

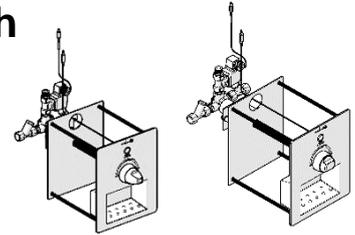
Flowmatic® Safe-Cell® Ducted Ezy-Grip Shower with Soap Holder

PRODUCT CODE:

- 52420 - 52427



WaterMark
 ATS 5200.030 Lic 060042
 The Australian Gas Association



SPECIFICATIONS

- Flowmatic® Safe-Cell® shower assemblies provide the complete anti-vandal, anti-ligature solution. The unique electronic valve assembly provides a precise delivery of water, and is specifically designed for prisons, mental health facilities and other custodial establishments. The adjustable temperature control Safe-Cell® handle allow users to adjust from a cold water option to the set hot water temperature.
- 4mm thick, exposed stainless steel faceplate to suit back mounted applications and face plate features push activation buttons. Plates have no front penetrations and are fixed from the duct.
- Solenoid is a Watermarked high flow, low-pressure loss control valve. The body is made from stainless steel and hammer resistant.
- These units must be installed with Galvin Flowmatic® Safe-Cell® controller 24V AC electronic.

TECHNICAL DATA

Solenoid	Input Voltage	24V AC – 50Hz		
	Power Consumption	4.5VA		
	Cable length	5m		
	Connection	Inlet	1/2" BSP - Male	
		Outlet	1/2" BSP - Male	
	Pressure Range (kPa)	Min	100	
		Max	1000	
Temperature (°C)	Min	5		
	Max	100		
Sensor	Type	IP68 24V		
	Activation	Push Button		
	Connections	3.5mm Male Jack		
	Cable length	5m		
Finish (user)	Stainless Steel			
Nominal Flow Rate (LPM)	N/A			

NOTE: Galvin Specialised continually strive to improve their products. Specifications may change without notice.

PRE - INSTALLATION

IMPORTANT:

- **INSTALLATION COMPLIANCE:** Galvin Specialised products must be installed in accordance with these installation instructions and in accordance with AS/NZS 3500, the PCA and your local regulatory requirements. Water and/or electrical supply conditions must also comply to the applicable national and/or state standards. Failing to comply with these provisions shall void the product warranty and may affect the performance of the product (Refer supplied installation compliance sheet with the product).
- These units must be used with Galvin Specialised Flowmatic control module.
- Before proceeding with installation first check the solenoid valve supplied is suitable for the site water pressure and conditions. If your water pressure is outside the stated range, please contact Galvin Specialised.
- Ensure all supply lines are flushed thoroughly to remove debris prior to the installation of this product. A line strainer is supplied to protect the solenoid valve from debris.
- We recommended a thermostatic mixing valve is used to provide pre mixed water to the valve and pressure reduction valve may be required to comply with recommended maximum supply pressure.
- Ensure that access to the push button, solenoid valve and transformer/GPO is available for future maintenance when installing the components. It is recommended that isolating valves be installed upstream to the solenoid valve to allow for servicing. All wiring must be able to be removed when installed into cavities or walls, therefore, it is recommended that a minimum of 25mm conduit be used to house the leads. The unit is supplied with 5 meters of lead on the transformer and a 5 meters lead from the solenoid. Additional lead lengths may be accommodated up to a length of 5m but must be ordered separately.
- Whilst our product designs consider a broad range of installation types and surfaces, it is important that surfaces which fixtures are mounted to are flat and free from defect. This is especially important for our Flowmatic® Safe-Cell® range where special attention is required to minimise ligature points and areas for concealment of contraband. In addition to ensuring the products are fitted securely and in accordance with the following instructions, consideration shall be given to the use of non-pick mastics such as BASF Sonolastic "Ultra" to ensure a high quality and safe installation.
- Most installation problems are due to damage to the unit during installation or the selection of an inappropriate installation location. Select the location carefully and take care with the installation, consider ease of operation for the end user.

