



INSTALLATION AND OPERATING MANUAL

AUP 04.B – Automatic wall-to-floor stainless urinal with automatic flushing systém, 6V

BASIC TECHNICAL INFORMATION

Power supply:	6 V DC
Recommended source of power supply:	4x AA alcalic battery (do not use rechargeable batteries with a voltage of 1.2 V)
Life of batteries:	about 1 year at 50 flushes a day
Water inlet:	G 1/2"
Water pressure:	0,2 – 0,8 MPa (2-8 bar)
Required water flow capacity:	min. 12 l/min.
Time of flushing:	3 - 16 s (adjusted by producer to 6 s)
Outlet:	d = 50 mm
Weblink:	AUP 04.B

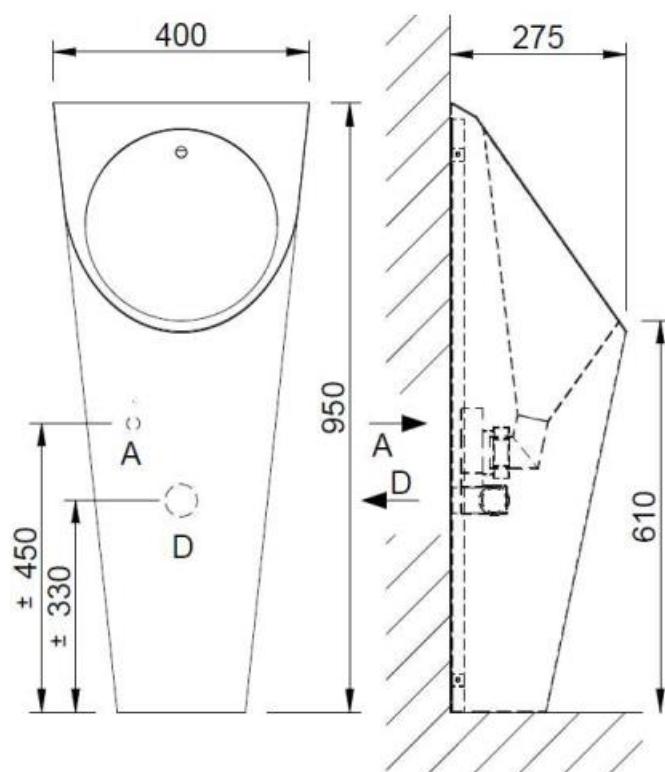
Function of the automatic urinal

- AUP 04.B is a stainless steel urinal with an automatic intelligent (IQ) flushing. The sensor itself is located on the self-priming siphon. When starting the use of the urinal, the electronics is activated which is indicated by a flash of a control LED light, after aproximately 5 sec. follows another double-flash and in next 15 sec. flushing is activated (triple flash of LED light signifies sufficient rinsing of the urinal siphon). Electronics does not react to people passing by or when the urinal is touched. In this way needless flushing is prevented. After 24 hours inactivity the urinal flushes itself.
- The electronics will ensure closing of the valve even with low voltage in batteries.

Installation of the automatic urinal

Requirements for setting up the construction

- Set-up water supply pipe G1/2" with the inner thread – according to the used urinal. Water supply must be placed behind the urinal in the place where the corner valve will not run into the siphon or casing.
- A filter must be set up in the water inlet to the urinal or group of urinals for removing mechanical dirt and a clap valve preventing reverse priming.
- It is recommended to set up the water inlet with a valve in order to switch off the water when the urinal is cleaned with chemical detergents. The electronics reacts to the liquid flowing through the siphon, is activated and the detergent would be flushed.



A – water inlet

D – water outlet



4. Set-up outlet $d = 50$ mm (height according to the used scheme). The sewer system must be designed in a way to prevent suction of water from the siphon. If there is no water in the siphon, the electronics may not react to short use of the urinal, which only fills up the liquid in the siphon (electronics is activated by liquid flowing through the end part of the siphon).
5. Set-up tiling.

Assembly

1. Set up the installation bar, so that the lower edge of the urinal touches the floor.
2. Set up the water inlet with the corner valve with the filter and connect the supply hose with the electromagnetic valve in a way to prevent its bending or twisting (observe the water flow direction through the valve!!).
3. Connect the blade (knife) connectors to the valve – connector on a red-black cable must be connected to + pole of the valve, connector on the black cable to – pole of the valve.
4. Fix the self-priming siphon with electronics onto the ceramics. For easier fixing use the appropriate lubricant, specified by the manufacturer of sewer piping, to prevent possible damage of the siphon during installation. It is necessary to fix the siphon first on the urinal (not on the waste pipe in the wall), push it on the urinal gently but as much as possible (in order to lower liquid content in siphon). Set up the flexible hose from the siphon outlet to prepared sewage.
5. Open the corner valve.
6. With the corner valve set the required water flow (according to used urinal).
7. Fix the lower part of the urinal by screwing attached bolts.

