

Insulating ducts in air distribution systems used for ventilation, heating or cooling is often required to minimise heat loss or prevent condensation on or in the duct. OMNIE has a complete range of well insulated ducts, which are extremely easy to install and maintain. They are available in two diameters and bends. Several accessories including terminals and air tight external duct seals complete the offering.

### The advantages at a glance

- Very well insulated and sound absorbing duct;
- Low pressure loss due to the very smooth inner surface
- Light material, easy to cut, elastic and pliable, impact resistant (i.e. no dents),
- Doesn't rust
- Comes in duct lengths of 2m

### Condensation

There is a risk of condensation in or on ductwork if the air in the duct is colder than the ambient air (or vice versa). Therefore, it is very important to use insulated ductwork if such conditions could occur. The high insulation value of the duct, including the couplers, also reduces heat loss.

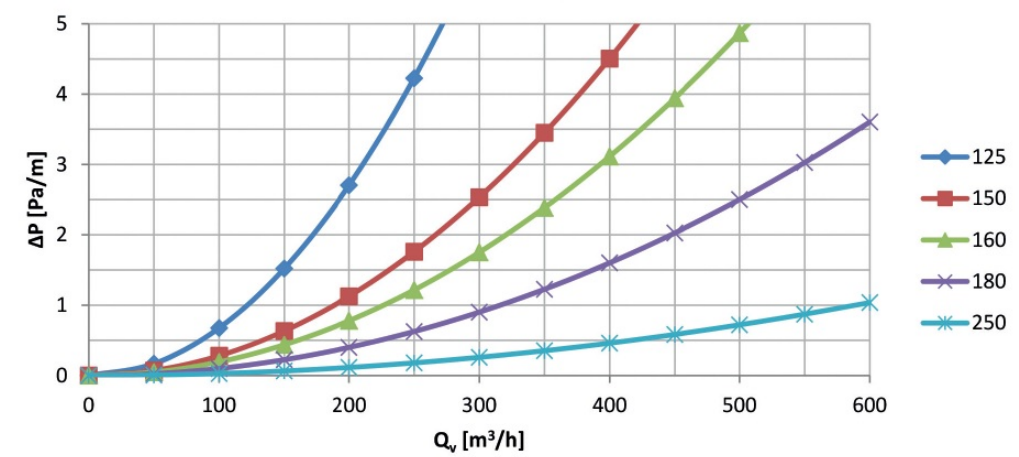


Features

Note: Only use a soft brush, i.e. not wire, to clean the inner layer to avoid damage

Material	EPE
Density	30 kg/m3
Heat transfer coefficient	0.041 W/m.K (EN 12667)
Thermal resistance	R = 0.56 m2.K/W
Temperature range	Min -300C   Max +600C
Wall thickness	16mm
Fire class	B1 (DIN 4102)
Function	Transport of air ventilation and/or heating and/or cooling
Airtightness	C (EN 12237:2003)
Colour	Grey
Material couplers and brackets	PP
Material Y-piece	EPP

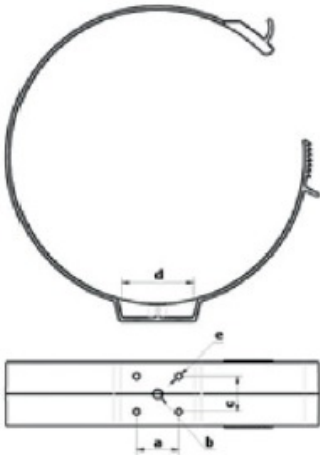
DIAGRAM PRESSURE LOSS AS A FUNCTION OF THE FLOW RATE  
(L=1M)

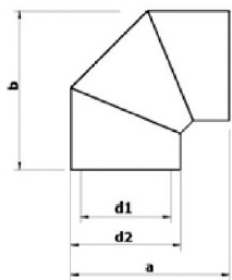


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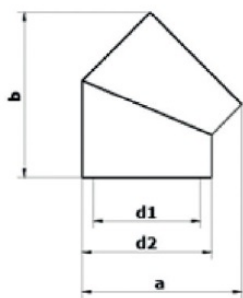


Duct	150	180
a (mm)	30	30
b (mm)	M8	M8
c (mm)	25	25
d (mm)	50	50
e (mm)	Ø 4.5	Ø 4.5

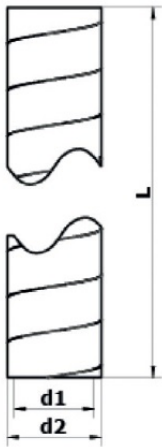




Bend 90°	150	180
d <sub>1</sub> (mm)	150	180
d <sub>2</sub> (mm)	182	212
a (mm)	2.250	2.250
b (kg)	0.56	0.67
Zeta	31.5	15.0
ΔP (Pa/m)		
100 m <sup>3</sup> /h	1.3	0.6
200 m <sup>3</sup> /h	5.0	2.4
300 m <sup>3</sup> /h	11.3	5.4
400 m <sup>3</sup> /h	20.2	9.6
500 m <sup>3</sup> /h	31.5	15.0



Bend 45°	150	180
d <sub>1</sub> (mm)	150	180
d <sub>2</sub> (mm)	182	212
a (mm)	224	258
b (kg)	231	261
Zeta	0.49	0.40
ΔP (Pa/m)		
100 m <sup>3</sup> /h	0.7	0.3
200 m <sup>3</sup> /h	2.9	1.1
300 m <sup>3</sup> /h	6.5	2.6
400 m <sup>3</sup> /h	11.6	4.6
500 m <sup>3</sup> /h	19.2	7.1



Duct	150	180
d <sub>1</sub> (mm)	150	180
d <sub>2</sub> (mm)	182	212
L (mm)	2.250	2.250
m (kg)	0.56	0.67
ΔP (Pa/m)		
100 m <sup>3</sup> /h	0.3	0.1
200 m <sup>3</sup> /h	1.1	0.4
300 m <sup>3</sup> /h	2.5	0.9
400 m <sup>3</sup> /h	4.5	1.6
500 m <sup>3</sup> /h	7.0	2.5