

# Zehnder ComfoTube Therm 90 mm

Insulated semi-rigid ductwork

Product data sheet always the best climate



### ComfoTube Therm 90 mm

The Zehnder ComfoTube Therm 90 mm is a high performance insulated semi-rigid ductwork ideal for residential applications. The attenuation and thermal properties make it the ideal ductwork for use with the Zehnder range of climate conditioning devices such as ComfoClime and ComfoPost. The low profile manifolds and ductwork mean it's perfect for use in small ceiling voids and is strong enough to even be set into the building concrete structure. 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. The O-rings and locking slides also help to prevent the ductwork being disconnected during first fix and maintain an airtight seal. End caps are also provided to prevent dust ingress during first fix to maintain a hygienic system.

A variety of manifolds, insulated EPP connections, ancillaries and terminations can be used with the ductwork in addition to a wide range of decorative grilles. The ductwork can also be used with the unique modular ComfoWell manifolds with integrated attenuators and filters.



### **Key Features**

- Low temperature loss and prevention of condensation when transporting tempered air
- The non-glued insulation offers flexibility during insulation and cutting
- No thermal bridges thanks to the insulation being optimally sized to fit against the connectors
- Wide range of EPP insulated connectors
- Easy and quick to install
- Airtight
- High-quality food-grade plastic (PE)
- Meets the minimum standard for PCDB accreditation
- Low pressure losses
- Easy to clean
- Suitable for installation in the building concrete structure
- Crush resistant a ring stiffness of 7.9 kN/m²
- Corrosion resistant
- Lightweight and easy to handle
- No sealant or tape required
- Wide range of manifolds and grille terminations
- Suitable for use with the unique modular ComfoWell manifolds

Article Numbers	
Description	Product Code
Ductwork Zehnder ComfoTube Therm insulated ø 90mm, 20m roll	990 328 030
EPP ancillaries Zehnder ComfoFit Therm insulated ø 90mm, pipe connector	990 430 855
Zehnder ComfoFit Therm insulated ø 90mm, 90° bend	990 430 856
Zehnder ComfoFit Therm insulated Flat 51 to Zehnder ComfoTube Therm insulated ø 90mm convertor	990 430 857
Zehnder ComfoFit Therm insulated Flat 51 to Zehnder ComfoTube Therm insulated ø 90mm convertor with 90° bend	990 430 852

■ Decorative radiators ■ Comfortable indoor ventilation ■ Heating and cooling ceilings ■ Clean air Solutions

Description	Product Co
CLD Grille housing	
Grille housing CLD-P 90 frontal sleeve, height 115 mm, connects 1 x ø 90 mm Zehnder ComfoTube	990 320 845
Grille housing CLD-P 90 lateral sleeve, height 115 mm, connects 1 x ø 90 mm Zehnder ComfoTube	990 320 846
Grille housing CLD-P 90 frontal sleeve, height 140 mm, connects 1 x ø 90 mm Zehnder ComfoTube	990 320 851
Grille housing CLD-P 90 lateral sleeve, height 140 mm, connects 1 x ø 90 mm Zehnder ComfoTube	990 320 852
TVA Grille housing Grille housing TVA-P 90 connects 1 x ø 125 mm valve to 2 x ø 90 mm Zehnder ComfoTube, L300 mm	990 320 725
Grille housing TVA-P 90 connects 1 x ø 125 mm valve to 1 x ø 90 mm Zehnder ComfoTube, L64 mm	990 326 122
Grille housing TVA-P 90 connects 1 x ø 125 mm valve to 1 x ø 90 mm Zehnder ComfoTube, L300 mm	990 326 126
CSB-P Grille housing Rectangular grille housing CSB-P 400 connects 1 x Lamina/Bilamina/ComfoGrid 400 to 1 x ø 90 mm, 2 x ø 75 mm Zehnder ComfoTube	990 321 745
Rectangular grille housing CSB-P 600 connects 1 x Lamina/Bilamina/ComfoGrid 600 to 1 x ø 110 mm, 2 x ø 90 mm Zehnder ComfoTube	990 321 746
	990 320 062
Renoventil Grille housing Renoventil housing, for Ø 90 mm, length 400 mm  Ancillaries	990 320 062
Renoventil housing, for ø 90 mm, length 400 mm	990 320 062 988 320 031
Renoventil housing, for ø 90 mm, length 400 mm  Ancillaries	
Renoventil housing, for ø 90 mm, length 400 mm  Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length	988 320 031
Renoventil housing, for ø 90 mm, length 400 mm  Ancillaries  Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length  Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length	988 320 031 990 320 027
Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces Filter for CLD housing, ISO Coarse >45% (G3), 10 Pieces	988 320 031 990 320 027 990 320 032
Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces Filter for CLD housing, ISO Coarse >45% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 400, ISO Coarse >55% (G3), 10 Pieces	988 320 031 990 320 027 990 320 032 990 320 573
Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces Filter for CLD housing, ISO Coarse >45% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 400, ISO Coarse >55% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 600, ISO Coarse >55% (G3), 10 Pieces	988 320 031 990 320 027 990 320 032 990 320 573 990 321 768
Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces Filter for CLD housing, ISO Coarse >45% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 400, ISO Coarse >55% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 600, ISO Coarse >55% (G3), 10 Pieces Zehnder ComfoTube ø 90 mm, manifold/grille housing spigot reducer, ø 90 mm to ø 75 mm	988 320 031 990 320 027 990 320 032 990 320 573 990 321 768 990 321 769
Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces Filter for CLD housing, ISO Coarse >45% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 400, ISO Coarse >55% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 600, ISO Coarse >55% (G3), 10 Pieces Zehnder ComfoTube ø 90 mm, manifold/grille housing spigot reducer, ø 90 mm to ø 75 mm Zehnder ComfoTube ø 90 mm, locking slides, 10 pieces	988 320 031 990 320 027 990 320 032 990 320 573 990 321 768 990 321 769 990 322 010
Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces Filter for CLD housing, ISO Coarse >45% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 400, ISO Coarse >55% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 600, ISO Coarse >55% (G3), 10 Pieces Zehnder ComfoTube ø 90 mm, manifold/grille housing spigot reducer, ø 90 mm to ø 75 mm Zehnder ComfoTube ø 90 mm, locking slides, 10 pieces Grille housing TVA-P 75/90 mounting set for concrete application	988 320 031 990 320 027 990 320 032 990 320 573 990 321 768 990 321 769 990 322 010 990 326 025
Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces Filter for CLD housing, ISO Coarse >45% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 400, ISO Coarse >55% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 600, ISO Coarse >55% (G3), 10 Pieces Zehnder ComfoTube ø 90 mm, manifold/grille housing spigot reducer, ø 90 mm to ø 75 mm Zehnder ComfoTube ø 90 mm, locking slides, 10 pieces Grille housing TVA-P 75/90 mounting set for concrete application 90° metal bracket for max 2 Zehnder ComfoTube	988 320 031 990 320 027 990 320 032 990 320 573 990 321 768 990 321 769 990 322 010 990 326 025 990 326 127
Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces Filter for CLD housing, ISO Coarse >45% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 400, ISO Coarse >55% (G3), 10 Pieces Filter for rectangular grille housing CSB-P 600, ISO Coarse >55% (G3), 10 Pieces Zehnder ComfoTube ø 90 mm, manifold/grille housing spigot reducer, ø 90 mm to ø 75 mm Zehnder ComfoTube ø 90 mm, locking slides, 10 pieces Grille housing TVA-P 75/90 mounting set for concrete application 90° metal bracket for max 2 Zehnder ComfoTube Fixing bracket for CSB-P 400/600 grille housing, 2 pieces	988 320 031 990 320 027 990 320 032 990 320 573 990 321 768 990 321 769 990 322 010 990 326 025 990 326 127 990 327 109
Ancillaries Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces	988 320 031 990 320 027 990 320 032 990 320 573 990 321 768 990 321 769 990 322 010 990 326 025 990 326 127 990 327 109 988 321 646

