# Gentworks

# LOW-FLUSH (FCV-01) PROGRAMMING INSTRUCTION SHEET

**STEP 1 – TEST MODE** With all switches in the off position the valve will open for 5 seconds after power up / reset and will remain open for a period set by the 6-way switches, or if all in off position, for 5 seconds. This cycle will then repeat after 5 seconds and continue to do so whilst still in test mode. When tested press the reset button on the circuit board to close the solenoid valve.

## STEP 2 – Flush Interval Time (Delay)

This is set using the 4-way switches. The time between flushes will be the sum total of the fill time AND the delay time FOR EXAMPLE, if the interval time is set at 5 minutes and the total flush time is say 4 minutes 20 seconds then the delay time will be 9 minutes 20 seconds from the start of one cycle to the start of the next.

#### The 4-WAY SWITCH - Flush Delay periods are as follows

- $N^{\circ} 1 = Adds 1$  Hour to the delay.
- $N^{\circ} 2 = Adds 2$  Hours to the delay.
- $N^{\circ} 3 = Adds 4$  Hours to the delay.
- $N^{\circ} 4 = Adds 8$  Hours to the delay.

This provides for operation intervals of between 1 and 15 hours in 1 hour increments.

All switches in the off (down) position provides for a test mode described in STEP1 above.

#### STEP 3 – Cistern Fill Time

This is set using the 6-way switches. All switches in the off (down) position, provides a nominal valve open time of 5 seconds. **NOTE** The Flush Interval Time (Delay) set by the 4-way switches will include the Cistern Fill Time set by the 6-way switches. Example – If a Flush Interval Time (Delay) of 1 hour and a valve open time of 5 minutes were selected the valve would open after 55 minutes and close again after 5 minutes thereby giving a total cycle time of 1 hour.

#### The 6-WAYSWITCH – Cistern Fill Time periods are as follows

- $N^{\circ} 1 = Adds 15$  seconds to the fill time.
- $N^{\circ} 2 = Adds 30$  seconds to the fill time.
- $N^{\circ} 3 = Adds 1$  minutes to the fill time.
- $N^{\circ} 4 = Adds 2$  minutes to the fill time.
- $N^{\circ} 5 = Adds 4$  minutes to the fill time.
- $N^{\circ} 6$  = Adds 8 minutes to the fill time.

This provides valve open times of between 15 seconds and 15 minutes 45 seconds in 15 second increments.

All switches in the off (down) position provides for a test mode described in STEP1 above.

# Fitting the Solenoid Valve.

Turn off the local water supply. Locate the solenoid valve in a position, as near to the cistern as possible and preferably upright as shown below.

**<u>Important!</u>** When connecting the **solenoid valve** to the filter make sure the solenoid valve is round the correct way.

Cut the supply pipe and purge any debris or swarf, fit the valve ensuring the solenoid valve is fitted with the flow markings on the solenoid valve body pointing or orientated towards the cistern. Tighten all joints and check for leaks.

## Wiring and Cable Preparation.

Power is provided by either a 6 volt DC battery or Mains transformer supplied. This connects to the circuit board via a 2 pin connector and great care must be taken to connect it correctly. The two lugs on the plug fit over the plastic tongue on the connector attached to the circuit board.

#### **Resetting the Solenoid Valve.**

Once power has been connected to the circuit it should not be disconnected. If for any reason the battery is disconnected from the circuit it will be necessary to press the reset button (situated at approximately 8 o'clock on the circuit board, 10mm to the left and above the 4 way-switch block), once the battery has been reconnected. To see if the Solenoid Valve has reset, conduct the operation shown under 'Test Mode'.

# Setting Cistern Fill Time.

**<u>IMPORTANT</u>** The cistern <u>must</u> be empty of water in order for the fill time to be set. This can either be accomplished by filling the cistern manually (with jugs of water) or by pulsing the solenoid valve open using the following method:

- 1. Connect unit to power supply and set all switches to the off position (See STEP 1 -TEST MODE). Press the small reset button. This will pulse the valve open.
- 2. Disconnect the power cable from the pins on the circuit board. This will cause the valve to remain open.
- 3. IMMEDIATELY the cistern starts to flush, reconnect the power cable. This should cause the valve to close. If it doesn't, press the reset button again.
- 4. Allow the cistern to completely discharge.
- 5. Once the cistern is empty, repeat procedures 1 to 3, but on this occasion time how long it takes for the cistern to fill and flush (preferably with a stop-watch).
- 6. Now select the combination of switches required to achieve the recorded time (see Settings Chart).
- 7. Press the reset button again to set the new timings.

If you require help or advice, please call Gentworks on 0845 202 4535 or email <a href="mailto:support@gentworks.co.uk">support@gentworks.co.uk</a>

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