

## High Accuracy For Harsh Environment



### Consistent Accuracy

Vibration, wind and temperature variances are outside influences that can cause errors in your formulations or mistakes in counting. The PBK9 Weighing Platforms virtually eliminate those risks, thanks to the Monobloc load cell and the robust design of the scale body, which absorbs environmental interference.



### Smart Load-Cell Technology

The load cell, with Monobloc technology, is at the core of the PBK9 Weighing Platforms and guarantees the highest precision and reliability. A robust load – cell housing features integrated overload protection and durable mechanical interfaces. This ensures stable weight values for many years of intensive use.



### Functional Design

The unique construction of the platform makes it suitable for a variety of challenging environments. The overload protection in combination with the built-in lever and bearing mechanical structure ensures the scale maintains peak performance regardless of the application.



### Hazardous Environments

When working in a hazardous environment, safety is key. The PBK9 Weighing Platforms are approved for the use in hazardous areas for Category 3 / Division 2 and Category 2 / Division 1 for top performance in gaseous and dusty environments.



### PBK9 Bench Platforms

Accurate – Reliable – Robust – Versatile

Accurate weighing helps you manage raw materials, ensure compliance with regulations and improve your product quality. For bench scale applications that require reliability with the best accuracy available, the PBK9 Weighing Platforms provide industry-leading performance. The wide range of platforms with nine capacities from 600 grams to 300 kilograms in five different sizes makes it suitable for a variety of applications and industries. The PBK9 Weighing Platforms can be connected to numerous METTLER TOLEDO terminals resulting in top-class weighing systems with benefits such as

- 30 000e resolution in legal-for-trade applications
- Up to 750 000d resolution for non-approved applications
- For safe as well as hazardous areas Category 3 / Division 2 and Category 2 / Division 1
- IP66/IP68 Ingress Protection
- Easy maintenance with built-in calibration weight