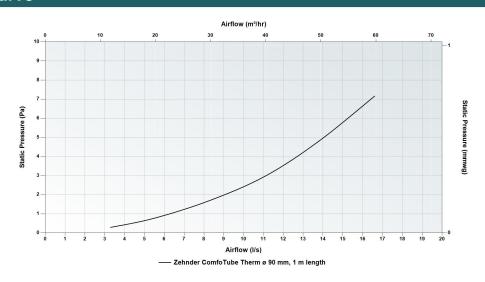
### Zehnder ComfoTube Therm insulated ø 90mm, 20m roll

Article number: 990 328 030



Technical Specification	
Material - Ductwork	High-quality food-grade plastic polyethylene (PE)
Material - Insulation	Cellular rubber
Operating temperature range	-25 to +60°C
Thermal conductivity at 0°C	0.033 W/mK
Thermal conductivity at 20°C	0.035 W/mK
10 m Temperature loss @ 40 m³hr (40/20°C)	7.1 K
10 m Temperature loss @ 40 m³hr (16/25°C)	-5.3 K
Maximum recommended air volume per tube	13.8 l/s (50 m³/h)
Minimum bending radius	220 mm
Buoyancy in concrete	190 N/m
Outside diameter	108 mm
Inside diameter	74 mm
Insulation thickness	9 mm
Weight per m	0.57 kg/m
Fire rating in accordance with EN 13501-1 - Ductwork	E
Fire rating in accordance with EN 13501-1 - Insulation	BL s2, d0
Fire rating in accordance with EN 13501-1 - EPP ancillaries	Е
Ring stiffness	7.9 kN/m <sup>2</sup>
BS EN ISO 9969:2016 crushability compliant	Yes
Coil diameter (20 m roll)	1200 mm
Coil height (20 m roll)	330 mm

### **Pressure Curve**



### Sound Data

	Octave Band (Hz) Insertion Loss, dB					
	125	250	500	1000	2000	4000
Zehnder ComfoTube ø 90 mm, 1 m length	0.4	0.5	0.3	0.3	0.4	0.7

