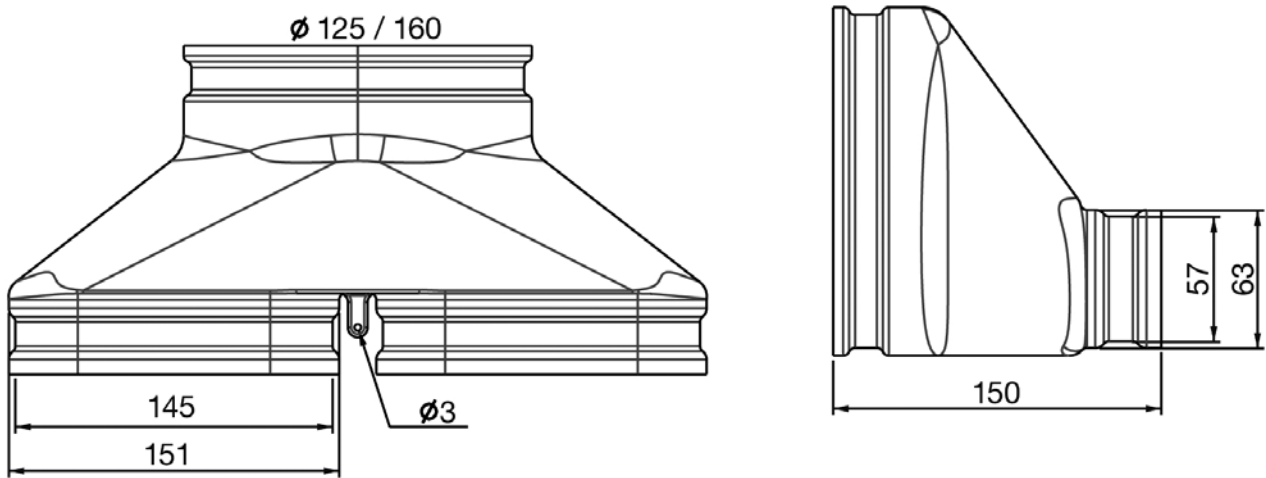
Frame with cover for manifold, 4-way / 6-way



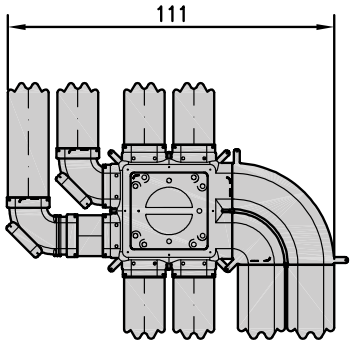
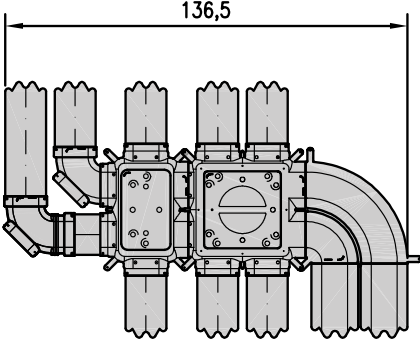
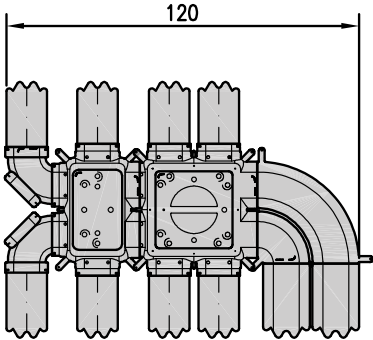
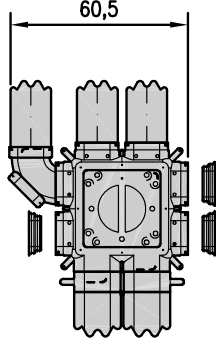
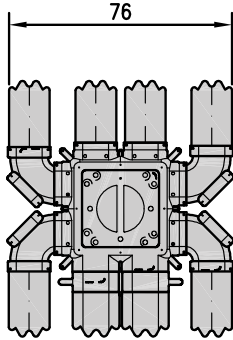
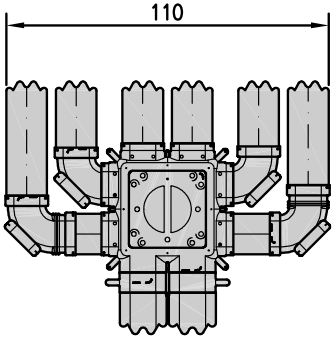
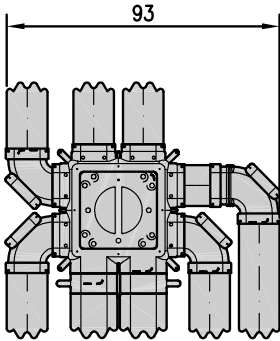
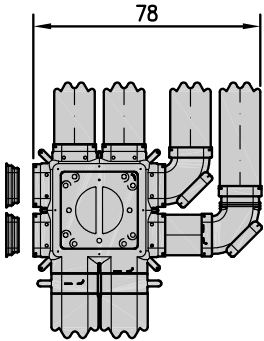
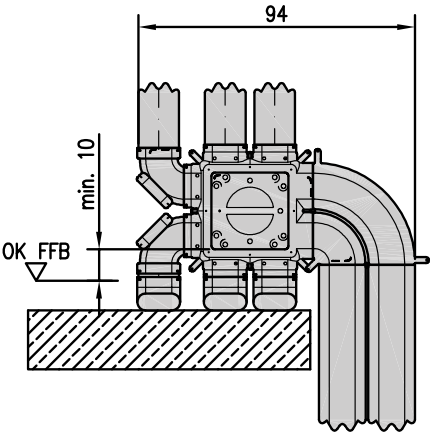
Flexible element CK 300



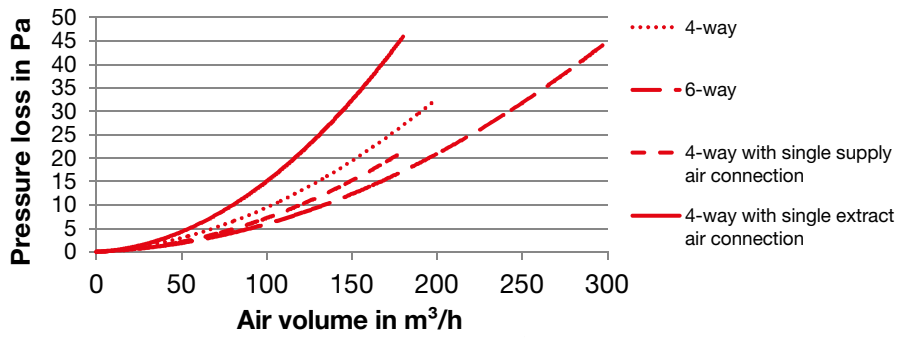
Manifold CK 300



Space requirement for manifold Flat 51



Pressure loss graph



Recommended application:

Manifold, 4-way up to 160 m³/h at nominal ventilation

Manifold, 6-way up to 240 m³/h at nominal ventilation

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