METTLER TOLEDO

PFA564
PFA569

Floor Scale

Installation and Service Manual

61070029
(1/15).04

METTLER TOLEDO

Publication Revision History

An overview of this manual's revision history is compiled below.

Publication Name: 2256 VLC WEIGHT-PLATE Analog Floor Scale Installation and Service Manual

Publication Part Number: A14914100A **Publication Date:** 8/97

Part Number	Date	Revisions
B14914100A	11/98	Added Class III acceptable readability data on page 1-1.
C14914100A	8/02	Revised manual so that it covers the new 2256 VLC design.
D14914100A	8/04	Added information about new leveling foot.
E14914100A	2/08	Added information about Revision 4 version of scale, including new leveling foot, junction box, and 745A load cell with retaining clip.
E14914100A.01	1/10	Removed warranty information. Updated hazardous area and parts information.
E14914100A.02	4/11	Added information about new retaining clip. Added item numbers to parts lists.
E14914100A.03	3/12	Added note about location of feet. Changed company name to Mettler-Toledo, LLC.
61070029	1/15	Changed model number to PFA564 (MS) and PFA569 (SS). Changed part number of manual. Changed to advanced load cells and precision junction box.

INTRODUCTION

This publication is provided solely as a guide for individuals who have received Technical Training in servicing the METTLER TOLEDO product.

Information about METTLER TOLEDO Technical Training can be obtained by writing, calling, or faxing:

METTLER TOLEDO
1900 Polaris Parkway
Columbus, Ohio 43240 USA
Phone: (614) 438-4511
Fax: (614) 438-4958
www.mt.com

FCC Notice

This device complies with Part 15 of the FCC Rules and the Radio Interference Requirements of the Canadian Department of Communications. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

METTLER TOLEDO RESERVES THE RIGHT TO MAKE REFINEMENTS OR CHANGES WITHOUT NOTICE.

Declaration of Conformity

METTLER TOLEDO

We / Wir / Nous / Wij / Noi: METTLER TOLEDO

declare under our sole responsibility that the product,
erklären, in alleiniger Verantwortung, daß dieses Produkt,
déclarons sous notre seule responsabilité que le produit,
declaramos, bajo nuestra sola responsabilidad, que el producto,
verklaren onder onze verantwoordelijkheid, dat het product,
dichiariamo sotto nostra unica responsabilitá, che il prodotto,

Model: Load Cell 0743,0745A starting with serial no. 6264578-6BQ

To which this declaration relates is in conformity with the following standard(s) or other normative document(s).
Auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder Richtlinie(n) übereinstimmt.
Auquel se réfère cette déclaration est conforme à la (aux) norme(s) ou au(x) document(s) normatif(s).
Al que se refiere esta declaración es conforme a la(s) norma(s) u otro(s) documento(s) normativo(s).
Waarnaar deze verklaring verwijst, aan de volende norm(en) of richtlijn(en) beantwoordt.
A cui si riferisce questa dichiarazione è conforme alla/e sequente/i norma/e o documento/i normativo/i.

In combination with a weighing terminal produced by METTLER TOLEDO is in conformity with the following directives and standards.

Council directive on the harmonization of the laws of the member states	**Standards**	**Certificate No. (if applicable)**
Relating to the restriction of the use of certain hazardous substances in electrical and electronic equipment as defined in directive 2011/65/EU	NA	NA
Relating to electrical equipment designed for use in potentially explosive atmosphere (94/9/EC)	EN 60079-0:2006 EN 60079-11:2007 EN 61241-0:2006 EN 61241-1:2004	KEMA 03ATEX1069 Issue 4[1] II 2 G Ex ia IIC T4 II 2 D Ex tD A21 IP6X T100°C
	EN 60079-0:2006 EN 60079-15:2005 EN 61241-0:2006 EN 61241-1:2004	KEMA 03ATEX1070 Issue 4[1] II 3 G Ex nA II T4 II 3 G Ex nL IIC T4 II 3 D Ex tD A22 IP6X T100°C

[1]Certificate issued by KEMA, Utrechtseweg 310, 6812 AR Arnhem, The Netherlands – NB 0344

EN 60079-0:2006, A review against EN 60079-0:2009*, EN 60079-0:2006**
EN 60079-11:2007, A review against EN 60079-11:2012*, EN 60079-11:2007**
EN 61241-0:2006, A review against EN 60079-0:2009*, EN 61241-0:2006**
EN 61241-1:2004, A review against EN 60079-31:2009*, EN 61241-1:2004**
EN 60079-15:2005, A review against EN 60079-15:2010*, EN 60079-15:2005**
*) which is harmonised, shows no significant changes relevant to this equipment so
**) continues to represent "State of the Art"

Original Issue: 2013-01-28
Mettler Toledo (ChangZhou) Measurement Technology Ltd.

Jean Christophe Emery
General Manager

Yang Jiawu
QA Manager

Precautions

READ this manual BEFORE operating or servicing this equipment.

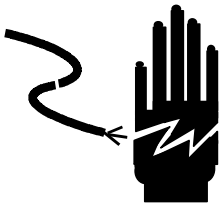
FOLLOW these instructions carefully.

SAVE this manual for future reference.

DO NOT allow untrained personnel to operate, clean, inspect, maintain, service, or tamper with this equipment.

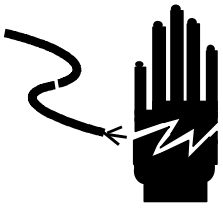
ALWAYS DISCONNECT this equipment from the power source before cleaning or performing maintenance.

CALL METTLER TOLEDO for parts, information, and service.



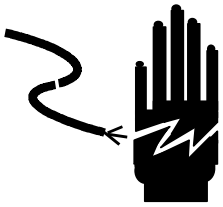
⚠ WARNING

PERMIT ONLY QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS, AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.



⚠ CAUTION

FOR CONTINUED PROTECTION AGAINST SHOCK HAZARD, CONNECT TO PROPERLY GROUNDED OUTLET ONLY. DO NOT REMOVE THE GROUND PRONG.



⚠ WARNING

DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

⚠ CAUTION

BEFORE CONNECTING OR DISCONNECTING ANY INTERNAL ELECTRONIC COMPONENTS OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT, ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN BODILY HARM OR DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT.

⚠ CAUTION

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.

⚠ WARNING

USE EXTREME CAUTION WHEN LIFTING AND MOVING THE SCALE TO THE DESIRED LOCATION. DO NOT ATTEMPT TO LIFT AND MOVE THE SCALE BY YOURSELF OR INJURY COULD OCCUR.

⚠ WARNING

IF THE SCALE IS USED IN A HAZARDOUS AREA, THE HAZARDOUS AREA MUST BE MADE SAFE PRIOR TO INSTALLATION, REPLACEMENT, OR TROUBLESHOOTING. FAILURE TO COMPLY COULD RESULT IN PERSONAL INJURY, DEATH, AND/OR PROPERTY DAMAGE.

Disposal of Electrical and Electronic Equipment

In conformance with the European Directive 2002/96 EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.

Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.

If you have any questions, please contact the responsible authority or the distributor from which you purchased this device.

Should this device be passed on to other parties (for private or professional use), the content of this regulation must also be related.

Thank you for your contribution to environmental protection.

CONTENTS

1 Introduction

General

Model PFA564 (carbon steel) and PFA569 (stainless steel) floor scales are fully electronic scales for general-purpose weighing. They are designed for top-of-floor installations and can be used as portable or permanently mounted scales.

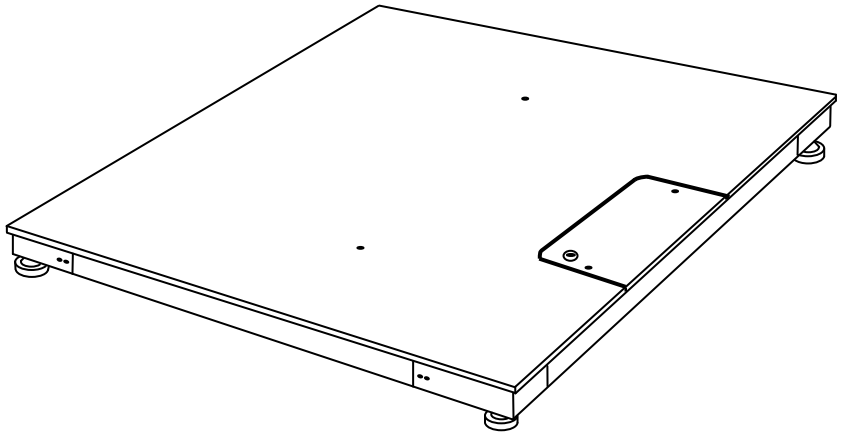


Figure 1-1: PFA564/PFA569 Floor Scale

Item Numbers

Tables 1-1 and 1-2 list the item numbers for standard PFA564 and PFA569 floor scales.

Item Number	Description
30126973	Floor Scale PFA564 S MT 1K 36x36
30126976	Floor Scale PFA564 S MT 1K 48x48
30127000	Floor Scale PFA564 S MT 1K 48x60
30127008	Floor Scale PFA564 S MT 1K 48x72
30127004	Floor Scale PFA564 S MT 1K 60x60
30127012	Floor Scale PFA564 S MT 1K 60x84
30126974	Floor Scale PFA564 S MT 2.5K 36x36
30126977	Floor Scale PFA564 S MT 2.5K 48x48
30127001	Floor Scale PFA564 S MT 2.5K 48x60
30127009	Floor Scale PFA564 S MT 2.5K 48x72
30127005	Floor Scale PFA564 S MT 2.5K 60x60
30127013	Floor Scale PFA564 S MT 2.5K 60x84
30126975	Floor Scale PFA564 S MT 5K 36x36

Item Number	Description
30126978	Floor Scale PFA564 S MT 5K 48x48
30127002	Floor Scale PFA564 S MT 5K 48x60
30127010	Floor Scale PFA564 S MT 5K 48x72
30127006	Floor Scale PFA564 S MT 5K 60x60
30127014	Floor Scale PFA564 S MT 5K 60x84
30126979	Floor Scale PFA564 S MT 10K 48x48
30127003	Floor Scale PFA564 S MT 10K 48x60
30127011	Floor Scale PFA564 S MT 10K 48x72
30127007	Floor Scale PFA564 S MT 10K 60x60
30127015	Floor Scale PFA564 S MT 10K 60x84

Table 1-1: PFA564 Floor Scales

Item Number	Description
30127016	Floor Scale PFA569 S SS 1K 36x36
30127019	Floor Scale PFA569 S SS 1K 48x48
30127023	Floor Scale PFA569 S SS 1K 48x60
30127031	Floor Scale PFA569 S SS 1K 48x72
30127027	Floor Scale PFA569 S SS 1K 60x60
30127035	Floor Scale PFA569 S SS 1K 60x84
30127017	Floor Scale PFA569 S SS 2.5K 36x36
30127020	Floor Scale PFA569 S SS 2.5K 48x48
30127024	Floor Scale PFA569 S SS 2.5K 48x60
30127032	Floor Scale PFA569 S SS 2.5K 48x72
30127028	Floor Scale PFA569 S SS 2.5K 60x60
30127036	Floor Scale PFA569 S SS 2.5K 60x84
30127018	Floor Scale PFA569 S SS 5K 36x36
30127021	Floor Scale PFA569 S SS 5K 48x48
30127025	Floor Scale PFA569 S SS 5K 48x60
30127033	Floor Scale PFA569 S SS 5K 48x72
30127029	Floor Scale PFA569 S SS 5K 60x60
30127037	Floor Scale PFA569 S SS 5K 60x84
30127022	Floor Scale PFA569 S SS 10K 48x48
30127026	Floor Scale PFA569 S SS 10K 48x60
30127034	Floor Scale PFA569 S SS 10K 48x72
30127030	Floor Scale PFA569 S SS 10K 60x60
30127038	Floor Scale PFA569 S SS 10K 60x84

Table 1-2: PFA569 Floor Scales

Load Cells

Each floor scale includes four stainless steel, cantilever-beam load cells with integral, four-conductor, shielded cables (see note). Individual load cell capacities are listed below:

NOTE: Scales measuring 60x84 inches use cables that are 5 meters (16.4 feet) long. Smaller scales use cables that are 3 meters (9.8 feet) long. DO NOT mix cables of different lengths within a platform.

