

# Ducts and fittings made of EPP

ALNOR reserves the right to modify technical specifications  
in line with the policy of continuous product improvement.



### About the system

The EPP duct system is made of expanded polypropylene. The system has a number of design and installation advantages: low weight, quick installation (no additional connectors or screws required), no additional insulation is required since the material itself is already an insulator, easy to cut using hand tools, no thermal bridges. Thermal conductivity:  $\lambda=0.039$  [W / m \* k]

### Dimensions

Ducts and fittings are available in the following diameters (inner): Ø125, Ø160, and Ø200. The ducts are sold in 1000 mm length. The wall thickness is 15mm or 43m. All ducts and fittings have integrated male-female couplings. The inner diameter of the EPP duct system fits the size of the SPIRAL®System components with male ends.

### Installation

The EPP ducts and fittings are connected using a male-female integrated couplings. Each coupling has double (15 mm system) or triple (43 mm system) <fold>, similar to double seals in the SPIRAL®System, thanks to which the system achieves airtightness class class ATC2 (old D) according to EN 17192. EPP is easy to process, each element can be easily cut in half.

Moreover, the EPP system components can be combined and adapted with the male elements of the SPIRAL®System (it's recommended to choose fittings with seals). The ducts fit directly into the connectors of the PremAIR heat recovery units and into the FLX-PLO-R or FLX-PRO-R distribution boxes (manifolds). The EPP duct can also be fitted directly with air intake and exhaust vents, e.g. USLA and USAV.

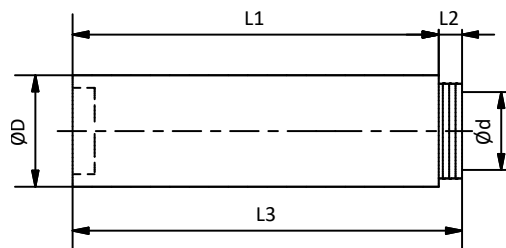
Due to the lightweight design of the elements, the suspension system is practically unnecessary. If additional clamps are needed - standard suspension clamps with the following diameters can be used.

Ventilation ducts made of 15 mm thick EPP

# EPP-15-SRGL



## Dimensions



## Description

Round ventilation duct made of expanded polypropylene (EPP). The most important features of the product are: rigid construction, low weight, easy assembly (integrated male-female coupling) and good thermal insulation. EPP ducts, used, for example, as sections of the supply and exhaust ventilation systems with heat recovery, do not require additional insulation. The system eliminates the formation of thermal bridges.

Lenght EPP ducts: 1 m sections  
 Diameters: 125, 160 and 200 mm.  
 Wall thickness: 15 mm

Thermal conductivity: 0.038 W / m\*K  
 Airtightness class: ATC2 (D) @ 90Pa  
 acc. to PN-EN 17192:2019-01

**Available materials:**  
 EPP-15-SRGL-...- EPP (expanded polypropylene)

**Product code example:**  
 Product code: **EPP-15-SRGL - 160 - 0100**

type \_\_\_\_\_  
 diameter \_\_\_\_\_  
 lenght \_\_\_\_\_

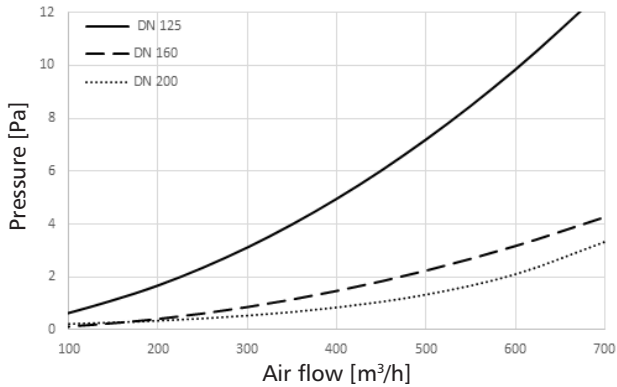
Code	Ød [mm]	ØD [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]
EPP-15-SRGL-125-0100	125	155	950	50	1000
EPP-15-SRGL-160-0100	160	190	950	50	1000
EPP-15-SRGL-200-0100	200	230	950	50	1000

Ventilation ducts made of 15 mm thick EPP

# EPP-15-SRGL

## Technical data

Pressure loss drops of EPP-15 pipes of different diameters



Technical data according to PN-EN 17192 15 mm

Air tightness	ATC2 (D) ≤ 90 Pa ATC3 (C) ≤ 900 Pa	
Service temperature	-25°C do +80°C	PN-EN 17192:2019
Reaction to fire	D-s3,d2 (DN 125) E (DN 160,200)	190
Resistance	No deformation at 3% deflection and 35 N load	230
Thermal conductivity	$\lambda = 0,038 \text{ W/(m}\cdot\text{k)}$	PN-EN 12664:2002
Thermal resistance	$U = 0,3947 \text{ m}^2\text{K/W}$	PN-EN 12664:2002
Microbial resistance	1a	Method A PN-EN ISO 846:2019

## Assembly method



# 45° Ventilation bend made of EPP

## EPP-15-BPF-45



### Description

Ventilation bends 45° made from expanded polypropylene (EPP). Bends are produced in diameters 125, 160 and 200 mm. The standard wall thickness is 15 mm. Each bend has a male-female coupling, the connection method eliminates thermal bridges.



Two 45° bends connect easily into one 90°

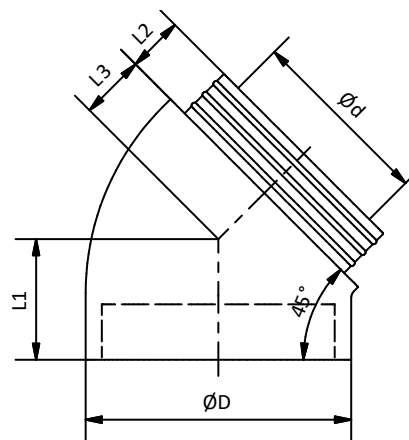
Thermal conductivity: 0.038 W / m\*K  
 Airtightness class: ATC2 (D) @ 90Pa  
 acc. to PN-EN 17192:2019-01

**Available materials:**  
 EPP-15-BPF-....- EPP (expanded polypropylene)

**Example of marking:**  
 Product code: **EPP-15-BPF - aaa - bbb**

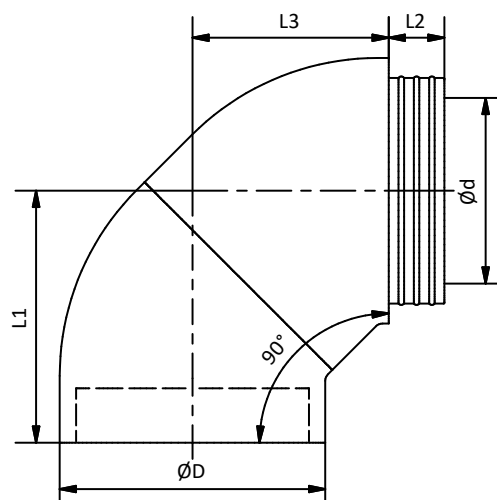
type \_\_\_\_\_  
 diameter Ød \_\_\_\_\_  
 angle \_\_\_\_\_

