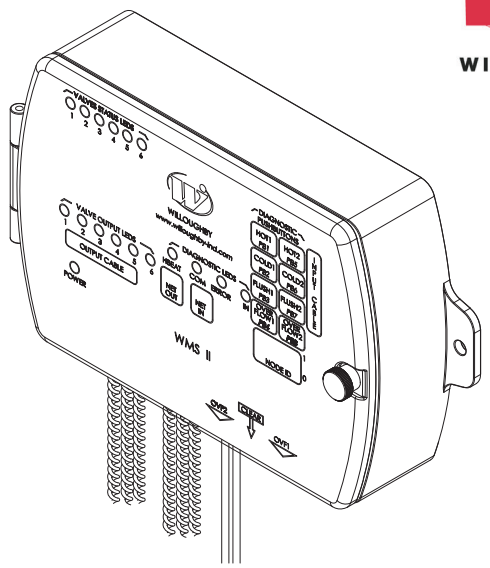
CVC2
Willoughby WMS II
Cell Valve Controller



Recommended Specifications

Electronic water management Cell Valve Controller shall be:
Willoughby Model: **CVC2**

Willoughby WMS II Cell Valve Controllers (CVCs) shall be located in the plumbing chase and shall control the operation of selected electronic lavatory valves, electronic shower valves, and electronic toilet flush valves.

CVCs are modular, factory-wired, and capable of operating in either stand-alone or fully-networked configurations (See WMS II Spec Page for networking details). A fully-networked system of chase-mounted CVCs can be controlled using Willoughby electronic Water Management Software installed on a secure central control room PC workstation.

Each CVC shall be capable of controlling up to six (6) individual low-voltage solenoid valves. Possible configurations include:
- (2) Lavatory/toilet combination units (each combination unit having (2) lavatory valves (hot & cold) and (1) flush valve)
- (3) Individual lavatories (hot and cold)
- (2) Toilets with overflow sensing
- (6) Toilets without overflow sensing
- (6) Single temperature showers
- Any combination totaling not more than (6) individual valves

CVCs shall require 24 Volt AC for operation and shall retain all memory of settings in the event of power interruption. System manufacturer shall supply a hard-wire 120/24 VAC 40VA step down transformer (option TF24H) with each controller A plug-in transformer is also available (option TF24P). The CVC's electronic circuitry shall be encased in a water-resistant (not waterproof) enclosure; as with all electrical and electronic equipment, avoid contact with water especially once connected to the power supply.

Maxumum Amp load is 1.5 Amps or .25 Amps per solenoid valve.

Standard Features

Each valve activation shall be controlled by a vandal-resistant, internally-sealed, stainless steel push button. Each push button shall require less than 5 lbs. of force to activate.

All solenoid valves shall be non-hold-open and all metering times shall be independently adjustable for each valve:
- (1 to 60 sec.) for each lavatory valve
- (1 to 10 sec.) for each flush valve
- (1 sec. to 9 min. 59 sec.) for each shower valve

Metering cycles can be interrupted with a second button push.

Diagnostic push buttons on the CVC will enable maintenance personnel to activate valves and overflow functions from the chase.

CVCs shall also include separate diagnostic lights to indicate:
- Presence of control power in the CVC
- Network communication activity (in networked CVCs)
- Status of all valve outputs
- Presence and type of any lockout condition on valve function

A programmable re-initiate delay feature shall be provided to control amount of fixture use to a preset threshold. Once the fixture use threshold has been reached, function will be locked-out for a preset time period (up to 4 hours).

A parallel pre-initiate delay feature shall also be provided to insert time between switch actuation and the subsequent valve actuation.

Configurable overuse limits shall be provided to control the amount of use of all fixture functions within a programmable time period of up to 24 hours. Overuse control shall be configurable to trigger only notification, latched lock-out of the fixture function, or auto-limit of fixture function to prevent its overuse.

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

visit our website at www.willoughby-ind.com
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MODEL NUMBER AND OPTIONS:

1.) Control System:

❑ CVC2 Cell Valve Controller

2.) Control Station:

❑ Stand-alone (Standard)
❑ Networked PC (Additional Cost)
❑ Laptop PC (Additional Cost)
(Laptop PC recommended for field-adjustment of CVC settings in a non network application)

3.) Toilet Parameter Configuration:

Number of Toilets with Overflow Sensing: _____(2 max.)
Number of Toilets w/o Overflow Sensing: _____(6 max.)

