



Installation Manual

Omnicell®

Model: 9102 FB



Amendment Record

Omnicell® 9102 FB

Installation Manual

DOCUMENT 51175

Manufactured by Fairbanks Scales Inc.

Created	08/2007	
Revision 0	08/2007	Preliminary Release
Revision 1	09/2007	Documentation Release
Revision 2	09/2007	Changed verbiage
Revision 3	10/2007	Updated size specifications
Revision 4	08/2016	minor text changes, new pics
Revision 5	01/2021	Updated load cell dimensions

Disclaimer

Every effort has been made to provide complete and accurate information in this manual. However, although this manual may include a specifically identified warranty notice for the product, Fairbanks Scales makes no representations or warranties with respect to the contents of this manual, and reserves the right to make changes to this manual without notice when and as improvements are made.

It is the responsibility of the requesting party to develop, maintain, install, and connect networking devices and general network connectivity as it applies to the originating party's network. No warranty or guarantee, expressed or implied, concerning the network, its design, its installation, or operational characteristics has been offered by Fairbanks Scales. Fairbanks Scales shall not be liable for any loss, damage, cost of repairs, incidental or consequential damages of any kind, whether or not based on express or implied warranty, contract, negligence, or strict liability arising in connection with the design, development, installation, or use of an intended network.

© Copyright 2021

This document contains proprietary information protected by copyright. All rights are reserved; no part of this manual may be reproduced, copied, translated or transmitted in any form or by any means without prior written permission of the manufacturer.

Table of Contents

SECTION 1: GENERAL INFORMATION	5
1.1. Description.....	5
1.2. Features	5
1.3. Applications	5
1.3.1. <i>Dimensions (In Inches).....</i>	<i>6</i>
1.3.2. <i>Wiring.....</i>	<i>6</i>
1.4. Specifications	7
SECTION 2: INSTALLATION.....	8
2.1. General Service Policies.....	8
2.1.1. <i>Phases of Installation</i>	<i>8</i>
2.1.2. <i>Conferring with Our Client</i>	<i>8</i>
2.1.3. <i>Pre-Installation Checklist.....</i>	<i>9</i>
2.1.4. <i>Unpacking</i>	<i>9</i>
2.1.5. <i>User's Responsibilities</i>	<i>10</i>
2.2. Installation.....	11
2.2.1. <i>Basic Assembly Steps.....</i>	<i>11</i>
2.2.2. <i>Omnicell Placement</i>	<i>12</i>
SECTION 3: PARTS.....	13
3.1. Omnicell® 9102 FB Complete Units.....	13
3.2. Load Cells	13
3.3. Omnicell 9102 FB Components.....	14
3.4. Parts Not Supplied	14

Section 1: General Information

1.1. DESCRIPTION

Fairbanks' Omnicell® 9102 FB Series is a single-ended beam weighing assembly. It is a cost-effective choice for medium-to-high capacity, outdoor, commercial and non-commercial weighing applications.

1.2. FEATURES

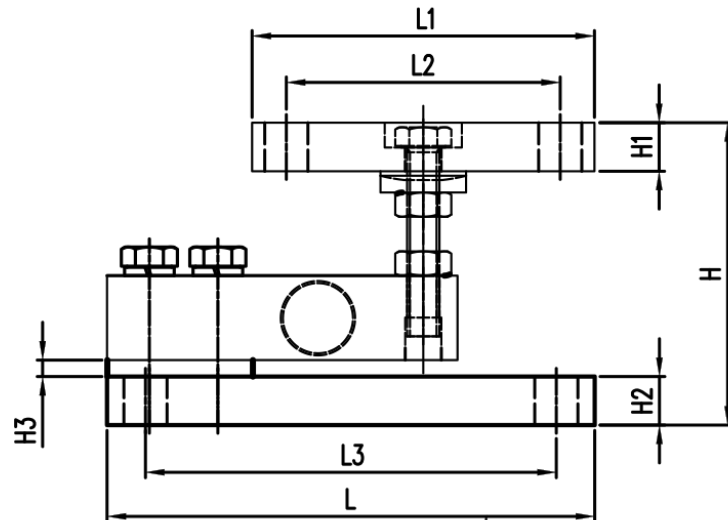
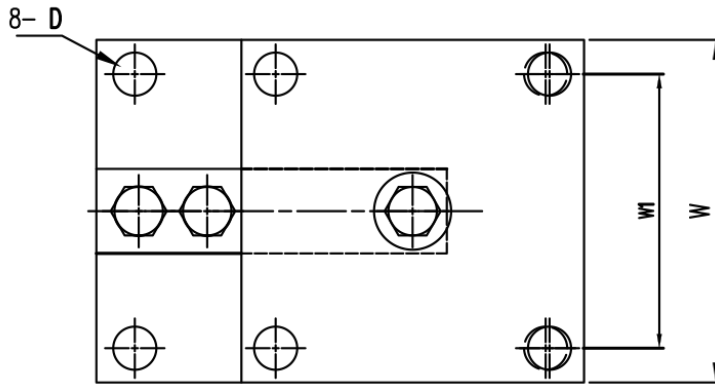
- **Medium Weight Ranges.**
- Designed for both **commercial and non-commercial applications**, not requiring extreme hostile protection.
- **1,000 to 10,000 lb** capacity models.
- **Integral height adjustment** on receiver plate for easy load balancing.
- Articulating mounting plate which accommodates non-planar misalignments of up to four degrees (4°).
- Commercially approved Stainless-Steel Load Cells.
- Mount constructed with **Stainless Steel**.
- Low profile design with integral height adjustment.
- Factory Mutual approved for hazardous applications.