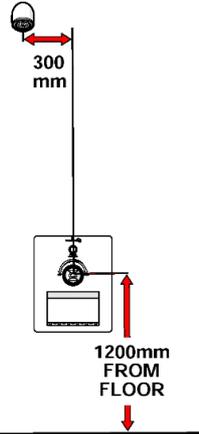
GENERAL INSTALLATION REQUIREMENTS

- Do not cut the wires or extended the existing leads without using a correct lead extension from Galvin Specialised, as this will void warranty.
- Suitable access to the service of all components must be provided.
- It is recommended that acoustic dampening products or materials be used in facilities where increased levels of sound protection is required. A water hammer arrestor may also be required.
- The number of valves and simultaneous demand must be considered when sizing pipes. If other fixtures are connected to the supply line, calculations of flow rates and pressures must be undertaken to ensure adequate water supply.
- Limit the number of changes of directions in pipe work. This will result in less friction loss, better valve performance and reduce potential water cavitation noise.
- We recommended fitting isolating valves before solenoid for easy servicing.
- Do not apply heat near this product during connecting water line. Heat generated by soldering could damage plastic or electrical parts and seals, and will void the warranty.
- For personal installation assistance and spare parts, please call our head office on 1300 514 074 and speak to our customer service staff.

Mounting Details

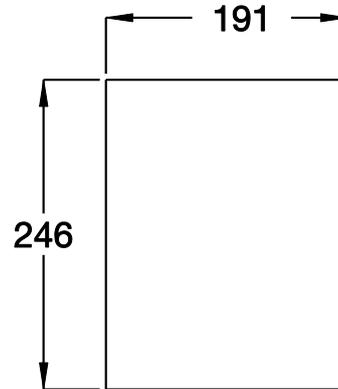
Shower face plate position

- Locate the shower face plate at a suitable distance from the shower rose (we recommend the shower face plate is not positioned directly beneath the shower rose, but at 300mm to the right or left of the centre line of shower rose and at a height of 1200mm from FFL to the centre of the Ezy-Grip handle).
- Outlets are not supplied and must be ordered separately.

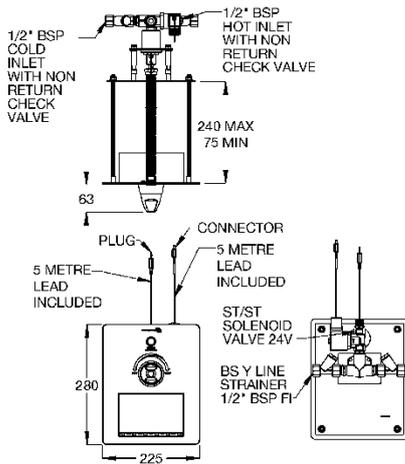


Cut out details for face plate

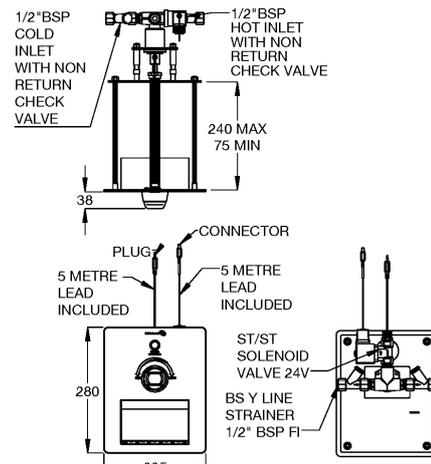
- Shower assembly to suit wall thickness between 75mm to 240mm. Ensure the cut out details are as below and the wall thickness does not exceed 240mm.