### Dimensions



Product code	Ød [mm]	ØD [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]
EPP-15-BPF-125-45	125	155	90	50	40
EPP-15-BPF-160-45	160	190	105	50	55
EPP-55-BPF-200-45	200	230	120	50	70

Bend 90° consisting of two bends 45° - EPP-15-BPF-45



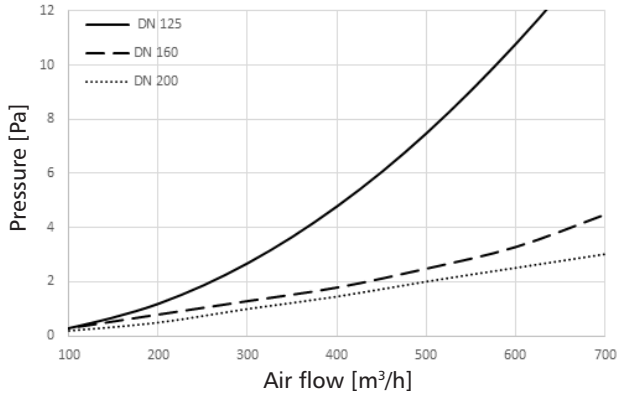
Product code	Ød [mm]	ØD [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]
2xEPP-15-BPF-125-45	125	155	182	50	132
2xEPP-15-BPF-160-45	160	190	218	50	168
2xEPP-55-BPF-200-45	200	230	255	50	205

# 45° Ventilation bend made of EPP

## EPP-15-BPF-45

### Technical data

Pressure loss drops of EPP-15-BPF bends of different diameters



Technical data according to PN-EN 17192 15 mm

Air tightness	ATC2 (D) ≤ 90 Pa ATC3 (C) ≤ 900 Pa	
Service temperature	-25°C do +80°C	PN-EN 17192:2019
Reaction to fire	D-s3,d2 (DN 125) E (DN 160,200)	190
Resistance	No deformation at 3% deflection and 35 N load	230
Thermal conductivity	$\lambda = 0,038 \text{ W/(m}\cdot\text{k)}$	PN-EN 12664:2002
Thermal resistance	$U = 0,3947 \text{ m}^2\text{K/W}$	PN-EN 12664:2002
Microbial resistance	1a	Method A PN-EN ISO 846:2019

### Assembly method



# Female coupling made of EPP

## EPP-15-MSF



### Description

A female-male coupling made of expanded polypropylene (EPP) is used to connect the EPP-15 ducts, when the male part is cut off (e.g. when duct is shortened). The female coupling fits the outer diameter of the 15mm duct. The couplings are produced in 125, 160 and 200mm sizes.

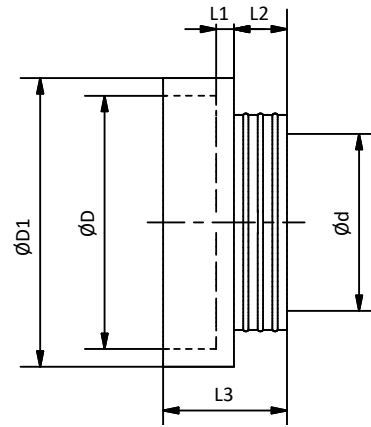
Thermal conductivity: 0.038 W / m\*K  
 Airtightness class: ATC2 (D) @ 90 Pa  
 acc. to PN-EN 17192:2019-01

**Available materials:**  
 EPP-15-MSF-....- EPP (expanded polypropylene)

**Example of marking:**  
 Product code: EPP-15-MSF - aaa

type \_\_\_\_\_  
 diameter Ød \_\_\_\_\_

### Dimensions



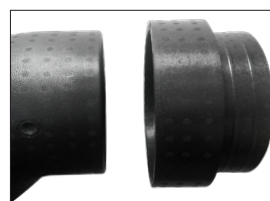
Kod	Ød [mm]	ØD [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]	ØD <sub>1</sub> [mm]
EPP-15-MSF-125	125	155	10	50	110	179
EPP-15-MSF-160	160	190	10	50	110	214
EPP-15-MSF-200	200	230	10	50	110	254

### Technical data

Technical data according to PN-EN 17192 15mm

Air tightness	ATC2 (D) ≤ 90 Pa ATC3 (C) ≤ 900 Pa	
Service temperature	-25°C do +80°C	PN-EN 17192:2019
Reaction to fire	D-s3,d2 (DN 125) E (DN 160,200)	190
Resistance	No deformation at 3% deflection and 35 N load	230
Thermal conductivity	λ = 0,038 W/(m·k)	PN-EN 12664:2002
Thermal resistance	U = 0,3947 m <sup>2</sup> K/W	PN-EN 12664:2002
Microbial resistance	1a	Method A PN-EN ISO 846:2019

### Assembly method



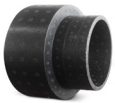
EPP T-piece

# EPP-15-TPC



## Description

Round T-piece made of expanded polypropylene (EPP), straight with 90 degrees equal branch. Galvanised collar saddle used as a merging element. The EPP-15-TPC is designed for residential ventilation systems and has a male-female coupling.



**Note!**

To connect the T-piece to an EPP system, one additional EPP-15-MSF coupling is required.

**Available diameters:** 125, 160 and 200 mm.

**Thickness:** 15 mm

**Available materials:**

EPP-15-TPC-....- EPP (expanded polypropylene)

**Example of marking:**

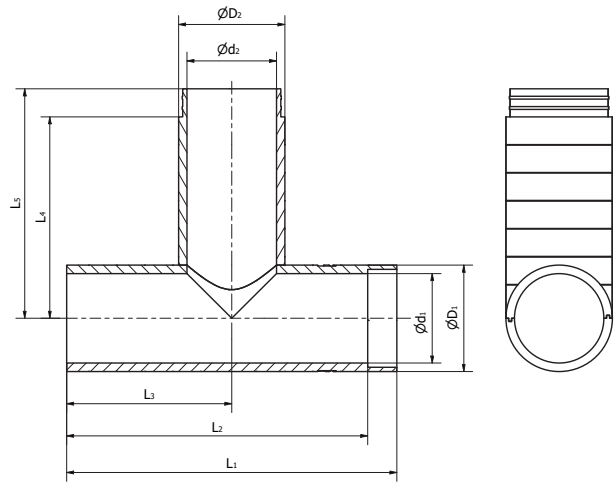
Product code: **EPP-15-TPC - 200 - 200**

type

diameter  $\varnothing d_1$

diameter  $\varnothing d_2$

## Dimensions



Product code	$\varnothing d_1$ [mm]	$\varnothing D_1$ [mm]	$\varnothing d_2$ [mm]	$\varnothing D_2$ [mm]
EPP-15-TPC-125-125	125	155	125	155
EPP-15-TPC-160-160	160	190	160	190
EPP-15-TPC-200-200	200	230	200	230

