

PRODUCT DESCRIPTION



The AIRCOM Classic system has been designed and manufactured for use in Compressed Air transport and distribution systems.

CORROSION

The special "High Impact" thermoplastic alloy used to manufacture the AIRCOM Classic System is resistant to corrosion by all atmospheric agents and a large number of chemical agents which rapidly attack and deteriorate the systems made with traditional materials; this allows the system to last much longer and the conveyed air quality to be much higher than it would have if it had been made from traditional materials (black iron, galvanised steel, etc.).

CONDENSATION

Condensation of water vapour is caused by the cooling of the hot air contained in the piping compared with the colder air present in the surrounding atmosphere. As the plastic used in the AIRCOM Classic system is a very bad heat conductor, the generation of condensation inside the piping decreases greatly and is totally eliminated if the compressed air has been effectively cooled by the production plant.

SHOCK RESISTANCE

Unlike most thermoplastics, AIRCOM offers excellent resistance to internal and external impacts even at low temperatures: -10°C. The material does not splinter if it is broken.

U.V. RADIATION

Similarly to all thermoplastics, AIRCOM Classic is sensitive to direct ultraviolet radiation (direct exposure to the sun), while it withstands indirect exposure reasonably well (behind a window or a similar screen). For outdoor installation and all other cases of direct exposure to UV radiation, shield the piping (paint, lagging, PE or PVC drain pipe, etc.).

FIRE RESISTANCE

The AIRCOM Classic system is SELF-EXTINGUISHING. In the event of fire, therefore, it neither feeds nor generates flames.

FLOW RATE

The AIRCOM Classic System, featuring an extremely low coefficient of friction, allows much higher rated and effective flow rates than those offered by metals (stainless steel included); generally speaking, the AIRCOM Classic System reduces the diameter of a plant fitted with metal pipes by one size, though this must be accurately calculated on a case-by-case basis. Please consult the flow rate tables for more accurate calculations (page 30).

INSTALLATION

The AIRCOM Classic System is extremely quick to install. Even the most complex plants do not require any special construction equipment. They are lightweight and resistant and therefore do not require lifting equipment or special safety precautions on the work-site, while electricity is not an indispensable requirement. It is very simple to modify or extend the plant even after installation.

DIMENSIONS AND CONFORMITY

Pipes, unions and valves comply with ISO, UNI and NF standards governing pipes, unions and valves in PVC.

All the products in the AIRCOM Classic System also comply with European and North American Standards governing the transport of compressed air.



ATTENTION: the information, data and characteristics of the products featured in this document are subject to modification at any time and without prior notice. All the applications specified in this document are guaranteed by AIRCOM as long as the conditions of use specified in this document are respected.

COMPATIBILITY WITH COMPRESSOR OILS

The lubricating oils used in the compressors, mixed with condensation, form an emulsion that is extremely aggressive on the piping conveying them. The AIRCOM Classic system is perfectly compatible with most of these products, but not with all of them.

The use of Classic with incompatible oils considerably shortens its lifetime, so much so that their use is neither recommended nor allowed.

PLEASE ASK OUR TECHNICAL DEPT. FOR CERTIFICATION OF COMPATIBILITY

PHYSICAL CHARACTERISTICS

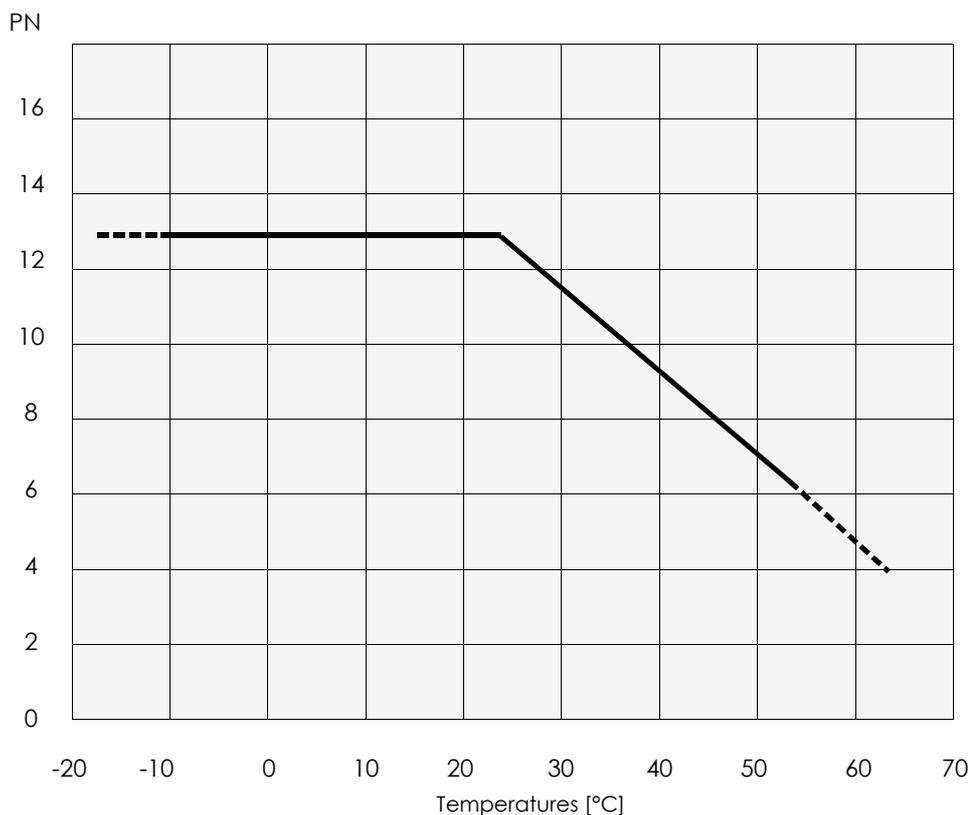
Characteristics	Standards	Unit	Values
VICAT class	ISO R/306 NF T 51-021	°C	≥ 75
Water absorption	ISO R507 NF T 50-023	mg/cm ³	< 4
Coefficient of heat expansion	ASTM D 696-70	mm°C	75x10-6
Density	ISO 1183/3514 NF T 54.022	g/cm ³	≥ 1,35

MECHANICAL CHARACTERISTICS

Characteristics	Standards	Units	Values
Ultimate elongation	ISO R 527/NF T 54-026	%	> 130
Bending elastic modulus	ISO R 527/NF T 54-026	KN/cm ²	233
IZOD impact resistance	NF T 51-911	KJ/m ²	> 100
Breaking resistance	ISO 527	MPa	36

PRESSURE/TEMPERATURE CURVE

Pn 13 means that the products in the AIRCOM Classic system can be used at a constant pressure of 13 bar at a temperature of 20°C. Increases in temperature correspond to decreases in rated pressure as shown by the curve in the following graph.





APPLICATIONS

1. COMPRESSED AIR

The AIRCOM Classic system was mainly designed for COMPRESSED AIR up to a pressure of 13 bar. The product range can be used to build systems featuring a production unit, treatment assembly, loop distribution system and all external connectors.

A set of special elements rapidly and effectively solves all specific installation problems connected with compressed air.

2. OTHER USES

- ♦ Inert gases
- ♦ Negative pressure systems
- ♦ Compatibility of liquid foodstuffs (please contact the Aircom technical dept.)

