

# Weighing Platform



## **PBA439 Platform**

Hygienic Design

IP68/IP69k Water-Resistant

Durable Construction



## **Durable, Easy-to-Clean Design**

### Heavy Washdown Applications

**METTLER TOLEDO**

# Affordable Weighing Platforms

## Built for Wet and Humid Environments

The PBA439 stainless steel platform is a robust, durable and economical solution for a wide range of weighing tasks with heavy washdown requirements. This platform series is a perfect fit in many industrial applications with a need for durability, streamlined cleaning and protection at the highest level against water, humidity and condensation.

“ Learn more about the PBA439 . ”  
 Visit the page: [www.mt.com/PBA439](http://www.mt.com/PBA439)



### Accuracy Protection

Optimally placed and independently adjusted overload stops ensure the best possible protection against load cell damage to give you confidence in your scale's accuracy over time.

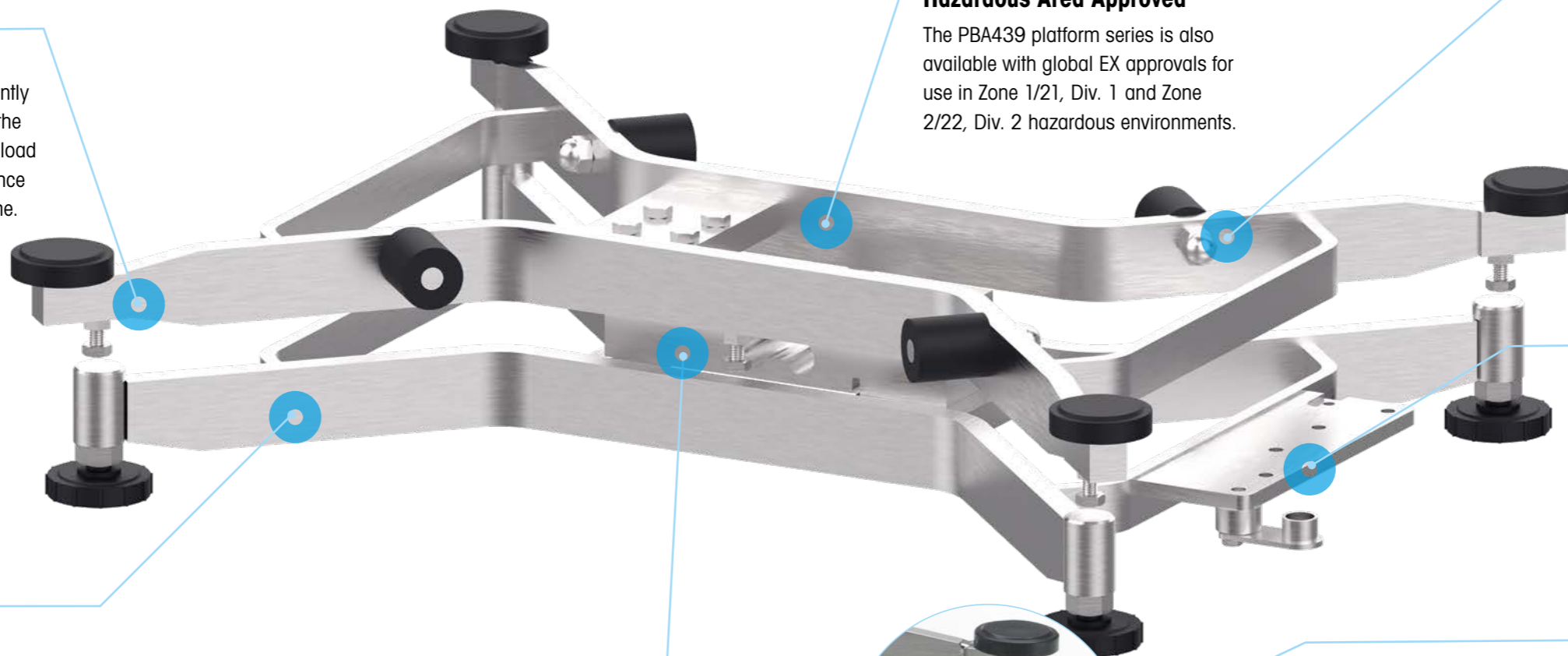


### Hazardous Area Approved

The PBA439 platform series is also available with global EX approvals for use in Zone 1/21, Div. 1 and Zone 2/22, Div. 2 hazardous environments.

