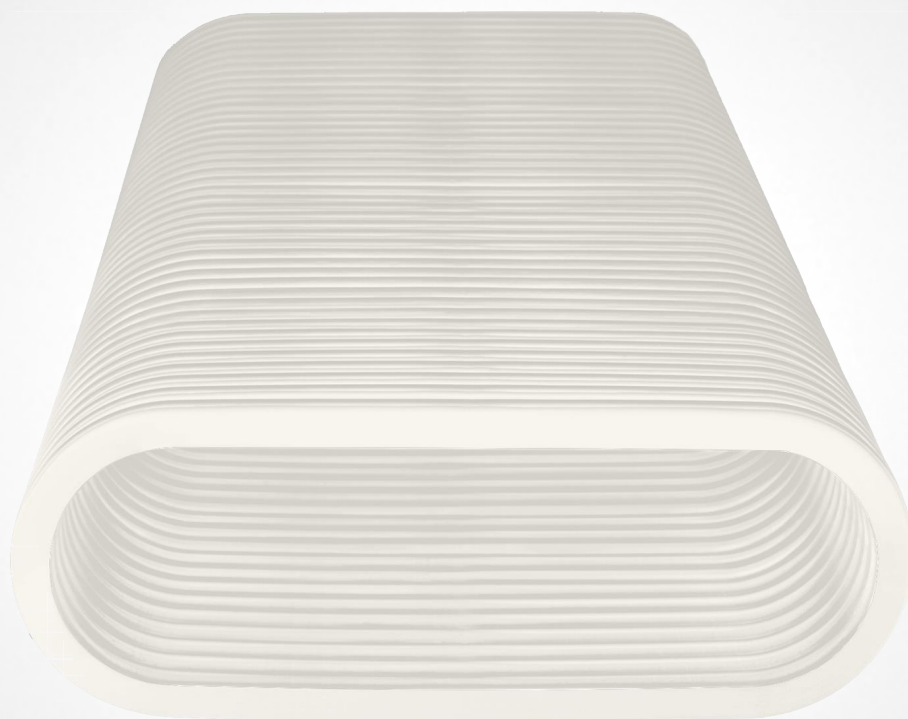


Zehnder ComfoTube Flat 51

Semi-rigid ductwork

Product data sheet

always the best climate



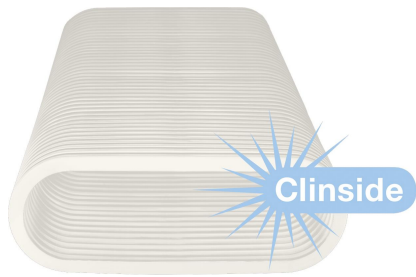


ComfoTube Flat 51

The Zehnder ComfoTube Flat 51 is a high performance oval shaped semi-rigid ductwork ideal for residential applications. The low profile manifolds and ductwork mean it's perfect for use in small ceiling voids. The clinside smooth internal lining help to reduce build up of dust and enable the ductwork to be cleaned, this has helped the ductwork achieve a hygiene certificate from the Hygiene Institute. The ductwork was also one of the first to be fully accredited and listed on the PCDB.

The ductwork can be installed much faster than conventional ductwork with a reduced number of connections helping to reduce any potential air leakage within the system. Our award winning RapidLock® connections form an air tight and robust seal by simply push-fitting the semi-rigid ductwork into it, and the secure fixing helps to prevent the ductwork being disconnected during first fix. End caps are also provided to prevent dust ingress during first fix to maintain a hygienic system.

A variety of manifolds, ancillaries and terminations can be used with the ductwork in addition to a wide range of decorative grilles.



Key Features

- Easy and quick to install
- Airtight
- Extremely low profile, ideal for small voids
- Sound-optimised inner skin to ensure extremely quiet air flow
- High-quality food-grade plastic (PE)
- Fully accredited and listed on the PCDB
- Low pressure losses
- Easy to clean
- Corrosion resistant
- Lightweight and easy to handle
- No sealant or tape required
- Wide range of manifolds and grille termination options

Article Numbers

Description	Product Code
Ductwork	
Zehnder ComfoTube Flat 51, 138 x 51 mm, 20 m roll	990 328 077
Zehnder ComfoTube Flat 51, 138 x 51 mm, 50 m roll	990 328 078
Manifold	
Zehnder ComfoTube Flat 51 manifold, ComfoMain rigid double duct to 4 x Zehnder ComfoTube Flat 51 ports	990 322 220
Zehnder ComfoTube Flat 51 manifold, ComfoMain rigid double duct to 6 x Zehnder ComfoTube Flat 51 ports	990 322 221
Zehnder ComfoTube Flat 51 manifold, ComfoMain rigid single duct to 4 x Zehnder ComfoTube Flat 51 ports	990 322 222



Article Numbers

Description	Product Code
Rigid twin duct CK300	
Zehnder ComfoMain CK150 rigid double duct, 1 x 158mm x 69mm x 1.5m, 2 Pieces	990 322 051
Zehnder ComfoMain CK300 rigid twin duct, horizontal 90° bend	990 322 021
Zehnder ComfoMain CK300 rigid twin duct, vertical 90° bend	990 322 022
Zehnder ComfoMain CK300 rigid twin duct, horizontal 45° bend	990 322 050
Zehnder ComfoMain CK300 rigid twin duct, flexible connector, L500 mm	990 328 821
Zehnder ComfoMain CK300 rigid twin duct, pipe connector	990 322 023
Zehnder ComfoMain CK300 rigid twin duct, end caps, 2 pieces	990 322 024
Zehnder ComfoMain CK300 rigid twin duct to ø 125 mm pipe adaptor	990 322 029
Zehnder ComfoMain CK300 rigid twin duct to ø 160 mm pipe adaptor	990 322 025
Zehnder ComfoMain CK300 rigid twin duct, oval O-ring seal, 10 pieces	990 322 026
Grille housing	
Grille housing CLF rectangular grille housing with 90° bend, connects 1 x 350x130 mm grille to 1 x Zehnder ComfoTube Flat 51, L123 mm	990 322 210
Grille housing CLRF circular grille housing with 90° bend, connects 1 x ø 125 mm valve to 1 x Zehnder ComfoTube Flat 51, L270 mm	990 322 211
Grille housing CLRF circular grille housing with 90° bend, connects 1 x ø 125 mm valve to 1 x Zehnder ComfoTube Flat 51, L35 mm	990 322 213
Grille housing CLRF circular grille housing with 90° bend, connects 1 x ø 125 mm valve to 2 x Zehnder ComfoTube Flat 51, L295 mm	990 322 215
Grille housing CLRF circular grille housing, connects 1 x ø 125 mm valve to 1 x Zehnder ComfoTube Flat 51, L180 mm	990 322 216
Grille housing Renoventil circular grille housing, connects 1 x ø 80 mm valve to 1 x Zehnder ComfoTube Flat 51, L356 mm	990 322 217
Ancillaries	
Zehnder ComfoTube Flat 51 manifold cover with ø 160 mm pipe adaptor, for 6 port manifold	990 322 037
Zehnder ComfoTube Flat 51, vertical 90° bend	990 322 200
Zehnder ComfoTube Flat 51, horizontal 90° bend	990 322 201
Zehnder ComfoTube Flat 51, Y-piece	990 322 203
Zehnder ComfoTube Flat 51, cross-piece	990 322 207
Zehnder ComfoTube Flat 51 to Zehnder ComfoTube ø 75/90 mm convertor	990 322 204
Zehnder ComfoTube Flat 51 to Zehnder ComfoTube ø 90 mm convertor with 90° bend	990 322 205
Zehnder ComfoTube Flat 51 to 2 x Zehnder ComfoTube ø 75 mm convertor	990 322 206
Zehnder ComfoTube Flat 51, pipe connector	990 322 202
Zehnder ComfoTube Flat 51, cross bracing floor insert for CLF grille housing	990 322 095
Zehnder ComfoTube Flat 51, end caps, 10 pieces	990 328 252
Zehnder ComfoTube Flat 51, oval O-ring seal, 10 pieces	990 328 352
Zehnder ComfoTube Flat 51, locking slides, 20 pieces	990 326 022
Zehnder ComfoTube Flat 51, RapidLock slides, 10 pieces	990 326 060
Zehnder ComfoTube Flat 51, mounting bracket, pack of 10	990 322 016
Zehnder ComfoTube Flat 51, adjustable airflow regulator	990 322 015
Filter for ø 125 mm extract air valve, ISO Coarse (G3), 10 Pieces	990 320 032
Filter for CLF housing, ISO Coarse (G3), 10 Pieces	990 322 100

Zehnder ComfoTube Flat 51, 138 x 51 mm, 20/50 m roll

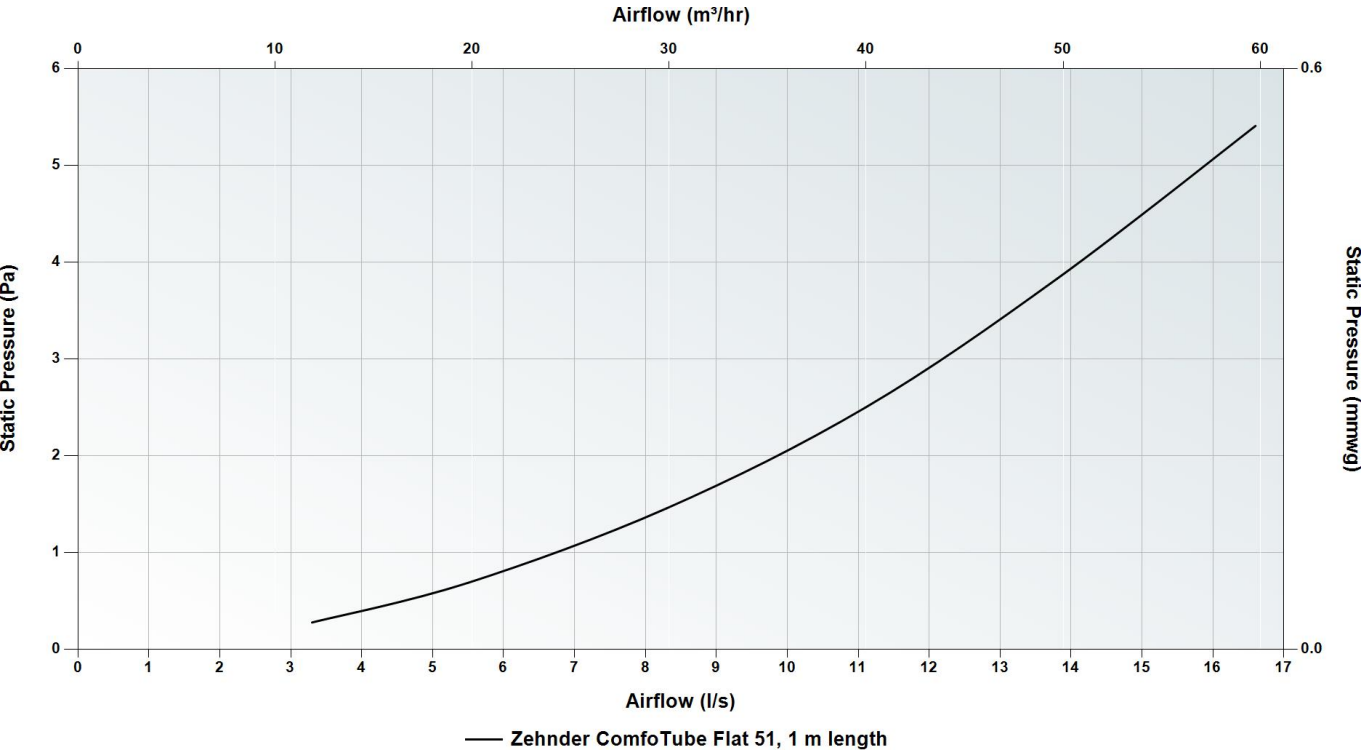
Article number: 990 328 077 / 990 328 078



Technical Specification

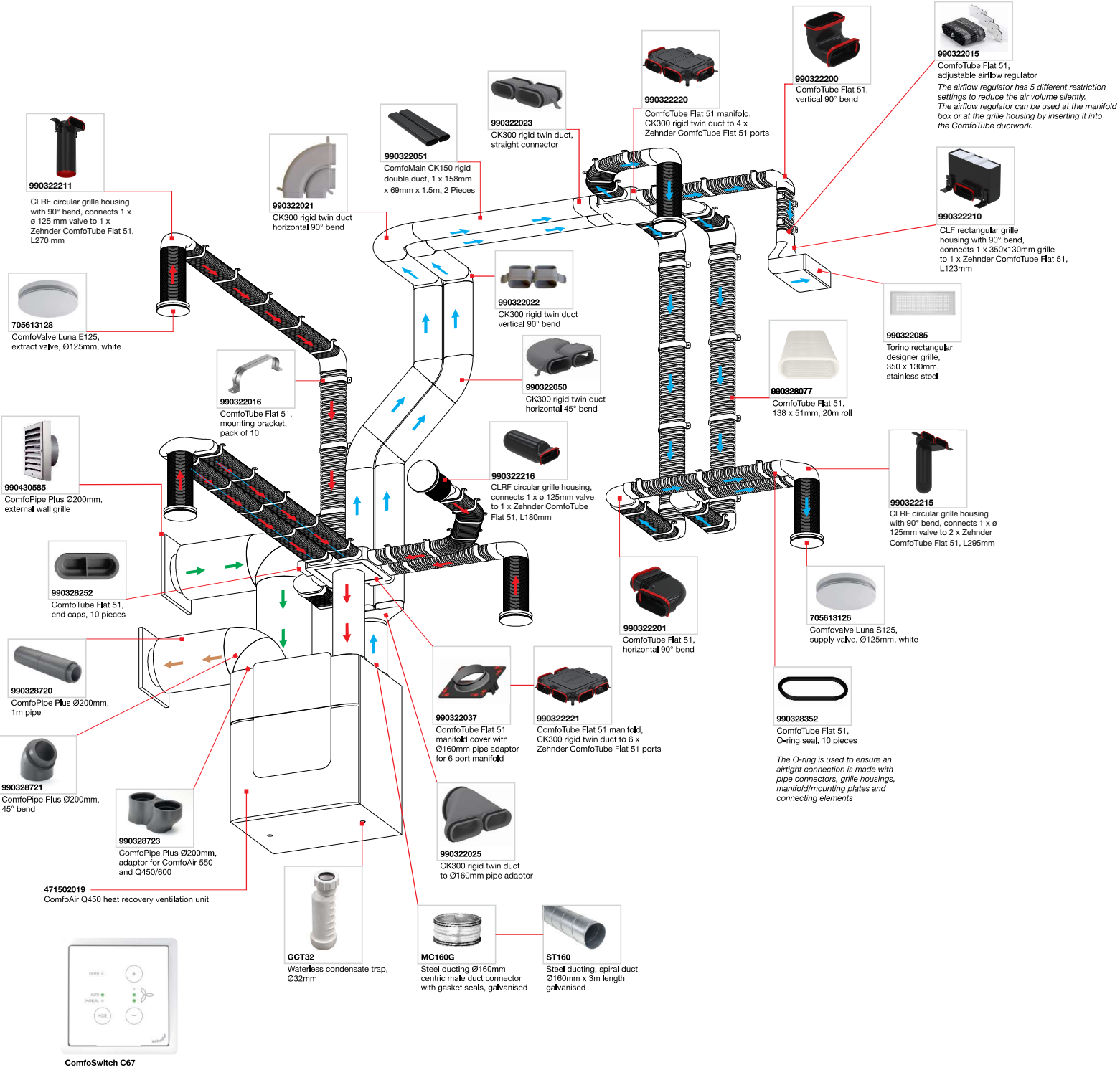
Material	High-quality food-grade polyethylene (PE)
Operating temperature range	-25 to +40°C
Maximum recommended air volume per tube	13 l/s (47 m³/h)
Minimum bending radius	153 mm and 414 mm
Outside diameter (W/H)	139 mm x 51 mm
Inside diameter (W/H)	127 mm x 39 mm
Weight per m	0.47 kg/m
Fire rating in accordance with EN 13501-1	E
BS EN 61386-24:2010 crushability compliant	Yes
Coil diameter (20 m/50 m roll)	1130 mm / 1150 mm
Coil height (20 m/50 m roll)	280 mm / 560 mm

Pressure Curve



■ For use with Zehnder ComfoTube Flat 51 Manifolds and Grille housings

3D System Layout



Zehnder ComfoTube Flat 51 manifold, ComfoMain rigid double duct to 4 x Zehnder ComfoTube Flat 51 ports

Article number: 990 322 220

Description

Manifold:

Zehnder ComfoTube Flat 51 manifold. Extremely low profile and compact design. Suitable for use with the Zehnder ComfoTube Flat 51 semi-rigid ductwork and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately. Can be used with Zehnder ComfoMain rigid double ductwork. For cleaning purposes the manifold plate can be removed for easy access. Mounting on the wall, floor or ceiling is done using the premoulded fixing holes.