Scale Platform Capacity	Capacity of Each Load Cell	Minimum Approved Graduation Size
1,000 lb	500 lb	0.2 lb
2,500 lb	1,250 lb	0.5 lb
5,000 lb	2,500 lb	1.0 lb
10,000 lb	5,000 lb	2.0 lb

Load Cell Specifications

NOTE: Revision 3 versions of the 2256 floor scale (Model 22563XXXXX-A) used 3-mV/V load cells.

Model Number	0745A
Rated Capacity (RC)	500 lb, 1,250 lb, 2,500 lb, 5,000 lb
Rated Output	2 mV/V
Maximum Excitation Voltage*	15 VDC or VAC rms
Recommended Excitation Voltage	15 VDC
Input Terminal Resistance	384 ± 10 ohms
Output Terminal Resistance	350 ± 2 ohms
Temperature Range (compensated)	+14°F to +104°F (-10°C to +40°C)
Safe Overload	150% RC
Safe Side Load	100% RC
Zero Balance	± 0.02 mV/V

*The power supply to the load cells is provided by the METTLER TOLEDO terminal.

Approvals

NTEP Certification

Model 0745A load cells meet or exceed NIST Handbook-44 requirements for Class III 5,000 divisions (multiple cell). A Certificate of Conformance was issued under the National Type Evaluation Program (NTEP) of the National Conference of Weights and Measures (certificate number 92-108A5).

OIML Certification

Model 0745A metric capacity load cells meet or exceed OIML requirements for R60 C3 3000 divisions (TC2154).

Entity Approval

Entity approval permits the application of individually approved components (even from various manufacturers) to be used together to build a solution that is approved. When installing equipment in hazardous areas, it is necessary to compare the entity values of the load cells, junction boxes, connecting cables, and other components. Those entity values include voltage, current, power, capacitance, and inductance.

The components must compare as follows in order for the wiring to be considered intrinsically safe:

V_{max} or U_i (Maximum voltage permitted) ≥ V_t or U_o (Total voltage output)

I_{max} or I_i (Maximum current permitted) ≥ I_t or I_o (Total current output)

P_{max} or P_i (Maximum power permitted) ≥ P_t or P_o (Total power output)

C_i (Unprotected capacitance) + C_{cable} (Cable capacitance) ≤ C_a or C_o (Allowable capacitance)

L_i (Unprotected inductance) + L_{cable} (Cable inductance) ≤ L_a or L_o (Allowable inductance)

If the above conditions are not true, then the circuit will not be intrinsically safe and must not be installed in a hazardous area. If the parameters compare favorably as shown above, then the circuit is intrinsically safe and can be installed in a hazardous area. Always refer to the electrical regulations for the country of installation for specific wiring requirements.

United States Approval

The United States safety approvals are based on entity values. Reports on the 0745A load cells were submitted to Factory Mutual for compliance with FM Approval Standards Class No. 3600, 3610, 3611, and 3810. They were approved as intrinsically safe devices and issued the following certificate:

FM Original Approval Job Identification #3005885
IS/I,II,III/1/ABCDEFG/T4 Ta=40°C – 158574R, 42111392; Entity; NI/I/2/ABCD/T6 Ta=40°C; S/II,III/2/FG/T6 Ta=40°C

The following chart lists the Factory Mutual entity values for the load cells.

Electrical Data	0745A
V_t (Total voltage output)	25 V
I_t (Total current output)	600 mA
P_t (Total power output)	1.25 W
C_a (Allowable capacitance)	0
L_a (Allowable inductance)	29 µH

When used in hazardous areas, the load cells must be installed according to control drawing 42111392B (see Figure 1-2) or control drawing 30062229A for Canada (see Figure 1-3).

European Approval

The European safety approvals are based on entity values. The 0745A load cells were submitted to DEKRA for compliance with EN60079-0, EN60079-11, EN60079-15, and EN60079-31. They were approved as intrinsically safe devices and issued the following certificates:

DEKRA 03ATEX1069
II 2 G Ex ia IIC T4 Gb
II 2 D Ex tb IIIC T100°C Db

DEKRA 03ATEX1070
II 3 G Ex ic IIC T4 Gc or
II 3 G Ex nA IIC T4 Gc or
II 3 D Ex tc IIIC T100°C Dc

The following chart lists the entity values for the load cells.

Electrical Data	0745A
U_o (Total voltage output)	25 V
I_o (Total current output)	600 mA
P_o (Total power output)	1.25 W
C_o (Allowable capacitance)	5 nF
L_o (Allowable inductance)	30 µH

When used in hazardous areas, the load cells must be installed according to installation drawing 42111367B (see Figure 1-4).

Junction Boxes

AJB641SX junction boxes were submitted to DEKRA for compliance with EN60079-0, EN60079-11, EN60079-15, and EN60079-31. They were approved as intrinsically safe devices and issued the following certificates:

DEKRA 03ATEX1396 X
II 2 G Ex ia IIC T4 Gb
II 2 D Ex ib IIIC T70°C…T90°C Db

DEKRA 03ATEX1397 X
II 3 G Ex ic IIC T4 Gc
II 3 G Ex nA IIC T4 Gc
II 3 D Ex tc IIIC T70°C…T90°C Dc

AJB641SX junction boxes have been certified to IP69K ingress protection.

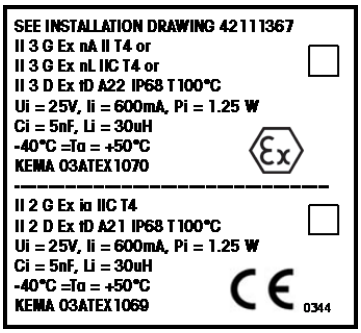
The following chart lists the entity values for the junction boxes.

Electrical Data	15V ISB Barrier	5V ISB Barrier
U_o (Total voltage output)	17.3 V	8.6 V
I_o (Total current output)	302 mA	300 mA
P_o (Total power output)	1 W	340 mW
C_o (Allowable capacitance)	0	0
L_o (Allowable inductance)	0	0

When used in hazardous areas, the junction boxes must be installed according to installation instructions document 30097779 (see Figure 1-5).

Product Markings

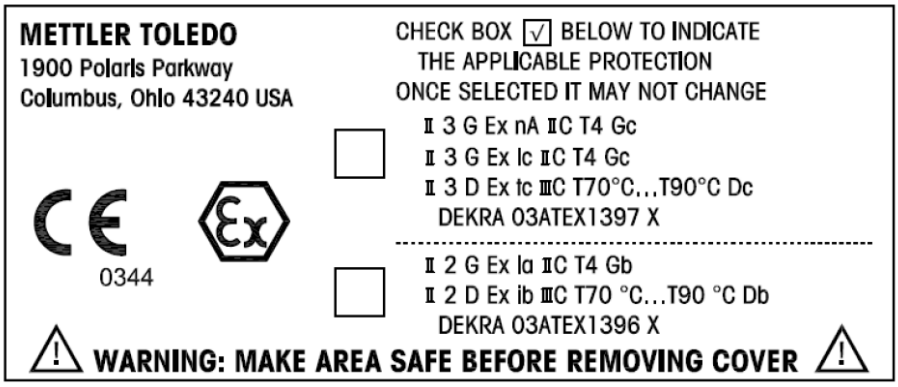
METTLER TOLEDO is not responsible for classifying hazardous areas. Each 0745A load cell should have the following label attached to it:



If you install a load cell in a hazardous area, use a permanent marker to place a mark in the check box on the label that indicates the applicable protection (DEKRA 03ATEX1069 or DEKRA 03ATEX1070). Once the label has been marked, it may not be changed.

Junction Boxes

AJB641SX junction boxes should have the following label attached:



If you install a junction box in a hazardous area, use a permanent marker to place a mark in the check box on the label that indicates the applicable protection (DEKRA 03ATEX1396 X or DEKRA 03ATEX1397 X). Once the label has been marked, it may not be changed.

Grounding

Make sure that all hazardous area installations are properly grounded. All grounding and equal potential bonding connections must be made according to local regulations based upon the country of installation. Refer to local codes and the control drawing provided in this manual for information about grounding.

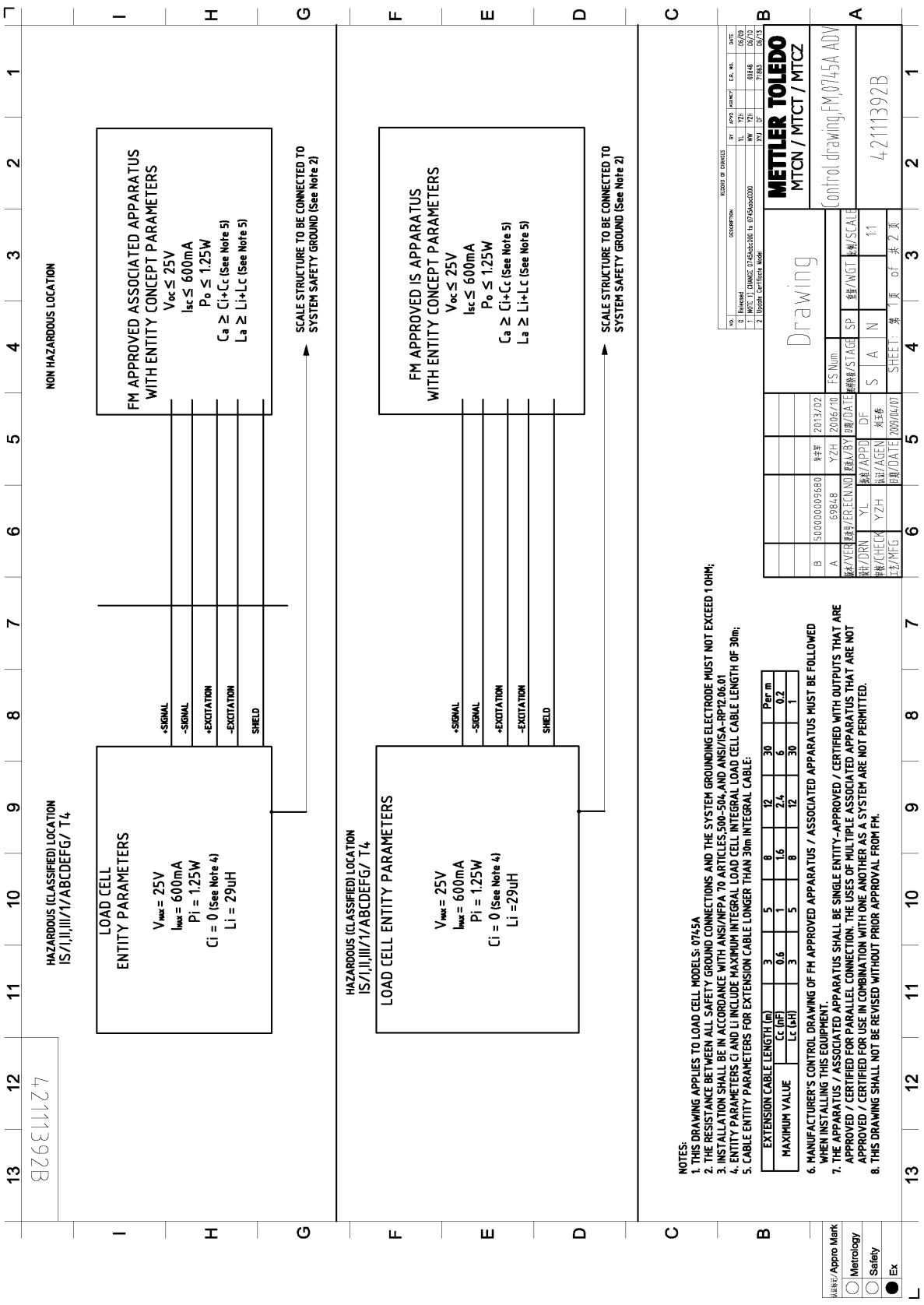


Figure 1-2: Control Drawing for 0745A Load Cell (Page 1 of 2)

