AC&R OILS REFRACTOMETER

This refractometer is an essential instrument that permits the quick and accurate determination of the refractive index for oils and oil mixtures. It is used to determine the percentage of residual MO Mineral Oil left in an AC/R system after Retrofit processing (sotitition of a CFC or HCFC refrigerant from the system into a new HFC ecological one). In CFC systems (R12, R22, R502) or HCFC is required the conversion of:
- A Mineral Oil (MO) into a PolyOIlEster (POE);
- A Mineral Oil (MO) into a PolyAlkylene Glycol Oil (PAG);
- A Mineral Oil (MO) into an AlkylBenzene Oil (AB);
- An AlkylBenzene Oil AB (Zerol) to a PolyOIlEster (POE), suited for the HFC (R134a, R404a, R407c, R410a, R-424a, R426a, R507...) systems. A percentage of old oil higher than 5% in the AC/R system may cause difficulties when new fluids evaporate.

Up until now for the identification of the lubricant residuals we used to follow old expensive procedures with the implication of Certified Labs; with this refractometer the procedures are quickly simplified. It actually identifies lubricant residuals by measuring the Refractive Index (nD) and it’s place in the furnished diagram.
- Eyeguard;
- High impact housing;
- Eyepiece (Adjusting ring of diopter);
- Recalibration screw (screwdriver furnished);
- High contrast blue/white scale and accurate reading;
- Oil dropper (furnished);
- Plastic carrying case.

Specifications:
- Refractive Index range : 1.435 ÷ 1.520 (nD);
- Accuracy : 1.001 (nD);
- Resolution : 0,001 (nD);
- Temperature : 15.5°C to 26.7°C. (60°C to 80°F.);
- Dimensions and Weight : Ø 40 x 160 mm. - 180 gr.

### REFRIGERATION OILS - REFRACTIVE INDEX nD @ 20°C, (68°F.)

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<th>Model</th>
<th>Description</th>
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<tr>
<td>REF109b</td>
<td>AC&amp;R Oils Refractometer, Refractive Index range 1,435 ÷ 1,520 nD w/plastic carrying case.</td>
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Method of operation:
1. Open the cover plate;
2. Using the oil dropper place a few oil drops on the measuring prism. Close the cover plate and press it lightly;
3. Hold the refractometer up to a light source and adjust the focusing ring so that you can read the scale;
4. Note the value where the boundary line crosses the scale.

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Specifications, design and materials subject to change without notice.