STERN ENGINEERING LTD.

ELECTRONIC FLUSH VALVE FOR FLUSH VALVES

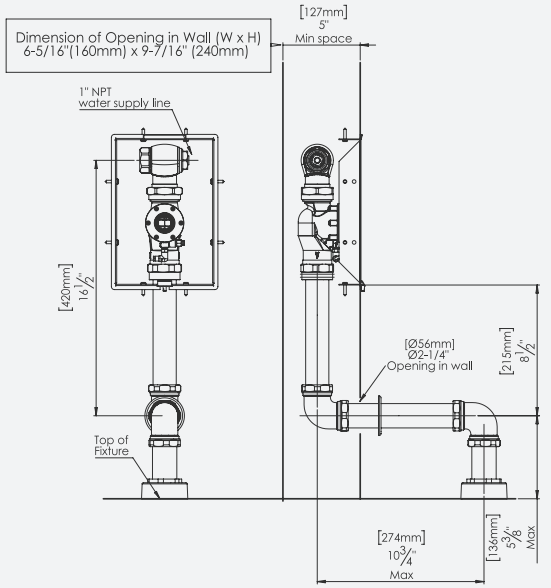
NARA 3002 E/P/PE

NOBLE 3032 E/P/PE

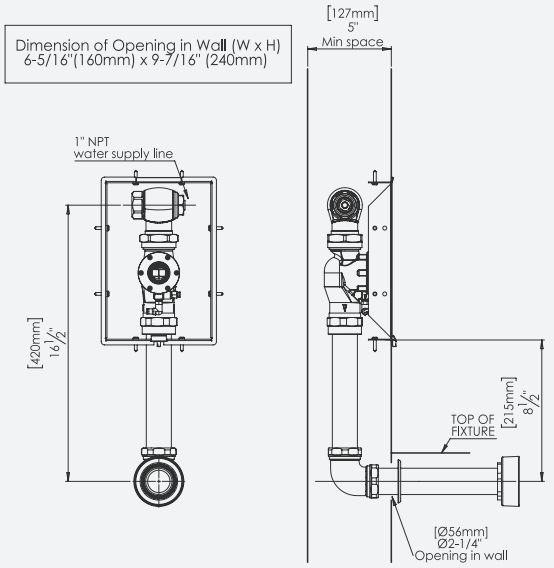
INSTALLATION AND MAINTENANCE GUIDE

INDEX

TECHNICAL DATA

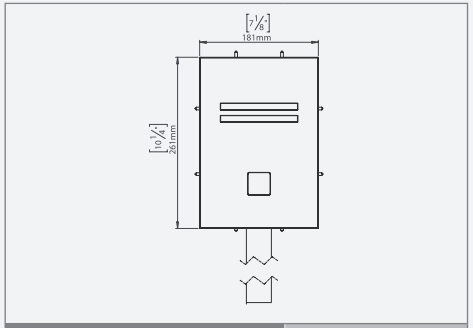


With Top Spud Tailpiece

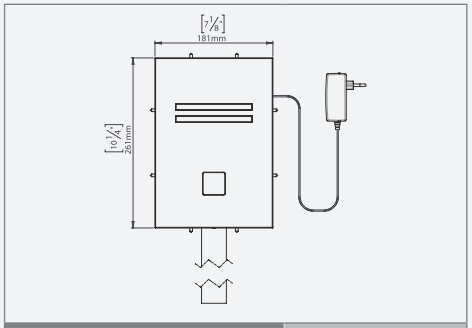


With Rear Spud Tailpiece

Nara is a touch-free electronic flush valve for W.C. operated by a self-adjusting infrared sensor. The W.C. will start flushing when the user walks away. If the user was present in front of the W.C. for less than one minute, a reduced flush will take place for removal of liquid waste. If the user was present in front of the W.C. for one minute or more, a full flush will occur for removal of solid waste. Nara 3002/3002 E models include a mechanical override push button for alternative manual operation. Nara 3002 P/PE models include a piezo button for alternative touch operation.
When the manual push button/piezo button is used, the system will discharge a full flush.



