



USER MANUAL

FIBER BAG DISPENSER 1X3-1300

Revision 3.0, March 2023

For Service or Support

Email: service@scaleton.com

Tel: +1 514-940-0337



COPYRIGHT

Neither the whole or any part of the information contained in, nor the product described in this document may be adapted or reproduced in any material form except with the prior written consent of Scale-Tron Inc.

© 2023 Scale Tron Inc.
2113C St Regis
Dollard-des-Ormeaux, Québec
H9B 2M9
Canada

All rights reserved

Customer Responsibility:

The customer in applying the product described in this document accepts that the product is a programmable electronic system which is inherently complex. In doing so, the customer therefore undertakes the responsibility to ensure that the product is properly installed, commissioned, operated, and maintained by competent and qualified personnel, trained in accordance with any instructions or safety precautions made available, or through proper engineering practices, and to thoroughly verify the use of the product in each particular application.

Errors in documentation:

The product described in this documentation is subject to continuous development and improvement. All information of a technical nature and particulars of the product and its use including the information and particulars contained in this documentation are given in good faith by Scale-Tron Inc.

This manual is intended only to assist the user in the installation, use, and operation of the product, and therefore Scale-Tron Inc. shall not be liable for any loss or damage whatsoever from the use of the information in, or any error in, or omission from this manual.

SCALE-TRON

1	INTRODUCTION	4
2	INSTALLATION	5
2.1	MOUNTING.....	5
2.2	ELECTRICAL.....	5
2.2.1	<i>Motor</i>	5
2.2.2	<i>Bag counter switch</i>	5
2.2.3	<i>Connection for manual dispensing</i>	5
2.2.4	<i>Connection to batch controller</i>	6
2.2.5	<i>Connection to optional bag counter controller</i>	6
2.2.6	<i>Last bag detector</i>	7
3	MAINTENANCE	7

SCALE-TRON

1 INTRODUCTION

No need to manually dispense your bagged fiber; the bag dispenser holds up to 30 bags and drops one, two or more, depending on your concrete batch size. Treat your fiber like an admix, proportioning it to the batch size. The Fiber Bag Dispenser can be positioned to drop bags into the scale hopper, onto the aggregate belt or directly into the concrete mixer or truck.



How it works:

- Load the fiber bags into the dispenser at the start of operation. Bags are simply placed one at a time into the feeder buckets. Simple to do.
- Chain bucket dispenser drops one bag at a time, guaranteed.
- Reliably holds and dispenses all sizes of bag up to 12" wide.
- A ½ second start pulse is required. The rest is automatic.
- Can be run from the admix outputs of most batch controllers. No special software.
- A Last Bag Detector warns when only one bag remains, giving you enough warning to refill the dispenser. It reliably detects even small plastic bags.
- Low power 110 or 220 volt single phase motor. No starter required.
- Standard dispensers holds 20 or 30 bags. Special models available for other quantities and oversize bags.
- Uses standard North American parts. Maintenance (if needed) is assured.

Because the dispenser runs from the admix output of the controller, you can proportion bags of fiber just like any admix. Set a quantity of one bag per yard (or cubic meter) and the dispenser will drop one bag, two or more depending on the batch size and your controller will report the number of bags on the batch report. On formulas not requiring fiber, set the quantity to zero.

Optional extras:

Bag counter - for plants without automatic dispensing capability, dispenses preset quantity of bags. Requires a start pulse or push-button switch to initiate operation.

2 INSTALLATION

2.1 Mounting

The mounting position can be selected to suit the plant and ease of loading. The simplest method in low profile plants is to dispense bags onto the aggregate conveyor near the scale. This is usually near ground level and avoids the need for climbing or lifting the product. In high profile (vertical) plants, it is necessary to locate the dispenser over the scale discharge area, at the truck or mixer loading area, or install a small conveyor to raise the dispensed product to the required height. Ensure that the dispenser is covered and protected from rain and snow, since the steel parts are prone to rust and soluble bags will be destroyed by water. The motor is not rated for outdoor operation.

2.2 Electrical

2.2.1 Motor

Motors are supplied to meet the customer's order. Normally this is 110 volt 60 Hz or 220/240 volt 50 Hz, both single phase. The single phase 220 volt motor can be run from one of the 3-phase lines to neutral in European 3-phase systems. All motors are capacitor start type, fractional HP and can be run from the relay output of a control system; no starter is required. Maximum current on 110 volt motors is 1.5 A and on 220 volt motors is 0.7 A.

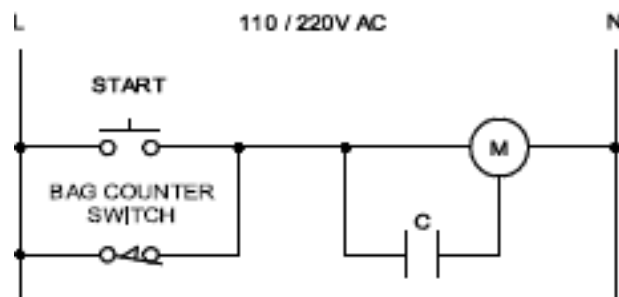
2.2.2 Bag counter switch

An Omron switch, model D4C-1420 is provided to count bags and stop the motor at the correct position. This switch is a single pole, 2 position type (SPDT) with both a NO and NC contact.