### Hygienic Design

The open, sturdy frame design provides easy access to all parts of the construction to improve cleaning efficiency and eliminate contamination risk.



### Precise Leveling

The fixed mounting plate offers a leveling bubble to help operators determine the optimal positioning for accurate weighing results, and easily adjustable feet allow for quick and precise leveling execution.

### High Durability

The electropolished, fully stainless steel construction is designed to withstand harsh environments to ensure equipment reliability and longevity.

### Hermetically Sealed Load Cell

The advanced welded seal of this high quality load cell makes it the perfect choice for wet and harsh applications. It not only withstands steam and high pressure wash-downs, but also provides the highest reliability under the influence of moisture.

### Optional Hygienic Kit

To further reduce the risk of contamination, this platform series offers an optional hygienic kit, containing leveling feet and overload stops without open threads so water and residue have no place to collect and hide.



# Technical Specifications - Imperial

## Standard Configurations

Imperial (lb/in)

Model	Platform size	Maximum capacity							Cable length
		10 lb	25 lb	50 lb	100 lb	250 lb	500 lb	1000 lb	
<b>PBA439-QA</b>	9" x 9"	10 lb							8.2 ft
<b>PBA439-A</b>	9.5" x 11.8"	10 lb	25 lb						8.2 ft
<b>PBA439-QB</b>	12" x 12"		25 lb	50 lb	100 lb				8.2 ft
<b>PBA439-BB</b>	11.8" x 15.7"			50 lb	100 lb				8.2 ft
<b>PBA439-B</b>	15.7" x 19.7"			50 lb	100 lb	250 lb			8.2 ft
<b>PBA439-BC</b>	19.7" x 25.6"				100 lb	250 lb	500 lb		8.2 ft
<b>PBA439-CC</b>	23.6" x 31.5"				100 lb	250 lb	500 lb	1000 lb	8.2 ft

## Weights and Measures - Legal for Trade Data

### NTEP (National Type Evaluation Program)

NTEP certification provides confidence that a weighing device will be manufactured in accordance with United States Weights and Measures standards. NTEP relies on specialized committees to develop the technical policies, evaluation checklists, and test procedures used by authorized laboratories to evaluate devices such as scales.

NTEP / Imperial (lb/in)	Maximum capacity							
	10 lb	25 lb	50 lb	100 lb	250 lb	500 lb	1000 lb	
<b>Approved resolution Class III single range - 1 x 5,000d</b>								
<b>Approved readability (e min.)</b>	[lb]	0.002	0.005	0.01	0.02	0.05	0.1	0.2
<b>Minimum capacity</b>	[lb]	0.04	0.1	0.2	0.4	1	2	4
<b>Weigh &amp; Measure NTEP General thresholds</b>								
<b>Preload range</b>	[%]	18% of Maximum capacity						
<b>Zero setting range</b>	[%]	2% of Maximum capacity						
<b>Taring range</b>	[kg]	Subtractive from 0 to Maximum capacity						
<b>Temperature range</b>	[°C]	-10°C...+40°C						

## Weights and Measures - Performance Data

Performance data or typical values are determined in production with no wind drafts and no vibration. Typical values represent the statistical mean value of all measured devices.

