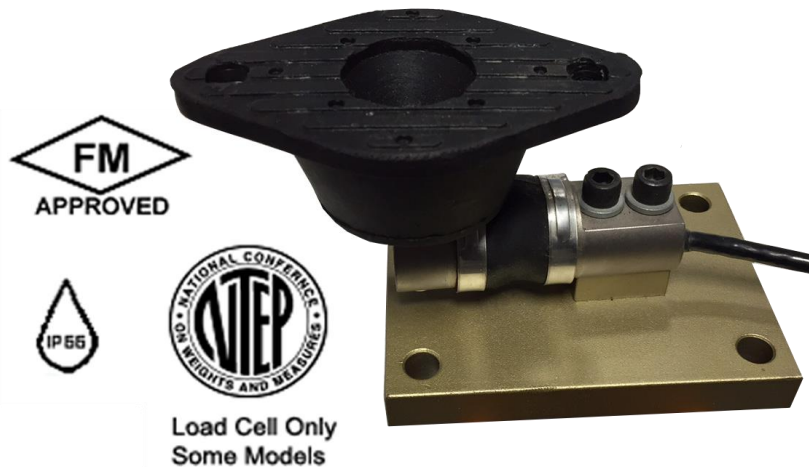




Omnicell

Model: 9101 FB



Amendment Record
Omnicell 9101 FB
DOCUMENT 51172

Manufactured by Fairbanks Scales Inc.
821 Locust Street
Kansas City, Missouri 64106

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Table of Contents

SECTION 1: GENERAL INFORMATION	6
Description.....	6
<i>Features</i>	6
<i>Applications</i>	6
<i>Dimensions (In Inches)</i>	7
<i>Wiring</i>	7
Specifications	8
SECTION 2: INSTALLATION.....	9
General Service Policies.....	9
<i>Phases of Installation</i>	9
<i>Conferring with Our Client</i>	9
<i>Pre-Installation Checklist</i>	10
<i>Unpacking</i>	10
<i>User's Responsibilities</i>	11
Installation	12
<i>Basic Assembly Steps</i>	12
<i>Load Cell Placement</i>	13
SECTION 3: PARTS.....	14
<i>Omnicell® 9101 FB Complete Units</i>	14
<i>Load Cells Only</i>	14
<i>Parts Not Supplied with Assembly</i>	15
<i>Assembly Units Without Load Cells</i>	15
APPENDIX I: OMNICELL CONFIGURATIONS	16

Section 1: General Information

DESCRIPTION

Fairbanks' Omnicell® 9101 FB Series is a single-ended beam weighing assembly. It is a cost-effective choice for low capacity, indoor, commercial and non-commercial weighing applications.

Features

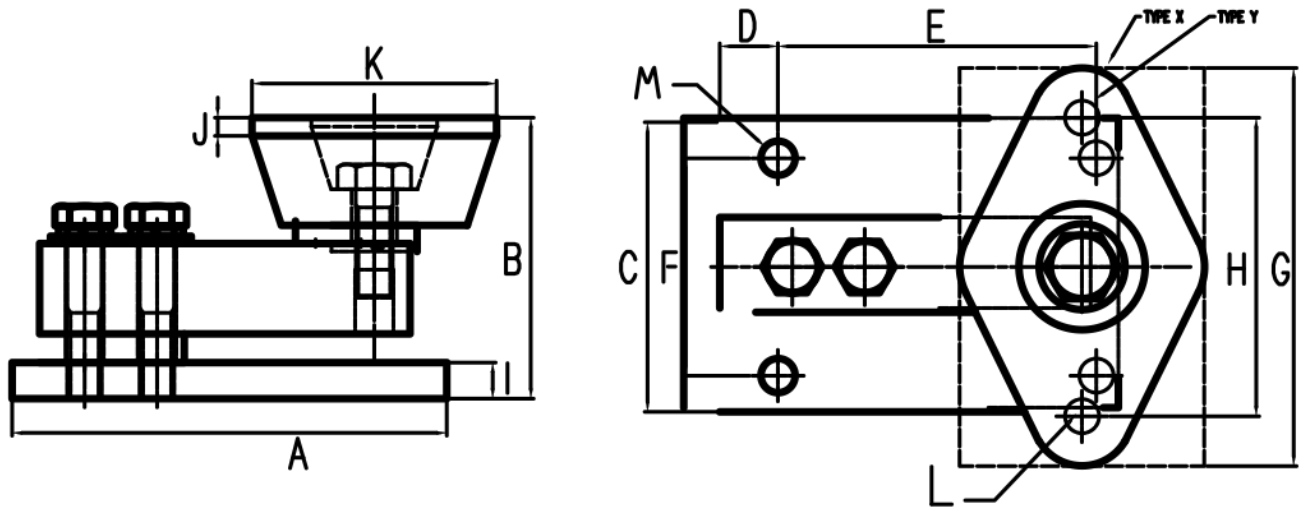
- Low-to-medium weight range Omnicells® — **100 to 2,500 lb capacity** models.
- Stainless steel mounting hardware.
- Low profile design.
- **Load Cell Types**
 - **Stainless Steel Load Cell** — 100 to 250 lb capacity models.
 - **Tool Steel Load Cell** — 500 to 2,500 lb capacity models.
- Environmentally protected load cells.
- **Mount Construction**
 - The top plate is made of neoprene, and it is an isolation/compression mount that provides for shock absorption, thermal expansion/contraction and compensates for minor misalignment.
 - The base plate is constructed from stainless steel to be extremely durable and to withstand corrosion.
- ***Custom capacities and cable lengths available.***

