



FLEXIBLE DUCTS FOR AIR VENTILATION SYSTEMS

AIRFLEX Ag
AIRFLEX Ag-HF-FR
AIRFLEX Blue



Airflex pipes serve for air transmission in ventilation and recovery systems. Pipes are characterized by high flexibility, and thanks to this, their routes can be freely formed, bent with very small radii, and adapted to installation conditions without the need to use additional connectors and fittings.

The pipe's design ensured mechanical resistance to compression above 450N, making it possible to immerse pipes in structural concrete over the course of construction works. The two-walled structure of the pipe with partially closed air voids muffles noise caused by air flowing inside to a large extent and provides thermal insulation.

The pipe is available in a wide range of diameters, which makes it possible to make the optimal choice for the requirements of the ventilation system and construction conditions. Pipe endings are secured and sealed in the production process, and the entire reel is protected with film, preventing potential contamination during transport and storage.

The selection and chemical composition of materials has been developed by the Ingremio company with the involvement of Polish research centers. The applied materials meet requirements posed towards materials intended for contact with food. The anti-bacterial layer, containing silver, is similar to the layer used in cooling and medical products manufactured by the most renowned companies in the world.

Bactericidal properties and technical parameters of Airflex ventilation pipes have been confirmed by independent, accredited laboratories. The product has a hygienic attestation from the National Institute of Public Health (PZH).



Available diameters

Nominal diameter DN (mm)	Inside diameter (mm)	Outside diameter (mm)	Minimum bending radius* (m)	Length (m)
50	40	50,5	0,11	50
63	52	63,2	0,15	50
75	61	76,2	0,17	50
90	75	90,6	0,25	50
110	93	110,7	0,33	50
160	136	161	0,4	25
200	176	201,5	0,55	25

* temp. above 10°C

Air flow (m³/h)

Diameter DN (mm)	Air speed						
	0.5 m/s	1.0 m/s	1.5 m/s	2.0 m/s	3.0 m/s	4.0 m/s	5.0 m/s
50	2,3	4,5	6,8	9,0	13,6	18,1	22,6
63	3,9	7,8	11,7	15,6	23,4	31,2	39,0
75	5,3	10,5	15,8	21,0	31,6	42,1	52,6
90	7,8	15,7	23,5	31,4	47,1	62,8	78,5
110	12,2	24,5	36,7	48,9	73,4	97,8	122,3
160	26,1	52,3	78,4	104,6	156,9	209,2	261,5
200	44,0	88,1	132,1	176,2	264,2	352,3	440,4

Characteristics of Airflex pipes

Mechanical strength (PN-EN 61386-24): **450N**
 Impact resistance (PN-EN 61386-24): **Normal (N)**
 Bending resistance: **pliable**

Airflex Ag

Flammability: **flammable**
 Effectiveness of product's anti-bacterial action after 24h: **61% - 92%**
Exterior layer:
 Material: **polyethylene mod. (HDPE-mod.)**
 Color: **green**
Interior layer:
 Material: **polyethylene mod. (LDPE-mod.), silver 150 ppm (anti-bacterial layer, antistatic)**
 Color: **silver**

Airflex Ag-HF-FR

Flammability: **halogen free, self-extinguishing HB (UL94)**
 Effectiveness of product's anti-bacterial action after 24h: **61% - 92%**
Exterior layer:
 Material: **polyethylene mod. (HDPE-mod.)**
 Color: **green**
Interior layer:
 Material: **polyethylene mod. (LDPE-mod.), silver 150 ppm (antibacterial layer, antistatic)**
 Color: **silver**

Airflex Blue

Flammability: **flammable**
Exterior layer:
 Material: **polyethylene mod. (HDPE-mod.)**
 Color: **blue**
Interior layer:
 Material: **polyethylene mod. (LDPE-mod.), antistatic**
 Color: **white**

AIRFLEX Ag

Pipes have an anti-bacterial interior layer containing silver in the amount of 150 ppm within the polymer's matrix, thanks to which it does not undergo migration, ionization or elution processes. The application of silver ensures unlimited in time bactericidal action regardless of air temperature and humidity and prevents development of defense mechanisms by bacteria. The interior layer also has anti-static action, which limits settling and accumulation of dust in pipes. The smooth interior surface makes it possible to attain high air flows at low pressure losses, contributing to the low energy consumption of the entire system. Moreover, it facilitates pipe cleaning if the need arises.



SILVER TECHNOLOGY

exterior protective layer (HDPE)
anti-bacterial, anti-static layer containing silver (LDPE)



AIRFLEX Ag-HF-FR

Ag-HF-FR Airflex pipes, besides the qualities of Airflex Ag pipes, have an exterior protective layer made from flame-retardant halogen-free material. Because of this, they are particularly recommended for air transmission in ventilation and recovery systems at locations where increased fire safety is required and locations subject to more stringent requirements concerning toxic chemical compounds released during burning (public buildings).