Technical Specification

Height	70 mm
Width	448 mm
Depth	299 m
Weight	1.38 kg
Material	High-density polyethylene (HDPE)
Operating temperature range	-25 to +60°C
Air tightness class to EN 12237:2003	D



Dimensions

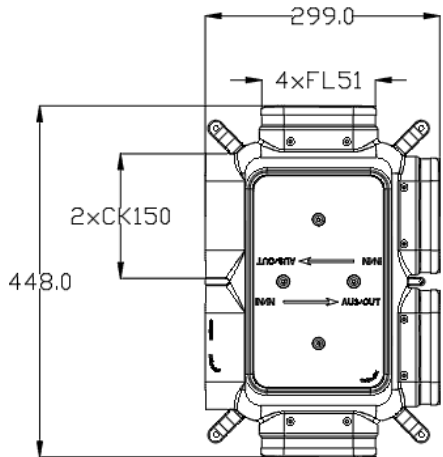
Front View



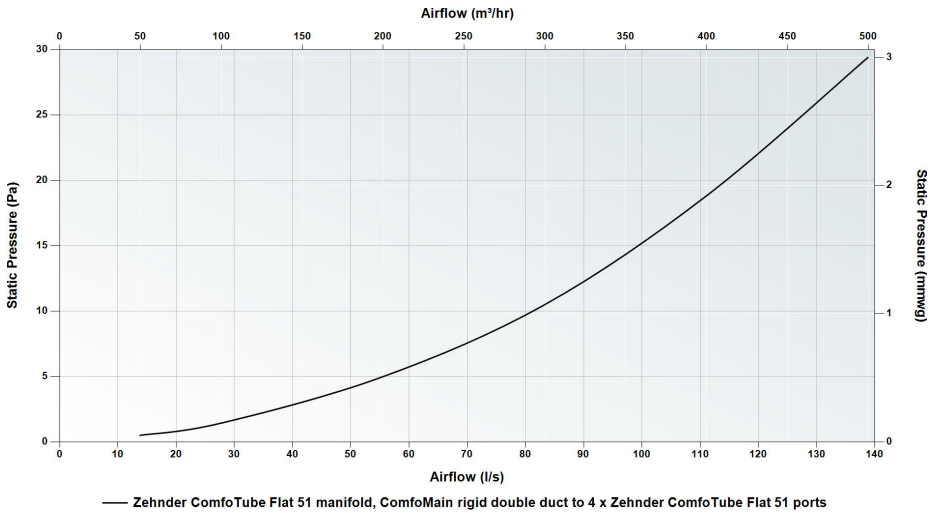
Side View



Top View



Pressure Curve



Sound Data

	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
Zehnder ComfoTube Flat 51 manifold, ComfoMain rigid double duct to 4 x Zehnder ComfoTube Flat 51 ports	23	23	14	11	8	8	15	17

Acoustic performance measured according to EN ISO 7235 (pink noise)

■ For use with Zehnder ComfoTube Flat 51 semi-rigid ductwork

Zehnder ComfoTube Flat 51 manifold, ComfoMain rigid double duct to 6 x Zehnder ComfoTube Flat 51 ports

Article number: 990 322 221

Description

Manifold:

Zehnder ComfoTube Flat 51 manifold. Extremely low profile and compact design. Suitable for use with the Zehnder ComfoTube Flat 51 semi-rigid ductwork and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately. Can be used with Zehnder ComfoMain rigid double ductwork or the cover can be removed and replaced with the Flat 51 manifold cover with ø 160 mm pipe adaptor. For cleaning purposes the manifold plate can be removed for easy access. Mounting on the wall, floor or ceiling is done using the premoulded fixing holes.

Technical Specification

Height	70 mm
Width	448 mm
Depth	438 mm
Weight	1.9 kg
Material	High-density polyethylene (HDPE)
Operating temperature range	-25 to +60°C
Air tightness class to EN 12237:2003	D



Dimensions

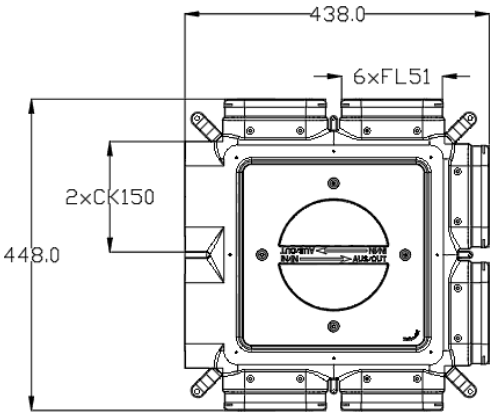
Front View



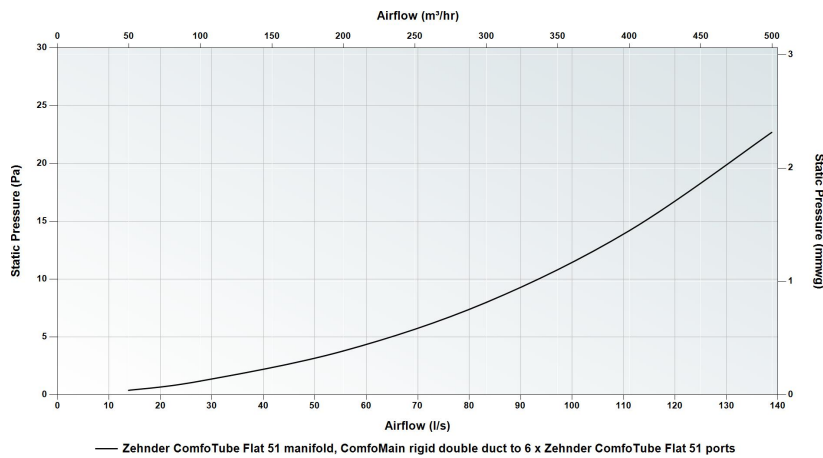
Side View



Top View



Pressure Curve



Sound Data

	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
Zehnder ComfoTube Flat 51 manifold, ComfoMain rigid double duct to 6 x Zehnder ComfoTube Flat 51 ports	22	25	14	11	10	8	16	18

Acoustic performance measured according to EN ISO 7235 (pink noise)

■ For use with Zehnder ComfoTube Flat 51 semi-rigid ductwork

Zehnder ComfoTube Flat 51 manifold, ComfoMain rigid single duct to 4 x Zehnder ComfoTube Flat 51 ports

Article number: 990 322 222

Description

Manifold:

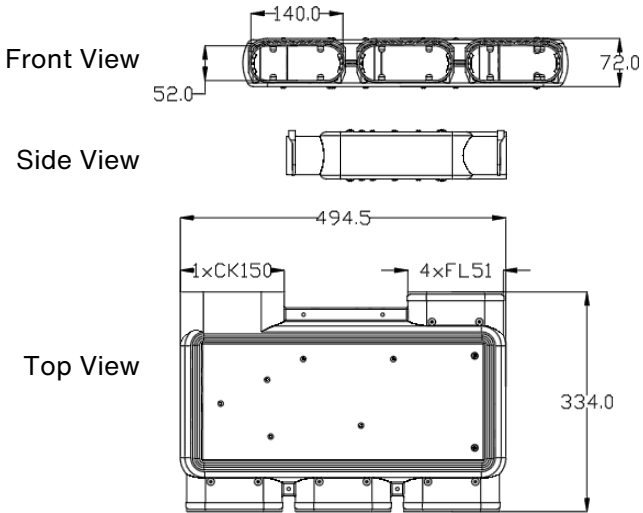
Zehnder ComfoTube Flat 51 manifold. Extremely low profile and compact design. Suitable for use with the Zehnder ComfoTube Flat 51 semi-rigid ductwork and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately. Must be used with single Zehnder ComfoMain CK150 ductwork, the manifold has a single CK150 connection. When combining two manifolds one CK150 ductwork is a supply and the other is extract air duct. For cleaning purposes the manifold plate can be removed for easy access. Mounting on the wall, floor or ceiling is done using the premoulded fixing holes.

Technical Specification

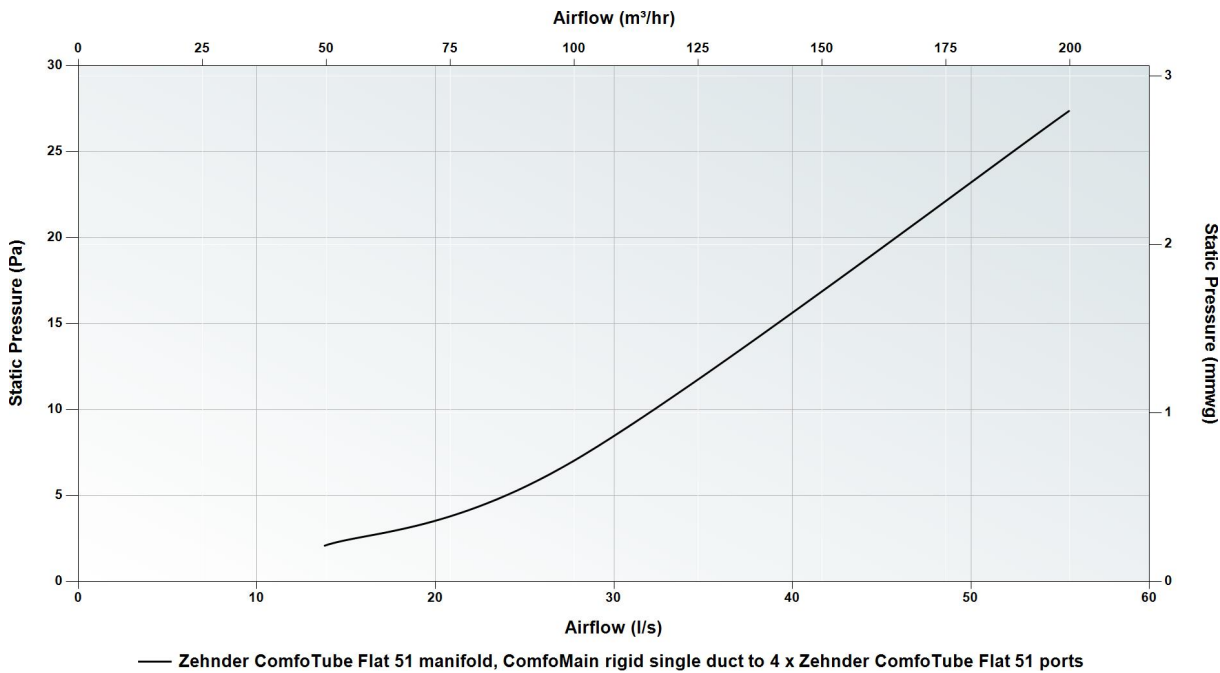
Height	72 mm
Width	494.5 mm
Depth	334 mm
Weight	2.2 kg
Material	High-density polyethylene (HDPE)
Operating temperature range	-25 to +60°C
Maximum recommended air volume per tube	41.6 l/s (150 m³/h)
Leakage rating	C



Dimensions



Pressure Curve



■ For use with Zehnder ComfoTube Flat 51 semi-rigid ductwork

Zehnder ComfoMain CK150 rigid double duct, 1 x 158mm x 69mm x 1.5m, 2 Pieces

Article number: 990 322 051

Description

Rigid double duct CK150:

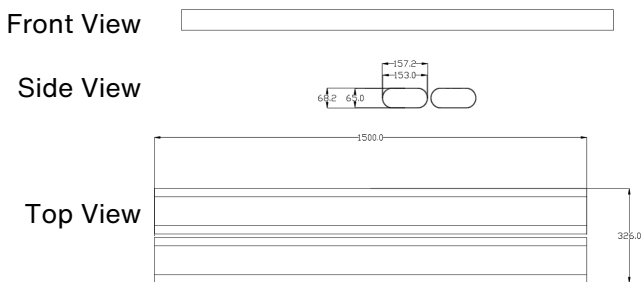
Zehnder ComfoMain CK150 rigid double duct. Extremely low profile and compact design. Suitable for use with the Zehnder ComfoTube Flat 51 semi-rigid manifolds and CK300 connections when using both ducts. The smooth, hygienic double duct is made for air flows of 41.6 l/s (150 m³/h) each or 83.3 l/s (300 m³/h) if both are utilised at low pressure drops.

Technical Specification

Material	High Impact Polystyrene (HIPS)
Operating temperature range	-25 to +40°C
Maximum recommended air volume	41.6 l/s (150 m³/h) each
Outside diameter (W/H)	(2x) 157.2 mm x 68.2 mm
Inside diameter (W/H)	(2x) 153 mm x 65 mm
Length	1500 mm
Weight	2.4 kg
Recycled material content	100%



Dimensions



Pressure Curve



Sound Data

	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
Zehnder ComfoMain CK150 rigid double duct, 1 x 158mm x 69mm x 1.5m, 2 Pieces	12	14	6	0	1	0	3	3

Acoustic performance measured according to [EN ISO 7235](#) (pink noise)



Zehnder ComfoMain CK300 rigid twin duct, horizontal 90° bend

Article number: 990 322 021

Description

Rigid horizontal 90° bend:

Zehnder ComfoMain CK300 rigid twin duct, horizontal 90° bend. The rigid bend can be placed between two lengths of Zehnder ComfoMain CK300 rigid twin duct or directly into the Flat 51 manifold. The bend comes complete with fixings to securely fix in place along with 4 x oval O-rings to ensure an airtight connection.