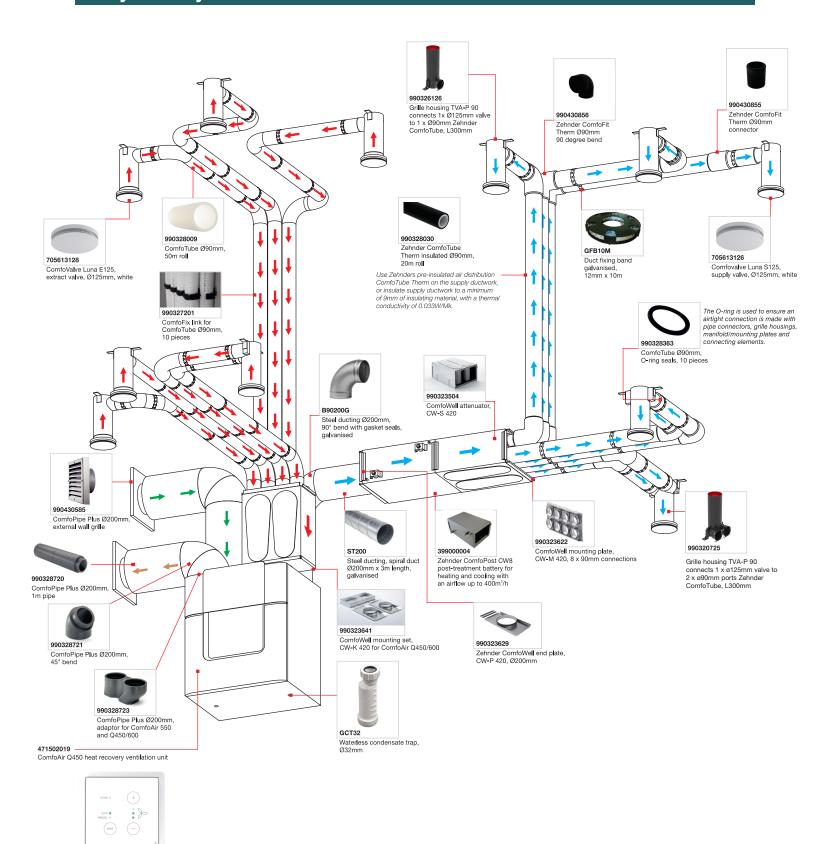
Acoustic performance measured according to EN ISO 7235 (pink noise)

■ For use with Zehnder ComfoWell, Manifolds and Grille housings

■ Decorative radiators ■ Comfortable indoor ventilation ■ Heating and cooling ceilings ■ Clean air Solutions

### 3D System Layout

ComfoSwitch C67



### Zehnder ComfoFit Therm insulated ø 90mm, pipe connector

Article number: 990 430 855

### Description

### Pipe connector:

Zehnder ComfoTube Therm ø 90 mm, insulated pipe connector. The connector is used to join two lengths of Zehnder ComfoTube Therm ø 90 mm together to create an airtight and robust seal using the supplied O-rings. The insulation must be cut straight to ensure no thermal bridging once push fit into the connector.

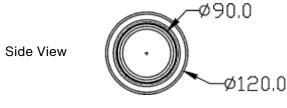
### **Technical Specification**

Length	140 mm
Diameter ID	90 mm
Diameter OD	120 mm
Weight	0.043 kg
Material	Expanded polypropylene (EPP)
	- · · · · · · · · · · · · · · · · · · ·

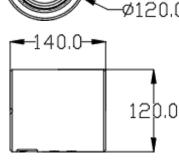


### **Dimensions**

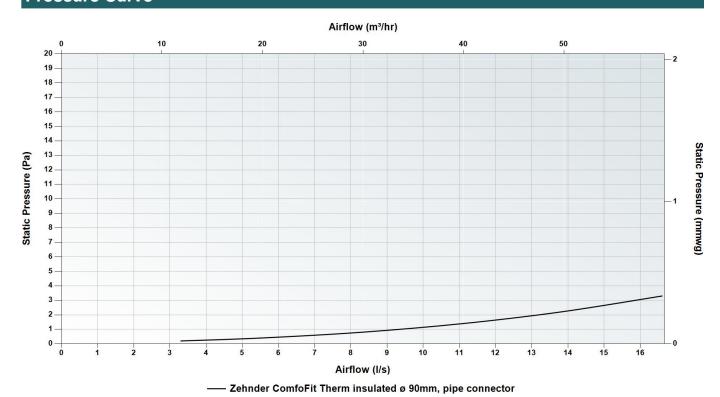




Top View



### **Pressure Curve**



### Zehnder ComfoFit Therm insulated ø 90mm, 90° bend

Article number: 990 430 856

### **Description**

### Rigid 90° bend:

Zehnder ComfoTube Therm ø 90 mm, insulated 90° bend. The rigid bend can be placed between two lengths of Zehnder ComfoTube Therm ø 90 mm to create an airtight and robust seal using the supplied O-rings. The insulation must be cut straight to ensure no thermal bridging once push fit into the connector.

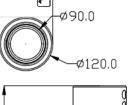
### **Technical Specification**

Height	182 mm
Width	120 mm
Depth	182 mm
Weight	0.077 kg
Material	Expanded polypropylene (EPP)