Product code	$L_1$ [mm]	$L_2$ [mm]	$L_3$ [mm]	$L_4$ [mm]	$L_5$ [mm]
EPP-15-TPC-125-125	590	538	295	360	410
EPP-15-TPC-160-160	590	538	295	360	410
EPP-15-TPC-200-200	590	538	295	360	410



EPP T-piece

# EPP-15-TPC

## Technical data

Technical data according to PN-EN 17192 15 mm

Air tightness	ATC2 (D) $\leq$ 90 Pa ATC3 (C) $\leq$ 900 Pa	
Service temperature	-25°C do +80°C	PN-EN 17192:2019
Reaction to fire	D-s3,d2 (DN 125) E (DN 160,200)	190
Resistance	No deformation at 3% deflection and 35 N load	230
Thermal conductivity	$\lambda = 0,038$ W/(m·k)	PN-EN 12664:2002
Thermal resistance	$U = 0,3947$ m <sup>2</sup> K/W	PN-EN 12664:2002
Microbial resistance	1a	Method A PN-EN ISO 846:2019

## Assembly method



Ventilation ducts made of 43 mm thick EPP

# EPP-43-SRGL



## Description

Round ventilation duct made of expanded polypropylene (EPP). The most important features of the product are: rigid construction, low weight, easy assembly and good thermal insulation. EPP ducts, used, for example, as sections of the supply and exhaust ventilation systems with heat recovery, do not require additional insulation. The system eliminates the formation of thermal bridges.

Ducts and fittings do not require additional couplings.

Length EPP ducts: 1 m sections  
Diameters: 125, 160 and 200 mm.  
Wall thickness: 43 mm

Thermal conductivity: 0.038 W / m\*K  
Airtightness class: ATC2 (D) @110Pa  
acc. to PN-EN 17192:2019-01

### Available materials:

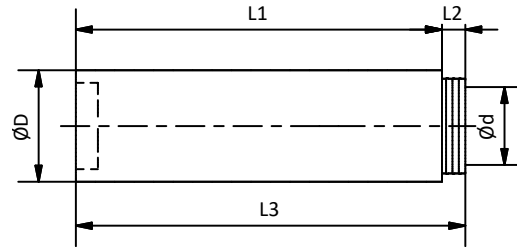
EPP-43-SRGL-...- EPP (expanded polypropylene)

### Product code example:

Product code: **EPP-43-SRGL - 160 - 0100**

type \_\_\_\_\_  
diameter \_\_\_\_\_  
length \_\_\_\_\_

## Dimensions



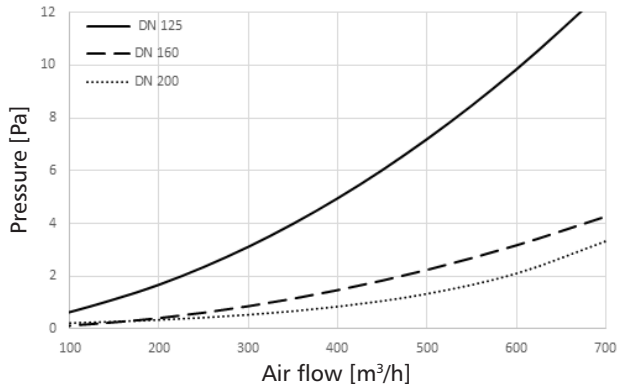
Code	Ød [mm]	ØD [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]
EPP-43-SRGL-125-0100	125	211	940	60	1000
EPP-43-SRGL-160-0100	160	246	940	60	1000
EPP-43-SRGL-200-0100	200	286	940	60	1000

Ventilation ducts made of 43 mm thick EPP

# EPP-43-SRGL

## Technical data

Pressure loss drops of EPP-43 pipes of different diameters



Technical data according to PN-EN 17192 43 mm

Air tightness	ATC2 (D) ≤ 110 Pa ATC3 (C) ≤ 1000 Pa	
Service temperature	-25°C do +80°C	PN-EN 17192:2019
Reaction to fire	E	EN 13501-1
Resistance	No deformation at 3% deflection and 291 N load	
Thermal conductivity	$\lambda = 0,038 \text{ W/(m}\cdot\text{k)}$	PN-EN 12664:2002
Thermal resistance	$U = 1,131 \text{ m}^2\text{K/W}$	PN-EN 12664:2002
Microbial resistance	1a	Method A PN-EN ISO 846:2019

## Assembly method



45° Ventilation bend made of 43 mm thick EPP

# EPP-43-BPF-45



## Description

Ventilation bends 45° made from expanded polypropylene (EPP). Bends are produced in diameters 125, 160 and 200mm. The standard wall thickness is 43mm (black colour). The connection method eliminates thermal bridges, no additional couplings are required.

To create a 90° bend two 45° beds can be connected together.

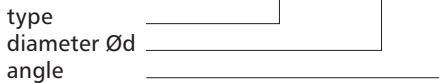


Two 45° bends connect easily into one 90°

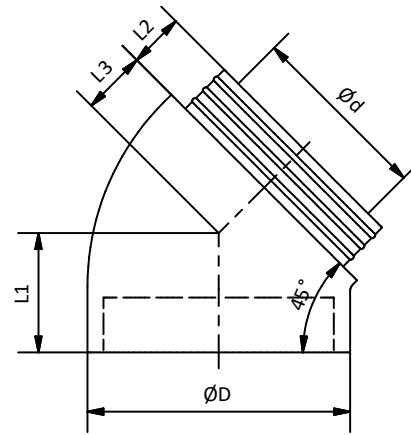
Thermal conductivity: 0.038 W / m\*K  
 Airtightness class: ATC2 (D) @ 110 Pa  
 acc. to PN-EN 17192:2019-01