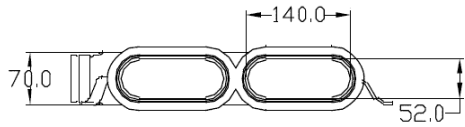
Technical Specification

Height	70 mm
Width	430 mm
Depth	430 mm
Weight	0.8 kg
Material	High-density polyethylene (HDPE)

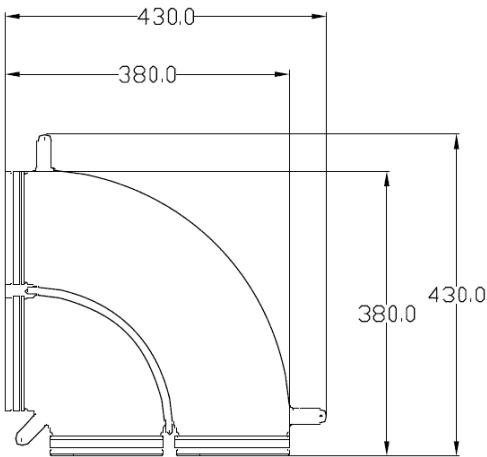


Dimensions

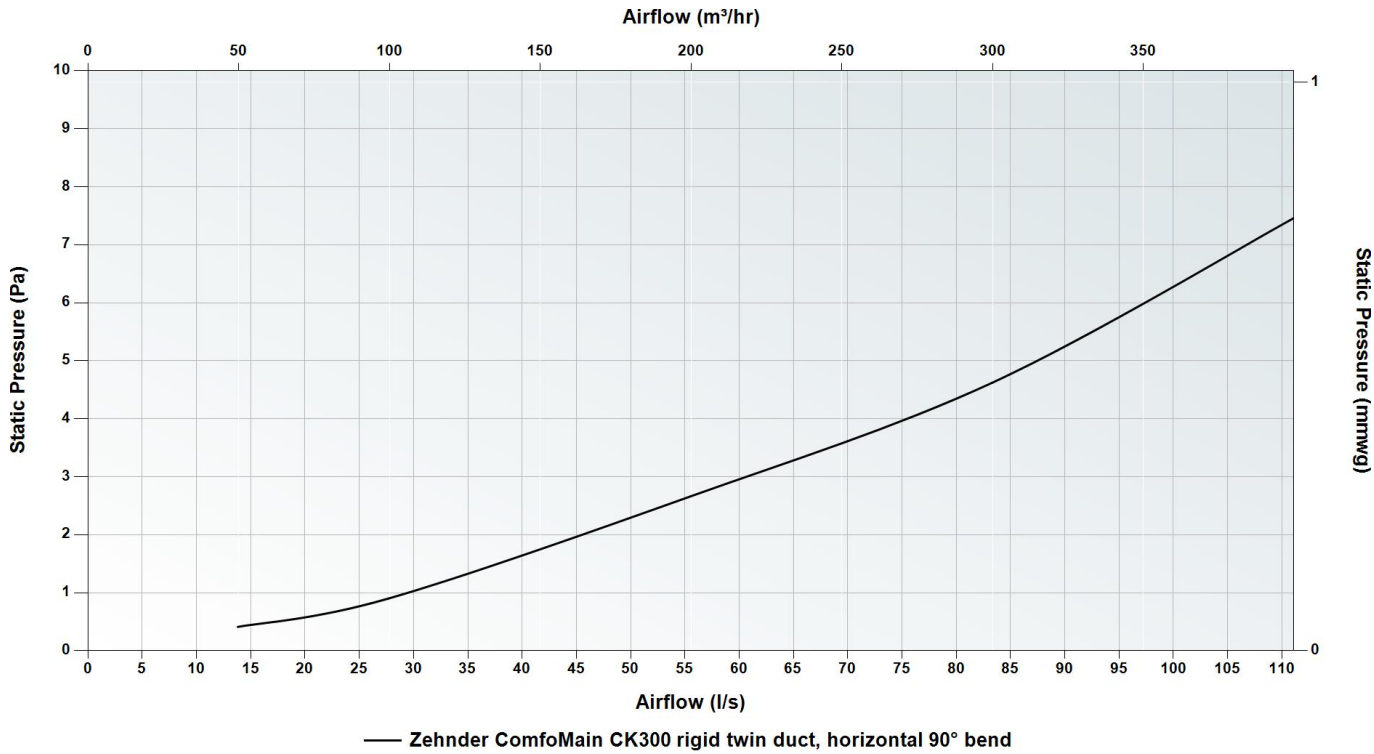
Front View



Top View



Pressure Curve



■ For use with Zehnder ComfoTube Flat 51 manifold



Zehnder ComfoMain CK300 rigid twin duct, vertical 90° bend

Article number: 990 322 022

Description

Rigid vertical 90° bend:

Zehnder ComfoMain CK300 rigid twin duct, vertical 90° bend. The rigid bend can be placed between two lengths of Zehnder ComfoMain CK300 rigid twin duct or directly into the Flat 51 manifold. The bend comes complete with fixings to securely fix in place along with 4 x oval O-rings to ensure an airtight connection.

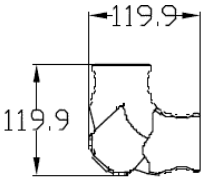
Technical Specification

Height	119.9 mm
Width	428 mm
Depth	119.9 mm
Weight	0.3 kg
Material	High-density polyethylene (HDPE)

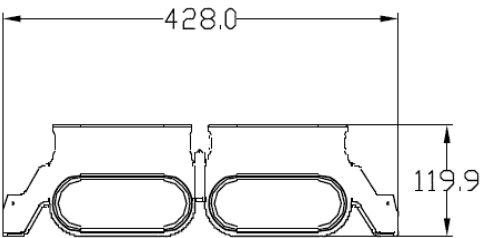


Dimensions

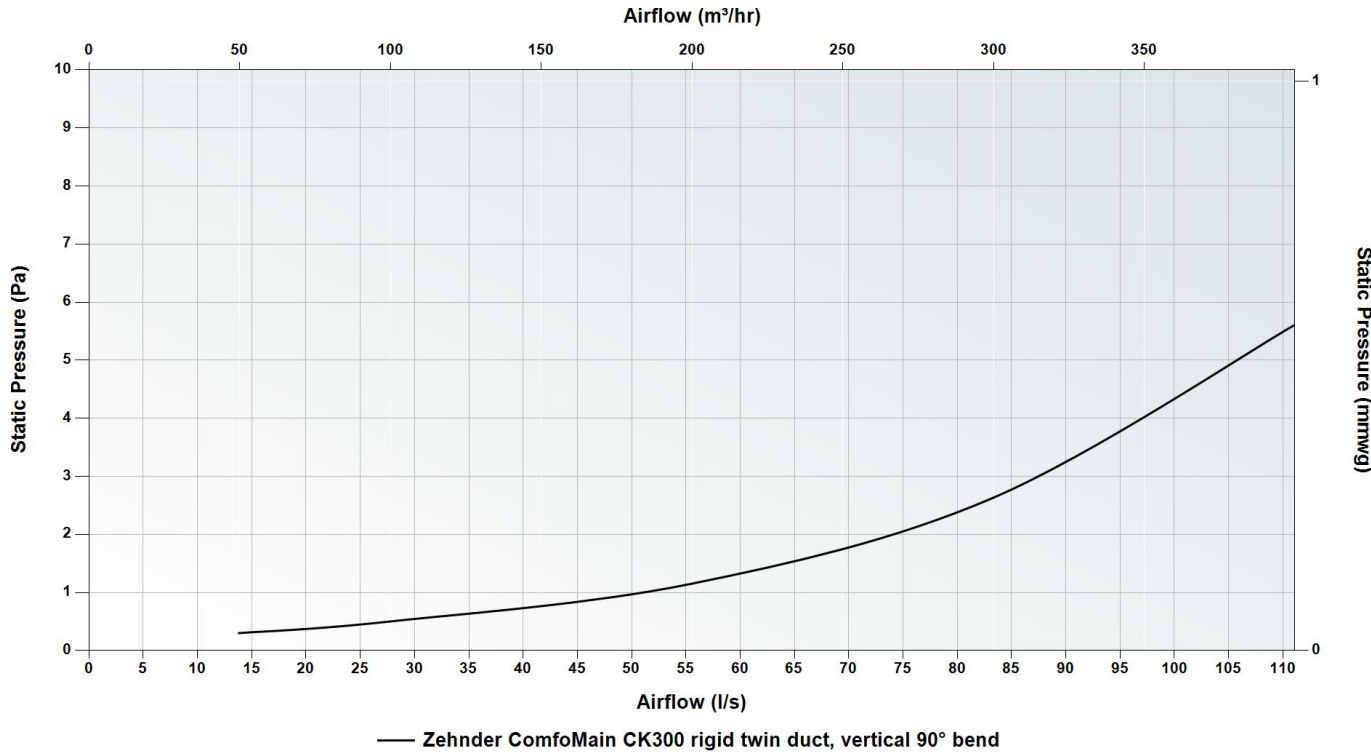
Side View



Top View



Pressure Curve



■ For use with Zehnder ComfoTube Flat 51 manifold

Zehnder ComfoMain CK300 rigid twin duct, horizontal 45° bend

Article number: 990 322 050

Description

Rigid horizontal 45° bend:

Zehnder ComfoMain CK300 rigid twin duct, horizontal 45° bend. The rigid bend can be placed between two lengths of Zehnder ComfoMain CK300 rigid twin duct or directly into the Flat 51 manifold. The bend comes complete with fixings to securely fix in place along with 4 x oval O-rings to ensure an airtight connection.

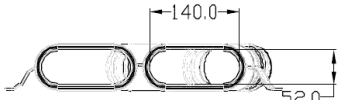
Technical Specification

Height	70 mm
Width	427.2 mm
Depth	331.9 mm
Weight	0.4 kg
Material	High-density polyethylene (HDPE)



Dimensions

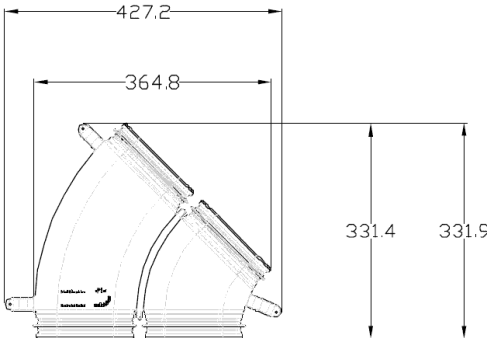
Front View



Side View



Top View



■ For use with Zehnder ComfoTube Flat 51 manifold

Zehnder ComfoMain CK300 rigid twin duct, flexible connector, L500 mm

Article number: 990 328 821

Description

Flexible connector:

Zehnder ComfoMain CK300 rigid twin duct, flexible connector. The flexible connector can be placed between a length of Zehnder ComfoMain CK300 rigid twin duct and a male oval O-ring seal connection. The flexible connection is ideal for 45 degree vertical stepped bends and come complete with 1 x oval O-ring to ensure an airtight connection to the CK300 ductwork.

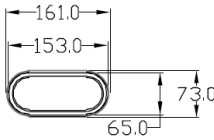
Technical Specification

Height	73 mm
Width	161 mm
Length	496 mm
Weight	0.28 kg
Material	High-density polyethylene (HDPE)



Dimensions

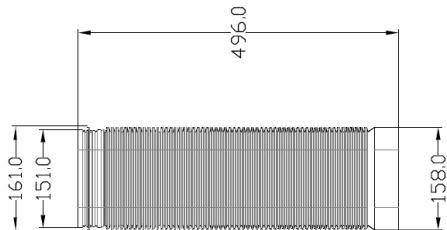
Front View



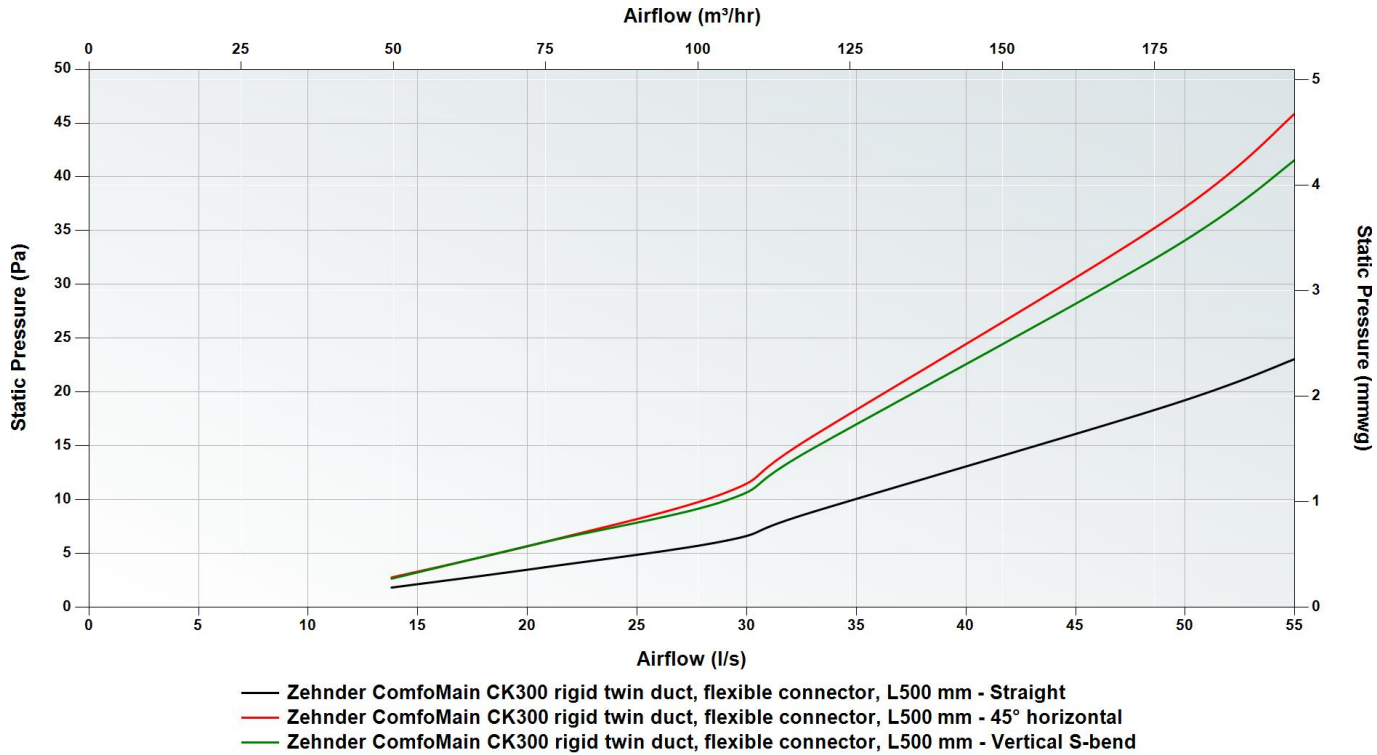
Side View



Top View



Pressure Curve



■ For use with Zehnder ComfoTube Flat 51 manifold

Zehnder ComfoMain CK300 rigid twin duct, pipe connector

Article number: 990 322 023

Description

Pipe connector:

Zehnder ComfoMain CK300 rigid twin duct, straight connector. The connector is used to join two lengths of Zehnder ComfoMain CK300 rigid twin duct together, or to connect Zehnder ComfoMain CK300 rigid twin duct to a manifold. The straight connector comes complete with fixings to securely fit in place along with 4 x oval O-rings.