### **Dimensions**

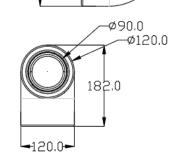
Front View



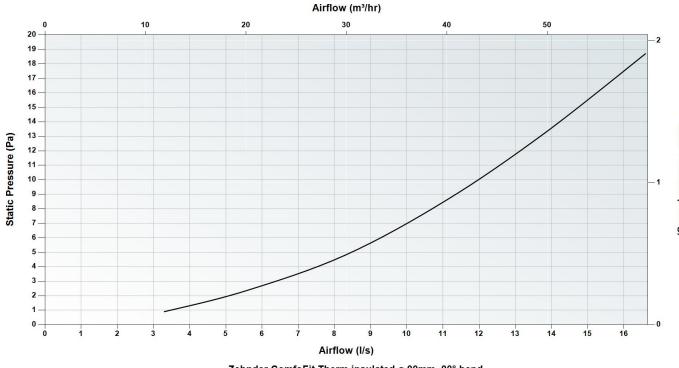
Side View

ew 182.0

Top View



### **Pressure Curve**



--- Zehnder ComfoFit Therm insulated ø 90mm, 90° bend

### Zehnder ComfoFit Therm insulated Flat 51 to Zehnder ComfoTube Therm insulated ø 90mm convertor

Article number: 990 430 857

### Description

#### **Converter:**

Zehnder ComfoTube Therm Flat 51 to Zehnder ComfoTube Therm ø 90 mm convertor. The rigid connector can be used to convert Zehnder ComfoTube Therm Flat 51 to Zehnder ComfoTube Therm ø 90 mm to create an airtight and robust seal using the supplied O-rings. The insulation must be cut straight to ensure no thermal bridging once push fit into the connector.

### **Technical Specification**

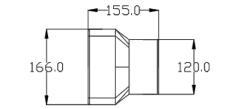
Height	120 mm
Width	166 mm
Depth	155 mm
Weight	0.06 kg
Material	Expanded polypropylene (EPP)



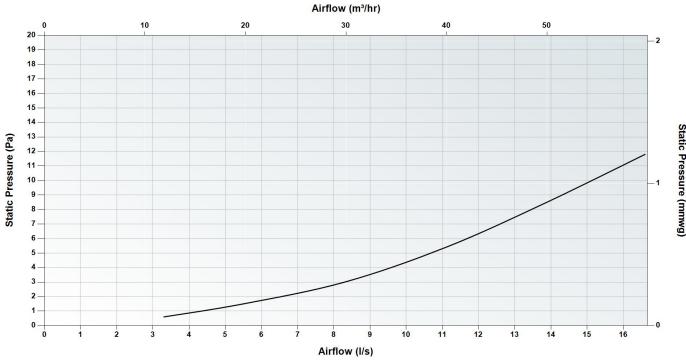








### **Pressure Curve**



Top View

— Zehnder ComfoFit Therm insulated Flat 51 to Zehnder ComfoTube Therm insulated ø 90mm convertor

■ Decorative radiators ■ Comfortable indoor ventilation ■ Heating and cooling ceilings ■ Clean air Solutions

### Zehnder ComfoFit Therm insulated Flat 51 to Zehnder ComfoTube Therm insulated Ø 90mm convertor with 90° bend

Article number: 990 430 852

### Description

### **Converter:**

Zehnder ComfoTube Therm Flat 51 to Zehnder ComfoTube Therm ø 90 mm, 90° convertor. The rigid bend can be used to convert Zehnder ComfoTube Therm Flat 51 to Zehnder ComfoTube Therm ø 90 mm to create an airtight and robust seal using the supplied O-rings. The insulation must be cut straight to ensure no thermal bridging once push fit into the connector.

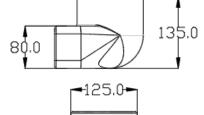
### **Technical Specification**

Height	135 mm
Width	166 mm
Depth	167.5 mm
Weight	0.079 kg
Material	Expanded polypropylene (EPP)



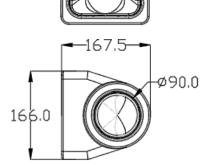
### **Dimensions**

Front View

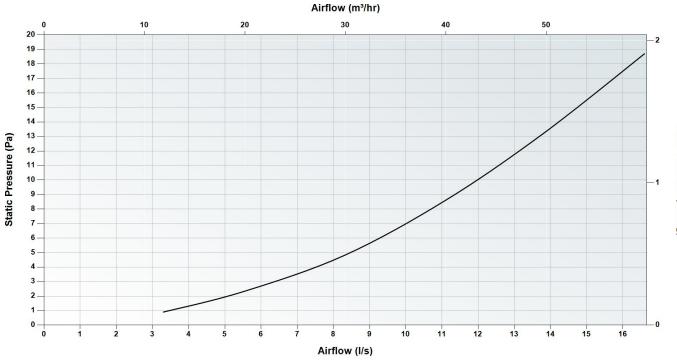








### **Pressure Curve**



— Zehnder ComfoFit Therm insulated Flat 51 to Zehnder ComfoTube Therm insulated Ø 90mm convertor with 90° bend

### Grille housing CLD-P 90 frontal sleeve, height 115 mm, connects 1 x ø 90 mm Zehnder ComfoTube

Article number: 990 320 845

### Description

### **CLD Grille housing:**

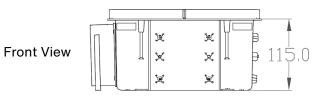
Rectangular frontal and lateral sleeve entry grille housings. The cleanable rectangular CLD grille housing is suitable for installation in all types of wall/floor/ceiling depending on the CLD height and comes complete with locking slides. The rectangular decorative grilles (300 x 200 mm and 260 x 160 mm) can be surface or flush-mounted dependent on preference. A Zehnder ComfoFresh filter can be used to remove particulates.