NARA 3002	160810
NARA 3002 P	160830



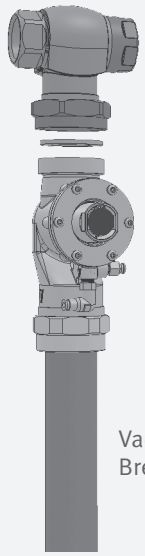
NARA 3002 E	160820
NARA 3002 PE	160840

Power Specification	9V low voltage system
Power supply	Nara 3002 / Nara 3002 P: 9V Battery Nara 3002 E / Nara 3002 PE: 9V Transformer
Operating water pressure	1.0-8.0 BAR (14.5-116.0 PSI) With water pressure of more than 8 Bars, use a pressure reducing valve for reduction.
Sensor range	700 mm default.

Familiarize yourself with the part names and confirm that the parts are included:

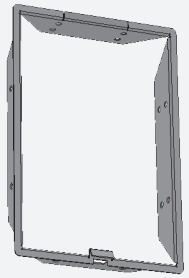
1 x Shutoff Valve

1 x Flush Valve



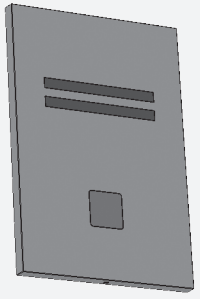
Vacuum Breaker

1 x Panel Support Frame



8 x Screws

1 x Panel Assembly

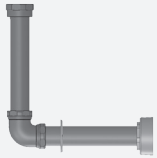


1 x M4X10 Screw

NARA 3002
NARA 3002 B

4 mm tubes

Allen Key

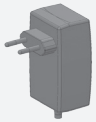


Optional rear spud tailpiece

Optional top spud tailpiece

NARA 3002
NARA 3002P

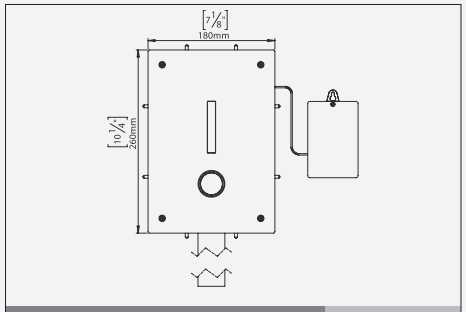
Battery box



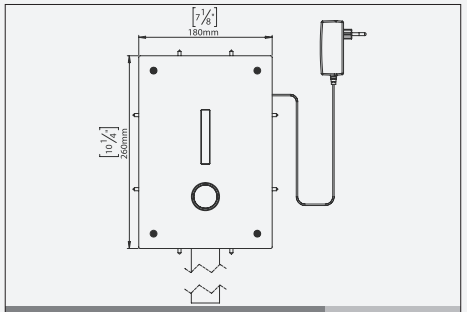
NARA 3002E
NARA 3002PE

Transformer

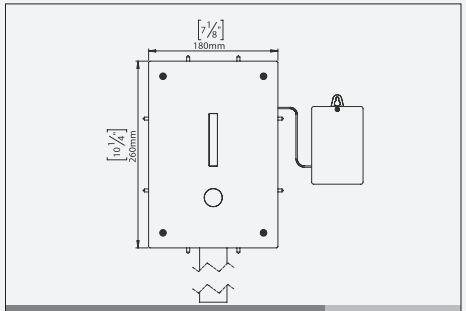
Noble is a touch-free electronic flush valve for W.C. operated by a self-adjusting infrared sensor. The W.C. will start flushing when the user walks away. If the user was present in front of the W.C. for less than one minute, a reduced flush will take place for removal of liquid waste. If the user was present in front of the W.C. for one minute or more, a full flush will occur for removal of solid waste. Noble 3032/3032 E models include a mechanical override push button for alternative manual operation. Noble 3032 P/PE models include a piezo button for alternative touch operation.
When the manual push button/piezo button is used, the system will discharge a full flush.



