

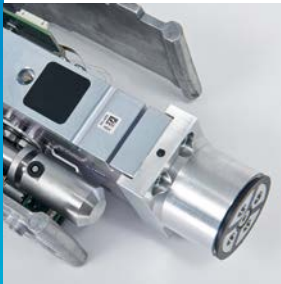
## Designed for Automation

### High-Resolution Weighing Platforms



#### Filling

GMP-compatible filling of active substances – 92 updates per second, flexible configuration options and monitoring functions for optimum filling processes.



#### Smart Load-Cell Technology

The load cell, with Monobloc technology, is at the core of the PFK9 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.



#### Connect to PLC

All platforms 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 PFK platforms for weighing connected to PLC systems.



#### Hazardous Environments

When working in a hazardous environment, safety is key. The PFK9 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.



#### PFK9-APW Floor Platforms

Accurate – Reliable – Robust – Versatile

Accurate weighing helps you manage raw materials, ensure compliance with regulations and improve your product quality. For floor scale applications that require reliability with the best accuracy available, the PFK9 weighing platforms provide industry-leading performance. The wide range of platforms with four capacities from 300 to 3000 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	C		D		E		ES	
		C300	C600	D600	D1500	E1500	E3000	ES1500	ES3000
<b>Maximum capacity</b>	kg	300	600	600	1500	1500	3000	1500	3000
<b>Resolution</b>									
<b>Non-Approved, single range</b>									
750'000d / 600'000d	g	0.5	1	1	2	2	5	2	5
300'000d / 240'000d	g	1	2	2	5	5	10	5	10
75'000d / 60'000d	g	5	10	10	20	20	50	20	50
<b>Zero-setting and preload range</b>									
Zero-setting range	kg ±	Full range							
Preload range	kg	54	108	108	270	270	540	270	540
<b>Maximum static safe load</b>									
Central load	kg	1000	1000	3500	3500	4500	4500	4500	4500
Side load	kg	650	650	2300	2300	3000	3000	3000	3000
Corner load	kg	330	330	1150	1150	1500	1500	1500	1500
<b>Typical values <sup>1)</sup></b>									
Repeatability s (at max. load)	g	0.6	1.2	2	4	5	10	5	10
Linearity deviation (at half load)	g	2.4	4.8	8	16	20	40	20	40
<b>Typical eccentric deviation (at 1/3 of max. load in the middle of one quadrant)</b>									
Single range	g	7	14	14	35	35	70	35	70

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

## General Data

Models		C	D	E	ES	
<b>Material</b>						
Platform material	Stainless steel AISI304	Standard	•	•	•	•
	Mild steel powder coated, blue	Standard	•			
	Mild steel galvanized	Standard		•	•	•
Platform surface	Stainless steel AISI304, glass bead blasted Ra < 3 µm	Standard	•	•	•	•
Load plate material	Stainless steel AISI304	Standard	•	•	•	•
	Mild steel galvanized	Option	•	•	•	•
	Stainless steel AISI304, raisable	Option		•	•	•
Load plate surface	Stainless steel AISI304, glass bead blasted, Ra < 3 µm	Standard	•	•	•	•
	Stainless steel brushed Ra < 0.8 µm	Option		•	•	•
	Stainless steel AISI304 pattern	Option		•	•	•
Foot	Desmopan (DP)	Standard	•			
	Stainless steel AISI304	Standard		•	•	•
Membrane	Silicone	Standard	•	•	•	•
Connecting cable	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	•	•	•	•
<b>Power supply voltage</b>						
12 to 24 V DC nominal (10 – 29 V DC)						
<b>Ingress protection</b>						
All PFK9-APW weighing platforms	IP66/68	Standard	•	•	•	•
<b>Hazardous area approval <sup>1)</sup></b>						
ATEX	Cat. 3GD BVS 10 ATEX E131	Option	•	•	•	•
	Cat. 2GD BVS 10 ATEX 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				
Category 2 / div. 1: cable M12, 6-pin, 5 m, 10 m, 20 m	Option				
Category 3 / div. 2: cable M12, 12-pin - open leads, 10 m	Option				

