

Configurable Floor Platforms



PFA584/589 Floor Scales

Accurate Out-of-the-Box

Faster Scale-Up

Globally Approved

Standardized Servicing

Globally Configurable Solutions
Customized for Maximum Value

METTLER TOLEDO

The Mettler Toledo logo is centered at the bottom of the page. It consists of the words 'METTLER' and 'TOLEDO' in a bold, blue, sans-serif font. Below the text is a graphic of several thin, parallel green lines that fan out from the center, creating a sense of motion or a stylized 'M' shape.

Floor Scale Procurement Made Easy

Solutions for Every Application

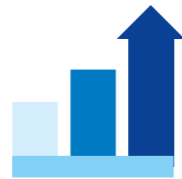
At METTLER TOLEDO, we know the needs of every industry are different, which is why the PFA5 is not a one-size-fits-all solution. We have taken the pain out of the floor scale configuration process by creating an easy-to-order, globally standardized set of components that can easily be mixed-and-matched to formulate your ideal scale.

What you can expect from this easy-to-configure solution:



Accurate Out-of-the-Box

By storing the factory calibration values within the scale, you get out-of-the-box accuracy and easy setup. Not only does this save you time and money during installation, it also gives you assurance your weighments are METTLER TOLEDO accurate.



Faster Scale-Up

The ability to mix-and-match from a set of globally approved components significantly eases the ordering and scale up process. Whether you are outfitting a single production line or sister factories around the world, the PFA5 makes the process painless.



Global Approvals for Consistency

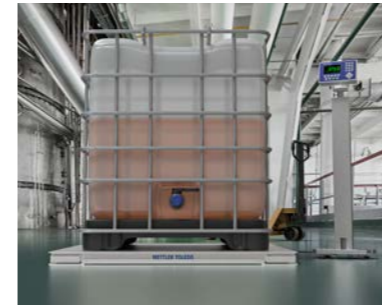
Metrology: OIML, NTEP, CPA
 Wireless: FCC, CE/RED,SRRC
 EMC: FCC, CE
 Bluetooth: SIG
 Safety: UN38.3/battery transportation, IEC/EN61010, UL
 Ex: IECEx, ATEX, FM approved for Hazardous Areas Zone 1/21, 2/22 and Div 1/Div 2



EPC or System Integrator? The PFA5 helps make your job easier!

As an EPC or system integrator, you may work with a variety of applications for companies who are multi-regional or even multinational. Our globally standardized floor scale solution enables you to easily deliver a standard solution to your customers worldwide. This ability to provide consistency worldwide in combination with our extensive portfolio of weighing and processing solutions and our consultative approach enable a smooth process for you and your customers.

Our Solutions for your Application Environment



Chemical and Hazardous Environments

For chemical and hazardous manufacturing environments, corrosive materials and safety are top concerns. Maximize uptime and compliance to hazardous area standards with this robust configuration:

- Stainless or mild steel platform
- Rocker pin suspension
- AJB579 Ex-approved stainless steel junction box
- 0745A stainless steel load cells



Pharmaceutical

For pharmaceutical manufacturers, quality and compliance are key. Limited space, repeatable measurements, and cleaning can be challenging. Ensure compliance with this smart configuration:

- Stainless steel smooth plate
- Rocker pin suspension
- ACW520 Cable-Free junction box
- 0745A stainless steel load cells



Food

For food manufacturing environments, productivity and hygiene are key. Heavy wash-down and temperature changes can lead to high maintenance costs. Stand up to the harshest environments with this rugged configuration:

- Stainless steel pattern plate
- Rocker foot suspension
- AJB579d SICSpro junction box
- 0745A stainless steel load cells



General Manufacturing

Heavy duty applications require the toughest scale. Forklift traffic, heavy loads, and forceful impacts create havoc with sensitive measurement devices. Choose a configuration that can stand up to the daily rigor:

- Mild steel platform
- Rocker pin suspension
- AJB459 junction box
- SLB415 nickel plated load cells

