



Australian Government

Department of Industry,
Science and Resources

**National
Measurement
Institute**

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/4C/332

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 BBA236-QA3 Combi PBA439 Basework Weighing Instrument

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 to 7 approved – certificate issued	13/09/24
1	Variant 8 approved & variant 7 amended & Table 7e added – certificate issued	18/03/25
2	Variant 9 approved & Table 11 added & variant 7 amended (Tables 10a to 10c added) – certificate issued	26/06/26

CONDITIONS OF APPROVAL

General

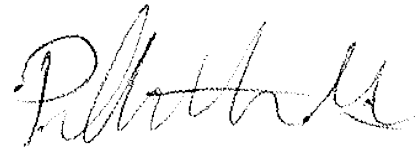
Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4C/332' and only by persons authorised by the submitter.

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 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.

This approval shall NOT be used in conjunction with General Certificate of Approval No 6B/0.

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



Phillip Mitchell
A/g Manager
Policy and Regulatory Services

TECHNICAL SCHEDULE No 6/4C/332

1. Description of Pattern

approved on 13/09/24

A Mettler Toledo model BBA236-QA3 Combi PBA439 basework class  single interval self-indicating non-automatic weighing instrument (Figure 1) of 3 kg maximum capacity with a verification scale interval of 0.001 kg, and with a minimum capacity of 0.02 kg.

Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording) unless the maximum capacity of the instrument is greater than 100 kg (i.e. as may be the case for variant 1).

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

1.1 Basework

The Mettler Toledo model PBA439-QA3 basework has the load receptor directly supported by a single load cell. The load receptor has a nominal dimension of 228 mm × 228 mm, and uses a stainless steel type construction as shown in Figure 6b.

1.2 Load cell

A Mettler Toledo model SLP846 load cell of 11 kg maximum capacity is used.

1.3 Indicator

A Mettler Toledo model IND236 (Figure 3a) digital indicator is used. The indicator is described in the documentation of approval NMI S653.

The indicator has a stainless steel enclosure with an LCD display for display of the weight value.

The indicator is mounted on a column attached to the base (Figure 1).

1.4 Zero

A zero-tracking device may be fitted.

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

1.5 Tare

An automatic subtractive tare device and/or semi-automatic subtractive tare device and/or pre-set tare device, each of up to maximum capacity of the instrument, may be fitted.

1.6 Display Check

A display check is initiated whenever power is applied.

1.7 Levelling

The instrument is provided with adjustable feet and a level indicator.

The instrument is to be used in a level condition as indicated by the level indicator.

1.8 Power Supply

The instrument operates from AC mains power.

1.9 Additional Features

Instruments may be fitted with certain additional functions including counting, over/under checking weighing and animal weighing. 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.

1.10 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 R 76 (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 NMI General Supplementary Certificate of Approval No 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/RS422/RS485, Ethernet TCP/IP and USB interfaces.

1.11 Verification Provision

Provision is made for the application of a verification mark.

1.12 Descriptive Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Mettler Toledo
Indication of accuracy class	
Pattern approval number for the instrument	NMI 6/4C/332
Maximum capacity	Max g or kg #1
Minimum capacity	Min g or kg #1
Verification scale interval	e = g or kg #1
Serial number of the instrument	

#1 These markings are shown near the display of the result.

In addition, instruments shall carry a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording (see 1. *Description of Pattern* above).

1.13 Sealing Provision

Provision is made for access to the calibration switch within the instrument to be sealed either using a 'lead and wire' or similar type seal with a drilled screw or use of a destructible adhesive label over the securing screw as shown in Figure 3b.

1.14 Software

The software is designated 1.xx.yyyy where xx.yyyy refers to the identification of non-legally relevant software.

The software version and number can be seen in the switch-on display sequence (when the power is first applied to the instrument).

2. Description of Variant 1

approved on 13/09/24

The Mettler Toledo model BBA236 Combi series instruments fitted with a stainless steel construction PBA439 platform (Figures 6a to 6g) which has the load receptor directly supported by a Mettler Toledo model SLP846 or SLP847 or SLP848 load cell in certain single interval capacities as listed in Table 1 (the pattern is shown in **bold**).

3. Description of Variant 2

approved on 13/09/24

The Mettler Toledo model BBA236 Combi series instruments which are similar to the pattern but fitted with a stainless steel construction PBA436 platform (Figures 6a to 6g) which has the load receptor directly supported by a Mettler Toledo 0785 or 0795 or 0805 load cell in certain single interval capacities as listed in Table 2.

4. Description of Variant 3

approved on 13/09/24

The Mettler Toledo model BBA236 Combi series instruments which are similar to the pattern but fitted with a stainless steel construction PBA639 platform (Figures 7a to 7g) which has the load receptor directly supported by a Mettler Toledo SLP846 or SLP847 or SLP848 load cell in certain single interval capacities as listed in Table 3.

5. Description of Variant 4

approved on 13/09/24

The Mettler Toledo model ICS4_9 Combi and ICS689 Combi series instruments which are similar to variant 1 but fitted with a Mettler Toledo model ICS429 or ICS439 or ICS449 or ICS469 or ICS689 indicator (Figure 4) in certain capacities as listed in Table 4. The indicators are described in the documentation of approval NMI S552.

Note: ICS4_9 Combi series as listed in Tables 4 to 6, where ‘_’ in the instrument model number represents the Mettler Toledo model ICS4x9 indicator fitted, e.g. the model ICS429-A3 uses an ICS429 indicator.

Instruments may be fitted with RS-232/RS422/RS485 serial data interfaces, Ethernet and USB interfaces.

5.1 Software

The software is designated AA-BB-01.dd.aa-FF-GG where ‘AA’, ‘BB’, ‘FF’ and ‘G’ can be alphanumeric or numerical characters which describe the configuration like language, application etc. ‘dd.aa’ is status of the non-legally relevant software part, and 01 is the identification of legally relevant software identification.

The software version and number can be seen in the switch-on display sequence (when the power is first applied to the instrument).

5.2 Sealing Provision

The instrument is sealed by preventing access to the calibration screw. This may be achieved by applying a destructible adhesive label on top of the hollow cylinder housing the calibration screw as shown Figure 5.

6. Description of Variant 5

approved on 13/09/24

The Mettler Toledo model ICS4_9 Combi and ICS689 Combi series instruments which are similar to variant 4 but fitted with a stainless steel construction PBA436 platform (Figures 6a to 6g) which has the load receptor directly supported by a Mettler Toledo 0785 or 0795 or 0805 load cell in certain single interval capacities as listed in Table 5.

7. Description of Variant 6

approved on 13/09/24

The Mettler Toledo model ICS4_9 Combi and ICS689 Combi series instruments which are similar to variant 4 but fitted with a stainless steel construction PBA639 platform (Figures 7a to 7g) which has the load receptor directly supported by a Mettler Toledo SLP846 or SLP847 or SLP848 load cell in certain single interval capacities as listed in Table 6.

8. Description of Variant 7

approved on 13/09/24
amended on 18/03/25
amended on 26/06/26

Single load cell baseworks of this approval used with a compatible approved indicator (Supplementary approval with reference to document **NMI R 76 dated October 2015 or later**) provided the conditions set out below are met. In this case instruments may be known according to the basework model number (e.g., model PBA439-A3). Any devices and features described in the approval for the indicator shall apply to this instrument.

Note: Only submittor-authorized manufacture or conversion is permitted under this variant.

The basework is connected to the indicator directly without lengthening the load cell cable.

The minimum temperature limit of the instrument is equal to the greater of the lower temperature limit of the basework or indicator. The maximum temperature limit is equal to the lesser of the upper temperature limit of the basework or indicator. The temperature range of the instrument shall be a minimum of 30 °C (e.g., 0 °C to 40 °C or 5 °C to 35 °C).

Note: Where no special temperature limits are given in the **Descriptive Markings and Notices**, then the temperature limits are -10 °C to 40 °C. If the temperature limits of the instrument are other than -10 °C to +40 °C, additional marking of special temperature limits must be added to the existing descriptive markings.

