



Oil Filter

You may take your oil filter for granted, but this small, inexpensive part of your vehicle's lubrication system plays a vital role in protecting the engine from premature wear. Each moving part in the engine and the cylinder walls requires clean oil for proper lubrication and lasting life. The oil filter cleans the oil as it passes through the filter element or filtering media. Preventing premature wear on engines internal parts, and for sure lubricant for rotating parts. Acting alone, engine oil would quickly become saturated with these contaminants and wear materials and would require very frequent changing, perhaps as often as every short distance, in order to effectively guard against wear. It is an engines oil filter which allows engine oil to last for an extended period of time. It is also important to prevent oil pump from damage and wear. With **FAC** oil filter, engine oil is able to last for an extended period of time with assuring health to both engine components and oil pump. **FAC** oil filters reliably purify oils from dirt and solid particles such as dust, abraded metal, carbon deposits, soot particles etc.



Types of **FAC** oil filtration system:

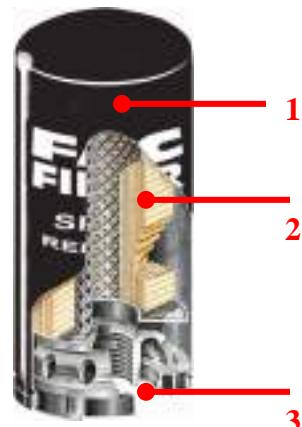
With **FAC** oil filtrating products, you can find two filters categories:

- 1- spin on oil filter
- 2- cartridge oil filter element

Spin on oil filter

FAC Spin-on oil filters form one unit consisting of housing and filter element. The whole unit is replaced during maintenance.

FAC spin on oil filter consist of:



1- Filter housing:

Made by special steel with high resistance to wear and corrosion. Also it has high resistance to fracture under too high oil pump pressure to avoid leakage due to explosion. Usually housing has a can shape which is able to confirming homogeny of in-oil pressure to give constant rate of oil arrived to engine.





2- Filter element:

The spin on filter core that's responsible for filtrating engine inlet oil. This occurs through a very special filtration paper with specific properties. The selection of right paper is FAC R&D paper engineers' responsibility, to meet your car engine requirements.

Almost, filter paper is plated to give largest area for collecting contaminations with its design performance along its life period. Filter paper is restricted in two metal covers and internal tube by very effective adhesion that is very resilience to heat, pressure, and impulses.



3- Filter base plate: it also made by special steel with high resistance to wear and corrosion. The tape threads are according to standards that meet all applications.

An oil seal with certain rubber based material is sealing oil inlets and outlet. That oil seal has resistance up to three times temperature of passing oil which is assuring zero leakage.

Another add-value component: Usually, FAC spin on oil filter contains a by-pass valve that will allow oil to bypass the filter element in the event that it becomes too plugged to pass enough oil. This prevents engine oil starvation and the possibility of destroying the element, allowing pieces of it and the junk it filtered to enter the engine. Also, when the oil is cold and very thick, it will tend to bypass the filter through the pressure relief valve because it cannot pass through the element until it thins out somewhat. If it did not do this, the filter element media would tear open.

FAC oil filters have an anti-drain back valve to prevent dirty oil from backwashing back into the oil pan. Also FAC spin on oil filters have a down spring to assure no mixing between clean and dirty oil.

Spin on FAC oil filter merits:

- 1- Strong steel housing to withstand the high oil pressure
- 2- An anti-drain back valve that actually works without creating any backpressure.
- 3- A pressure relief valve that save engine and doesn't leak.
- 4- A strong paper element and covers that can stand the pressure and flow of oil without falling apart.





- 5- The element media has to be able to duty trap small particles, but without restricting the flow too much, according to your car engine design.
- 6- Prevents damage to the engine's bottom end, including bearings and crankshaft.
- 7- Long life which leads to engine protected for the entire service interval.
- 8- Improved flow thus reduced risk of oil starvation enhancing engine protection.



Cartridge oil filter element

FAC Oil filter elements are either situated in their own housing or they are integrated directly into the engine oil circulation system. Seams like separate spin on element. They are particularly kind to the environment as only the filter element is replaced also because its eco covers (almost all). Housing and valves remain on the engine block. The exact fit in the housing ensures that FAC oil filter elements are completely leak-free.



Cartridge FAC oil filter element merits:

- 1- Reduced use of raw materials.
- 2- kinder to the environment with less waste during maintenance.
- 3-Waste disposal problems are eased.