# High Precision Bench Platforms Model Specific Data



Models		XS	A			AB			B		CC	
	unit	XS 0.61	A3	A6	AB15	AB30	AB60	B60	B120	CC150	CC300	
<b>Maximum Capacity</b>	[kg]	0.61	3	6	15	30	60	60	120	150	300	
<b>Readability</b>												
<b>Accuracy Class II Single Range</b>												
60 000e / 30 000e / 24 000e	[g]	<b>0.01</b>	<b>0.1</b>	0.2	0.5	<b>1</b>	2	2*	5*	5*	<b>10*</b>	
15 000e / 12 000e	[g]	–	0.2	0.5	<b>1</b>	2	5	5	<b>10</b>	<b>10</b>	20	
7 500e / 6 000e	[g]	–	0.5	<b>1</b>	2	5	<b>10</b>	<b>10</b>	20	20	50	
<b>Accuracy Class III 3x10 000e Multi Interval</b>												
Max1 / e1	[kg/g]	–	1/0.1	2/0.2	5/0.5	10/1	20/2	20/2	50/5	50/5	100/10	
Max2 / e2	[kg/g]	–	2/0.2	5/0.5	10/1	20/2	50/5	50/5	100/10	100/10	200/20	
Max3 / e3	[kg/g]	–	3/0.5	6/1	15/2	30/5	60/10	60/10	120/20	150/20	300/50	
<b>Recommended Readability (min.) Single Range</b>												
750 000d / 600 000d	[g]	0.001	0.005	0.01	0.02	0.05	0.1	0.1	0.2	0.2	0.5	
300 000d / 240 000d	[g]	0.002	0.01	0.02	0.05	0.1	0.2	0.2	0.5	0.5	1	
75 000d / 60 000d	[g]	0.01	0.05	0.1	0.2	0.5	1	1	2	2	5	
<b>Maximum Permissible Error at maximum load (Limit Values, approved platforms only)</b>												
Class II, Single Range, 60 000e / 30 000e / 24 000e	[g]	0.015	0.15	0.3	0.75	1.5	3	3	7.5	7.5	15	
Class III, Multi Interval, 3x10 000e	[g]	–	0.75	1.5	3	7.5	15	15	30	30	75	
<b>Minimum Capacities (approved platforms only)</b>												
Class II, Single Range, 30 000e / 24 000e	[kg]	–	0.0005	0.01	0.025	0.005	0.1	0.1	0.25	0.25	0.05	
Class II, Single Range, 15 000e / 12 000e	[kg]	–	0.01	0.025	0.005	0.1	0.25	0.25	0.05	0.05	1	
Class II, Single Range, 7 500e / 6 000e	[kg]	–	0.025	0.005	0.1	0.25	0.05	0.05	1	1	2.5	
Class III, Multi Interval, 3x10 000e	[kg]	–	0.002	0.004	0.01	0.02	0.04	0.04	0.1	0.1	0.2	
<b>Zero-setting and Preload Range</b>												
Zero-setting range	[kg ±]	0.0122	0.06	0.12	0.3	0.6	1.2	1.2	2.4	3	6	
Preload range	[kg]	0.1098	0.54	1.08	2.7	5.4	10.8	10.8	21.6	27	54	
<b>Maximum Static Safe Load</b>												
Central load	[kg]	2	20	20	50	50	80	150	150	500	500	
Side load	[kg]	1.5	15	15	40	40	60	100	100	300	300	
Corner load	[kg]	1	10	10	30	30	40	50	50	150	150	
<b>Typical Values**</b>												
Repeatability sd (at max. load)	[g]	0.001	0.01	0.015	0.03	0.05	0.1	0.15	0.3	0.3	0.5	
Error of Indication typ. (at half load)	[g]	0.004	0.03	0.05	0.08	0.2	0.4	0.6	1.2	1.2	2	
Error of Indication typ. (at full load)	[g]	0.01	0.05	0.1	0.2	0.4	0.6	0.8	1.5	1.5	2.5	
<b>Eccentric load deviation typ (at 1/3 of max. load in the middle of one quadrant)</b>												
Class II, Single Range, 7 500e / 6 000e	[g]	–	0.07	0.14	0.35	0.7	1.4	2.1	5.3	5.3	10.5	
Class II, Single Range, 30 000e / 24 000e / 15 000e / 12 000e	[g]	0.007	0.07	0.14	0.35	0.7	1.4	1.6	3.5	3.5	7	
Class III, Multi Interval, 3x10 000e	[g]	–	0.07	0.14	0.35	0.7	1.4	2.1	5.3	5.3	10.5	
<b>Minimum Weight typ.***</b>												
	[g]	0.2	2	3	6	10	20	30	60	60	100	

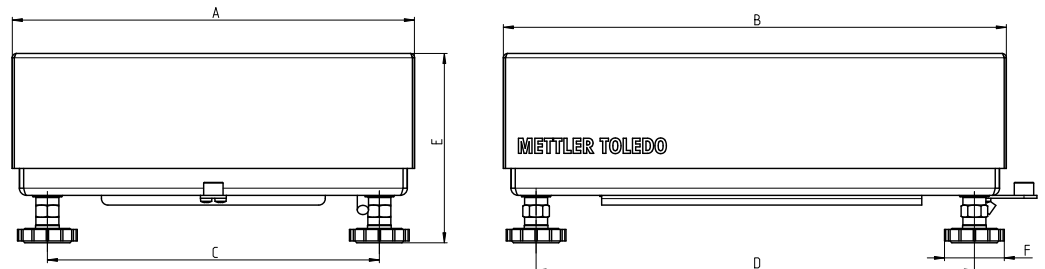
Readability in **bold** letters enable the use of an auxiliary indicating device to display d, where d = e/10

\* Requires installation by a METTLER TOLEDO Service Technician and appropriate environmental conditions

\*\* at room temperature and stable environmental conditions without vibration and draft, with automated weight placement

\*\*\* The minimum weight achievable depends on the settings of the weighing device, the tare vessel as well as the environment. The minimum weight of your device in situ can therefore be smaller or larger than the typical values published, for which METTLER TOLEDO takes no responsibility. The determination of the minimum weight on site is documented in GWP® Verification. The minimum weight is calculated at the minimum recommended readability and a process tolerance of 1%.

