

# ALRO Circular Slide Rules

The full company name was "All-Round" but it is better known as: **ALRO**. This Dutch maker started producing their striking "flagship" metal cased **circular** slide rules in **1936**. A unique selling point of these models was that the case doubled up as a handy desk stand. In **1953** ALRO briefly started producing all plastic linear slide rules. However, the plastic chosen (Perspex™) proved too brittle. So three years after starting production ALRO abandoned the manufacture of linear slide rules. In **1960** ALRO stopped all slide rule production and reinvented themselves as a major supplier of plastic credit cards and laminated slide charts.



In **2020** the *Dutch Circle for Historical Calculating Instruments* (KRING) published "THE ALRO CATALOGUE" by Otto van Poelje (ISBN/EAN: 978-90-81-550-024). In it every known calculating disc, slide rule and slide chart is meticulously catalogued and photographed. Order it from: <http://www.rekeninstrumenten.nl/ALRO/> .

This "quick-reference" list, based in part on the ALRO catalogue, features just the pre-1960 **circular** slide rules the company is famous for.

| Model #/name           | Type                  | Size (cm)    | Comments  | ALRO Cat. #           |
|------------------------|-----------------------|--------------|---|-----------------------|
| <b>10 R</b>            | Rietz                 | Ø 6          | Duplex + other versions made for <i>T.K.F. &amp; Van Kranenburg</i>                                 | AC-1.45a/b            |
| <b>100 R</b>           | Rietz                 | Ø 13         | More precise than <b>200 R</b> as C & D scales nearer outer rim                                     | AC-1.04               |
| <b>101 Commercial</b>  | Business Long-Scale   | Ø 6          | Single long-scale design but length unknown   | AC-1.50               |
| <b>1010 Commercial</b> | Business Long-Scale   | Ø 13<br>Ø 16 | Single long-scale of 150 cm<br>Single long-scale of 200 cm  | AC-1.17/18<br>AC-1.37 |
| <b>200 R</b>           | Rietz                 | Ø 13         | Commonest model with many variations & coloured finishes  | AC-1.05a/b/c          |
| <b>300 D</b>           | Darmstadt             | Ø 13         | Versions with (? later) & without a P scale   | AC-1.08a/b            |
| <b>400 D</b>           | Darmstadt             | Ø 13<br>Ø 16 | Successor to <b>300 D</b> without a ST scale but with CI & P in lid<br>Duplex but same scale layout | AC-1.09<br>no number  |
| <b>50 Ng</b>           | Printing & Conversion | Ø 6          | Duplex for printing with cm-cicero conversion & also version made for <i>Gravura</i>                | AC-1.47               |
| <b>50 Nmmi</b>         | Basic & Conversion    | Ø 6          | Duplex for metric-based units with mm to inch conversion  | AC-1.46a              |
| <b>50 Nvm</b>          | Basic & Conversion    | Ø 6          | Duplex for imperial-based units with feet to metre conversion                                       | AC-1.46b              |
| <b>500 N</b>           | Basic                 | Ø 13<br>Ø 16 | Just C & D scale layout leaves room for 3 <sup>rd</sup> party advertising                           | AC-1.11<br>no number  |
| <b>600 E</b>           | Electro               | Ø 13         | Rare circular design for a classic Electro type   | AC-1.19               |

