

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval NMI S884

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.

Mettler Toledo Model IND400 Digital Indicator

submitted by Mettler-Toledo Limited

Level 1, 191 Salmon Street

Port Melbourne VIC 3207

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 October 2015.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

DOCUMENT HISTORY

| Rev | Reason/Details | Date |
|-----|--|----------|
| 0 | Pattern & variants 1 approved – certificate issued | 10/12/25 |

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI S884' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S884' in addition to the approval number of the instrument, 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 of Approval No S1/0B.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

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

Darryl Hines

Manager

Policy and Regulatory Services

TECHNICAL SCHEDULE No S884

1. Description of Pattern

approved on 10/12/25

A Mettler Toledo model IND400 digital mass indicator (Figure 1 and Table 1) which may be configured to form part of:

- A class weighing instrument with a single weighing range of up to 10 000 verification scale intervals; or
- A class weighing instrument with a single weighing range of up to 1000 verification scale intervals; or
- A class multi-interval weighing instrument with up to three partial weighing ranges (each with its own verification scale interval) in which case it is approved for use with up to 10 000 verification scale intervals per partial weighing range; or
- A class multi-interval weighing instrument with up to three partial weighing ranges (each with its own verification scale interval) in which case it is approved for use with up to 1000 verification scale intervals per partial weighing range; or
- A class multiple range weighing instrument with up to three weighing ranges, in which case it is approved for use with up to 10 000 verification scale intervals per weighing range; or
- A class multiple range weighing instrument with up to three weighing ranges, in which case it is approved for use with up to 1000 verification scale intervals per weighing range.

The changeover between weighing ranges is automatic.

The instrument has a stainless steel housing with an LCD for display of the weight value. The front panel housing the LCD and button panel is ABS, whereas otherwise housing is metallic.

Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices (see clause 1.6 below).

TABLE 1 – Specifications

| Maximum number of verification scale intervals | 10 000 | (class 🖤) | | |
|--|-------------------------|------------------------------|--|--|
| | 1000 | (class 🎟) | | |
| Minimum sensitivity | 0.3 μV/scale interval | | | |
| Excitation voltage | 5 V DC | | | |
| Maximum excitation current | 115mA | | | |
| Fraction of maximum permissible error | $p_i = 0.5$ | | | |
| Minimum load cell impedance | $43.75~\Omega$ | | | |
| Maximum load cell impedance | 3000Ω | | | |
| Measuring range minimum voltage | 0 mV | | | |
| Measuring range maximum voltage | 30mV | | | |
| Maximum tare range | -100%Ma | X | | |
| Operating temperature range | -10 °C to +40 °C | | | |
| Load cell connection | 4 or 6 wire plus shield | | | |
| Maximum value of load cell cable | | | | |
| length per wire cross section (*) | 706.3 m/m | m ² (6-wire only) | | |

(*) Additional connection cable between indicator and load cell or load cell junction box. In case a 4-wire connection is used, the load cells are connected directly without a junction box or lengthening the load cell(s) cable.

This approval does not include the use of the indicator as an automatic weighing instrument, unless specifically mentioned in a certificate of approval for such an instrument.

1.1 Zero

A zero-tracking device may be fitted.

The initial zero-setting device has a nominal range of not more than 20% 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.

1.2 Tare

A semi-automatic subtractive tare device of up to the maximum capacity of the instrument may be fitted.

A pre-set tare device of up to the maximum capacity of the instrument (or of up to the Max_1 for multi-interval instruments) may also be fitted.

1.3 Linearisation Facility

Instruments are fitted with a linearisation correction facility having up to six points.

1.4 Display Check

A display check is initiated whenever power is applied.

1.5 Power Supply

The indicator operates on mains power supply (100-240 V AC, 50/60 Hz).

1.6 Interfaces

The indicator 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 General Supplementary Certificate of Approval No NMI S1/0B (in particular in regard to the data and its format).

Indications other than the indications of measured mass (i.e. gross, tare, net, totals) displayed either on the indicator or on an auxiliary or peripheral device, are not for trade use.

Instruments may be fitted with RS232, RS485, Ethernet, USB OTG, Wi-Fi, and digital inputs/outputs.

1.7 Additional Features

Instruments may be fitted with additional functions such as Over/Under, Counting, Manual Filling/Dosing, animal weighing and totalisation. The additional functions (other than the indications of measured mass, i.e. gross, tare, net, totals, displayed

either on the indicator or on an auxiliary or peripheral device) are not approved for trade use.

Instruments may also be fitted with a 'weighing unstable sample' or 'animal weighing' function. This function shall not be used for trade use.

Note: In particular circumstances (e.g. in regard to weighbridge or public weighbridge operation), Trade Measurement legislation or other NMI Certificates of Approval may impose requirements in regard to specific features, methods of operation, or records to be provided (and in what form).

Certain features of this instrument are able to be configured by the installer or user. Whilst NMI believes that an acceptable configuration can be achieved for typical basic modes of operation, it may also be possible for the instrument to be configured to produce unacceptable configurations, and use of some configurations may be inappropriate in different situations. It is the responsibility of the installer and user to ensure that the configuration is acceptable and meets relevant requirements for any particular situation.

1.8 Verification Provision

Provision is made for the application of a verification mark.

1.9 Sealing Provision

The instrument is sealed by both physical and software means.

Physical access is restricted by a metal calibration screw slotted into the lock mechanism. This may be achieved by the use of a destructible adhesive label placed over the access hole to the security switch and a join in the instrument housing (Figure 2).

