

TR SERIES - Engine oil cleaner



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



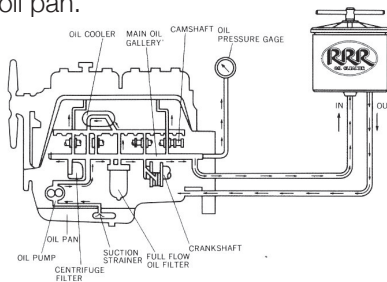
Stabilises the oil conditions to extend oil life!

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, gearboxes, extruders, etc.

Setup:

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



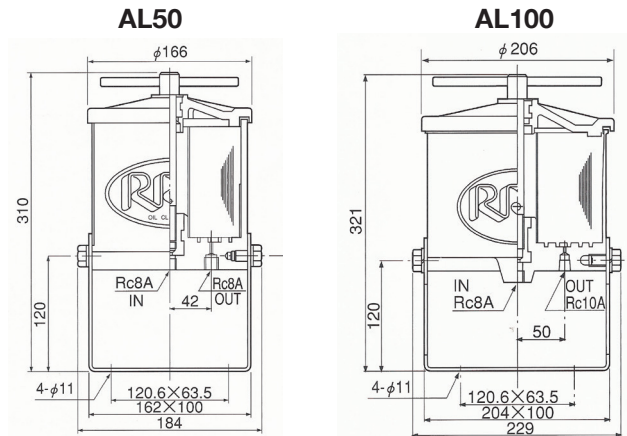
There are 3 filter elements available:

- 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-10300	TR-10451
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
Dimension mm	166 x 184 x 310	206 x 229 x 321



Filter element & oil change recommendations for engine oil.

Filter model	AL50			AL100			Oil life	
	E50	X50	Main filter	E100	X100	D100	Main filter	Max.
Routed bus, short distance	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	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
Fork lift, container lift, etc.	125 hr	175 hr	500 hr	250 hr	350 hr	500 hr	500 hr	2.000 hr
Construction machinery	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 check 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 due to the (bio-)fuel mixing with the engine oil.
4. Cracks in the element layers are a sign of a too high water concentration. Try to detect and repair the cause.

