

Disc Filtration Technology

Arkal's filtration systems use a specially designed disc filtration technology.

Color-coded Polypropylene or Nylon discs are grooved on both sides to a specific micron size. A series of these discs are then stacked and compressed on a specially designed spine. When stacked, the groove on top runs opposite to the groove below, creating a filtration element with a statistically significant series of intersecting grooves which trap the solids. The stack is enclosed in a corrosion and pressure resistant housing.

During filtration, the discs are tightly compressed together by a combination of the spring's power and the differential pressure, thus providing high filtration efficiency. Filtration occurs while water is percolating from the outer diameter to the inner diameter of the element. Depending on the micron rating (See table), there are from 18 (in 400 micron discs) to 32 (in 20 micron discs) stopping points in each track, thus creating the unique in-depth filtration (Figure below).

Table of Filtration Grades of the Discs and Color Code

Color Code	Blue	Yellow	Red	Black	Brown	Green	Purple	Gray
Micron	400	200	130	100	70	55	40	20
Mesh	40	80	120	140				
PP								
Nylon								