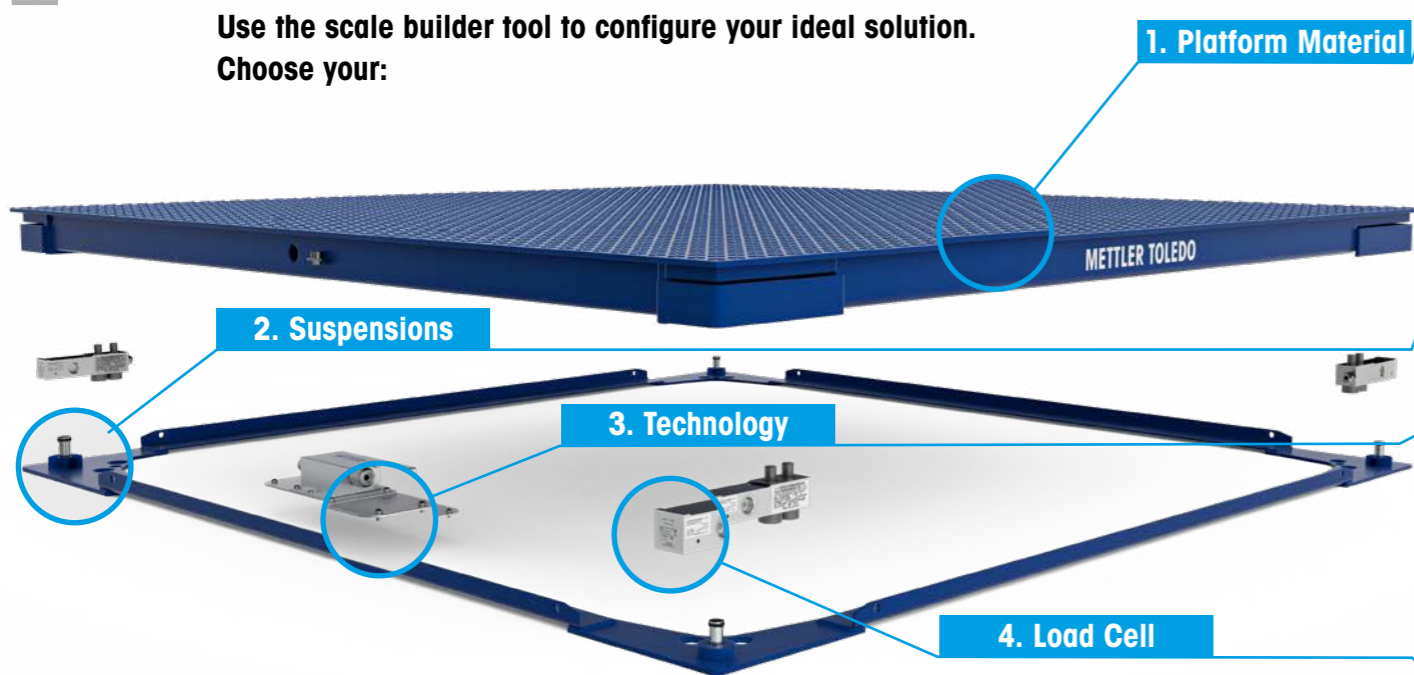
Check out the next page for easy configuration!

Easily Build Your Ideal Solution

Mix-and-Match Scale Configuration

Significantly ease the ordering and scale up process with flexible customization and expert METTLER TOLEDO consultancy. It's easy to see why this solution is ideal for multinational companies, because it eliminates the need to order different configurations country-by-country.

Use the scale builder tool to configure your ideal solution. Choose your:



Build Your Ideal Solution

1. Choose from the following platform material options:



- Stainless steel – ideal for corrosive or wash-down applications
- Mild steel painted – best for dry environments
- Options for both pattern safety plate or smooth plate

1

2. Choose from the following suspension options:

Foot Options

- Rocker foot suspension



Rocker Pin / Full Frame

- Best Accuracy - Most Robust
- Rocker pin suspension



2

3. Choose from the following weighing technology:

Standard Analog

- Field-Calibrated
- Ex-approved versions



Smart Weighing

- Accuracy Out-of-the-Box
- SICSpro
 - Cable-Free



3

4. Choose from the following load cell options:

Best for Dry Environments

- Heavy Duty Use Cases
- SLB415 / Nickel Plated, Hermetic, IP67



Best for Harsh Environments

- Wash-Down, Chemicals, Heavy Duty Applications
- 0745A / Stainless, Hermetic, IP68, IP69K, Ex-approved



4

“With the PFA5 we were able to order exactly what we needed to retrofit our line without the typical wait time for customized solutions.”