1.3. APPLICATIONS

- Legal for Trade
- Tanks
- Bins
- Conveyor/In-Motion
- Mixing
- Blending
- Intrinsically Safe
- Hoppers
- Batching

1.3.1. Dimensions (In Inches)

CAPACITY	L	L1	L2	L3	H	H1	H2	H3	W	W1	D
250-5000SE lbs.	7.12	5.00	4.00	6.00	3.94-4.72	0.71	0.71	0.24	5.00	4.00	0.63
5,000-10,000 lbs.	8.50	5.00	4.00	7.00	5.12-5.91	1.02	1.02	0.24	5.00	4.00	0.63



1.3.2. Wiring

CABLE CODE	
Red	(+) Excitation
Black	(-) Excitation
Green	(+) Signal
White	(-) Signal

1.4. SPECIFICATIONS

Capacities	1,000, 1,000, 2,500, 5,000, and 10,000 lbs.
Mount Construction	Stainless Steel
Full Scale Output (FSO)	3.0mV/v \pm 0.25%
Combined Error (FSO)	\leq 0.03%
Non-Linearity (FSO)	\leq 0.03%
Hysteresis (FSO)	\leq 0.02%
Creep Error (20 min.)	\leq 0.03%
Compensated Temperature	14° to 104° F (-10° C to 40° C)
Operating Temperature	-4° to 140° F (-20° to 60° C)
Excitation Voltage	5-15 VDC
Mechanical Overload	<ul style="list-style-type: none"> • Safe = 150% • Ultimate = 300%
Sideload	Safe = 100%
Bridge Resistance	350 ohms nominal
Load Cell Construction	Stainless Steel 17-4 PH
Sealing	Environmental Steel
Cable	20 ft. Polyurethane
Protection	IP 66
Approvals	<ul style="list-style-type: none"> • Factory Mutual Approved • NTEP CC #12-022



Section 2: Installation

2.1. GENERAL SERVICE POLICIES

2.1.1. Phases of Installation

1. Verifying the application
2. Unpacking & equipment checkout
3. Installation & adjustments
4. Customer check-off and site readiness

2.1.2. Conferring with Our Client

- The lead tech must be prepared to recommend the arrangement of components which provide the most efficient layout, utilizing the equipment to the best possible advantage.
- The warranty policy must be explained and reviewed with the customer.

2.1.3. Pre-Installation Checklist

The following points should be checked and discussed with the **Area Sales Manager and/or customer**, if necessary, before the technician goes to the site and installs the equipment.

- ✓ Check the customer's application to make certain it is within the capabilities and design parameters of the equipment.
- ✓ If the installation process might disrupt normal business operations, tell the customer and ask that they make ample arrangements.
- ✓ Is properly grounded power available at the installation location?
- ✓ Be sure that the equipment operator(s) are available for training.
- ✓ The service technician must thoroughly review the installation procedures.
- ✓ The service technician reviews the recommended setup with the Area Sales Manager or Area Service Manager, and together they identify all necessary variations to satisfy the customer's particular application.