Additionally, software access to the calibration and metrological configuration is restricted to users with ADMIN rights. The current user and/or login can be viewed by selecting the softkey and pressing the & key in Quick Settings Menu.

1.10 Software Version

The software version is designated 2.xx.yyyy, where 'xx' refers to the identification of major updates of non-legally relevant software and 'yyyy' refers to the identification of minor updates of non-legally relevant software.

The instructions for accessing the legally relevant version are as follows (starting from the normal weighing mode):

- Press icon in Quick Settings Menu.
- Select Terminal and the software version is displayed. Scroll down to see the full information.

1.11 Descriptive Markings and Notices

Instruments carry the following markings, in the form shown at right:

Manufacturer's mark, or name written in full
Indication of accuracy class

Maximum capacity

Min g or kg or t #1

Verification scale interval

Serial number of the instrument

Mettler Toledo

Max g or kg or t #1

e = g or kg or t #1

.......

Pattern approval number for the indicator NMI S884
Pattern approval mark for other components #2

- #1 These markings are shown in the electronic markings field above the display of the result.
- #2 May be located separately from the other markings.

In addition, instruments not greater than 100 kg capacity shall carry a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

2. Description of Variant 1

approved on 10/12/25

The Mettler Toledo model IND400 which is similar to the pattern but with a PowerDeck scale board instead of an analog board, in which case the indicator shall be used with the NMI approved Mettler Toledo model SLC820 (may also be known as POWERCELL PDX) series digital load cells as described in the documentation of approval NMI S529 for the instruments which approved with reference to document NMI R 76 dated October 2015 or earlier.

This variant may also be used with the NMI approved Mettler Toledo model SLB615D series digital load cells as described in the documentation of approval NMI S697 for the instruments which approved with reference to document NMI R 76 dated October 2015 or earlier.

The maximum number of verification scale intervals (VSI) applicable is determined by the number of VSI given in the approval documentation for the load cell used.

TEST PROCEDURE No S884

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

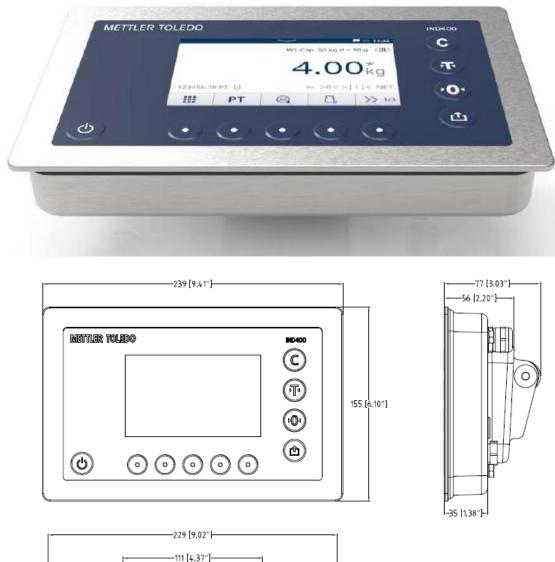
Maximum Permissible Errors

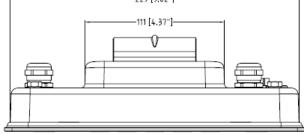
The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

Tests

For multi-interval and multiple range instruments with verification scale intervals of e_1 , e_2 ..., apply e_1 for zero adjustment, and maximum permissible errors apply e_1 , e_2 ..., as applicable for the load.

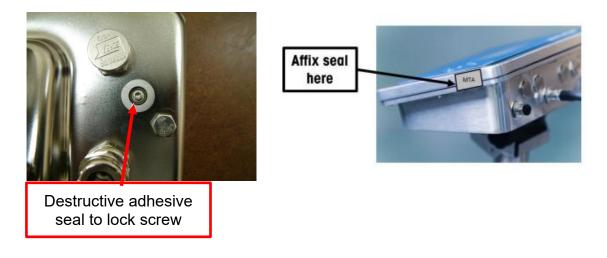
FIGURE S884 - 1





Mettler Toledo Model IND400 Digital Indicator (Pattern and Variant 1)

FIGURE S884 -2

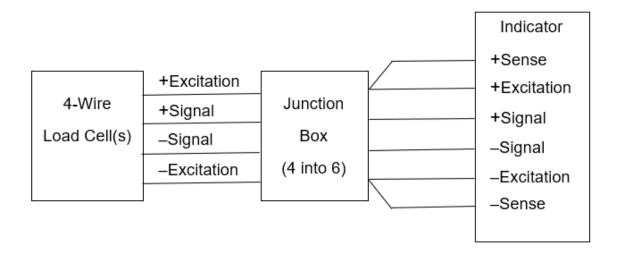




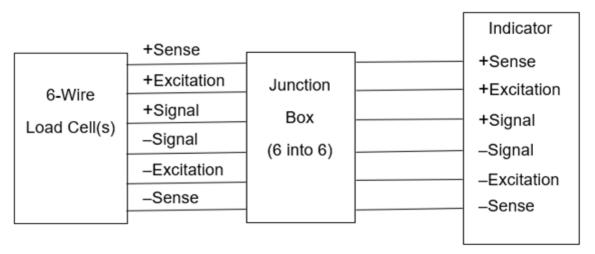
Mettler Toledo Model IND400 Sealing Method (Pattern and Variant 1)

Typical Sealing Method

FIGURE S884 -3



4-Wire Analogue Load Cell Connection Using Junction Box (Pattern)



6-Wire Analogue Load Cell Connection Using Junction Box (Pattern)

~ End of Document ~