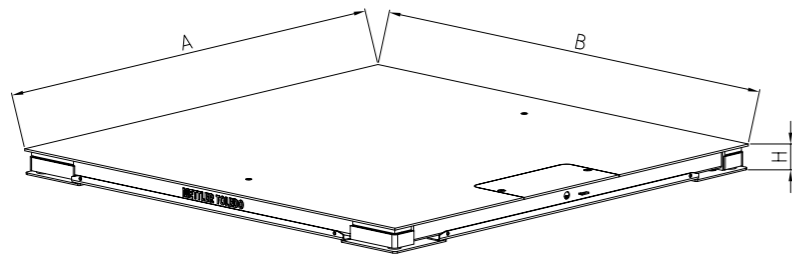
Operations Manager



Floor Platforms Model Specific Data

| Maximum Capacity | kg | 300 | 600 | 1,500 | 3,000 | 5,000 | 10,000 |
|---|------|-----|-----|-------|-------|-------|--------|
| Height (H)* | mm | 78 | 78 | 78 | 78 | 78 | 102 |
| Sizes A x B, See above dimensional drawing | | | | | | | |
| 800x800 | [mm] | • | • | • | | | |
| 1000x1000 | [mm] | • | • | • | | | |
| 1250x1250 | [mm] | • | • | • | • | • | • |
| 1250x1500 | [mm] | • | • | • | • | • | • |
| 1500x1500 | [mm] | • | • | • | • | • | • |
| 1500x2000 | [mm] | | | • | • | • | • |
| 2000x2000 | [mm] | | | • | • | • | • |
| EIO size | | | | | | | |
| 250x250 to 1500x1500 | [mm] | • | • | | | | |
| 250x250 to 1800x1800 | [mm] | | | • | | | |
| 600x600 to 2500x3000 | [mm] | | | | • | | |
| 750x750 to 2500x3000 | [mm] | | | | | • | |
| 900x900 to 2500x3000 | [mm] | | | | | | • |

* The height H is for rocker pin/full frame suspension option.



Weights and Measures - Legal for Trade Data

OIML (International Organization of Legal Metrology)

OIML certification provides confidence that a weighing device complies with the OIML R76 regulation, which establishes the metrological characteristics required for weighing instruments and specifies methods and equipment for checking their conformity.

| Maximum Capacity | kg | 300 | 600 | 1,500 | 3,000 | 5,000 | 10,000 |
|---|------|-----|-----|-------|-------|-------|--------|
| Approved Accuracy Resolution Class III Single Range - 1x3,000e | | | | | | | |
| Approved Readability (e min.) | [kg] | 0.1 | 0.2 | 0.5 | 1 | 2 | 5 |
| Minimum Capacity | [kg] | 2 | 4 | 10 | 20 | 40 | 100 |
| Approved Accuracy Resolution Class III Single Range - 1x6,000e | | | | | | | |
| Approved Readability (e min.) | [kg] | - | 0.1 | - | 0.5 | 1 | - |
| Minimum Capacity | [kg] | - | 2 | - | 10 | 20 | - |

Weigh and Measure OIML General Thresholds

| | | |
|--------------------|------|--|
| Zero Setting Range | [%] | 2% of Maximum Capacity |
| Taring Range | [kg] | Subtractive from 0 to Maximum Capacity |
| Temperature Range | [°C] | -10°C...+40°C |
| Preload Range | [kg] | 18% of Maximum Capacity |

Weighing - 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.

