

# MODEL CF-112 MODEL CF-8 MODEL CF-12

## INSTALLATION INSTRUCTION SHEET

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# MODEL CF-112

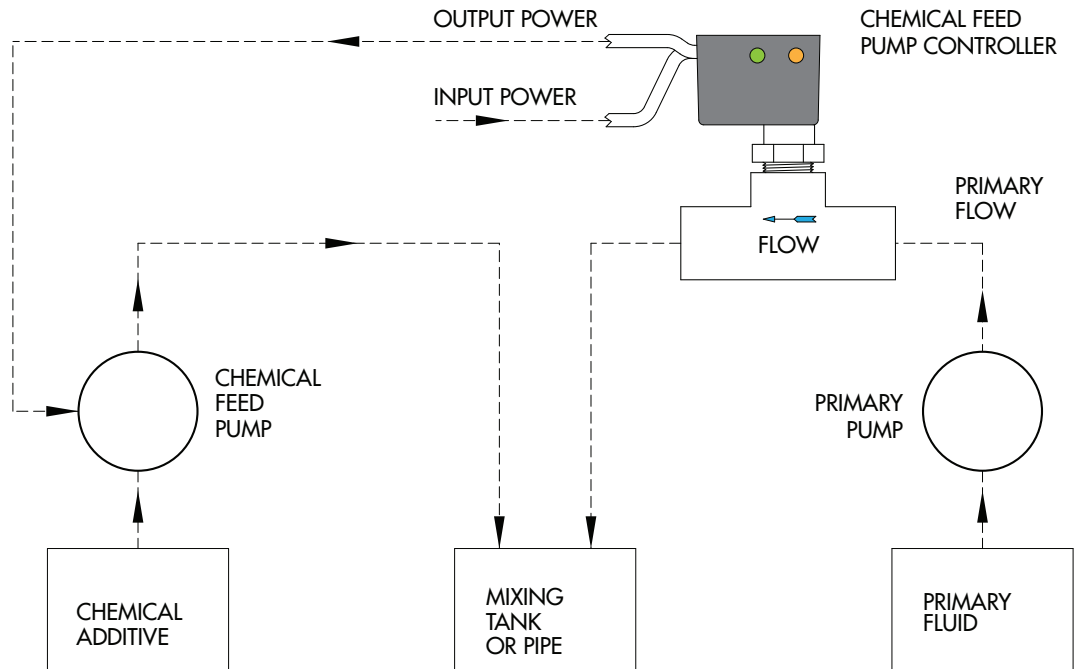


FIGURE 1

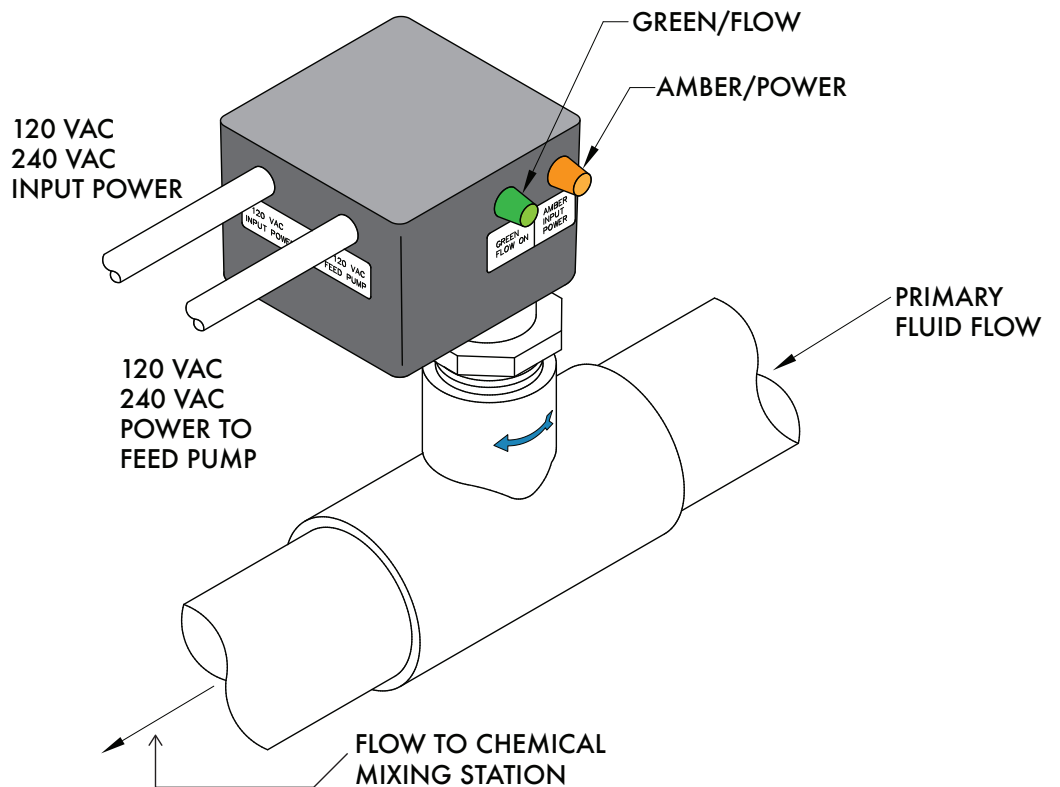
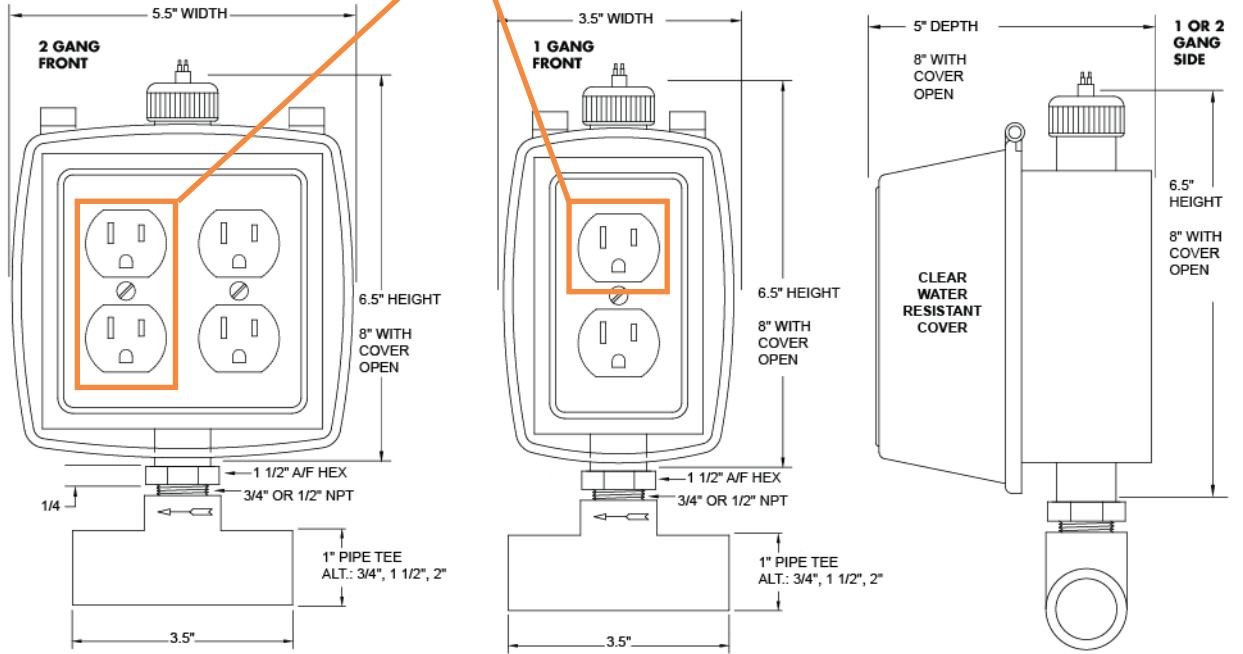