2.1.4. Unpacking

Follow these guidelines when unpacking all equipment:

- ✓ Check in all components and accessories according to the customer's order.
- ✓ Remove all components from their packing material, checking against the invoice that they are accounted for and not damaged.
 - *Advise the shipper immediately, if damage has occurred.*
 - *Order any parts necessary to replace those which have been damaged.*
 - *Keep the shipping container and packing material for future use.*
 - *Check the packing list.*
- ✓ Collect all necessary installation manuals for the equipment and accessories.
- ✓ Open the equipment and perform an inspection, making certain that all hardware, electrical connections and printed circuit assemblies are secure.
- ✓ Do not reinstall the cover if the final installation is to be performed after the pre-installation checkout.
- ✓ Do not locate near magnetic material or equipment/instruments which use magnets in their design.



2.1.5. User's Responsibilities

1. All electronic and mechanical calibrations and or adjustments required for making this equipment perform to accuracy and operational specifications are considered to be part of the installation.
 - They are included in the installation charge.
 - Only those charges which are incurred as a result of the equipment's inability to be adjusted or calibrated to performance specifications may be charged to warranty.
2. Absolutely no physical, electrical or program modifications other than selection of standard options and accessories are to be made to this equipment.
 - Electrical connections other than those specified may not be performed, and physical alterations (holes, etc.) are not allowed.



2.2. INSTALLATION

2.2.1. Basic Assembly Steps

1. **Raise the vessel** that is to be supported by the Omnicell® Assemblies.
2. Secure the Assembly by safely **placing blocks under the vessel** to the required height.
3. **Place each Assembly onto a level surface** under each support leg.
4. Set the Assemblies for the **correct load cell orientation** (*as shown on the following page*).
5. **Insert the four (4) bolts**, and then **fasten them loosely** to the support leg for each assembly.
 - **1/2-13 bolts** are used for all capacities.
6. **Mark the location** of the anchor bolt locations.
7. Slide the assembly back and **drill the anchor hole** locations.
8. Re-position the load cell assemblies, level, and **anchor all assemblies**.
9. **Lower the vessel** onto the top plate of each Omnicell® Assembly.
10. **Tighten the bolts**, securing the load plates to each support leg of the vessel.
11. Remove all cribbing blocks.
12. **Route the cables** to the junction box and indicator.
13. **Wire the Omnicell® Assemblies** according to the appropriate junction box and indicator service manual.

Before the installation is considered complete, the equipment is to be configured to meet or exceed any applicable weights and measures requirements.

2.2.2. Omnicell Placement

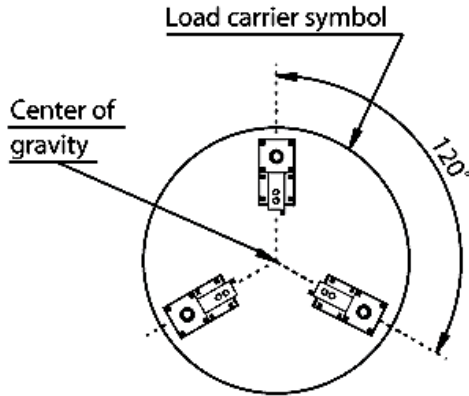


Figure 1

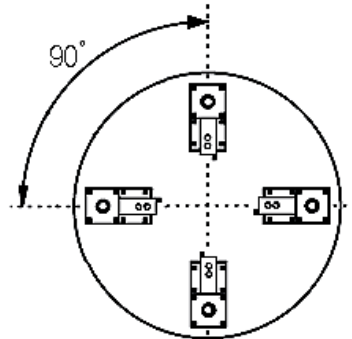


Figure 2

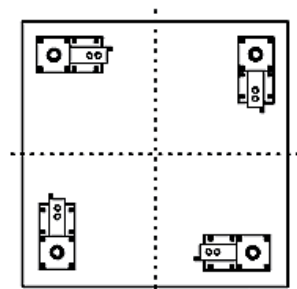


Figure 3

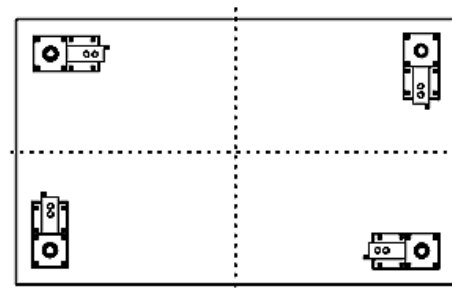


Figure 4

Follow these guidelines for installing Omnicell® Load Cells.

1. The loading points of the modules should be as far from one another as the structure allows.
2. When installing the square and rectangle Omnicell units, line up the **Base Plates** of the Load Cells with each other, and align them evenly from the end and the sides of the units.
3. When installing six Load Cells (*Figure 5*), **be extremely careful** to position the center Omnicells® to the same height as the outer Omnicells®.

