



AMSOIL Ea By-Pass Filters

AMSOIL EaBP Filters are high efficiency by-pass filters that also remove soot. They provide the ultimate in protection against wear, oil degradation and corrosion.

Higher Efficiency

EaBP Filters provide higher filtering efficiency, soot removal and increased oil capacity due to new media composition and configuration. AMSOIL EaBP Filters have an efficiency of 98.7 percent at two microns. At normal operating RPMs the EaBP Filter will filter all of the oil in a typical five quart sump in less than 10 minutes.

Superior Construction

The superior construction of AMSOIL EaBP Filters provides better sealing and increased longevity along with superior corrosion resistance.

Longer Lasting

When used in conjunction with AMSOIL motor oils and an AMSOIL EaO or Donaldson Endurance™ filter, the EaBP should be changed every other full-flow filter change, not to exceed 600,000 miles. When used with other brands of motor oil or full-flow filters, the EaBP Filter should be changed every other full-flow filter change. AMSOIL recommends using oil analysis when extending oil drain intervals.

Increased Oil Capacity

The increased fluid system capacity and filtration life provides improved oil cooling and ensures that equipment constantly runs on clean oil. Engine efficiency is increased and engine life is extended significantly.

Soot Removal

AMSOIL has designed a high-efficiency by-pass filter element that is also a soot removal device. AMSOIL Ea By-Pass Filters use a synthetic/cellulose sandwiched media. The inner layer of the element is composed of a highly efficient cellulose media covered with a full-synthetic media outer layer. These filters remove 39 percent of soot contaminants less than one micron. Soot removal efficiency can increase approximately 10 to 14 percent when the EaBP Filter is used in conjunction with a standard full-flow filter, even higher in conjunction with Ea Oil Filters or Donaldson Endurance filters.

The Dangers of Soot

The combustion process in diesel engines creates soot. After fuel is injected, combustion occurs with soot as a by-product of the process and the combustion par-

ticulates become trapped on the exposed oil film. The rings wipe the particulates into the oil and the fine particulates aggregate, increasing levels of soot in the oil.

Oil with dispersant additives will generally keep soot in the range of 0.002 to 0.5 microns in suspension; detergent additives prevent the build-up of sludge and act as an acid neutralizer, keeping soot in the range of 0.5 to 1.5 microns in suspension. These anti-wear additives work by providing a sacrificial chemical-to-chemical barrier. As the amount of soot suspended in the oil increases, the performance of these additives decreases.

Soot Causes Wear

As an oil's soot dispersant additive levels increase, wear-reducing additives become less effective. This creates a direct linear correlation between wear and soot concentration; the higher the concentration of soot, the higher the level of wear. Today's oil manufacturers are extending oil life by holding higher concentrations of contaminants, including soot, in suspension in the oil. They are also increasing fuel economy by reducing oil viscosity and oil film thickness, therefore reducing the critical contaminant size. This further necessitates the use of by-pass filtration, especially in diesel engines.

Quality Construction

AMSOIL EaBP Filters have a marine powder coated exterior. Their zinc-dichromate base plates increase rust protection, and are compatible with existing AMSOIL by-pass filter mounts. EaBP Filters have a nitrile HNBR gasket and an orange silicone anti-drain valve. The two-stage pleated and layered cellulose/full-synthetic media has an efficiency rating of 98.7 percent at two microns.

EaBP Vital Statistics

AMSOIL offers three by-pass filters; the EaBP90, EaBP100 and EaBP110. All vehicles and applications that can accept the AMSOIL BMK11, 12, 13, 15, 16, 17 and 18 filter mounts can use the EaBP Filters. Per AMSOIL by-pass installation instructions, AMSOIL recommends by-pass filters be mounted as close to vertical as possible. The filters are equipped with anti-drain back valve in the event they are mounted at an angle.