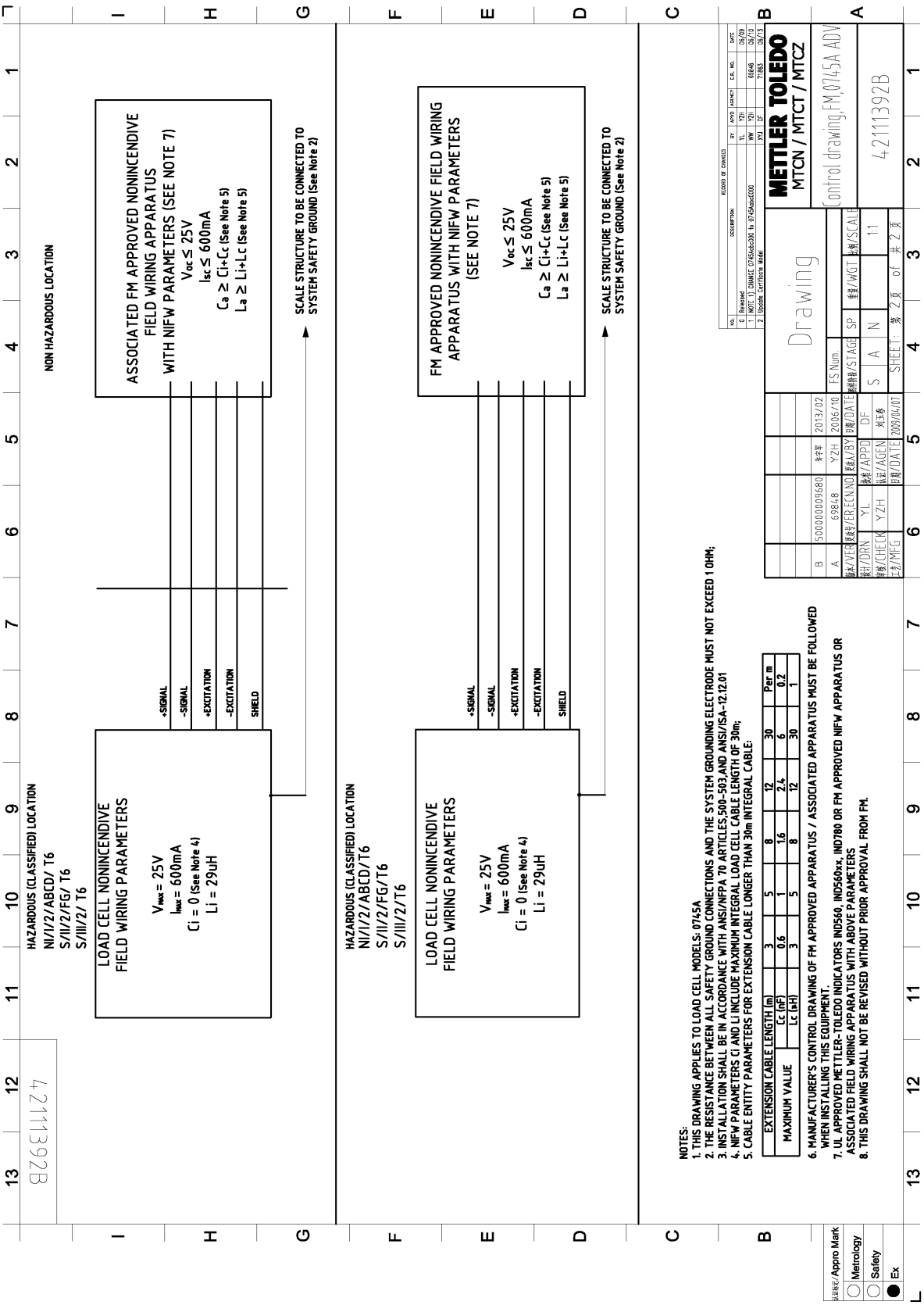


Figure 1-2: Control Drawing for 0745A Load Cell (Page 2 of 2)

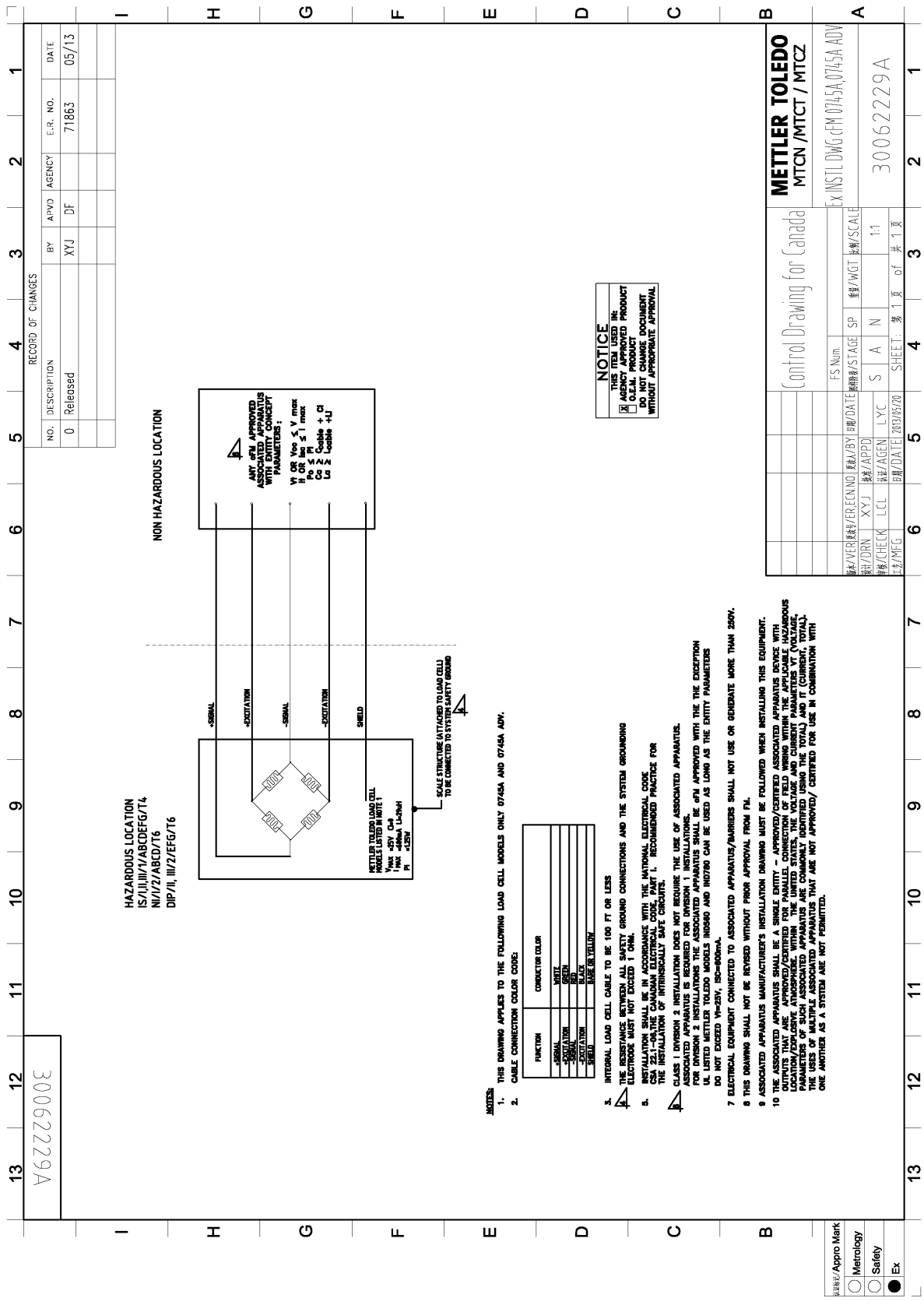


Figure 1-3: Control Drawing for 0745A Load Cell (Canada)

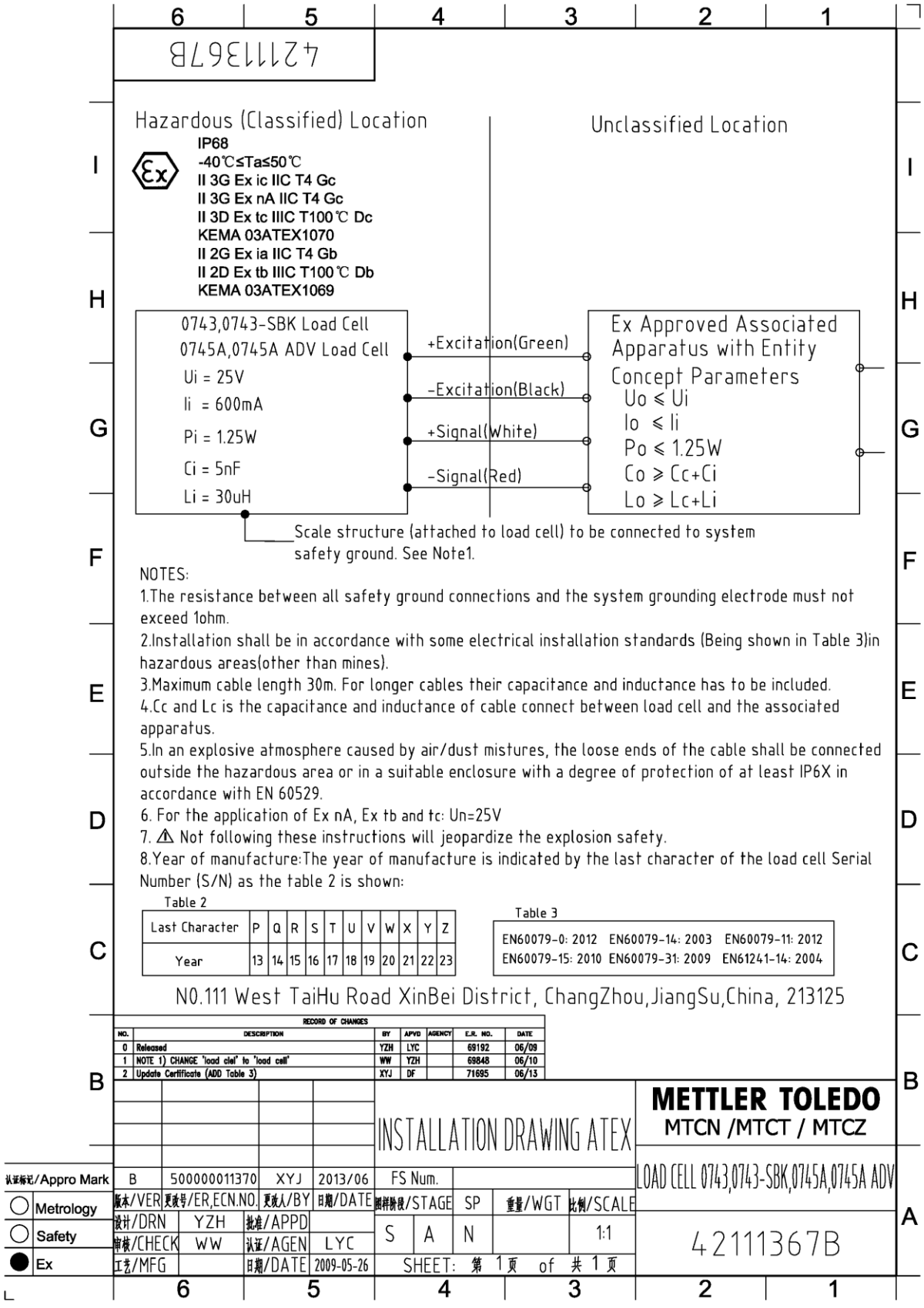


Figure 1-4: Installation Drawing for 0745A Load Cell

Precision Junction Boxes – Manual for Hazardous Area

⚠ CAUTION

BEFORE WORKING IN HAZARDOUS AREA MAKE SURE THE LOCATION IS SAFE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN BODILY HARM OR DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT.