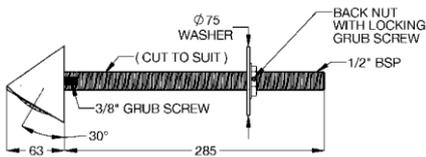
Component Dimensions



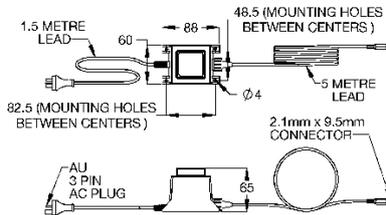
52427- STAINLESS STEEL SHOWER FACE PLATE ASSEMBLY



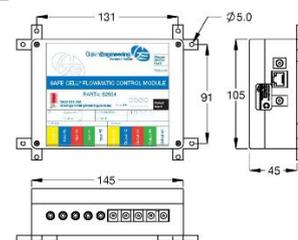
52427- STAINLESS STEEL SHOWER FACE PLATE ASSEMBLY



40691 (STD) / 40698- SHOWER ROSE DUCTED ASSEMBLY (NOT SUPPLIED)



52028 - TRANSFORMER (NOT SUPPLIED)

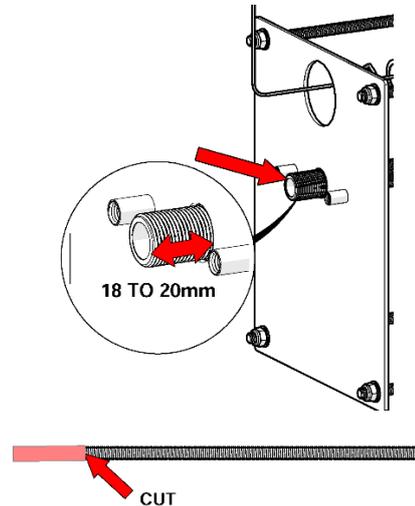
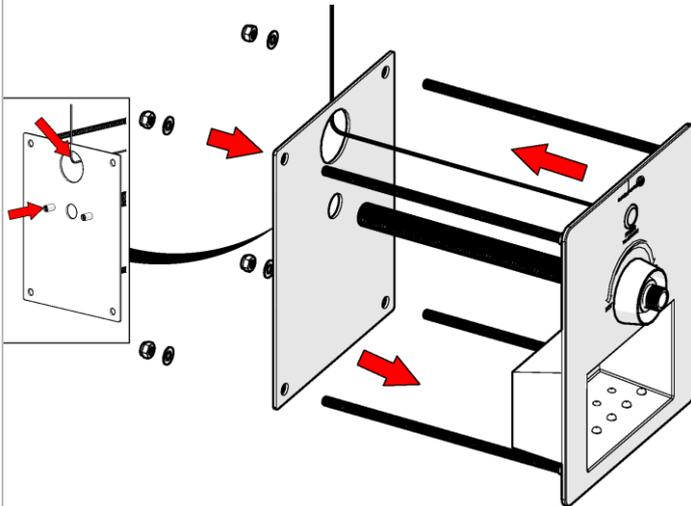


52504/52504X - FLOWMATIC CONTROLLER (NOT SUPPLIED)

INSTALLATION

⚠ Avoid common installation errors :

- Incorrect supply pipe size installed.
- Non-compliance to Australian Standards.
- Water pressure not tested before installation
- Lines not flushed before installation.
- No access for service.
- Valve not commissioned properly.



1. Mount face plate

- The stainless steel face plate is always mounted flush to the wall.
- Mount faceplate to the wall using the back plate, washers and nyloc nuts; the two welded nuts on the back plate must be outside the wall cavity.
- Ensure the button lead is fed through the large hole at the top of the back plate and lightly tighten with the Nyloc nuts until the assembly is held
- Apply a thin bead of silicon on the edge of the wall cut out.

