

Designed for Automation

High-Precision Weighing Platforms



Smart Load-Cell Technology

The load cell, with Monobloc technology, is at the core of the SLF6-Series load cells 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.



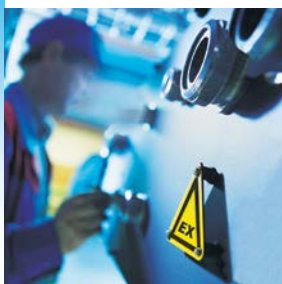
High Resolution

SLF6 load cells have a resolution up to 750'000 points. With this high precision, it is possible to measure even the slightest change in the weight; thus unnecessary waste can be minimized and cost savings realized by optimizing the material quantity.



Connect to PLC

All load cells can easily be connected to popular fieldbus systems. Add-on software modules facilitate seamless integration into automated environment. This allows machine builders to standardize on SLF6-Series load cells for weighing connected to PLC systems.



Hazardous Environments

When working in a hazardous environment, safety is key. The SLF6-Series load cells are approved for the use in hazardous areas for category 2 and category 3 and FM division 1 and 2 for top performance in gaseous and dusty environments.



PBK9-APW 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 3 to 300 kilograms in four different sizes makes it suitable for a variety of applications and industries. The PFK9 Weighing platforms provide benefits such as

- Up to 750'000d resolution
- Directly connects to control systems
- Increases speed of filling processes with up to 92 updates per second
- For safe as well as hazardous areas category 3 / division 2 and category 2 / division 1
- IP66/IP68 ingress protection
- Minimizes downtimes by checking the platform periodically with the internal weight

Model Specific Weighing Data



Models	Unit	A		AB			B		CC	
		A3	A6	AB15	AB30	AB60	B60	B120	CC150	CC300
Maximum capacity	kg	3	6	15	30	60	60	120	150	300
Resolution										
Non-Approved, single range										
750'000d / 600'000d	g	0.005	0.01	0.02	0.05	0.1	0.1	0.2	0.2	0.5
300'000d / 240'000d	g	0.01	0.02	0.05	0.1	0.2	0.2	0.5	0.5	1
75'000d / 60'000d	g	0.05	0.1	0.2	0.5	1	1	2	2	5
Zero-setting and preload range										
Zero-setting range	kg ±	full range								
Preload range	kg	0.54	1.08	2.7	5.4	10.8	10.8	21.6	27	54
Maximum static safe load										
Central load	kg	20	20	50	50	80	150	150	500	500
Side load	kg	15	15	40	40	60	100	100	300	300
Corner load	kg	10	10	30	30	40	50	50	150	150
Typical values ¹⁾										
Repeatability s (at max. load)	g	0.007	0.01	0.02	0.05	0.1	0.15	0.3	0.3	0.5
Linearity deviation (at half load)	g	0.028	0.04	0.08	0.2	0.4	0.6	1.2	1.2	2
Eccentric deviation (at 1/3 of max. load in the middle of one quadrant)										
Single range	g	0.07	0.14	0.35	0.7	1.4	1.6	3.5	3.5	7

¹⁾ at room temperature and stable environmental conditions without vibration and draft, with automated weight placement

General Data

Models		A	AB	B	CC	
Material						
Weighing platform material	Stainless steel AISI304	Standard	•	•	•	•
	Mild steel powder coated, blue	Standard			•	•
Weighing platform surface	Stainless steel models: glass 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	•	•	•	•
Connecting cable safe area	Polyurethane (PU)	Standard	•	•	•	•
Connecting cable hazardous area cat. 2, div. 1 and cat. 3, div. 2	Thermoplastic Polyether Polyurethan TPE-U	Standard	•	•	•	•
Load cell	Stainless steel (AISI304), brushed, e-polished	Standard	•	•	•	•
Power supply voltage						
12 to 24 V DC nominal (10 - 29 V DC)						
Ingress protection						
All PBK-APW weighing platforms	IP66/68	Standard	•	•	•	•
Hazardous area approval ¹⁾						
ATEX	Cat. 3GD BVS 10 ATEX E131	Option	•	•	•	•
	Cat. 2GD BVS 10ATEX E131	Option	•	•	•	•
FM	Division 2	Option	•	•	•	•
	Division 1	Option	•	•	•	•

Resolution (The resolution is dependent on the weighing platform model.)