Scope

Precision Junction Boxes AJB641SX, AJB841SX

Use

These products are capable for use in hazardous area Zone 1/21 and Zone 2/22.

Entity parameters for Cat 2 installation:

Ui = 17.3V, Ii = 302mA, Pi = 1W, Ci = Li = 0 (Matches 15V ISB Barrier)

Ui = 8.6V, Ii = 300mA, Pi = 340mW, Ci = Li = 0 (Matches 5V ISB Barrier)

Entity parameters for Cat 3 (Ex ic) installation:

Ui = 17.3V, Ii = 302mA, Pi = 1W, Ci = Li = 0 (Matches 15V ISB Barrier)

For Cat 3 (Ex nA or Ex tc): Ui = 30V, Ii = 1A.

Special Conditions for Safe Use

The Junction Boxes shall be installed in such a way that the risk of mechanical danger is low, ambient temperature range -20°C to +60°C. The specified temperature T70°C to T90°C for application in explosive atmospheres caused by air/dust mixtures, is based upon an ambient temperature of 40°C or 60°C respectively.

For applications in explosive atmospheres caused by dust, electrostatic charges of the marking label on the enclosure shall be avoided.

For intrinsically safe operation, the use of a resistively-limited Intrinsically Safe Load Cell Barrier with appropriate entity parameters, such as METTLER TOLEDO ISB05000 or ISB150000, must be used.

Sealing

For unused conduits only use supplied blind plugs with hazardous marking.

Marking

Check respective box with permanent marker or similar means. See sample below.

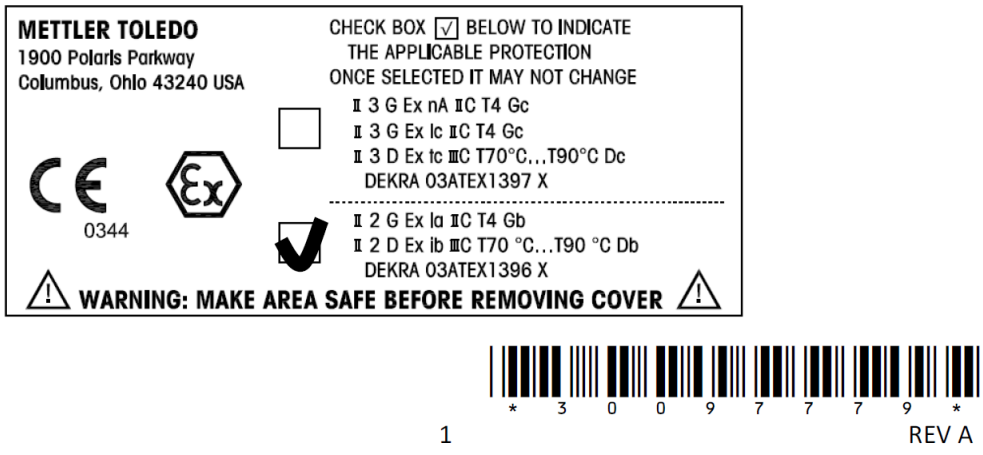


Figure 1-5: Installation Instructions for Junction Box

2 Inspection and Site Selection

Inspection

When the floor scale is delivered, visually inspect it for any damage that might have occurred during shipping and handling. Inspect the following areas:

1. Platform assembly
2. Load cells and rocker feet
3. Load cell cables
4. Junction box

If the scale is damaged, contact your freight carrier immediately.

Site Selection

Many problems associated with floor scale installations are caused by improper site conditions. Before installing the scale, check the proposed location to make sure that it meets the following requirements:

1. The floor where the scale will be positioned should be level. The scale's rocker feet can be adjusted to compensate for floors that are slightly out of level.
2. The floor/support at each corner of the scale must be strong enough to support the scale when it is loaded to full weighing capacity.
3. There should be proper drainage away from the scale.
4. There should be no heavy vibrations or wind currents at or near the scale.
5. The scale should not be subjected to excessive or unusual loading due to the location or type of equipment used.

If the site is acceptable, proceed with the installation. If not, choose a new location or select another scale.

⚠ WARNING

IF THE SCALE IS USED IN A HAZARDOUS AREA, THE HAZARDOUS AREA MUST BE MADE SAFE PRIOR TO INSTALLATION, REPLACEMENT, OR TROUBLESHOOTING. FAILURE TO COMPLY COULD RESULT IN PERSONAL INJURY, DEATH, AND/OR PROPERTY DAMAGE.

3 Installation

Leveling Feet

Set up the scale in the location where it will be used. To move the scale, install 3/4-10 eyebolts (P/N MZ0905000003; 61072856) in the threaded holes in the top of the scale platform. Attach a chain to the eyebolts, and use it to lift the scale with a forklift.

1. Remove the corner guard from each corner of the scale (see Figure 3-1).
2. Install a retaining clip in the holes in the side of each load cell. Insert one end of the clip into one hole, and then stretch the clip just enough to insert the opposite end into the other hole. Be careful not to bend the clip. NOTE: Feet and retaining clips are shipped in a bag located under the junction box access plate.
3. Install a leveling foot in the loading hole in each load cell. Shift the retaining clip to one side of the load cell, and insert the rocker foot into the loading hole at an angle. Rotate the foot until it is fully installed.
4. Install a corner guard at each corner of the scale. Make sure that the corner guard is flush against the load cell mounting block.

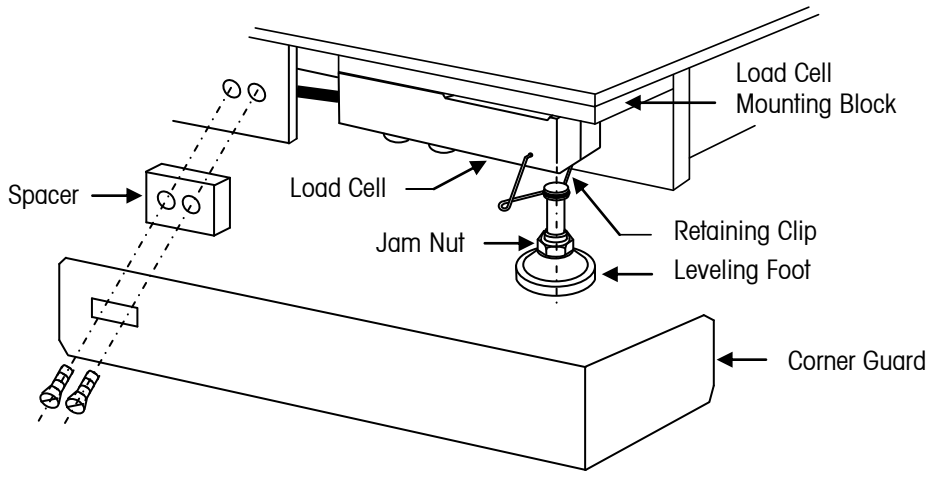


Figure 3-1: Leveling Foot Assembly

5. Make sure the scale platform is level. Adjust the leveling feet as needed to level it. All four feet should touch the floor so that the scale does not rock.

- To adjust a leveling foot upward or downward, use a 3/4-inch wrench to loosen the jam nut on the foot. Turn the foot until it is positioned correctly, and then tighten the jam nut so that it is snug against the foot.
- Check the level that is located on the scale platform's junction-box access plate. Adjust the leveling feet until the bubble on the level is centered.
- You must level the scale each time you move it to a new location.

Junction Box Wiring

The floor scale must be used with a compatible analog scale terminal. The scale's load cell outputs are summed by an analog junction box. Open the junction box, and connect the home run cable from the scale terminal to the input terminals on the junction box PCB. See Figure 3-2 and Table 3-1 for the correct cable connections.

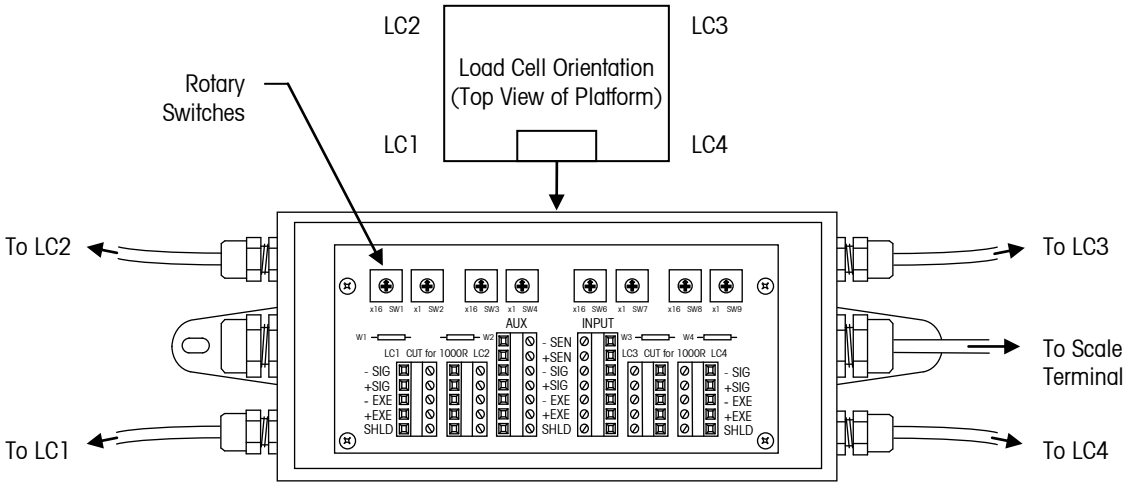


Figure 3-2: Analog Junction Box Detail

NOTE: Do not cut load cell cables. Cutting a cable will affect compensation and void the warranty.

Load Cell Wiring		Instrument Cable Wiring*	
Function	**Color**	**Function**	**Color**
-Sense	Not Used	-Sense	Red
+Sense	Not Used	+Sense	Yellow
-Signal	Red	-Signal	Black
+Signal	White	+Signal	Green
-Excitation	Black	-Excitation	Blue
+Excitation	Green	+Excitation	White
Shield	Yellow	Shield	Orange
*Based on METTLER TOLEDO cable number 510624370 (61006641)			

Table 3-1: Analog Junction Box Wiring Codes

Optional Locating Plates

Locating plates are available for scales that will be mounted permanently. Two locating plates installed at adjacent corners of a scale are usually sufficient.

⚠ WARNING

USE EXTREME CAUTION WHEN LIFTING AND MOVING THE SCALE TO THE DESIRED LOCATION. DO NOT ATTEMPT TO LIFT AND MOVE THE SCALE BY YOURSELF OR INJURY COULD OCCUR.

1. Remove the rubber pads from the scale's leveling feet, and position the scale in the location where it will be installed.
2. Lift the scale enough to position the locating plates under the corners of the scale.
3. Lower the scale carefully so that its leveling feet fit inside the large holes in the locating plates.
4. Drill holes in the floor for the anchor bolts (two for each locating plate). Use the bolt holes in the plates as guides (see Figure 3-3).
5. Install 1/2-inch insert-type anchor bolts through the bolt holes in the locating plates to anchor the plates to the floor.