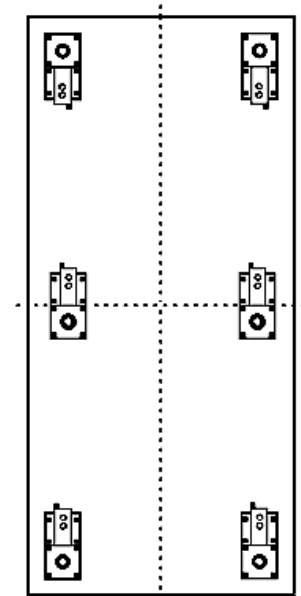


Figure 5

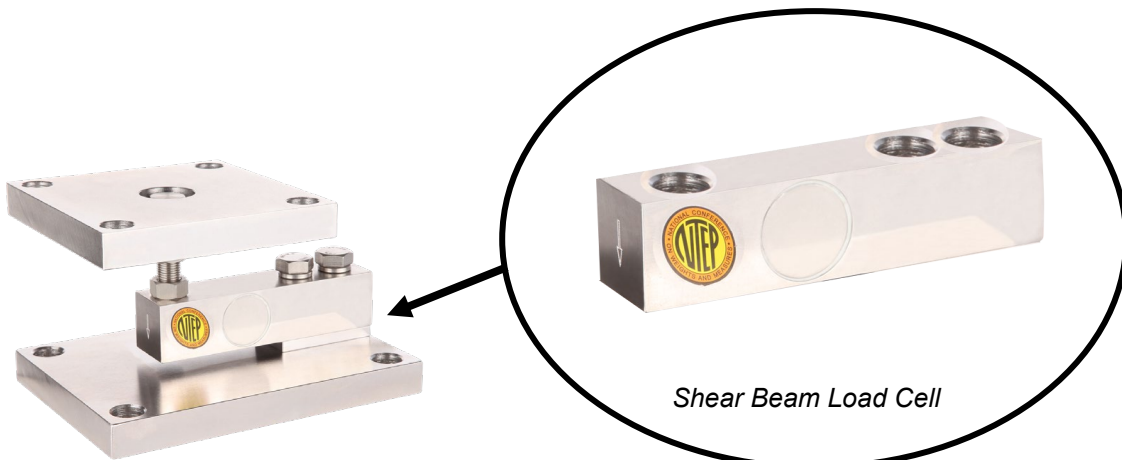
Section 3: Parts

3.1. OMNICELL® 9102 FB COMPLETE UNITS

Part No.	Description
27881	OmniceLL, w/ Fabricated SS Mount, SS Load Cell 1,000 lb. Capacity
27882	OmniceLL, w/ Fabricated SS Mount, SS Load Cell 1,500 lb. Capacity
27883	OmniceLL, w/ Fabricated SS Mount, SS Load Cell 2,500 lb. Capacity
27884	OmniceLL, w/ Fabricated SS Mount, SS Load Cell, 5,000 - SE Capacity
27885	OmniceLL, w/ Fabricated SS Mount, SS Load Cell, 10,000 Capacity

3.2. LOAD CELLS

Part No.	Description
27901	Stainless Steel Shear Beam Load Cell, 1,000 lb. Capacity
27902	Stainless Steel Shear Beam Load Cell, 1,500 lb. Capacity
27903	Stainless Steel Shear Beam Load Cell, 2,500 lb. Capacity
27904	Stainless Steel Shear Beam Load Cell, 5,000 - SE Capacity
27905	Stainless Steel Shear Beam Load Cell, 10,000 lb. Capacity



9102 FB Series Omnicell

Shear Beam Load Cell

3.3. OMNICELL 9102 FB COMPONENTS

Fairbanks P/N	Qty	Components
93648	1	9102 FB Mounting Ass'y (250 lbs to 5,000-SE)
93649	1	9102 FB Mounting Ass'y (10,000 lbs)

3.4. PARTS NOT SUPPLIED

Qty. Per Ass'y	Components
	Fastening Bolts for Vessel Attachment
4	<ul style="list-style-type: none"> ▪ 1/2 -13 UNC Bolts
6	<ul style="list-style-type: none"> ▪ 1/2 -13 UNC Anchor Bolts
4	<ul style="list-style-type: none"> ▪ 5/8-11 UNC Bolts (10,000 lb Capacity)
6	<ul style="list-style-type: none"> ▪ 5/8-11 UNC Anchor Bolts (10,000 lb Capacity)



Manufactured by Fairbanks Scales, Inc.

www.fairbanks.com

Omnicell®
Model: 9102 FB

Installation Manual 51175