In addition to the markings specified in clause **1.12 Descriptive Markings and Notices**, instruments are marked with the NMI approval number for the indicator used, together in the same location. Where the resulting instrument is a multiple range instrument, appropriate markings regarding the ranges and scale intervals shall be provided in accordance with the Supplementary Certificate for the indicator.

The approved single load cell baseworks and their limiting characteristics are given in Tables 7a to 7e and Tables 8a to 8d and Tables 9a to 9d and Tables 10a to 10c.

The conditions to be met are given below, and include calculations using the following terms:

E_x = Excitation voltage from indicator (V)

LC_Sens = Load cell sensitivity (mV/V)

E_{max} = Load cell maximum capacity (kg)

IZSR = Initial zero setting range for the indicator (kg) (positive range only)

DL = Dead load of load receptor (kg)

T^+ = Additive tare capacity (kg)

U_{min} = Minimum input voltage for the indicator (mV)

Indicator Sensitivity = Minimum sensitivity value per verification scale interval for the indicator (μV)

e = verification scale interval of the instrument (kg). ***In the case of multiple range or multi-interval instruments, any reference to 'e' refers to the smallest verification scale interval (i.e. e_1).***

$e_1, e_2, \dots$ = verification scale interval of each range for multiple range instruments (or partial weighing ranges for multi-interval instruments), e_1 refers to the smallest verification interval.

Max = the maximum capacity of the instrument. This refers to the maximum capacity of the highest range (i.e. Max_r for multiple range instruments).

Max_r = the maximum capacity of the instrument for a multiple range instrument, i.e. the maximum capacity of the highest range.

$Max_1, Max_2, \dots$ = the maximum capacity of the various ranges for a multiple range instrument. Max_1 refers to the maximum capacity of the smallest range.

n_{LC} = the maximum number of verification intervals for which the load cell or basework is approved (e.g. 3000 for a 'class C3' load cell).

DR = dead load output return value for the load cell. Note: Many load cells do not have a specified DR value.

The conditions are:

- The excitation voltage used is within the range approved for the baseworks.
- The load cell input impedance is within the impedance range approved for the indicator.
- The maximum load applied to the load cell (live load plus any dead load) does not exceed the load cell maximum capacity, i.e.

$$Max + DL + IZSR + T^+ \leq E_{max}$$
- The verification scale interval is not less than the minimum value specified. ***In the case of multiple range or multi-interval instruments, the verification scale interval refers to the smallest verification scale interval (i.e. e_1).***
- The number of verification scale intervals of the instrument is less than or equal to the *maximum number of verification intervals* specified for the load cell and also for the approved indicator. ***In the case of multiple range or multi-interval instruments, the number of verification scale intervals refers to the largest number in any weighing range or partial weighing range (i.e. the largest of $Max_1/e_1, Max_2/e_2$ etc).***

- The signal voltage per verification scale interval is not less than the minimum sensitivity value per verification scale interval for the indicator (as specified in the approval documentation for the indicator), i.e.

$$\text{Indicator Sensitivity} \leq 1000 \times E_x \times LC_Sens \times e / E_{max}$$

In the case of multiple range or multi-interval instruments, e is replaced by e_1 .

- The input voltage for the indicator (when the basework is unloaded) is not less than the minimum input voltage for the indicator (as specified in the approval documentation for the indicator), i.e.

$$U_{min} \leq E_x \times LC_Sens \times DL / E_{max}$$

Where U_{min} is not given in the Supplementary Certificate of Approval for the indicator, $U_{min} = 0$ mV.

Additional requirement for multiple range operation:

In the case of indicators which are configured to form a multiple range weighing instrument the instrument shall comply with the following conditions:

- (i) The smallest verification scale interval (e_1) shall satisfy the following:***

$$e_1 \geq DR \times Max_r / E_{max}$$

Of course (i) cannot apply where a value of 'Dead load output return' DR is not given. In this case the smallest verification scale interval (e_1) shall satisfy the following:

$$e_1 \geq 0.4 \times Max_r / n_{LC}$$

Additional requirement for multi-interval operation:

In the case of indicators which are configured to form a multi-interval weighing instrument the instrument shall comply with the following conditions:

- (i) The smallest verification scale interval (e_1) shall satisfy the following:***

$$e_1 \geq 2 \times DR \times Max / E_{max}$$

Of course (i) cannot apply where a value of 'Dead load output return' DR is not given. In this case the smallest verification scale interval (e_1) shall satisfy the following:

$$e_1 \geq Max / n_{LC}$$

- (ii) The instrument shall also satisfy the following condition with the exception of the last partial weighing range:***

$$Max_i / e_{i+1} \geq 500 \text{ (e.g. } Max_1/e_2 \geq 500 \text{ and } Max_2/e_3 \geq 500)$$

9. Description of Variant 8

approved on 18/03/25

The Mettler Toledo model BBA236-BC60 Cargoscan instrument which is similar to the pattern but having 60 kg maximum capacity with a verification scale interval of 0.02 kg, and with a minimum capacity of 4 kg.

The instrument is fitted with a Mettler Toledo model PBA439XL platform (Figure 8a) which has the load receptor directly supported by a Mettler Toledo SLP848-250 kg

C3 load cell. The load receptor has a nominal dimension of 900 mm × 1000 mm, and uses a painted mild steel frame with a stainless steel flat load receptor type of construction (Figure 8b) or a roller top (Figure 8c).

10. Description of Variant 9

approved on 26/06/26

The Mettler Toledo model BBA231 series instruments which are similar to the pattern but fitted with a Mettler Toledo model IND231 indicator (Figure 10a) and a Mettler Toledo model PBA220 painted steel type construction basework (Figures 9a to 9e) which has the load receptor directly supported by a Mettler Toledo model MT1022 or MT1241 or MT1260 load cell in certain single interval capacities as listed in Table 11.

The indicator is described in the documentation of approval NMI S653.

10.1 Sealing Provision

Provision is made for access to the calibration switch within the instrument to be sealed either using a 'lead and wire' or similar type seal with a drilled screw or use of a destructible adhesive label over the securing screw as shown in Figure 10b.

10.2 Software

The software is designated 1.xx.yyyy where xx.yyyy refers to the identification of non-legally relevant software.

The software version and number can be seen in the switch-on display sequence (when the power is first applied to the instrument).

TEST PROCEDURE No 6/4C/332

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*.

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.

Table 1

Instrument Model	Maximum Capacity (<i>Max</i>) (kg)	Minimum Capacity (<i>Min</i>) (kg)	Verification Scale Interval (<i>e</i>) (kg)	Basework Model	Platform Size (mm x mm)	Mettler Toledo Load Cell Model	Load Cell Maximum Capacity, <i>E_{max}</i> (kg)
BBA236-A3 Combi	3	0.02	0.001	PBA439-A3	240 X 300	SLP846-11kg C3	11
BBA236-A6 Combi	6	0.04	0.002	PBA439-A6	240 X 300	SLP846-11kg C3	11
BBA236-A15 Combi	15	0.1	0.005	PBA439-A15	240 X 300	SLP846-22kg C3	22
BBA236-QA3 Combi	3	0.02	0.001	PBA439-QA3	228 X 228	SLP846-11kg C3	11
BBA236-QA6 Combi	6	0.04	0.002	PBA439-QA6	228 X 228	SLP846-11kg C3	11
BBA236-QB15 Combi	15	0.1	0.005	PBA439-QB15	305 X 305	SLP846-22kg C3	22
BBA236-QB30 Combi	30	0.2	0.01	PBA439-QB30	305 X 305	SLP846-60kg C3	50
BBA236-B30 Combi	30	0.2	0.01	PBA439-BB30	400 X 500	SLP846-60kg C3	100
BBA236-B60 Combi	60	0.4	0.02	PBA439-BB60	400 X 500	SLP846-100kg C3	100
BBA236-B150 Combi	150	1	0.05	PBA439-B30	400 X 500	SLP847-60kg C3	200
BBA236-BB30 Combi	30	0.2	0.01	PBA439-B60	300 X 400	SLP847-100kg C3	50
BBA236-BB60 Combi	30	0.2	0.01	PBA439-B150	300 X 400	SLP848-250kg C3	100
BBA236-BC60 Combi	60	0.4	0.02	PBA439-BC60	500 X 650	SLP848-100kg C3	100
BBA236-BC150 Combi	150	1	0.05	PBA439-BC150	500 X 650	SLP848-250kg C3	250
BBA236-BC300 Combi	300	2	0.1	PBA439-BC300	500 X 650	SLP848-500kg C3	500
BBA236-CC60 Combi	60	0.4	0.02	PBA439-CC60	600 X 800	SLP848-100kg C3	100
BBA236-CC150 Combi	150	1	0.05	PBA439-CC150	600 X 800	SLP848-250kg C3	250
BBA236-CC300 Combi	300	2	0.1	PBA439-CC300	600 X 800	SLP848-500kg C3	500
BBA236-CC600 Combi	600	4	0.2	PBA439-CC600	600 X 800	SLP848-750kg C3	750