**Available materials:**  
 EPP-43-BPF-....- EPP (expanded polypropylene)

**Example of marking:**  
 Product code: **EPP-43-BPF - 125 - 45**

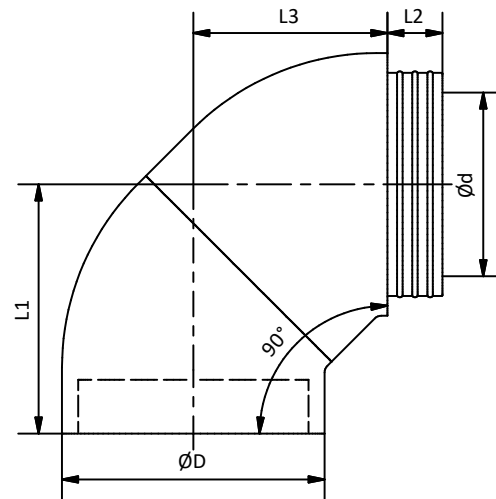


## Dimensions



Product code	Ød [mm]	ØD [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]
EPP-43-BPF-125-45	125	211	114	60	54
EPP-43-BPF-160-45	160	246	122	60	62
EPP-43-BPF-200-45	200	286	130	60	70

Bend 90° consisting of two bends 45° - EPP-43-BPF-45



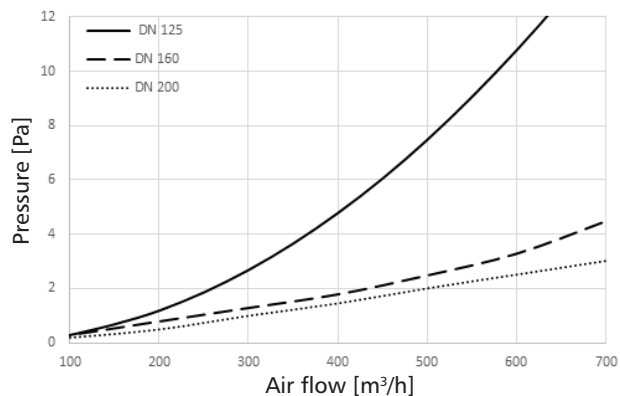
Product code	Ød [mm]	ØD [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]
2xEPP-43-BPF-125-45	125	211	232	60	173
2xEPP-43-BPF-160-45	160	246	252	60	192
2xEPP-43-BPF-200-45	200	286	272	60	212

45° Ventilation bend made of 43 mm thick EPP

# EPP-43-BPF-45

## Technical data

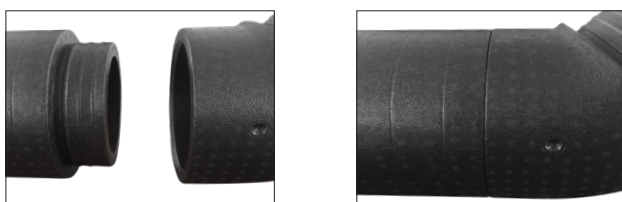
Pressure loss drops of EPP-43-BPF bends of different diameters



Technical data according to PN-EN 17192 43 mm

Air tightness	ATC2 (D) ≤ 110 Pa ATC3 (C) ≤ 1000 Pa	
Service temperature	-25°C do +80°C	PN-EN 17192:2019
Reaction to fire	E	EN 13501-1
Resistance	No deformation at 3% deflection and 291 N load	
Thermal conductivity	$\lambda = 0,038 \text{ W}/(\text{m}\cdot\text{k})$	PN-EN 12664:2002
Thermal resistance	$U = 1,131 \text{ m}^2\text{K}/\text{W}$	PN-EN 12664:2002
Microbial resistance	1a	Method A PN-EN ISO 846:2019

## Assembly method



## Female coupling made of 43 mm EPP

# EPP-43-MSF



### Description

Female coupling made of expanded polypropylene (EPP) for connecting 43mm thick ducts. The coupling is used as additional piece, for example when connecting ducts which were cut. Such coupling is put on the outer diameter of a duct. The female couplings are produced in the following diameters: 125, 160 or 200 mm.

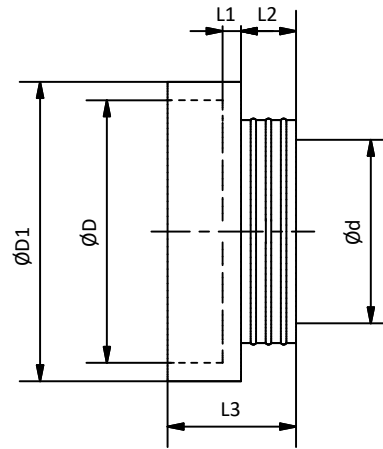
Thermal conductivity: 0.038 W / m\*K  
 Airtightness class: ATC2 (D) @ 110 Pa  
 acc. to PN-EN 17192:2019-01

**Available materials:**  
 EPP-43-MSF-....- EPP (expanded polypropylene)

**Example of marking:**  
 Product code: **EPP-43-MSF - 200**

type \_\_\_\_\_  
 diameter Ød \_\_\_\_\_

### Dimensions



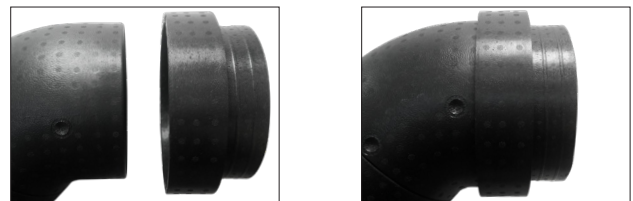
Code	Ød [mm]	ØD [mm]	L <sub>1</sub> [mm]	L <sub>2</sub> [mm]	L <sub>3</sub> [mm]	ØD <sub>1</sub> [mm]
EPP-43-MSF-125	125	211	20	60	140	251
EPP-43-MSF-160	160	246	20	60	140	286
EPP-43-MSF-200	200	286	20	60	140	226

### Technical data

Technical data according to PN-EN 17192 43mm

Air tightness	ATC2 (D) ≤ 110 Pa ATC3 (C) ≤ 1000 Pa	
Service temperature	-25°C do +80°C	PN-EN 17192:2019
Reaction to fire	E	EN 13501-1
Resistance	No deformation at 3% deflection and 291 N load	
Thermal conductivity	λ = 0,038 W/(m·k)	PN-EN 12664:2002
Thermal resistance	U = 1,131 m²K/W	PN-EN 12664:2002
Microbial resistance	1a	Method A PN-EN ISO 846:2019

### Assembly method



# EPP T-piece

## EPP-43-TPC



### Description

Round T-piece made of expanded polypropylene (EPP), straight with 90 degrees equal branch. Galvanised collar saddle used as a merging element. The EPP-43-TPC is designed for residential ventilation systems and has a male-female coupling.



#### Note!

To connect the T-piece to an EPP system, one additional EPP-43-MSF coupling is required.

