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and Northern Ireland

OIML Certificate No R76/2006-GB1-12.04

# OIML CERTIFICATE OF CONFORMITY

Issuing authority: National Measurement Office

Person responsible: Paul Dixon – Product Certification Manager

Applicant: Avery Weigh-Tronix Ltd

Foundry Lane Smethwick

West Midlands B66 2LP

**United Kingdom** 

Manufacturer: The applicant

Identification of the

certified pattern: ZM301, ZM303, ZQ375 Series

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 [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: 27 April 2012 Reference No: TS1201/0041

Signatory: P R Dixon





The conformity was established by tests described in the associated pattern evaluation report P00835 which includes 13 pages.

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

# **Characteristics**:

The family of indicating devices is designated the Avery Weigh-Tronix ZM301 / ZM303 / ZQ375 Series. The indicators are self-indicating, mains, DC or battery-powered, and are designed to be used as part of a Class III or IIII, non-automatic weighing instrument.

#### Construction:

The indicator construction is dependent on the model number, the designation follows the following format: "Prefix-XYZ", with

- Model Number Prefix:
   ZM301 or ZM303 = Standard Indicator
   ZQ375 = Check-weighing Indicator
- First Digit X Enclosure material
   S = Stainless enclosure
   A=Alloy Enclosure
- Second Digit Y Mounting orientationD = Desktop
  - P = Panel Mount
- Third Digit Z Display Type
   1 = IBN Black background with Green Digits
   2 = TN Green Background with Black Digits

The ZM301 features 6 operational keys, whereas the ZM303 overlay is fitted with 24 operational keys, including a numeric keypad. The ZQ375 is specifically designed for Check Weighing applications, and is fitted with 10 operational keys.

#### Devices:

- Semi-automatic zero setting (≤ 4% Max)
- Zero tracking (≤ 4% Max)
- Semi-automatic subtractive tare weighing
- Pre-set tare
- Recall of Gross indication when tare is active
- Determination of stability of equilibrium
- Indication of stability of equilibrium
- Checking of display
- Printing
- PLUs
- Alibi storage device
- Gravity compensation
- Checkweighing
- Real time clock
- Counting
- Weigh labelling
- Command via external device (PC)
- Accumulation
- Target Weighing
- Batching

- Peak Hold
- Simple checkweighing (Sim375), ZQ375 models only
- Mid-level checkweighing (Mid375), ZQ375 models only
- Advanced checkweighing (Adv375), ZQ375 models only
- Percentage checkweighing (Per375), ZQ375 models only
- Grading checkweighing (Grad375), ZQ375 models only
- Gross, Net, Tare, Preset tare, Print, Zero, Motion, Accumulation, Over/Under weight and Network indicators

## Technical data:

Power supply	- ZM301-ADz*, ZM303-ADz*, ZM301-SPz*,	
	ZM303-SPz:	
	12-36V DC via mains adaptor or external	
	battery pack.	
	- ZM301-SDz*, ZM303-SDz*, ZQ375-SD1:	
	110-240V AC(50/60Hz)	
	* where z = display type	
Maximum number of scale intervals	6000	
Maximum Tare	-100% Max	
Maximum Preset Tare	-100% Max	
Load cell excitation voltage	5 VDC	
Minimum load cell impedance	58.33 Ω	
Maximum load cell impedance	1100 Ω	
Minimum input voltage per scale interval	0.8 μV	
Measuring range minimum voltage	0 mV	
Measuring range maximum voltage	15 mV	
Fraction of maximum permissible error	P <sub>ind</sub> = 0.5	
Operating temperature range	-10 °C to +40 °C	
Load cell connection	4 or 6-core with braided outer screen, flexible	
	PVC overall Jacket.	
	0.5 mm <sup>2</sup> per core	
	Maximum length (6-wire) = 30m (60 m/mm <sup>2</sup> )	

### Interfaces:

- Load cell 4-wire or 6-wire shielded connection
- 3 x logic level inputs
- 3 x open collector outputs
- 2 x RS232 serial ports
- 10/100 Ethernet
- USB Host

# Optional Interface & PCBs:

- Analogue output card, providing 0-10 VDC and 4-20mA outputs
- Current loop card, providing 4-20mA loop and RS485 / RS422
- Internal Wireless LAN card, providing an 802.11b/g wireless link

# Optional Modules (ZQ375 only):

- ZQ-BAT Battery pack
- ZQ-OPTO Interface box (with or without beacon assembly)

# Software:

The software is designated AWT30-500161 version 1.x.x.x (where x.x.x refers to the identification of non-legally relevant software, which may be modified by the manufacturer). The calibration and legally relevant parameters are protected via physical (jumper located on main board) or software means (password and incrementing counters).

# **Certificate History**

ISSUE NO.	DATE	DESCRIPTION
R76/2006-GB1-12.04	27 April 2012	Certificate first issued
-	-	No revisions have been issued.