Table 2

Instrument Model	Maximum Capacity (<i>Max</i>) (kg)	Minimum Capacity (<i>Min</i>) (kg)	Verification Scale Interval (<i>e</i>) (kg)	Basework Model	Platform Size (mm x mm)	Mettler Toledo Load Cell Model	Load Cell Maximum Capacity, E_{max} (kg)
BBA236-A3 Combi	3	0.02	0.001	PBA436-A3	240 X 300	0785-11kg C3.5	11
BBA236-A6 Combi	6	0.04	0.002	PBA436-A6	240 X 300	0785-11kg C3.5	11
BBA236-A15 Combi	15	0.1	0.005	PBA436-A15	240 X 300	0785-22kg C3.5	22
BBA236-QA3 Combi	3	0.02	0.001	PBA436-QA3	228 X 228	0785-11kg C3.5	11
BBA236-QA6 Combi	6	0.04	0.002	PBA436-QA6	228 X 228	0785-11kg C3.5	11
BBA236-QB15 Combi	15	0.1	0.005	PBA436-QB15	305 X 305	0785-22kg C3.5	22
BBA236-QB30 Combi	30	0.2	0.01	PBA436-QB30	305 X 305	0785-50kg C3.5	50
BBA236-B30 Combi	30	0.2	0.01	PBA436-B30	400 X 500	0795-100kg C3	100
BBA236-B60 Combi	60	0.4	0.02	PBA436-B60	400 X 500	0795-100kg C3	100
BBA236-B150 Combi	150	1	0.05	PBA436-B150	400 X 500	0795-200kg C3	200
BBA236-BB30 Combi	30	0.2	0.01	PBA436-BB30	300 X 400	0785-50kg C3	50
BBA236-BB60 Combi	30	0.2	0.01	PBA436-BB60	300 X 400	0785-100kg C3	100
BBA236-BC60 Combi	60	0.4	0.02	PBA436-BC60	500 X 650	0805-100kg C3	100
BBA236-BC150 Combi	150	1	0.05	PBA436-BC150	500 X 650	0805-250kg C3	250
BBA236-BC300 Combi	300	2	0.1	PBA436-BC300	500 X 650	0805-500kg C3	500
BBA236-CC60 Combi	60	0.4	0.02	PBA436-CC60	600 X 800	0805-100kg C3	100
BBA236-CC150 Combi	150	1	0.05	PBA436-CC150	600 X 800	0805-250kg C3	250
BBA236-CC300 Combi	300	2	0.1	PBA436-CC300	600 X 800	0805-500kg C3	500
BBA236-CC600 Combi	600	4	0.2	PBA436-CC600	600 X 800	0805-750kg C3	750

Table 3

Instrument Model	Maximum Capacity (<i>Max</i>) (kg)	Minimum Capacity (<i>Min</i>) (kg)	Verification Scale Interval (<i>e</i>) (kg)	Basework Model	Platform Size (mm x mm)	Mettler Toledo Load Cell Model	Load Cell Maximum Capacity, <i>E_{max}</i> (kg)
BBA236-A3 Combi	3	0.02	0.001	PBA639-A3	240 X 300	SLP846-11kg C3	11
BBA236-A6 Combi	6	0.04	0.002	PBA639-A6	240 X 300	SLP846-11kg C3	11
BBA236-A15 Combi	15	0.1	0.005	PBA639-A15	240 X 300	SLP846-22kg C3	22
BBA236-QA3 Combi	3	0.02	0.001	PBA639-QA3	228 X 228	SLP846-11kg C3	11
BBA236-QA6 Combi	6	0.04	0.002	PBA639-QA6	228 X 228	SLP846-11kg C3	11
BBA236-QB15 Combi	15	0.1	0.005	PBA639-QB15	305 X 305	SLP846-22kg C3	22
BBA236-QB30 Combi	30	0.2	0.01	PBA639-QB30	305 X 305	SLP846-60kg C3	50
BBA236-B30 Combi	30	0.2	0.01	PBA639-B30	400 X 500	SLP847-60kg C3	100
BBA236-B60 Combi	60	0.4	0.02	PBA639-B60	400 X 500	SLP847-100kg C3	100
BBA236-B150 Combi	150	1	0.05	PBA639-B150	400 X 500	SLP848-250kg C3	200
BBA236-BB30 Combi	30	0.2	0.01	PBA639-BB30	300 X 400	SLP846-60kg C3	50
BBA236-BB60 Combi	30	0.2	0.01	PBA639-BB60	300 X 400	SLP846-100kg C3	100
BBA236-BC60 Combi	60	0.4	0.02	PBA639-BC60	500 X 650	SLP848-100kg C3	100
BBA236-BC150 Combi	150	1	0.05	PBA639-BC150	500 X 650	SLP848-250kg C3	250
BBA236-BC300 Combi	300	2	0.1	PBA639-BC300	500 X 650	SLP848-500kg C3	500
BBA236-CC60 Combi	60	0.4	0.02	PBA639-CC60	600 X 800	SLP848-100kg C3	100
BBA236-CC150 Combi	150	1	0.05	PBA639-CC150	600 X 800	SLP848-250kg C3	250
BBA236-CC300 Combi	300	2	0.1	PBA639-CC300	600 X 800	SLP848-500kg C3	500
BBA236-CC600 Combi	600	4	0.2	PBA639-CC600	600 X 800	SLP848-750kg C3	750

Table 4

Instrument Model	Maximum Capacity (<i>Max</i>) (kg)	Minimum Capacity (<i>Min</i>) (kg)	Verification Scale Interval (<i>e</i>) (kg)	Basework Model	Platform Size (mm x mm)	Mettler Toledo Load Cell Model	Load Cell Maximum Capacity, E_{max} (kg)
ICS4_9-A3/ICS689-A3 Combi	3	0.02	0.001	PBA439-A3	240 X 300	SLP846-11kg C3	11
ICS4_9-A6/ICS689-A6 Combi	6	0.04	0.002	PBA439-A6	240 X 300	SLP846-11kg C3	11
ICS4_9-A6/ICS689-A6 Combi	15	0.1	0.005	PBA439-A15	240 X 300	SLP846-22kg C3	22
ICS4_9-QA3/ICS689-QA3 Combi	3	0.02	0.001	PBA439-QA3	228 X 228	SLP846-11kg C3	11
ICS4_9-QA6/ICS689-QA6 Combi	6	0.04	0.002	PBA439-QA6	228 X 228	SLP846-11kg C3	11
ICS4_9-QB15/ICS689-QB15 Combi	15	0.1	0.005	PBA439-QB15	305 X 305	SLP846-22kg C3	22
ICS4_9-QB30/ICS689-QB30 Combi	30	0.2	0.01	PBA439-QB30	305 X 305	SLP846-60kg C3	50
ICS4_9-B30/ICS689-B30 Combi	30	0.2	0.01	PBA439-BB30	400 X 500	SLP846-60kg C3	100
ICS4_9-B60/ICS689-B60 Combi	60	0.4	0.02	PBA439-BB60	400 X 500	SLP846-100kg C3	100
ICS4_9-B150/ICS689-B150 Combi	150	1	0.05	PBA439-B30	400 X 500	SLP847-60kg C3	200
ICS4_9-BB30/ICS689-BB30 Combi	30	0.2	0.01	PBA439-B60	300 X 400	SLP847-100kg C3	50
ICS4_9-BB60/ICS689-BB60 Combi	30	0.2	0.01	PBA439-B150	300 X 400	SLP848-250kg C3	100
ICS4_9-BC60/ICS689-BC60 Combi	60	0.4	0.02	PBA439-BC60	500 X 650	SLP848-100kg C3	100
ICS4_9-BC150/ICS689-BC150 Combi	150	1	0.05	PBA439-BC150	500 X 650	SLP848-250kg C3	250
ICS4_9-BC300/ICS689-BC300 Combi	300	2	0.1	PBA439-BC300	500 X 650	SLP848-500kg C3	500
ICS4_9-CC60/ICS689-CC60 Combi	60	0.4	0.02	PBA439-CC60	600 X 800	SLP848-100kg C3	100
ICS4_9-CC150/ICS689-CC150 Combi	150	1	0.05	PBA439-CC150	600 X 800	SLP848-250kg C3	250
ICS4_9-CC300/ICS689-CC300 Combi	300	2	0.1	PBA439-CC300	600 X 800	SLP848-500kg C3	500
ICS4_9-CC600/ICS689-CC600 Combi	600	4	0.2	PBA439-CC600	600 X 800	SLP848-750kg C3	750