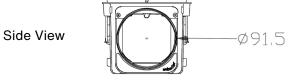
### **Technical Specification**

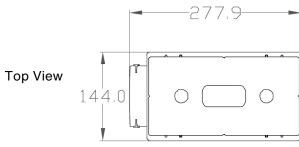
Height	115 mm
Width	277.9 mm
Depth	144 mm
Weight	<0.8 kg
Material	High-density polyethylene (HDPE)



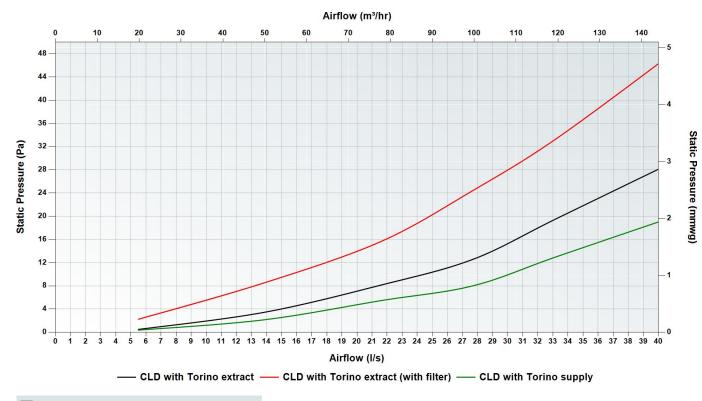
### **Dimensions**







### **Pressure Curve**



### For use with CLD decorative grilles

### Grille housing CLD-P 90 lateral sleeve, height 115 mm, connects 1 x ø 90 mm Zehnder ComfoTube

Article number: 990 320 846

#### **Description**

### **CLD Grille housing:**

Rectangular frontal and lateral sleeve entry grille housings. The cleanable rectangular CLD grille housing is suitable for installation in all types of wall/floor/ceiling depending on the CLD height and comes complete with locking slides. The rectangular decorative grilles (300 x 200 mm and 260 x 160 mm) can be surface or flush-mounted dependent on preference. A Zehnder ComfoFresh filter can be used to remove particulates.

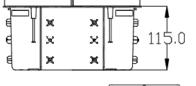
### **Technical Specification**

Height	115 mm
Width	250 mm
Depth	171.8 mm
Weight	<0.8 kg
Material	High-density polyethylene (HDPE)

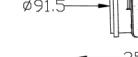


### **Dimensions**

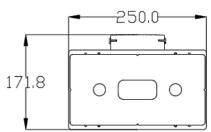
Front View



Side View



Top View



### For use with CLD decorative grilles

### Grille housing CLD-P 90 frontal sleeve, height 140 mm, connects 1 x ø 90 mm Zehnder ComfoTube

Article number: 990 320 851

#### **Description**

### **CLD Grille housing:**

Rectangular frontal and lateral sleeve entry grille housings. The cleanable rectangular CLD grille housing is suitable for installation in all types of wall/floor/ceiling depending on the CLD height and comes complete with locking slides. The rectangular decorative grilles (300 x 200 mm and 260 x 160 mm) can be surface or flush-mounted dependent on preference. A Zehnder ComfoFresh filter can be used to remove particulates.

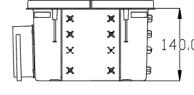
#### **Technical Specification**

Height	140 mm
Width	277.2 mm
Depth	144 mm
Weight	<0.8 kg
Material	High-density polyethylene (HDPE)

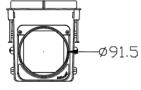


### **Dimensions**

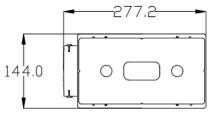
Front View



Side View



Top View



### For use with CLD decorative grilles

### Grille housing CLD-P 90 lateral sleeve, height 140 mm, connects 1 x ø 90 mm Zehnder ComfoTube

Article number: 990 320 852

### Description

### **CLD Grille housing:**

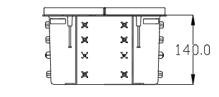
Rectangular frontal and lateral sleeve entry grille housings. The cleanable rectangular CLD grille housing is suitable for installation in all types of wall/floor/ceiling depending on the CLD height and comes complete with locking slides. The rectangular decorative grilles (300 x 200 mm and 260 x 160 mm) can be surface or flush-mounted dependent on preference. A Zehnder ComfoFresh filter can be used to remove particulates.

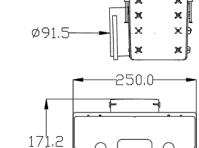
### **Technical Specification**

140 mm
250 mm
171.2 mm
<0.8 kg
High-density polyethylene (HDPE)



### **Dimensions**





## Top View

Front View

Side View

Front View

Side View

### ■ For use with CLD decorative grilles

### Grille housing TVA-P 90 connects 1 x ø 125 mm valve to 2 x ø 90 mm Zehnder ComfoTube, L300 mm

Article number: 990 320 725

#### **Description**

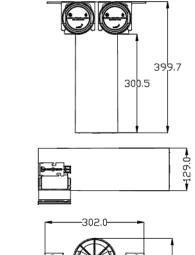
TVA Grille housing Circular grille housing. The cleanable circular TVA grille housing is suitable for installation in all types of wall/ceiling depending on the height and comes complete with locking slides. The square (160 x 160 mm) and circular decorative grilles can be used in addition to any standard ø 125 mm valve. A Zehnder ComfoFresh filter can be used to remove particulates.