FIGURE 2

# MODEL CF-8/1 OR 2G



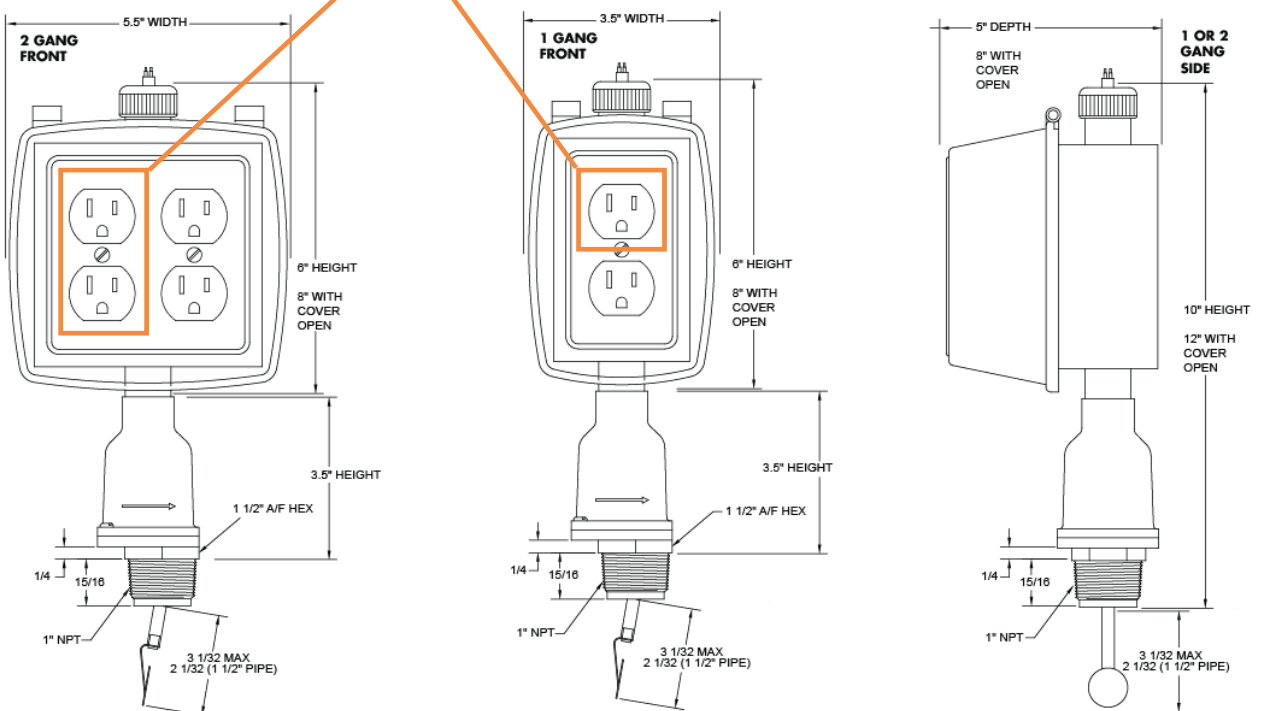
**SWITCHED  
OUTLET**



# MODEL CF-12/1 OR 2G



**SWITCHED  
OUTLET**



## INSTALLATION AND OPERATING INSTRUCTIONS

1. Inspect the shipping container and its contents for damage. Read this instruction sheet in detail, noting input and output power cord labels in addition to the primary flow direction arrows.
2. Thread the module into the side of the supplied tee (see note). All male threads supplied by Harwil are delivered with several layers of Teflon-coated tape. New tape should be applied each time the thread is used. "Paste" type thread-sealing is not recommended.
3. Insert the mating threads with care in order to insure that the threads match without cross threading and the delicate flow-sensing metal blade does not touch any interior surfaces during insertion and tightening. Touching the blade can change its fluid flow sensing ON/OFF set points.
4. Tighten the thread until a firm coupling is established and all flow arrows are aligned.