Table 5

Instrument Model	Maximum Capacity (Max) (kg)	Minimum Capacity (Min) (kg)	Verification Scale Interval (e) (kg)	Basework Model	Platform Size (mm x mm)	Mettler Toledo Load Cell Model	Load Cell Maximum Capacity, E_{max} (kg)
ICS4_9-A3/ICS689-A3 Combi	3	0.02	0.001	PBA436-A3	240 X 300	0785-11kg C3.5	11
ICS4_9-A6/ICS689-A6 Combi	6	0.04	0.002	PBA436-A6	240 X 300	0785-11kg C3.5	11
ICS4_9-A6/ICS689-A6 Combi	15	0.1	0.005	PBA436-A15	240 X 300	0785-22kg C3.5	22
ICS4_9-QA3/ICS689-QA3 Combi	3	0.02	0.001	PBA436-QA3	228 X 228	0785-11kg C3.5	11
ICS4_9-QA6/ICS689-QA6 Combi	6	0.04	0.002	PBA436-QA6	228 X 228	0785-11kg C3.5	11
ICS4_9-QB15/ICS689-QB15 Combi	15	0.1	0.005	PBA436-QB15	305 X 305	0785-22kg C3.5	22
ICS4_9-QB30/ICS689-QB30 Combi	30	0.2	0.01	PBA436-QB30	305 X 305	0785-50kg C3.5	50
ICS4_9-B30/ICS689-B30 Combi	30	0.2	0.01	PBA436-B30	400 X 500	0795-100kg C3	100
ICS4_9-B60/ICS689-B60 Combi	60	0.4	0.02	PBA436-B60	400 X 500	0795-100kg C3	100
ICS4_9-B150/ICS689-B150 Combi	150	1	0.05	PBA436-B150	400 X 500	0795-200kg C3	200
ICS4_9-BB30/ICS689-BB30 Combi	30	0.2	0.01	PBA436-BB30	300 X 400	0785-50kg C3	50
ICS4_9-BB60/ICS689-BB60 Combi	30	0.2	0.01	PBA436-BB60	300 X 400	0785-100kg C3	100
ICS4_9-BC60/ICS689-BC60 Combi	60	0.4	0.02	PBA436-BC60	500 X 650	0805-100kg C3	100
ICS4_9-BC150/ICS689-BC150 Combi	150	1	0.05	PBA436-BC150	500 X 650	0805-250kg C3	250
ICS4_9-BC300/ICS689-BC300 Combi	300	2	0.1	PBA436-BC300	500 X 650	0805-500kg C3	500
ICS4_9-CC60/ICS689-CC60 Combi	60	0.4	0.02	PBA436-CC60	600 X 800	0805-100kg C3	100
ICS4_9-CC150/ICS689-CC150 Combi	150	1	0.05	PBA436-CC150	600 X 800	0805-250kg C3	250
ICS4_9-CC300/ICS689-CC300 Combi	300	2	0.1	PBA436-CC300	600 X 800	0805-500kg C3	500
ICS4_9-CC600/ICS689-CC600 Combi	600	4	0.2	PBA436-CC600	600 X 800	0805-750kg C3	750

Table 6

Instrument Model	Maximum Capacity (<i>Max</i>) (kg)	Minimum Capacity (<i>Min</i>) (kg)	Verification Scale Interval (<i>e</i>) (kg)	Basework Model	Platform Size (mm x mm)	Mettler Toledo Load Cell Model	Load Cell Maximum Capacity, <i>E_{max}</i> (kg)
ICS4_9-A3/ICS689-A3 Combi	3	0.02	0.001	PBA639-A3	240 X 300	SLP846-11kg C3	11
ICS4_9-A6/ICS689-A6 Combi	6	0.04	0.002	PBA639-A6	240 X 300	SLP846-11kg C3	11
ICS4_9-A6/ICS689-A6 Combi	15	0.1	0.005	PBA639-A15	240 X 300	SLP846-22kg C3	22
ICS4_9-QA3/ICS689-QA3 Combi	3	0.02	0.001	PBA639-QA3	228 X 228	SLP846-11kg C3	11
ICS4_9-QA6/ICS689-QA6 Combi	6	0.04	0.002	PBA639-QA6	228 X 228	SLP846-11kg C3	11
ICS4_9-QB15/ICS689-QB15 Combi	15	0.1	0.005	PBA639-QB15	305 X 305	SLP846-22kg C3	22
ICS4_9-QB30/ICS689-QB30 Combi	30	0.2	0.01	PBA639-QB30	305 X 305	SLP846-60kg C3	50
ICS4_9-B30/ICS689-B30 Combi	30	0.2	0.01	PBA639-B30	400 X 500	SLP847-60kg C3	100
ICS4_9-B60/ICS689-B60 Combi	60	0.4	0.02	PBA639-B60	400 X 500	SLP847-100kg C3	100
ICS4_9-B150/ICS689-B150 Combi	150	1	0.05	PBA639-B150	400 X 500	SLP848-250kg C3	200
ICS4_9-BB30/ICS689-BB30 Combi	30	0.2	0.01	PBA639-BB30	300 X 400	SLP846-60kg C3	50
ICS4_9-BB60/ICS689-BB60 Combi	30	0.2	0.01	PBA639-BB60	300 X 400	SLP846-100kg C3	100
ICS4_9-BC60/ICS689-BC60 Combi	60	0.4	0.02	PBA639-BC60	500 X 650	SLP848-100kg C3	100
ICS4_9-BC150/ICS689-BC150 Combi	150	1	0.05	PBA639-BC150	500 X 650	SLP848-250kg C3	250
ICS4_9-BC300/ICS689-BC300 Combi	300	2	0.1	PBA639-BC300	500 X 650	SLP848-500kg C3	500
ICS4_9-CC60/ICS689-CC60 Combi	60	0.4	0.02	PBA639-CC60	600 X 800	SLP848-100kg C3	100
ICS4_9-CC150/ICS689-CC150 Combi	150	1	0.05	PBA639-CC150	600 X 800	SLP848-250kg C3	250
ICS4_9-CC300/ICS689-CC300 Combi	300	2	0.1	PBA639-CC300	600 X 800	SLP848-500kg C3	500
ICS4_9-CC600/ICS689-CC600 Combi	600	4	0.2	PBA639-CC600	600 X 800	SLP848-750kg C3	750

