

Aeromotive, Inc. Technical Bulletin #103

From: Aeromotive Technical Department

Date: 3/28/2019

Re: Fuel Filters: Identifying the correct replacement element for your filter housing.

Filter ID Tech Tips:

How do you know what replacement element will fit your inline filter housing and have the same micron rating? First determine which filter housing you have, then what micron rating the element is.

There are 3 in-line Aeromotive filter housings, each with unique dimensions and port sizes:

- 3-1/2" long x 1-1/4" diameter with 3/8" NPT (National Pipe Thread) ports
- 5-1/2" long x 2" diameter filter housings are available in two versions:
 - ORB-10 female ports (7/8"x14 SAE thread with o-ring boss)
 - AN Male flare connections (housings with AN-06, AN-08 and AN-10 are available)
- 7" long x 2-1/2" diameter with ORB-12 (1-1/16"x12 SAE thread with o-ring boss) ports

To determine the housing size, measure the overall length from port face to port face (not including fittings) and then measure major diameter, as measured across the center of the filter housing.

Housing colors don't necessarily indicate housing size and vary including red, black and nickel plate.

There are 4 Aeromotive filter elements, each with unique micron ratings and filter material:

- 10-micron cellulose/fabric
- 10-micron Microglass
- 40-micron stainless mesh
- 100-micron stainless mesh.

To determine what micron rating you have now, look at the element end cap (visible through the filter inlet port) and read the micron number. It will have 10m, 40m or 100m etched near the center of the end cap.

There are two important things to know about micron ratings and element material:

1. The larger the number the coarser the element. 100-micron is 10X coarser than 10-micron.
2. There is some cross-over in element material in the 40-m and 10-m area.

The following should provide a general understanding of Aeromotive filter element materials:

- All 100-m elements are stainless mesh and compatible with any fuel.
- All 40-micron elements are stainless but the element for the smallest housing, which is cellulose.
- 10-micron, the finest filter material Aeromotive offers, is available in cellulose-fabric and Microglass. Microglass is a 10-m absolute mat between two layers of stainless mesh and co-pleated into a filter cartridge. Microglass is the recommended 10-m material for alcohol (ethanol/methanol) fuels.
- Fine filters in all fuels must be used after the pump, not before, and must be closely monitored and serviced as needed. 10-m filters of either material are not cleanable and must be replaced.

See Filter Chart below for help identifying the filter housing you have and which element will be a direct replacement. It will also show optional elements that would fit in the same housing.

THE FILTER GUIDE		100 MICRON STAINLESS MESH ALL FUELS	40 MICRON STAINLESS MESH ALL FUELS	10 MICRON CELLULOSE GAS & DIESEL	10 MICRON MICRO GLASS E85 / ALCOHOL
FEMALE END					
	3/8" NPT 1.25" x 3.5"	12316 - RED 12366 - PLATINUM 12616 - ELEMENT	FABRIC 12303 - RED 12353 - PLATINUM 12603 - ELEMENT		
	ORB-10 2" x 5.5"	12304 - RED 12324 - BLACK 12354 - PLATINUM 12307 - HARD COAT 12604 - ELEMENT 12614 - CRIMP ELEMENT	12335 - RED 12330 - BLACK 12635 - ELEMENT	12301 - RED 12321 - BLACK 12351 - PLATINUM 12306 - HARD COAT 12601 - ELEMENT	12340 - RED 12350 - BLACK 12346 - HARD COAT 12650 - ELEMENT
	ORB-12 2.5" x 7"	12302 - PRO SERIES 12352 - PLATINUM 12309 - HARD COAT 12602 - ELEMENT	12342 - PRO SERIES 12343 - HARD COAT 12642 - ELEMENT	12310 - PRO SERIES 12360 - PLATINUM 12311 - HARD COAT 12610 - ELEMENT	12339 - PRO SERIES 12341 - HARD COAT 12639 - ELEMENT
MALE END					
	AN-06	12349 - BLACK	12348 - BLACK	12347 - BLACK	12345 - BLACK
	AN-08	12379 - BLACK	12378 - BLACK	12377 - BLACK	12375 - BLACK
	AN-10 2" x 5.5"	12389 - BLACK 12604 - ELEMENT	12388 - BLACK 12635 - ELEMENT	12387 - BLACK 12601 - ELEMENT	12385 - BLACK 12650 - ELEMENT
SHUT - OFF					
	ORB-10	12331 - BLACK 12604 - ELEMENT	7.375" long x 2" diameter	Features - Proprietary stainless steel shutoff valve design. - 10 micron stainless steel filter element. - Please see the following page for more information	
	ORB-12	12332 - BLACK 12602 - ELEMENT	8.875" long x 2.5" diameter		
CANISTER					
 • 3/8" NPT ports. • 6.125" x 3.75"		12318 - RED & POLISH 12319 - RED & BLACK 12618 - ELEMENT		12308 - RED & POLISH 12317 - RED & BLACK 12358 - PLATINUM 12608 - ELEMENT	REPLACEMENT ELEMENTS All replacement elements include (x1) filter housing o-ring