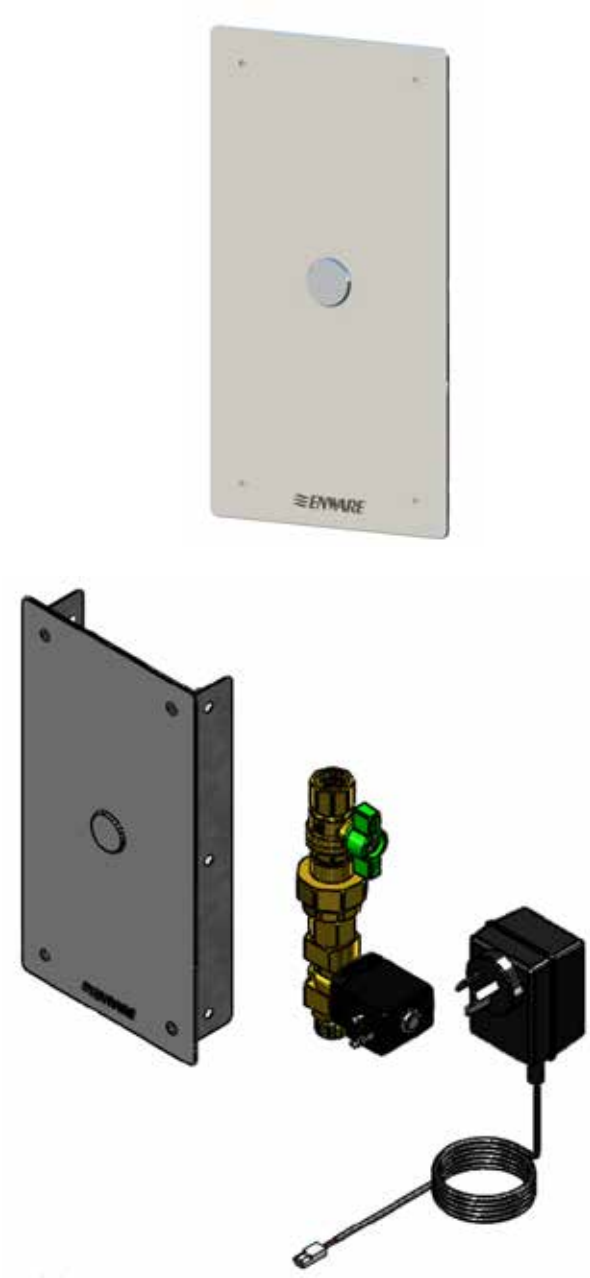
TOUCH-ACTIVATED URINAL FLUSHING SYSTEM SLIM STYLE PANEL - LARGE (FRONT ACCESS)

Installation & Maintenance Instructions

EMF307M



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Touch-Activated Urinal Flushing System - Large Panel (Front Access)

EMF307M

Enware's Urinal flushing systems provide a neat and reliable flushing solution using piezoelectric technology particularly suited for public access applications.

Electronic Flush Valve for urinals, activated by a piezo button that is powered by mains power. Semi concealed installation with a stainless steel front access panel. Shut off valve and filter included.

FEATURES

- Piezo touch button control
- Vandal resistant torx screws
- Large face plate for front access
- Mains power 24V
- 3 Star water efficiency rating*
- 1-year warranty

OPTIONS available on request

- Sentinel Flushing - Every 12 or 24 hours

Product Codes

EMF307M-3 WELS 3 Star rated*

Technical Information

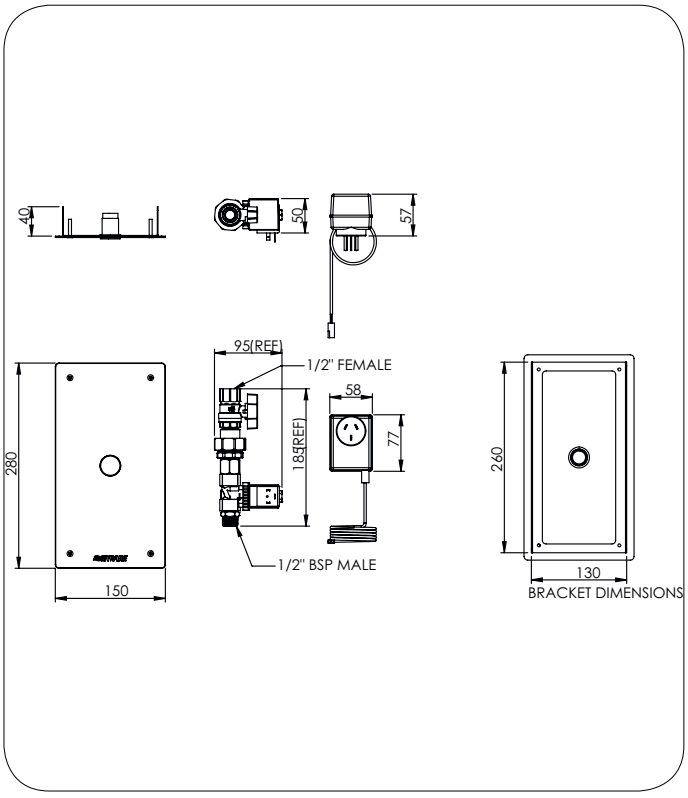
Water Supply	350 kPa
Connection	Inlet - ½" BSP (15mm)
Minimum Water Supply Line Size	¾" (20mm)
Mains Powered	24V AC transformer