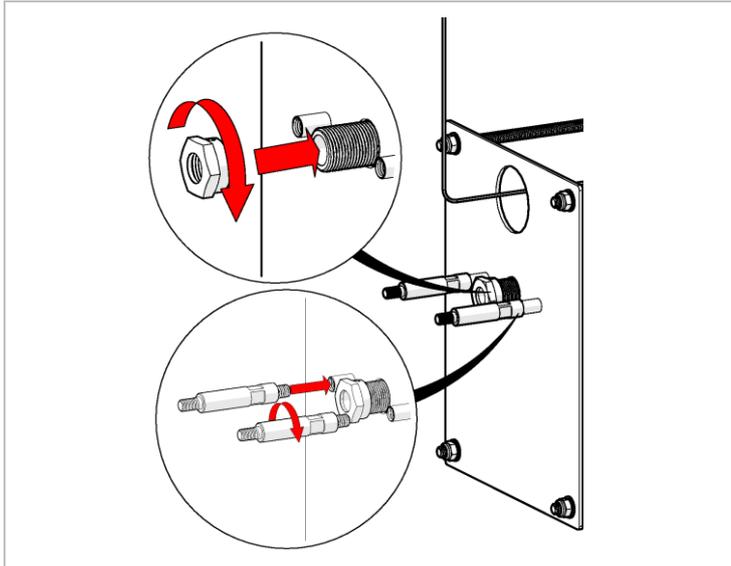
⚠ Do not force the faceplate to fit onto wall or attempt to disassemble components, as this could result in damage to sensor push button.

2. Shorten Tail

- Before tightening the Nyloc nuts, check that the threaded tail protrudes past the back plate between 18-20mm. If it is too long mark the threaded tail, remove the back plate and cut to suit.

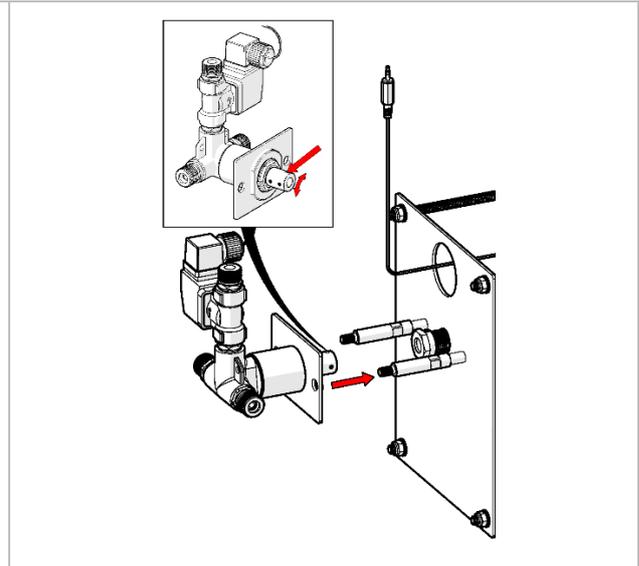
Note: if the 4 threaded studs are too long these can also be shortened to suit.

⚠ Warning: remove the centre Ezy-Grip handle before shortening. De-burr the threaded tail after cutting and re-assemble into wall. Do not over tighten Nyloc nuts (max. 35 Nm).



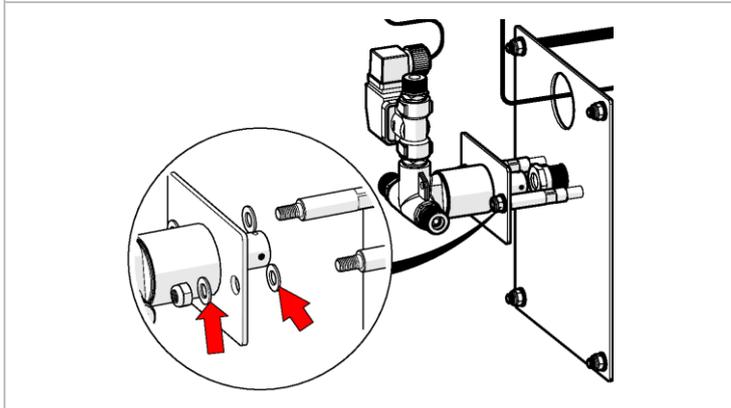
3. Fit Guide Nut and Studs

- Fit the guide nut to the end of the extension tail and tighten.
- Fit the two Brass studs into the welded nuts on the back plates and tighten