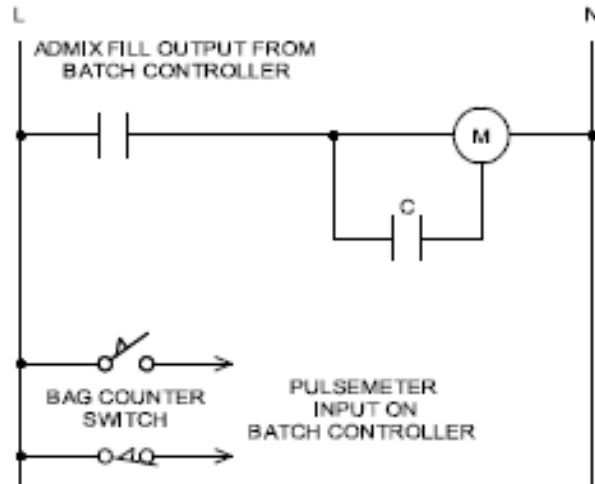
2.2.3 Connection for manual dispensing

Connect as shown in the diagram. The start button should be pressed for ½ to 1 second. Longer than this may allow a second tray to pass the switch and dispense two bags.



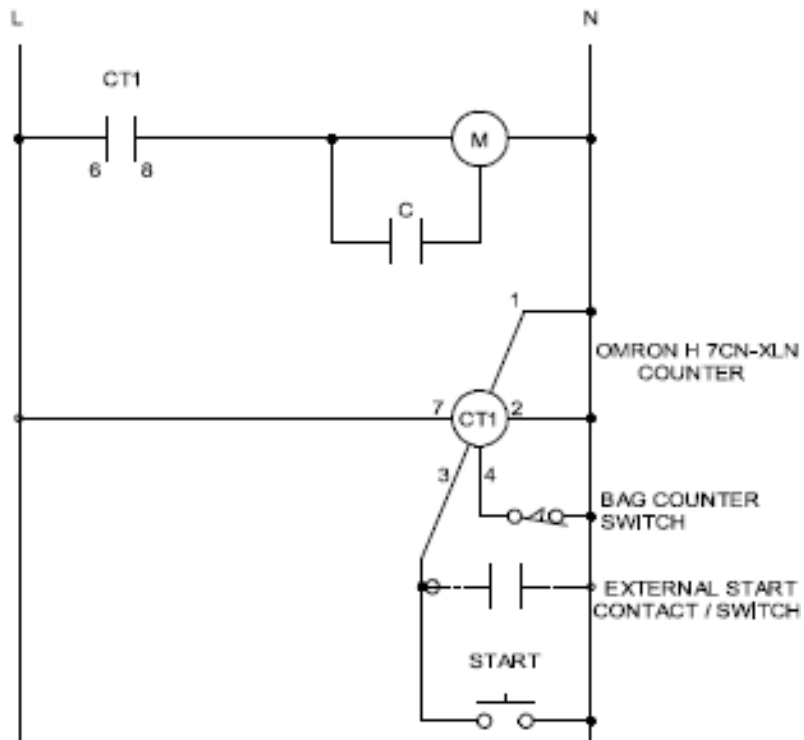
2.2.4 Connection to batch controller

The motor and bag counter switch can be connected to a batch controller in the same way as a direct feed admix. The motor is energized from the Admix Feed output and the bag counter switch is connected to the pulse meter input. When the motor is activated, the dispenser runs and activates the switch, which gives one pulse for each bag dispensed. The batch controller should be set to the appropriate number of bags for the standard unit of product; for example, 1 bag per cubic yard or cubic meter of concrete.



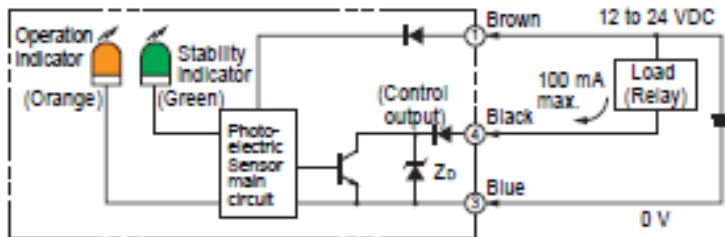
2.2.5 Connection to optional bag counter controller

The bag counter controller provides semi-automatic operation when a preset number of bags need to be dropped with each batch of product. Connect the motor and bag counter switch as shown in the diagram. Set the counter for the number of bags to be dispensed. Pressing the Start button initiates the dispensing process and the counter counts down until it reaches zero, when the motor is stopped.



2.2.6 Last bag detector

A retro-reflective photo switch is mounted at the last bag position, looking through the slots in the bag tray. The reflector at the opposite side reflects the light beam back to the sensor, closing the sensor output circuit. This sensor is normally an Omron E3Z-R61 type, with 24 volt DC operation. Its output is a PNP transistor and can operate a 24 VDC relay or PLC input circuit. A switch on the sensor selects whether the output is activated or de-activated when the light beam is interrupted. This can be used to signal the control system that the last bag is about to be dispensed, so that corrective action can be taken.



3 MAINTENANCE

Very little maintenance is required to keep the dispenser in good operating condition. Ensure that the whole assembly is protected from rain and dripping water. Keep everything clean and out of the path of falling aggregates, dust and cement.

Clean the trays and chain bed if it becomes fouled. Clean and oil the drive chains at least once per year and more often if dirt is present. Wipe the last bag detector lens and reflector regularly to keep it operating.