Table 7a – PBA439 Basework with Mettler Toledo Load Cell

Basework Model	PBA439-A3	PBA439-A6	PBA439-A15	PBA439-QA3	PBA439-QA6
Platform Size	240 mm x 300 mm			228 mm x 228 mm	
Basework Maximum Capacity	3 kg	6 kg	15 kg	3 kg	6 kg
Typical Verification Scale Interval	0.001 kg	0.002 kg	0.005 kg	0.001 kg	0.002 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000				
Dead Load of Platform	1.23 kg	1.23 kg	1.23 kg	0.95 kg	0.95 kg
Load Cell Used	SLP846 C3	SLP846 C3	SLP846 C3	SLP846 C3	SLP846 C3
Load Cell Maximum Capacity E_{max}	11 kg	11 kg	22 kg	11 kg	11 kg
Maximum Load Cell Scale Interval n_{LC}	3000				
Minimum Value of Verification Scale Interval for Basework	0.001 kg	0.001 kg	0.002 kg	0.001 kg	0.001 kg
Minimum Dead Load Output Return DR	0.002 kg	0.002 kg	0.004 kg	0.002 kg	0.002 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at E_{max}	1.8 mV/V				
Input Impedance	384 Ω				
Maximum Excitation Voltage	20 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

Table 7b – PBA439 Basework with Mettler Toledo Load Cell

Basework Model	PBA439-QB15	PBA439-QB30	PBA439-QB60	PBA439-BB30	PBA439-BB60
Platform Size	305 mm x 305 mm			300 mm x 400 mm	
Basework Maximum Capacity	15 kg	30 kg	60 kg	30 kg	60 kg
Typical Verification Scale Interval	0.005 kg	0.01 kg	0.02 kg	0.01 kg	0.02 kg
Maximum Number of Verification Scale Intervals ($n_{\max}$)	3000				
Dead Load of Platform	1.51 kg	1.51 kg	1.51 kg	1.86 kg	1.86 kg
Load Cell Used	SLP846 C3	SLP846 C3	SLP846 C3	SLP846 C3	SLP846 C3
Load Cell Maximum Capacity $E_{\max}$	22 kg	60 kg	100 kg	60 kg	100 kg
Maximum Load Cell Scale Interval n_{LC}	3000				
Minimum Value of Verification Scale Interval for Basework	0.002 kg	0.005 kg	0.01 kg	0.005 kg	0.01 kg
Minimum Dead Load Output Return DR	0.004 kg	0.01 kg	0.017 kg	0.01 kg	0.017 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at $E_{\max}$	1.8 mV/V				
Input Impedance	384 Ω				
Maximum Excitation Voltage	20 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

Table 7c – PBA439 Basework with Mettler Toledo Load Cell

Basework Model	PBA439-B30	PBA439-B60	PBA439-B150	PBA439-BC60	PBA439-BC150
Platform Size	400 mm x 500 mm			500 mm x 650 mm	
Basework Maximum Capacity	30 kg	60 kg	150 kg	60 kg	150 kg
Typical Verification Scale Interval	0.01 kg	0.02 kg	0.05 kg	0.02 kg	0.05 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000				
Dead Load of Platform	2.85 kg	2.85 kg	2.85 kg	5.8 kg	5.8 kg
Load Cell Used	SLP847 C3	SLP847 C3	SLP847 C3	SLP848 C3	SLP848 C3
Load Cell Maximum Capacity E_{max}	60 kg	100 kg	200 kg	100 kg	250 kg
Maximum Load Cell Scale Interval n_{LC}	3000				
Minimum Value of Verification Scale Interval for Basework	0.005 kg	0.01 kg	0.02 kg	0.01 kg	0.02 kg
Minimum Dead Load Output Return DR	0.01 kg	0.017 kg	0.033 kg	0.017 kg	0.042 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at E_{max}	1.8 mV/V				
Input Impedance	384 Ω				
Maximum Excitation Voltage	20 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

Table 7d – PBA439 Basework with Mettler Toledo Load Cell

Basework Model	PBA439-BC300	PBA439-CC60	PBA439-CC150	PBA439-CC300	PBA439-CC600
Platform Size	500 mm x 650 mm	600 mm x 800 mm			
Basework Maximum Capacity	300 kg	60 kg	150 kg	300 kg	600 kg
Typical Verification Scale Interval	0.1 kg	0.02 kg	0.05 kg	0.1 kg	0.2 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000				
Dead Load of Platform	5.8 kg	11 kg	11 kg	11 kg	14.1 kg
Load Cell Used	SLP848 C3	SLP848 C3	SLP848 C3	SLP848 C3	SLP848 C3
Load Cell Maximum Capacity E_{max}	500 kg	100 kg	250 kg	500 kg	750 kg
Maximum Load Cell Scale Interval n_{LC}	3000				
Minimum Value of Verification Scale Interval for Basework	0.05 kg	0.01 kg	0.02 kg	0.05 kg	0.1 kg
Minimum Dead Load Output Return DR	0.083 kg	0.017 kg	0.043 kg	0.083 kg	0.125 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at E_{max}	1.8 mV/V				
Input Impedance	384 Ω				
Maximum Excitation Voltage	20 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

Table 7e – PBA439 Basework with Mettler Toledo Load Cell

Basework Model	PBA439XL
Platform Size	900 mm x 1000 mm
Basework Maximum Capacity	60 kg
Typical Verification Scale Interval	0.02 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000
Dead Load of Platform	14 kg (flat top) 20 kg (roller top)
Load Cell Used	SLP848 C3
Load Cell Maximum Capacity E_{max}	250 kg
Maximum Load Cell Scale Interval n_{LC}	3000
Minimum Value of Verification Scale Interval for Basework	0.02 kg
Minimum Dead Load Output Return DR	0.043 kg
Operating Temperature Range	-10 °C to +40 °C
Output Rating at E_{max}	1.8 mV/V
Input Impedance	384 Ω
Maximum Excitation Voltage	20 V (AC / DC)
Cable Length of Load Cell	2.5 m
Number of Leads of Load Cell (plus shield)	6

Table 8a – PBA436 Basework with Mettler Toledo Load Cell

Basework Model	PBA436-A3	PBA436-A6	PBA436-A15	PBA436-QA3	PBA436-QA6
Platform Size	240 mm x 300 mm			228 mm x 228 mm	
Basework Maximum Capacity	3 kg	6 kg	15 kg	3 kg	6 kg
Typical Verification Scale Interval	0.001 kg	0.002 kg	0.005 kg	0.001 kg	0.002 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000				
Dead Load of Platform	1.23 kg	1.23 kg	1.23 kg	0.95 kg	0.95 kg
Load Cell Used	0785 C3.5	0785 C3.5	0785 C3.5	0785 C3.5	0785 C3.5
Load Cell Maximum Capacity E_{max}	11 kg	11 kg	22 kg	11 kg	11 kg
Maximum Load Cell Scale Interval n_{LC}	3500				
Minimum Value of Verification Scale Interval for Basework	0.001 kg	0.001 kg	0.002 kg	0.001 kg	0.001 kg
Minimum Dead Load Output Return DR	0.001 kg	0.001 kg	0.002 kg	0.001 kg	0.001 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at E_{max}	2 mV/V				
Input Impedance	415 Ω				
Maximum Excitation Voltage	15 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

Table 8b – PBA436 Basework with Mettler Toledo Load Cell

Basework Model	PBA436-QB15	PBA436-QB30	PBA436-QB60	PBA436-BB30	PBA436-BB60
Platform Size	305 mm x 305 mm			300 mm x 400 mm	
Basework Maximum Capacity	15 kg	30 kg	60 kg	30 kg	60 kg
Typical Verification Scale Interval	0.005 kg	0.01 kg	0.02 kg	0.01 kg	0.02 kg
Maximum Number of Verification Scale Intervals ($n_{\max}$)	3000				
Dead Load of Platform	1.51 kg	1.51 kg	1.51 kg	1.86 kg	1.86 kg
Load Cell Used	0785 C3.5	0785 C3.5	0785 C3.5	0785 C3.5	0785 C3.5
Load Cell Maximum Capacity $E_{\max}$	22 kg	50 kg	100 kg	50 kg	100 kg
Maximum Load Cell Scale Interval n_{LC}	3500				
Minimum Value of Verification Scale Interval for Basework	0.002 kg	0.005 kg	0.01 kg	0.005 kg	0.01 kg
Minimum Dead Load Output Return DR	0.002 kg	0.004 kg	0.008 kg	0.004 kg	0.008 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at $E_{\max}$	2 mV/V				
Input Impedance	415 Ω				
Maximum Excitation Voltage	15 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