Non-approved, 1 x 60'000d / 1 x 75'000d	Standard	•	•	•	•
Non-approved, 1 x 300'000d / 1 x 240'000d	Option	•	•	•	•
Non-approved, 1 x 600'000d / 1 x 750'000d	Option	•	•	•	•

Temperature range

Non-approved application

In operation	-20 °C ... +60 °C		•	•	•	•
In operation cat. 2 div. 1	-10 °C ... +40 °C		•	•	•	•
For storage	-20 °C ... +70 °C		•	•	•	•

Warm-up time (dependent on resolution)

Typically 30 min.

Scale interfaces

RS232, RS422/RS485	MT - SICS command set	Standard				
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Cable length

Safe area: cable M12, 12-pin - open leads, 10 m	Option				
Cat. 2 / div. 1: cable M12, 6-pin, 5 m, 10 m, 20 m	Option				
Cat. 3 / div. 2: cable M12, 12-pin - open leads, 10 m	Option				

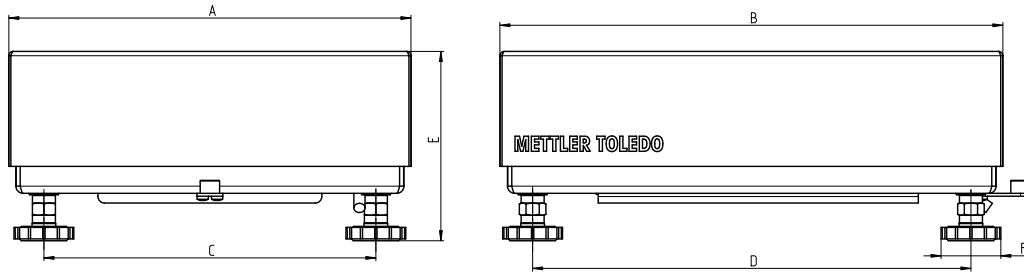
Model designation examples:

PBK989APW-AB15 Bench platform with frame in stainless steel, direct connectivity version, AB-size (280 mm x 350 mm), capacity 15 kg

PBK987APW-CC300 Bench platform with frame in mild steel powder coated, direct connectivity version, CC-size (600 mm x 800 mm), capacity 300 kg

¹⁾ In the hazardous area, you can use powder coated platforms only if intense electrostatic charges do not accumulate on the platform during the application or process.

Drawings (mm)

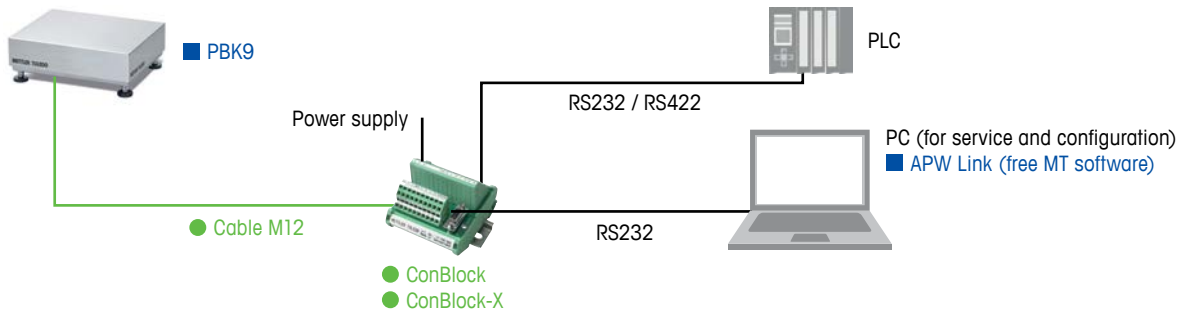


Dimensions (mm)	A		AB	B	CC
	Weighing platform	Load plate			
A	275	240	280	402	600
B	345	300	350	503	800
C	231	–	231	337	503
D	305	–	305	431	724
E	135–147	–	132–144	127–152	130–155
F	40	–	40	35	35

