



Fluid Power Specialist



Comparing Cellulose And Synthetic Media

CELLULOSE MEDIA

Cellulose (paper) media fibers are larger and more irregular therefore the creating a higher pressure drop. This causes larger contaminant particles to become concentrated on the surface of the media, increasing the restriction and limiting the dirt holding capacity of the element. The size of the paper also makes it difficult to intercept smaller contaminant particles below 10 micron.

- The most widely used filter media
- More economical than any other media
- More cost effective media for less sophisticated hydraulic systems
- Efficient in removing contaminant particles 10 to 40 microns
- Flat irregular shaped fibers tend to restrict flow, so efficiency is not as high as synthetic



SYNTHETIC MEDIA

Synthetic fibers are uniform in size and have a more aerodynamic shape. This creates less resistance to flow, because the synthetic fibers are smaller, so more filtration can be done in same filter. This combination of low pressure drop and increased surface area results in improved filter efficiency and, allows contaminants to be trapped throughout the filter material.

- More expensive than cellulose, but can be more efficient for sophisticated systems
- Smaller fibers provide more surface area for removing contaminants from the system
- Higher efficiencies in the range of particular removal 15 micron in size and below
- Circular shaped fibers offer less flow restriction providing better cold weather start up