| Maximum Capacity | kg | 300 | 600 | 1,500 | 3,000 | 6,000 | 10,000 |
|--|------|------|------|-------|-------|-------|--------|
| Recommended Readability (min.) | | | | | | | |
| 15,000d | [kg] | 0.02 | - | 0.1 | 0.2 | - | - |
| 30,000d | [kg] | 0.01 | 0.02 | 0.05 | 0.1 | 0.2 | 0.04 |
| Minimum Weight @ 1% for 30,000d | [kg] | 1.2 | 2.6 | 6.4 | 14 | 26 | - |
| Typical Values ** | | | | | | | |
| Repeatability sd (at full load) for 3,000e/15,000d | [g] | 7 | 14 | 35 | 80 | 150 | 300 |
| Repeatability sd (at full load) for 6,000e/30,000d | [g] | 6 | 13 | 32 | 70 | 130 | 250 |
| Error of indication (at half load) | [g] | 13 | 30 | 65 | 120 | 250 | 500 |
| Error of indication (at full load) | [g] | 20 | 40 | 100 | 170 | 360 | 700 |

Total Preload Range of non-approved PFA584/589

| Scale Maximum Capacity | kg | 300 | 600 | 1,500 | 3,000 | 6,000 | 10,000 |
|------------------------|------|-----|-------|-------|-------|-------|--------|
| Platform Size | | | | | | | |
| 800x800 | [kg] | 470 | 1,390 | 2,560 | 1,210 | - | - |
| 1000x1000 | [kg] | 450 | 1,370 | 2,540 | 1,190 | - | - |
| 1250x1250 | [kg] | 420 | 1,330 | 2,500 | 1,150 | 2,360 | 6,590 |
| 1250x1500 | [kg] | 390 | 1,310 | 2,480 | 1,130 | 2,330 | 6,490 |
| 1500x1500 | [kg] | 370 | 1,290 | 2,460 | 1,110 | 2,310 | 6,340 |
| 1500x2000 | [kg] | - | - | 2,400 | 1,040 | 2,210 | 6,650 |
| 2000x2000 | [kg] | - | - | 2,340 | 920 | 2,070 | 6,620 |

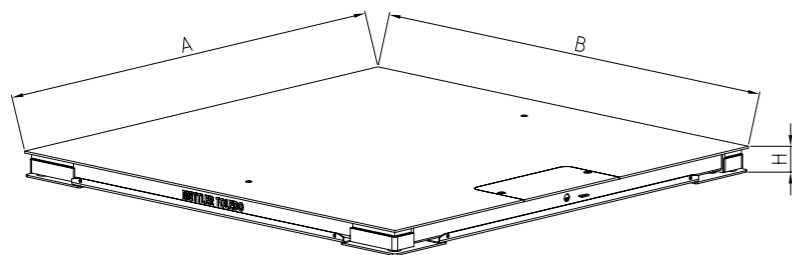
Mechanical Thresholds

| Maximum Capacity | kg | 300 | 600 | 1,500 | 3,000 | 6,000 | 10,000 |
|-------------------------------------|------|-------|-------|-------|-------|-------|--------|
| Maximum static safe load(kg) | | | | | | | |
| Central load | [kg] | 1,500 | 3,500 | 3,500 | 4,500 | 9,000 | 18,000 |
| Side load | [kg] | 900 | 2,300 | 2,300 | 3,000 | 6,000 | 9,000 |
| Corner load | [kg] | 450 | 1,150 | 1,150 | 1,150 | 3,000 | 4,500 |

Floor Platforms Model Specific Data

| Maximum Capacity | [lbs] | 500 | 1,000 | 2,500 | 5,000 | 10,000 | 20,000 |
|----------------------|-------|--------|--------|--------|--------|--------|--------|
| Height (H)* | [in] | 3-1/16 | 3-1/16 | 3-1/16 | 3-1/16 | 3-1/16 | 4 |
| Platform Size | | | | | | | |
| 30x30 | [in] | • | • | • | | | |
| 36x36 | [in] | • | • | • | | | |
| 48x48 | [in] | • | • | • | • | • | • |
| 48x60 | [in] | • | • | • | • | • | • |
| 60x60 | [in] | • | • | • | • | • | • |
| 60x84 | [in] | | | • | • | • | • |
| 72x72 | [in] | | | • | • | • | • |
| EIO Sizes | | | | | | | |
| 10x10 to 60x60 | [in] | • | • | | | | |
| 10x10 to 72x72 | [in] | | | • | | | |
| 24x24 to 96x120 | [in] | | | | • | | |
| 30x30 to 96x120 | [in] | | | | | • | |
| 36x36 to 96x120 | [in] | | | | | | • |

* The height H is for rocker pin/full frame suspension option.