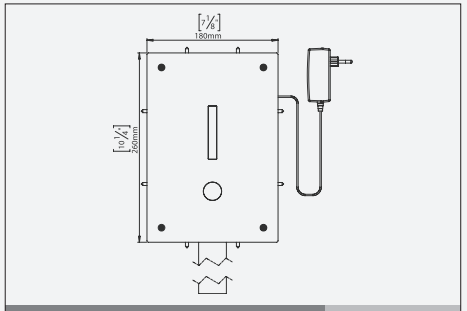
NOBLE 3032 460700



NOBLE 3032 E 460710



NOBLE 3032 P 460720



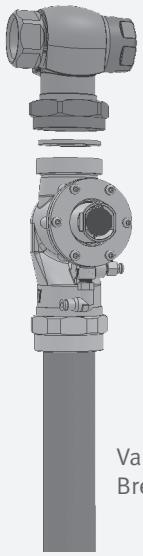
NOBLE 3032 PE 460730

Power Specification	9V low voltage system
Power supply	Noble 3032 / Noble 3032 P: 9V Battery Noble 3032 E / Noble 3032 PE: 9V Transformer
Operating water pressure	1.0-8.0 BAR (14.5-116.0 PSI) With water pressure of more than 8 Bars, use a pressure reducing valve for reduction.
Sensor range	700 mm default.

Familiarize yourself with the part names and confirm that the parts are included:

1 x Shutoff Valve

1 x Flush Valve

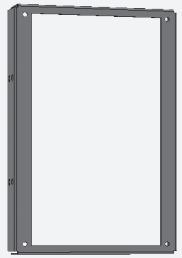


Vacuum Breaker

NOBLE 3032
NOBLE 3032 B

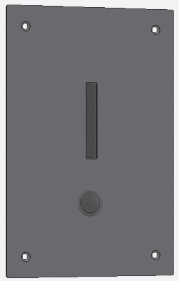
4 mm tubes

1 x Panel Support Frame

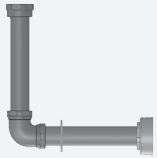


8 x Screws

1 x Panel Assembly

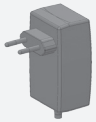


4 x Screws



Optional rear spud tailpiece

Optional top spud tailpiece



NOBLE 3032 NOBLE 3032P	NOBLE 3032E NOBLE 3032PE
Battery box	Transformer

PRE-INSTALLATION INFO

CHECK CONTENTS
Remove all parts from the packaging and check each part against the Pack Contents section.

Make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install the electronic flush valve until you obtain the missing parts.

WARNINGS
Do not install the system facing a mirror or any other electronic system operated by an infrared sensor.

To prevent reflection problems, it is recommended to keep a minimum distance of 1.50 meters between the flush valve and other objects.

PREPARATION FOR INSTALLATION

Flush water supply lines thoroughly before installing the flush valve. Do not allow dirt, thread seal tape or metal particles to enter the flush valve.

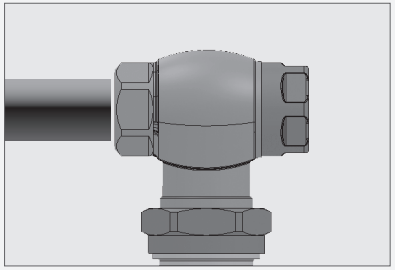
All plumbing is to be installed in accordance with applicable codes and regulations.

Important: The entire piping infrastructure from the main big water-supply pipe down to the W.C. should have a minimun of 1" diameter.

INSTALLATION

STEP 1 – INSTALLING THE FLUSH VALVE

1. Cut an adequate opening in the wall, based on the relevant schematic above in the Technical Data section.
2. Connect the Shutoff Valve to the main water line.