To ensure that the unit works correctly, it is important to ensure that the site and location of installation meets the requirements of AS/NZS 3500.1 & AS/NZS 3500.2.

In addition there must also be:

- Minimum 20mm copper supply line for 1 stall or up to 450mm wall space. 600mm of wall space may require 25mm supply
- Minimum 200kPa for valve to operate. NOTE: WELS Flush Volume only achieved at 350kPa
- No more than 1 valve per urinal OR 600mm wall space
- Flush valve must be no more than 2m above ground level
- Flush valve should be installed min 300mm above wall hung urinals and 450mm above continuous wall urinals

** Solenoid has ATS 5200.030 certification. To achieve ATS 5200.020 certification EMFS10 must be used.



WATER RATING
2 Stars per flush per stall

WaterMark
ATS5200.030
CofC 60042
AGA

WaterMark
ATS 5200.020
C of C 40116
Global-Mark

Version: Sep 12

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INSTALLATION INSTRUCTIONS

Before proceeding with installation ensure all operating & dimensional specifications are suitable for the intended installation.

1.1 INSTALLATION COMPLIANCE REQUIREMENTS

Enware product's must be installed in accordance with AS/NZS 3500.1 & AS/NZS3500.2 – Plumbing and Drainage, the Plumbing Code of Australia as well as imposed Local and State / Territory Legislative requirements and the manufacturers instructions.

The following clauses must be observed for a compliant installation and correct operation of Enware tapware:

Water Services

Plumbing Code of Australia:
Part B1 Cold Water Services

AS / NZS 3500.1-2003 Water Services;

- Section 3.3.2 Pressure at outlets (min 200kPa is required for valve to operate)
- Section 3.3.4 Max. pressure within buildings (500kPa operating)
- Section 3.4 Velocity Requirement (Max 3.0m/s)
- Section 16 Testing and Commissioning; Flushing, Hydrostatic testing, cleaning & disinfection of water services.

NOTE: Enware's WC flushing units have Watermark License to ATS5200.020 (For Flushing Valves for Water Closets and Urinals - For use with Mains Supply), ATS5200.030 (Solenoid Valves) and WELS registered to AS/NZS 6400

IMPORTANT TECHNICAL REQUIREMENTS

To ensure that the unit works correctly, it is important to ensure that the site and location of installation meets the hydraulic requirements of AS/NZS 3500.1. Also there must be:

- Minimum 20mm copper supply line for 1 stall or up to 450mm wall space. 600mm of wall space may require 25mm supply
- Minimum 200kPa for valve to operate
  NOTE: WELS Flush Volume only achieved at 350kPa
- No more than 1 valve per urinal OR 600mm wall space
- Flush valve must be no more than 2m above ground level
- Flush valve should be installed min 300mm above wall hung urinal and 450mm above continuous wall urinals

Pipe work to the valve fixture must be sized according to water service rule calculations and simultaneous demand requirements. To ensure that the pipeline reticulation system for the valve is designed correctly for the satisfactory performance of the valve a Hydraulic services Consultant and/or Engineer (or other personnel appropriately qualified in hydraulic services design) must be engaged.

1.2 INSTALLATION INSTRUCTIONS

1. Separate parts from packaging & check each part (figure 2.1). Parts will separate as shown in figure 1.2. Pay attention to the different models variations. Make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install your flushing system until missing parts are obtained.
2. Flush water supply lines thoroughly before installing the flush valve. Do not allow dirt, Teflon tape or metal particles to enter the unit.
3. Shut off water supply and ensure shut off valve is closed on flushing system.
4. Decide on appropriate location combining piezo operation and valve placement. Install height of between 1-1.5m recommended.