Imperial (lb/in)	Maximum capacity							
	10 lb	25 lb	50 lb	100 lb	250 lb	500 lb	1,000 lb	
<b>Readabilities at max. resolution (~15,000d/ 5,000d)</b>								
<b>Recommended readability (min.)</b>	[lb]	0.001	0.002	0.005	0.01	0.02	0.05	0.1
<b>Minimum Weight @ 1%</b>	[lb]	0.082	0.164	0.41	0.82	1.64	4.1	8.2
<b>Typical values</b>								
<b>Repeatability sd (at full load)</b>	[lb]	0.0004	0.0007	0.0014	0.0031	0.0071	0.010	0.024
<b>Error of indication typ. (at half load)</b>	[lb]	0.00123	0.00220	0.00639	0.0101	0.0234	0.034	0.069
<b>Error of indication typ (at full load)</b>	[lb]	0.00110	0.00198	0.00441	0.0093	0.0216	0.027	0.055

## Preload for non-approved platforms without Weighing Platter

Imperial (lb/in)		Maximum capacity							Weight Weighing Platter (lb)
		10 lb	25 lb	50 lb	100 lb	250 lb	500 lb	1000 lb	
QA (9" x 9")	[lb]	11.9							2.09
A (9.5" x 11.8")	[lb]	10.9	20.2						2.71
QB (12" x 12")	[lb]		19.7	56.4	116.7				3.32
BB (11.8" x 15.7")	[lb]			55.6	115.8				4.09
B (15.7" x 19.7")	[lb]			52.6	112.8	183.3			6.27
BC (19.7" x 25.6")	[lb]				105.0	285.7	586.8		12.76
CC (23.6" x 31.5")	[lb]				99.8	280.5	581.6	628.1	24.2 / 31.02*

\*1000 lb Model

## Glossary

Weighing terms	Simple definition
<b>Readability</b>	The smallest difference in mass that can be read on a weighing instrument. For instruments with a digital display, the readability is equal to the division value or actual scale interval of the display. Recommended readability (min.) is what is prescribed by the manufacturer; whereas, approved readability is prescribed (or mandated) by weights and measures authorities.
<b>Resolution</b>	Smallest difference between displayed indications that can be meaningfully distinguished - this is a non-technical expression for the number of scale intervals. Sometimes confused with readability.
<b>Minimum capacity</b>	The lower range of a scale that should not be used, this range is mandated by weights and measures intended to eliminate excessive relative weighing errors. In industry, it is recommended to use minimum weight instead because it is considered a more accurate method that considers the customer's production tolerance.
<b>Repeatability</b>	Ability of a weighing instrument to provide results that agree one with the other when the same load is deposited several times in a practically identical way on the load receptor under reasonably constant test conditions. Repeatability is expressed as a standard deviation.
<b>Error of Indication at full load / half load</b>	The difference between the weight indicated on the display and the actual test weight (full load / half load) placed on the scale. The value represents the combined error of non-linearity, sensitivity offset and repeatability. Note: Sometimes this is wrongly referred to as sensitivity error, or span error.
<b>Minimum weight</b>	Smallest (sample) weight required for a weighing to achieve a desired weighing tolerance. Weighing below the minimum weight threshold results in errors because the sample weight is too small to achieve the defined process tolerance.



### We offer global and local partnership, no matter where you do business.

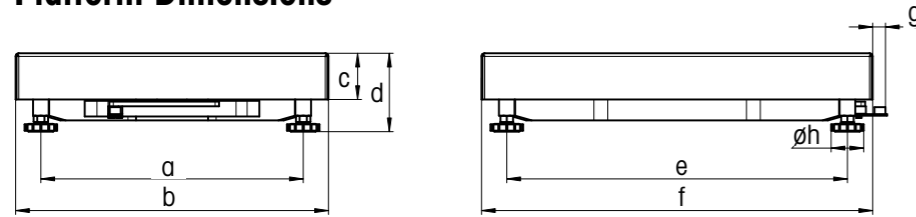
Whether you are a multinational business or a systems integrator serving customers worldwide, our globally approved weighing platforms enable you to standardize your weighing solutions to minimize procurement and engineering hours and deliver a reliable value to your customers or production facilities worldwide. Our comprehensive consulting and extensive weighing portfolio are available to help you simplify your job.