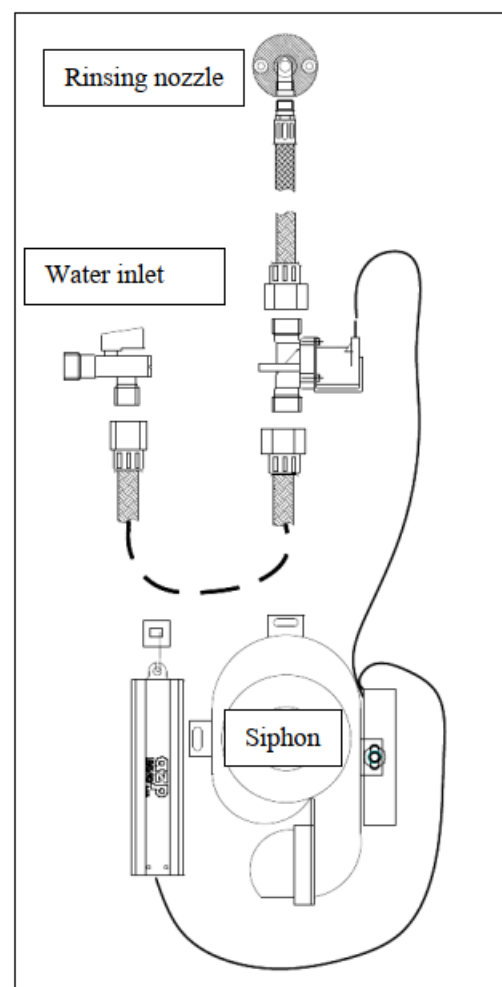
Setting

Automatic setting

- The electronics of the urinal is automatically adjusted after the source of power supply is switched on – it will be automatically adjusted to the particular conditions.
- **The adjustment of the electronics is processing without any necessary intervention. Do not use the urinal and do not pour any liquid into the urinal during the whole process of adjustment!** The process of adjustment takes max. 2 min. When connected to the source of power supply the urinal flushes automatically (time of the flush is approx. 20 s to fill the siphon completely and flush away eventual dirt from siphon) and remains for approx. 1 min in rest – the resting conditions of urinal are being set. Then the urinal flushes again. It is possible to use the urinal in approx. 15 seconds after the second flush.
- Automatic setting is not possible if supply of water is closed. It is necessary to open the water supply and repeat the whole process of setting.

Change of setting by the user

- User can change the length of flushing or block the flushing completely (e.g. for cleaning the urinal). All changes of initial setting are done by setting magnet (use any standard magnet), which must be attached to the electronics – on the other side of electronics than the cables are. It is also possible to re-set the electronics through the wall of urinal (i.e. without removing the urinal from the wall), but stronger magnet, which has a range of at least 50 mm, must be used. This magnet can be purchased separately - order no. 1190 1001 00. Attach the





magnet to the urinal in the place where is the location of electronics (in other cases the setting will not be successful – electronics out of the magnet range).

Setting of flushing time

- Attach the magnet to the electronics within 20 minutes after inserting the AA batteries. Electronics will provide 3 short flushes (each aprox. 1 sec.). During this time, the magnet must be still attached to the electronics. Subsequently water begins to flow constantly – as long as the magnet is attached, the water flows. When removed, water stops flowing. Time of the water flow = time of newly set flushing. Should the user try to set the flushing time out of allowed range of 3 to 16 seconds, the originally set time of flushing will be retained. If the new time of flushing was set successfully the urinal flushes automatically with the newly set time. Should the setting be unsuccessful the urinal will not flush.

Blocking

- It is possible to block the urinal by means of attached magnet – e.g. for cleaning. Blocking process is possible only after 20 minutes from connecting the urinal to the power supply (within first 20 min of operation the electronics would be automatically switched into the setting mode, not blocking mode). Attach the magnet to the electronics – water starts to flow and flows for 10 s. It is not necessary to hold the magnet attached during the whole time of flushing – flushing will be finished automatically (without following short flush to prevent dilution of cleaning detergent). After this flush the urinal stays in rest mode for next 15 min. After 15 minutes, it automatically flushes including the following short flush (regardless to set length of flushing time). From now the urinal will be in standard operation mode again.

