

## Application Note: 2100 Bag filler using a single speed feeder

### Application:



A weighing machine is to be used in a single-speed, single material, bag/box filling application using a 2100. The 2100's in-flight compensation automatically adjusts the in-flight value at the end of every batch. The 2100 can alert the operator to manually remove the filled bag/box or it can trigger an external mechanism to remove the filled bag/box. For 2100 - Bag Filler Using a Two-Speed Feeder refer to Application Note 3.

### Components:



12VDC, Panel mount  
2100



0227  
12VDC Relay output  
module



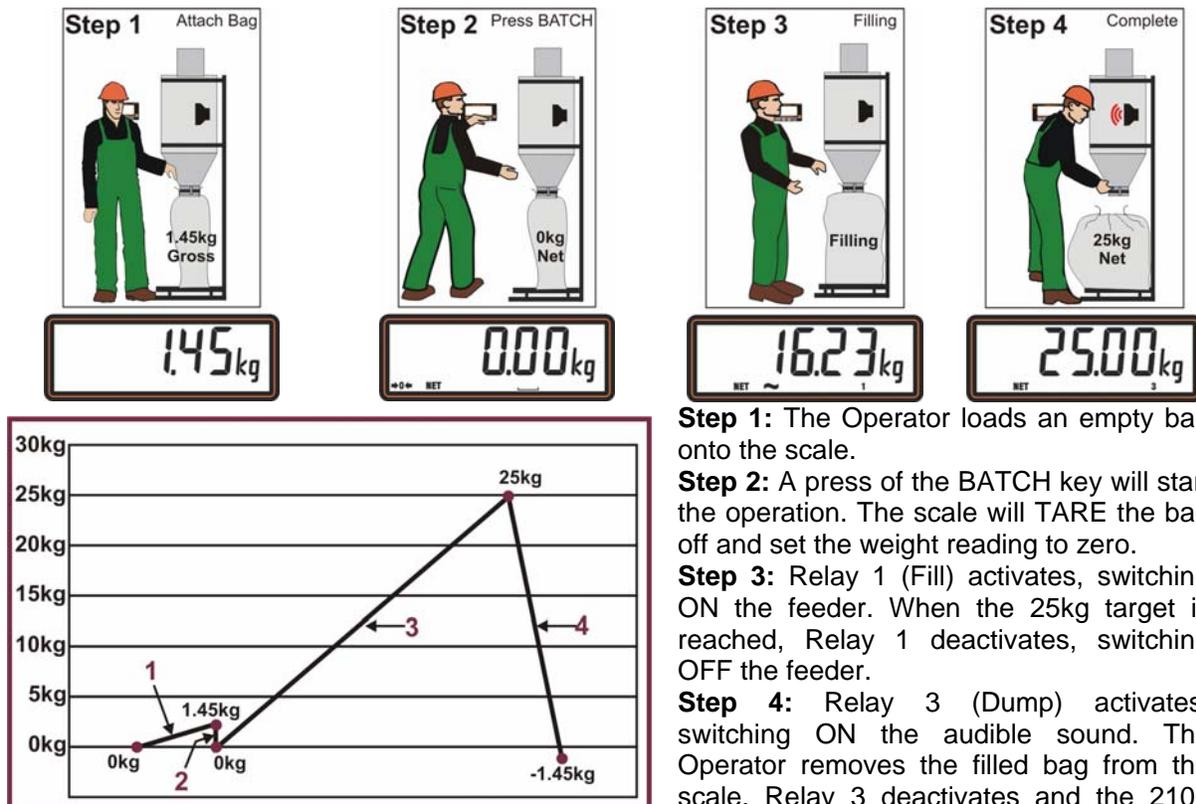
0329  
IP65 Stainless steel  
housing



A10001 - A10004  
Plug pack

### Operation:

In this example a 30kg weighing machine is used to fill bags to a maximum weight of 25kg. When the 25kg maximum weight is reached, the feeder will stop and an audible sound will alert the operator to manually remove the filled bag.