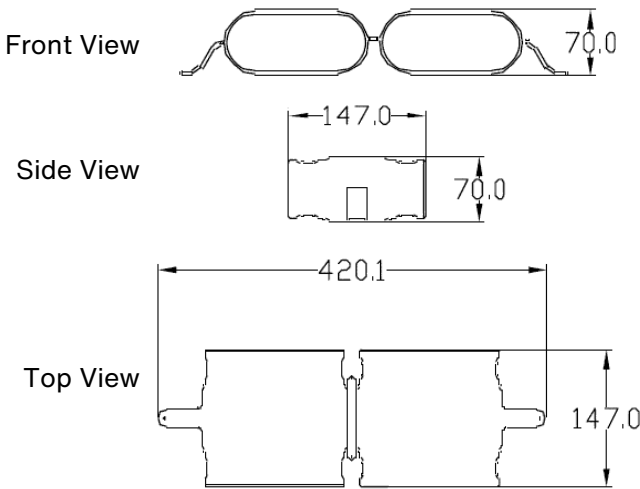
Technical Specification

Height	70 mm
Width	420.1 mm
Length	147 mm
Weight	0.28 kg
Material	High-density polyethylene (HDPE)

■ For use with Zehnder ComfoTube Flat 51 manifold



Dimensions



Zehnder ComfoMain CK300 rigid twin duct, end caps, 2 pieces

Article number: 990 322 024

Description

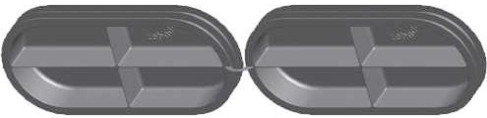
End caps:

Zehnder ComfoMain CK300 rigid twin duct, end caps. The oval end caps can be placed within their corresponding Zehnder ComfoMain CK300 rigid duct during the construction phase to prevent dust ingress. They can also be placed into the Flat 51 manifold if using the 990 322 037 pipe adaptor.

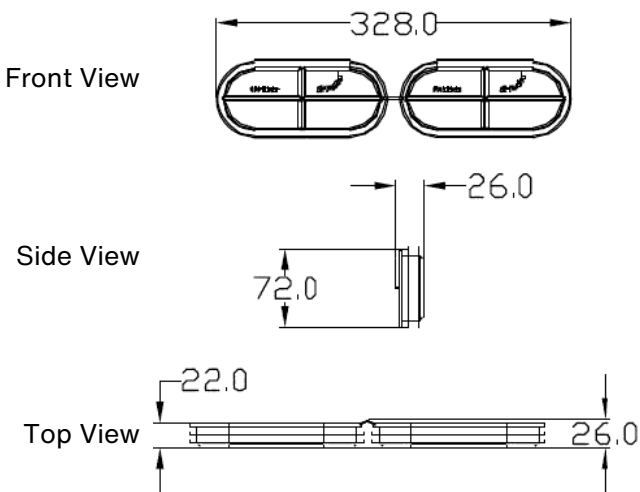
Technical Specification

Height	72 mm
Width	328 mm
Depth	26 mm
Weight	0.05 kg
Material	High-density polyethylene (HDPE)

■ For use with Zehnder ComfoTube Flat 51 manifold



Dimensions



Zehnder ComfoMain CK300 rigid twin duct to ø 125 mm pipe adaptor

Article number: 990 322 029

Description

Pipe adaptor:

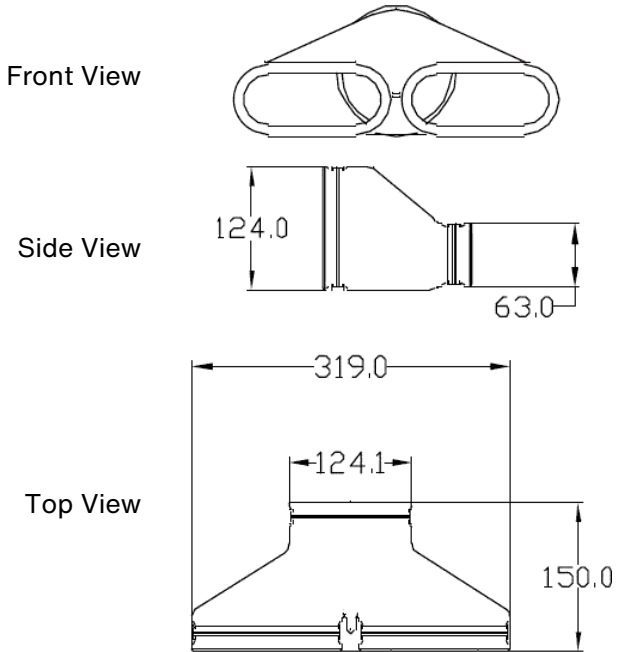
Zehnder ComfoMain CK300 rigid twin duct to ø 125 mm pipe adaptor. The rigid gasket seal connector can be used to convert Zehnder ComfoMain CK300 rigid twin duct to ø 125 rigid round duct, or to connect ø 125 rigid round duct to the Zehnder ComfoTube Flat 51 manifold.

Technical Specification

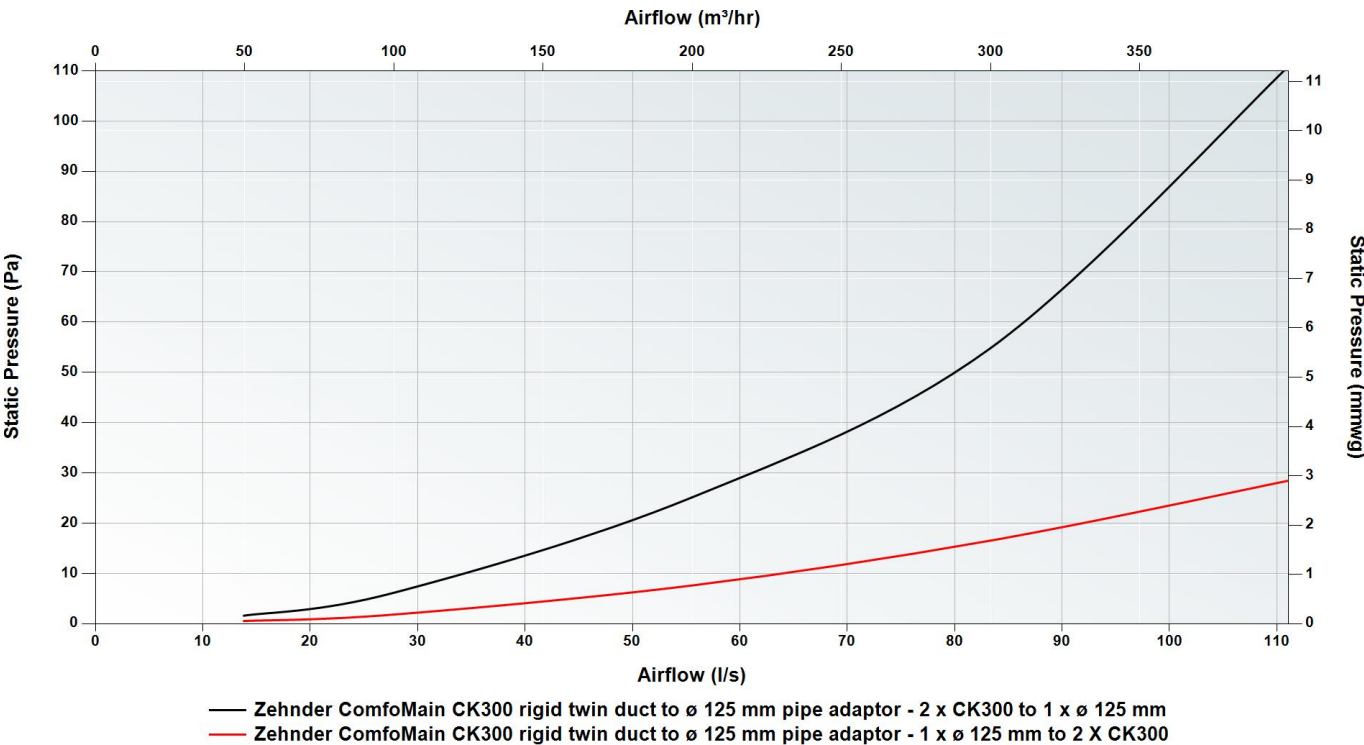
Height	124 mm
Width	319 mm
Depth	150 mm
Weight	0.21 kg
Material	High-density polyethylene (HDPE)



Dimensions



Pressure Curve



■ For use with Zehnder ComfoTube Flat 51 manifold

Zehnder ComfoMain CK300 rigid twin duct to ø 160 mm pipe adaptor

Article number: 990 322 025

Description

Pipe adaptor:

Zehnder ComfoMain CK300 rigid twin duct to ø 125 mm pipe adaptor. The rigid gasket seal connector can be used to convert Zehnder ComfoMain CK300 rigid twin duct to ø 160 rigid round duct, or to connect ø 160 rigid round duct to the Zehnder ComfoTube Flat 51 manifold.

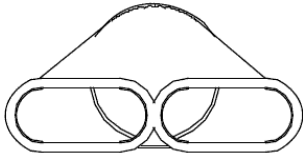
Technical Specification

Height	159.1 mm
Width	319 mm
Depth	150 mm
Weight	0.21 kg
Material	High-density polyethylene (HDPE)

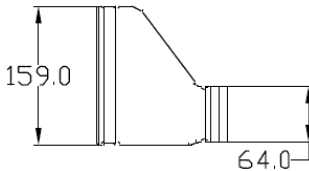


Dimensions

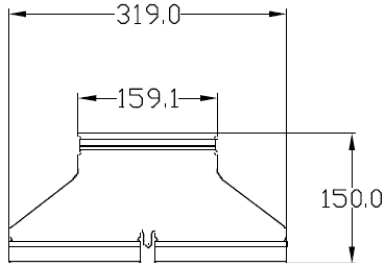
Front View



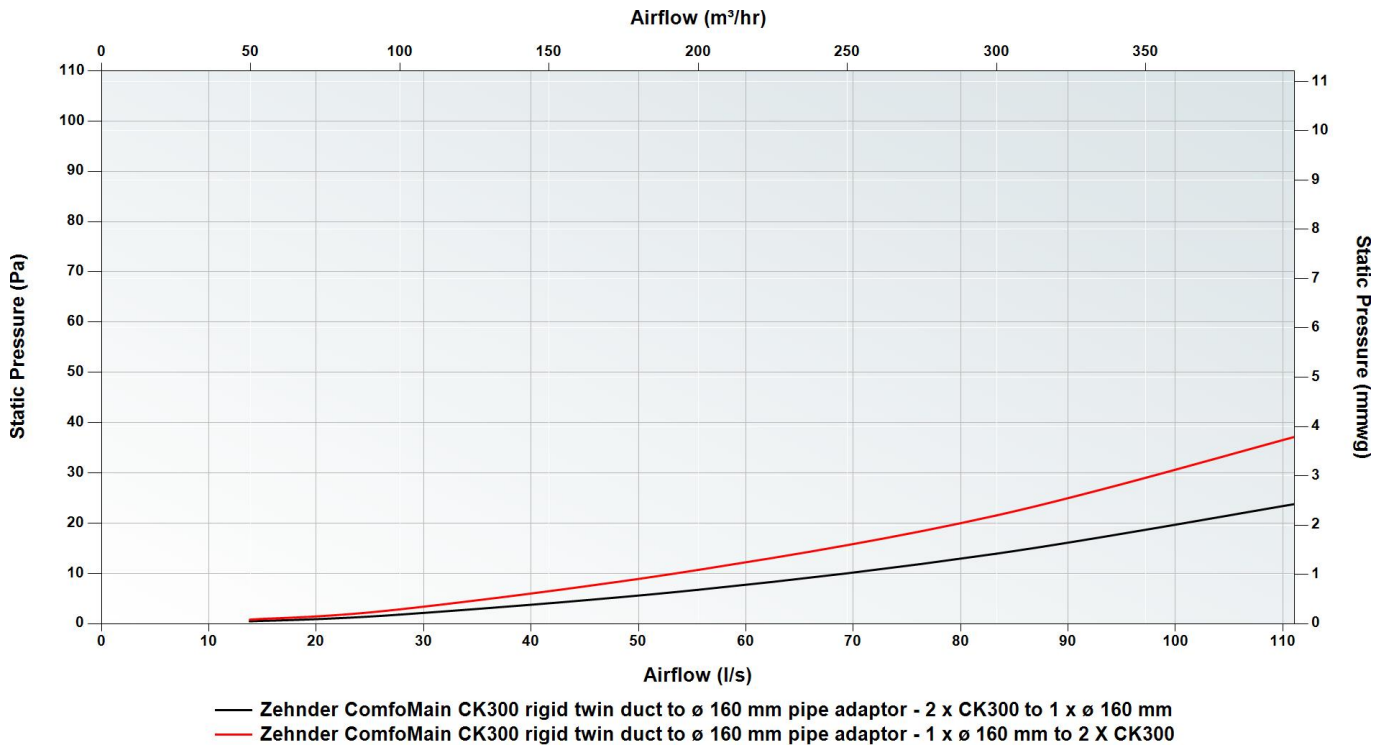
Side View



Top View



Pressure Curve



■ For use with Zehnder ComfoTube Flat 51 manifold

Zehnder ComfoMain CK300 rigid twin duct, oval O-ring seal, 10 pieces

Article number: 990 322 026

Description

Oval O-ring:

Zehnder ComfoMain CK300 rigid twin duct oval O-ring seal. The oval O-ring is used to ensure an airtight connection is made with pipe connectors, manifold and connecting elements.

Technical Specification

Height	73 mm
Width	161 mm
Depth	13 mm
Weight	0.012 kg each
Material	EPDM (Ethylene Propylene Diene Monomer)



■ For use with Zehnder ComfoTube Flat 51 manifold



Grille housing CLF rectangular grille housing with 90° bend, connects 1 x 350x130 mm grille to 1 x Zehnder ComfoTube Flat 51, L123 mm

Article number: 990 322 210

Description

CLF Grille housing:

Rectangular grille housing with 90° bend. The cleanable rectangular CLF grille housing, made from 25% recycled plastic, is suitable for installation in multiple types of wall/floor/ceiling applications and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately. The rectangular decorative grilles (350 mm x 130 mm) can be surface or flush-mounted dependent on preference. A Zehnder ComfoFresh filter can be used to remove particulates.