| Model # /name                 | Type                | Size (cm)   | Comments  | ALRO Cat. #          |
|-------------------------------|---------------------|-------------|---|----------------------|
| <b>700 H Philips Emission</b> | Radio Electronics   | Ø 13        | Specially designed for high-frequency radio calculations                                | AC-1.26              |
| <b>746 De Muiderkring</b>     | Radio Electronics   | Ø 6<br>Ø 13 | Specially designed for high-frequency radio calculations                                | no number<br>AC-1.27 |
| <b>Afd. Nomographie</b>       | Leaf Springs        | Ø 16        | Four disc design but no cursor  | AC-1.38              |
| <b>AL-RO</b>                  | Basic Retail        | Ø 13        | Early "pre-production" with <i>CJD</i> monogram   | AC-1.01              |
| <b>ALRO-PATENT</b>            | Basic Retail        | Ø 13        | Early "pre-production" & synonymous with <b>Ha</b>                                      | AC-1.02              |
| <b>Azimuth</b>                | Astro Navigation    | Ø 13        | Duplex with no cursor   | AC-1.31              |
| <b>BOB3</b>                   | Reinforced Concrete | Ø 13        | Probable forerunner to later <b>Beton</b> but with scale for extra strong cement        | no number            |
| <b>Beton</b>                  | Reinforced Concrete | Ø 13        | Later version of <b>BOB3</b> without scale for extra strong cement                      | AC-1.22              |
| <b>Chem</b>                   | Chemical            | Ø 13        | Stoichiometry/ratio of mass calculations  | AC-1.23              |
| <b>CYCLOOP</b>                | Medical             | Ø 10        | Duplex & made for <i>KIPP</i> for determining O <sup>2</sup> saturation levels in blood | AC-1.48              |
| <b>DECIBEL</b>                | Radio Electronics   | Ø 6         | Duplex & made for <i>Philips Telecommunications</i>                                     | AC-1.44              |
|                               |                     | Ø 8         | Duplex & made for <i>PTT</i>  | AC-1.43              |
|                               |                     | Ø 12        | Duplex & made for <i>PTT</i>  | AC-1.42              |
| <b>DISCABOIS</b>              | Forestry            | Ø 13        | Patented design + clips in lid to hold note pages                                       | AC-1.24              |
| <b>EIA 4</b>                  | Electro             | Ø 13        | Probable forerunner to later <b>600 E</b>   | AC-1.19              |
| <b>GoA</b>                    | Sea/Air Navigation  | Ø 13        | Double-length trig scales for high-precision work                                       | AC-1.10              |
| <b>Ha</b>                     | Basic Retail        | Ø 13        | Synonymous with the <b>ALRO PATENT</b> prototype  | AC-1.02              |
| <b>Ha Tex</b>                 | Business & Textile  | Ø 13        | Textile calculations with pre-decimal UK £sd currency & imperial yards                  | AC-1.14/15/16        |
| <b>Ha.A2</b>                  | Basic Retail        | Ø 13        | Probable forerunner to later <b>500 N</b> but in larger font                            | AC-1.12              |
| <b>Ha.C</b>                   | Basic Retail        | Ø 13        | Version of type <b>Ha</b> especially for fixed brokerage fees                           | no number            |
| <b>Ha.P</b>                   | Basic Retail        | Ø 13        | Version of type <b>Ha</b> especially for very small percentages                         | no number            |
| <b>Ha.V</b>                   | Basic Retail        | Ø 13        | Version of type <b>Ha</b> especially for rapid calculations                             | AC-1.13              |
| <b>Ha.Q</b>                   | Basic Retail        | Ø 13        | Version of type <b>Ha</b> especially for powers and roots                               | no number            |

| Model # /name                 | Type                      | Size (cm) | Comments  | ALRO Cat. # |
|-------------------------------|---------------------------|-----------|---|-------------|
| <b>Klinische Rekencirkel</b>  | Medical                   | Ø 16      | Duplex for metabolic-related & blood ph/gasses  | AC-1.39     |
| <b>KLM CONVAIR 240</b>        | Aviation                  | Ø 13      | Load adjuster made for Dutch airline <i>KLM</i> who had the first fleet in Europe of US-made Convair 240 planes                                 | no number   |
| <b>KLM SYST ALRO</b>          | Sea/Air Navigation        | Ø 16      | Larger version of <b>GoA</b> with double-length trig scales for high-precision work but made for Dutch airline <i>KLM</i>                       | AC-1.35     |
| <b>MILITAIRE REKENSCHIJF</b>  | Military Terrain Analysis | Ø 13      | Made for Dutch Army with & without belt pouch + metal cased army barracks or classroom/study version  | AC-1.32/33  |
| <b>MILITARY CALCULATOR</b>    | Military Terrain Analysis | Ø 13      | Made for foreign armies with & without belt pouch + metal cased army barracks or classroom/study version  | no numbers  |
| <b>Ned. Octr. Aangevr.</b>    | Rietz                     | Ø 13      | Early "pre-production" with <i>CJD</i> monogram   | AC-1.03     |
| <b>Piret</b>                  | Machining                 | Ø 13      | For metal wire drawing/extrusion  | AC-1.25     |
| <b>REKENSCHIJF</b>            | Basic                     | Ø 70      | Demonstration (wall hanging) for teaching   | AC-1.52     |
| <b>Roulette</b>               | Gambling                  | Ø 13      | Adapted <b>200 R</b> with gauge marks as pay-out odds for six popular types of bets placed on the numbers part of a French style roulette table | no number   |
| <b>SHELL VISCOKLOK</b>        | Petroleum                 | Ø 19      | With two radial cursors for oil viscosity calculations  | AC-1.40     |
| <b>SIKORSKY S-51</b>          | Aviation                  | Ø 13      | Prototype load adjuster probably made for Dutch Navy for US-made Sikorsky S-51 type helicopter  | no number   |
| <b>Truck Tyre Performance</b> | Commercial Transport      | Ø 13      | For determining large/heavy goods vehicle (HGV) tyre sizes  | AC-1.20     |
| <b>Van Leer</b>               | Optics                    | Ø 14      | For optical ray traces  | AC-1.36     |
| <b>Vonderlingenplaat</b>      | Agriculture               | Ø 13      | For chemical crop spraying by farmers & market gardeners  | AC-1.21     |
| <b>WeM</b>                    | Rietz                     | Ø 13      | Probable forerunner to later <b>200 R</b>   | no number   |
| <b>WeR 4</b>                  | Rietz                     | Ø 13      | Made for <i>NEKEF</i> with paper trig scales in lid   | AC-1.06     |
| <b>WeR2 5</b>                 | Rietz                     | Ø 13      | Version of <b>WeR 4</b> with scale labelling in red with paper trig scales in lid & probable forerunner to later <b>100 R</b>                   | AC-1.07     |