**Available diameters:** 125, 160 and 200 mm.  
**Thickness:** 43 mm

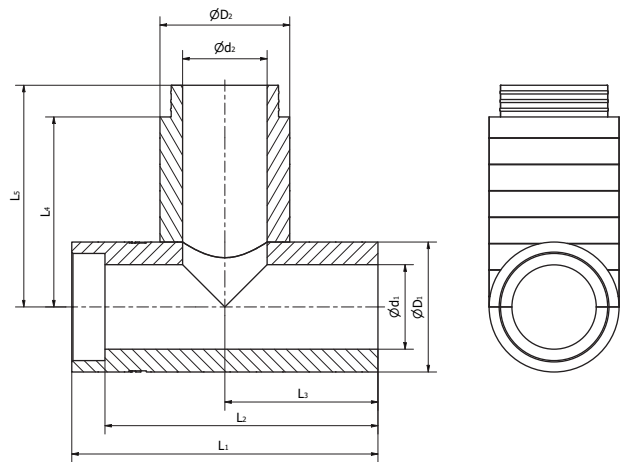
**Available materials:**  
EPP-43-TPC-....- EPP (expanded polypropylene)

#### Example of marking:

Product code: **EPP-43-TPC - 200 - 200**

type \_\_\_\_\_  
diameter  $\varnothing d_1$  \_\_\_\_\_  
diameter  $\varnothing d_2$  \_\_\_\_\_

### Dimensions



Code	$\varnothing d_1$ [mm]	$\varnothing D_1$ [mm]	$\varnothing d_2$ [mm]	$\varnothing D_2$ [mm]
EPP-43-TPC-125-125	125	211	125	211
EPP-43-TPC-160-160	160	246	160	246
EPP-43-TPC-200-200	200	286	200	286

Code	$L_1$ [mm]	$L_2$ [mm]	$L_3$ [mm]	$L_4$ [mm]	$L_5$ [mm]
EPP-43-TPC-125-125	580	517	290	360	420
EPP-43-TPC-160-160	580	517	290	360	420
EPP-43-TPC-200-200	580	517	290	360	420

EPP T-piece

**EPP-43-TPC**

## Technical data

Technical data according to PN-EN 17192 43 mm

Air tightness	ATC2 (D) $\leq$ 110 Pa ATC3 (C) $\leq$ 1000 Pa	
Service temperature	-25°C do +80°C	PN-EN 17192:2019
Reaction to fire	E	EN 13501-1
Resistance	No deformation at 3% deflection and 291 N load	
Thermal conductivity	$\lambda = 0,038$ W/(m·k)	PN-EN 12664:2002
Thermal resistance	$U = 1,131$ m <sup>2</sup> K/W	PN-EN 12664:2002
Microbial resistance	1a	Method A PN-EN ISO 846:2019

## Assembly method



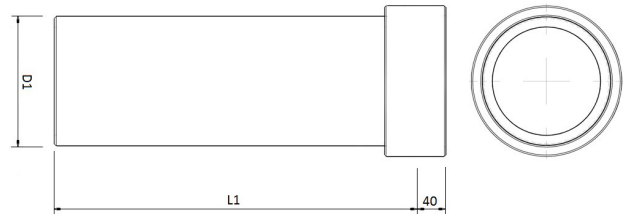


# Ventilation ducts made of EPP

## EPP-SRGL



### Dimensions



### Description

Round ventilation duct made of expanded polypropylene (EPP). The most important features of the product are: rigid construction, low weight, easy assembly (female coupling on each element) and good thermal insulation. EPP ducts, used, for example, as sections of the supply and exhaust ventilation systems with heat recovery, do not require additional insulation. The system eliminates the formation of thermal bridges.

EPP ducts are manufactured in 0.5 m and 1 m sections and diameters 125, 150, 160 and 180 mm. The standard wall thickness is 15mm (gray colour). The duct is supplied with one female coupling in the set.

Thermal conductivity: 0.039 W / m \* K

Airtightness class: C

Surface roughness: 0.077 mm

Available materials:

EPP-SRGL-...- EPP (expanded polypropylene)

Product code example:

Product code: **EPP-SRGL - 125 - 0100**

type \_\_\_\_\_  
 diameter \_\_\_\_\_  
 length \_\_\_\_\_

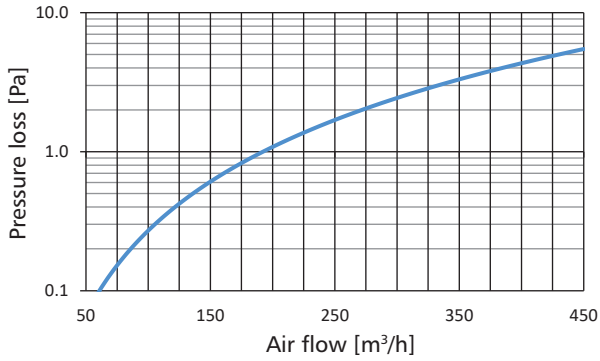
Product code	Diameter [mm]	Wall thickness [mm]	Length [mm]
EPP-SRGL-125-0050	125	15	500
EPP-SRGL-150-0050	150	15	500
EPP-SRGL-160-0050	160	15	500
EPP-SRGL-180-0050	180	15	500
EPP-SRGL-125-0100	125	15	1000
EPP-SRGL-150-0100	150	15	1000
EPP-SRGL-160-0100	160	15	1000
EPP-SRGL-180-0100	180	15	1000

# EPP-SRGL

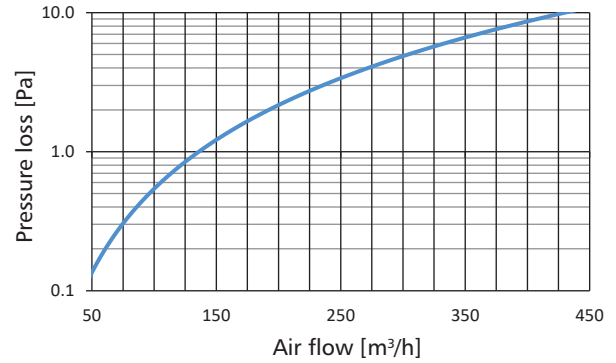
## Technical data

### Pressure loss chart

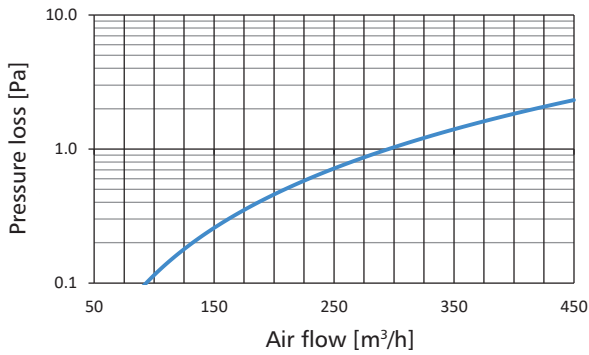
Measurement: **inner diameter: 125mm, length: 0.5m**,  
temp: 25°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.173 kg/m<sup>3</sup>