### **Technical Specification**

Height	399.7 mm
Spigot length	300.5 mm
Width	302 mm
Depth	~170 mm
Weight	0.716 kg
Material	High-density polyethylene (HDPE)



### **Dimensions**



Top View

### For use with TVA decorative grilles, ø 125 mm supply/extract grilles and ComfoValve Luna

### Grille housing TVA-P 90 connects 1 x ø 125 mm valve to 1 x ø 90 mm Zehnder ComfoTube, L64 mm

Article number: 990 326 122

### **Description**

TVA Grille housing Circular grille housing. The cleanable circular TVA grille housing is suitable for installation in all types of wall/ceiling depending on the height and comes complete with locking slides. 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.

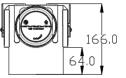
### **Technical Specification**

Height	166 mm
Spigot length	64 mm
Width	161.2 mm
Depth	~170 mm
Weight	<0.5 kg
Material	High-density polyethylene (HDPE)

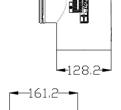


### **Dimensions**

Front View







Top View

### For use with TVA decorative grilles, ø 125 mm supply/extract grilles and ComfoValve Luna

### Grille housing TVA-P 90 connects 1 x ø 125 mm valve to 1 x ø 90 mm Zehnder ComfoTube, L300 mm

Article number: 990 326 126

### **Description**

TVA Grille housing Circular grille housing. The cleanable circular TVA grille housing is suitable for installation in all types of wall/ceiling depending on the height and comes complete with locking slides. 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.

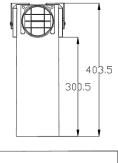
### **Technical Specification**

Height	403.5 mm
Spigot length	300.5 mm
Width	161.2 mm
Depth	~170 mm
Weight	<0.5 kg
Material	High-density polyethylene (HDPE)
	·

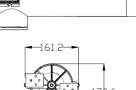


### **Dimensions**

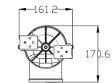
Front View



Side View



Top View



For use with TVA decorative grilles, ø 125 mm supply/extract grilles and ComfoValve Luna

#### Rectangular grille housing CSB-P 400 connects 1 x Lamina/Bilamina/ComfoGrid 400 to 1 x Ø 90 mm, 2 x Ø 75 mm Zehnder ComfoTube

Article number: 990 321 745

#### **Description**

Lamina/Bilamina/ComfoGrid Linea 400 slot diffuser housing Rectangular lateral sleeve entry grille housing. The cleanable rectangular slot diffuser housing is suitable for installation in all types of wall/ceiling, including within concrete, depending on the height, and comes complete with locking slides and end caps. For use with 988 321 646 fixing bracket for mounting within wall/ceiling void. The rectangular lamina / bilamina slot diffuser can be used when used with the 20/40 mm extension pins (990 320 687 / 990 320 688 / 990 320 699) and offer adjustable directional air supply. Can be used with the 990 322 010 90 mm to 75 mm reducer to convert to a 3 port 75 mm housing. The ComfoGrid Linea 400 range of slot diffusers can also be used without the need for the extension pins.

### **Technical Specification**

Height	182 mm
Width	439 mm
Depth	115.4 mm
Weight	1.05 kg
Material	High-density polyethylene (HDPE)



Front View

**Dimensions** 

\_ø91.0

For use with Lamina/Bilamina/ComfoGrid Linea 400 slot diffusers



### Rectangular grille housing CSB-P 600 connects 1 x Lamina/Bilamina/ComfoGrid 600 to 1 x ø 110 mm, 2 x ø 90 mm Zehnder ComfoTube

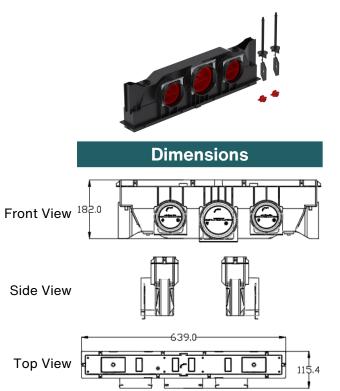
Article number: 990 321 746

#### **Description**

Lamina/Bilamina/ComfoGrid Linea 600 slot diffuser housing Rectangular lateral sleeve entry grille housing. The cleanable rectangular slot diffuser housing is suitable for installation in all types of wall/ceiling, including within concrete, depending on the height, and comes complete with locking slides and end caps. For use with 988 321 646 fixing bracket for mounting within wall/ceiling void. The rectangular lamina / bilamina slot diffuser can be used when used with the 20/40 mm extension pins (990 320 687 / 990 320 688 / 990 320 699) and offer adjustable directional air supply. Can be used with the 90 mm to 75 mm reducer (990 322 010) to convert to a 2 port 75 mm housing. The ComfoGrid Linea 600 range of slot diffusers can also be used without the need for the extension pins.

### **Technical Specification**

Height	182 mm
Width	639 mm
Depth	115.4 mm
Weight	1.12 kg
Material	High-density polyethylene (HDPE)



■ For use with Lamina/Bilamina/ComfoGrid Linea 600 slot diffusers

### Renoventil housing, for ø 90 mm, length 400 mm

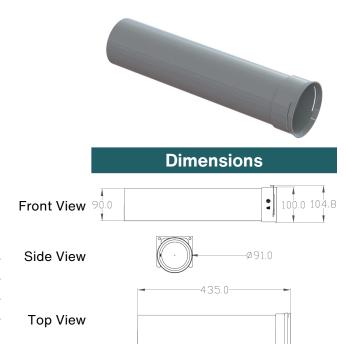
Article number: 990 320 062

### Description

Renoventil Grille housing Circular grille housing. 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 O-ring and locking slide

### **Technical Specification**

Length	435 mm
Diameter	90-100 mm
Weight	0.28 kg
Material	High-density polyethylene (HDPE)



■ For use with Renoventil supply/extract grilles

### Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 30 mm length

Article number: 988 320 031

### **Description**

### Airflow regulator:

Zehnder ComfoTube 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 box or at the grille housing by inserting it into the ComfoTube ductwork.