SILVER TECHNOLOGY

self-extinguishing, halogen free exterior protective layer (HDPE)
anti-bacterial, anti-static layer containing silver (LDPE)



AIRFLEX Blue

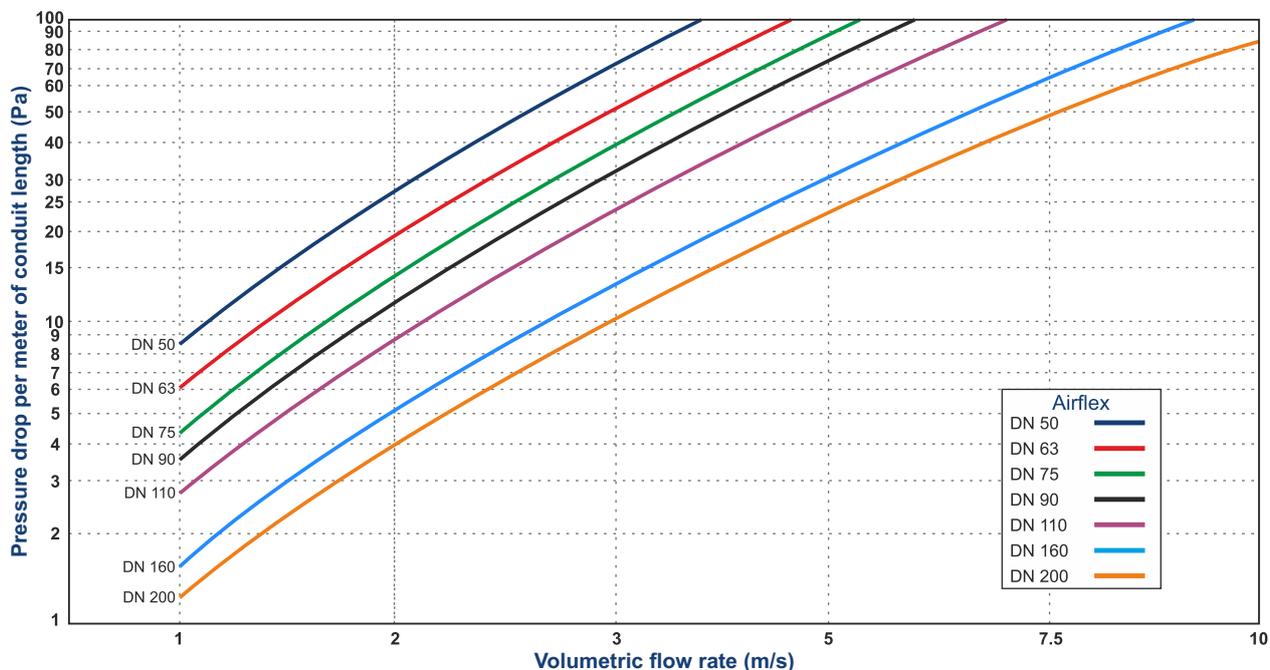
Airflex Blue pipes have been designed for the purposes of "recovery" systems in single-family home construction. Recommended wherever anti-bacterial protection is not required.

Pipes have a smooth, anti-static interior coat which significantly limits settling and accumulation of dust in pipes and makes it possible to achieve high air flows at low pressure losses, contributing to the low energy consumption of the entire system. Moreover, it facilitates pipe cleaning if the need arises.



exterior protective layer (HDPE)
standard antistatic layer





Accessories



MUFFS- MKD

Muffs made from black HDPE are available for every dimension of Airflex pipe. Muffs ensure fast, durable and break-resistant connection of pipes.

RUBBER MUFFS - GKD

Rubber muffs are available for every dimension of Airflex pipe. Muffs ensure fast, durable and break-resistant connection of pipes.



SEALS - UKD

Specially designed seals guarantee tight joining of pipes and low energy consumption of the system.

PIPE CAPS - EKD

Caps protect pipes against any contaminants during transport, storage and installation.



ELBOW FOR CONNECTING VENTILATION DUCTS

Airflex 90 ° elbow is designed for connecting ventilation ducts with large diameters with other elements of the ventilation system, where a 90 degree change of direction is required over a short distance. The overall stability of the shape during the entire period of use guarantees that no forces are exerted on the fastening elements and the connection points with other devices. Elbow comes in two sizes: DN 160 and DN200. The set includes two rubber connecting flanges.

The specification can be subject to change without notice.



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