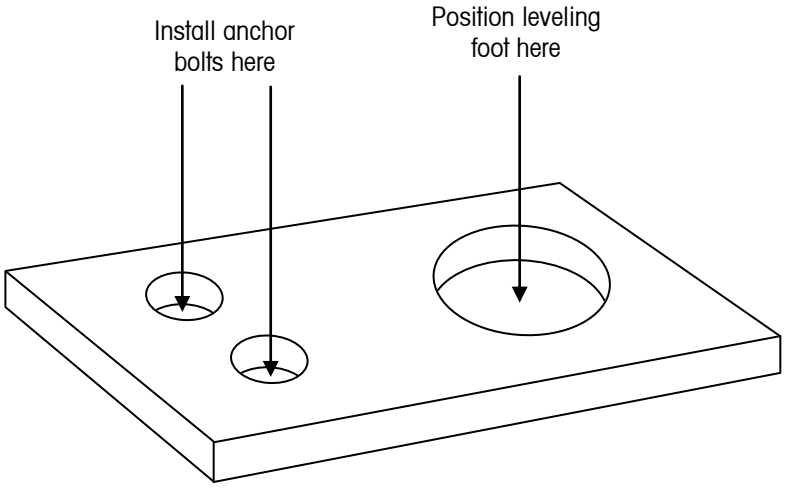


Figure 3-3: Locating Plate Installation

Optional Ramps

You can install one or more ramps with a floor scale. Standard ramps are available in widths of 36, 48, and 60 inches.

⚠ WARNING

USE EXTREME CAUTION WHEN LIFTING AND MOVING THE SCALE TO THE DESIRED LOCATION. DO NOT ATTEMPT TO LIFT AND MOVE THE SCALE BY YOURSELF OR INJURY COULD OCCUR.

1. Remove the rubber pads from the scale's leveling feet.
2. Position the ramp in the location where it will be installed. Make sure there is enough room for the scale and for any other ramps that will be installed.
3. Drill holes in the floor for the two anchor bolts. Use the bolt holes in the flanged portion of the ramp as guides (see Figure 3-4).
4. Install 1/2-inch insert-type anchor bolts through the bolt holes in the flange to anchor the ramp to the floor.
5. Lower the scale carefully so that its leveling feet fit inside the large holes in the flange.

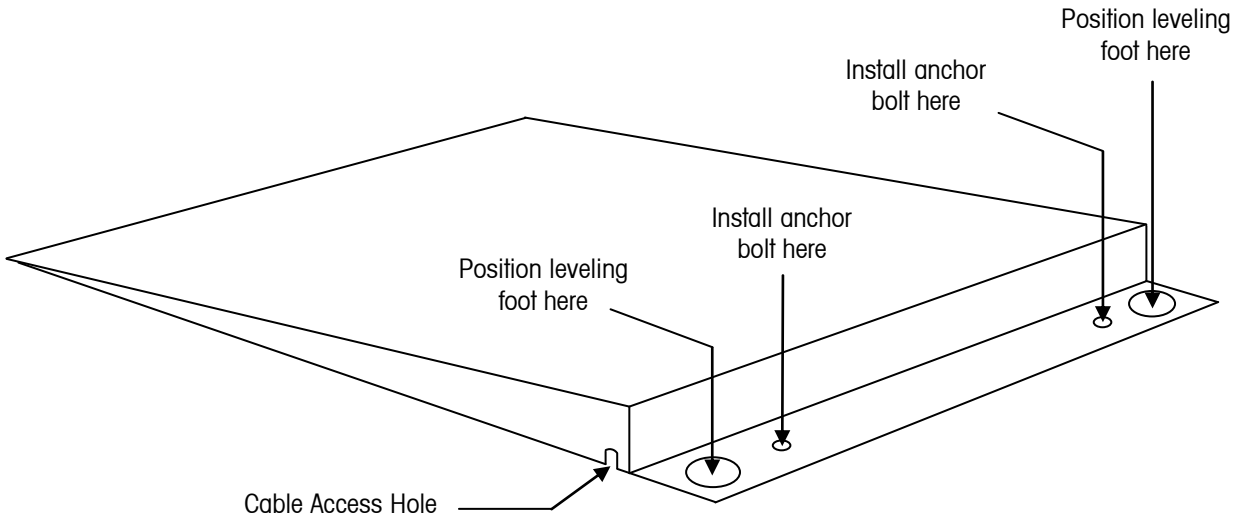
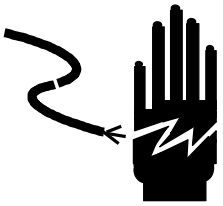


Figure 3-4: Ramp Installation

If you will be installing a second ramp, lift the scale and position the large holes in the ramp's flange under the leveling feet on the opposite side of the scale. Then move the scale out of the way. Drill bolt holes, install anchor bolts, and then lower the scale carefully so that its leveling feet fit inside the large holes in the ramp flanges.

4 Calibration

Shift Adjust



⚠ WARNING

PERMIT ONLY QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS, AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

When you shift adjust a scale, you are adjusting the output voltage (signal) of each load cell so that all load cells in the system produce a consistent signal. A correctly adjusted scale will give the same weight reading no matter where on the platform you place a test weight. Each floor scale is shift adjusted at the factory. For a new installation, the only adjustment that should be needed is minor load cell trimming.

After the scale has been installed, check all mechanical parts to make sure that they work properly. The platform should be level, and the scale should not rock. Then check the scale's repeatability by placing a test weight on the same location on the platform several times to make sure that you get the same weight reading each time.

Analog Junction Box Shift Adjustment

After verifying the scale's repeatability, check the scale to make sure that it is shift adjusted properly:

1. Remove all weight from the scale platform, and zero the scale.
2. Place a test weight at the center of the platform and record the weight reading (we recommend using a test weight equal to 1/4 of the scale's rated capacity).
3. Figure 4-1 shows the locations (A, B, C, and D) for positioning test weights equal to 1/4 of the scale's rated capacity. Place the test weight at location A and record the weight reading. Then move the test weight to location B and record the weight reading. Continue until you have taken a weight reading at each of the four locations.

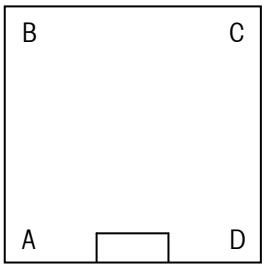


Figure 4-1: Test Weight Locations

4. If all weight readings are within the specified National Institute of Standards and Technology (NIST) Handbook 44 Scale Accuracy Requirements, there is no need to shift adjust the scale. If weight readings are out of tolerance, shift adjust the scale using either the on-load procedure or the off-load procedure.

Rotary Switches for Precision Junction Boxes

Load cell signals are adjusted using the rotary switches on the printed circuit board (PCB) inside the precision analog junction box (see Figure 4-2). There are two rotary switches for each load cell: the x16 switch is for coarse adjustments and the x1 switch is for fine adjustments. To make adjustments, use a 2-mm flat-blade screwdriver to turn a rotary switch so that the arrow points to the desired setting. Switch settings range from "0" (the lowest signal) to "F" (the highest signal).

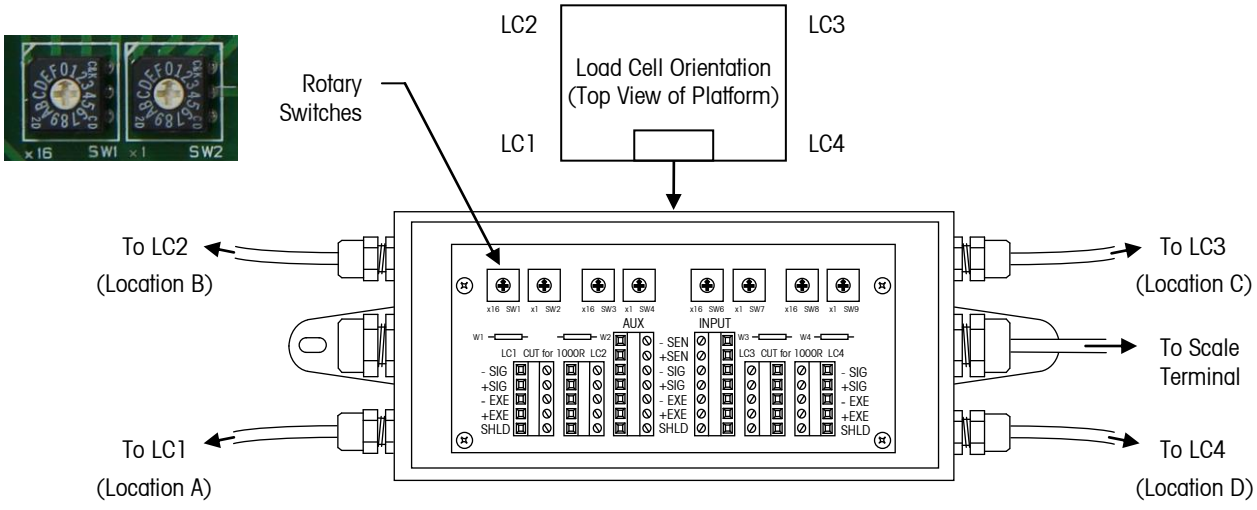


Figure 4-2: Analog Precision Junction Box

On-Load Procedure for Shift Adjustment

If you are replacing one or more load cells, refer to the Precision Junction Boxes Installation and Service Manual for complete instructions about on-load shift adjustment and the initial switch settings.

1. Remove all weight from the platform, and zero the scale.
2. Remove the junction box access plate and place it on the platform so that its weight will be included during the shift adjustment.
3. Open the junction box.
4. Place a test weight at the center of the platform and record the weight reading (we recommend using a test weight equal to 1/4 of the scale's rated capacity).
5. Place the test weight at location A. Adjust the rotary switches that correspond to that corner so that the weight reading is as close as possible to the weight reading for the center of the platform (from step 4).
6. Repeat step 5 for each of the remaining test weight locations, and adjust the rotary switches for those corners.
7. Repeat steps 1 to 6 until no further adjustments are needed.
8. Replace the junction box cover and secure the access plate to the platform.

Off-Load Procedure for Shift Adjustment

This procedure requires access to a computer that is equipped with the InSite® configuration tool. Refer to the Precision Junction Boxes Installation and Service Manual for complete instructions about off-load shift adjustment and the values that need to be entered on the InSite® software screens.

Scale Calibration

METTLER TOLEDO recommends calibrating the scale using test weights equal to the scale's capacity. Follow the calibration instructions in the manual provided with the scale terminal.

5 Routine Care and Maintenance

General

Once the scale has been installed, have an authorized METTLER TOLEDO representative inspect and calibrate it periodically. If the scale is used for legal-for-trade purposes, consult the local weights and measures authorities for minimum inspection requirements. Contact your local authorized METTLER TOLEDO service representative for information about periodic inspection and calibration services.

Site Inspection

Make sure that the scale site remains in good condition. Check for alterations in the surrounding floor, excessive vibrations, and possible overloading conditions.

Platform Inspection

During periodic inspections of the scale, check the following:

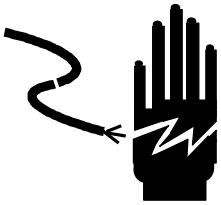
1. Make sure there are no unusual wear points, paths, or marks on the weighing platform.
2. Make sure the junction box cover is properly sealed and all cable connectors are tight against the enclosure.
3. Make sure there is no moisture or foreign material around or inside the junction box assembly.
4. Make sure the instrument cable is not damaged or binding the scale.
5. Make sure there is no debris or material built up under or around the platform that could prevent the platform from moving freely.
6. Visually inspect the load cells and leveling feet for signs of unusual wear.
7. Check repeatability and shift of the scale.

6 Troubleshooting

General

If the scale does not operate properly, find out as much about the problem as possible. Try to determine whether the problem is constant or intermittent. Mechanical and electrical influences can cause malfunctions, so be patient and use sound logic when troubleshooting.

When troubleshooting a floor scale, examine the scale's physical location. Check for the presence of water, corrosive materials, unlevel floors, high vibrations, air currents, or physical damage to the scale platform or frame. Also check the instrument cable for damage, and check all connections for loose or improper wiring.