TABLE 8c – PBA436 Basework with Mettler Toledo Load Cell

Basework Model	PBA436-B30	PBA436-B60	PBA436-B150	PBA436-BC60	PBA436-BC150
Platform Size	400 mm x 500 mm			500 mm x 650 mm	
Basework Maximum Capacity	30 kg	60 kg	150 kg	60 kg	150 kg
Typical Verification Scale Interval	0.01 kg	0.02 kg	0.05 kg	0.02 kg	0.05 kg
Maximum Number of Verification Scale Intervals ($n_{\max}$)	3000				
Dead Load of Platform	2.85 kg	2.85 kg	2.85 kg	5.8 kg	5.8 kg
Load Cell Used	0795 C3	0795 C3	0795 C3	0805 C3	0805 C3
Load Cell Maximum Capacity $E_{\max}$	60 kg	100 kg	200 kg	100 kg	250 kg
Maximum Load Cell Scale Interval n_{LC}	3000			3000	
Minimum Value of Verification Scale Interval for Basework	0.005 kg	0.005 kg	0.01 kg	0.01 kg	0.02 kg
Minimum Dead Load Output Return DR	0.003 kg	0.004 kg	0.008 kg	0.008 kg	0.017 kg
Operating Temperature Range	−10 °C to +40 °C				
Output Rating at $E_{\max}$	2 mV/V				
Input Impedance	415 Ω			415 Ω	
Maximum Excitation Voltage	15 V (AC / DC)				
Cable Length of Load Cell	3 m				
Number of Leads of Load Cell (plus shield)	6				

TABLE 8d – PBA436 Basework with Mettler Toledo Load Cell

Basework Model	PBA436-BC300	PBA436-CC60	PBA436-CC150	PBA436-CC300	PBA436-CC600
Platform Size	500 mm x 650 mm	600 mm x 800 mm			
Basework Maximum Capacity	300 kg	60 kg	150 kg	300 kg	600 kg
Typical Verification Scale Interval	0.1 kg	0.02 kg	0.05 kg	0.1 kg	0.2 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000				
Dead Load of Platform	5.8 kg	11 kg	11 kg	11 kg	14.1 kg
Load Cell Used	0805 C3	0805 C3	0805 C3	0805 C3	0805 C3
Load Cell Maximum Capacity E_{max}	500 kg	100 kg	250 kg	500 kg	750 kg
Maximum Load Cell Scale Interval n_{LC}	3000				
Minimum Value of Verification Scale Interval for Basework	0.05 kg	0.01 kg	0.02 kg	0.05 kg	0.1 kg
Minimum Dead Load Output Return DR	0.042 kg	0.008 kg	0.017 kg	0.042 kg	0.063 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at E_{max}	2 mV/V				
Input Impedance	415 Ω				
Maximum Excitation Voltage	15 V (AC / DC)				
Cable Length of Load Cell	3 m				
Number of Leads of Load Cell (plus shield)	6				

Table 9a – PBA639 Basework with Mettler Toledo Load Cell

Basework Model	PBA639-A3	PBA639-A6	PBA639-A15	PBA639-QA3	PBA639-QA6
Platform Size	240 mm x 300 mm			228 mm x 228 mm	
Basework Maximum Capacity	3 kg	6 kg	15 kg	3 kg	6 kg
Typical Verification Scale Interval	0.001 kg	0.002 kg	0.005 kg	0.001 kg	0.002 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000				
Dead Load of Platform	1.23 kg	1.23 kg	1.23 kg	0.95 kg	0.95 kg
Load Cell Used	SLP846 C3	SLP846 C3	SLP846 C3	SLP846 C3	SLP846 C3
Load Cell Maximum Capacity E_{max}	11 kg	11 kg	22 kg	11 kg	11 kg
Maximum Load Cell Scale Interval n_{LC}	3000				
Minimum Value of Verification Scale Interval for Basework	0.001 kg	0.001 kg	0.002 kg	0.001 kg	0.001 kg
Minimum Dead Load Output Return DR	0.002 kg	0.002 kg	0.004 kg	0.002 kg	0.002 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at E_{max}	1.8 mV/V				
Input Impedance	384 Ω				
Maximum Excitation Voltage	20 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

Table 9b – PBA639 Basework with Mettler Toledo Load Cell

Basework Model	PBA639-QB15	PBA639-QB30	PBA639-QB60	PBA639-BB30	PBA639-BB60
Platform Size	305 mm x 305 mm			300 mm x 400 mm	
Basework Maximum Capacity	15 kg	30 kg	60 kg	30 kg	60 kg
Typical Verification Scale Interval	0.005 kg	0.01 kg	0.02 kg	0.01 kg	0.02 kg
Maximum Number of Verification Scale Intervals ($n_{\max}$)	3000				
Dead Load of Platform	1.51 kg	1.51 kg	1.51 kg	1.86 kg	1.86 kg
Load Cell Used	SLP846 C3	SLP846 C3	SLP846 C3	SLP846 C3	SLP846 C3
Load Cell Maximum Capacity $E_{\max}$	22 kg	60 kg	100 kg	60 kg	100 kg
Maximum Load Cell Scale Interval n_{LC}	3000				
Minimum Value of Verification Scale Interval for Basework	0.002 kg	0.005 kg	0.01 kg	0.005 kg	0.01 kg
Minimum Dead Load Output Return DR	0.004 kg	0.01 kg	0.017 kg	0.01 kg	0.017 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at $E_{\max}$	1.8 mV/V				
Input Impedance	384 Ω				
Maximum Excitation Voltage	20 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

TABLE 9c – PBA639 Basework with Mettler Toledo Load Cell

Basework Model	PBA639-B30	PBA639-B60	PBA639-B150	PBA639-BC60	PBA639-BC150
Platform Size	400 mm x 500 mm			500 mm x 650 mm	
Basework Maximum Capacity	30 kg	60 kg	150 kg	60 kg	150 kg
Typical Verification Scale Interval	0.01 kg	0.02 kg	0.05 kg	0.02 kg	0.05 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000				
Dead Load of Platform	2.85 kg	2.85 kg	2.85 kg	5.8 kg	5.8 kg
Load Cell Used	SLP847 C3	SLP847 C3	SLP847 C3	SLP848 C3	SLP848 C3
Load Cell Maximum Capacity E_{max}	60 kg	100 kg	200 kg	100 kg	250 kg
Maximum Load Cell Scale Interval n_{LC}	3000				
Minimum Value of Verification Scale Interval for Basework	0.005 kg	0.01 kg	0.02 kg	0.01 kg	0.02 kg
Minimum Dead Load Output Return DR	0.01 kg	0.017 kg	0.033 kg	0.017 kg	0.042 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at E_{max}	1.8 mV/V				
Input Impedance	384 Ω				
Maximum Excitation Voltage	20 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

TABLE 9d – PBA639 Basework with Mettler Toledo Load Cell

Basework Model	PBA639-BC300	PBA639-CC60	PBA639-CC150	PBA639-CC300	PBA639-CC600
Platform Size	500 mm x 650 mm	600 mm x 800 mm			
Basework Maximum Capacity	300 kg	60 kg	150 kg	300 kg	600 kg
Typical Verification Scale Interval	0.1 kg	0.02 kg	0.05 kg	0.1 kg	0.2 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000				
Dead Load of Platform	5.8 kg	11 kg	11 kg	11 kg	14.1 kg
Load Cell Used	SLP848 C3	SLP848 C3	SLP848 C3	SLP848 C3	SLP848 C3
Load Cell Maximum Capacity E_{max}	500 kg	100 kg	250 kg	500 kg	750 kg
Maximum Load Cell Scale Interval n_{LC}	3000				
Minimum Value of Verification Scale Interval for Basework	0.05 kg	0.01 kg	0.02 kg	0.05 kg	0.1 kg
Minimum Dead Load Output Return DR	0.083 kg	0.017 kg	0.043 kg	0.083 kg	0.125 kg
Operating Temperature Range	-10 °C to +40 °C				
Output Rating at E_{max}	1.8 mV/V				
Input Impedance	384 Ω				
Maximum Excitation Voltage	20 V (AC / DC)				
Cable Length of Load Cell	2.5 m				
Number of Leads of Load Cell (plus shield)	6				