Applications

- Legal for Trade
- Low Capacity
- Intrinsically Safe
- Conveyor/In-Motion
- Batching
- Mixing
- Blending
- Bins
- Tanks
- Hoppers
- Vibratory Feeder
- Hazardous Conditions

Dimensions (In Inches)

CAPACITY	A	B	C	D	E	F	G	H	I	J	K	L	M	TYPE
25–250 lbs	4	3.13	3	0.37	3.25	2.25	3.88	3.00	0.50	0.22	2.38	0.38	0.34	Y
500 lbs	6	3.88	4	1.00	4.00	3.00	5.50	4.13	0.50	0.25	3.38	0.56	0.56	Y
1,000 lbs	6	4.00	4	1.00	4.00	3.00	5.13	4.13	0.50	0.13	3.00	0.56	0.56	X
2,500 lbs	6	4.00	4	1.00	4.00	3.00	6.25	5.00	0.50	0.38	4.62	0.56	0.56	X

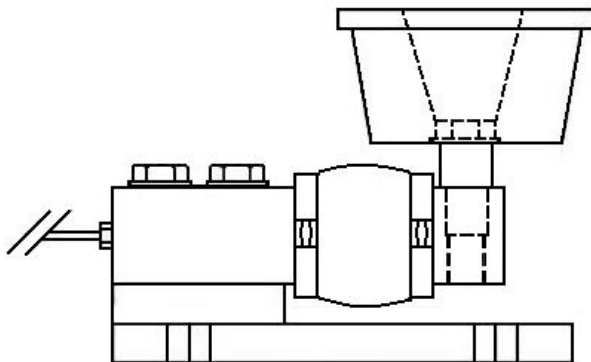


Wiring

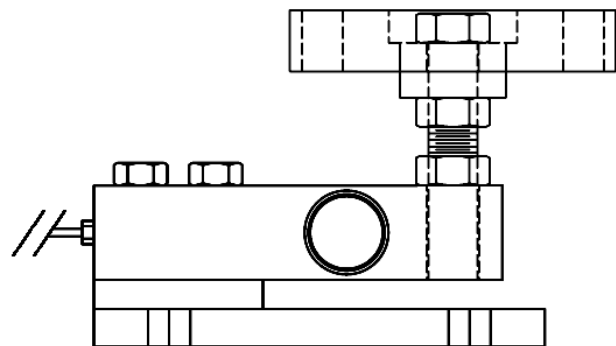
CABLE CODE 100-2500 LB	
Red	(+) Excitation
Black	(-) Excitation
Green	(+) Signal
White	(-) Signal

SPECIFICATIONS

Capacities	50, 75, 100, 150, 250, 500, 1,000 and 2,500 lbs.
Mount Construction	<ul style="list-style-type: none"> Stainless steel Base Plate Reinforced Neoprene Top Plate
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° – 60° C)
Excitation Voltage	5-15 VDC
Mechanical Overload	<ul style="list-style-type: none"> Safe = 150% Ultimate = 300%
Side-load	Safe = 100%
Reject Ratio	500:1
Bridge Resistance	350 ohms nominal
Load Cell Construction	<ul style="list-style-type: none"> Stainless Steel (100-250 Capacity) Alloy Tool Steel (500-2,500 Capacity)
Cable	20 ft. Polyurethane
Protection	IP 66
Approvals	<ul style="list-style-type: none"> Factory Mutual Approved NTEP CC #12-028 – Capacities 500 lbs. and greater



Omicell 9101 FB Bending Beam design with capacities equal to or less than 250 pounds



Omicell 9101 FB Shear Beam design with capacities greater than 250 pounds

Section 2: Installation

GENERAL SERVICE POLICIES

Phases of Installation

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

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.