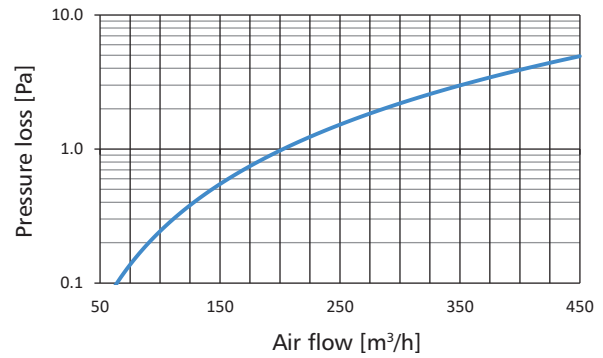
Measurement: **inner diameter: 125mm, length: 1m**,  
temp: 25°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.173 kg/m<sup>3</sup>



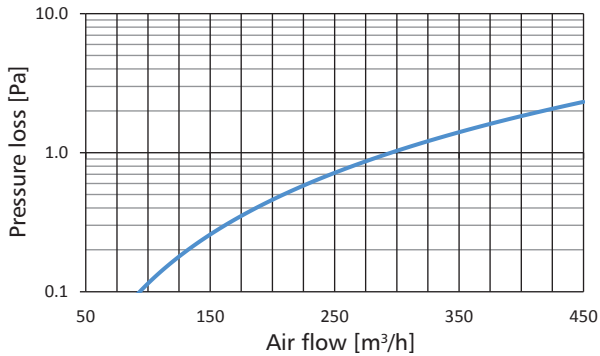
Measurement: **inner diameter: 150mm, length: 0.5m**,  
temp: 28.5°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.159 kg/m<sup>3</sup>



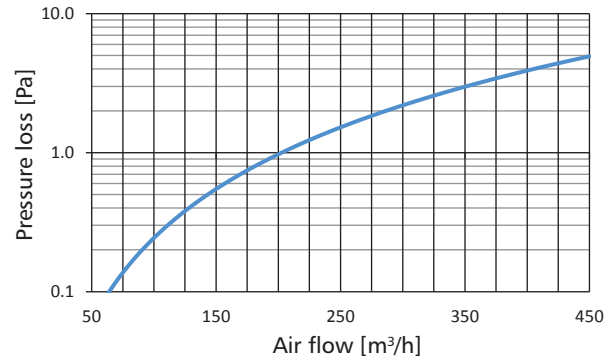
Measurement: **inner diameter: 150mm, length: 1m**,  
temp: 28.5°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.159 kg/m<sup>3</sup>



Measurement: **inner diameter: 160mm, length: 0.5m**,  
temp: 30.6°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.151 kg/m<sup>3</sup>



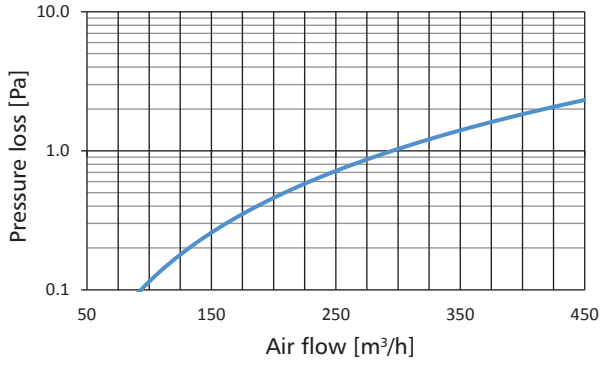
Measurement: **inner diameter: 160mm, length: 1m**,  
temp: 30.6°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.151 kg/m<sup>3</sup>



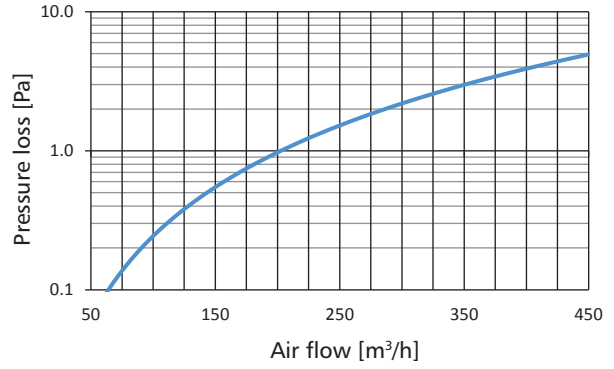
# Ventilation ducts made of EPP

## EPP-SRGL

Measurement: inner diameter: 180mm, length: 0,5m,  
temp: 33.8°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.139 kg/m<sup>3</sup>



Measurement: inner diameter: 180mm, length: 1m,  
temp: 33.8°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.139 kg/m<sup>3</sup>



90° Ventilation bend made of EPP

# EPP-BPF-90



## Description

90° ventilation bend made of expanded polypropylene (EPP). Bends are produced in diameters 125, 150, 160 and 180mm. The standard wall thickness is 15mm (gray). Each bend is delivered with one female coupling in the set, the connection method eliminates thermal bridges. The 90° bend can be cut in half along the extrusion, forming two 45° bends (an additional EPP-MSF may be needed).

Thermal conductivity: 0.039 W / m \* K  
 Airtightness class: C  
 Surface roughness: 0.077 mm

### Available materials:

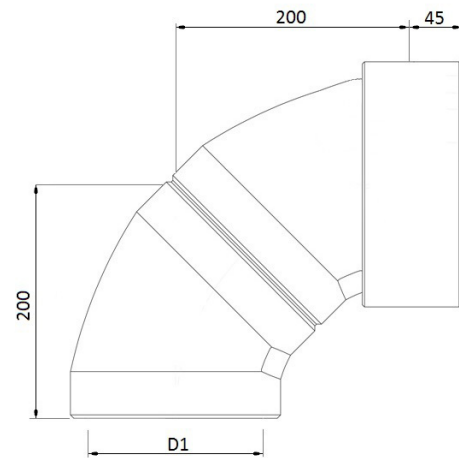
EPP-BPF-....- EPP (expanded polypropylene)

### Example of marking:

Product code: **EPP-BPF - aaa - bbb**

type \_\_\_\_\_  
 diameter Ød<sub>1</sub> \_\_\_\_\_  
 angle \_\_\_\_\_

## Dimensions



Product code	Diameter [mm]	Wall thickness [mm]
EPP-BPF-125-90	125	15
EPP-BPF-150-90	150	15
EPP-BPF-160-90	160	15
EPP-BPF-180-90	180	15