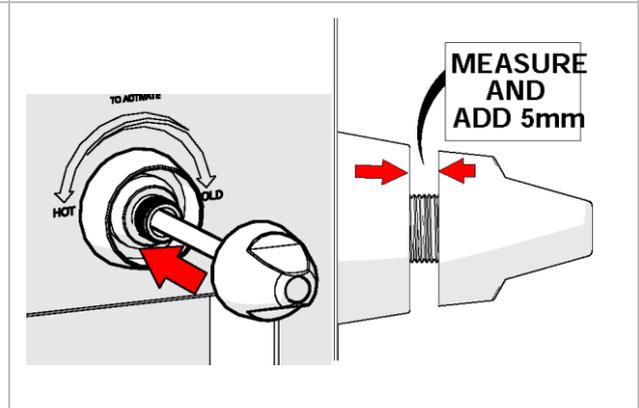
4. The Diverter to Midway

- Turn the shower diverter from one extreme to the other, this should be 90° of movement.
- Set the diverter cartridge to midway of the movement. In this position the drilled hole in the Brass connector should be vertical; this will allow easy drilling of handle



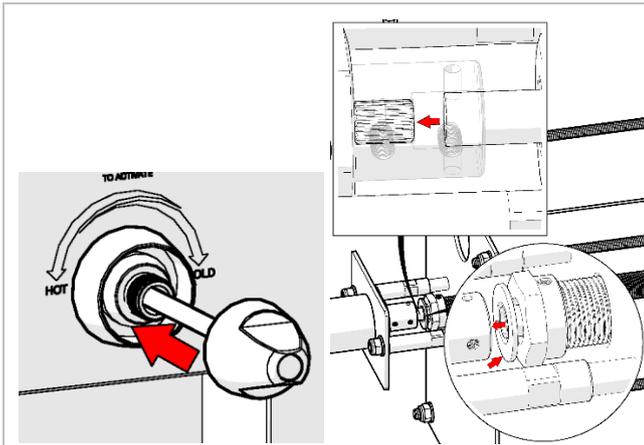
5. Fitting the Solenoid Assembly

- Fit the solenoid assembly onto the Brass studs with washers on both sides of the mounting plate as shown, lightly tighten with the Nyloc nuts until the assembly is held



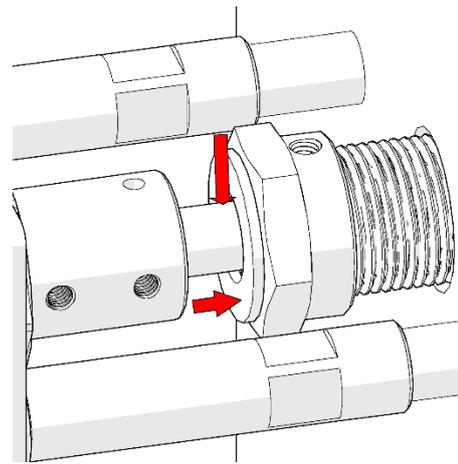
6. Adjust Handle Length

- Insert the Ezy-Grip handle through the threaded tail and into the Brass connector on the mounted solenoid assembly making sure the Ezy-Grip handle is pushed as far into the Brass connector as it will go.
- Measure the distance from the underside of the Ezy-Grip handle to the top of the flange and add 5mm. This is the amount that the Ezy-Grip handle needs to be shortened by.
- Remove the Ezy-Grip handle and mark this distance from the end of the shaft and cut, remove any burrs



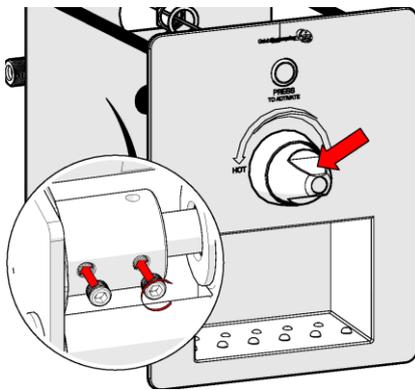
7. Re-assemble Handle

- Re-insert the Ezy-Grip handle through the threaded tail and the flat washer before entering the Brass connector on the mounted solenoid assembly.
- Ensure the Ezy-Grip handle is sitting correctly in the flange and is pushed as far into the Brass connector as it will go.



