

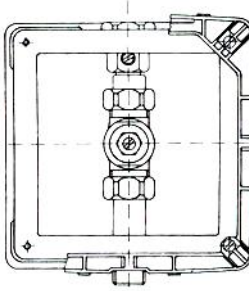


Installation and Operating Instructions

Urinal flusher for concealed installation NILplus 2003UP with self-cleaning jet-bore.



Cover plate no. 2510



Concealed part no. 2003UP

1. Article numbers and scope of delivery

1.1 Description

Urinal flusher for concealed installation, model: **NILplus 2003 UP**

1.2 Material for 1st stage of delivery, order-no. 2003UP:

Concealed urinal flusher including screw connections, with integrated supply stop on inlet and outlet sides. Inlet side at top, 1/2" internal thread, outlet side at bottom, 1/2" external thread.

Concealed casing 162 x 162 x 73 mm including screws and plugs for fitting in wall niches or pre-fabricated wall sections.

Temporary protective cover and polystyrene cover including fixing screws.

Installation and operating instruction.

1.3 Material for 2nd stage of delivery, order-no. 2510:

Cover plate (brushed stainless steel), operating button (mirror-finish chrome-plated).

Order no. 2510-ff:

Cover plate and operating button available in coloured or with special surface finish.

2. Technical data

DIN DVGW 3265, Test registration number DIN DVGW 768.

With NILplus automatic flush system.

Flow pressure 1.2 – 4.0 bar.

Flush volume: constant 3±0.5 l.

Integrated supply-stop with 1/2" internal thread.

Outlet fitting with 1/2" external thread.

With self-cleaning jet-bore.



3. Connection to all standard siphonic and normal urinal bowls with middle inlet at back

3.1 Either with: existing outlet ½" + connecting sleeve ½" + pipe ½" + wall union ½" + NIL connection pipe with urinal connector (order no. 445/45K).

or

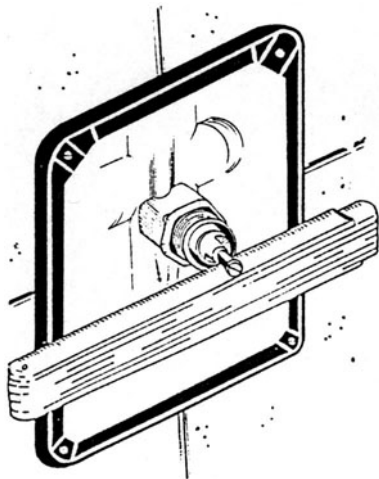
3.2 NIL urinal inlet fittings for urinal flusher, for concealed installation (order no. 445).

4. Installation of 1st stage material

4.1 Installation of the 1st stage material in wall niches or pre-fabricated walls and preparatory work for plasterers and/or wall-panel installers.

- Remove polystyrene cover and protective cap from concealed casing.
- Place concealed casing flush valve into the wall niche, making sure that this is positioned exactly horizontally and vertically. Check the horizontal and vertical position of the concealed casing with a level.
- Fix the installation case with 2 screws (not within scope of delivery) into the pre-fabricated wall element plain to the wall. Or fix it with fast-binding cement.
- Fix concealed casing into pre-fabricated wall section by means of 2 self-cutting screws (not included). Make sure that the casing is positioned exactly horizontally and vertically. Check arrow-marks on the installation case with a level.
- Connect the flusher to the mains, making sure that the supply-stop is positioned towards you.
- Connect the flusher to the urinal inlet observing point 3 above.
- After installation of the installation case, please put the protective covers back on the installation frame.
- Close wall openings and prepare everything for the plasterer.
- Make provision for niches in wall panels to take the concealed casing, temporary protective cover and urinal inlet fitting. Then fit these onto the pre-fabricated frame.