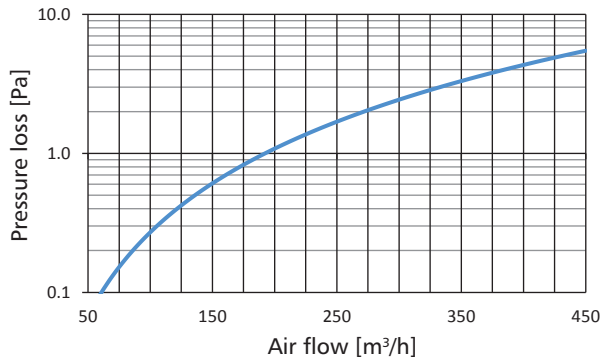
# 90° Ventilation bend made of EPP

## EPP-BPF-90

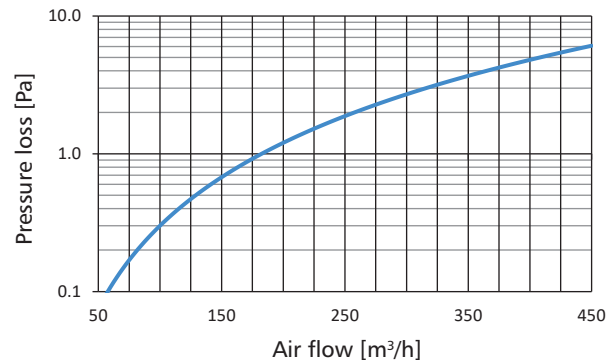
### Technical data

#### Pressure loss chart

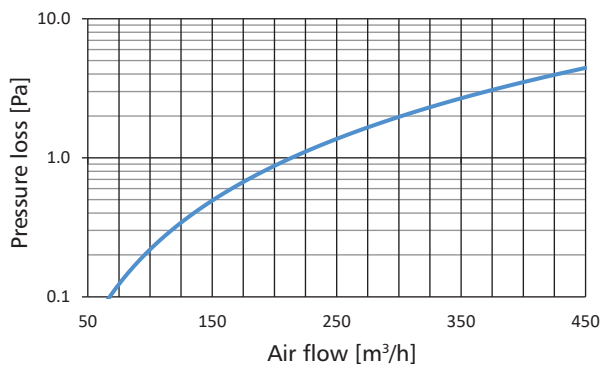
Measurement: **inner diameter: 125mm, angle: 90°**,  
temp: 25°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.173 kg/m<sup>3</sup>



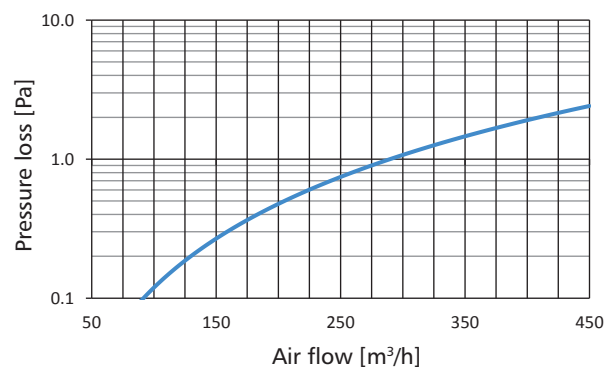
Measurement: **inner diameter: 150mm, angle: 90°**,  
temp: 28.9°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.158 kg/m<sup>3</sup>



Measurement: **inner diameter: 160mm, angle: 90°**,  
temp: 32°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.146 kg/m<sup>3</sup>



Measurement: **inner diameter: 180mm, angle: 90°**,  
temp: 27.4°C,  $P_{atm}$ : 1015 mBar,  $\rho$  (density): 1.176 kg/m<sup>3</sup>



45° Ventilation bend made of EPP

# EPP-BPF-45



## Description

Ventilation bends 45° made from expanded polypropylene (EPP). Bends are produced in diameters 125, 150, 160 and 180mm. The standard wall thickness is 15mm (gray). Each bend is delivered with one female coupling in the set, the connection method eliminates thermal bridges.

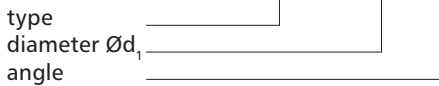
Thermal conductivity: 0.039 W / m \* K  
 Airtightness class: C  
 Surface roughness: 0.077 mm

### Available materials:

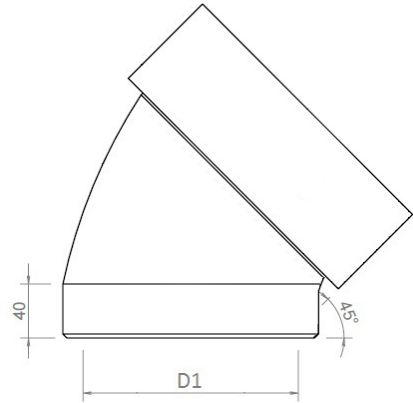
EPP-BPF-....- EPP (expanded polypropylene)

### Example of marking:

Product code: **EPP-BPF - aaa - bbb**



## Dimensions



Product code	Diameter [mm]	Wall thickness [mm]
EPP-BPF-125-45	125	15
EPP-BPF-150-45	150	15
EPP-BPF-160-45	160	15
EPP-BPF-180-45	180	15

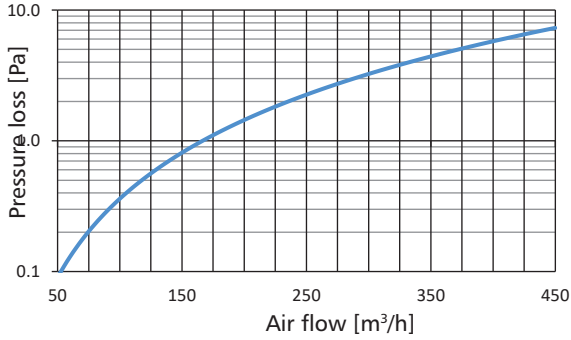
# 45° Ventilation bend made of EPP

## EPP-BPF-45

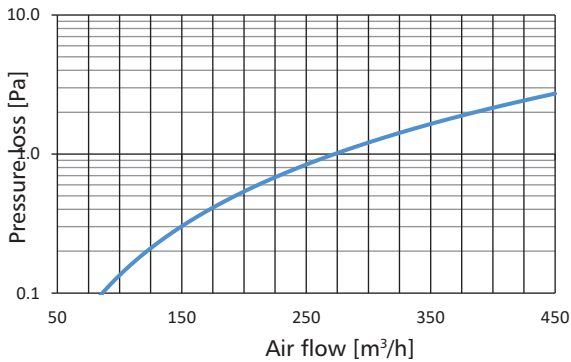
### Technical data

#### Pressure loss chart

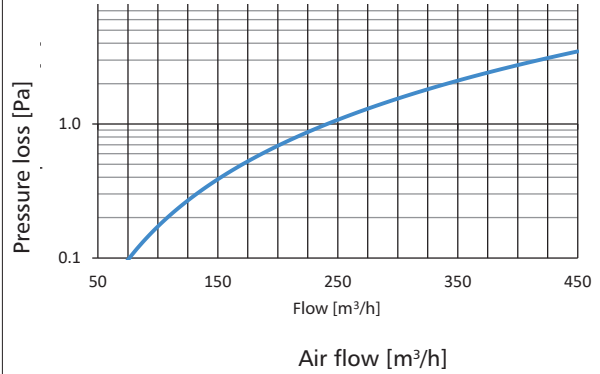
Measurement: **inner diameter: 125mm, angle: 45°**,  
temp: 24.8°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.174 kg/m<sup>3</sup>