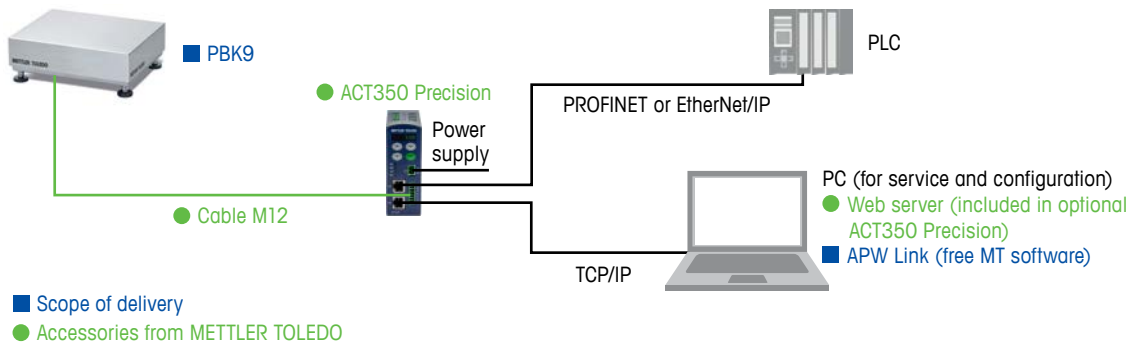
Typical Configurations

Safe area

Serial interface configuration



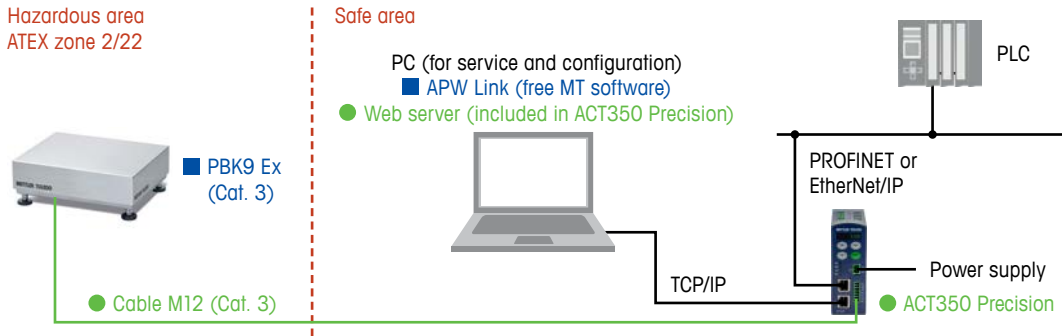
Automation network configuration



Hazardous area

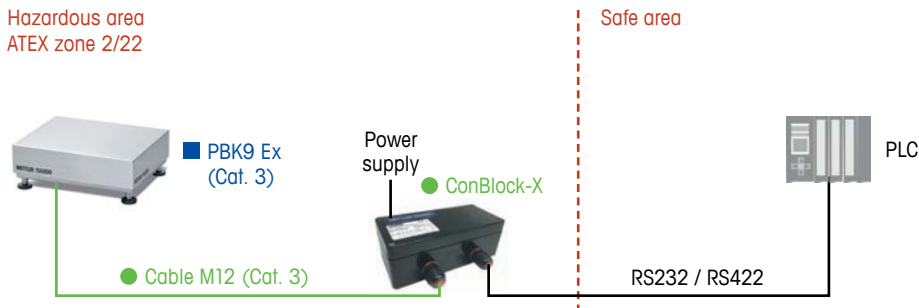
Consult the applicable certificate of conformity for compliant hazardous area installation. Contact your MT representative for further information.