**For more technical information see the user manual.**



# Technical Specifications

## Platform Dimensions



### Dimensions of PBA439 in mm

Dimensions	a	b	c	dmin*	e	f	g	h	
QA	mm	163	228	56	85.6	163	228	21	42
A	mm	175	240	56	85.6	235	300	21	42
QB	mm	240	305	57	96.6	253	305	18	42
BB	mm	235	300	57	96.6	335	400	18	42
B	mm	335	400	59	100.1	435	500	18	42
BC	mm	437	500	73	106.8	584	650	17	42
CC	mm	503	600	85	128.3	724	800	18	42

\*Non-hygienic kits. For hygienic kits, the height of the platform increases 12 mm.

### Dimensions of PBA439 in inch

Dimensions	a	b	c	dmin*	e	f	g	h	
QA	inch	6.42	8.98	2.2	3.37	6.42	8.98	0.83	1.65
A	inch	6.89	9.45	2.2	3.37	9.25	11.81	0.83	1.65
QB	inch	9.45	12.01	2.24	3.8	9.96	12.01	0.71	1.65
BB	inch	9.25	11.81	2.24	3.8	13.19	15.75	0.71	1.65
B	inch	13.19	15.75	2.32	3.94	17.13	19.69	0.71	1.65
BC	inch	17.2	19.69	2.87	4.2	22.99	25.59	0.67	1.65
CC	inch	19.8	23.62	3.35	5.05	28.5	31.5	0.71	1.65

\*Non-hygienic kits. For hygienic kits, the height of the platform increases 0.47 inch.

### Construction per platform size



A = 240 × 300 mm / 9.5" × 11.8"  
QA = 228 × 228 mm / 9" × 9"



BB = 300 × 400mm / 11.8" × 15.7"  
QB = 305 × 305mm / 12" × 12"  
B = 400 × 500mm / 15.7" × 19.7"



BC = 500 × 650mm / 19.7" × 25.6"  
CC = 600 × 800mm / 23.6" × 31.5"

## General Specifications

Ingress protection	IP68/IP69k	
Material	Platform frame: stainless steel (AISI 304)	
	Load plate: stainless steel (AISI 304)	
Surface	Load plate: Ra <math>\leq 0.8\mu\text{m}</math>	
Load cell	Hermetically sealed, stainless steel	
Compliance	Metrology	OIML Class III, NTEP Class III
	EMC	10 V/m
Scale interface	Analog	
Operating temperature	Compensated	-10°C to +40°C / 14°F to 104°F)
	Operation (safe area)	-20°C...+65°C / -4°F...+149°F
Hazardous area approvals (optional)	ATEX/IECEx	II 2G Ex ia IIC T6...T4 Gb, II 2D Ex ia IIIC T80°C Db -40°C<math>\leq T_a \leq 60^\circ\text{C}</math>, T5/T4; -40°C<math>\leq T_a \leq 40^\circ\text{C}</math> T6 II 3G Ex ic IIC T6...T4 Gc -40°C<math>\leq T_a \leq 60^\circ\text{C}</math>, T5/T4; -40°C<math>\leq T_a \leq 40^\circ\text{C}</math> T6 II 3G Ex ec IIC T6 Gc, II 3D Ex tc IIIC T80°C Dc -40°C<math>\leq T_a \leq 60^\circ\text{C}</math>
		FMus
	FMc	IS/I,II,III/1/ABCDEF/G/T6...T4 Class I, Zone 1, Ex ia IIC T6...T4 Gb Class II,III, Zone 21, Ex ia IIIC T80°C Db -40°C<math>\leq T_a \leq 60^\circ\text{C}</math> T5/T4; -40°C<math>\leq T_a \leq 40^\circ\text{C}</math> T6 NI/I,II,III/2/ABCDEF/G/T6 -40°C<math>\leq T_a \leq 60^\circ\text{C}</math> Class I, Zone 2, Ex ec IIC T6 Gc; Class II,III, Zone 22, Ex tc IIIC T80°C Dc
Suitable Indicators	Safe area: All analog METTLER-TOLEDO indicators	
	Hazardous area: select appropriate Ex approved indicators per local Ex regulations	