Weights and Measures - Legal for Trade Data

Weights and Measures - Legal for Trade Data

NTEP certificate of conformance provides confidence that a weighing device complies with Handbook 44 regulation, which establishes the metrological characteristics required for weighing instruments and specifies methods and equipment for checking their conformity.

| Maximum Capacity | [lbs] | 500 | 1,000 | 2,500 | 5,000 | 10,000 | 20,000 |
|--|-------|-----|-------|-------|-------|--------|--------|
| Approved Accuracy_Resolution Class III Single Range - 5000d | | | | | | | |
| Approved Readability (e min.) | [lbs] | 0.1 | 0.2 | 0.5 | 1 | 2 | 5 |
| Minimum Capacity | [lbs] | 10 | 20 | 50 | 100 | 200 | 500 |

Weigh and Measure NTEP General Thresholds

| | | |
|-------------------|-------|--|
| Taring Range | [lbs] | Subtractive from 0 to Maximum Capacity |
| Temperature Range | [°F] | 14°F...104°F |

Weighing - 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.

| Maximum Capacity | [lbs] | 500 | 1000 | 2,500 | 5,000 | 10,000 | 20,000 |
|--|-------|--------|-------|-------|-------|--------|--------|
| Recommended Readability (min.) | | | | | | | |
| 10000d | [lbs] | 0.05 | 0.1 | 0.25 | 0.5 | 1 | 2 |
| Typical Values ** | | | | | | | |
| Repeatability sd (at full load) for 10000d | [lbs] | 0.0154 | 0.033 | 0.066 | 0.18 | 0.33 | 0.66 |

Total Preload Range of non-approved PFA584/589

| Scale maximum capacity | [lbs] | 500 | 1,000 | 2,500 | 5,000 | 10,000 | 20,000 | |
|------------------------|-------|------|-------|-------|-------|--------|--------|--------|
| Platform Size | 30x30 | [in] | 1,190 | 730 | 2,010 | 4,120 | - | - |
| | 36x36 | [in] | 1,150 | 710 | 1,960 | 4,080 | - | - |
| | 48x48 | [in] | 1,060 | 620 | 1,900 | 4,010 | 8,110 | 16,510 |
| | 48x60 | [in] | 1,010 | 570 | 1,830 | 3,950 | 8,050 | 16,420 |
| | 60x60 | [in] | 930 | 460 | 1,740 | 3,860 | 7,960 | 16,310 |
| | 60x84 | [in] | - | - | 1,610 | 3,700 | 7,720 | 16,120 |
| | 72x72 | [in] | - | - | 1,610 | 3,730 | 7,690 | 16,120 |

Mechanical Thresholds

| Maximum Capacity | [lbs] | 500 | 1,000 | 2,500 | 5,000 | 10,000 | 20,000 |
|--------------------------------------|-------|-------|-------|-------|-------|--------|--------|
| Maximum static safe load (lb) | | | | | | | |
| Central load | [lbs] | 3,000 | 3,000 | 7,500 | 9,000 | 15,000 | 30,000 |
| Side load | [lbs] | 1,900 | 1,900 | 5,000 | 6,500 | 10,000 | 15,000 |
| Corner load | [lbs] | 900 | 900 | 2,500 | 2,500 | 6,500 | 9,000 |

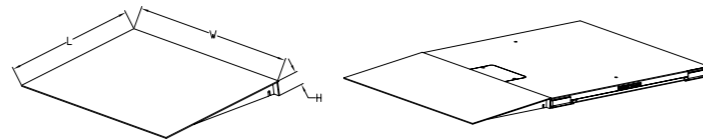
Glossary

| Weighing Terms | Simple Definition |
|---|---|
| Readability | 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. |
| Resolution | 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. |
| Minimum Capacity | 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. |
| Repeatability | 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. |
| Error of Indication at full load / half load | 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. |
| Minimum Weight | Smallest (sample) weight required for a weighment 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. |

Options / Accessories

Ramps

Ramps allow easy access from any side of a scale, eliminating the need to lift heavy loads onto the platform.

