

PARTS LIST

No	Part No	Description
1	TD115	1" Filterball Valve
2	RP7306/9	1" 9Vdc solenoid valve
3	SL/VB	Vacuum breaker assy
4	Z-FPK-SEAL	Flush pipe seal
5	Z-FPK-NUT	Flush pipe nut
6	Z-FPK-PIPE	40mm flush pipe
7	Z48	rubber pan connector
8	SL-CM-DF	SOLO WC control module

MAINTENANCE

It is recommended the valve is annually checked for leaks and correct performance.

Problem	Cause	Remedy
Poor/inadequate flush	Incorrect pipe sizing or inadequate pressure	Increase pipe supply, boost pressure
Short flush	Excessive pressure Incorrectly set flush time	Fit Wilkins pressure reducing valve Adjust DIP switches
Valve won't shut off	Insufficient line pressure to repressurize valve By pass hole blocked/debris under diaphragm	Increase pipe supply, boost pressure Clear debris
Leaking from vacuum breaker slots	Back pressure from WC	Check pan connector to pan is clear
Valve will not flush	Water supply cut off Electrical supply switched off	Turn water on Restore electrical supply
Valve runs continuously. Shuts off briefly when switch pressed	Electrical connection on solenoid valve installed around wrong way	Ensure colour of cables to solenoid connectors align to colour shown on solenoid valve. (BLUE "+", WHITE "-").



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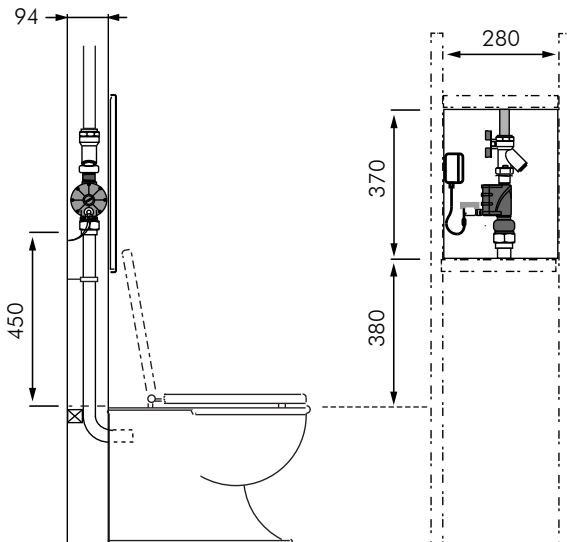
SL-DFXL

WC MAINS PRESSURE ELECTRONIC FLUSH VALVE



CONTENTS OF STANDARD PACK

1. 25mm isolating filterball valve with loose union nut.
2. 25mm F/F 9Vdc latching coil solenoid valve.
3. Flush pipe set including;
 - vacuum breaker assembly pre-fitted with 70L/min flow regulator,
 - 610 x 280 x 40mm plastic flush pipe,
 - rubber pan connector.
4. 450 x 325mm stainless steel access panel and mounting frame, with 2 x piezo switches mounted on panel.
5. SOLO electronic control module.
6. 9Vdc mains supplied power pack.



VALVE DESCRIPTION

SL-DFXL is a commercial quality, electronically actuated, recess mounted, dual flush WC flush valve designed to be connected to mains pressure (potable) water.

Valve is suitable for connection to back entry 6L WCs.

Pressing a button will initiate a half or full flush of the WC.

ELECTRICAL

All components for SL-DFXL are extra low voltage and can be installed by plumber.

The SL-DFXL control module is located on the inside of the access panel and is secured to the panel by velcro fastening tape.

There are two wiring looms;

1. Power loom has
 - a) power input connector for connection to the 9Vdc power pack lead.
 - b) power output lead for connection to the solenoid valve. This has a 1m extension lead that allows the access panel to be safely removed. The leads are terminated with Faston quick connect terminals that are colour matched to the terminals on the solenoid valve. Blue to + terminal, White to - terminal.
2. Sensor lead; 2 leads, 150mm long each with 2 x Faston terminals for connection to the piezo switches. These should already be connected but if removed take care to ensure colour of cables match the colours on the piezo switches.