   Note: Unit is designed to have fascia fitted in front of valve (to allow for easy access in the future)
5. Cut an adequate opening in the wall for the bracket and appropriate gap in pipe work to fit the valve. (Bracket Dimensions 130 x 260 - cut out MAX 132 x 265) (FIGURE 1.1)

   Note: 20mm inlet pipe with 1/2" BSP (male) adaptor required for install.

   Note: Piezo plate can be installed away from valve box where necessary, i.e. flush valve in wall cavity with activation on different wall. Extensions can be purchased if required. AS3500.1 requirements are still required to be met.
6. Connect the shut off valve and upper section of the union (as shown) (FIGURE 1.2 and 1.3) Note: If using EMFS10-Air Gap also refer to FIGURE 1.9 on page 4.

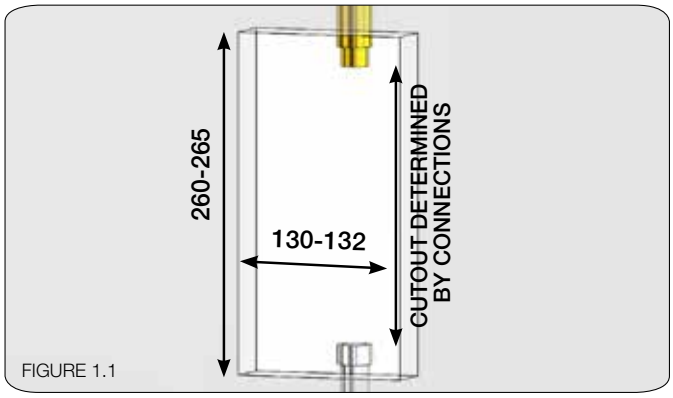


FIGURE 1.1


FIGURE 1.2

FIGURE 1.3

INSTALLATION INSTRUCTIONS

1.2 INSTALLATION INSTRUCTIONS (Cont'd)

7. Connect lower half of flush valve to union and spreader pipe (FIGURE 1.2 & 1.3)

8. Fit mounting bracket to wall cutout and fix in place. (FIGURE 1.4)

9. Place the transformer near to electrical outlet and thread its lead to the metal bracket and out the hole in the wall.

   Note: transformer MUST be accessible after installation.

10. Turn on water supply and check that there are no leaks. Ensure shut off valve is off again after test.

11. Fit the piezo to the stainless steel cover plate. Ensure the red fiber washer is fitted between the back of the plate and the piezo nut. (FIGURE 1.5) Do not overtighten nut.

12. Plug piezo spade connectors onto solenoid (FIGURE 1.6)

13. Plug in transformer. Turn on to test the operation of the valve. If the valve clicks and resets, it is working. Ensure the transformer is turned off until after final connection. (FIGURE 1.7)