Technical Specification

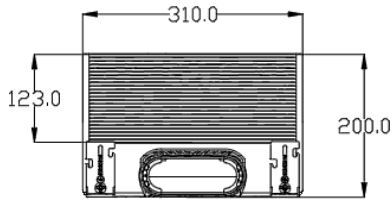
Height	200 mm
Spigot length	123 mm
Width	310 mm
Depth	130 mm
Weight	0.64 kg
Material	High-density polyethylene (HDPE)
Recycled material content	25%

■ For use with Rectangular decorative grilles 350 x 130 mm

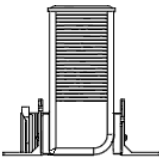


Dimensions

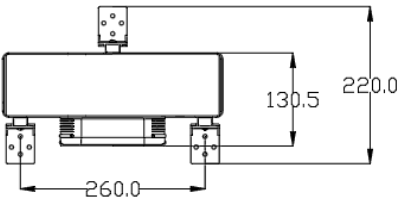
Front View



Side View



Top View



Grille housing CLRF circular grille housing with 90° bend, connects 1 x ø 125 mm valve to 1 x Zehnder ComfoTube Flat 51, L270 mm

Article number: 990 322 211

Description

CLRF Grille housing:

Circular grille housing with 90° bend. The cleanable circular CLRF grille housing is suitable for installation in multiple types of wall and ceiling applications and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately. The square (160 x 160 mm) and circular decorative grilles can be used in addition to any standard ø 125 mm valve. A Zehnder ComfoFresh filter can be used to remove particulates.

Technical Specification

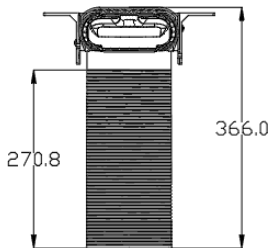
Height	366 mm
Spigot length	270 mm
Width	146.5 mm
Depth	170 mm
Weight	0.43 kg
Material	High-density polyethylene (HDPE)
Recycled material content	25%

■ For use with Square or circular decorative grilles, ø 125 mm supply/extract grilles and ComfoValve Luna

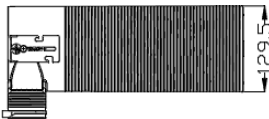


Dimensions

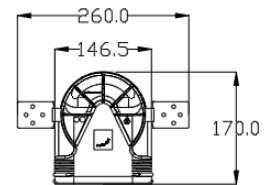
Front View



Side View



Top View



Grille housing CLRF circular grille housing with 90° bend, connects 1 x ø 125 mm valve to 1 x Zehnder ComfoTube Flat 51, L35 mm

Article number: 990 322 213

Description

CLRF Grille housing:

Circular grille housing with 90° bend. The cleanable circular CLRF grille housing is suitable for installation in multiple types of wall and ceiling applications and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately. The square (160 x 160 mm) and circular decorative grilles can be used in addition to any standard ø 125 mm valve. A Zehnder ComfoFresh filter can be used to remove particulates.

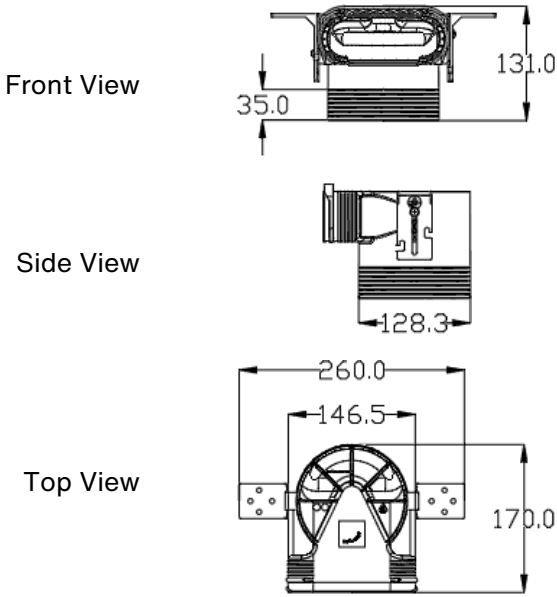
Technical Specification

Height	131 mm
Spigot length	35 mm
Width	146.5 mm
Depth	170 mm
Weight	0.26 kg
Material	High-density polyethylene (HDPE)
Recycled material content	25%

■ For use with Square or circular decorative grilles, ø 125 mm supply/extract grilles and ComfoValve Luna



Dimensions



Grille housing CLRF circular grille housing with 90° bend, connects 1 x ø 125 mm valve to 2 x Zehnder ComfoTube Flat 51, L295 mm

Article number: 990 322 215

Description

CLRF Grille housing:

Circular grille housing with 90° bend. The cleanable circular CLRF grille housing is suitable for installation in multiple types of wall and ceiling applications and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately. The square (160 x 160 mm) and circular decorative grilles can be used in addition to any standard ø 125 mm valve. A Zehnder ComfoFresh filter can be used to remove particulates.

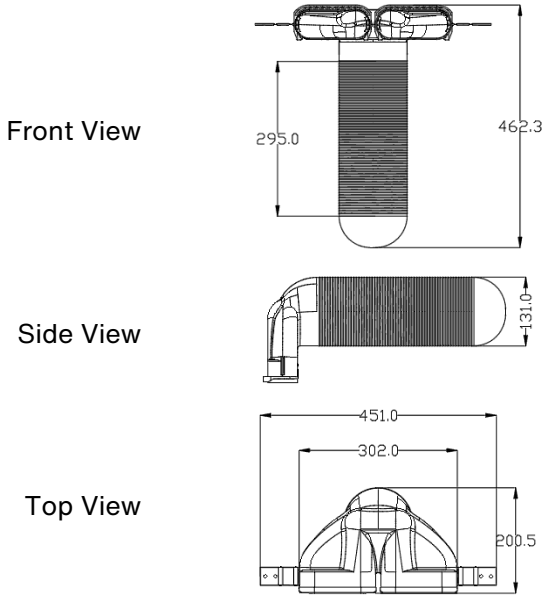
Technical Specification

Height	462.3 mm
Spigot length	295 mm
Width	302 mm
Depth	200.5 mm
Weight	0.57 kg
Material	High-density polyethylene (HDPE)

■ For use with Square or circular decorative grilles, ø 125 mm supply/extract grilles and ComfoValve Luna



Dimensions



Grille housing CLRF circular grille housing, connects 1 x ø 125 mm valve to 1 x Zehnder ComfoTube Flat 51, L180 mm

Article number: 990 322 216

Description

CLRF Grille housing:

Circular grille housing with straight connection. The cleanable circular CLRF grille housing is suitable for installation in multiple types of wall and ceiling applications and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately. The square (160 x 160 mm) and circular decorative grilles can be used in addition to any standard ø 125 mm valve. A Zehnder ComfoFresh filter can be used to remove particulates.

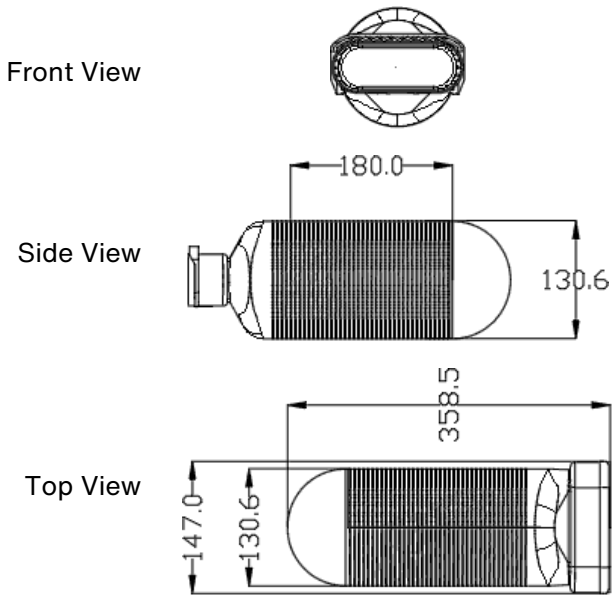
Technical Specification

Height	130.6 mm
Spigot length	180 mm
Width	147 mm
Depth	358.5 mm
Weight	0.3 kg
Material	High-density polyethylene (HDPE)

■ For use with Square or circular decorative grilles, ø 125 mm supply/extract grilles and ComfoValve Luna



Dimensions





Grille housing Renoventil circular grille housing, connects 1 x ø 80 mm valve to 1 x Zehnder ComfoTube Flat 51, L356 mm

Article number: 990 322 217

Description

Renoventil Grille housing:

Circular grille housing with straight connection. The Renoventil housing is perfect for refurbishments since the Renoventil supply and extract grilles can be located close to the ceiling. The Renoventil grille housing comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately.

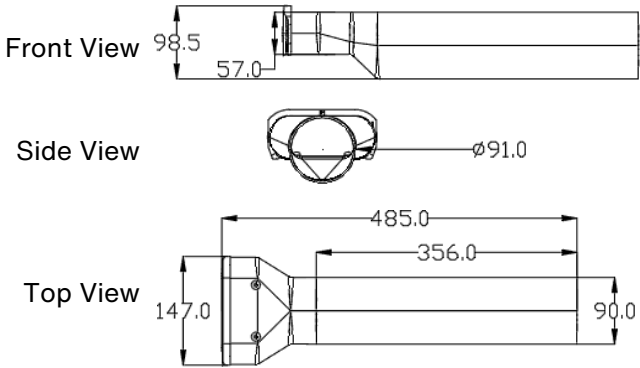
Technical Specification

Height	98.5 mm
Spigot length	356 mm
Width	147 mm
Depth	485 mm
Weight	0.3 kg
Material	High-density polyethylene (HDPE)

■ For use with Renoventil supply/extract grilles



Dimensions



Zehnder ComfoTube Flat 51 manifold cover with ø 160 mm pipe adaptor, for 6 port manifold

Article number: 990 322 037

Description

Pipe adaptor:

Zehnder ComfoTube Flat 51 manifold cover with ø 160 mm pipe adaptor. The rigid gasket seal connector can be used to connect ø 160 rigid round duct to the Zehnder ComfoTube Flat 51 manifold.

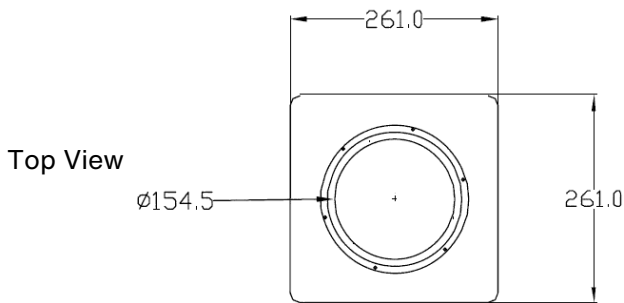
Technical Specification

Height	38 mm
Width	261 mm
Depth	261 mm
Weight	0.5 kg
Material	High-density polyethylene (HDPE)

■ For use with Zehnder ComfoTube Flat 51 manifold, ComfoMain rigid double duct to 6 x Zehnder ComfoTube Flat 51 ports



Dimensions



Zehnder ComfoTube Flat 51, vertical 90° bend

Article number: 990 322 200

Description

Rigid 90° bend:

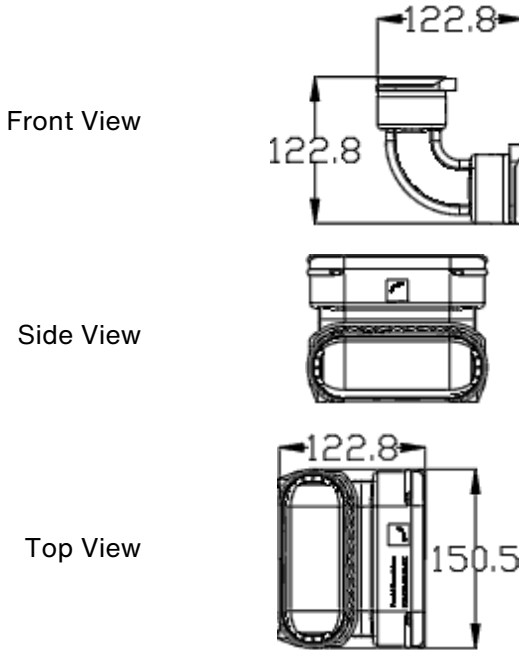
Zehnder ComfoTube Flat 51, vertical 90° bend. The rigid bend can be placed between two lengths of Zehnder ComfoTube Flat 51 or directly into the manifold, and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately.

Technical Specification

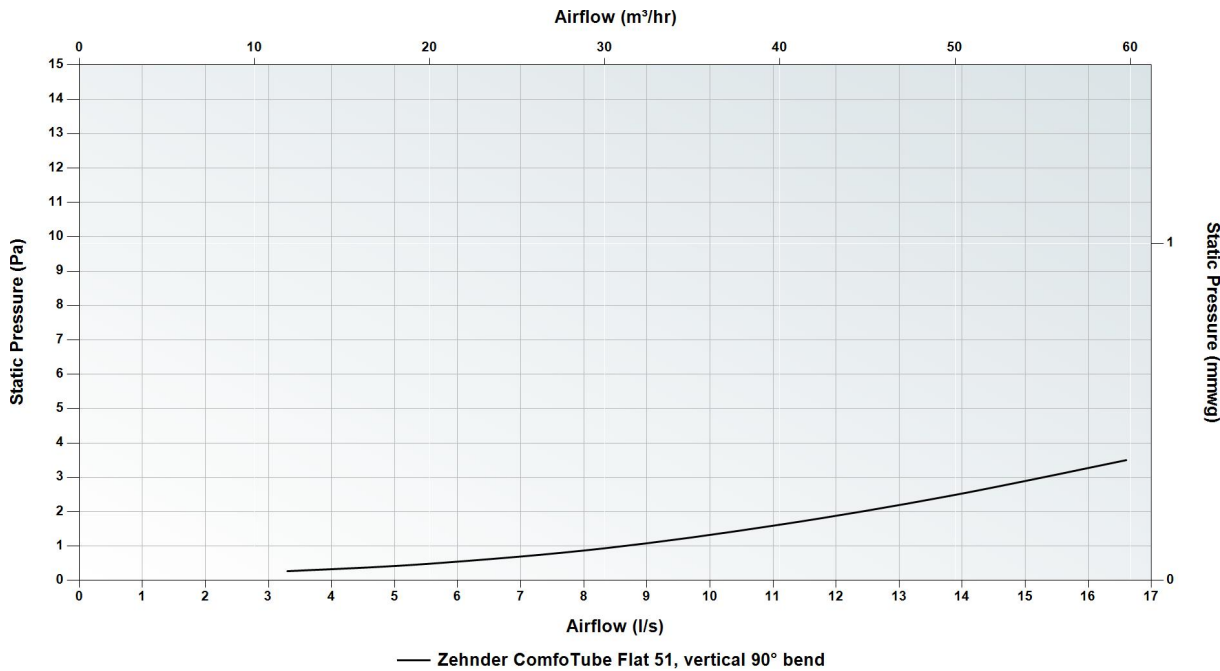
Height	122.8 mm
Width	150.5 mm
Depth	122.8 mm
Weight	0.2 kg
Material	High-density polyethylene (HDPE)



Dimensions



Pressure Curve



Sound Data

	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
Zehnder ComfoTube Flat 51, vertical 90° bend	4	0	2	0	1	2	3	2

Acoustic performance measured according to EN ISO 7235 (pink noise)



Zehnder ComfoTube Flat 51, horizontal 90° bend

Article number: 990 322 201

Description

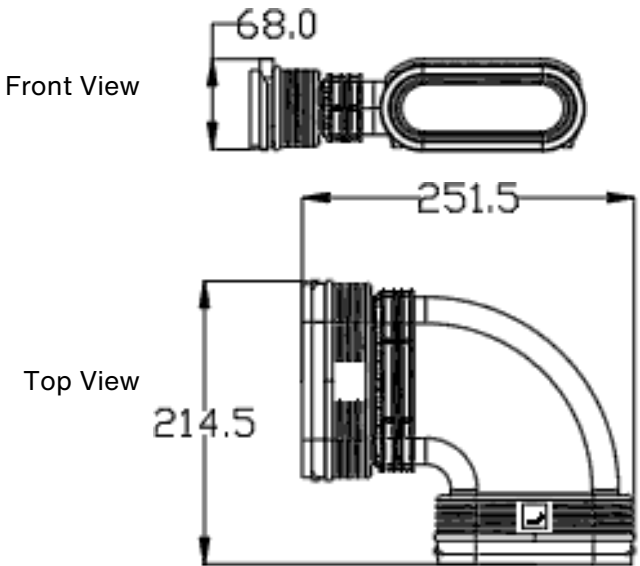
Rigid 90° bend:
Zehnder ComfoTube Flat 51, horizontal 90° bend. The rigid bend can be placed between two lengths of Zehnder ComfoTube Flat 51 or directly into the manifold, and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately.