ATEX zone 2/22 automation network configuration

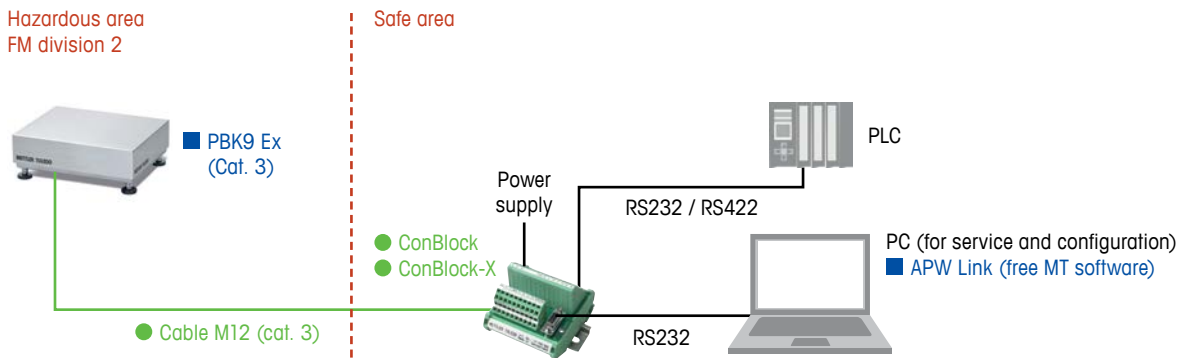


- Scope of delivery
- Accessories from METTLER TOLEDO

ATEX zone 2/22 serial interface configuration

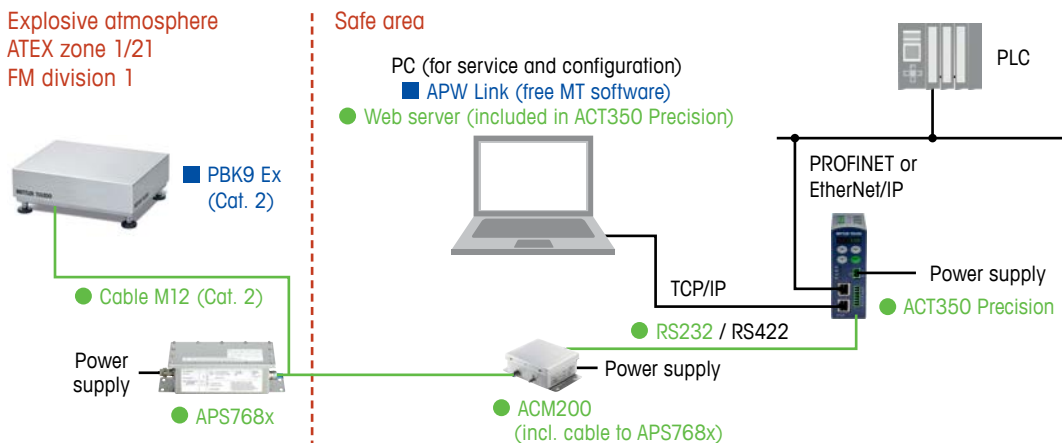


FM division 2 serial interface configuration

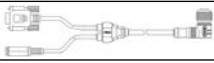






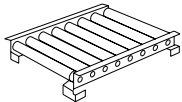


- Scope of delivery
- Accessories from METTLER TOLEDO

ATEX zone 1/21 and FM division 1 configuration



Accessories

Item	Description	Item number	Picture
Cable M12	M12, 12-pin, open leads, 10 m	302 444 46	
Cable M12	M12 - open leads, PUR/PVC (180°/3 m)	305 248 60	
Cable M12	M12 12p 0.3m A-coded (M12f90° - M12m180°)	305 248 74	
Cable M12	Y-Cable 12p 1.9m A-coded (M12f90° - DE-9 and DC Jack Ø5.5/2.5 mm), PUR/PVC	304 895 64	
Cable M12 (cat. 3)	M12, 12-pin, open leads, 10 m (zone 2/22, division 2)	302 444 47	
Cable M12 (cat. 2)	M12, 6-pin, 5 m (zone 1/21, division 1)	302 671 59	
Cable M12 (cat. 2)	M12, 6-pin, 10 m (zone 1/21, division 1)	302 671 90	
Cable M12 (cat. 2)	M12, 6-pin, 20 m (zone 1/21, division 1)	303 371 09	
ConBlock	Connection module	111 520 00	
ConBlock-X	Connection module cat. 2 (zone 1/21)	303 740 66	
APS768x	Power supply unit cat. 2 (120 V AC) (zone 1/21, division 1)	220 267 24	
APS768x	Power supply unit cat. 2 (230 V AC) (zone 1/21, division 1)	220 267 28	
ACM200	Interface converter (CL - serial) DC supply / RS232	220 266 92	
ACM200	Interface converter (CL - serial) DC supply / RS422, RS485	220 266 93	
ACM200	Interface converter (CL - serial) AC supply / RS232	220 266 95	
ACM200	Interface converter (CL - serial) AC supply / RS422, RS485	220 266 96	
Cable Ex-i	APS768x - ACM200 (up to 100 m)	220 167 91	
Bench Stand	For B-Model: powder coated	005 036 31	
	For B-Model: stainless steel	005 036 32	
	For CC-Model: powder coated	005 048 53	
	For CC-Model: stainless steel	005 048 54	
Roller Track	For B-Model: mild steel galvanized for dry environments, 8 rollers	005 036 40	
	For B-Model: stainless steel for wet environments, 8 rollers	220 016 47	
	For CC-Model: mild steel galvanized for dry environments, 9 rollers	005 048 52	
	For CC-Model: stainless steel for wet environments, 9 rollers	220 016 48	

Order Information

The PFK9 models are individually configured for each application.
Please contact your local MT representative for configuration support and orders.

METTLER TOLEDO Service

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

www.mt.com

For more information

METTLER TOLEDO Group

Industrial Division

Local contact: www.mt.com/contacts

Subject to technical changes

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