14. Fit stainless steel panel with piezo to mounting bracket in wall (FIGURE 1.8)

FIGURE 1.4

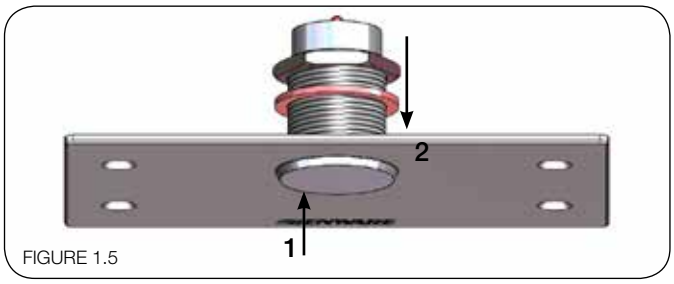


FIGURE 1.5

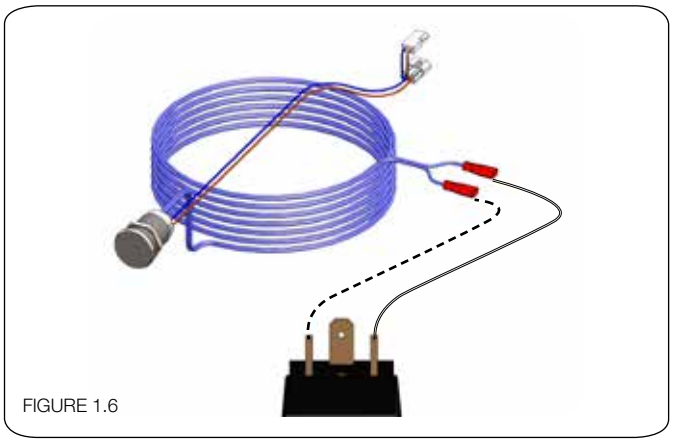


FIGURE 1.6

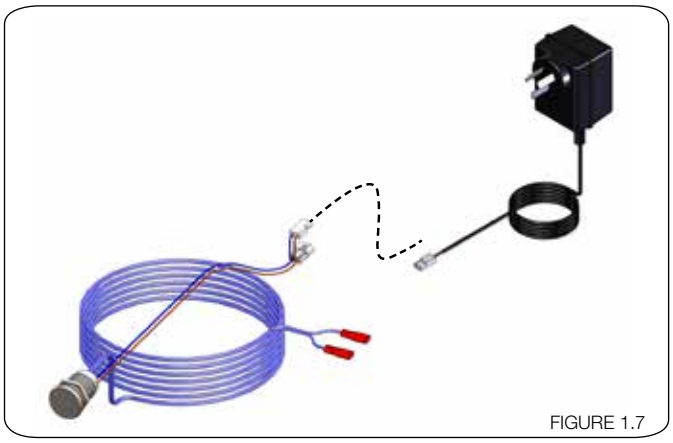


FIGURE 1.7

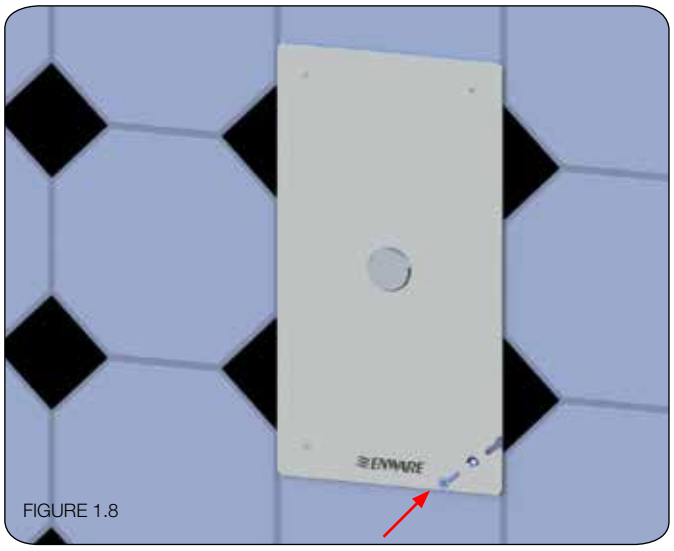
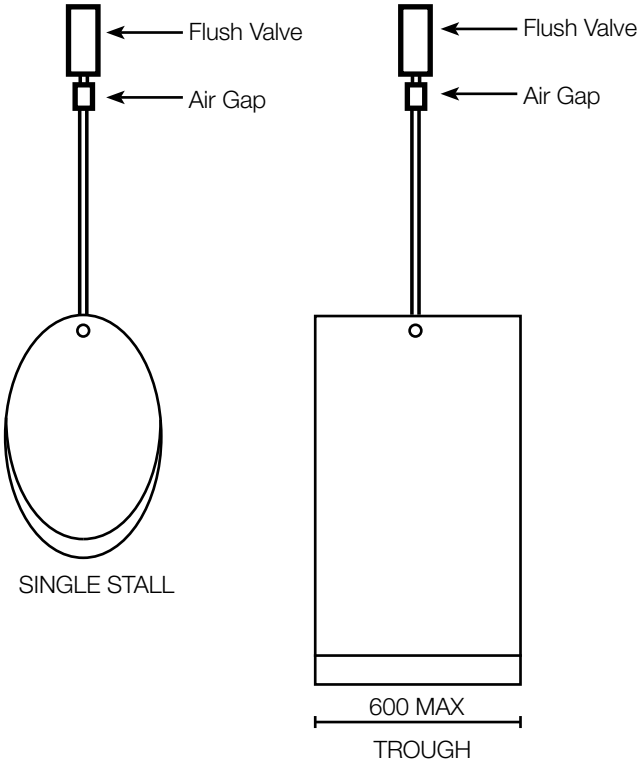


