

Telecommunications Air Filter Service Guide

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Author:

Revision:

Purpose:

To provide some basic guidelines regarding the stocking, care and useful service life of our air filters in a typical, telecommunications system application. This information is based on industry standards, common practices, material properties, customer comments and our experience.

Since our air filters can be subjected to a variety of environments beyond our control, we do not publish a life expectancy. The terms "shelf life" and "operating life" are not used because they are relative terms. The ideal storage condition for our filters is a cool, dry, dark environment. Surroundings that adversely affect the media are high heat, humidity at high temperatures and ultraviolet light. Media may degrade when exposed to solvents and sulfates, such as, cleaning agents and exhaust. Reduced filter service life depends upon the severity of the digressions from ideal storage and operating conditions.

Replace Filters:

Cleaning telecommunications equipment air filters is not recommended by major carriers and service providers. It is challenging to thoroughly clean an air filter. Some air filters are not intended to be cleaned due to the media fibers. Trying to clean certain types of media will result in damage or destruction of the media integrity. Other media may be more resilient to the rigors of attempted cleanings, but blowing with air, vacuuming, or washing with water is impractical or potentially risky to the electronics within the telecommunications systems. While some efforts to remove dust and debris from the filter surface seem effective, it does not completely remove harmful contaminants captured within the depth of the media. This results in a compounding dust build up that adversely affects air flow which is required to sufficiently cool the system. The time and expense associated with attempting to clean an air filter thoroughly can be more costly than replacing the air filter. Completely replacing the air filters ensure the telecommunications equipment is receiving ideal cooling air flow and no residual contaminants will be dislodged and enter the system.

Since cleaning air filters is not recommended by major telecommunication carriers and service providers, the governing NEBS Standards have stated air filters should be replaced. NEBS GR-63-CORE, Section 4.1.5.2 Fan-Cooled Equipment Criteria, Requirement R4-27, states the following: Equipment fan filters shall be single use and not the types that require cleaning.

General Guidelines:

Based on network equipment environmental criteria, telecommunications industry standards, thermal management concerns, and fiscal assessments, it is recommended air filters be replaced every three to six months, or within the recommended preventive maintenance schedule.

We do not recommend storing air filters for long durations, many months, or years at a time. Instead, purchase cost-effective quantities and keep sufficient inventories for no more than a few months. Filters have improved permanence in an operating situation with air movement and ventilation. To ensure optimal filter integrity in the operating environment it is recommended that filters be put into service within one (1) year of the product ship date from Universal Air Filter. Check filter media integrity before installing filters stored for longer periods.

Revision History

Rev.	Date	Description of Changes	
1	3 Dec 2017	Initial release	
2	05Oct 2022	Added storage duration recommendations	

Procedure Approvals

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Title	Signature (On printed master only)			
Engineering Manager				

Note: These instructions are provided for informational purposes only. Please contact a UAF Sales Engineer for application specific details.