

stern

STERN ENGINEERING LTD.



APOLLO MEDICAL



APOLLO MEDICAL F



MEDICAL 1000 T

ELECTRONIC WALL MOUNTED FAUCET

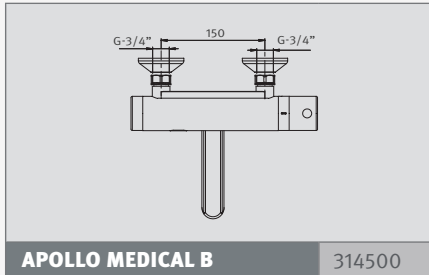
INSTALLATION AND MAINTENANCE GUIDE

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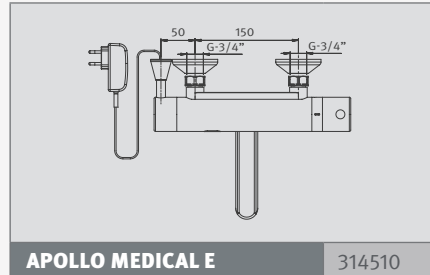
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TECHNICAL DATA



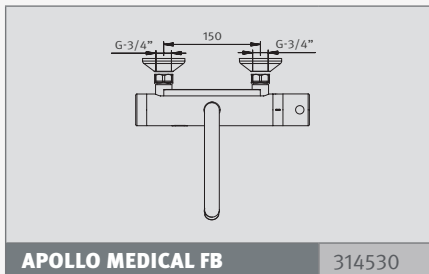
APOLLO MEDICAL B

314500



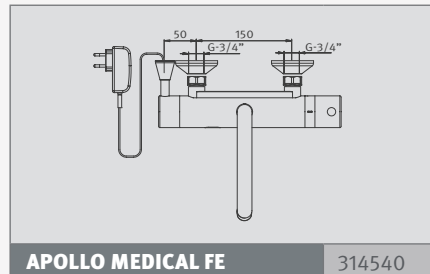
APOLLO MEDICAL E

314510



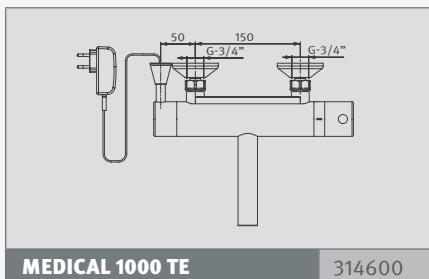
APOLLO MEDICAL FB

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APOLLO MEDICAL FE

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MEDICAL 1000 TE

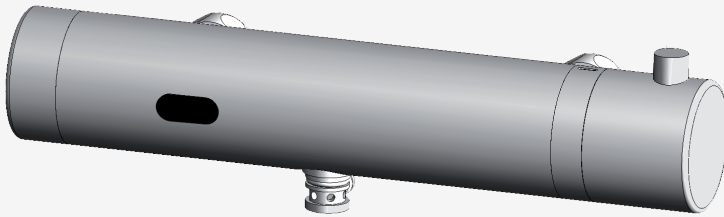
314600

Power supply	Internally mounted 9V battery or 9V switching transformer
Minimum operating water pressure:	0.5 bar
Maximum operating water pressure:	8.0 bar
Max. Hot water supply:	65° C
Sensor range	45 cm - Adjustable
Security time	90 seconds. Adjustable with remote control.
24 hs. hygiene flush	Disabled. Can be enabled on site.

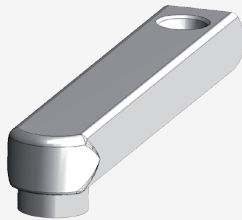
PACK CONTENTS

APOLLO MEDICAL B / E

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



1 x Faucet body



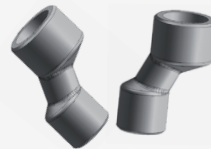
1 x Spout



1 x 2 mm Allen key



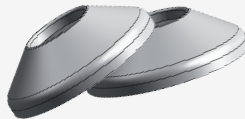
1 x 2.5 mm Allen key



2 x Eccentric unions



1 x 4 mm Allen key



2 x Fixation accessories (rosettes)