**CAUTION: ALWAYS TIGHTEN THE FLOW SWITCH USING A WRENCH APPLIED TO THE SWITCH HEX BODY. NEVER TURN THE BLACK BOX. GREY OUTLET BOXES CAN BE TURNED BY HAND, NO MORE THAN 180°.**

5. If plastic tees have been provided with the CF-112, CF-8 or CF-12 module, insert the preassembled tee into the primary flow line. Avoid touching the flow sensing blade manually or with glue.
6. Connect the external 120 VAC/240 VAC input power to the CF-112, CF-8 or CF-12 120 VAC/240 VAC input power cable in accordance with the schedule below.
7. Connect the CF-112, CF-8 or CF-12 output chemical feed pump power cable to the input 120 VAC/240 VAC power connection on the chemical feed pump in accordance with the schedule below.
8. Turn on primary flow and check for chemical feed pump operation.
9. If the feed pump fails to operate, check the flow rate of the primary line to insure the CF-112, CF-8 or CF-12 has enough flow to activate the internal flow switch.

### WIRING

#### 120 VAC

BLACK – POWER  
WHITE – COMMON  
GREEN – GROUND

#### 240 VAC

BLACK – POWER 1  
RED – POWER 2  
GREEN – GROUND

# CERTIFICATE OF CONFORMANCE

All HARWIL Corporation ("HARWIL") products are manufactured using new materials and components. Our products meet the applicable performance and materials specifications indicated in our current Specifications Sheets and Parts Lists. HARWIL endeavors to obtain its materials and components from American Companies.

## **DOMINANCE OF HARWIL LIMITED EXPRESS WARRANTY**

HARWIL warrants that all HARWIL products will be free from defects in material and workmanship for a period of one year from the date of original shipment. This warranty shall be limited to the replacement and reconditioning of our products and parts. HARWIL reserves the right and sole discretion to modify or change the composition, design and appearance of its products at anytime.

This warranty shall be in lieu of all warranties of merchantability and of all warranties of fitness for a particular purpose relating to harwil products and parts. Buyer's sole remedy hereunto shall be replacement or reconditioning as set forth herein.

HARWIL shall incur no obligations hereunder and no liability in the event of (a) buyer not fulfilling its responsibilities, including as set forth herein; (b) neglect, alteration or improper product use, including use with non-compatible devices or chemicals; or (c) repair by other than HARWIL. ANY LAWSUIT RELATING TO THIS WARRANTY MUST BE COMMENCED WITHIN ONE YEAR OF THE DATE IT ACCRUES.

Each user of our product should make appropriate analysis and tests to determine the suitability of the product for the intended use prior to purchase. HARWIL provides no warranty and assumes no responsibility for corrosive attack on any material, component or design features associated with any of its products.

Corrosion resistance information listed in HARWIL specification sheets, installation sheets and product brochures is solely for general background information. This table has been compiled from literature published by various material suppliers and by equipment manufacturers who use these materials in their products. Inasmuch as these data are based on tests by entities over which HARWIL has no control, HARWIL does not guarantee or accept responsibility for the accuracy of such tests. When using the table, please remember that in any given case several factors such as concentration, temperature, degrees of agitation and presence of impurities influence the rate of corrosion. The guide is intended, in a general way, to rate materials for resistance to chemicals which contain their usual impurities and for types of equipment in common use. Ratings should be used only as a general guide to first approximation of your material requirements rather than as the final answer.

- When in doubt, test materials before installation.
- After installation, follow up with preventative maintenance and periodic inspection.