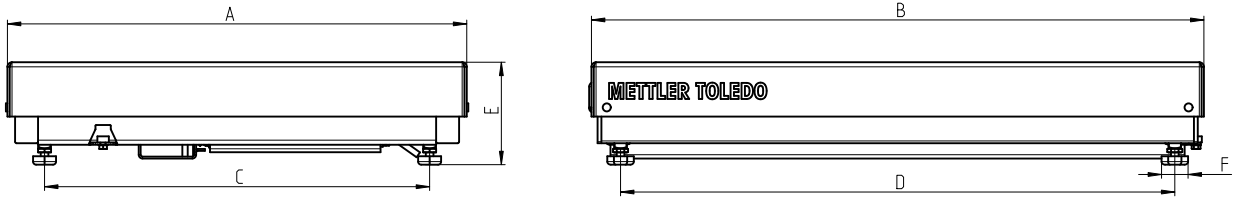
**Model designation examples:**

**PFK989APW-C600** Floor platform with frame in stainless steel, direct connectivity version, C-size (800 mm x 1000 mm), capacity 600 kg

**PFK988APW-E3000** Floor platform with frame in mild steel galvanized, direct connectivity version, E-size (1250 mm x 1500 mm), capacity 3000 kg

<sup>1)</sup> 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)

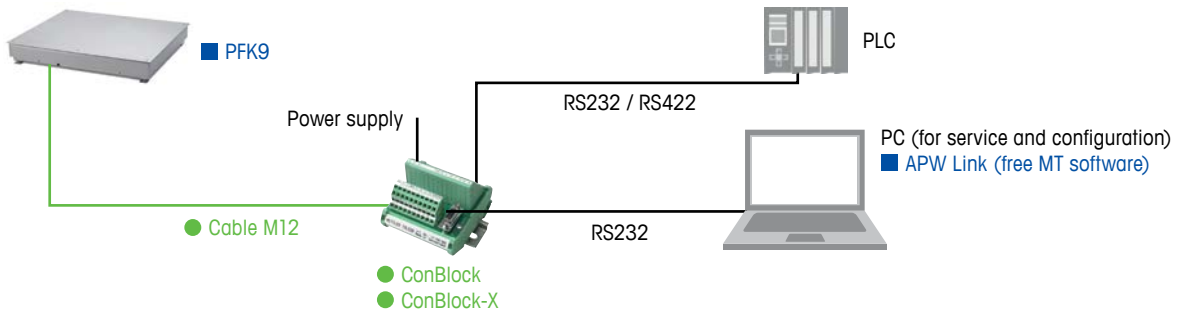


Dimensions (mm)	C	D	E	ES
A	800	1000	1250	1500
B	1000	1250	1500	1500
C	625	890	1140	1390
D	932	1110	1360	1360
E	115-140	180-205	182-207	197-222
F	40	60 x 60	60 x 60	60 x 60