Technical Specification

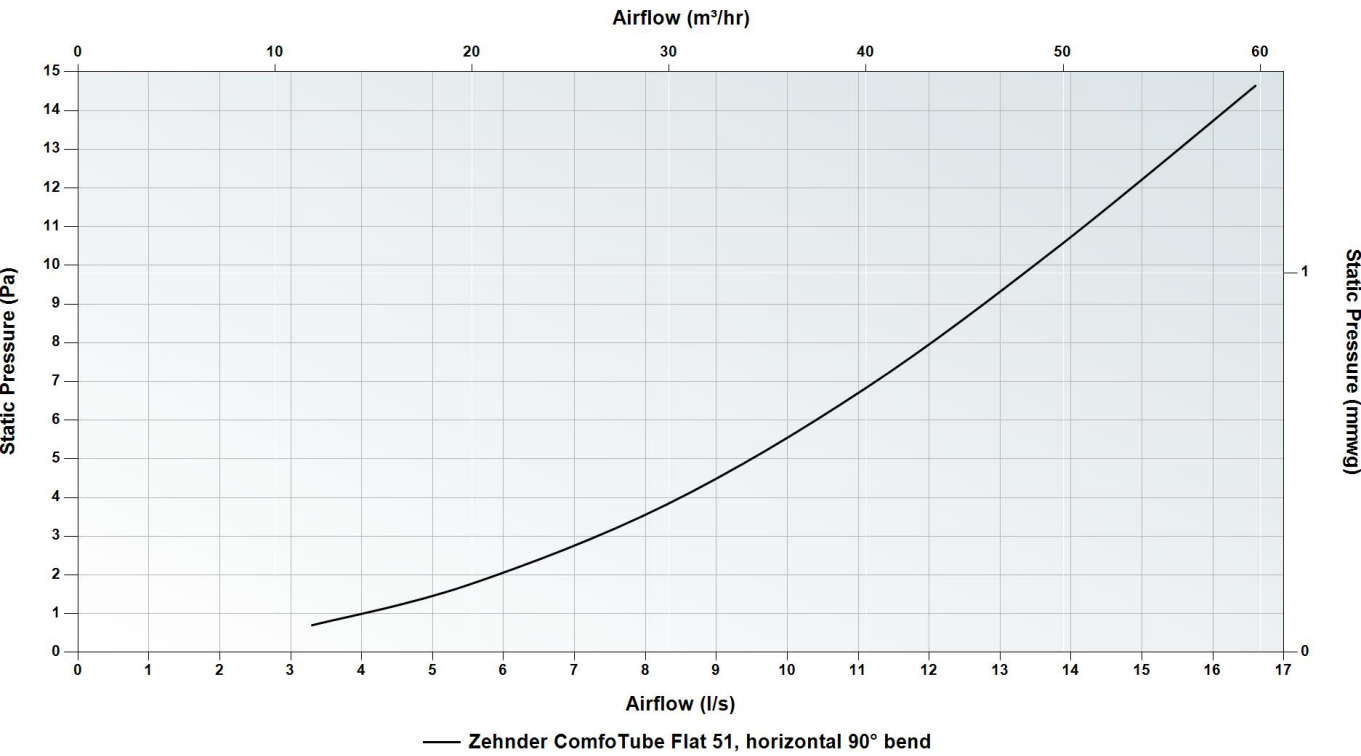
Height	68 mm
Width	214.5 mm
Depth	251.5 mm
Weight	0.22 kg
Material	High-density polyethylene (HDPE)



Dimensions



Pressure Curve



Sound Data

	Octave Band (Hz) Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
Zehnder ComfoTube Flat 51, horizontal 90° bend	3	1	0	0	2	0	1	1

Acoustic performance measured according to [EN ISO 7235](#) (pink noise)



Zehnder ComfoTube Flat 51, Y-piece

Article number: 990 322 203

Description

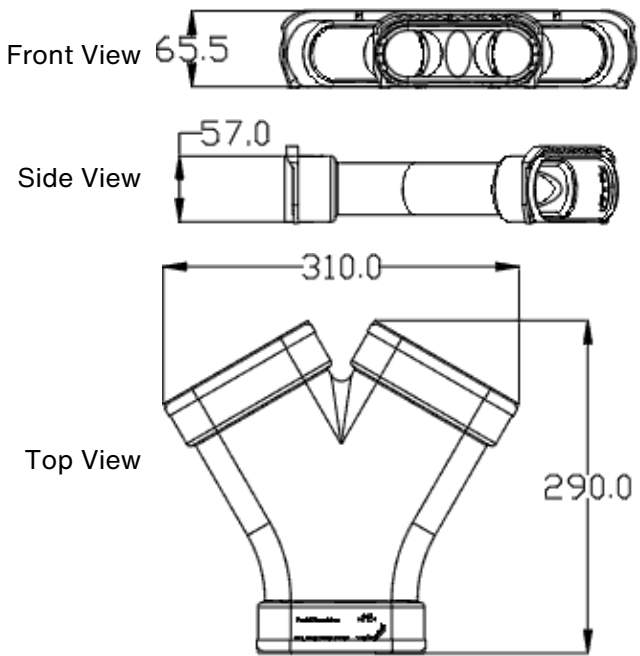
Y-piece:
Zehnder ComfoTube Flat 51, Y-piece. The rigid Y-piece can be placed between three lengths of Zehnder ComfoTube Flat 51 to branch from a single run into two separate runs and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately.

Technical Specification

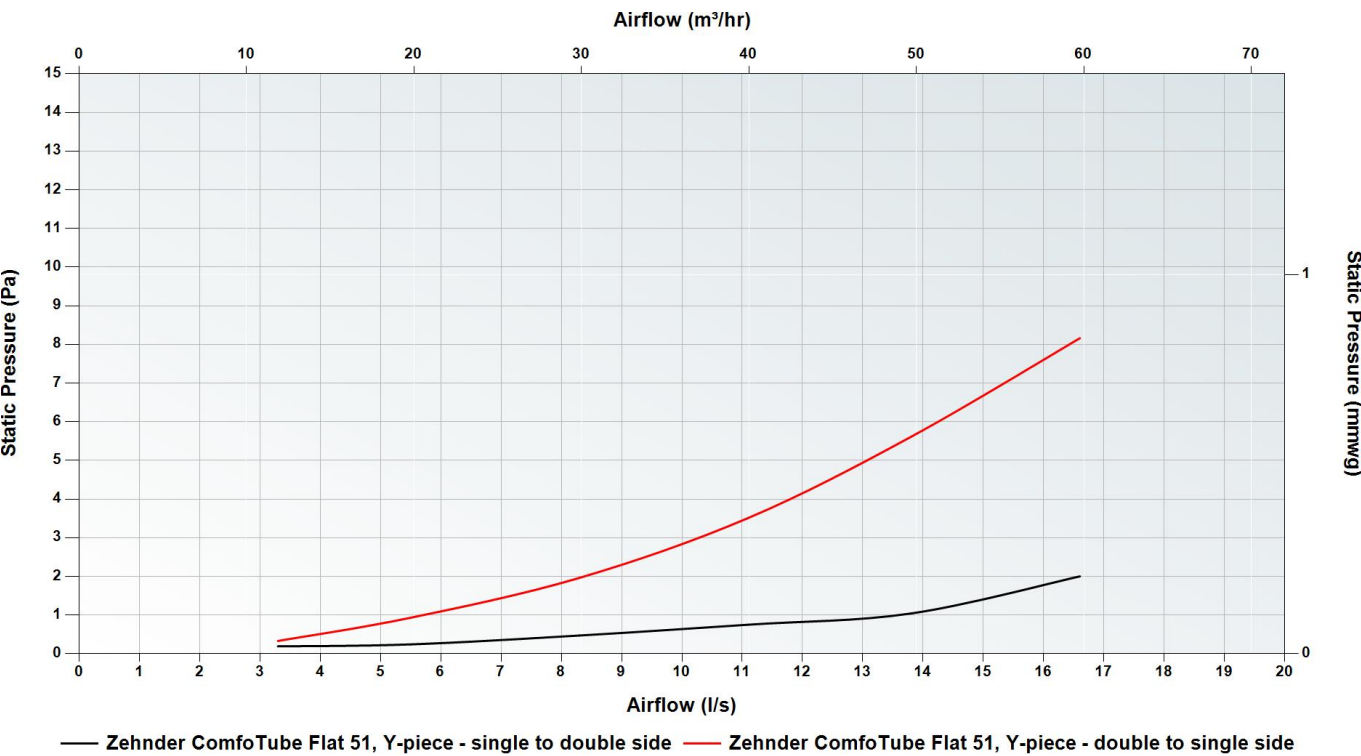
Height	65.5 mm
Width	290 mm
Depth	310 mm
Weight	0.3 kg
Material	High-density polyethylene (HDPE)



Dimensions



Pressure Curve



Zehnder ComfoTube Flat 51, cross-piece

Article number: 990 322 207

Description

ComfoTube cross-piece:

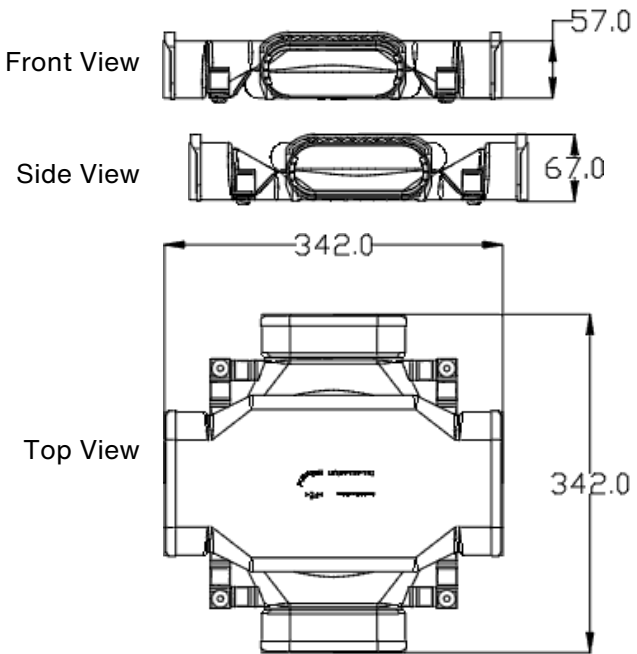
Zehnder ComfoTube Flat 51 cross-piece. The compact cross-piece can be used to cross over two lengths of Zehnder ComfoTube Flat 51 in a height restricted space. The cross-piece comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately.

Technical Specification

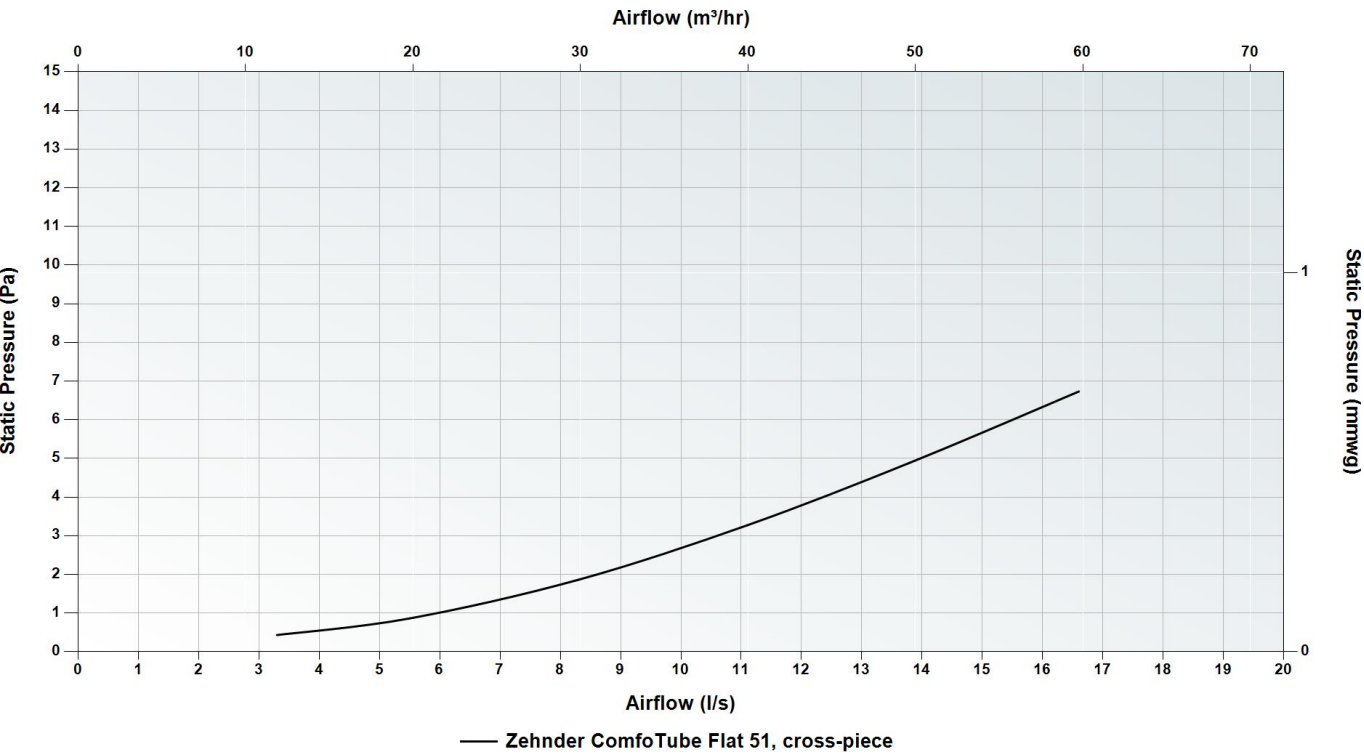
Height	57 mm
Width	342 mm
Depth	342 mm
Weight	0.69 kg
Material	High-density polyethylene (HDPE)