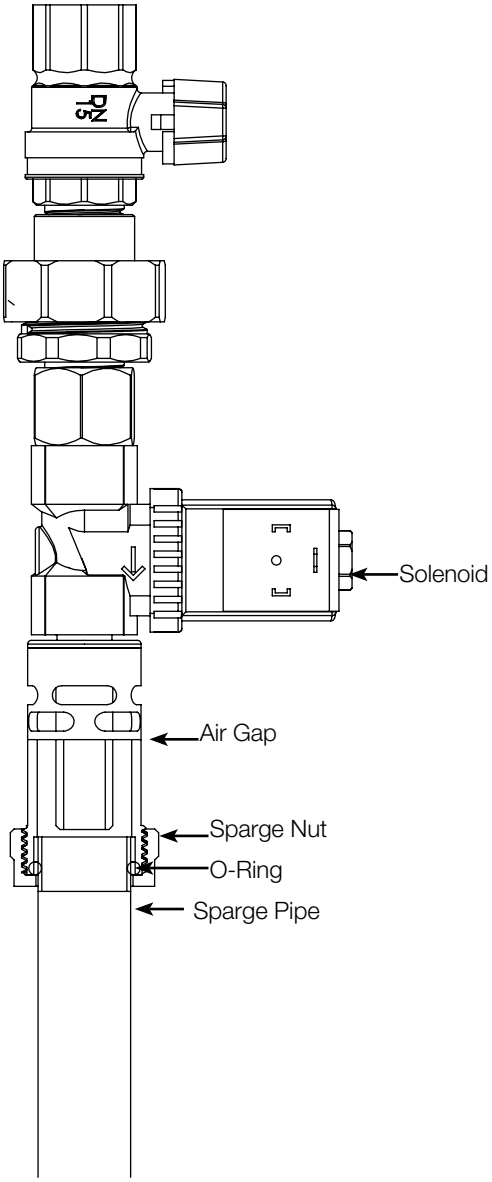
FIGURE 1.8

INSTALLATION INSTRUCTIONS

1.9 INSTALLATION OF AIR GAP EMFS10



- Air gap must be installed vertically to prevent leakage
- Fit air gap to solenoid (use thread tape or similar to seal)
- Fit sparge 25mm pipe to air gap.



PRODUCT COMPONENTS AND SPARE PARTS LIST

2.1 EXPLODED VIEW

FIGURE 2.1

2.2 SPARE PARTS

EMDS800	24V Transformer - 1.8M Lead
EMFS300	Switch Piezo 22MM S/S Urinal
EMS804	Solenoid 3/8” 24V AC
ENMS123	1/2” Strainer
EMFS304	Shut off valve
EMFS10	1/2” Air Gap

2.3 OPTIONAL PART

EMDS801	2m Power to piezo extension cable

SERVICE AND MAINTENANCE

3.1 SERVICE INSTRUCTIONS

Refer to trouble shooting chart to help determine specific problems

Spare part kits should be on hand before servicing the unit.

3.2 TROUBLE SHOOTING

Refer to the following trouble shooting chart for specific problems and solutions. Service instructions are supplied with spare part kits

FAULT / SYMPTOM	CAUSE	RECTIFICATION
Button pressed - water does not flow	Loose connection on leads	Reconnect electrical connections
	Piezo switch is not working (no light appears when unit switched on)	Piezo switch or transformer faulty
	Dirty Filter	Turn off shut off valve. Open union and remove lower section of valve. Clean or replace filter.
	Supply pressure issue	Ensure pressure delivered to unit is above 200kpa and below 500kPa (dynamic)
Water does not stop flowing	Debris or scale in the solenoid	Remove solenoid, pull out plunger and spring & clean them. Use scale remover if required. When replacing plunger, ensure spring is in vertical position
	Dirty Filter	Turn off shut off valve. Open union and remove lower section of valve. Clean or replace filter.
	Supply pressure issue	Ensure pressure delivered to unit is above 200kpa and below 500kPa (dynamic)
Flush pattern not fully covering bowl	Supply pressure issue	Ensure pressure delivered to unit is above 200kpa and below 500kPa (dynamic)
	Supply pipe inadequate size	Ensure supply is 20mm (minimum)
Too little water delivered	Supply pressure issue	Ensure pressure delivered to unit is above 200kpa and below 500kPa (dynamic)
	Supply pipe inadequate size	Ensure supply is 20mm (minimum)
	Trying to flush too large an area	Ensure no more than 450 wall space or 1 stall is being serviced by valve (25mm supply if covering 600mm of wall space)

3.3 FILTER CLEANING

This flush valve is provided with a stainless steel filter preventing foreign particles from entering the lines. If the water flow has decreased, this may be because the filter is clogged. They can be cleaned as follows:

1. Turn-off the water shut off valve
2. Disconnect flush valve at union and separate from spreader pipe
3. Remove the filter & wash it under running water. It may be necessary to replace the filter (spare parts can be ordered from Enware)
4. Reinsert the filter and refit the flush valve
6. Turn on the water shut off valve
7. Make sure that there is no water leakage

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