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

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.



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.



User's Responsibilities

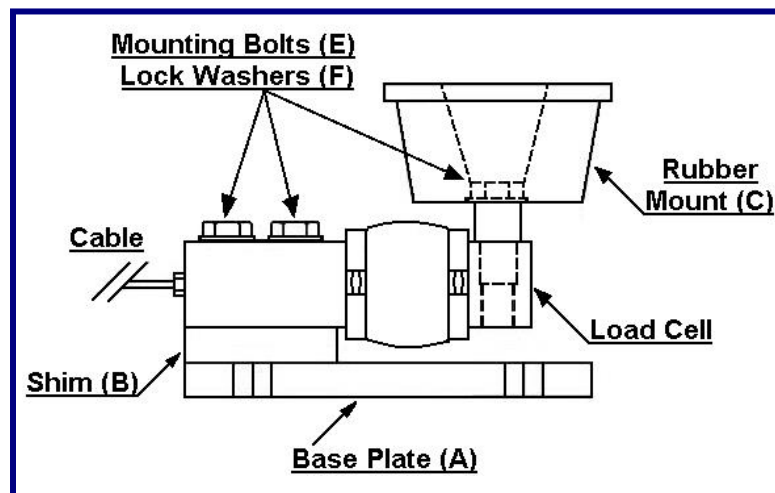
1. All electronic and mechanical calibrations and or adjustments required for making this equipment perform to accuracy and operational specifications are considered to be part of the installation.
 - They are included in the installation charge.
 - Only those charges which are incurred as a result of 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.
3. The equipment consists of printed circuit assemblies which must be handled ***using ESD handling procedures***, and must be replaced as units.
 - ***Replacement of individual components is not allowed.***
 - The assemblies must be properly packaged in ESD protective material and returned intact for replacement credit per normal procedures.



INSTALLATION

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 two (2) bolts**, and then **fasten them loosely** to the support leg for each assembly.
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.



Load Cell Placement

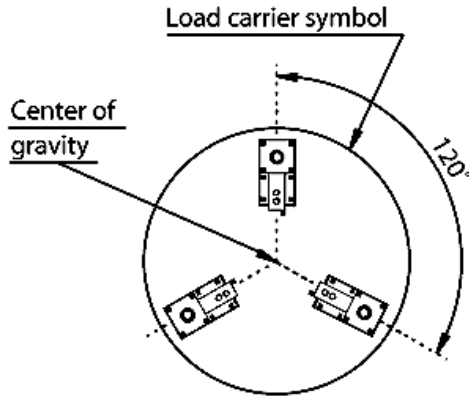


Figure 1

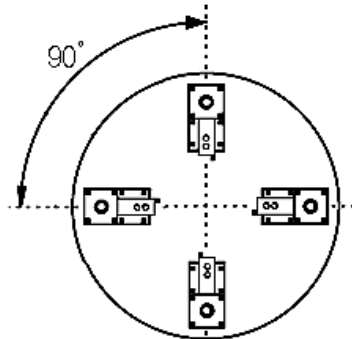


Figure 2

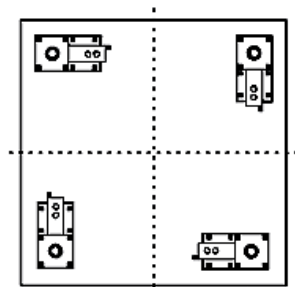


Figure 3

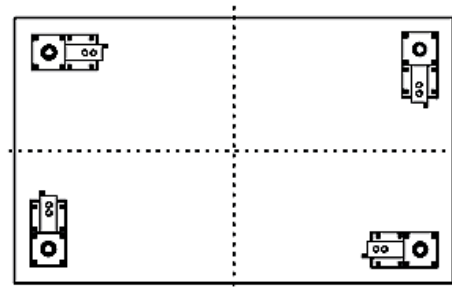


Figure 4

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 exactly the same height as the outer Omnicells®.