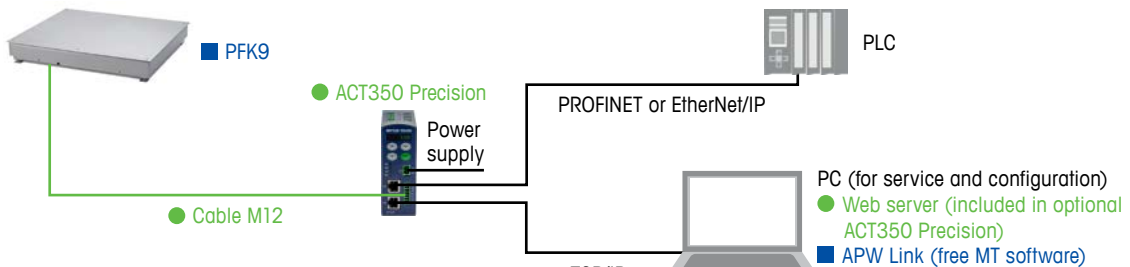
Typical Configurations

Safe area

Serial interface configuration



Automation network configuration



■ Scope of delivery

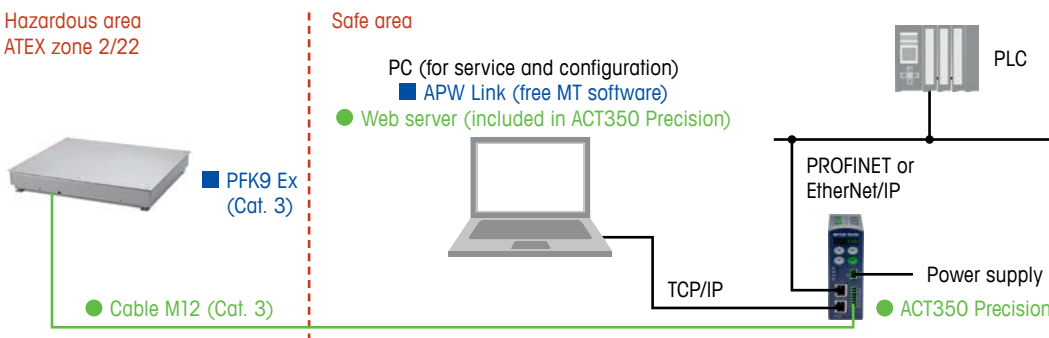
● Accessories from METTLER TOLEDO

## 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

Hazardous area  
ATEX zone 2/22

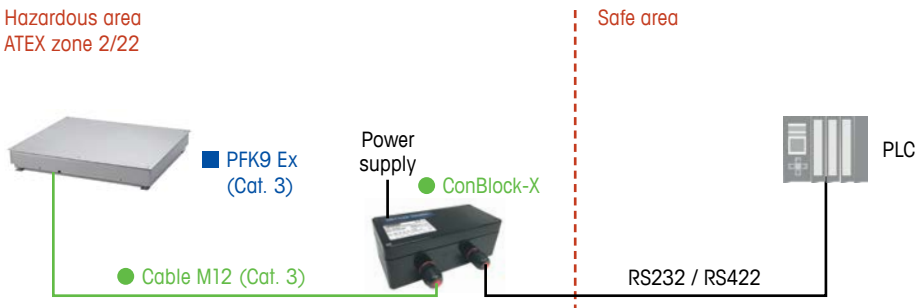


■ Scope of delivery

● Accessories from METTLER TOLEDO

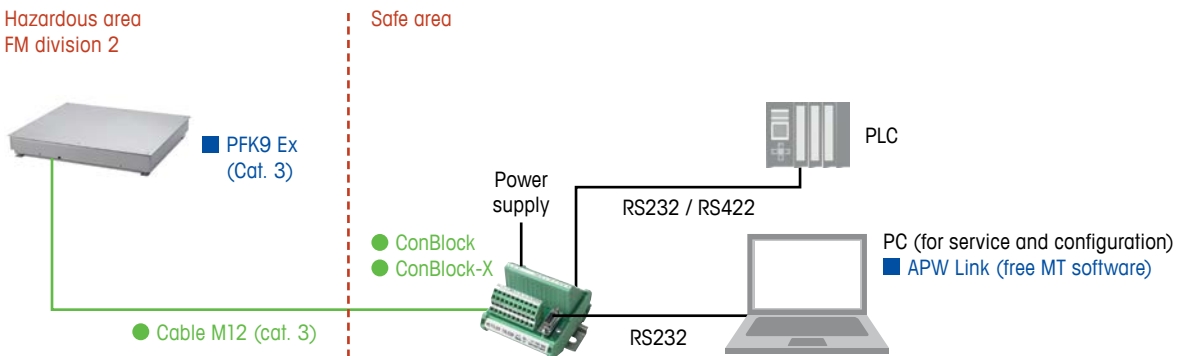
### ATEX zone 2/22 serial interface configuration