### **Technical Specification**

Length	30 mm
Diameter	74 mm
Weight	<0.06 kg
Material	Polypropylene



■ Decorative radiators ■ Comfortable indoor ventilation ■ Heating and cooling ceilings ■ Clean air Solutions

### Zehnder ComfoTube ø 90 mm, adjustable airflow regulator, 75 mm length

Article number: 990 320 027

### **Description**

### Airflow regulator:

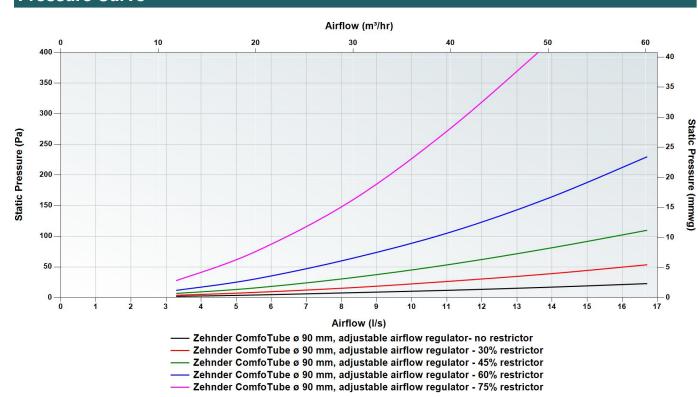
Zehnder ComfoTube adjustable airflow regulator. The airflow regulator has 5 different restriction settings to reduce the air volume silently. The airflow regulator can be used at the manifold box or at the grille housing by inserting it into the ComfoTube ductwork.

### **Technical Specification**

Length	75 mm
Diameter	74 mm
Weight	<0.06 kg
Material	Polypropylene



### **Pressure Curve**



### Filter for ø 125 mm extract air valve, ISO Coarse >45% (G3), 10 Pieces

Article number: 990 320 032

### Description

### **Grille housing filter:**

Zehnder ComfoFresh filter for ø 125 mm TVA 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	9 mm
Filter grade	ISO Coarse <45% (G3)
Weight	<0.018 kg each
Material	Polyester

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

### Filter for CLD housing, ISO Coarse >45% (G3), 10 Pieces

Article number: 990 320 573

### **Description**

### Grille housing filter:

Zehnder ComfoFresh filter for ø 125 mm TVA and CLD 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	9 mm
Width	113 mm
Depth	174 mm
Filter grade	ISO Coarse <45% (G3)
Weight	<0.018 kg each
Material	Polyester

■ For use with Rectangular decorative grilles for CLD 260 x 160 mm and 300 x 200 mm



#### ■ Decorative radiators ■ Comfortable indoor ventilation ■ Heating and cooling ceilings ■ Clean air Solutions

### Filter for rectangular grille housing CSB-P 400, ISO Coarse >55% (G3), 10 Pieces

Article number: 990 321 768

### Description

### **Grille housing filter:**

Zehnder ComfoFresh filter for CSB-P 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	32 mm
Width	342 mm
Depth	55 mm
Filter grade	ISO Coarse <55% (G3)
Weight	<0.038 kg each
Material	Polyester

■ For use with ComfoGrid Linea 400 slot diffusers

### Filter for rectangular grille housing CSB-P 600, ISO Coarse >55% (G3), 10 Pieces

Article number: 990 321 769

### **Description**

### Grille housing filter:

Zehnder ComfoFresh filter for CSB-P 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**

32 mm
542 mm
55 mm
ISO Coarse <55% (G3)
<0.052 kg each
Polyester

For use with ComfoGrid Linea 600 slot diffusers





### Zehnder ComfoTube ø 90 mm, manifold/grille housing spigot reducer, ø 90 mm to ø 75 mm

Article number: 990 322 010

### **Description**

### **Converter:**

Zehnder ComfoTube ø 90 mm to Zehnder ComfoTube ø 75 mm convertor. The rigid connector can be placed into a Zehnder ComfoTube ø 90 mm manifold or grille housing spigot to convert it to Zehnder ComfoTube ø 75 mm and comes complete with locking slides and O-rings. Ideal for use with the CSB-P to convert 90 mm spigots for use with 75 mm ductwork.

### **Technical Specification**

Length	50 mm
Diameter	90.1 mm
Weight	0.12 kg
Material	High-density polyethylene (HDPE)



### Zehnder ComfoTube ø 90 mm, locking slides, 10 pieces

Article number: 990 326 025

### **Description**

### Locking slide:

Zehnder ComfoTube ø 90 mm, locking slide. The locking slide is used to secure the Zehnder ComfoTube ø 90 mm ductwork without the need for messy sealants.

### **Technical Specification**

Weight	0.042 kg (each)	
Material	Galvanised steel	

■ For use with Zehnder ComfoTube ø 90 mm ComfoWell / Grille housings



■ Decorative radiators ■ Comfortable indoor ventilation ■ Heating and cooling ceilings ■ Clean air Solutions

### Grille housing TVA-P mounting set for concrete application

Article number: 990 326 127

### Description

### Mounting set:

Grille housing TVA-P 75/90 mounting set for concrete application. Used in conjunction with 64 mm versions of the TVA-P to ensure quick installation to wooden framework prior to concrete being poured.

