# TR SERIES - ENGINE OIL CLEANER



- **COST SAVING EN EXTENDING OIL LIFE TO 3.000 HRS**
- Triple R

- IMPROVING FUEL CONSUMPTION
- **ELIMINATING SLUDGE AND VARNISH**





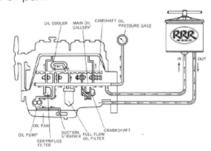
### STABILISES THE OIL CONDITIONS TO EXTEND OIL LIFE!

#### **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.







D100



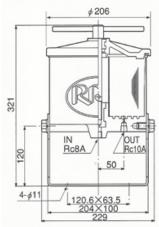
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### TECHNICAL SPECIFICATIONS

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 GENERATOR SETS

		Oil life			
Filter element type	E100	X100	D100	Main filter	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.