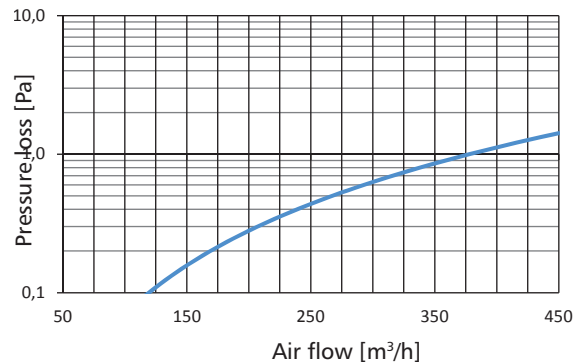
Measurement: **inner diameter: 160mm, angle: 45°**,  
temp: 28.2°C,  $P_{atm}$ : 1015 mBar,  $\rho$  (density): 1.173 kg/m<sup>3</sup>



Measurement: **inner diameter: 150mm, angle: 45°**,  
temp: 28.5°C,  $P_{atm}$ : 1004 mBar,  $\rho$  (density): 1.159 kg/m<sup>3</sup>



Measurement: **inner diameter: 180mm, angle: 45°**,  
temp: 27.8°C,  $P_{atm}$ : 1015 mBar,  $\rho$  (density): 1.175 kg/m<sup>3</sup>



Female coupling made of EPP

# EPP-MSF



## Description

Female coupling made of expanded polypropylene (EPP) for connecting ducts and fittings. The coupling is used to connect all elements of the EPP duct system: duct+duct, duct+f fitting, fitting+f fitting.

The female couplings are produced in the following diameters: 125, 150, 160 and 180mm.

Thermal conductivity: 0.039 W / m \* K  
 Airtightness class: C  
 Surface roughness: 0.077 mm

### Available materials:

EPP-MSF-....- EPP (expanded polypropylene)

### Example of marking:

Product code: EPP-MSF - aaa

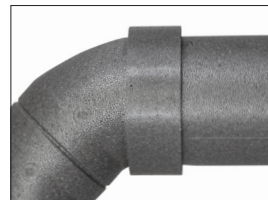
type \_\_\_\_\_  
 diameter Ød<sub>1</sub> \_\_\_\_\_

## Dimensions



Product code	Diameter [mm]	Wall thickness [mm]
EPP-MSF-125	125	15
EPP-MSF-150	150	15
EPP-MSF-160	160	15
EPP-MSF-180	180	15

## Assembly method





# One-piece suspension ring

## CLRU



### Description

One-piece suspension rings are designed for installation of ducts made in EPP. The lugs at the top of the suspension ring top are tied together with a steel bolt and a matching nut.

#### Available materials:

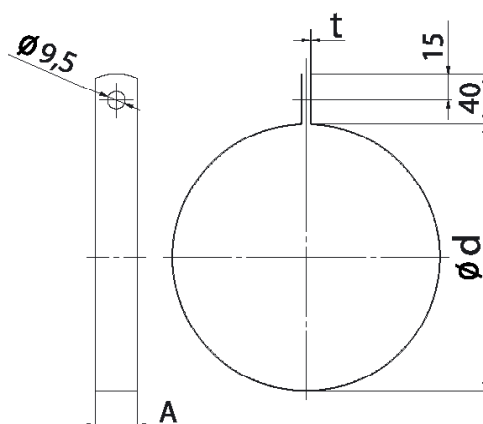
- CLRU-...-... - galvanized steel sheet
- CLRU-K-...-... - 1.4301/304 stainless steel sheet
- CLRU-K-...-...-316L - 1.4404/316L stainless steel sheet, molybdenum-enriched

#### Example of marking:

Product code: **CLRU - 160 - 120**

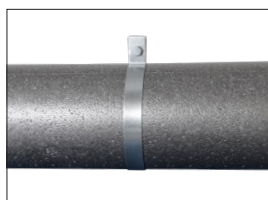
type \_\_\_\_\_  
 $\varnothing d_1$  \_\_\_\_\_  
 thickness t \_\_\_\_\_

### Dimensions



$\varnothing d$ [mm]	A [mm]	t [mm]	A [mm]	t [mm]
125	25	2.0	30	1.2
150	25	2.0	30	1.2
160	25	2.0	30	1.2
180	25	2.0	30	1.2

### Assembly method



## Suspension ring for EPP ducts

# CLRO-EPP



### Description

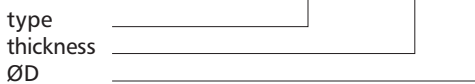
The CLRO-EPP suspension ring is designed for the EPP round ventilation ducts with a wall thickness of 15 or 43 mm. EPP ducts have a different outer diameter, resulting from the thickness of the material, therefore standard rings are not applicable. The CLRO-EPP has a clasp, resulting in a quick and easy assembly. Equipped with M8 rivet nut for fastening.

#### Available materials:

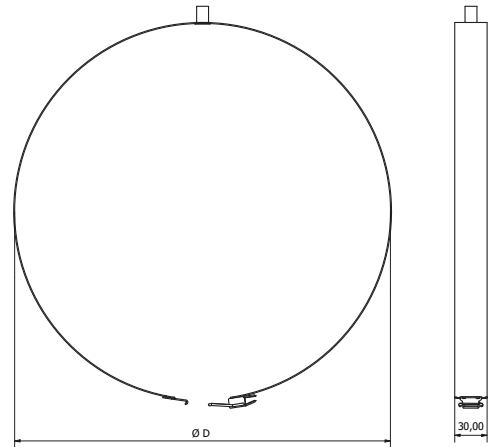
CLRU-EPP-...-... - galvanized steel sheet

#### Example of marking:

Product code: **CLRO-EPP - 43 - 125**



### Dimensions



Product code	ØD [mm]	ØD duct EPP (in/out) [mm]	Width [mm]	Montage
CLRO-EPP-15-125	155	125 / 155	30	M8
CLRO-EPP-15-160	190	160 / 190	30	M8
CLRO-EPP-15-200	230	200 / 230	30	M8
CLRO-EPP-43-125	211	125 / 211	30	M8
CLRO-EPP-43-160	246	160 / 246	30	M8
CLRO-EPP-43-200	286	200 / 286	30	M8

### Assembly method