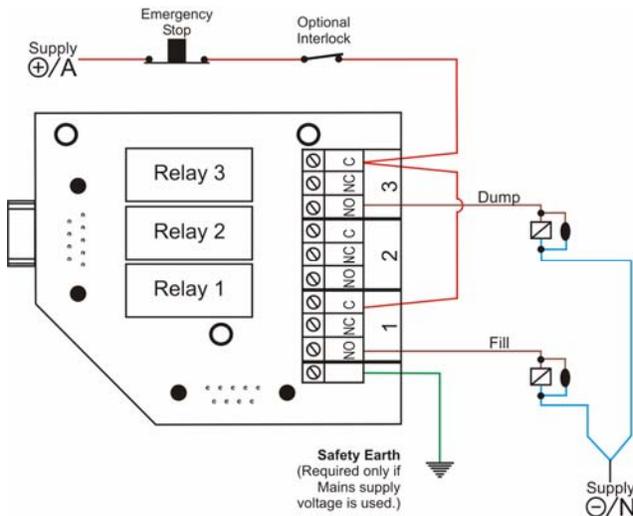
**Step 1:** The Operator loads an empty bag onto the scale.

**Step 2:** A press of the BATCH key will start the operation. The scale will TARE the bag off and set the weight reading to zero.

**Step 3:** Relay 1 (Fill) activates, switching ON the feeder. When the 25kg target is reached, Relay 1 deactivates, switching OFF the feeder.

**Step 4:** Relay 3 (Dump) activates, switching ON the audible sound. The Operator removes the filled bag from the scale. Relay 3 deactivates and the 2100 resets ready for the next fill.

**Connection Details:**



<p>Emergency stop push button (0123) (Optional)</p> <ul style="list-style-type: none"> <li>• Normally closed</li> <li>• Press to latch open</li> <li>• Turn to release</li> </ul>	
<p>Control circuit loads</p> <ul style="list-style-type: none"> <li>• Maximum voltage 240VAC / 50VDC</li> <li>• Maximum current 2A</li> <li>• Example: lamp, relay coil or solenoid valve</li> </ul>	
<p>Spark suppressor (0100) (Optional)</p> <ul style="list-style-type: none"> <li>• Must be fitted across load if load is inductive (eg. relay coil or solenoid valve)</li> </ul>	
<p>Interlock switch contacts (Optional)</p> <ul style="list-style-type: none"> <li>• Normally closed</li> <li>• Example: Bag/box sensor switch to prevent loading when container is not in place on the scale</li> </ul>	

**Configuration:**

1. Attach the “Batch” overlay sticker to the blank 2100 function key.
2. Press and hold the **Power** and **Zero** buttons for two (2) seconds to enter the setup mode.
3. Configure the instrument using the settings described below.

GROUP	ITEM	SET TO	COMMENT
SPEC	KEY.Fn	B---	<b>B</b> = Sets the 2100 function key to work as a <b>Batch</b> control. - = All other control settings are left blank.
SET.PTS	OPTn A	SNOL-	<b>S</b> = Use <b>Option A</b> (output 1) as the ( <b>S</b> low) feeder. <b>N</b> = Use <b>Net</b> weight (i.e. tare off at start). <b>O</b> = The direction of fill is upwards (i.e. output changes state when weight gets <b>O</b> ver this point). <b>L</b> = Set to <b>Lower</b> . Relay will turn on under target weight. - = No alarm set.
	TARG A	25.00 kg	Enter the final target weight for the bag.
	OPTn C	DNOL-	<b>D</b> = Use <b>Option C</b> (output 3) as the <b>D</b> ump, or <b>D</b> ischarge. <b>N</b> = Display to show <b>Net</b> weight during unloading. <b>O, L</b> = These options remain as the default settings (in this example O and L). - = No alarm set.
	TARG C		Not used in this setup.

**For more information refer to the Reference Manual for this product**