## Accessories

Article #	Designation	Description	Picture
72229393	Column open 120mm/4.7"	Fits for all platform size	
72198702	Column open 330mm/13"	Fits for all platform size	
72198703	Column open 660mm/26"	Fits for all platform size	
72198704	Column open 900mm/35.4"	Fits for all platform size larger than A-size	
72225939	Stainless steel cart BC	Fits for BC-size platform	
72225940	Stainless steel cart CC	Fits for CC-size platform	
30253326	Roller track 400 × 500 mm / 15.7" × 19.7" stainless steel	Fits for B-size platform. Roll to short side of platform	
30253328	Roller track 500 × 650 mm / 19.7" × 25.6" stainless steel	Fits for BC-size platform. Roll to short side of platform	
30253330	Roller track 600 × 800 mm / 23.6" × 31.5" stainless steel	Fits for CC-size platform. Roll to short side of platform	
30253327	Roller track 400 × 500 mm / 15.7" × 19.7" stainless steel	Fits for B-size platform. Roll to long side of platform	
30253329	Roller track 500 × 650 mm / 19.7" × 25.6" stainless steel	Fits for BC-size platform. Roll to long side of platform	
30253331	Roller track 600 × 800 mm / 23.6" × 31.5" stainless steel	Fits for CC-size platform. Roll to long side of platform	
30640393	Roller track 400 × 500 mm / 15.7" × 19.7" stainless steel	Fits for hazardous area	
30640394	Roller track 500 × 650 mm / 19.7" × 25.6" stainless steel	Fits for hazardous area	
30640395	Roller track 600 × 800 mm / 23.6" × 31.5" stainless steel	Fits for hazardous area	
22021062	Front mount bracket	Fit for ICS4_9 front mount	

For more information on **AISI 316 stainless steel platter**, please scan the QR code on the previous pages to access user manual.

# Explore Our Service Solutions

## Tailored to Fit Your Equipment Needs

METTLER TOLEDO Service delivers resources to enhance your efficiency, performance and productivity by providing service packages that fit your operational needs, maximize your equipment lifetime, and protect your weighing solution scale investment.

► [www.mt.com/IND-Service](http://www.mt.com/IND-Service)

### Start with professional installation



Installation services include support for your unique production situation:

- Professional IQ/OQ/PQ/MQ documentation
- Initial calibration and confirmation of fit-for-purpose
- Hazardous area installations

### Extend your warranty coverage



Add two years of preventive maintenance and repair coverage to protect your indicator or full system purchase and achieve maximum productivity and budget control.

### Maintain accuracy over time



Receive professional guidance (GWP Verification™), including a routine testing plan that specifies four key factors to maximize your efficiency and ensure quality:

- Tests to perform
- Weights to use
- Testing frequency
- Tolerances to apply

### Schedule maintenance



Full preventative maintenance plans offer inspection, functional testing, and proactive replacement of worn parts.

Health inspections offer a full assessment of current condition with professional maintenance recommendations.

### Calibrate for quality and compliance

**GWP®**

Professional Accuracy Calibration Certificate (ACC) determines measurement uncertainty in use over the entire weighing range. Corresponding annexes give a clear pass/fail statement for specific tolerances applied, such as fit-for-purpose (GWP®), OIML R76, NTEP HB44, or further regulations.

[www.mt.com/PBA439](http://www.mt.com/PBA439)

For more information

#### METTLER TOLEDO Group

Industrial Division

Local contact: [www.mt.com/contacts](http://www.mt.com/contacts)



Subject to technical changes

©11/2021 METTLER TOLEDO. All rights reserved

Document No. 30552269 A

MarCom Industrial