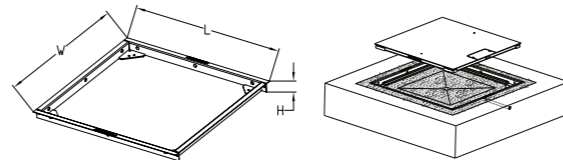


| Model | | Standard Profile Ramp (10k and below) | | | | | | Standard Profile Ramp (20k) | | | |
|------------|--------|---|----|----|----|----|----|-----------------------------|----|----|----|
| Dimensions | W [in] | 30 | 36 | 48 | 60 | 72 | 84 | 48 | 60 | 72 | 84 |
| | H [in] | 3.12 | | | | | | 4 | | | |
| | L [in] | 36 | | | | | | | | | |
| Material | | Painted Mild Steel or Glass Blasted Stainless Steel | | | | | | | | | |
| Top plate | | Smooth or Patterned | | | | | | | | | |

| Model | | Standard Profile Ramp (6t and below) | | | | | Standard Profile Ramp (10t and above) | | |
|------------|--------|---|------|------|------|------|---------------------------------------|------|------|
| Dimensions | W [mm] | 800 | 1000 | 1250 | 1500 | 2000 | 1250 | 1500 | 2000 |
| | H [mm] | 79 | | | | | 102 | | |
| | L [mm] | 914 | | | | | | | |
| Material | | Painted Mild Steel or Glass Blasted Stainless Steel | | | | | | | |
| Top plate | | Smooth or Patterned | | | | | | | |

Quick-Pit Frame

With our Quick-Pit frame, installing a floor scale in a pit is an easy, trouble-free process. Just level the frame in the pit and pour concrete to complete the pit. After the concrete has cured, install the scale and anchor it. The result is a pit scale that is square and flush with the floor.

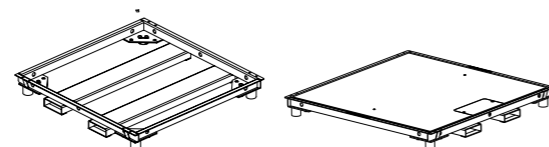


| Model | | Standard Profile Pit Frame (10k and below) | | | | | | Standard Profile Pit Frame (20k) | | | | | |
|------------------|--------|---|-------|-------|-------|-------|-------|----------------------------------|-------|-------|-------|-------|-------|
| Scale Size | | 30x30 | 36x36 | 48x48 | 48x60 | 60x60 | 72x72 | 60x84 | 48x48 | 48x60 | 60x60 | 72x72 | 60x84 |
| Frame Dimensions | W [in] | 33.75 | 39.75 | 51.75 | 51.75 | 63.75 | 75.75 | 63.75 | 51.75 | 51.75 | 63.75 | 75.75 | 63.75 |
| | L [in] | 33.75 | 39.75 | 51.75 | 63.75 | 63.75 | 75.75 | 87.75 | 51.75 | 63.75 | 63.75 | 75.75 | 87.75 |
| | H [in] | 3.25 | | | | | | 4.19 | | | | | |
| Material | | Painted Mild Steel or Glass Blasted Stainless Steel | | | | | | | | | | | |

| Model | | Standard Profile Pit Frame (6t and below) | | | | | | Standard Profile Pit Frame (10t and above) | | | | | |
|------------------|--------|---|-----------|-----------|-----------|-----------|-----------|--|-----------|-----------|-----------|-----------|-------|
| Scale Size | | 800x800 | 1000x1000 | 1250x1250 | 1500x1500 | 1500x2000 | 2000x2000 | 1250x1250 | 1250x1500 | 1500x1500 | 1500x2000 | 2000x2000 | |
| Frame Dimensions | W [mm] | 895 | 1095 | 1345 | 1345 | 1595 | 1595 | 2095 | 1345 | 1345 | 1595 | 1595 | 2095 |
| | L [mm] | 895 | 1095 | 1345 | 1595 | 1595 | 2095 | 2095 | 51.75 | 63.75 | 63.75 | 75.75 | 87.75 |
| | H [mm] | 83 | | | | | | 106 | | | | | |
| Material | | Painted Mild Steel or Glass Blasted Stainless Steel | | | | | | | | | | | |

