

# TR SERIES - Engine oil cleaner



1. **Cost saving and extending engine oil life to 3.000 hrs**
2. **Improving fuel consumption**
3. **Eliminating sludge and varnish**



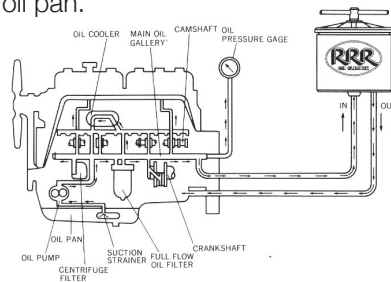
## Stabilises the oil conditions to extend oil life!

### Features:

- Very compact and light bypass oil cleaners, specially designed to clean engine oil from **diesel motors** and **generator sets**.
- 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, eliminating sludge and avoiding excessive oil oxidation.
- Especially very useful when running on **bio-fuel!** Typically 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 sludge and 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.



E100



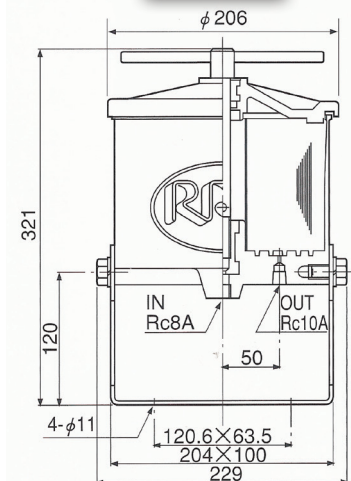
X100



D100

## Technical specifications.

| Model             | AL100            | AL200      | AL300      | AL400      |
|-------------------|------------------|------------|------------|------------|
| Article nr.       | TR-10450         | TR-121048  | TR-121049  | TR-121051  |
| Max pressure      | 6 bar            |            |            |            |
| Engine oil volume | < 45 lit.        | < 100 lit. | < 150 lit. | < 200 lit. |
| Max. flow rate    | < 0,5 l/m        | < 1,0 l/m  | < 1,5 l/m  | < 2,0 l/m  |
| Thread In/Out     | 1/4" x 3/8" BSPT |            |            |            |
| Element type      | E100, X100, D100 |            |            |            |
| Weight kg         | 5,5 kg           | 12 kg      | 18 kg      | 25 kg      |



## Filter element & oil change recommendations when used on Diesel Engines and Generators sets.

| Filter element type             | AL100              |                    |                    | Main filter | Oil life         |
|---------------------------------|--------------------|--------------------|--------------------|-------------|------------------|
|                                 | E100               | X100               | D100               |             | Max.             |
| Routed bus, short distance      | 6.000 ~ 8.000 km   | 9.000 ~ 12.000 km  | 12.000 ~ 16.000 km | 40.000 km   | 150.000 km       |
| Tour bus; long distance         | 10.000 ~ 12.000 km | 15.000 ~ 18.000 km | 20.000 ~ 25.000 km | 50.000 km   | 200.000 km       |
| Short/mid distance truck        | 6.000 ~ 8.000 km   | 9.000 ~ 12.000 km  | 12.000 ~ 16.000 km | 40.000 km   | 150.000 km       |
| Long distance truck             | 10.000 ~ 12.000 km | 15.000 ~ 18.000 km | 20.000 ~ 25.000 km | 50.000 km   | 150.000 km       |
| Dumper/cement truck             | 6.000 ~ 8.000 km   | 9.000 ~ 12.000 km  | 12.000 ~ 16.000 km | 40.000 km   | 150.000 km       |
| Fork lift, container lift, etc. | 250 hr             | 350 hr             | 500 hr             | 500 hr      | 2.000 hr         |
| Construction machinery          | 250 hr             | 350 hr             | 500 hr             | 500 hr      | 2.000 hr         |
| Generator sets                  | 250 hr             | 350 hr             | 500 hr             | 500 hr      | 2.000 - 3.000 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.