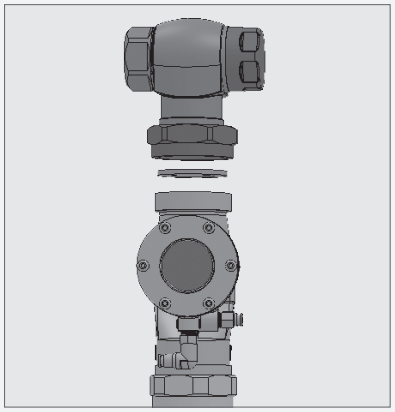


Note: When installing the Shutoff Valve, verify that it is being installed in accordance with the requirements described in the relevant schematics above in the Technical Data section – to ensure proper positioning of the rest of the Nara 3002 assembly.

Warning: Supply piping for the Nara 3002 must be securely anchored to the building structure. This will prevent the unnecessary movement of the Nara 3002 when operated by user.

STEP 1 – INSTALLING THE FLUSH VALVE

3 Connect the Flush Valve to the Shutoff Valve.



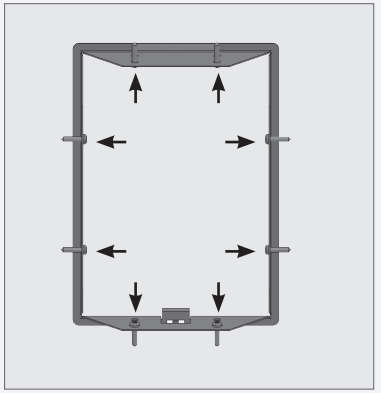
Warning: When connecting the Flush Valve to the Shutoff Valve (and for any further connections from this point of the installation onward), do not use pipe thread sealant of any type.

4 For customers who purchased an optional Tailpiece, after connection of the Flush Valve install the Tailpiece in accordance with the relevant schematic above in the Technical Data section.

5 At this point, the Rough-in portion of the installation is complete.

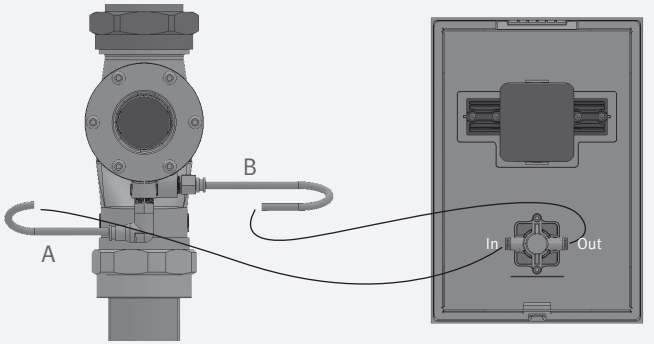
STEP 2 – CONNECTING THE POWER SOURCE

1 After completion of wall and tile works following the Rough-in portion of the installation, secure the Panel Support Frame to the wall using the 8 screws provided.

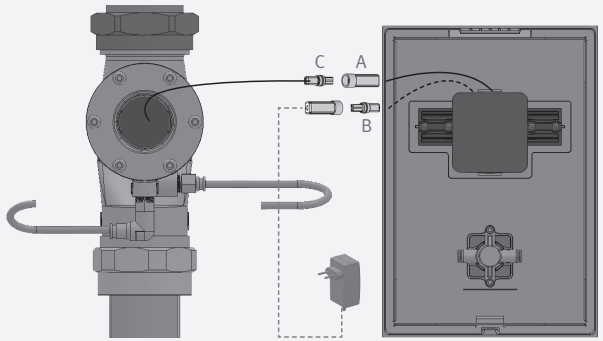


For Nara 3002 P, 3002 PE and Noble 3032, 3032 PE versions skip to Step 4

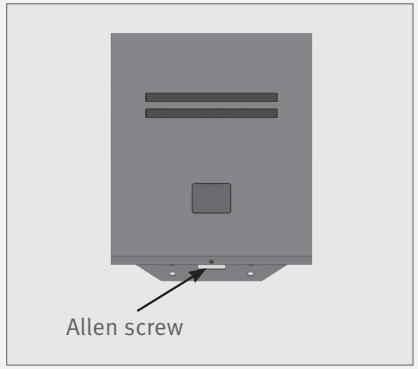
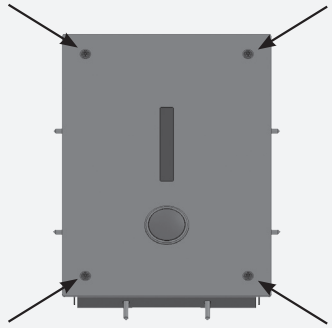
2