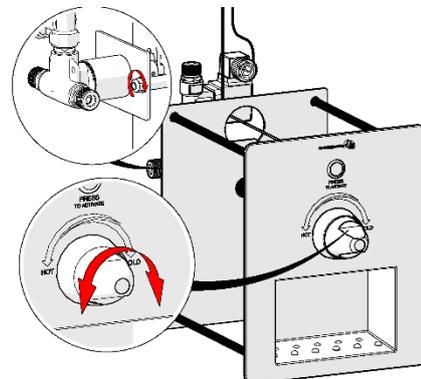
8. Mark Shaft for Cotter Pin

- Hold the flat washer against the guide nut and mark the shaft 2mm from the face of the washer.
- Remove the extended handle and drill a Ø3mm hole through the shaft where marked.
- Re-insert the extended handle through the extension tail and the flat washer before entering the connector on the mounted solenoid assembly.



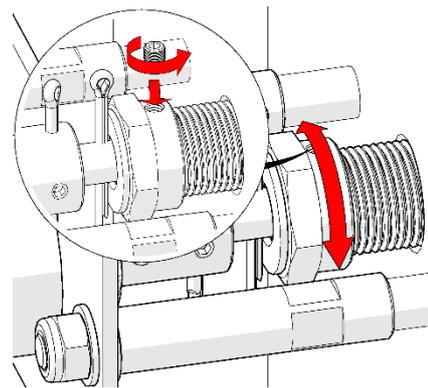
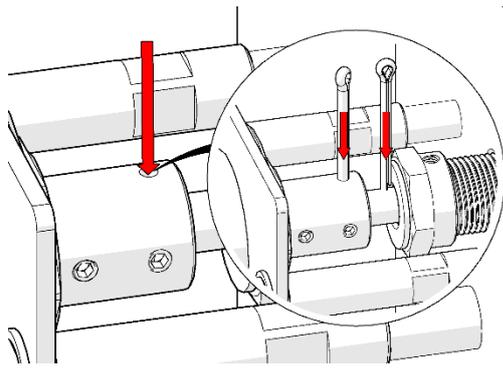
9. Set Handle Position

- Adjust the Ezy-Grip handle so the flats are horizontal.
- Fit the supplied grub screw into the Brass Connector and lock the handle.
- Check the handle alignment to the solenoid movement is correct. If it is not, loosen the grub screw and adjust before re-tightening



10. Tighten Solenoid Assembly

- Check the handle moves freely and the flats on the handle are horizontal midway through the handles movement (if the movement appears to be very tight or sticks loosen the Nyloc nuts holding the solenoid assembly and move around on the clearance of the holes until easy movement is achieved).

