



Australian Government
Department of Industry,
Innovation and Science

National Measurement Institute

Certificate of Approval

NMI 6/4C/281

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

Zebra Technologies Model MP6500 Weighing Instrument

submitted by Zebra Technologies Australia PTY LTD
Tally Ho Business Park
10 Wesley Court
East Burwood VIC 3151

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

This approval becomes subject to review on 1/10/18, and then every 5 years thereafter.

DOCUMENT HISTORY

| Rev | Reason/Details | Date |
|-----|--|----------|
| 0 | Pattern & variants 1 to 3 approved – interim certificate issued | 13/09/13 |
| 1 | Pattern & variants 1 to 4 approved – certificate issued | 6/12/13 |
| 2 | Pattern & variants 1 to 4 amended (brand, submittor & images) – certificate issued | 6/02/15 |
| 3 | Variants 5 & 6 approved – certificate issued | 31/05/16 |
| | | |

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4C/281' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0B.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.



Dr A Rawlinson

TECHNICAL SCHEDULE No 6/4C/281

1. Description of Pattern **approved on 13/09/13**

A Zebra Technologies model MP6500 class III multi-interval self-indicating non-automatic weighing instrument (Figures 1 to 3) with a verification scale interval e_1 of 0.002 kg up to 6 kg and with a verification scale interval e_2 of 0.005 kg from 6 kg to the maximum capacity of 15 kg. May also be known as Motorola Solutions model MP6500.

Instruments are fitted with one model MX 201 single display or one model MX 202 dual display mounted on a column (Figure 2). Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording) unless two displays are present or unless the single display is located such that all primary indications are clearly and simultaneously displayed to both the vendor and the customer.

The platter size of the model MP6500 is 283 mm x 309 mm.

Instruments are approved for use over a temperature range of 0°C to +40°C and must be so marked.

Instruments use an HIPRO model HP-A0502R3D, 12 V DC, 4.16 A AC/DC power supply; the submitter should be consulted regarding the acceptability of alternatives.

Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices.

1.1 Zero

The initial zero-setting device of the pattern has a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has a zero-tracking device with a nominal range of not more than 4% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

The instrument has an automatic zero-setting device with a nominal range of not more than -2% of the maximum capacity of the instrument.

1.2 Display Check

A display check is initiated whenever power is applied.

1.3 Scanner

Instruments are provided with an integral image scanner for reading bar codes.

1.4 Levelling

The instrument is intended to be installed in a fixed position (e.g. a supermarket check-out) and hence is not fitted with adjustable feet.

1.5 Interfaces

Instruments may be fitted with interfaces for the connection of auxiliary and/or peripheral devices. Any interfaces shall comply with clause 5.3.6 of document NMI R76 (the basic intent of which is that it shall not be possible to alter weighing results via the interfaces).

Any measurement data output from the instrument or its interfaces shall only be used for trade in compliance with Supplementary Certificate No S1/0/B (in particular in regard to the data and its format).

Instruments may be fitted with serial data interface RS-232, IBM 485 interface, USB interface, POS interface and Checkpoint or Sensormatic EAS interlock interface.

1.6 Sealing Provision

The instrument is sealed by recording the audit trail counters on verification.

The instrument automatically increments a configuration and/or calibration value (audit trail number) each time the instrument is re-configured and/or calibrated.

The value(s) of these counters may be recorded on a destructible adhesive label attached to the instrument (e.g. as Cxxx, Pyyy).


Any subsequent alteration to the calibration or configuration will be evident as the recorded values and the current counter values will differ.

The instructions for accessing the calibration and configuration audit trail are as follows (starting from the normal weighing mode):

- Press and hold the 'ZERO' key for three seconds until a click sound and C is displayed on the integrated seven segment LED display as shown Figure 3.
The Cxxx and Pyyy (leading zeros are not displayed) scroll on the seven segment LED display. The Cxxx and Pyyy are also seen on the remote display.
- Release the 'ZERO' key to return to the normal weighing mode.

1.7 Descriptive Markings and Notices

Instruments carry the following markings:

| | |
|--|--|
| Manufacturer's mark, or name written in full | Zebra Technologies Corp. |
| Indication of accuracy class |  |
| Pattern approval mark for the instrument | NMI 6/4C/281 |
| Maximum capacity | Max g or kg #1 |
| Minimum capacity | Min g or kg #1 |
| Verification scale interval | e = g or kg #1 |
| Special temperature limits | 0°C to +40°C |
| Serial number of the instrument | |

#1 These markings are also shown near the display of the result if they are not already located there.

Note:

For multi-interval instruments the markings shall be as above, with the exception that the 'Maximum capacity' and 'Verification scale interval' shall be marked for both interval ranges, e.g. as follows:

| | |
|-----------------------------|-------------------------|
| Maximum capacity | Max/..... g or kg |
| Verification scale interval | e =/..... g or kg |

1.8 Verification Provision

Provision is made for the application of a verification mark.

2. Description of Variant 1 **approved on 13/09/13**

The model Zebra Technologies (or Motorola Solutions) MP6200 which is similar to the pattern but is a single interval instrument of 15 kg maximum capacity with a verification scale interval of 0.005 kg.

3. Description of Variant 2 **approved on 13/09/13**

The pattern and variant 1 having a shorter, 232 mm × 309 mm, scale platter (Figure 4). May be fitted with adjustable feet in which case the instrument is levelled and then fixed in place.

4. Description of Variant 3 **approved on 13/09/13**

The model Zebra Technologies (or Motorola Solutions) MP6x10 (Figure 5) which is similar to the pattern and variants except that it has an optional customer scanner.

5. Description of Variant 4 **approved on 6/12/13**

Any model of the Zebra Technologies (or Motorola Solutions) MP6 series may be fitted with either a Checkpoint or Sensormatic (EAS) deactivation antenna beneath the scale platter.

6. Description of Variant 5 **approved on 31/05/16**

Instruments may be fitted with one revised model MX 201 single display or one revised model MX 202 dual display mounted on a column (Figure 6). Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording) unless two displays are present or unless the single display is located such that all primary indications are clearly and simultaneously displayed to both the vendor and the customer.

7. Description of Variant 6 **approved on 31/05/16**

The pattern and variants alternatively using a Pihong model PS000084A01 or a Sanhua model SAWA-56-41612A, 12 V DC, 4.16 A AC/DC power supply; the submitter should be consulted regarding the acceptability of alternatives.

TEST PROCEDURE No 6/4C/281

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

Tests

Ensure that instruments are only being used within the special temperature limits stated elsewhere in this Technical Schedule.

FIGURE 6/4C/281 – 1



(a) Zebra Technologies Model Weighing Instrument (Pattern)



(b) Zebra Technologies MP6500 Series With Load Receptor Plate Removed (Pattern)

FIGURE 6/4C/281 – 2



(a) Zebra Technologies Model MX 202 Dual Display



(b) Zebra Technologies Model MX 201 Single Display

FIGURE 6/4C/281 – 3



Seven Segment LED Display for Calibration and Configuration Event Counters

FIGURE 6/4C/281 – 4



Zebra Technologies Model MP6200 Series Weighing Instrument
With Short Platter (Variant 2)

FIGURE 6/4C/281 – 5



Zebra Technologies Model MP6X10 With Optional Customer Scanner

FIGURE 6/4C/281 – 6



(a) Revised model MX 201 single display (variant 5)



(b) Revised model MX 202 dual display (variant 5)

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