AL-Phon

Flexible hose made of AL/PET/AL (aluminium/polyester/aluminium) micro-perforated walls to reduce air flow noise and steel wire helix. Thermo-insulating covering in polyester fibre (th. 25mm/16kg/m^3). Outer anti-steam protection in aluminized polyolefin film (flame retardant).
The sturdiness of the heat-bonded polyester fibre prevents dispersion of microfibres during air flow and maintains its integrity over the years.
Insulation: 25mm / 16kg/m^3 - standard
50mm / 16kg/m^3 - on request
Thermal resistivity at 20°C **R = 0,58m² K/W (UNI EN 12664:2002)**

TECHNICAL SPECIFICATIONS AND USAGE LIMIT

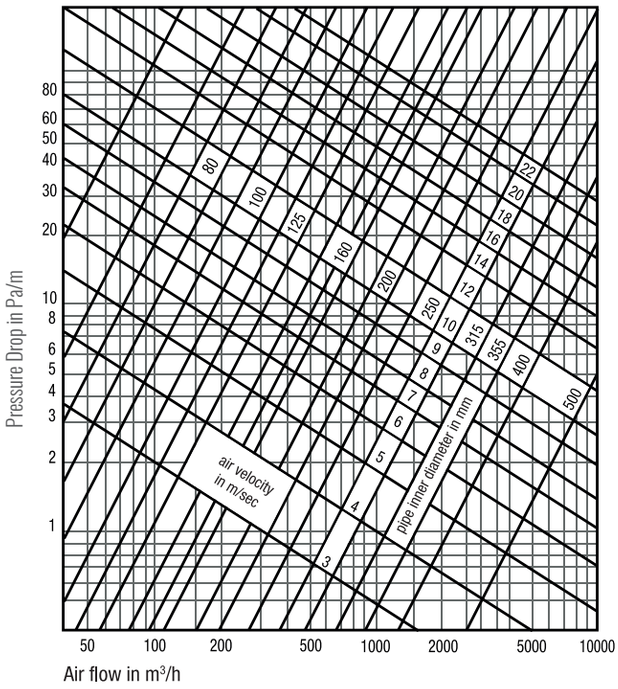
COLOR	LENGTH	PRODUCTION DIAMETERS	WORKING TEMPERATURE	CURVATURE RADIUS	AIR SPEED	PRESSURE
Aluminium	10 m standard	from 82 to 630 mm	-30°C / +140°C (peak 180°C)	0,8 - 1,5 x Ø	max 32 m/sec	max 250 mmH_2O

PRODUCTION DIAMETERS

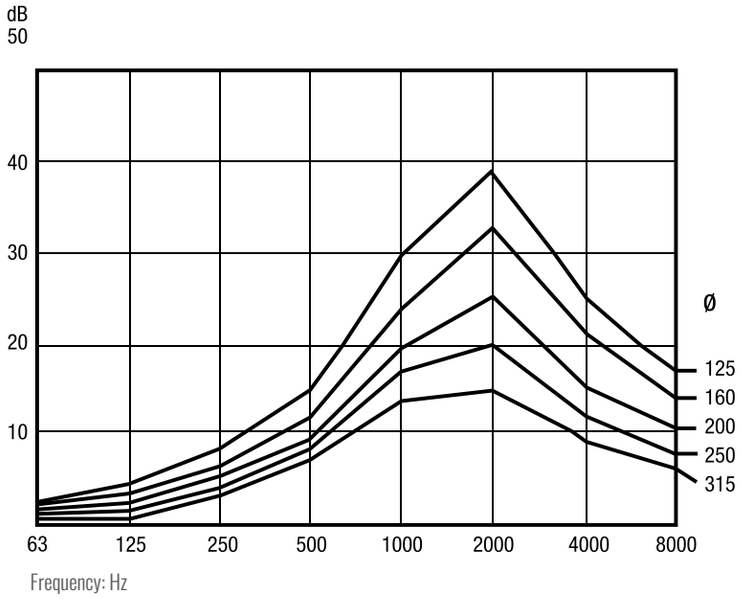
82	102	127	152	160	165*	180	203	228*	254	305	318	356	406	457*	508	630*

*Diameters available on request
Diameters other than those indicated are available by prior feasibility check.

PRESSURE DROPS DIAGRAM (Air temperature 20°C)



AL-PHON SOUND REDUCTION CURVE
Hose length: 1m



TECNICA™
Efficient Indoor Air Project

TECNICA srl – Via degli Intarsiatori Rolesi 1 – 42047 Rolo (RE) tel.+39 0522 665129
fax. +39 0522 650211 www.tecnicasrl.it - info@tecnicasrl.it

CERTIFICATION FOR FIRE REACTION

IT	Class 1 (D.M. 26/06/84), Omologation nr.: RE1205C20D100010		
EU	Inner tube: Class B-s1, d0 (EN 13823:2010) Thermal insulation: Class B-s2, d0 (UNI EN 13501-1:2009)	Vapor barrier: Class B-s1, d0 (EN 13501:2009)	0497 MED/3.18f - (2014/90/UE) Surface materials and floor coverings with low flame-spread characteristics: f) Combustible ducts membrane
FR	class M1 (NF P 92-507:2004)		

GREEN BUILDING

Thanks also to the support of GreenMap, products manufactured by Tecnica srl contribute to obtain the credits of the major international rating systems for sustainable buildings:

LEED
Contributes to credits:
IP, EA, MR

WELL
Contributes to credits:
SOUND, MATERIALS COMMUNITY

BREEAM
Contributes to credits:
MAN, HEA, ENE, WST

For further details regarding the specific contributions to the credits indicated, contact Tecnica srl

APPLICATIONS

Residential	Flexibility	Easy Pack	Self-extinguishing	Tear Resistant	Calibrated Diameters*	Compact Version*	Building	Air Conditioning
CMV	Non-magnetic*	Extractor Hoods						

*on request

PRESSURE DROPS TABLE WITH CALCULATION EXAMPLES

To calculate the flow rates and pressure drops of other diameters, use the beside diagram.

DIAMETER	AIR SPEED 8m/s		AIR SPEED 10m/s	
[mm]	FLOW RATE [m3/h]	PRESSURE DROP [Pa/m]	FLOW RATE [m3/h]	PRESSURE DROP [Pa/m]
82	152	19	190	31
102	250	15	333	24
127	383	12	368	18
160	575	8	773	14
203	900	7	1151	11
254	1445	5	1843	8
318	2278	4	3105	6
356	3058	3	3850	5
406	3845	3	4590	4
508	5111	2	8223	3

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