



# NMO



Member State of OIML  
United Kingdom of Great Britain  
and Northern Ireland

OIML Certificate No  
R76/2006-GB1-16.08

## OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**  
Person responsible: **Max Linnemann – Head of Certification Body**  
Applicant: **RYCO**  
**6810 220th SW Street**  
**Mountlake Terrace**  
**WA, 98043**  
**USA**  
Manufacturer: **The applicant**  
Identification of the certified pattern: **#820A**

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organisation of Legal Metrology (OIML):

**OIML R 76 - Edition 2006(E) for accuracy class: [III] and/or [IIII]**

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

This certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the certificates reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

Issue Date: **13 July 2016**  
Reference No: **TS1201/0112**

**G Stones**  
**Technical Manager**  
*For and on behalf of the Head of Certification Body*

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The conformity was established by testing and examination described in the associated Evaluation Report P01432 which includes 14 pages.

### **Characteristics of the instrument:**

This indicating device, designated the RYCO #820A, is designed to be used as part of a single interval, Class III or IIII, non-automatic weighing instrument. The indicator is self-indicating and mains-powered.

The instrument is not designed for direct sales to the public.

### Main features:

- Stainless Steel enclosure
- User interface (Figure 2) including a LED display with 7 segments, a secondary LED display, and operator keypad with 5 navigation and function keys
- LED enunciators

### Devices:

- Initial zero setting ( $\leq 4\%$  Max)
- Semi-automatic zero setting ( $\leq 4\%$  Max)
- Zero tracking (optional) ( $\leq 4\%$  Max)
- Semi-automatic subtractive tare weighing (T = - 20% Max)
- Checkweighing (Weigh bar limit indicator)
- Gross/Net indication
- Zero-indicator
- Indication of stable equilibrium
- Totalisation of weights
- Unit change (g, kg)

### Interfaces:

- Load cell connection

### Load cell:

Any compatible load cell(s) may be used providing the following conditions are met:

- There is a respective OIML Certificate of Conformity (R60) issued for the load cell.
- The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules, and any particular installation requirements. A load cell marked NH is allowed only if humidity testing to R76 has been conducted on this load cell.
- The compatibility of the load cells and indicator is established by the manufacturer by means of the compatibility of modules calculation at the time of verification.
- The load cell transmission conforms to a standard type.

### Technical data:

Power supply	100-240 VAC 50/60 Hz
Maximum number of scale intervals	5,000 (Class III), single interval 1,000 (Class IIII), single interval
Maximum Tare value	- 20% Max
Load cell excitation voltage	5 VDC
Minimum load cell impedance	350 $\Omega$
Maximum load cell impedance	1100 $\Omega$
Minimum input voltage per verification scale interval	1.0 $\mu$ V / div

Measuring range minimum voltage	-39 mV
Measuring range maximum voltage	39 mV
Fraction of maximum permissible error	$P_i = 0.5$
Operating temperature range	- 10 °C to + 50 °C
Load cell cable (from indicator to load cell junction box) - Maximum length	4-wire configuration or 12.66 m/mm <sup>2</sup> (6-wire configuration) and less than 30 m in length.

Software:

The software is held in firmware on the circuit board, and has the identification number “#820.08x”, with “x” reflecting non-legally relevant changes. The software version number is displayed by pressing Manual, then Help/About.

Download of software and access to the legally relevant parameters are prevented by sealing the enclosure.

Sealing:

Access to the electronics and load cell connection is prevented by sealing the enclosure.

**CERTIFICATE HISTORY**

ISSUE NO.	DATE	DESCRIPTION
R76/2006-GB1-16.08	13 July 2016	Certificate first issued.
-	-	No revisions have been issued.