



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation

Supplementary Certificate of Approval No S359

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

This is to certify that the approval for use for trade granted in respect of the

Mettler Toledo Model PUMA Digital Indicator

submitted by Mettler Toledo Limited
 Unit 3, 220 Turner Street
 Port Melbourne VIC 3207

has been cancelled in respect of new instruments as from 1 May 2013.

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

A handwritten signature in black ink, appearing to read 'Dr A Rawlinson', with a horizontal line underneath.

Dr A Rawlinson



National Standards Commission

Supplementary Certificate of Approval

No S359

Issued under Regulation 9
of the
National Measurement (Patterns of Measuring Instruments) Regulations

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

Mettler Toledo Model PUMA Digital Indicator

submitted by Mettler Toledo Limited
525 Graham 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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 September 2003, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S359 and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S359 in addition to the approval number of the instrument.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission 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 the Commission's Document 106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

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

DESCRIPTIVE ADVICE

Pattern: approved 26 August 1998

- A Mettler Toledo model PUMA digital indicator.

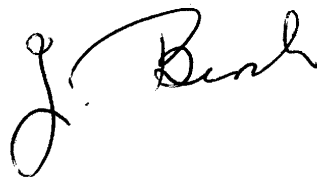
Technical Schedule No S359 describes the pattern.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S359 dated 10 December 1998
Technical Schedule No S359 dated 10 December 1998 (incl. Table 1 &
Test Procedure)
Figures 1 to 3 dated 10 December 1998

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.



TECHNICAL SCHEDULE No S359

Pattern: Mettler Toledo Model PUMA Digital Indicator.

Submittor: Mettler Toledo Limited
525 Graham Street
Port Melbourne VIC 3207.

1. Description of Pattern

A Mettler Toledo model PUMA digital indicator (Figure 1 and Table 1) which is approved for use with up to 3000 verification scale intervals and which may be fitted with output sockets for the connection of auxiliary and/or peripheral devices. Instruments are either battery-operated or powered by mains supply.

1.1 Zero

Zero is automatically corrected to within $\pm 0.25e$ whenever power is applied and whenever the instrument comes to rest within $0.5e$ of zero.

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 initial 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 and/or a keyboard-entered preset subtractive taring device, each having a capacity of up to maximum capacity of the instrument, may be fitted.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Sealing Provision

Provision is made for the calibration adjustment to be sealed by means of either or both of the methods shown in Figures 2 and 3.

1.5 Verification/Certification Provision

Provision is made for the application of a verification/certification mark.

1.6 Markings

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

Manufacturer's mark, or name written in full	Mettler Toledo
Indication of accuracy class	Ⓜ
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = kg *
Serial number of the instrument
Pattern approval mark for the indicator	NSC No S359

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

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.

TABLE 1 — Specifications

Maximum number of verification scale intervals	3000
Minimum sensitivity	0.26 μ V/scale interval
Excitation voltage	1.6 V DC
Maximum excitation current	18 mA

TEST PROCEDURE

Instruments should be tested in conjunction with any tests specified in the approval documentation for the instrument to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

Maximum Permissible Errors at Verification/Certification

The maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads, m , expressed in verification scale intervals, e , are:

- $\pm 0.5 e$ for loads $0 \leq m \leq 500$;
- $\pm 1.0 e$ for loads $500 < m \leq 2\,000$; and
- $\pm 1.5 e$ for loads $2\,000 < m \leq 10\,000$.



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Notification of Change
Supplementary Certificate of Approval No S359
Change No 1

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

The following changes are made to the approval documentation for the

Mettler Toledo Model PUMA Digital Indicator

submitted by Mettler Toledo Limited
now of Unit 3, 220 Turner Street
Port Melbourne VIC 3207.

- A. In Supplementary Certificate of Approval No S359 dated 10 December 1998 and its Technical Schedule, all references to the address of the submitter should be amended to read:

“now of Unit 3, 220 Turner Street
Port Melbourne VIC 3207.”

- B. In Supplementary Certificate of Approval No S359 dated 10 December 1998;
- (i) The Condition of Approval referring to the review of the approval should be amended to read:

“This approval becomes subject to review on 1 September 2011, and then every 5 years thereafter.”

- (ii) In the DESCRIPTIVE ADVICE, the description of the pattern should be amended by adding the following:
“May also be known as the model ID3sTx.”
- C. In Technical Schedule No S359 dated 10 December 1998, in clause **1. Description of Pattern**;
 - (i) The first paragraph should be amended by adding the following:
“May also be known as the model ID3sTx.”
 - (ii) The following paragraph should be added:
“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.”

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

A handwritten signature in black ink, appearing to be 'J. G. T.', written in a cursive style.

FIGURE S359 - 1



Mettler Toledo Model PUMA Digital Indicator

FIGURE S359 - 2



Showing A Sealing Method

FIGURE S359 - 3



Showing An Alternative Sealing Method