TABLE 10a – PBA220 Basework with Mettler Toledo Load Cell

Basework Model	PBA220-A6	PBA220-A15	PBA220-BB30	PBA220-BB60
Platform Size	240 mm x 300 mm		300 mm x 400 mm	
Basework Maximum Capacity	6 kg	15 kg	30 kg	60 kg
Typical Verification Scale Interval	0.002 kg	0.005 kg	0.01 kg	0.02 kg
Maximum Number of Verification Scale Intervals ($n_{\max}$)	3000			
Dead Load of Platform	1.23 kg	1.23 kg	1.86 kg	1.86 kg
Load Cell Used	MT1022	MT1022	MT1241	MT1241
Load Cell Maximum Capacity $E_{\max}$	10 kg	20 kg	50 kg	100 kg
Maximum Load Cell Scale Interval n_{LC}	3000	3000	3500	3500
Minimum Value of Verification Scale Interval for Basework	0.002 kg	0.005 kg	0.005 kg	0.01 kg
Minimum Dead Load Output Return DR	0.0017 kg	0.0033 kg	0.007 kg	0.014 kg
Operating Temperature Range	−10 °C to +40 °C			
Output Rating at $E_{\max}$	2 mV/V			
Input Impedance	400 Ω		410 Ω	
Maximum Excitation Voltage	20 V (AC / DC)			
Cable Length of Load Cell	1 m		2 m	
Number of Leads of Load Cell (plus shield)	4		6	

TABLE 10b – PBA220 Basework with Mettler Toledo Load Cell

Basework Model	PBA220-B60	PBA220-B150	PBA220-BC60	PBA220-BC150
Platform Size	400 mm x 500 mm		500 mm x 650 mm	
Basework Maximum Capacity	60 kg	150 kg	60 kg	150 kg
Typical Verification Scale Interval	0.02 kg	0.05 kg	0.02 kg	0.05 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000			
Dead Load of Platform	2.85 kg	2.85 kg	5.8 kg	5.8 kg
Load Cell Used	MT1241	MT1241	MT1260	MT1260
Load Cell Maximum Capacity E_{max}	100 kg	250 kg	100 kg	300 kg
Maximum Load Cell Scale Interval n_{LC}	3500	3500	3000	3000
Minimum Value of Verification Scale Interval for Basework	0.01 kg	0.05 kg	0.01 kg	0.05 kg
Minimum Dead Load Output Return DR	0.014 kg	0.036 kg	0.017 kg	0.05 kg
Operating Temperature Range	-10 °C to +40 °C			
Output Rating at E_{max}	2 mV/V			
Input Impedance	410 Ω			
Maximum Excitation Voltage	20 V (AC / DC)			
Cable Length of Load Cell	2 m			
Number of Leads of Load Cell (plus shield)	6			

TABLE 10c – PBA220 Basework with Mettler Toledo Load Cell

Basework Model	PBA220-BC300	PBA220-CC60	PBA220-CC150	PBA220-CC300
Platform Size	500 mm x 650 mm	600 mm x 800 mm		
Basework Maximum Capacity	300 kg	60 kg	150 kg	300 kg
Typical Verification Scale Interval	0.1 kg	0.02 kg	0.05 kg	0.1 kg
Maximum Number of Verification Scale Intervals (n_{max})	3000			
Dead Load of Platform	5.8 kg	11 kg	11 kg	11 kg
Load Cell Used	MT1260	MT1260	MT1260	MT1260
Load Cell Maximum Capacity E_{max}	500 kg	100 kg	300 kg	500 kg
Maximum Load Cell Scale Interval n_{LC}	3000	3000	3000	3000
Minimum Value of Verification Scale Interval for Basework	0.05 kg	0.01 kg	0.05 kg	0.05 kg
Minimum Dead Load Output Return DR	0.083 kg	0.017 kg	0.05 kg	0.083 kg
Operating Temperature Range	-10 °C to +40 °C			
Output Rating at E_{max}	2 mV/V			
Input Impedance	410 Ω			
Maximum Excitation Voltage	20 V (AC / DC)			
Cable Length of Load Cell	2 m			
Number of Leads of Load Cell (plus shield)	6			

Table 11

Instrument Model	Maximum Capacity (<i>Max</i>) (kg)	Minimum Capacity (<i>Min</i>) (kg)	Verification Scale Interval (<i>e</i>) (kg)	Basework Model	Platform Size (mm x mm)	Mettler Toledo Load Cell Model	Load Cell Maximum Capacity, E_{max} (kg)
BBA231-A6	6	0.04	0.002	PBA220-A6	240 X 300	MT1022	10
BBA231-A15	15	0.1	0.005	PBA220-A15	240 X 300	MT1022	20
BBA231-BB30	30	0.2	0.01	PBA220-BB30	300 x 400	MT1241	50
BBA231-BB60	60	0.4	0.02	PBA220-BB60	300 x 400	MT1241	100
BBA231-B60	60	0.4	0.02	PBA220-B60	400 x 500	MT1241	100
BBA231-B150	150	1	0.05	PBA220-B150	400 x 500	MT1241	250
BBA231-BC60	60	0.4	0.02	PBA220-BC60	500 x 650	MT1260	100
BBA231-BC150	150	1	0.05	PBA220-BC150	500 x 650	MT1260	300
BBA231-BC300	300	2	0.1	PBA220-BC300	500 x 650	MT1260	500
BBA231-CC60	60	0.4	0.02	PBA220-CC60	600 x 800	MT1260	100
BBA231-CC150	150	1	0.05	PBA220-CC150	600 x 800	MT1260	300
BBA231-CC300	300	2	0.1	PBA220-CC300	600 x 800	MT1260	500

FIGURE 6/4C/332 – 1



Mettler Toledo Model BBA236 / ICS4_9 / ICS689 Series Weighing Instrument

FIGURE 6/4C/332 – 2

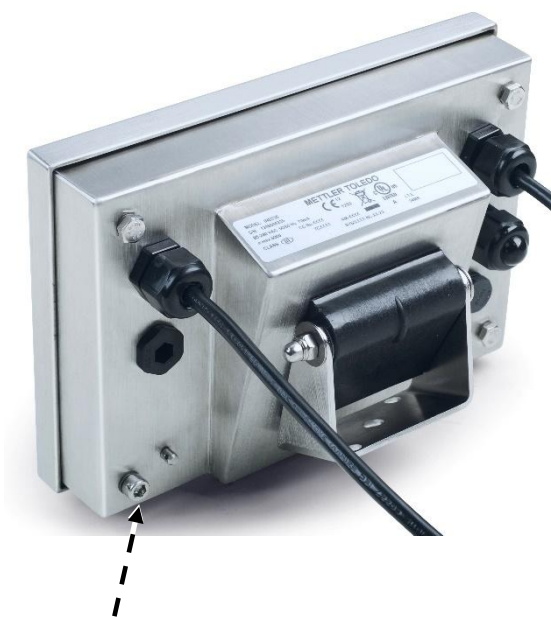


Mettler Toledo Model BBA236 / ICS4_9 / ICS689 Series Weighing Instrument
with a PBA639 platform