Dimensions



Pressure Curve



Zehnder ComfoTube Flat 51 to Zehnder ComfoTube ø 75/90 mm convertor

Article number: 990 322 204

Description

Converter:

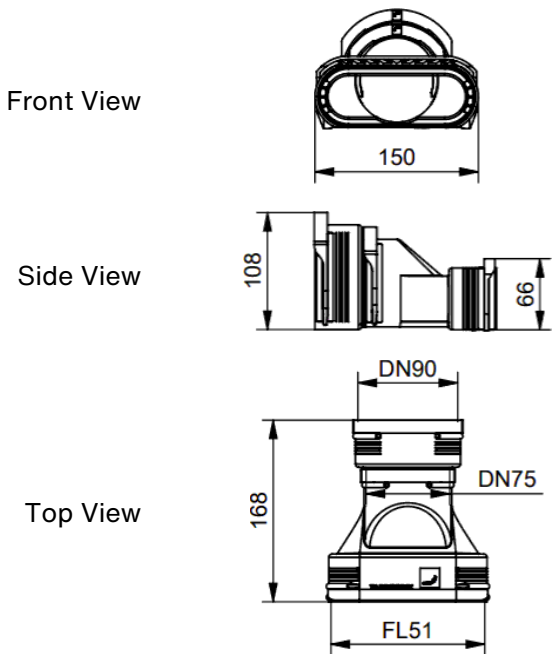
Zehnder ComfoFresh Flat 51 to Zehnder ComfoTube ø 75/90 mm convertor. The rigid connector can be used to convert Zehnder ComfoFresh Flat 51 to Zehnder ComfoTube ø 75 or Zehnder ComfoTube ø 90 mm and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately.

Technical Specification

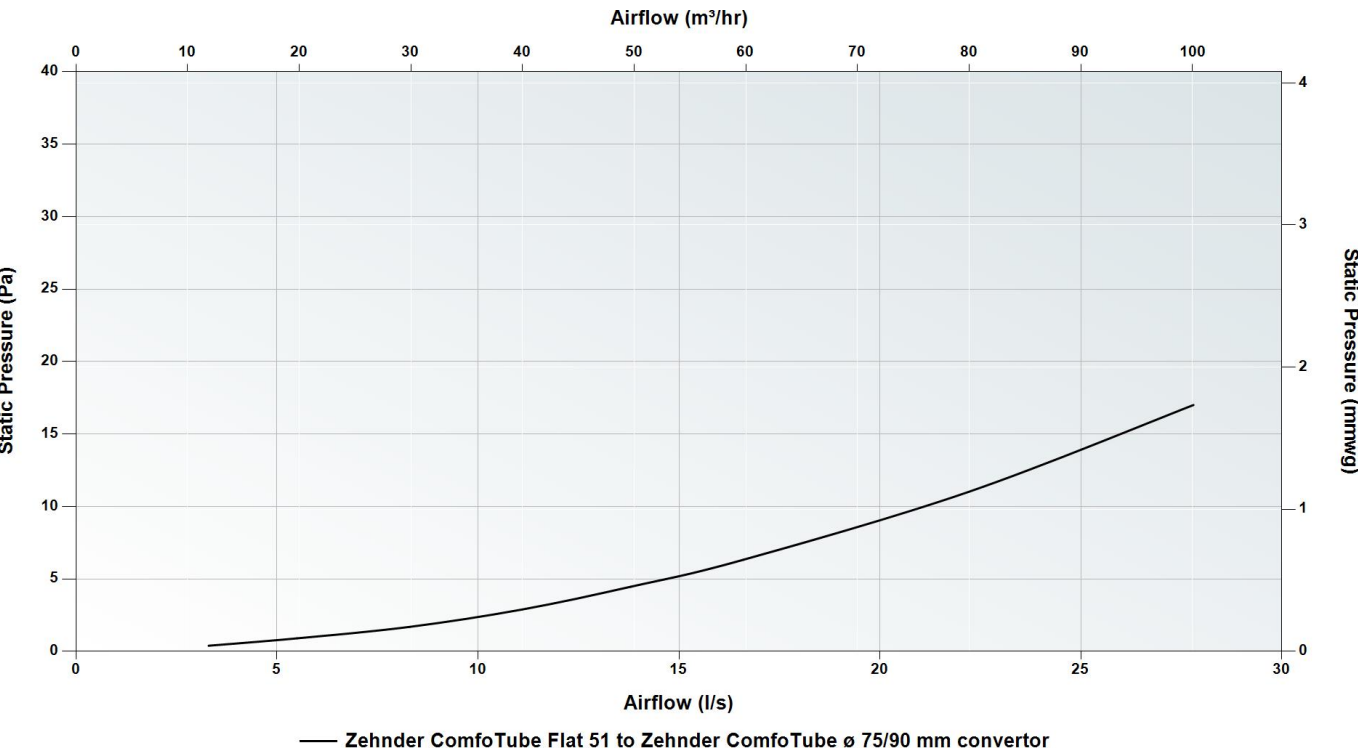
Height	107.9 mm
Width	167.5 mm
Depth	150 mm
Weight	0.17 kg
Material	High-density polyethylene (HDPE)
Recycled material content	25%



Dimensions



Pressure Curve





Zehnder ComfoTube Flat 51 to Zehnder ComfoTube ø 90 mm convertor with 90° bend

Article number: 990 322 205

Description

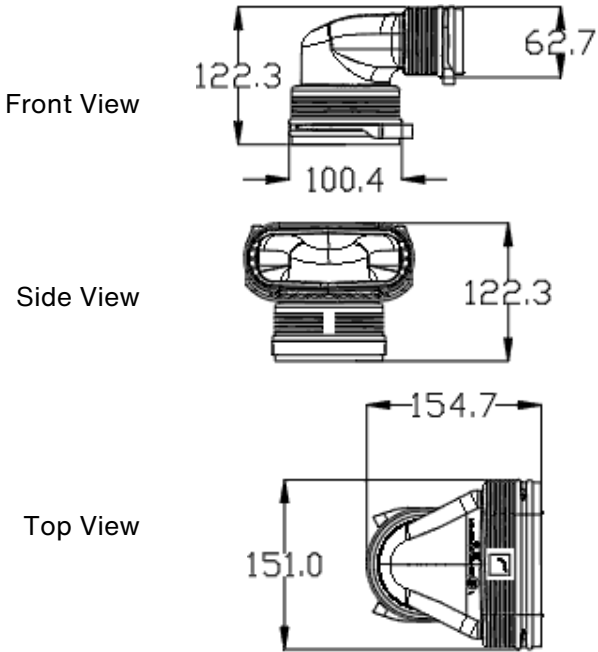
Converter:
Zehnder ComfoTube Flat 51 to Zehnder ComfoTube ø 90 mm, 90° convertor. The rigid bend can be used to convert Zehnder ComfoTube Flat 51 to Zehnder ComfoTube ø 90 mm and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately.

Technical Specification

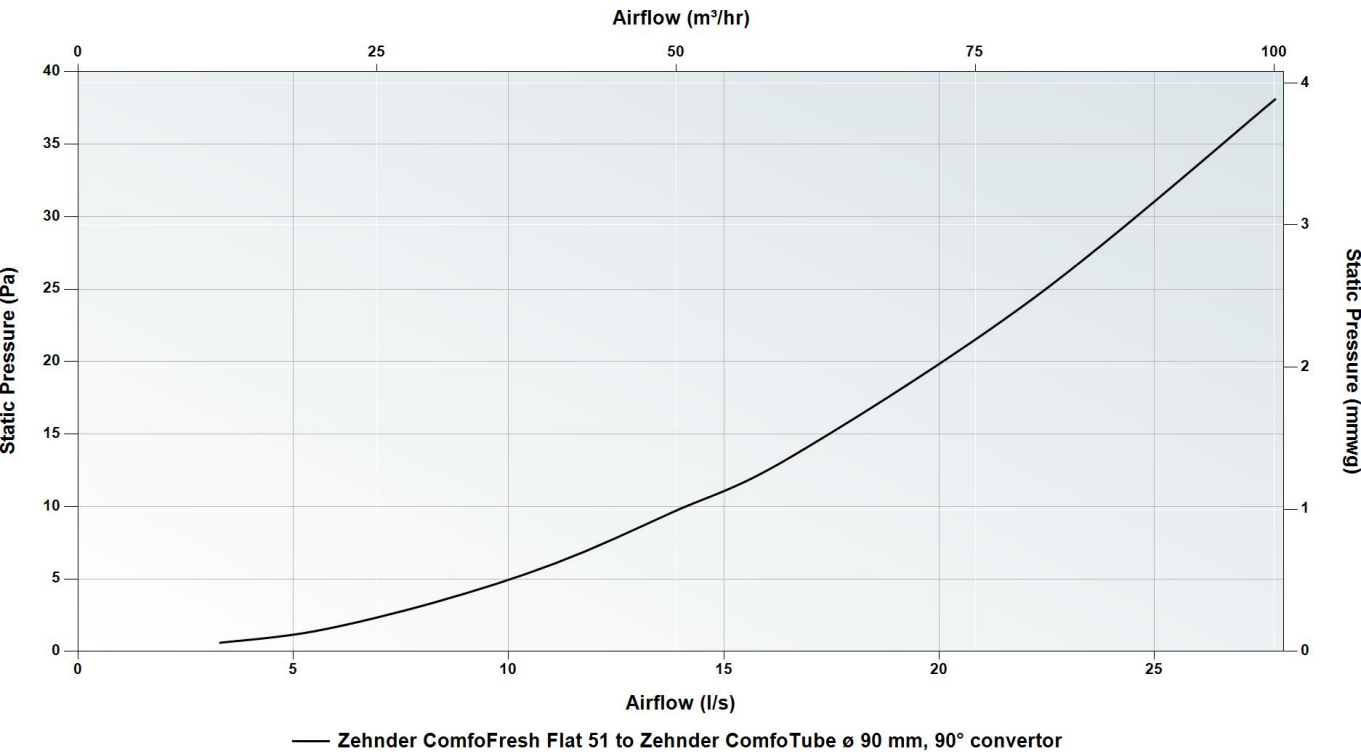
Height	122.3 mm
Width	154.7 mm
Depth	151 mm
Weight	0.19 kg
Material	High-density polyethylene (HDPE)



Dimensions



Pressure Curve



Zehnder ComfoTube Flat 51 to 2 x Zehnder ComfoTube ø 75 mm convertor

Article number: 990 322 206

Description

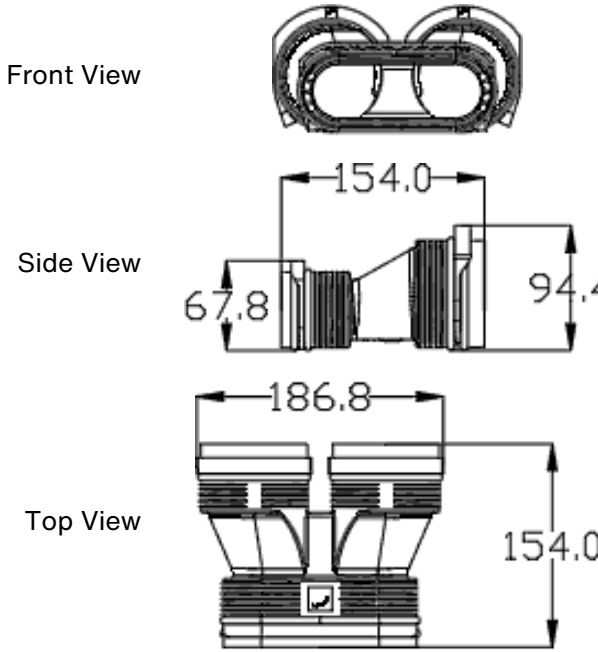
Converter:
Zehnder ComfoTube Flat 51 to 2 x Zehnder ComfoTube ø 75 mm convertor. The rigid connector can be used to convert Zehnder ComfoTube Flat 51 to 2 x Zehnder ComfoTube ø 75 mm and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately.