## Dimensional Drawings



Dimensions [mm]	Models						
	XS weighing platform	XS load plate	A weighing platform	A load plate	AB	B	CC
A	210	130	275	240	280	400	600
B	250	160	345	300	350	500	800
C	173	–	231	–	231	337	503
D	213	–	305	–	305	431	724
E	115-127	–	135-147	–	132-144	127-152	130-155
F	40	–	40	–	40	35	35

## High Precision Bench Platforms General Specifications

Models			XS	A	AB	B	CC
<b>Material</b>							
Weighing Platform Material	Stainless steel AISI304	Standard	•	•	•	•	•
	Mild steel powder coated, blue	Standard				•	•
Weighing Platform Surface	Stainless steel models: Glas bead blasted Ra < 3 µm	Standard		•	•	•	•
	Stainless steel: brushed Ra < 0.8 µm	Standard	•				
Load Plate Material	Stainless steel AISI304	Standard	•	•	•	•	•
	Stainless steel AISI316	Option		•	•	•	•
Load Plate Surface	Brushed Ra < 0,8 µm	Standard	•	•	•	•	•
Shock absorber	Nitrile Butadiene Rubber (NBR)	Standard		•	•	•	•
Foot	Chloroprene - Caoutchouc (CR)	Standard	•	•	•		
	Ethylene Propylene Diene Monomer Rubber (EPDM)	Standard				•	•
Membrane	Silicone	Standard	•	•	•	•	•
Blind Plugs	Polyethylen (PE)	Standard				•	•
Connecting Cable safe area	Polyurethane (PU)	Standard	•	•	•	•	•
Connecting Cable hazardous area Category 3/Division 2 and Category 2/Division 1	Thermoplastic Polyether-Polyurethane-U	Standard		•	•	•	•
Load Cell	Stainless Steel (AISI304), brushed, e-polished	Standard	•	•	•	•	•
<b>Ingress Protection</b>							
XS Weighing Platform	IP54	Standard	•				
Other standard weighing platforms	IP66/68	Standard		•	•	•	•
<b>Hazardous Area Approval*</b>							
ATEX	Category 3GD	Option		•	•	•	•
	Category 2GD	Option		•	•	•	•
FM	Division 2	Option		•	•	•	•
	Division 1	Option		•	•	•	•
<b>Resolution (The resolution is dependant on the weighing platform model)</b>							
Class III, Multi Interval, 3x10 000e		Standard		•	•	•	•
Class II, Single Range, 1 x 60 000e		Standard	•				
Class II, Single Range, 1 x 6 000e / 1 x 7 500e		Option	•	•	•	•	•
Class II, Single Range, 1 x 15 000e / 1 x 12 000e		Option	•	•	•	•	•
Class II, Single Range, 1 x 30 000e / 1 x 24 000e		Option	•	•	•	•**	•**
1 x 60 000d / 1 x 75 000d		Option	•	•	•	•	•
1 x 300 000d / 1 x 240 000d		Option	•	•	•	•	•
1 x 600 000d / 1 x 750 000d		Option	•	•	•	•	•
<b>Temperature Range</b>							
<b>Approved Application</b>							
Accuracy Class II	+ 10°C... + 30°C		•				
	0°C ... + 40°C			•	•	•	•
Accuracy Class III	0°C ... + 40°C			•			
	- 10°C ... + 40°C				•	•	•
<b>Non-Approved Application</b>							
In Operation (Safe Area)	- 20°C ... + 60°C		•	•	•	•	•
In Operation (Category 3/Division 2 and Category 2/Division 1)	-10°C ... + 40°C		•	•		•	•
For Storage	- 20°C ... +70°C		•	•	•	•	•
<b>Warm up time (dependant on resolution)</b>							
Typically 30 min							
<b>Scale Interfaces</b>							
SICSpro	MT - SICS command set, (Standard/Category3 /DIV2: RS422, Category 2/DIV1: Ex-i CL)	Standard					
IDNet via ACC409xx adapter	SICSpro - IDNet signal convertor (cable)	Option					
Cable length Safe Area	0.5m, 2.5m, 5m, 10m, 20m	Option					
Cable length Category 3 /Division 2	2.5m, 5m, 10m, 20m	Option					
Cable length Category 2 /Division 1	0.125m, 1.5m, 5m, 10m, 20m	Option					

\* If intense electrostatic charging processes may be caused by applications or processes only use stainless steel platforms.