FIGURE 6/4C/332 – 3



(a) Mettler Toledo Model IND236 Digital Indicator



(b) IND236 Indicator Sealing Method

FIGURE 6/4C/332 – 4



Model ICS429 Digital Indicator



Model ICS439 Digital Indicator



FIGURE 6/4C/332 – 5



Apply Seal

Mettler Toledo Model ICS4_9/ICS689 Indicator Typical Sealing Provision

FIGURE 6/4C/332 – 6



(a) PBA436-A / PBA439-A Platform



(b) PBA436-QA / PBA439-QA Platform



(c) PBA436-QB / PBA439-QB Platform



(d) PBA436-B / PBA439-B



(e) PBA436-BB / PBA439-BB Platform



(f) PBA436-BC / PBA439-BC Platform



(g) PBA436-CC / PBA439-CC Platform

PBA436 Series and PBA439 Series Type Platforms

FIGURE 6/4C/332 – 7



(a) PBA639-A Platform



(b) PBA639-QA Platform



(c) PBA639-QB Platform



(d) PBA639-B Platform



(e) PBA639-BB Platform



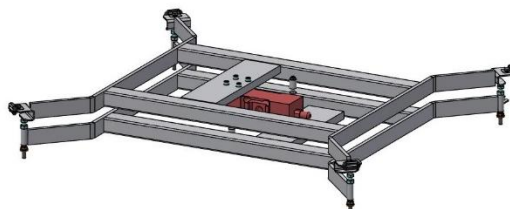
(f) PBA639-BC Platform



(g) PBA639-CC Platform

PBA639 Series Type Platforms

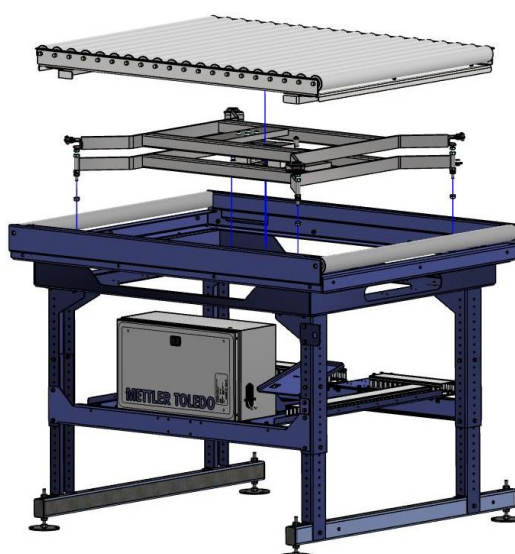
FIGURE 6/4C/332 – 8



(a) PBA439XL platform

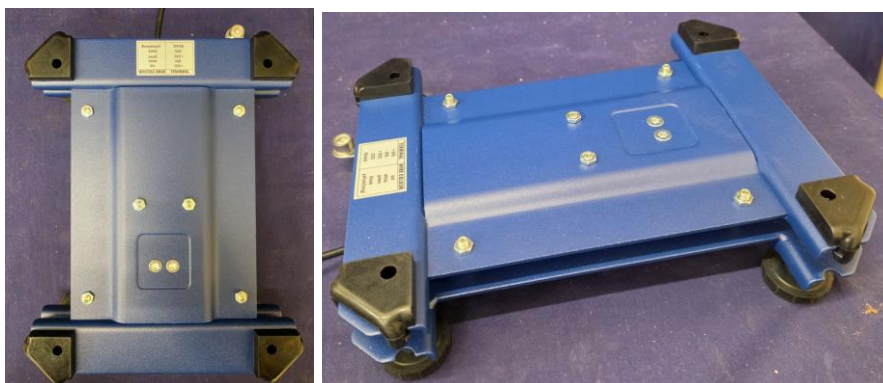


(b) Without a Roller Top

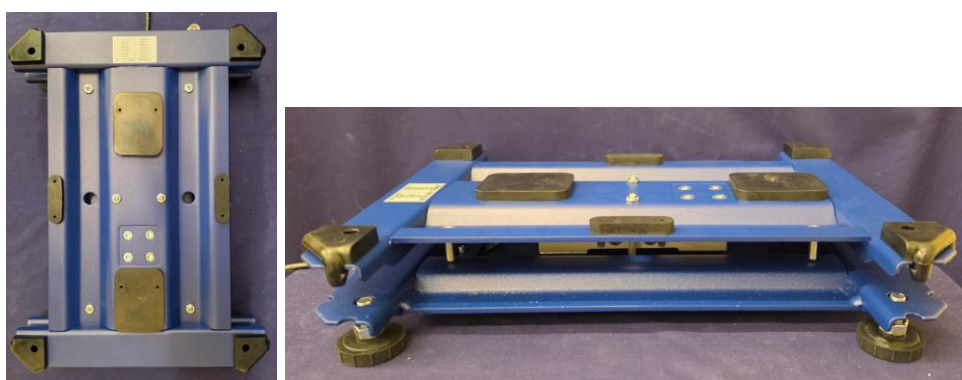


(c) With a Roller Top

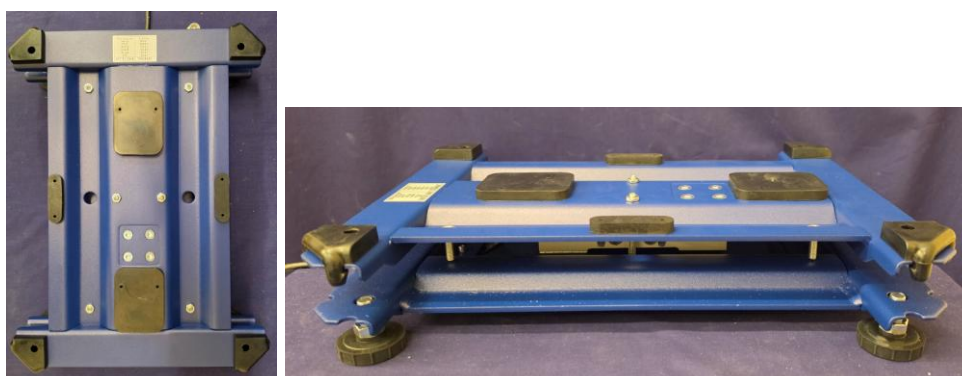
FIGURE 6/4C/332 – 9



(a) PBA220-A Platform



(b) PBA220-BB Platform



(c) PBA220-B Platform



(d) PBA220-BC Platform

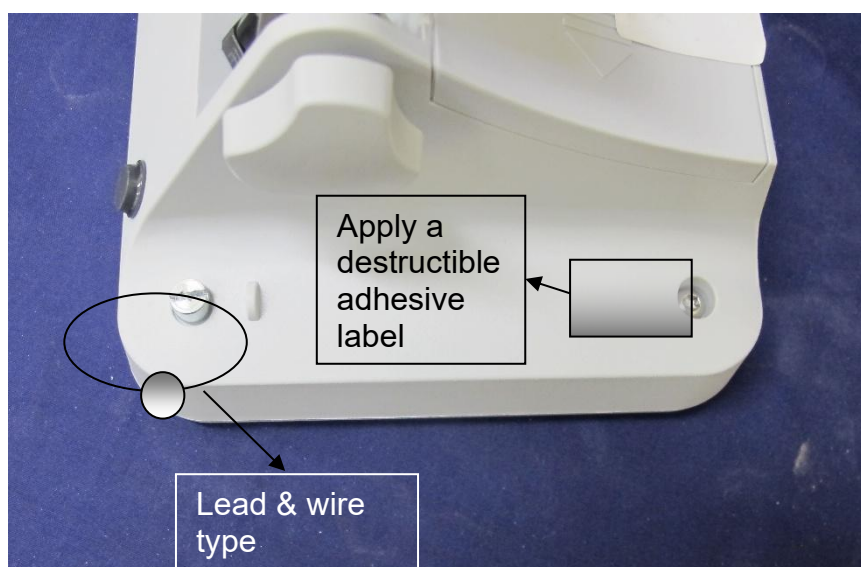


(e) PBA220-CC Platform

FIGURE 6/4C/332 – 10



(a) Mettler Toledo Model IND231 Digital Indicator



(b) Typical Sealing of Mettler Toledo Model IND231 Digital Indicator

~ End of Document ~