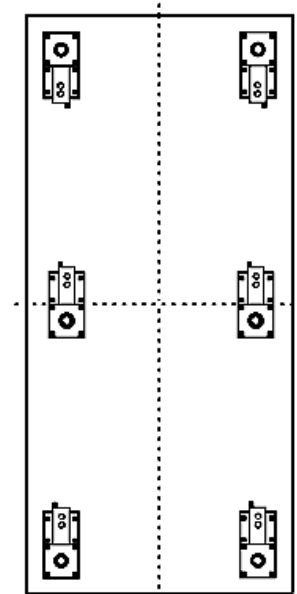


Figure 5

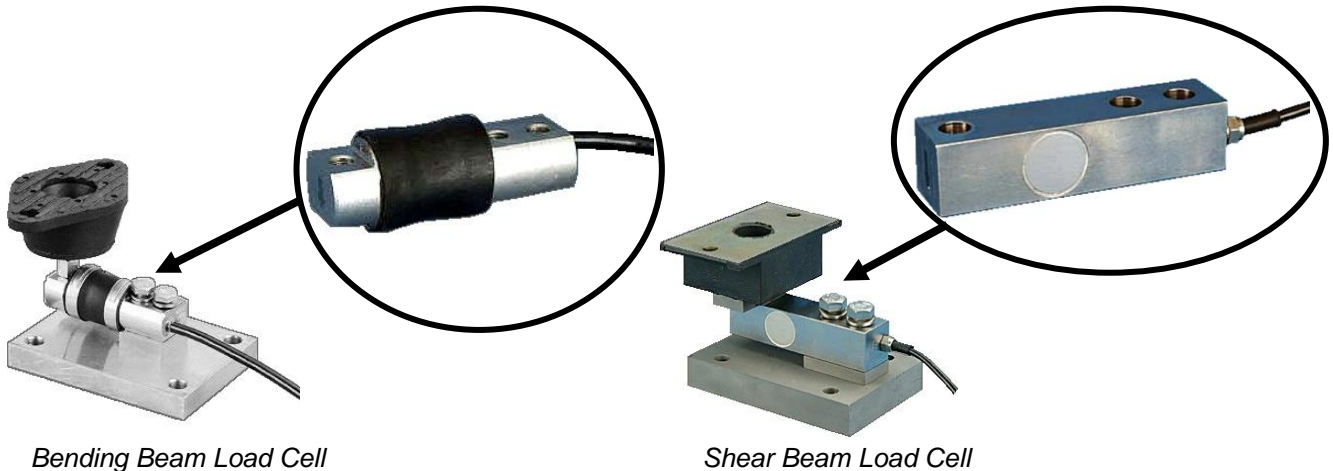
Section 3: Parts

Omnice[®] 9101 FB Complete Units

Part No.	Description
	Each assembly includes all necessary Omnicell Unit parts.
27873	Omnice [®] , w/ Fabricated SS Mount, SS Load Cell 100 lb. Capacity
27874	Omnice [®] , w/ Fabricated SS Mount, SS Load Cell 150 lb. Capacity
27875	Omnice [®] , w/ Fabricated SS Mount, SS Load Cell 250 lb. Capacity
27876	Omnice [®] , w/ Fabricated SS Mount, Nickel Plated Alloy Steel Load Cell, 500 lb. Capacity
27877	Omnice [®] , w/ Fabricated SS Mount, Nickel Plated Alloy Steel Load Cell, 1K Capacity
27878	Omnice [®] , w/ Fabricated SS Mount, Nickel Plated Alloy Steel Load Cell, 2.5K Capacity

Load Cells Only

Part No.	Description
27893	Stainless Bending Beam Load Bell, 100 lb. Capacity
27894	Stainless Bending Beam Load Cell, 150 lb. Capacity
27895	Stainless Bending Beam Load Cell, 250 lb. Capacity
27896	Alloy Steel Shear Beam Load Cell, 500 lb. Capacity
27897	Alloy Steel Shear Beam Load Cell, 1,000 lb. Capacity
27898	Alloy Steel Shear Beam Load Cell, 2,500 lb. Capacity