PACK CONTENTS

APOLLO MEDICAL FB / FE

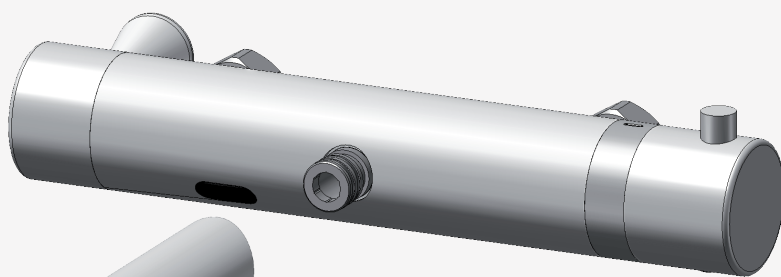
Familiarize yourself with the part names and confirm that the parts are included.



PACK CONTENTS

MEDICAL 1000TE

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



1 x Faucet body



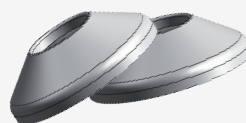
1 x Spout



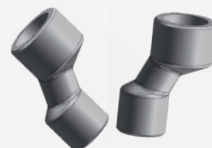
1 x 2 mm Allen key



1 x 2.5 mm Allen key



2 x Fixation accessories (rosettes)



2 x Eccentric unions

PRE-INSTALLATION INFO

Check contents

Separate all parts from the packaging and check each part with the “Pack contents” section.

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 electronic faucet until you obtain the missing parts.

Warnings

Do not install 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 faucet and any other objects.

Preparation for installation

Flush water supply lines thoroughly before installing the faucet. Do not allow dirt, Teflon tape or metal particles to enter the faucet.

Shut off water supply.

Important

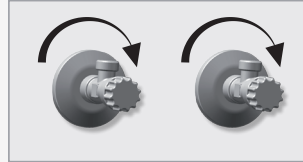
All plumbing is to be installed in accordance with applicable codes and regulations.

FAUCET INSTALLATION

STEP 1 – INSTALLING THE FAUCET

1

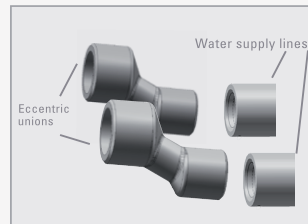
Shut off the water supply.



NOTE: The standard distance between the water supply pipes centers is 150 mm. Two eccentric unions are provided to allow variations from 130mm to 170mm.

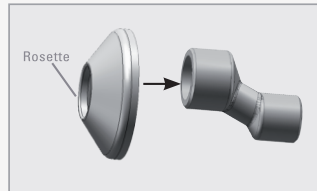
2

Mount the eccentric unions on the water supply pipes.



3

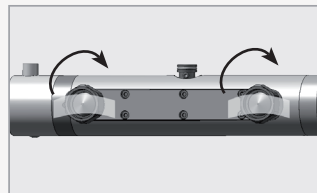
Apply the covering rosettes on the eccentric unions, and set the eccentric unions so that they correspond with the faucet inlets.



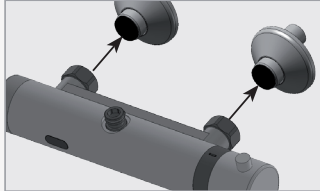
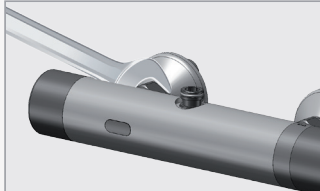
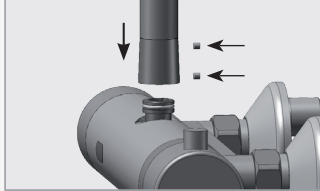
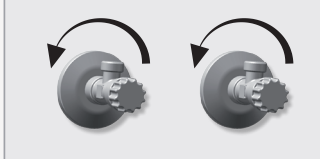
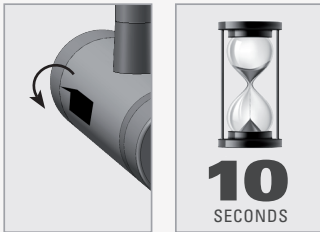
IMPORTANT: To make sure it will be installed in the right location, the filter is joined to the faucet nuts with a clear adhesive tape.

4

Remove the clear adhesive tape holding the filters in place.