⚠ WARNING

PERMIT ONLY QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS, AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

⚠ CAUTION

BEFORE CONNECTING/DISCONNECTING ANY INTERNAL ELECTRONIC COMPONENTS OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT, ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN BODILY HARM OR DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT.

Isolate the Problem

Determine whether the problem is in the scale or the terminal.

1. Remove power from the system, and then disconnect the terminal from the scale.
2. Connect the terminal to a load cell simulator (analog simulator available from METTLER TOLEDO).
3. Reapply power and test the terminal. If the problem persists, consult the terminal manual for further troubleshooting assistance.
4. If the problem is NOT present with the load cell simulator attached to the terminal, remove power, disconnect the simulator, and reconnect the scale. If the problem persists, continue troubleshooting the scale.

Check Wiring

1. Remove power from the system.
2. Remove the junction box access plate from the scale platform.
3. Remove the cover from the junction box and check the interior for moisture and foreign material.
4. Make sure that all wiring connections are tight and that no insulation material is touching the terminal contacts.
5. Check all cable connections to make sure they are wired correctly. The wiring color codes are given in Table 6-1:

Load Cell Wiring		**Instrument Cable Wiring***	
Function	**Color**	**Function**	**Color**
-Sense	Not Used	-Sense	Red
+Sense	Not Used	+Sense	Yellow
-Signal	Red	-Signal	Black
+Signal	White	+Signal	Green
-Excitation	Black	-Excitation	Blue
+Excitation	Green	+Excitation	White
Shield	Yellow	Shield	Orange
*Based on METTLER TOLEDO cable number 510624370 (61006641)			

Table 6-1: Load Cell Wiring Color Codes

6. Check all cable connectors and cord grip caps on the junction box.
7. Tighten any loose connectors.

Check Load Cells

1. Remove power from the system. Fully disconnect each load cell and check for proper input/output resistances (see Table 6-2).

NOTE: The information in this section is for 2-mV/V load cells.

Measuring Points	Resistance
+Exc (Green) to -Exc (Black)	374-394 ohms
+Sig (White) to -Sig (Red)	348-352 ohms

Table 6-2: Load Cell Measuring Points

2. If resistance is within specification, perform a shorted-signal symmetry test.
   - Short the signal leads together and place one multimeter lead on the shorted signals and one lead on the +Excitation wire. Note the resistance value.
   - Remove the lead from the +Excitation wire and place it on the -Excitation wire. The two resistance values should be approximately equal.
3. If the load cells pass the shorted-signal test, reconnect them and reapply power to the scale. Confirm that the proper excitation voltage is reaching the load cells by placing multimeter leads on the excitation positions of each load cell terminal.
4. If proper excitation voltage is reaching the load cells, check the output signal from each cell by disconnecting the signal leads and measuring voltage output. If one cell has a particularly high or low dead-load output, it is suspect. The maximum output possible from any cell is 30 mV at 15 VDC excitation and loaded to gross capacity.
5. If any load cell has an unusual signal, remove all load from that cell by raising the platform.

NOTE: Remove signal leads from terminals to measure output.

   - With the power on, measure the output from the suspect load cell. The no-load zero output should be ± 1.5% of the full scale output. For example, if the excitation voltage is 15 VDC, then the full scale output would be 30 mV and the no-load zero output should be within ± 0.45 mV.
6. If a load cell fails any of the above tests, replace it.

Check Mechanical Components

Because the floor scale design is so simple, there are only a few mechanical components to troubleshoot. Make sure that the platform can move freely and that there is clearance between the loading end of each load cell and the bottom of the deck. Check the following:

1. The platform should be level and the scale should not rock.
2. Check the load cells for damage. Replace any load cells that are damaged.
3. Check the leveling feet for unusual wear. Replace any leveling feet that are unevenly worn.
4. Inspect the platform and frame for physical damage. Replace any platform or frame that is bent or has broken welds.
5. The mounting surfaces of the load cells and platform should be free of grease and other debris.
6. Verify that the load cell overload stop gap is set properly:

Load Cell Capacity	Overload Stop Gap
500 lb (220 kg)	0.012" to 0.016"
1,250 lb (550 kg)	0.014" to 0.018"
2,500 lb (1,100 kg)	0.018" to 0.023"

Load Cell Replacement

1. Remove power from the scale terminal and disconnect the instrument cable.
2. Remove the access plate from the platform to gain access to the junction box. Remove the junction box cover and locate the defective load cell terminal.
3. Disconnect the defective load cell cable from its terminal on the summing PCB.
4. Loosen the cable connector on the junction box and remove the cable from the enclosure.

NOTE: The instrument cable may need to be removed from the junction box to allow the platform to be moved.

5. Carefully position the platform on a stable surface that allows access to the defective load cell and cable, as well as offering protection to the other load cells during disassembly.
6. Remove the corner guard at the corner of the scale where the defective load cell is located.
7. Attach a string to the end of the defective load cell's cable. The string should be long enough and strong enough to pull the new load cell's cable through the platform structure.

NOTE: If the load cell is mounted with 1/2-13 UNC socket-head cap screws, use a 3/8" hex Allen socket wrench to remove the screws.

8. Remove the two 1/2-13 UNC screws that mount the load cell to the underside of the scale platform (see Figure 6-1). Keep the screws for installing the new load cell. Then lift the load cell from the mounting surface.

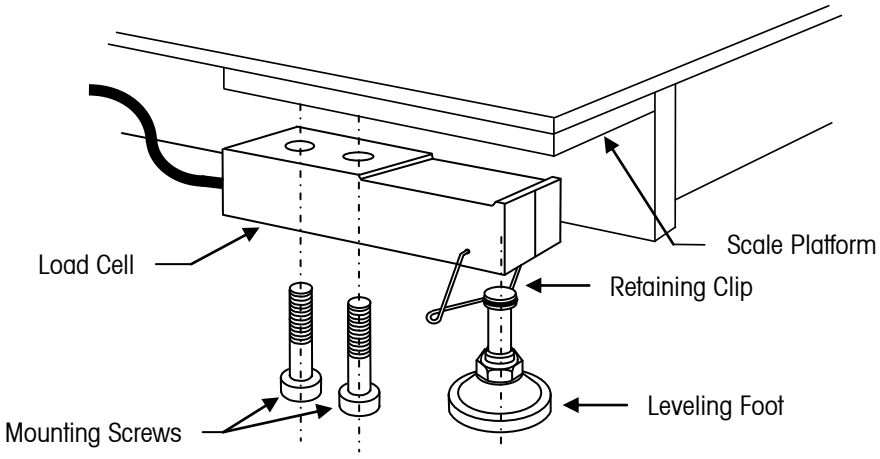


Figure 6-1: Load Cell and Leveling Foot Assembly (Corner Guard Removed)

9. Carefully pull the defective load cell's cable through the platform while feeding the string in at the junction box opening. Once the string is at the load cell location, detach it from the load cell cable.
10. Remove the leveling foot from the defective load cell. You will need to pull on one side of the retaining clip to rotate and release the foot. Install the foot in the new load cell. To install the foot, shift the retaining clip to one side of the load cell and insert the foot into the loading hole at an angle. Rotate the foot until it is fully installed.
11. Attach the new load cell's cable to the pulling string and carefully thread it through the platform into the junction box opening. Coil any excess cable and store it within the platform's side channel.

NOTE: Make sure load cell and platform mounting surfaces are free of grease and other foreign materials.

12. Secure the new load cell to the platform. Apply an anti-seize compound such as Never-Seez to the threads of the mounting screws and tighten them with a calibrated torque wrench (75 ft-lb for stainless steel hexagonal-head screws and 100 ft-lb for Grade 8 socket-head cap screws).
13. Verify that the load cell overload stop gap is set properly:

Load Cell Capacity	Overload Stop Gap
500 lb (220 kg)	0.012" to 0.016"
1,250 lb (550 kg)	0.014" to 0.018"
2,500 lb (1,100 kg)	0.018" to 0.023"

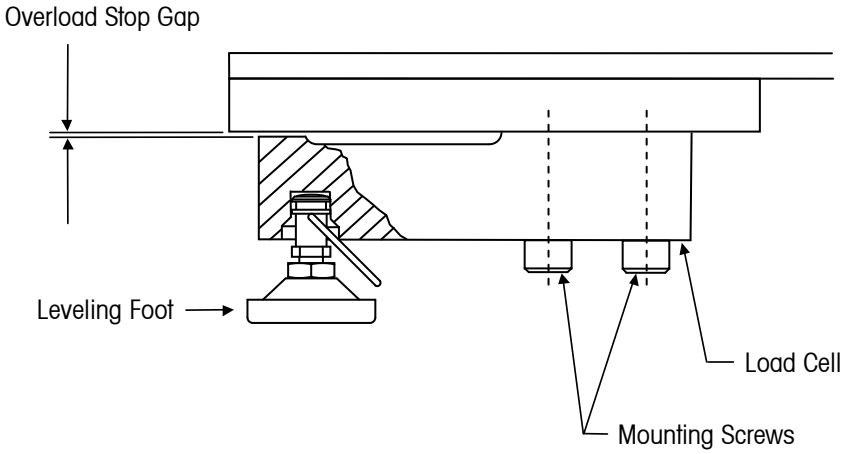


Figure 6-2: Load Cell Installation

14. Replace the corner guard.
15. Thread the load cell cable through the connector on the junction box. When enough cable is inside the box, tighten the connector.
16. Wire the new load cell cable to the proper terminal on the PCB according to the wiring codes shown in Chapter 3.
17. Reconnect the instrument cable and power-up the terminal. Perform a shift adjust and recalibrate the scale.

NOTE: It might be necessary to apply a small amount of lubricant to the cable so that it passes easily through the double-hole cord grip.

7 Service Parts

PFA564/PFA569

Refer to Tables 7-1 and 7-2 when ordering parts for a PFA564/PFA569 floor scale or for Model 22564XXXXX-A.

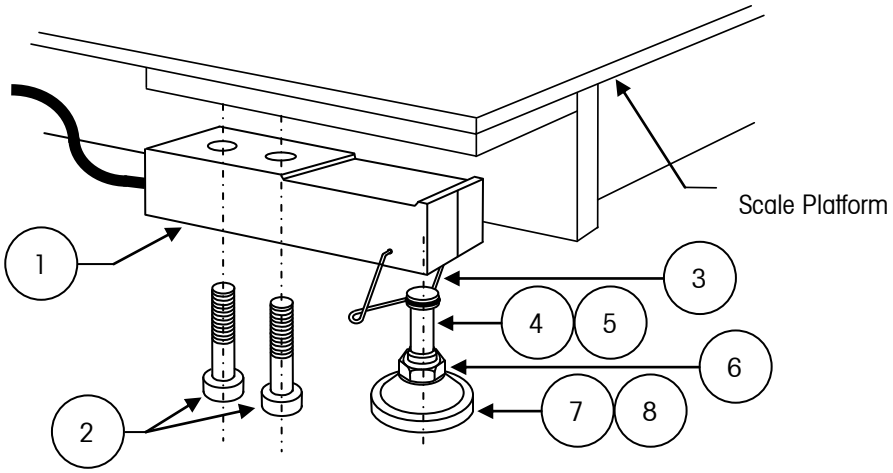


Figure 7-1: Load Cell and Leveling Foot Assembly

Ref. No.	Trade Name	Item Number	Description	Qty.
1	--	30129604	0745A Load Cell, 500 lb / 220 kg, 3-meter cable	4
	--	30091046	0745A Load Cell, 500 lb / 220 kg, 5-meter cable (60x84 scales)	
	--	30129606	0745A Load Cell, 1,250 lb / 550 kg, 3-meter cable	
	--	30091050	0745A Load Cell, 1,250 lb / 550 kg, 5-meter cable (60x84 scales)	
	--	30129608	0745A Load Cell, 2,500 lb / 1.1t, 3-meter cable	
	--	30091054	0745A Load Cell, 2,500 lb / 1.1t, 5-meter cable (60x84 scales)	
	--	30039031	0745A Load Cell, 5,000 lb / 2.2t, 3-meter cable	
	--	30039033	0745A Load Cell, 5,000 lb / 2.2t, 5-meter cable (60x84 scales)	
2	TN800646	68002150	1/2-13 Hex Head Cap Screw x 1.75 inches, Stainless Steel	8
	TN800647	68002018	1/2-13 Socket Head Cap Screw x 1.75 inches, Black Oxide	
	TN800649	68004368	1/2-13 Hex Head Cap Screw x 2 inches, Stainless Steel (5K cells)	
	TN800650	68004369	1/2-13 Socket Head Cap Screw x 2 inches, Black Oxide (5K cells)	
3	TN208192	61044842	Retaining Clip	4
4	TN207059	61045801	Rocker Foot	4
5	MZ0909000005	68000587	O-Ring	4
6	MZ0901020108	61037905	Hex Jam Nut, M12 x 1.75	4
7	TN207060	61085866	Rocker Foot Base	4
8	T208934	61045759	Rubber Pad	4