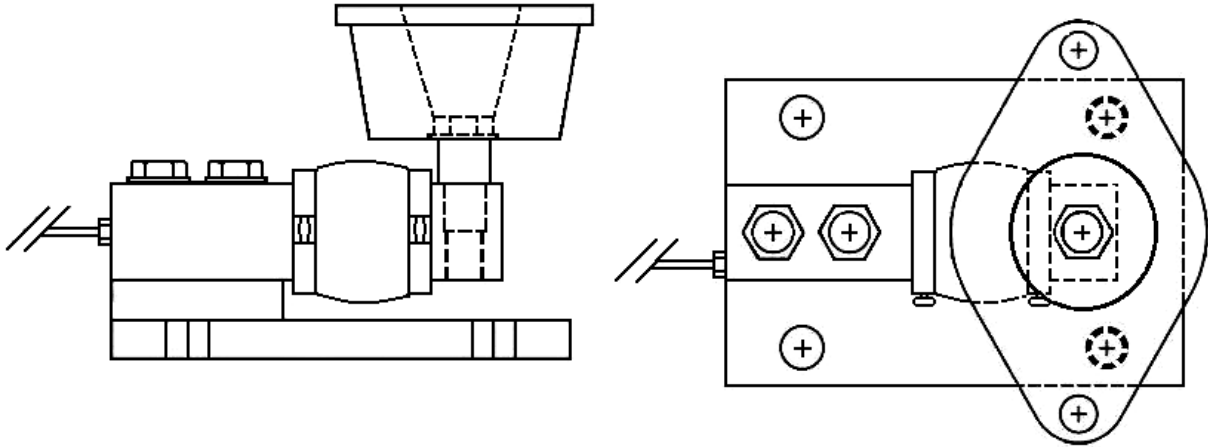
Parts Not Supplied with Assembly

Qty. Per Ass'y	Components
	Fastening Bolts for Vessel Attachment
2	▪ 5/16 - 18 UNC bolts – 100-250 lb capacity
4	▪ 5/16 - 18 UNC Anchors/bolts – 100-250 lb capacity
2	▪ 1/2 -13 UNC bolts – 500 lb capacity
4	▪ 7/16 - 14 UNC Anchor bolts – 500 lb capacity
2	▪ 1/2 - 13 UNC bolts – 1,000 & 2,500 lb capacity
4	▪ 7/16 - 14 UNC Anchor bolts – 1,000 & 2,500 lb capacity

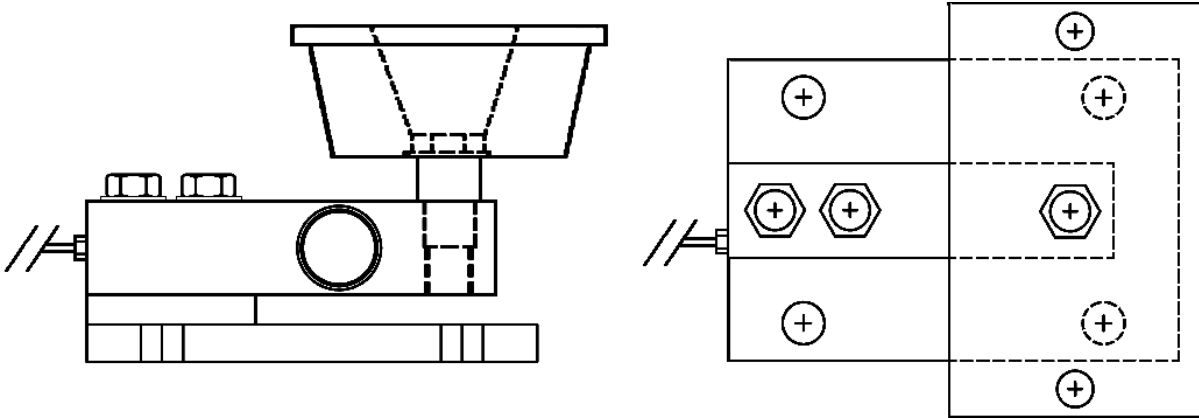
Assembly Units Without Load Cells

Fairbanks P/N	Diagram Letter	Qty	Components
93644		1	*9101 FB Mounting Ass'y (100 - 250 lbs)
34821		1	*9101 FB Mounting Ass'y (500 lbs)
93646		1	*9101 FB Mounting Ass'y (500 & 1,000 lbs)
93647		1	*9101 FB Mounting Ass'y (2,500 lbs)
			<i>* Assemblies include all required parts (without a load cell)</i>

Appendix I: Omnicell Configurations



Omnicell 9101 FB Bending Beam design with capacities equal to or less than 250 pounds.



Omnicell 9101 FB Sheer Beam design with capacities greater than 250 pounds.



Manufactured by Fairbanks Scales, Inc.
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Omnicell
Model: 9101 FB
INSTALLATION MANUAL
DOCUMENT 51172