\*\* Requires installation by a METTLER TOLEDO Service Technician and appropriate environmental conditions and appropriate weights

### Model designation examples:

**PBK989-AB15** bench platform with frame in stainless steel, AB-Size (280 mm x 350 mm), capacity 15 kg

**PBK987-CC300** bench platform with frame in mild steel powder coated, CC-Size (600 mm x 800 mm), capacity 300 kg

## Connection to Terminals



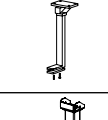


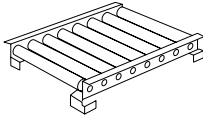

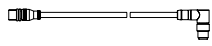
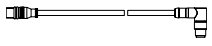




Terminals with **SICSpro** interface that directly connect to PBK9:  
IND890, IND570; ICS4\_5;  
ICS685; ICS4\_9, ICS689;



Terminals with **IDNet** interface that require ACC409xx adapter:  
IND4\_9(xx); IND560(xx);  
IND690(xx); IND780(xx); ID5; ID7;  
ID30 (ID5, ID7 and ID30 for non-approved applications only)

## Accessories

Article Number	Designation	Description	Picture
72262929	Wind shield XS	For the XS Model included in delivery (for use in the safe area only)	
00503631	Bench Stand B powder coated	For B-Model: Rigid frame construction, 2 feet with casters, 1 fixed foot with screw adjustment. Height approx. 560 mm	
00503632	Bench Stand B stainless steel		
00504853	Bench Stand CC powder coated	For CC-Model: Rigid frame construction, 2 feet with casters, 1 fixed foot with screw adjustment. Height approx. 560 mm	
00504854	Bench Stand CC stainless steel		
00504127	Pillar Support mild steel	For B-Model and CC-Model: For mounting terminals on stand incl. Fastenings	
00504128	Pillar Support stainless steel		
72198702	Column stainless steel	For A, AB and B Model Height: 330 mm	
72198703	Column stainless steel	For A, AB and B Model: Height: 660 mm	
00503640	Roller Track B mild steel galvanized	For B-Model: Steel-clad rollers with rust protection, for dry environments, lengthwise motion. (8 rollers)	
00504852	Roller Track CC mild steel galvanized	For CC-Model: Steel-clad rollers with rust protection, for dry environments, lengthwise motion. (9 rollers)	
22001647	Roller Track B stainless steel	For B-Model: Steel-clad rollers with rust protection, for wet surroundings, lengthwise motion. (8 rollers)	
22001648	Roller Track CC stainless steel	For CC-Model: Steel-clad rollers with rust protection, for wet surroundings, lengthwise motion. (9 rollers)	
30242222	Cable M12 RS422 SICSPRO 12P/6P 0,5m	Cables for safe area	
30242223	Cable M12 RS422 SICSPRO 12P/6P 2,5m	Cables for safe area	
30242224	Cable M12 RS422 SICSPRO 12P/6P 5m		
30242226	Cable M12 RS422 SICSPRO 12P/6P 10m		
30242225	Cable M12 RS422 SICSPRO 12P/6P 20m		
30242227	Cable M12 RS422 SICSPRO 12P/6P 100m		
30242229	Cable M12 RS422 SICSPRO 2,5m Ex2	Cables for hazardous area (Cat 3, DIV2)	
30242230	Cable M12 RS422 SICSPRO 5m Ex2		
30242231	Cable M12 RS422 SICSPRO 10m Ex2		
30242232	Cable M12 RS422 SICSPRO 20m Ex2		
30267157	Cable M12 6p 0,125m Ex1	Cables for hazardous area (Cat 2, DIV1)	
30267158	Cable M12 6p 1,5m Ex1		
30267159	Cable M12 6p 5m Ex1		
30267190	Cable M12 6p 10m Ex1		
30337109	Cable M12 6p 20m Ex1		
22026963	ACC409xx	Adapter to convert SICSPRO signal into IDNet for use in safe area and Category 3	

## METTLER TOLEDO Service

Our extensive service network is among the best in the world and ensures maximum availability and service life of your product.

### METTLER TOLEDO Group

Industrial Division

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

Subject to technical changes

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