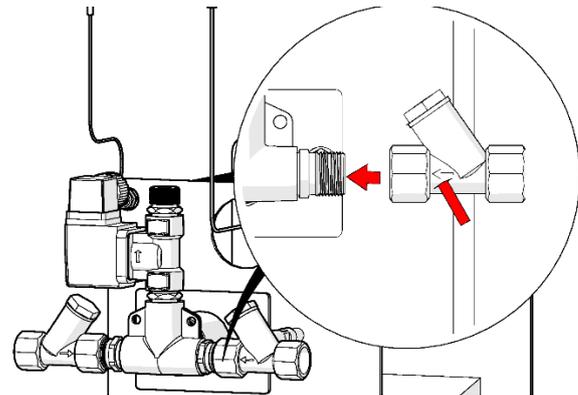
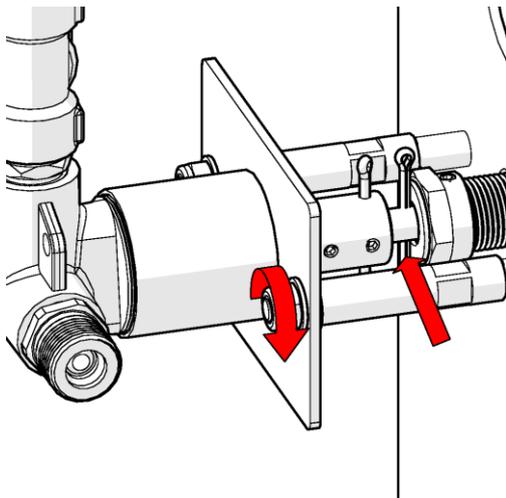


11. Lock Handle

- Using the hole in the Brass connector drill a Ø3.0mm hole through the shaft of the Ezy-Grip handle
- Fit the cotter pins through the Brass connector and Ezy-Grip handle shaft; bend over the ends to stop the cotter pin falling out in use

12. Adjust Handle End Float

- Adjust guide nut to limit end float on the handle, do not make too tight as it will affect the easy use of the handle.
- Once the end float has been adjusted lock the guide nut in position with the supplied grub screw.

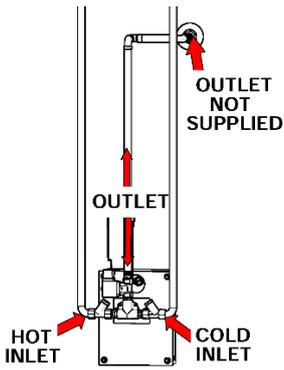


13. Check

- Ensure all Nyloc nuts and grub screws are securely tightened (max. 35 Nm) and the cotter pins have been bent over to stop them falling out.

14. Fit Y strainers

- The supplied Y strainers are fitted in line. Ensure it is installed in the correct direction (the arrow on the Y strainer body must align with the direction of water flow).
- Not used of these strainers may void the warranty



15. Connect Water Supply and Outlet

- Connect the water supply to the inlet check valves and the shower rose (not supplied) is connected to the outlet on top of the solenoid assemblies. Turn on water supply and check for leaks.

Note: The TZ-FLOWTMSHWDT is not supplied with our Safe-Cell® vandal resistant shower rose - Item# 40691/40698 and must be specified at time of order

⚠ Do not apply heat near this product. Heat generated by soldering could damage plastic or electrical parts and seals and will void the warranty.

16. Mount and connect control module (must be used with Galvin Specialised Flowmatic control module, it is not supplied with this unit, must order separately).

- Connect the button leads to the input side of the control module and the solenoid leads to the output side. The ends of the leads are colour coded for easy identification.

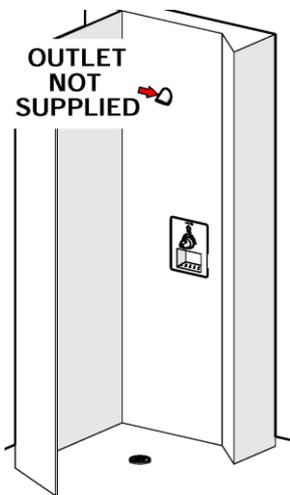
17. Connect the power supply

- Connect the module to the GPO (Not supplied with this unit, must order separately).
- When the button is pushed water should flow from the outlet.

⚠ Do not cut the leads. If the leads are too long, it is recommended that any excess is coiled up and clipped to the wall.

⚠ The connection of this product to mains power supply should be undertaken by a competent person and should conform to local Wiring Regulation – AS3000 Wiring rules.

⚠ All electrical components should be protected from contact with water or excessive heat and installed in accordance with local regulations.



