



# AL1-Therm

Flexible hose made of AL/PET (aluminium/polyester) wall and steel wire helix. Thermo-insulating covering in polyester fibre (th. 17mm/11kg/m<sup>3</sup>). Outer protection in aluminized polyolefin film (flame retardant). The sturdiness of the heat-bonded polyester fibre prevents dispersion of microfibres during air flow.

Insulation: 17mm / 11kg/m<sup>3</sup> - standard  
 25mm / 16kg/m<sup>3</sup> - on request  
 50mm / 16kg/m<sup>3</sup> - on request

Thermal resistivity at 20°C **R = 0,35m<sup>2</sup> 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 20 m/sec	max 200 mmH <sub>2</sub> O

## PRODUCTION DIAMETERS

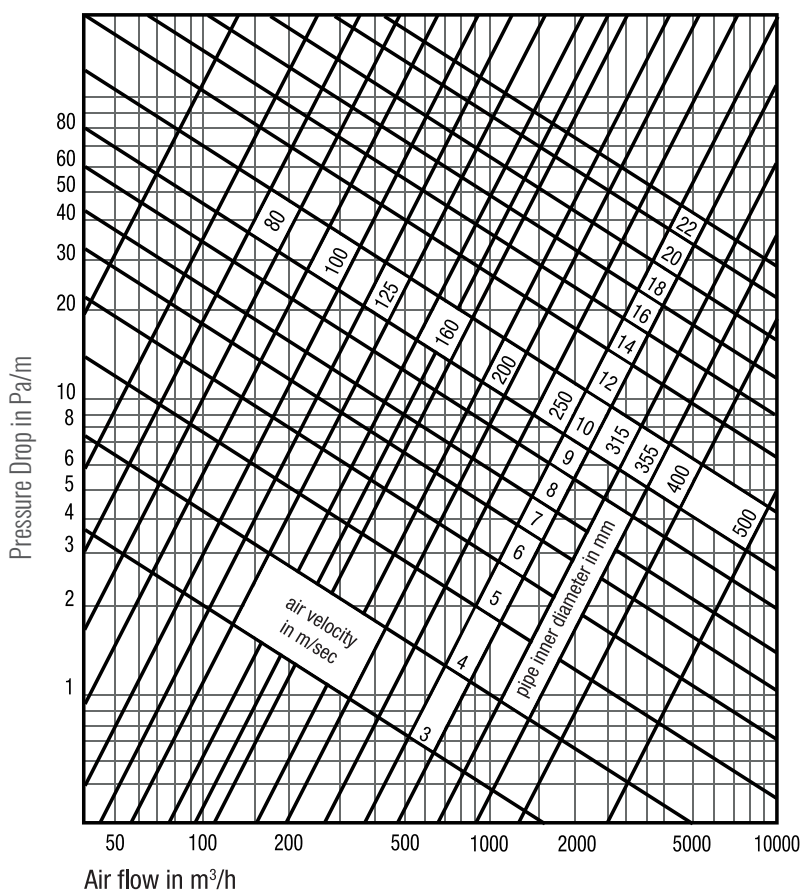
82	102	127	152	160	165*	180	203	228*	254	305	318	356	406	457*	508	630*
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\*Diameters available on request

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

### PRESSURE DROPS DIAGRAM

(Air temperature 20°C)



### PRESSURE DROPS TABLE WITH CALCULATION EXAMPLES

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

DIAMETER [mm]	AIR SPEED 8m/s		AIR SPEED 10m/s	
	FLOW RATE [m <sup>3</sup> /h]	PRESSURE DROP [Pa/m]	FLOW RATE [m <sup>3</sup> /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	6,5	1151	10,5
254	1445	4,7	1843	7,5
318	2278	3,7	3105	6
356	3058	3	3850	5,2
406	3845	2,7	4590	4,4
508	5111	2	8223	3

## CERTIFICATION FOR FIRE REACTION



IT

Class 1 (D.M. 26/06/84),  
Omologation nr.: RO3827C20D100003

## 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:  
MATERIALS, COMMUNITY

**BREEAM**

**BREEAM**

Contributes to credits:  
MAN, 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