Table 7-1: Load Cell and Leveling Foot Assembly

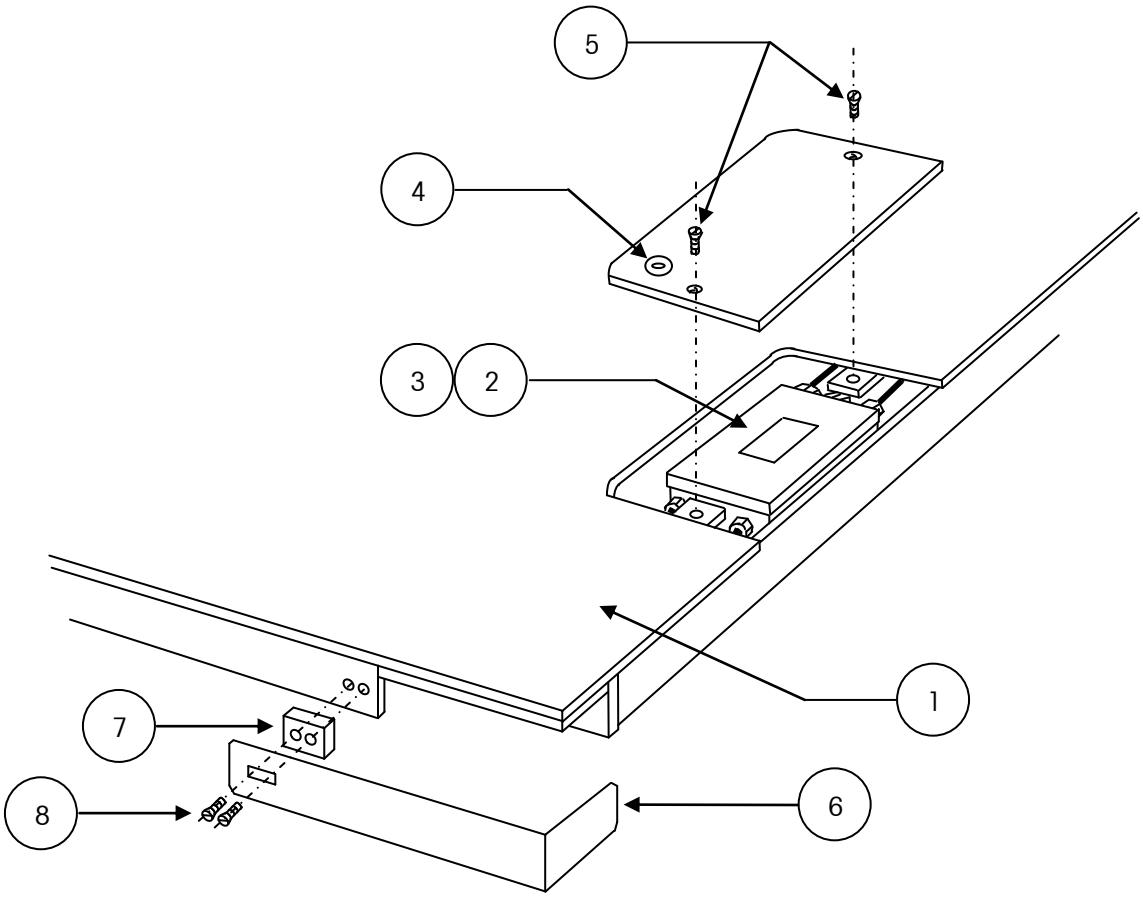


Figure 7-2: Platform and Junction Box Assembly

Ref. No.	Trade Name	Item Number	Description	Qty.
1	TC207096-MT-56	61082493	Platform, 36x36 inches, Carbon Steel, Tread Plate (1K, 2.5K, 5K)	1
	TC207097-MT-56	61082501	Platform, 48x48 inches, Carbon Steel, Tread Plate (1K, 2.5K, 5K)	
	TC207102-MT-56	61082524	Platform, 48x48 inches, Carbon Steel, Tread Plate (10K)	
	TC207154-MT-56	61082554	Platform, 48x60 inches, Carbon Steel, Tread Plate (1K, 2.5K, 5K)	
	TC207103-MT-56	61082530	Platform, 48x60 inches, Carbon Steel, Tread Plate (10K)	
	TC207100-MT-56	61042553	Platform, 60x60 inches, Carbon Steel, Tread Plate (1K, 2.5K, 5K)	
	TC207105-MT-56	61082541	Platform, 60x60 inches, Carbon Steel, Tread Plate (10K)	
	TC207099-MT-56	61082511	Platform, 48x72 inches, Carbon Steel, Tread Plate (1K, 2.5K, 5K)	
	TC207104-MT-56	61082536	Platform, 48x72 inches, Carbon Steel, Tread Plate (10K)	
	TC207155-MT-56	61082560	Platform, 60x84 inches, Carbon Steel, Tread Plate (1K, 2.5K, 5K)	
	TC207106-MT-56	61082546	Platform, 60x84 inches, Carbon Steel, Tread Plate (10K)	
	TC207096-SS-56	61082495	Platform, 36x36 inches, Stainless Steel, Smooth Plate (1K, 2.5K, 5K)	
	TC207097-SS-56	61082503	Platform, 48x48 inches, Stainless Steel, Smooth Plate (1K, 2.5K, 5K)	
	TC207102-SS-56	61082526	Platform, 48x48 inches, Stainless Steel, Smooth Plate (10K)	
	TC207154-SS-56	61082556	Platform, 48x60 inches, Stainless Steel, Smooth Plate (1K, 2.5K, 5K)	
	TC207103-SS-56	61082532	Platform, 48x60 inches, Stainless Steel, Smooth Plate (10K)	
	TC207100-SS-56	61082518	Platform, 60x60 inches, Stainless Steel, Smooth Plate (1K, 2.5K, 5K)	
	TC207105-SS-56	61082543	Platform, 60x60 inches, Stainless Steel, Smooth Plate (10K)	
	TC207099-SS-56	61082513	Platform, 48x72 inches, Stainless Steel, Smooth Plate (1K, 2.5K, 5K)	
	TC207104-SS-56	61082537	Platform, 48x72 inches, Stainless Steel, Smooth Plate (10K)	
	TC207155-SS-56	61082562	Platform, 60x84 inches, Stainless Steel, Smooth Plate (1K, 2.5K, 5K)	
	TC207106-SS-56	61082548	Platform, 60x84 inches, Stainless Steel, Smooth Plate (10K)	
2	--	30206108	Precision Analog Junction Box Assembly Includes: Analog PCB (30206064) TA800218 Desiccant Bag (68004199)	1
3	MZ0901010379	61024581	1/4-20 Phillips Head Screw x 1/4 inch long, Stainless Steel	2
4	TN206847	61045886	Circular Bubble Level	1
5	MZ0901010035	68004027	3/8-16 Flat Head Screw x 3/4 inch long, Stainless Steel	2
6	TN207225-SSE	61042792	Corner Guard	4
7	TN207223-SSE	61042791	Spacer	4
8	MZ0901010667	61072733	1/4-20 Flat Head Screw x 0.75 inches long, Stainless Steel	8
--	510624370	61006641	Cable, 24 gauge, 25 feet	--

Table 7-2: Platform and Junction Box Assembly

Model 22563XXXXX-A

Refer to Tables 7-3 and 7-4 when ordering parts for Model 22563XXXXX-A.

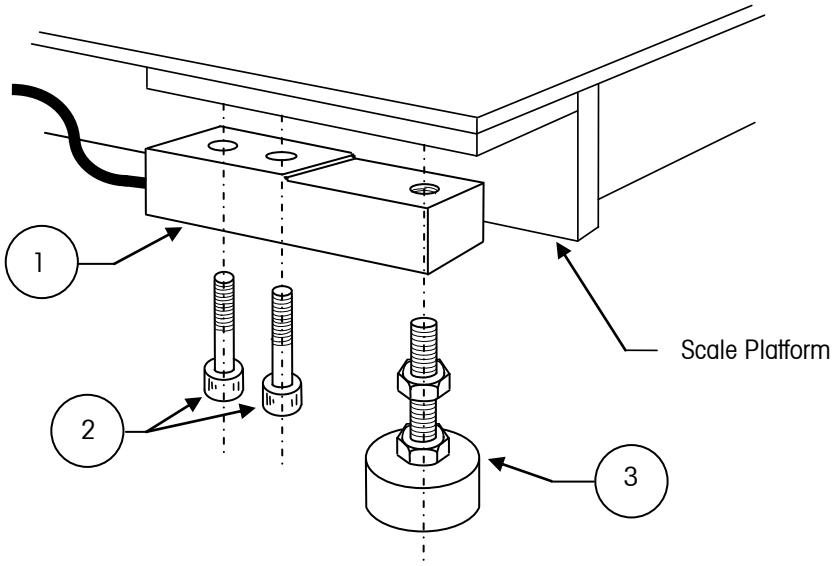


Figure 7-3: Load Cell and Leveling Foot Assembly (22563XXXXX-A)

Ref. No.	Trade Name	Item Number	Description	Qty.
1	TB601015-008	61037080	Model 793 Load Cell, 1,000 lb, 8-foot cable	4
	TB601015-020	61037530	Model 793 Load Cell, 1,000 lb, 20-foot cable (60x84 scales)	
	TB601016-008	61037253	Model 793 Load Cell, 2,500 lb, 8-foot cable	
	TB601016-020	61038121	Model 793 Load Cell, 2,500 lb, 20-foot cable (60x84 scales)	
	TB601018-008	--	Model 793 Load Cell, 5,000 lb, 8-foot cable	
	TB601018-020	61042030	Model 793 Load Cell, 5,000 lb, 20-foot cable (60x84 scales)	
2	TN800647	68002018	1/2-13 Socket Head Cap Screw x 1.75 inches long, Black Oxide	8
	TN800648	68002019	1/2-13 Socket Head Cap Screw x 1.75 inches long, Stainless Steel	
3	TN206043-SS	61038488	Leveling Foot, Stainless Steel	4

Table 7-3: Load Cell and Leveling Foot Assembly (22563XXXXX-A)