Typical Installation

18. Check for correct operation

- Check for correct operation.

Shower function: Pressing the illuminated cell call button activates the shower. Once activated the water will flow for the factory preset time of 6 minutes or until deactivated by pressing the button again. Once the time is achieved or the shower is deactivated the factory preset lockout time of 10 minutes will commence stopping.

⚠ Shower Pulse Warning (SPW):

Prior to the shower finishing its preset time the shower will warn the user by pulsing once 30 seconds before finishing allowing the user to quickly finish.

Showers Per Day (SPD):

The shower also has a maximum daily shower feature, the factory setting is 2 showers per day.

Run Time:

The factory preset run time is 6 minutes but can be adjusted from 1-15 minutes in increments of 1 minute.

Lockout Time:

The factory preset lockout time is 10 minutes but can be adjusted from 1-15 minutes in increments of 1 minute. The lockout time feature can be also disabled if required.

Setting details, please contact Galvin Engineering.

TROUBLE SHOOTING		
PROBLEM	CAUSE	RECTIFICATION
Outer ring on push button not illuminated.	No Power	Check power is reaching transformer
	Leads not connected correctly	Ensure all leads are firmly pushed into connectors
No water flow	No power	Check power is reaching transformer
	Faulty solenoid valve	Check electrical connections, Replace solenoid valve
	Water or structural damage to electrical components	Replace damaged electrical components
	Incorrect connections	Check all connections
	Damage to sensor lead or power supply lead	Check and replace lead & controllers
	Pressure exceeding 500kPa	Reduce pressure to solenoid to 350 kPa
Continuous water flow	Water corroded electrical connections	Replace electronic components
	Solenoid valve jammed open	Remove obstruction from solenoid valve
	Solenoid installed incorrectly	Reinstall valve correctly
	Bypass valve lever on the solenoid in the 'open' position	Move the valve handle to the 'closed' position

Maintenance Instructions

Solenoid Valve:

- Turn the water supply off and activate the push button to drain as much water from the installation as possible, and then turn the power off at the GPO.
- Depending on the location of the solenoid valve it may be more convenient to remove the solenoid valve completely from the installation to service it.
- The solenoid may be disassembled and checked for debris and cleaned to avoid potential damage to the diaphragm. Please take note of the location of the components and reassemble in the correct order, as there is a spring in the housing that may inadvertently spring out.
- Service or replace the solenoid and re-install into the line. Push the power plug from the sensor back onto the solenoid.
- It is recommended that the line strainer be serviced and cleaned at this stage to ensure that dirt and grit isn't restricting the flow
- Ensure the bypass tap on the valve is in the closed position

Push Button, Face Plate, Control Module and Power Transformer

These items are non-serviceable products. If damaged they must be replaced.
If there appears to be any problems with these items please contact Galvin Engineering.

Note: Before attempting to replace any of these items check that you have access to re-run the connection leads. If you do not have access or you have any doubts, please contact Galvin Specialised for advice before commencing replacement.

WARRANTY

The warranty set forth herein is given expressly and is the only warranty given by the Galvin Engineering Pty Ltd. With respect to the product, Galvin Engineering Pty Ltd makes no other warranties, express or implied. Galvin Engineering Pty. Ltd. hereby specifically disclaims all other warranties, express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

Galvin Engineering Pty Ltd products are covered under our manufacturer's warranty available for download from www.galvinengineering.com.au Galvin Engineering Pty Ltd expressly warrants that the product is free from operational defects in workmanship and materials for the warranty period as shown on the schedule in the manufacturer's warranty. During the warranty period, Galvin Engineering will replace or repair any defective products manufactured by Galvin Engineering without charge, so long as the terms of the Manufacturer's warranty are complied with.

The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and Galvin Engineering Pty Ltd shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labour charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, electrical or any other circumstances over which Galvin Engineering has no control. This warranty shall be invalidated by any abuse, misuse, misapplication, improper installation or improper maintenance or alteration of the product.

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