4. Final installation and operation

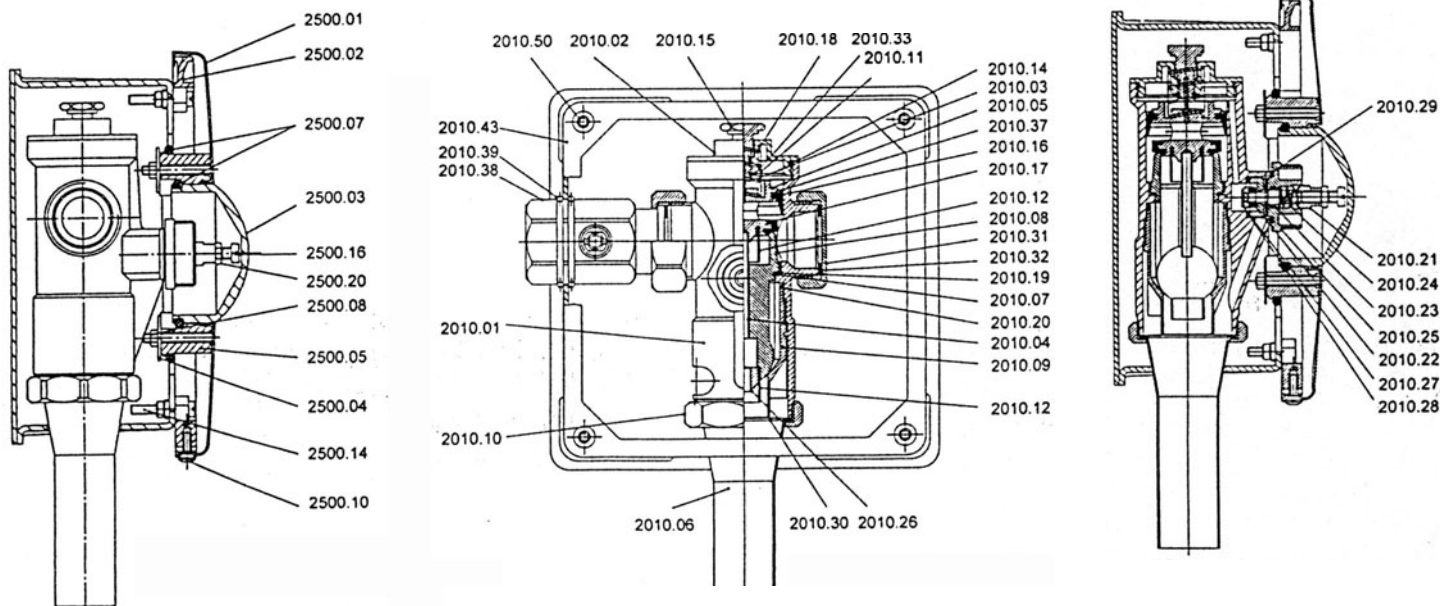


- Remove the protective plug from the flush-pipe, cut the inlet fitting to size to the toilet bowl and install it, fix the WC-connector and install the toilet bowl.
- Remove the polystyrene cover from the installation case.
- Fix installation frame with 4 screws.

- Screw the operation screw into the push-button of the flusher, adjust and cut it to size (if necessary), secure it with hexagonal nuts. NOTE: The head of the screw has to be plain to a horizontal set metric measure (as shown on the picture on the right).
- Open the supply-stop valve. Hang-in the wall cover and fix it from the bottom side with a screw. The push-button should be free to move about 2 mm to each side.

5. Operating principle

Pressing the push-button (2500/3) and thereby pressing the push-rod (2010/21) against the auxiliary valve spring (2010/24), the auxiliary valve (2010/27) opens through the release channel (I) the piston chamber (IV) above the piston (2010/5). The piston lip seal seals the piston chamber, initially under pressure. The release water flows through the release channel (II) in direction of the pressureless side of the flusher. The piston (2010/5) is released and is lift-up from the water pressure towards the piston spring (2010/11). The flushing process has now begun.



When releasing the push-button (2500/3), the auxiliary valve (2010/27) closes the piston chamber again. The piston chamber now refills through the ring channel (III), located between the piston drilling and piston rod (2010/3), while the piston (2010/5) is pressed in direction of the valve seat (V). The piston closes the valve seat, within the piston chamber the water pressure of the supply pipe is built up; the flushing process is now complete.

6. Setting of flush volume and flush rate

Factory pre-setting of flush rate: 1,0 l/sec. (1,3 l/sec.) at a flow-pressure of 2,5 bar (4,0 bar).

To **increase** the **flush rate** or adjust to a lower flow-pressure:

Turn the throttle sleeve (2010/9) with the provided allen-key or a screwdriver up to ¼ of a turn clockwise.

To **decrease** the **flush rate** or adjust to a higher flow-pressure:

Turn the throttle sleeve (2010/9) with the provided allen-key or a screwdriver up to ¼ of a turn counter-clockwise.

Factory pre-setting of the flush volume 6,0l – 6,5l at a flow-pressure of 2,5 bar and pushing the push-button for 1 sec.

To **increase** the **flush volume** turn the limitation screw (2010/15) counter-clockwise. ½ of a turn causes an increase of the flush volume of approx. 1 litre.

To **decrease** the **flush volume** turn the limitation screw (2010/15) clockwise. ½ of a turn causes a decrease of the flush volume of approx. 1 litre.

Adjustment of the flush volume by pressing the push-button for a longer/shorter time.

7. Spare parts

Article description	Article-no.
Complete replacement flusher	2010/1K
Complete head section (head piece 2, piston pin 3, upper section seal 14, limitation screw 15, o-ring for limitation screw 18, securing disc 33)	2010/2K
Complete piston (pressure relief pipe 4, piston 5, piston nipple seal 12, piston lip seal 16, piston seal 17, piston seal circlip 37)	2010/5K
Complete auxiliary valve head section (pressure rod 21, auxiliary valve seal 22, o-ring for pressure rod 23, auxiliary valve spring 24, auxiliary valve head section 25, auxiliary valve 27, auxiliary valve head section seal 28 and 29)	2010/25K
Set of spare parts (seals and springs)	2010/72
Set of seals	2010/73
Boxed assortment of spare parts (1x complete head section 2010/2K, 2x complete piston 2010/5K, 1x set of spare parts 2010/72)	2010/74K

8. Trouble-shooting

8.1 Flusher runs continuously: Clean head piece (2010/2K) and piston (2010/5K) thoroughly or completely replace these parts.

8.2 Flusher does not run: Clean or replace piston sleeve (2010/16).

8.3 Flush volume too small at correct flow-pressure: Cleaning of head piece (2010/2K), piston (2010/5K) and throttle sleeve (2010/9K).