Note

- Under the term of „flushing“ is understood:
 - flush with set length of time, pause and second short flush to fill-up water in siphon. This applies for both – operation and setting mode.
- **Note**
When the urine is not flushed away from the siphon during the time when it should occur (e.g. due to closed corner valve) or the flush is insufficient (half-closed corner valve or undersized water supply), urinal will repeat flushing 3 times and then remains in rest. Automatic flush will be repeated every hour until the conditions in siphon improve.

Flush test

- In order to produce a flush test of the urinal, it is sufficient to throw the content of the enclosed bag into the urinal. Automatic flushing will follow within next 45 sec.

Indication of operational states

- Control LED (located directly on electronics)
- flashes 1x - electronics was activated – automatic flush will follow
- flashes 2x - the concentration of urine in the siphon is stable - from this moment begins the countdown of time to the flush, which is 15 s
- flashes 3x - after flushing indicates that the cleaning of siphon was sufficient and will not be repeated

Notice

- The electronics must not come in any contact with water or lubricant during the assembly of the urinal. Should it by accident happen, first dry the electronics and only then connect it to the power supply unit – the automatic adjustment of electronics will follow. Do not adjust the wet electronics! The quiescent conditions change after its drying and the electronics would not work reliably.



- Automatic urinal AUP 04.B can be connected to D.C. voltage of 6 V only (4 pcs of cylindrical batteries 1, 5 V). If connected to a different source of power supply, the manufacturer does not take the responsibility for reliable functioning or eventual damages arising from connection to other voltages.
- Never combine new and old batteries together (if the sum of the voltages is lower than 5,7 V, the electronics does not work). If the voltage is lower than required voltage the electronics closes the valve and the controlling light starts to blink until complete discharge of batteries.
- Do not use the accumulators with 1, 2 V voltage is forbidden – the electronics will not work!

Explanation and delivery parts

1 pc. – self-priming siphon with electronics
1 pc. – corner valve with filter
1 pc. – electromagnetic valve
1 pc. – st. steel urinal

1 pc. – flexible hose
1 pc. – anchoring material
1 pc. – flexible outlet

Possible failures and their solution

Failure	Cause	Solution
After inserting AA batteries the pilot light blinks constantly	Low voltage – partly discharged batteries. Use new batteries with min. voltage of 6V	Use new batteries. Before inserting the batteries discharge the electronics completely – see next point.
After inserting AA batteries does not blink	Electronics was shortly without power, absorbed charge in capacitor – self-setting of electronics is not possible	Take out the batteries and short circuit “+” and “-” pole in the casing for batteries (spring and brass point on the side where cable is). Insert the batteries again.
After inserting AA batteries, water starts to flow and flows constantly	Reverse polarity of cables on solenoid valve	Connect correctly
After switching on the LED light blinks, after 10 min. does not flush	Clogged filter of corner valve Solenoid valve not connected Closed corner valve	Clean the filter Connect the valve Open the corner valve
Electronics blinks weakly but constantly, water does not flow	Low voltage – discharged batteries. At 4,5 V the valve stops opening.	Exchange the batteries
Water keeps running	Impurities in the solenoid valve	Clean the valve

Maintenance and cleaning

- The device was made from the stainless steel of quality corresponding with ČSN 17 240 (AISI 304) standard and, therefore, it must not be operated in chemically-aggressive environment and
- **Preparations containing chlorine must not be used for its cleaning!!**
- Cleaning agents by WÜRTH are recommended:
 - Metal renewal agent - Order No. 893 121 1
 - Stainless steel spray treatment - Order No. 0893 121 – K.
- If corrosion has already occurred, it can be removed with a cleaner INNOSOFT B 570 from the company Emergo.

Valve cleaning

- Screw out three spins holding the coil. Remove the coil; carefully take out plastic covering of the core; (be careful not to lose the spring). Remove the membrane, clean the space underneath. Check out the clearness of both inlets in the plastic centre of the membrane and insert the valve. It is necessary to



observe the water flow direction at the back assembly – the arrow on the valve and voltage polarity.

Black wire on (-) minus polarity and red wire on (+) plus polarity.

- The pulse valve is opened by a pulse of length of 20 ms and closed by the same pulse but with inverse polarity. Because after assembly of the valve it can be in the opened position and water can constantly flow, it is necessary to carry out a cycle for flushing without an opened water inlet, which reliably closes the valve.