Take the open end of the tube (A) and insert it into the quick connector on the Panel Assembly marked **In**. Insert the open end of the tube (B) into the quick connector on the Panel Assembly marked **Out**.

3	Open the Shutoff Valve.
4	 Connect the solenoid connector on the Panel Assembly (A) to the matching connector on the Flush Valve (C). Then connect the power connector on the Panel Assembly (B) to the power source (battery box or transformer, depending on model).

STEP 2 – CONNECTING THE POWER SOURCE

6	Nara 3002: Connect the Panel Assembly to the Panel Support Frame, and tighten the Allen screw on the bottom of the Panel Assembly.	
	Noble 3032: Connect the Panel Assembly to the Panel Support Frame, and screw it to the Panel Assembly using 4 screws.	

SETTINGS ADJUSTMENT WITH REMOTE CONTROL

ADJUSTING THE SETTINGS WITH THE REMOTE CONTROL

If necessary, the sensor settings can be adjusted as following:

Shut off the water supply. In order to adjust the sensor with the remote control, hold the remote control straight in front of the sensor in a distance of about 6-8" (15-20cm). After finishing the adjustment, turn the water supply back on.

SETTINGS ADJUSTMENT WITH REMOTE CONTROL

RANGE	DETECTION RANGE: If necessary, use the remote control to adjust the sensor range as follows: Press the RANGE button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase one level and – to reduce it every push will increase or decrease one level.
≈	FLOW TIME: This function determines the water flushing time once the user leaves the WC. Press the two waves button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the flow time and – to reduce it.
IN	DELAY IN TIME: If required, the delay in time can be modified as follows: Press the IN button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.
OUT	DELAY OUT TIME: This button changes the time interval the water starts to flush after the user has left the WC. If required, the delay out time can be modified as follows: Press the OUT button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.
🕒	24 HOUR HYGIENE FLUSH: If you have a compatible model with a 24 hours hygiene flush it is possible to enable and disable it. To activate the hygiene flush, press the clock button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then press + to activate the hygiene flush or – to deactivate it.
⏻	TEMPORARY OFF FUNCTION: This function is ideal to perform any kind of activity in front of the sensor without operating the system (for example, cleaning). Urinals will remain shut for 1 minute when this button is pressed once. To cancel this function and to return to normal operation press the On/Off button again or wait 1 minute.
RES	RESET BUTTON: This function allows the sensor to return to the original factory preset settings. If required, press the Reset button and without releasing it, press the + button once.

MAINTENANCE

Care and cleaning of chrome and special finishes

DO NOT use steel wool or cleansing agents containing alcohol, acid, abrasives, or the like. Use of any prohibited cleaning or maintenance products or substances could damage the surface of the flush valve. For surface cleaning use ONLY soap and water, then wipe dry with clean cloth or towel. When cleaning bathroom tile, the flush valve should be protected from any splattering of harsh cleansers.

If system chemical disinfection is practiced, chlorine can be used (calculated chlorine concentration of 50mg/l maximum in water per one hour dwell time) at service interval frequency.

LIMITED WARRANTY

Y. Stern Engineering Ltd. warrants that its electronic faucets, flush valves and controls will be free of defects in material and workmanship during normal use for two years from the date the product is purchased.