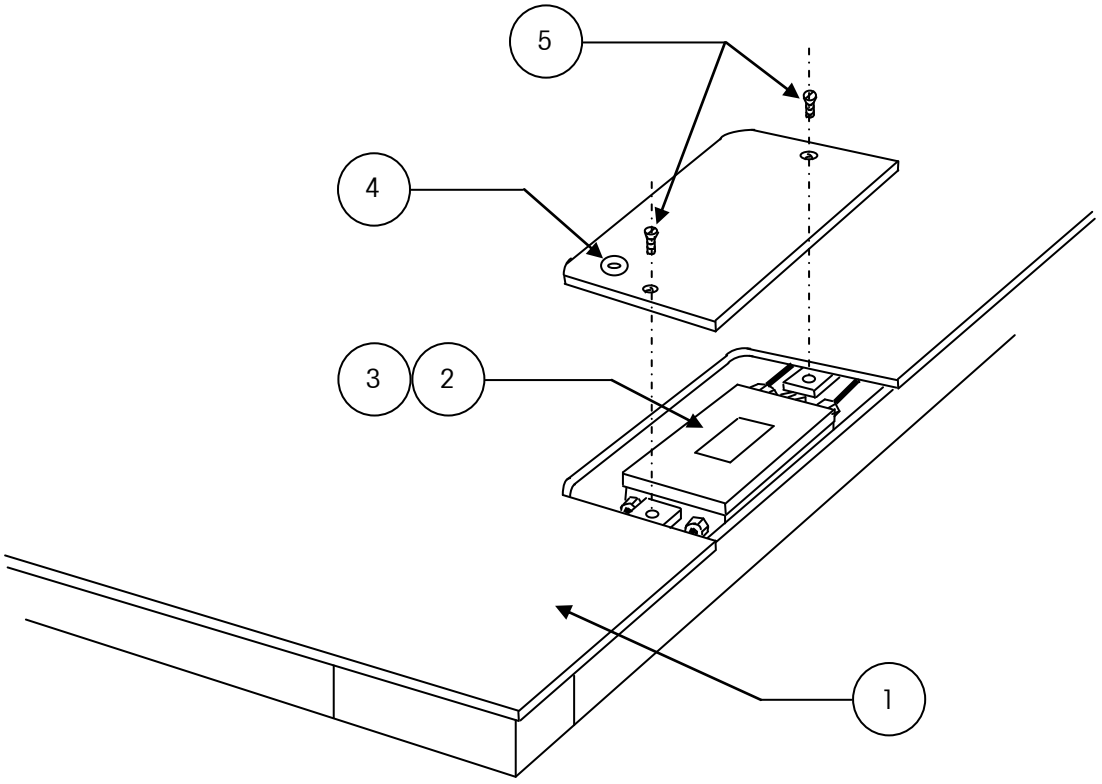


Figure 7-4: Platform and Junction Box Assembly (22563XXXXX-A)

Ref. No.	Trade Name	Item Number	Description	Qty.
1	TC205104-1	--	Platform, 36x36 inches, Carbon Steel (2.5K and 6K)	1
	TC205105-1	--	Platform, 48x48 inches, Carbon Steel (2.5K and 6K)	
	TC205106-1	--	Platform, 48x48 inches, Carbon Steel (10K)	
	TC205107-1	--	Platform, 48x60 inches, Carbon Steel (2.5K and 6K)	
	TC205108-1	--	Platform, 48x60 inches, Carbon Steel (10K)	
	TC205109-1	--	Platform, 60x60 inches, Carbon Steel (2.5K and 6K)	
	TC205110-1	--	Platform, 60x60 inches, Carbon Steel (10K)	
	TC205111-1	--	Platform, 48x72 inches, Carbon Steel (2.5K and 6K)	
	TC205112-1	--	Platform, 48x72 inches, Carbon Steel (10K)	
	TC205113-1	--	Platform, 60x84 inches, Carbon Steel (2.5K and 6K)	
	TC205114-1	--	Platform, 60x84 inches, Carbon Steel (10K)	
	TC205115-1	--	Platform, 36x36 inches, Stainless Steel (2.5K and 6K)	
	TC205116-1	--	Platform, 48x48 inches, Stainless Steel (2.5K and 6K)	
	TC205117-1	--	Platform, 48x48 inches, Stainless Steel (10K)	
	TC205118-1	--	Platform, 48x60 inches, Stainless Steel (2.5K and 6K)	
	TC205119-1	--	Platform, 48x60 inches, Stainless Steel (10K)	
	TC205120-1	--	Platform, 60x60 inches, Stainless Steel (2.5K and 6K)	
	TC205121-1	--	Platform, 60x60 inches, Stainless Steel (10K)	
	TC205122-1	--	Platform, 48x72 inches, Stainless Steel (2.5K and 6K)	
	TC205123-1	--	Platform, 48x72 inches, Stainless Steel (10K)	
	TC205124-1	--	Platform, 60x84 inches, Stainless Steel (2.5K and 6K)	
	TC205125-1	--	Platform, 60x84 inches, Stainless Steel (10K)	
2	TB100481	61005973	Analog Junction Box Assembly Consists of: *13640300A Analog PCB TA800218 Desiccant Bag (68004199)	1
3	MZ0901010379	61024581	1/4-20 Phillips Head Screw x 1/4 inch long, Stainless Steel	4
4	TN201817	--	Circular Bubble Level	1
5	MZ0901010035	68004027	3/8-16 Flat Head Screw x 3/4 inch long, Stainless Steel	2

* May have a letter prefix.

Table 7-4: Platform and Junction Box Assembly (22563XXXXX-A)

Model 22562XXXXX-A

Model 22562XXXXX-A uses the same parts as 22563XXXXX-A, except for the leveling foot (see Table 7-5).

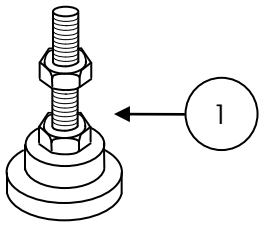


Figure 7-5: Leveling Foot (Model 22562XXXXX-A)

Ref. No.	Trade Name	Item Number	Description	Qty.
1	TN203980	--	Leveling Foot, Zinc Plated	4
	TN203980-SS	61037152	Leveling Foot, Stainless Steel	

Table 7-5: Leveling Foot (22562XXXXX-A)

Model 22561XXXXX-A

Replacement parts for Model 22561XXXXX-A are listed in Table 7-6.

NOTE: Reference drawing TB203366).

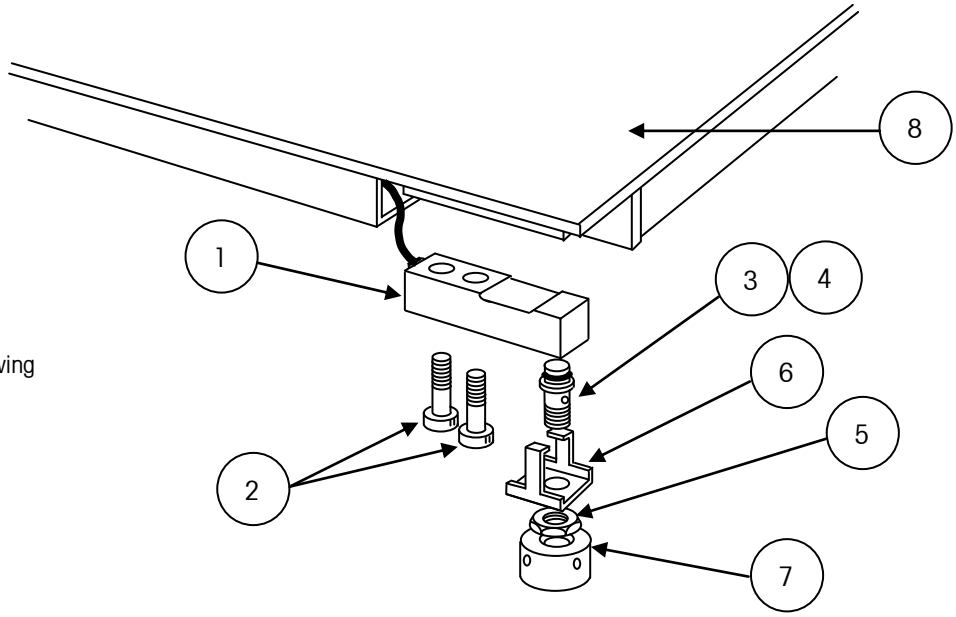


Figure 7-6: Load Cell and Leveling Foot Assembly (Model 22561XXXXX-A)

Ref. No.	Trade Name	Item Number	Description	Qty.
1	TB600363-1	64052908	Model 745 Load Cell, 1,250 lb (2 mV/V)	4
	TB600342-1	64052915	Model 745 Load Cell, 2,500 lb (2 mV/V)	
	TB600343-1	64052922	Model 745 Load Cell, 5,000 lb (2 mV/V)	
2	TN800647	68002018	1/2-13 Socket Head Screw x 1.75 inches long, Black Oxide	8
	TN800650	68004369	1/2-13 Socket Head Screw x 2 inches long, Black Oxide	
	TN800646	68002150	1/2-13 Hex. Head Screw x 1.75 inches long, Stainless Steel	
	TN800649	68004368	1/2-13 Hex. Head Screw x 2 inches long, Stainless Steel	
3	TA203345	68002451	Mounting Foot Load Pin (3K and 6K)	4
	TA203346	69033799	Mounting Foot Load Pin (10K)	
4	MZ0909000005	68000587	O-Ring	4
5	MZ0901020087	68004057	Hex. Jam Nut, 7/16-20, Stainless Steel	4
6	TA203104	68002452	Mounting Foot Retainer Clip (3K and 6K)	4
	TA203347	68004165	Mounting Foot Retainer Clip (10K)	
7	TN203103	68002438	Mounting Foot Base	4
8	TB203359-1	--	Platform, 36x36 inches, Carbon Steel (3K and 6K)	1
	TB203095	--	Platform, 48x48 inches, Carbon Steel (3K and 6K)	
	TB203417-1	--	Platform, 48x48 inches, Carbon Steel (10K)	
	TB203096	--	Platform, 48x60 inches, Carbon Steel (3K and 6K)	
	TB203418-1	--	Platform, 48x60 inches, Carbon Steel (10K)	
	TB203097	--	Platform, 60x60 inches, Carbon Steel (3K and 6K)	
	TB203331-1	--	Platform, 60x60 inches, Carbon Steel (10K)	
	TB203419-1	--	Platform, 36x36 inches, Stainless Steel (3K and 6K)	
	TB203098	--	Platform, 48x48 inches, Stainless Steel (3K and 6K)	
	TB203420-1	--	Platform, 48x48 inches, Stainless Steel (10K)	
	TB203099	--	Platform, 48x60 inches, Stainless Steel (3K and 6K)	
	TB203421-1	--	Platform, 48x60 inches, Stainless Steel (10K)	
	TB203100	--	Platform, 60x60 inches, Stainless Steel (3K and 6K)	
	TB203422-1	--	Platform, 60x60 inches, Stainless Steel (10K)	

Table 7-6: Load Cell and Leveling Foot Assembly (Model 22561XXXXX-A)

8 Reference Material

Reference Drawings

Scale Capacity	General Dimensions	Wiring Diagram
1,000 lb, 2,500 lb, 5,000 lb, 10,000 lb	TB207177	TB100505

Recommended Spare Parts

For part numbers, refer to the service parts list (Chapter 7).

Quantity	Description
1	Load cell (capacity of cell required depends on scale capacity)
1	Junction box circuit board
1	Junction box desiccant bag

METTLER TOLEDO

Publication Suggestion Report

If you have suggestions concerning this publication, please complete this form and fax it to (614) 841-7295

Publication Name: PFA564/PFA569 Floor Scale Installation and Service Manual

Publication Part Number: 61070029 Publication Date: 1/15

PROBLEM(S) TYPE:	DESCRIBE PROBLEM(S):	*INTERNAL USE ONLY*
☐ Technical Accuracy	☐ Text ☐ Illustration	
☐ Completeness What information is missing?	☐ Procedure/Step ☐ Illustration ☐ Definition ☐ Example ☐ Guideline ☐ Feature ☐ Explanation ☐ Other (please explain below)	☐ *information in manual* ☐ *information not in manual*
☐ Clarity What is not clear?		
☐ Sequence What is not in the right order?		
☐ Other Comments Use another sheet for additional comments		

Your Name: _____ Location: _____

Phone Number: (_____) _____

Fax this completed form to METTLER TOLEDO at (614) 841-7295

METTLER TOLEDO
1900 Polaris Parkway
Columbus, Ohio 43240 USA

www.mt.com/support

P/N: 61070029

(1/15).04

61070029