Technical Specification

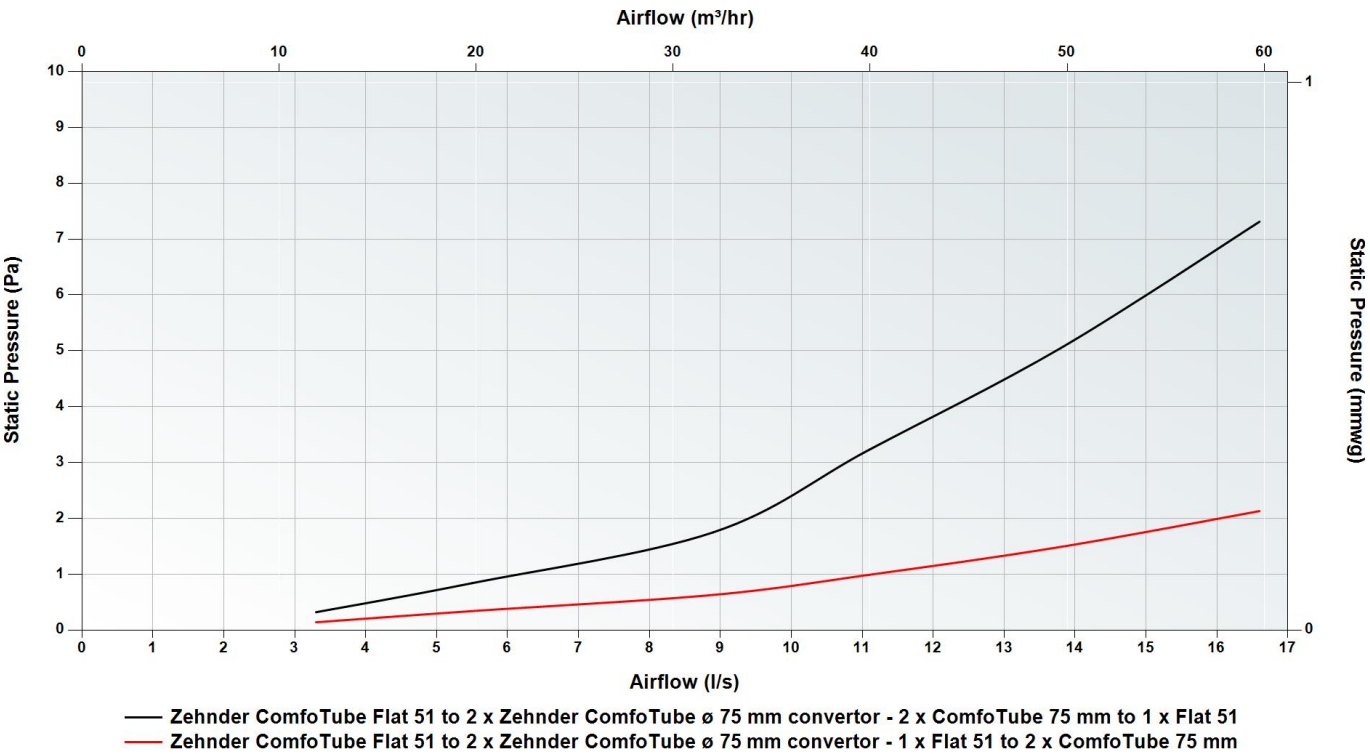
Height	94.4 mm
Width	154 mm
Depth	186.8 mm
Weight	0.17 kg
Material	High-density polyethylene (HDPE)
Recycled material content	25%



Dimensions



Pressure Curve



Zehnder ComfoTube Flat 51, pipe connector

Article number: 990 322 202

Description

Pipe connector:

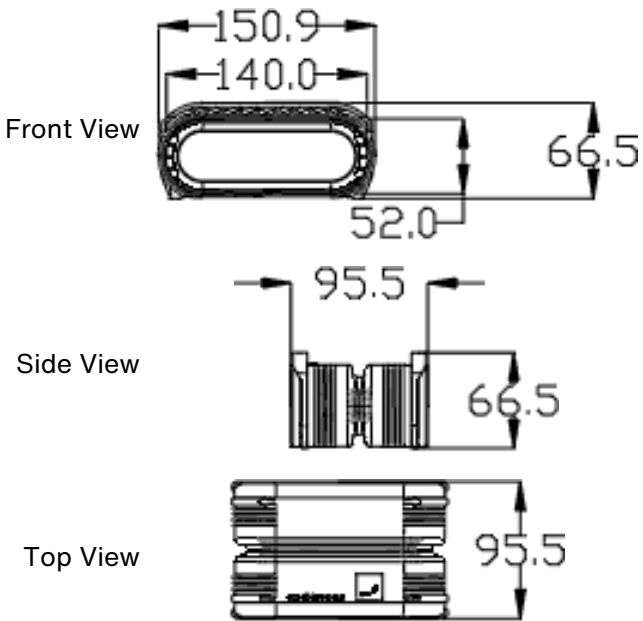
Zehnder ComfoTube Flat 51 pipe connector. The connector is used to join two lengths of Zehnder ComfoTube Flat 51 together to create an airtight and robust seal and comes complete with award winning RapidLock® connections to quickly form an air tight and robust seal by simply push-fitting the semi-rigid ductwork when combined with the o-ring seals sold separately.

Technical Specification

Length	95.5 mm
Outside diameter (W/H)	150.9 mm / 66.5 mm
Inside diameter (W/H)	140 mm / 52 mm
Weight	0.09 kg
Material	High-density polyethylene (HDPE)
Recycled material content	25%



Dimensions



Zehnder ComfoTube Flat 51, cross bracing floor insert for CLF grille housing

Article number: 990 322 095

Description

Cross brace:

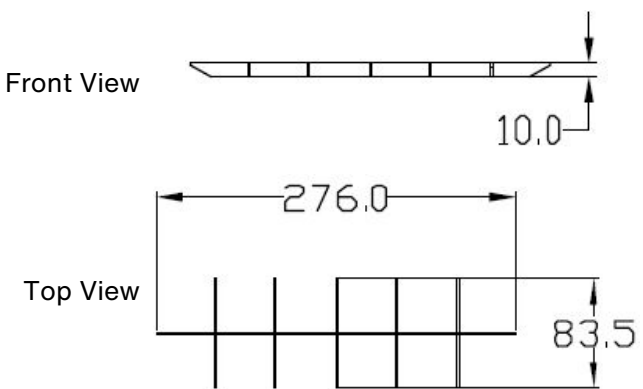
Zehnder ComfoTube Flat 51, cross bracing floor insert for CLF grille housing. The support is installed behind the 350 x 130 mm rectangular decorative grilles when installed in the floor to ensure strength and rigidity.

Technical Specification

Height	10 mm
Width	276 mm
Depth	83.5 mm
Weight	1 kg
Material	Steel



Dimensions



■ For use with #REF!

Zehnder ComfoTube Flat 51, end caps, 10 pieces

Article number: 990 328 252

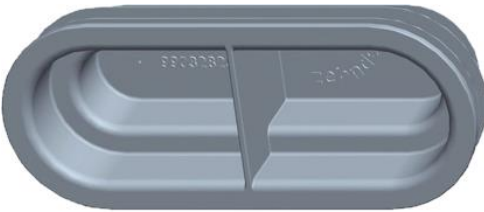
Description

End caps:

Zehnder ComfoTube Flat 51 end caps. The Flat 51 end caps can be placed within their corresponding Zehnder ComfoTube Flat 51 ductwork during the construction phase to prevent dust ingress. The end caps can also be placed directly into Flat 51 manifold to seal off any unwanted ports.

Technical Specification

Height	60 mm
Width	148 mm
Depth	42 mm
Weight	0.037 kg (each)
Material	Low-density polypropylene



Zehnder ComfoTube Flat 51, O-ring seal, 10 pieces

Article number: 990 328 352

Description

O-ring:

Zehnder ComfoTube Flat 51 oval O-ring seal. The lubricated oval O-ring is used to ensure an airtight connection is made with pipe connectors, grille housings, manifolds and connecting elements.

Technical Specification

Height	60 mm
Width	143.4 mm
Depth	4.45 mm
Weight	0.007 kg (each)
Material	EPDM (Ethylene Propylene Diene Monomer)





Zehnder ComfoTube Flat 51, locking slides, 20 pieces

Article number: 990 326 022

Description

Locking slide:
Zehnder ComfoTube Flat 51, locking slide. The locking slide is used to secure the Zehnder ComfoTube Flat 51 ductwork without the need for messy sealants.

Technical Specification

Weight	0.036 kg (each)
Material	Galvanised steel



Zehnder ComfoTube Flat 51, RapidLock slides, 10 pieces

Article number: 990 326 060

Description

Locking slide:
Zehnder ComfoTube Flat 51, RapidLock locking slide. The locking slide is used to secure the Zehnder ComfoTube Flat 51 ductwork without the need for messy sealants.

Technical Specification

Weight	0.011 kg (each)
Material	Acrylonitrile butadiene styrene (ABS)



Zehnder ComfoTube Flat 51, mounting bracket, pack of 10

Article number: 990 322 016

Description

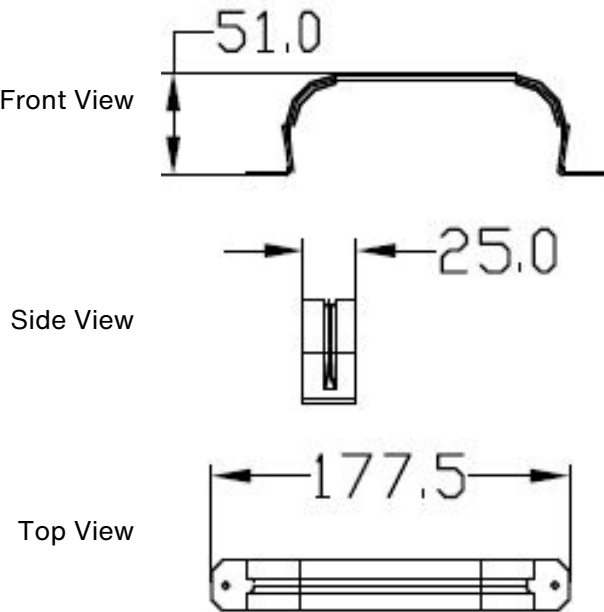
ComfoFresh Flat 51 mounting bracket:
Zehnder mounting bracket for ComfoFresh Flat 51. The mounting bracket can be used to securely fix the ductwork to the wall/floor/ceiling.

Technical Specification

Height	51 mm
Width	177.5 mm
Depth	25 mm
Weight	0.056 kg (each)
Material	Galvanised steel



Dimensions



Zehnder ComfoTube Flat 51, adjustable airflow regulator

Article number: 990 322 015

Description

Airflow regulator:

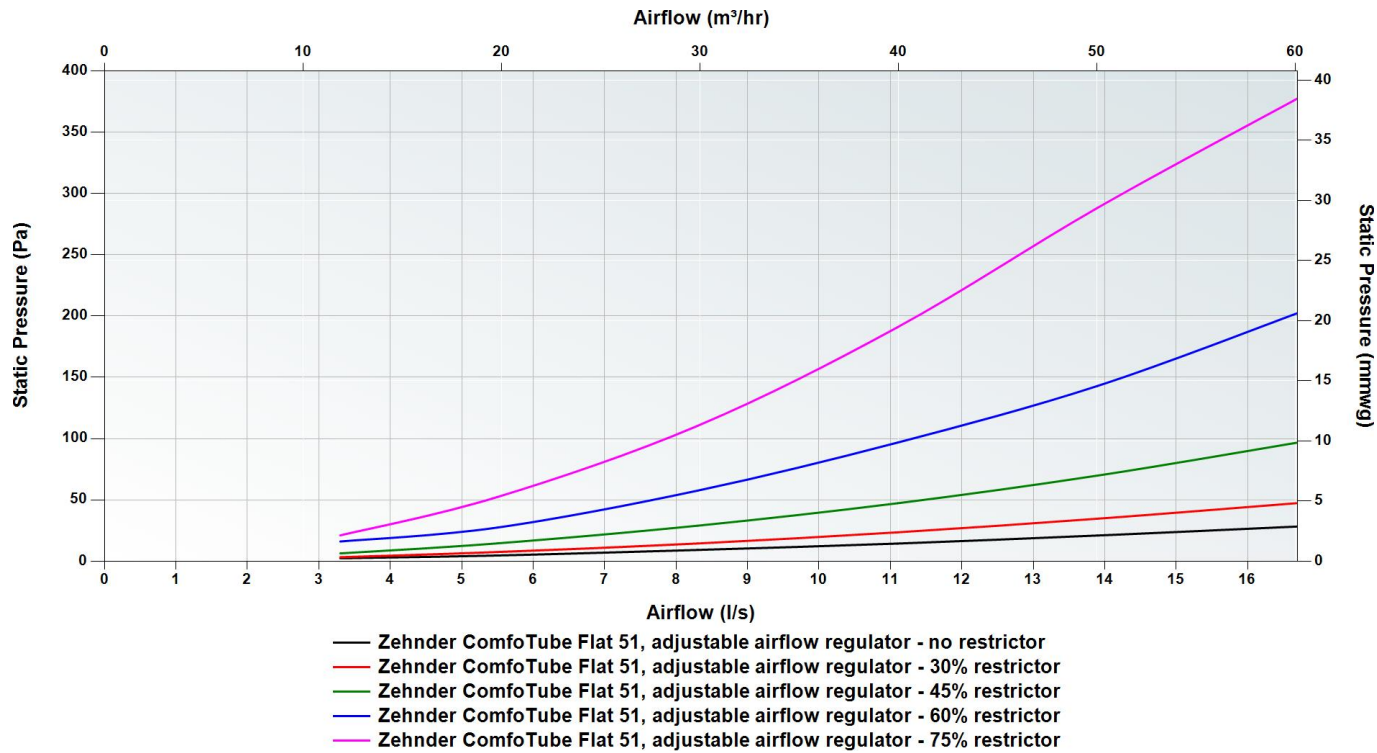
Zehnder ComfoTube Flat 51 adjustable airflow regulator. The airflow regulator has 5 different restriction settings to reduce the air volume silently. The airflow regulator can be used at the manifold or at the grille housing by inserting it into the Flat 51 ductwork.

Technical Specification

Height	41 mm
Width	129 mm
Depth	75 mm
Weight	0.06 kg
Material	Polypropylene



Pressure Curve



Filter for ø 125 mm extract air valve, ISO Coarse (G3), 10 Pieces

Article number: 990 320 032

Description

Grille housing filter:

Zehnder filter for ø 125 mm CLRF grille housing. The filter is perfect to remove particles before they enter the ductwork and is quick and easy to install without interfering with the installed parts.

Technical Specification

Length	165 mm
Diameter	125 mm
Height	15 mm
Filter grade	ISO Coarse (G3)
Weight	<0.032 kg each
Material	Polyester

■ For use with Square or circular decorative grilles, ø 125 mm supply/extract grilles and ComfoValve Luna valves



Filter for CLF housing, ISO Coarse (G3), 10 Pieces

Article number: 990 322 100

Description

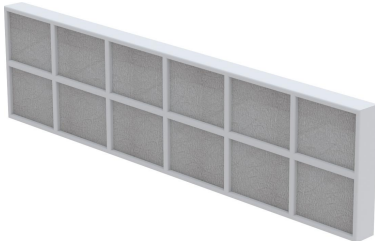
Grille housing filter:

Zehnder filter for CLF grille housing. The filter is perfect to remove particles before they enter the ductwork and is quick and easy to install without interfering with the installed parts.

Technical Specification

Height	15 mm
Width	294.5 mm
Depth	74.5 mm
Filter grade	ISO Coarse (G3)
Weight	<0.032 kg each
Material	Polyester

■ For use with Rectangular decorative grilles 350 x 130 mm





BIM/CAD Components

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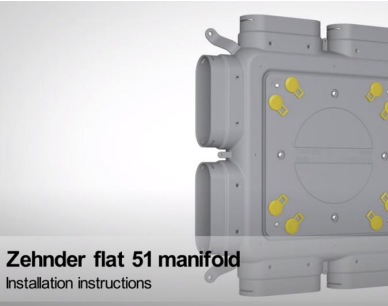
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Our Informational Videos



Watch our video on installation and functions of the Zehnder ComfoTube Flat 51 ductwork

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Watch our video on installation and functions of the Zehnder ComfoTube Flat 51 manifolds

TO WATCH OUR VIDEO

CLICK HERE



Watch our video on how to change the Zehnder filter.

TO WATCH OUR VIDEO

CLICK HERE



Consultant Specification

Specification

The semi-rigid ductwork shall be dual wall constructed of high-quality food-grade plastic PE. It shall have a fire rating in accordance with EN 13501-1 of E. It shall have an operating temperature range of -25 to +40 °C and not be designed to exceed flowrates of 13 l/s.

The ductwork shall have a hygiene certificate and be accredited for use in SAP Appendix Q.

The ductwork shall be manufactured by Zehnder.