FAUCET INSTALLATION

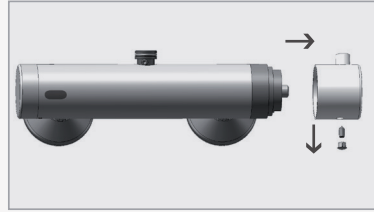
<p>5</p>	<p>Proceed to mounting the faucet on the eccentric unions.</p>	
<p>6</p>	<p>Tighten the nuts carefully with a 30mm wrench.</p>	
<p>7</p>	<p>Mount the spout to its location in the faucet body, and tighten the Allen screw/s using the Allen key provided in the packaging.</p>	
STEP 2 – CONNECTING THE WATER SUPPLY AND OPERATING THE FAUCET		
<p>1</p>	<p>Turn on the central water supply and the shut-off valves and check for leaks.</p>	
<p>2</p>	<p>Remove the protective sticker that covers the sensor and wait 10 seconds before activating the faucet. IF THE RANGE IS UNSATISFACTORY, REFER TO THE SECTION TITLED “SETTING ADJUSTMENT”.</p>	

ADJUSTING THE WATER TEMPERATURE

The faucet has been factory calibrated to 38°C under ideal installation conditions. Due to variations in site conditions, the mixed water temperature may need adjustments to match the site conditions and make sure that it is safe.

1

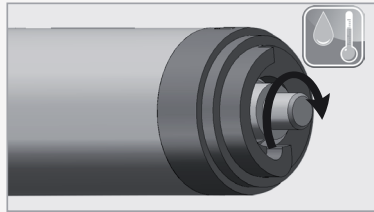
Unscrew the regulation knob screw and remove the regulation knob.



2

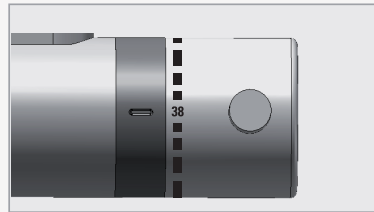
Proceed to achieve a 38°C settings by turning the spindle and measuring the water temperature with a thermometer.

NOTE: Make sure always to use a thermometer with proven accuracy.



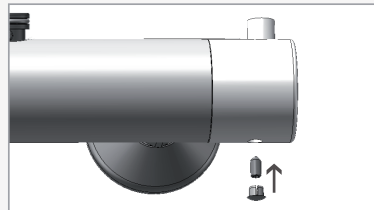
3

Assemble the regulation knob to the 38°C position. The anti scalding knob must correspond to the 38°C stop in the stop ring, without moving the spindle.



4

Screw the regulation knob screw and tighten it.



THE FAUCET IS NOW CALIBRATED ACCORDING TO THE SITE SPECIFIC CONDITIONS.

SETTINGS ADJUSTMENT



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). Choose the function you want to adjust by pressing on one of the function buttons once. After pressing a specific function button once, a quick flashing of the red light in the front of the sensor will occur. At this stage, you can change the setting by pressing the (+) or the (-) buttons, every push will increase or decrease one level. After completing the adjustment, turn the water supply back on.



DETECTION RANGE: Only 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 in the sensor eye is perceived. Then, press + to increase one level and - to reduce one level.

SETTINGS ADJUSTMENT

NOTE: Once you have changed the detection range with the remote control, this distance will be remembered by the sensor, even if the power source is disconnected.



SECURITY TIME: The Security time prevents continuous running of water due to reflections or vandalism. By default, if the sensor is covered for more than 90 seconds the water flow will shut automatically. To resume regular operation any obstruction must be removed. Press the SEC button. Wait until a quick flashing of the red light in the sensor eye is perceived. Then, press + to increase the security time and – to reduce it.



DELAY IN TIME: It is recommended to change the delay in time for flush valves for urinals or toilets only.

If required, the delay in time can also be modified in faucets as follows:

Press the IN button. Wait until a quick flashing of the red light in the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.



DELAY OUT TIME: This button allows modifying the water flow time after the user removes his hands from the faucet. A delay out time close to 0 will save more water. An increased delay out time will make the user experience more comfortable.

If required, the delay out time can be modified as follows:

Press the OUT button. Wait until a quick flashing of the red light in the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.