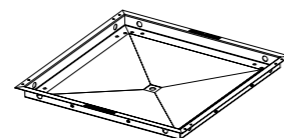
Forklift Channel Frame

This frame makes it easy to move the scale with a forklift. Simply slide the forks into the channels and lift. The heavy-duty frame protects the scale from damage.



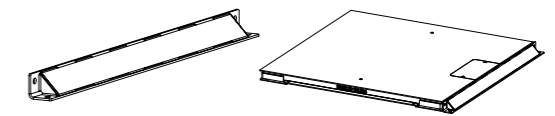
Pit Liner

Pit Liner makes the pit more clean and sanitary.



Scale Guard

Protect your scale from side-impact damage with scale guards. When a forklift hits the side of a scale, the impact can bend the scale's frame or damage its load cells. The angled guard prevents damage by deflecting the impact upward. Scale guards can be used on any or all sides of a floor scale.



General Specifications

| Model | | PFA584 | PFA589 |
|--------------------------|--------------------------------|---|--|
| Platform Material | Mild Steel Powder Coated, Blue | • | |
| | Stainless Steel AISI 304 | | • |
| | Stainless Steel AISI 316L | | •** |
| Top Deck Plate | Smooth | • | • |
| | Pattern | • | • |
| Sizes | | From 0.8x0.8 m to 2.0x2.0 m and 30x30 inch to 72x72, | |
| Capacities | | From 300 kg to 12,000 kg / 500lbs to 20,000lbs | |
| Compliance | Metrology | OIML Class III, NTEP Class III, CPA Class III | |
| | EMC | 10 V/m | |
| Hazardous Area Approvals | ATEX | No | II3G / II3D Load cell 0745A: KEMA 03ATEX1070* Junction box AJB579xx-α: BVS 18 ATEX E 008* II2G / II2D Load cell 0745A: KEMA 03ATEX1069* Junction box AJB579xx-α: BVS 18 ATEX E 007* |
| | IECEx | No | Gb / Db or Gc /Dc Load cell 0745A: IECEx DEK 15.0017* Junction box AJB579xx-α/AJB579xx-α: IECEx BVS 18.0008* |
| | FM US | NI/I, II, III/2/ABCD/FG/T6 Ta=55C | |
| | FM Canada | NI/I, II/2/ABCD/FG/T6 Ta=55C / DIP/III/2/T6 ta=55C | |
| | NEPSI CN | Ex ic nA IIC T4 Gc Ex nA IIC T4 Gc Ex tD A22 IP6X T130°C Ex ib IIC T4 Gb Ex ibD 21 T85-T135 | |
| | Temperature Range | Compensated | -10°C - +40°C / 14°F - 104°F |
| | Operating (safe area) | -20°C - +65°C | |
| Home Run Cable / Length | | Polyurethane, 3 m, 10 m, 20 m | |
| Load Cell | | SLB415 / 0745A, IP68/IP69K | |
| Scale Interfaces | | Analog, SICSpro | |

* Product Compliance Document System:
www.mt.com/us/en/home/search/compliance.html

** Specify when ordering



Fast Consistent Service

Faster, standard service worldwide for multinational companies. Gain efficiency and get up and running at every plant with ensured consistency.

► www.mt.com/service

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

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/PFA584
www.mt.com/PFA589

For more information

METTLER TOLEDO Group

Industrial Division

Local contact: www.mt.com/contacts



Subject to technical changes

©05/2022 METTLER TOLEDO. All rights reserved

Document No. 30476111 B

MarCom Industrial