If a defect is found in normal use, Y. Stern Engineering Ltd. will, at its discretion, repair, provide a replacement part or product, or make appropriate adjustments. Damage caused by accident, misuse, or abuse is not covered by this warranty. Improper care and cleaning will void the warranty. Proof of purchase (original sales receipt) must be provided to Stern Engineering Ltd. with all warranty claims.

Stern Engineering Ltd is not responsible for labor charges, installation, or other incidental or consequential costs other than those noted above. In no event shall the liability of Stern Engineering Ltd. exceed the purchase price of the faucet, valve or control.

If you believe that you have a warranty claim, contact your Stern Distributor, Dealer or Plumbing Contractor. Please be sure to provide all pertinent information regarding your claim, including a complete description of the problem, the product, model number, the date the product was purchased, from whom the product was purchased and the installation date. Also include your original invoice.

Y. STERN ENGINEERING AND/OR SELLER DISCLAIM ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty excludes product damage due to installation error, incorrect maintenance, wear and tear, battery, water composition, product abuse, or product misuse, whether performed by a contractor, service company, or the consumer. This warranty does not cover product damage caused by the following:

- Incorrect installation, inversions of supply pipes.
- Pressures or temperatures exceeding recommended limits.
- Improper manipulation, tampering, bad or lapsed maintenance.
- Foreign bodies, dirt or scale introduced by the water supply.

TROUBLESHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
Valve does not flush	The red LED indicator in the sensor flashes continuously when the user steps within the sensor's range.	Low battery.	Replace battery.
	The red LED indicator in the sensor does not flash (once) when the user steps within the sensor's range.	Inappropriate sensor range.	Increase or decrease the sensor range.
		Battery is completely used up.	Replace battery.
		The sensor is picking up reflections from a mirror or another object.	Eliminate cause of reflections.
	The red LED indicator in the sensor flashes (once) when the user steps within the sensor's range.	Connectors between the electronic unit and the solenoid valve are disconnected.	Connect the connectors of the electronic unit to the solenoid valve.
		Debris or dirt in the solenoid valve clog up the bleeding hole.	Replace or clean the solenoid valve. Unscrew the solenoid, pull out the plunger and the spring from the solenoid and clean them. When placing the plunger and spring back, please make sure the spring is in vertical position.
		The water supply pressure is higher than 8 bars or pressure peaks over 8 bars in the water supply causes pressure to be trapped in the flush valve.	Reduce the water supply pressure.
Continuous Flow	The red LED indicator in the sensor flashes (once) when the user steps within the sensor's range.	Debris or dirt in the Flush Valve clog up the piston or the orifice. The piston doesn't close.	Open the piston cover and clean the piston, the orifice and body internally.
		Debris or dirt in the solenoid valve. The solenoid valve doesn't close.	Replace or clean the solenoid valve. Unscrew the solenoid, pull out the plunger and the spring from the solenoid and clean them. When placing the plunger and spring back, please make sure the spring is in vertical position.

TROUBLESHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
Low Discharge		The self cleaning needle came out of the piston orifice or is displaced. The orifice delivers more water than usual pushing down the piston, causing the piston to close faster than normal.	Replace the piston.
		The U-seal is torn or damaged and doesn't seal well enough.	Replace the U-seal.
		Flow time setting is too short.	Flow time setting is too short.
High Discharge		Debris or dirt in the Flush Valve clog up the piston. Friction in the piston movement causes the piston to close slower than normal.	Increase the flow time.
		Dirt in the piston orifice prevents enough water from going through the orifice. The reduced flow causes the piston to close slower than normal.	Open the piston cover and clean the piston and the orifice.
		Flow time setting is too long.	Reduce the flow time setting.
Dripping		Debris or dirt in the piston seat.	Clean the piston seat.
		Piston seal is torn or damaged.	Replace piston seal.
		Debris or dirt in the solenoid valve orifice. The solenoid valve doesn't close properly.	Replace or clean the solenoid valve. Unscrew the solenoid, pull out the plunger and the spring from the solenoid and clean them. When placing the plunger and spring back, please make sure the spring is in vertical position.

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