24 HOUR HYGIENE FLUSH: This model includes a 24 hours hygiene flush which is disabled. To activate the hygiene flush, press the clock button. Wait until a quick flashing of the red light in the sensor eye is perceived. Then press + to activate the hygiene flush. To disable it again, press – 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).

The faucet 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.



RESET BUTTON: This function restores all the factory settings except for the sensor range. If required, press the Reset button and without releasing it, press the + button once.

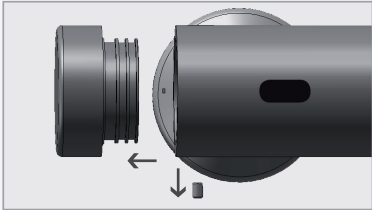
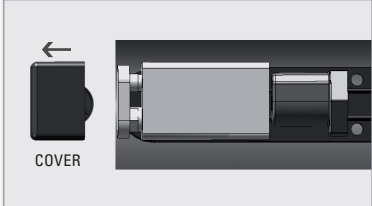
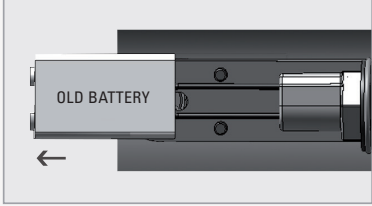
BATTERY REPLACEMENT

LOW BATTERY INDICATOR

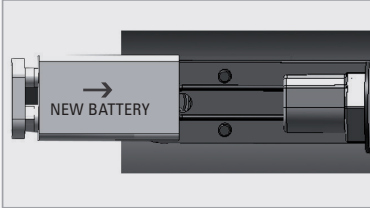
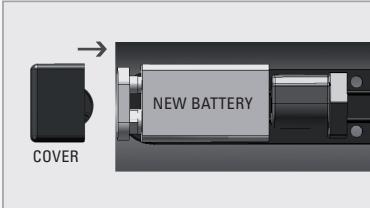
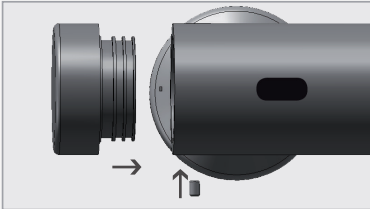
The product has an advanced battery level management system consisting of 2 steps. In the first step, the battery still has enough power to open and close the solenoid valve and allows the solenoid valve to open.

In the second step the battery might not have enough power to open and close the solenoid valve. In this case, the battery level management system does not allow the solenoid valve to open. Instead of providing an opening and closing pulse, the systems provides two closing pulses.

BATTERY REPLACEMENT INSTRUCTIONS

<p>1</p>	<p>Unscrew the M4X6 Allen screw on the faucet left hand side and pull out the cap.</p>	
<p>2</p>	<p>Remove the battery cover protection and disconnect the connector between the battery and the electronic unit.</p>	
<p>3</p>	<p>Take out the old battery.</p>	

BATTERY REPLACEMENT

<p>4</p>	<p>Replace the used battery with a new 9V battery (a Lithium battery is recommended), and connect the connector between the battery and the electronic unit.</p>	
<p>5</p>	<p>Put the battery protection cover back on.</p>	
<p>7</p>	<p>Place the cap back into place and tighten the Allen screw. Note: Make sure the o-rings are still in their groove.</p>	

- Do not allow moisture or water into the system while the battery is being replaced.
- The interior of the faucet must be fully dry before reassembling the parts. If it is not fully dry, carefully dry it.

IMPORTANT: Spent batteries should not be disposed of with normal household waste. Contact your local authority for information on waste disposal and recycling.



MAINTENANCE

FILTER CLEANING INSTRUCTIONS

The system is provided with two stainless steel filters preventing foreign particles to enter the lines. It is recommended to clean the filters every six (6) months. If the water flow has decreased, this may be because the filters are clogged. The filters can be cleaned as follows:

1. Shut-off the water shut off valve.
2. Disassemble the shower and remove the filters located between the shower nuts and the eccentric unions
3. Wash the filters under running water.
4. Reassemble the parts.
5. Make sure that there is no water leakage.

SOLENOID VALVE SERVICING

The solenoid valve diaphragm requires periodical cleaning every six (6) month. Remove the diaphragm from the solenoid valve and examine it for dirt. in case it is dirty or clogged, wash it under running water and reassemble it.