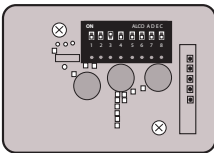
POWER SUPPLY

Each SL-DFXL controller must be supplied with 9Vdc power. Each power pack is supplied can connect directly with the power input lead described above. Alternatively 1 x power pack can supply power for up to 4 x SL-DFXL controllers when supplied in conjunction with a SL-PP4 splitter box and the required number of either 4m or 8m extension leads.

When using a 4 way splitter, the 230V GPO can be located remotely (in ceiling) together with the SL-PP4 splitter box and then extension cables can feed power to each of the 4 SL-DFXL controllers. We recommend all extension leads be installed in conduit to allow for future maintenance.

ALTERING RUN TIMES AND DELAY AFTER USE TIMES

SL-DFXL is preset to deliver a 6/3L flush when supplied with a nominal 300kPa dynamic pressure. Flush volume and delays after use are able to be adjusted by using the DIP switches located within the control module. Options available are as per the following chart.



FULL FLUSH			HALF FLUSH			DELAY AFTER USE	AUTO FLUSH AFTER 24hrs
Switches 1 2 3	Switches 4 5 6	Switch 7	Switch 8				
▼▼▼ = 2.25 sec	▼▼▼ = 1.0 sec	▼ = 0.5 sec	▼ = OFF **				
▲▼▼ = 2.50 sec	▲▼▼ = 1.25sec**	▲ = 2.0 sec**	▲ = ON				
▼▲▼ = 3.25 sec	▼▲▼ = 1.50 sec						
▲▲▼ = 3.50 sec**							

▼ = OFF ▲ = ON ** Pre-set

PLUMBING

All plumbing must be completed by competent plumbing tradesman according to relevant laws and trade practices in country of installation.

1. SL-DFXL flush valves rely on the capacity of the supply pipe to maintain the flow rate and pressure needed to evacuate the pan. A minimum of 25mm (nominal ID) supply is necessary to achieve this however much larger supply pipes may be required depending on;

- a) Supply pressure
- b) Length of pipe
- c) Number of valves installed
- d) Other fixtures using the supply pipe

All pipework must be designed by a suitably qualified person (services engineer or other) to achieve the necessary flow rate. Pressures given are dynamic pressure (under flow) not static head.

Flow rate: 80L/min

Pressure: 100 - 500kPa (ideally 300 - 350kPa)

Connection: 25mm BSP

2. Prior to wall lining, assemble and install valve as per diagram on Page 4.
- Secure flush valve using pipe clamp or similar on flush pipe.
 - Vacuum breaker must be installed at not less than 450mm above rim of WC to ensure correct function of backflow preventer.
 - Cut horizontal section of flush pipe to suit pan dimensions. It may be necessary to nog behind flush pipe to enable installation of back to wall pans.
 - All threaded joints should be made using proprietary sealing tape, hemp or joint sealing compound to ensure a water tight seal. Joints using O rings or flat face washers should not be over tightened which may result in distortion of sealing material.
3. Wall should be framed with a clear opening of 280W x 370H to accommodate the access panel frame, ensuring that there is easy access to valve components and that the seat lid is below the piezo switches when in the open position.
4. Once all plumbing has been completed, connect power to SL-DFXL controller, open the isolating valve and press one of the piezo switches. Repeat until all air is out of plumbing line and you are achieving a consistent flush.
5. Close isolator valve and remove and clean strainer of debris. Reassemble and test flush.
6. The SL-DFXL valve is designed to flush 6L of water over a wide range of pressures however some adjustment of the isolator valve may be necessary to ensure correct operation and to minimise pan splash, particularly at higher pressures. It may also be necessary to make a small alteration to the run time of the solenoid valve in order to maximize water savings and/ or bowl evacuation. Refer to Page 2 for details.
7. SL-DFXL allows the installer to provide a short delay after use before the WC can be flushed for a second time. Refer to Page 2 for options.