

1. **Cost saving and extending oil life to 150.000 km.**
2. **Improving fuel consumption**
3. **Environmental responsibility**



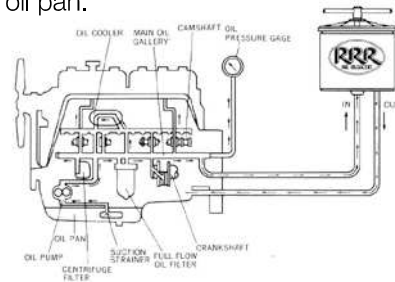
Stabilises the oil conditions to extend oil life!

Features:

- Very compact and light bypass oil cleaners, specially designed to clean engine oil.
- Effectively removes all the particles that are not removed by the conventional filters, and performs a total cleaning of the oil by removing solid particles (carbon, metallic particles) absorbing water and eliminating sludge and other oil oxidation residues.
- An absolute necessity when running on bio-fuel! Typically the bio-fuel will mix with the engine oil and create resinous substances that will harm the engine, even leading to engine breakdown, and considerably reduce oil life. Triple R will clean the oil, stabilise the oil condition, and consequently avoid and eliminate the creation of resinous substances.
- Low running cost, easy installation & maintenance.
- Also applicable for lube systems, gearboxes and machinery with a system pressure below 6 bar. For example: wind mills, transmissions, etc.

Setup:

The TR bypass filter connects directly to the engine main gallery, and the cleaned oil is returned to the engine oil pan.



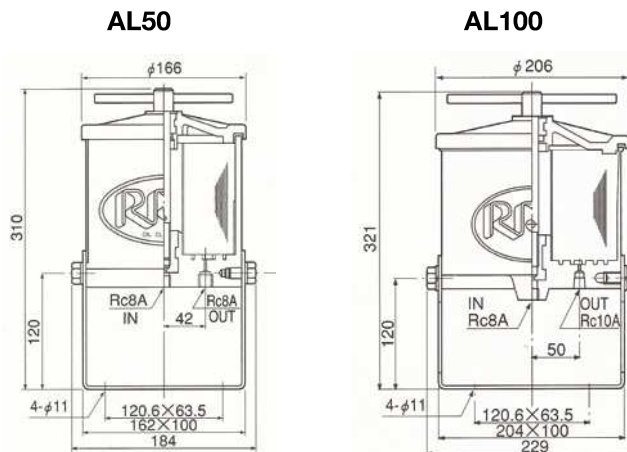
There are 3 filter elements available:

- E-series: normal element for engine oil.
- X-series: "long life" element with a 50% higher dirt capacity and element life.
- D-series: "heavy duty" filter element with a very high dirt and water absorbing capacity.



Technical specifications.

| Model | AL50 | AL100 |
|-------------------|------------------|------------------|
| Article nr. | TR-19650 | TR-19530 |
| Max pressure | 6 bar | 6 bar |
| Engine oil volume | max 15 lit. | max 45 lit. |
| Max flow rate | 2,2 l/m | 3,8 l/m |
| Thread In/Out | 1/4" x 1/4" BSPT | 1/4" x 3/8" BSPT |
| Element type | E50, X50 | E100, X100, D100 |
| Weight kg | 3,5 kg | 5,5 kg |



Filter element & oil change change recommendations for engine oil.

| Filter model | AL50 | | | AL100 | | | Oil life | |
|---------------------------------|------------------|------------------|-------------|--------------------|--------------------|--------------------|-------------|------------|
| | E50 | X50 | Main filter | E100 | X100 | D100 | Main filter | Max. |
| Routed bus; short dist. | 3.000 ~ 4.000 km | 4.500 ~ 6.000 km | 40.000 km | 6.000 ~ 8.000 km | 9.000 ~ 12.000 km | 12.000 ~ 16.000 km | 40.000 km | 120.000 km |
| Tour bus; long distance | 5.000 ~ 6.000 km | 7.500 ~ 9.000 km | 50.000 km | 10.000 ~ 12.000 km | 15.000 ~ 18.000 km | 20.000 ~ 25.000 km | 50.000 km | 150.000 km |
| Short/mid distance truck | 3.000 ~ 4.000 km | 4.500 ~ 6.000 km | 40.000 km | 6.000 ~ 8.000 km | 9.000 ~ 12.000 km | 12.000 ~ 16.000 km | 40.000 km | 120.000 km |
| Long distance truck | 5.000 ~ 6.000 km | 7.500 ~ 9.000 km | 50.000 km | 10.000 ~ 12.000 km | 15.000 ~ 18.000 km | 20.000 ~ 25.000 km | 50.000 km | 150.000 km |
| Dumper/cement truck | 3.000 ~ 4.000 km | 5.000 ~ 6.000 km | 40.000 km | 6.000 ~ 8.000 km | 9.000 ~ 12.000 km | 12.000 ~ 16.000 km | 40.000 km | 120.000 km |
| Fork lift, container lift, etc. | 125 hr | 175 hr | 500 hr | 250 hr | 350 hr | 500 hr | 500 hr | 2.000 hr |
| Construction machine | 125 hr | 175 hr | 500 hr | 250 hr | 350 hr | 500 hr | 500 hr | 2.000 hr |

Analyzing the engine condition.

Checking the top of the filter element is a great tool for checking your engine or system condition. As all the big particles remain on top, it's easy to see the kind of contamination that is present in the oil.

1. Normal condition: fine black deposit from carbon particles.
2. Excessive amount of bright metal particles: the engine is facing abnormal wear caused by engine overload. Check if the engine had a proper maintenance and act accordingly.
3. Excessive sludge and carbon deposit: oxidation products are caused by excessive heat or (bio-)fuel mixing with the engine oil.
4. Cracks in the element layers indicate a too high water concentration. Try to detect and repair the cause.