### **Technical Specification**

Weight	0.08 kg
Material	Polymer

■ For use with TVA-P L64 mm versions



### 90° metal bracket for max 2 Zehnder ComfoTube

Article number: 990 327 109

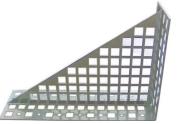
### Description

#### Metal bracket:

90° metal bracket for max 2 Zehnder ComfoTube. The mounting aid is to enable a 90 degree angle to be formed on Zehnder ComfoTube Ø 75 mm or Zehnder ComfoTube Ø 90 mm when attached to a horizontal surface.

### Technical Specification

Height	200 mm
Width	300 mm
Depth	100 mm
Weight	0.57 kg
Material	Galvanised steel



### Fixing bracket for CSB-P 400/600 grille housing, 2 pieces

Article number: 988 321 646

### Description

### Fixing bracket:

Zehnder Fixing bracket for CSB-P 400/600 grille housing. The fixing bracket is mounted to either side of the CSB-P to enable secure fixing to the wall or floor and comes complete with screws to fix to the CSB-P. These are not supplied as standard with the CSB-P.

### **Technical Specification**

Height	163.5 mm
Width	110.5 mm
Depth	54 mm
Weight	0.08 kg (each)
Material	Galvanised steel



### Zehnder ComfoTube ø 90 mm, end caps, 10 pieces

Article number: 990 328 263

### Description

### End caps:

Zehnder ComfoTube end caps. The 90 mm end caps can be placed within their corresponding Zehnder ComfoTube Ø 90 mm during the construction phase to prevent dust ingress. The 90 mm end caps can also be placed directly into the 75 mm manifold or mounting plate to seal off any unwanted ports.

### **Technical Specification**

Length	53.3 mm
Diameter	82 mm
Weight	0.031 kg (each)
Material	Medium-density polyethylene





### Zehnder ComfoTube ø 110 mm, end caps, 2 pieces

Article number: 990 328 264

### Description End caps:

Zehnder ComfoTube end caps. The 110 mm end caps can be placed within their corresponding Zehnder ComfoTube Ø 110 mm during the construction phase to prevent dust ingress. The 110 mm end caps can be placed directly into the 90 mm manifold or mounting plate to seal off any unwanted ports.

### **Technical Specification**

Length	55.3 mm
Diameter	102 mm
Weight	0.05 kg (each)
Material	Medium-density polyethylene



### Zehnder ComfoTube ø 90 mm, O-ring seal, 10 pieces

Article number: 990 328 363

### **Description**

#### O-ring:

Zehnder ComfoTube O-ring seal. The O-ring is used to ensure an airtight connection is made with pipe connectors, grille housings, manifold/mounting plates and connecting elements.

### **Technical Specification**

Outside	diameter	98 mm
Outside	diamotor	20 IIIII

Outside diameter	30 IIIII
Inside diameter	75 mm
Weight	0.009 kg each
Material	EPDM (Ethylene Propylene Diene Monomer)



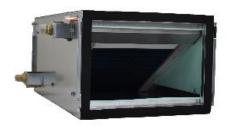
### **Thermal Shield**

- With ThermalShield by Zehnder you establish a fast reacting system providing freshness in the summer and warmth in the winter.
- Our new air distribution components with ThermalShield help reduce temperature loss when transporting tempered air and enables
- By using ThermalShield you support the climate system solution in your home to create a comfortable and healthy indoor climate



### For use with

The Zehnder ComfoTube Therm flat 51 insulated ventilation tube impresses with optimum sound and heat insulation properties for the perfect feel-good climate at home. This makes the ComfoTube Therm the ideal solution for the condensation-free transport of warm and cold air. Thanks to high-quality insulation, the temperature-controlled air is passed through the ventilation tube with almost no temperature loss, so that living spaces can be supplied tempered or supplementary heated as required in an energy-efficient manner. The ideal devices to provide the tempered or heated supply air are the ComfoPost and ComfoClime units from Zehnder.







TO VIEW OUR COMFOPOST DATASHEET

**CLICK HERE** 

■ Decorative radiators ■ Comfortable indoor ventilation ■ Heating and cooling ceilings ■ Clean air Solutions

### **BIM/CAD Components**

If you would like to download the BIM / CAD files for this or any other of our products then please visit our BIM library.

#### TO VISIT OUR BIM/CAD LIBRARY

**CLICK HERE** 

### **Installation Instructions**

If you would like to download the installation files for this or any other of our products then please visit our download page by clicking the link below.

#### TO VISIT OUR DOWNLOAD PAGE

**CLICK HERE** 

### **Consultant Specification**

#### **Specification**

The insulated semi-rigid ductwork shall be dual wall constructed of high-quality food-grade polyethylene (PE) with cellular rubber insulation to provide a thermal conductivity of at least 0.035 W/mK. It shall have a crush resistant ring stiffness of 7.9 kN/m² and be suitable for installation into concrete with a fire rating in accordance with EN 13501-1 of E. It shall have an operating temperature range of -25 to +60°C and not be designed to exceed flowrates of 13.8 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.

ComfoTubeTherm90mm\_Technical\_Specification\_2023\_V3