❑ (3) Flushes per (1 Hr.) with (1 Hr.) Lock-out
❑ Custom: (__) Flushes per (__ Hr.), with (__ Hr.) Lock-out

4.) Lavatory Parameter Configuration:

Number of Lavatories: ____ Single or Dual Temp: _____

❑ (15 sec.) per Button-push, (5 min.) of Water Flow per (30 min.)
❑ Custom: (____ sec.) per Button-push,
(____ min.) of Water Flow per (____ min.)
with (___ min.) Lock-out

5.) Shower Parameter Configuration:

Number of Showers: ____ Single or Dual Temp: _____

❑ (2 min.) per Button-push, (8 min.) of Water Flow per (30 min.), with (30 min.) Lock-out
❑ Custom: (___ min.) per Button-push,
(___ min.) of Water Flow per (___ min.),
with (___ min.) Lock-out

6.) Other Options:

❑ On-site Start-Up, and Commissioning
(must be scheduled 30 days prior to training and after complete installation and testing of the system)
❑ On-site Owner Training Session
(must be scheduled 30 days prior to training and after complete installation and testing of the system)
❑ TF24H Hard-wired Transformer, 110VAC to 24VAC* (Standard)
❑ TF24P Plug-in Transformer, 110VAC to 24VAC*
❑ Other _____
❑ Other _____

*(Req 110V power through ground fault interrupter (GFCI) receptacle / breaker)

Approved For Manufacturing By: _____ Date: _____ Company: _____
Wall Thickness: _____ Wall Type: _____

VERIFY ALL DIMENSIONS WITH FACTORY PRIOR TO ROUGH-IN

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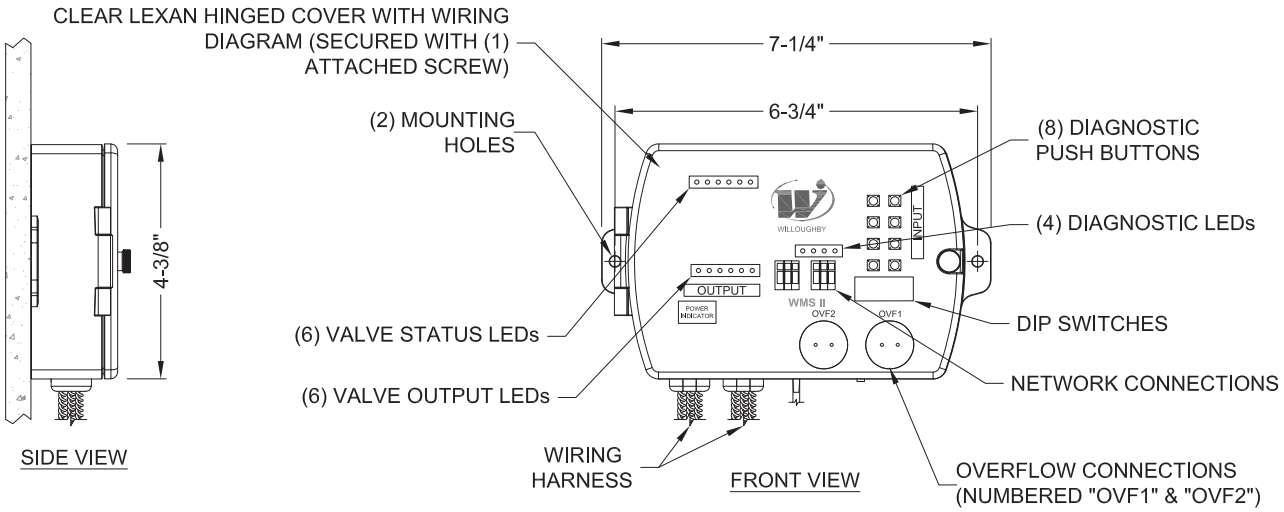

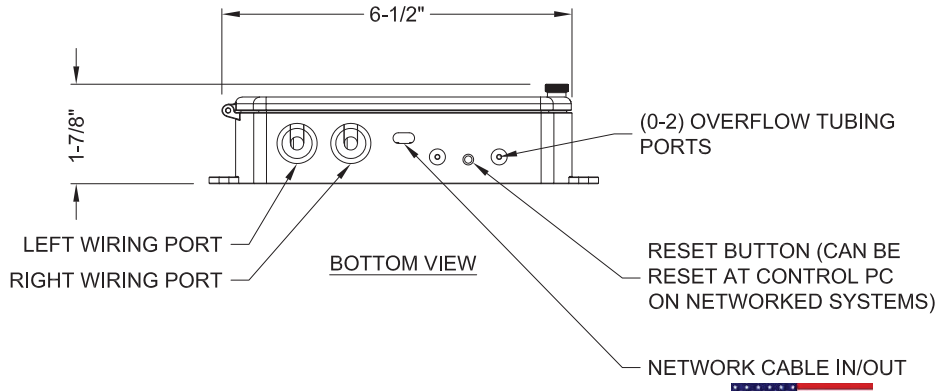

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