Do not attempt to dismantle the solenoid valve if you are unfamiliar with electronic solenoid valves.

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 shower. For surface cleaning of shower use ONLY soap and water, then wipe dry with clean cloth or towel. When cleaning bathroom tile, the showers should be protected from any splattering of harsh cleansers

SPARE PARTS LIST

APOLLO MEDICAL B/E

Seals and Screws Kit	07210075
Sensor Kit battery Version 10-Pack	07220277
Sensor Kit transformer version 10-Pack	07220304
Thermostatic Cartridge Kit	07240021
Thermostatic Handle	07110018
Stern Interoperable solenoid valve 10-Pack	07230049
Adapter for Handle	07055067
Nut for Thermostat	07055070
Spout	07015035
Cover kit battery version	07270070
Cover Kit transformer version	07270079
Inlet Nipple Kit	07246033
Switching Transformer 12-Pack	06540002

APOLLO MEDICAL FB/FE

Seals and Screws Kit	07210144
Sensor Kit battery Version 10-Pack	07220277
Sensor Kit transformer version 10-Pack	07220304
Thermostatic Cartridge Kit	07240021
Thermostatic Handle	07110018
Stern Interoperable solenoid valve 10-Pack	07230049
Adapter for Handle	07055067
Nut for Thermostat	07055070
Spout	07015006
Cover kit battery version	07270070
Cover Kit transformer version	07270079
Inlet Nipple Kit	07246033
Switching Transformer 12-Pack	06540002

SPARE PARTS LIST

MEDICAL 1000TE

Seals and Screws Kit	07210159
Sensor Kit 10-Pack	07220305
Thermostatic Cartridge Kit	07240021
Thermostatic Handle	07110018
Stern Interoperable solenoid valve 10-Pack	07230049
Adapter for Handle	07055067
Nut for Thermostat	07055070
Spout kit	07271024
Cover kit	07270079
Inlet Nipple Kit	07246033
Switching Transformer 12-Pack	06540002

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 shower, 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.

SERVICE CHECK LIST

PROBLEM	INDICATOR	CAUSE	SOLUTION
No water coming out of the faucet:	1. Sensor flashes continuously when user's hands are within the sensor's range.	Low battery.	Replace battery
	2. Red light in the sensor does not flash once when user's hands are within the sensor's range.	1. Range is too short.	Increase the range
		2. Range is too long.	Decrease the range
		3. Battery is completely used up	The battery must be replaced.
		4. Unit is in "Security Mode"*	
	3. Red light in the sensor flashes once when user's hands are within the sensor's range.	5. Sensor is picking up reflections from the washbasin or another object.	Eliminate cause of reflection.
1. Debris or scale in solenoid.		Unscrew solenoid, pull out the plunger and the spring from the solenoid and clean them. Use scale remover material if needed. When replacing the plunger, please make sure that the spring is in vertical position.	
	2. The central orifice in the diaphragm is plugged or the diaphragm is torn	Clean the orifice or replace diaphragm.	
	3. The water supply pressure is higher than 8 bar.	Reduce the supply water pressure.	
	4. The water supply pressure is under 8 bars and yet the pressure in the faucet's body is higher. This situation could be caused by a sudden increase in the water supply pressure that the backcheck prevents from dropping, even after water supply pressure drops under 8 bars.	Shut off water supply and unscrew one of the flexible pipes in order to reduce the pressure that blocks the product.	
Water flow from spout does not stop:	1. Sensor flashes once when user's hands are within the sensor's range.	1. Debris or scale in diaphragm	Clean the orifice or replace diaphragm.
	2. Red light in the sensor does not flash once when user's hands are within the sensor's range.	2. Connectors between the electronic unit and the Dual power input box are disconnected or not connected properly	Connect the connectors properly. Refer to page 6 to see how.
1. Sensor is dirty or covered.**		Clean or eliminate cause of interference.	
		2. Sensor is picking up reflections from the washbasin or another object.	Decrease the range or eliminate cause of reflection.
Water flow diminished		Filter or aerator is clogged	Remove, clean, re-install

* "Security Mode": If the sensor is covered for more than 90 sec. the faucet will automatically shut off water flow. To return to normal operation remove any blockage.

** In this case, the water flow will stop anyway after 90 seconds because of the security time.

STERN

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