Hazardous area  
ATEX zone 2/22



### FM division 2 serial interface configuration

Hazardous area  
FM division 2

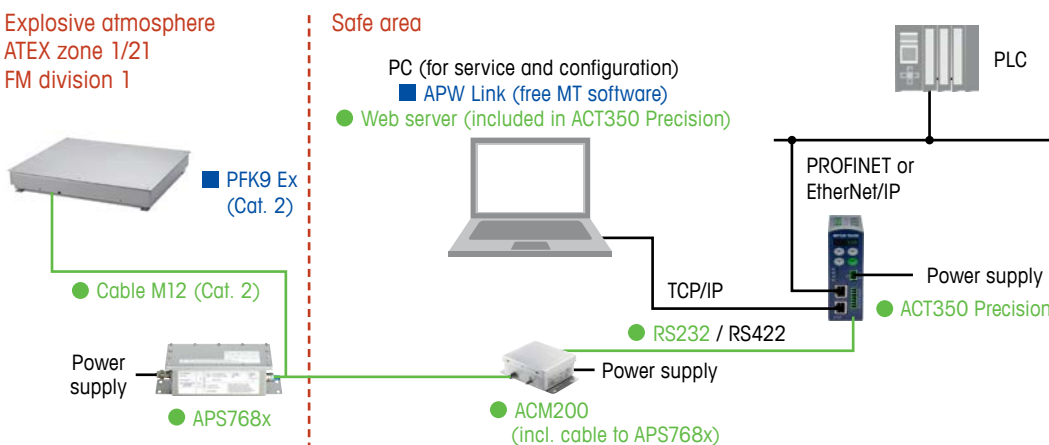


■ Scope of delivery




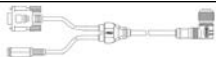





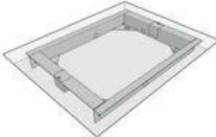
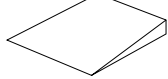
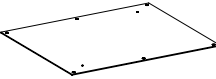
● Accessories from METTLER TOLEDO

### ATEX zone 1/21 and FM division 1 configuration

Explosive atmosphere  
ATEX zone 1/21  
FM division 1



## 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 (cat. 3)	M12, 12-pin, open leads, 10 m (zone 2/22, division 2)	302 444 47	
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. 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	
Quick pit	For C-Model: galvanized (930 x 1210 mm)	302 422 14	
	For C-Model: stainless steel (930 x 1210 mm)	302 422 15	
	For D-Model: galvanized (1130 x 1380 mm)	302 422 16	
	For D-Model: stainless steel (1130 x 1380 mm)	303 422 17	
	For E-Model: galvanized (1390 x 1640 mm)	303 422 18	
	For E-Model: stainless steel (1390 x 1640 mm)	303 422 19	
	For ES-Model: galvanized (1640 x 1640 mm)	304 422 20	
	For ES-Model: stainless steel (1640 x 1640 mm)	304 422 21	
Ramp	For C-Model: galvanized	005 036 38	
	For C-Model: stainless steel pattern	005 992 04	
	For C-Model: stainless steel smooth	005 991 98	
Load plate	For D-Model: mild steel powder coated	005 036 17	
	For D-Model: mild steel galvanized	005 036 18	
	For D-Model: stainless steel	005 036 19	
	For E-Model: mild steel powder coated	005 036 20	
	For E-Model: mild steel galvanized	005 036 21	
	For E-Model: stainless steel	005 036 22	
	For ES-Model: mild steel powder coated	005 045 04	
	For ES-Model: mild steel galvanized	005 045 05	
For ES-Model: stainless steel	005 045 06		

## 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](http://www.mt.com)

For more information

### METTLER TOLEDO Group

Industrial Division

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

Subject to technical changes

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