

INSTALLATION AND MAINTENANCE GUIDE

QUADRAT SERIES

WALL MOUNTED ELECTRONIC FAUCET FOR COLD OR PREMIXED WATER



Quadrat B Quadrat E Quadrat 2030 B Quadrat 2030 E Quadrat LB Quadrat LE
Quadrat 2030 LB Quadrat 2030 LE

stern

STERN ENGINEERING LTD.

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TECHNICAL DATA



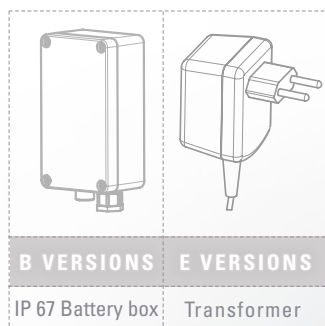
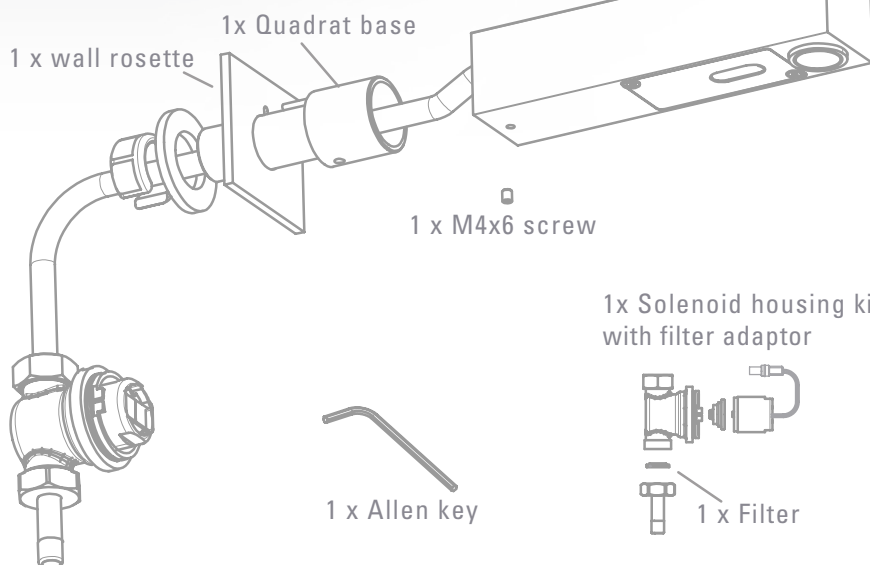
QUADRAT WALL MOUNTED ELECTRONIC FAUCET FOR COLD OR PREMIXED WATER

Power supply:	6x1.5V AA battery (models Quadrat B, LB) 1x9V battery (model Quadrat 2030 B, 2030 LB) 9V transformer (models Quadrat E, LE, 2030 E, 2030 LE)
Recommended water pressure:	0.5-8.0 bar (7-116 PSI) With water pressure of more than 8 bars, use a pressure reducing valve
Preset sensor range:	220 mm. Adjustable.
Minimum sensor range:	80 mm
Maximum sensor range:	300 mm
Security time:	90 seconds. Can be reduced with the remote control.
Hot water temperature:	Max 70°C

PACK CONTENTS

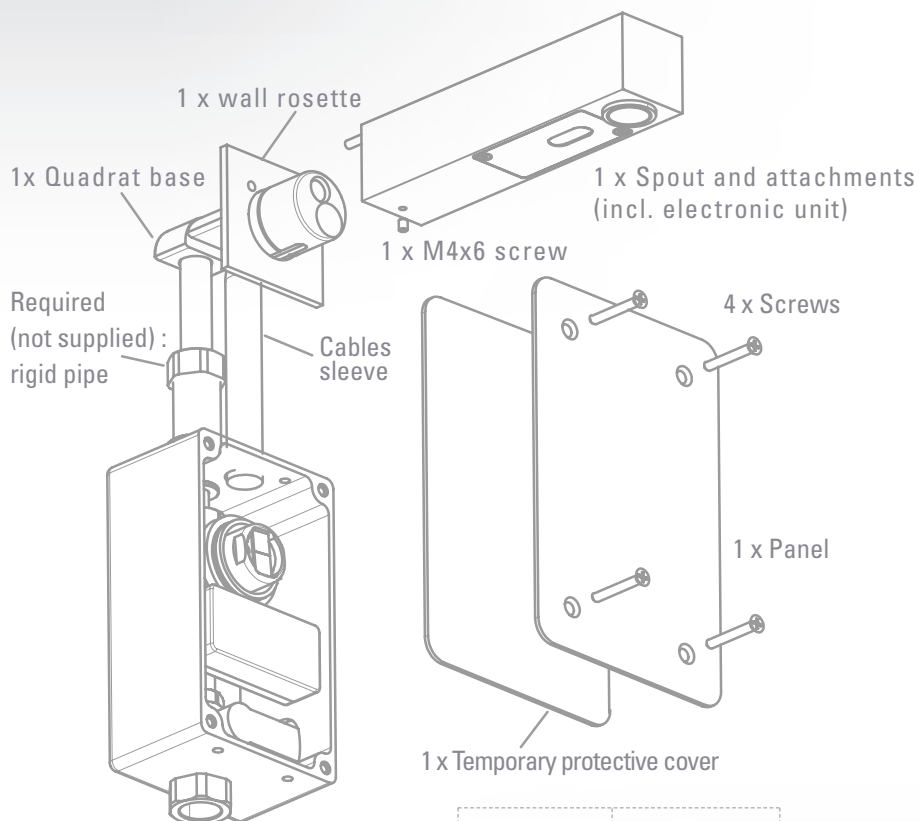
QUADRAT B, LB, E, LE

1 x Spout and attachments
(incl. electronic unit)



PACK CONTENTS

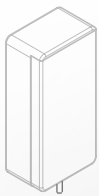
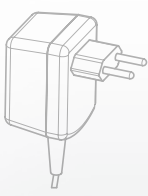
QUADRAT 2030 B, 2030 LB, 2030 E, 2030 LE



1 x Box mounting pack
(incl. solenoid valve and filter)



1 x Allen key

	
B VERSIONS	E VERSIONS
9V Battery box	Transformer

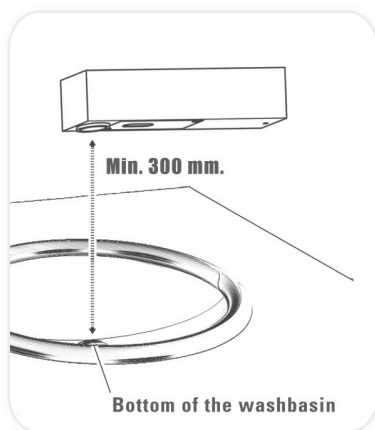
PRE-INSTALLATION INFO

Check contents

Separate all parts from the packaging and check each part with the pack contents section. Pay attention to the variations of the different models.

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.



Warning

To avoid reflection problems keep a distance of more than 300 mm. between the sink and the spout.

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.

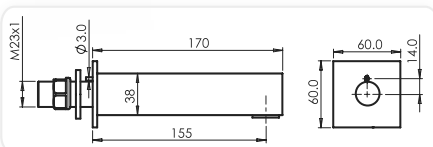
FAUCET INSTALLATION

Installation instructions for

QUADRAT B, LB, E, LE

Step 1 – Installing the faucet

1. Shut off the water supply
2. Cut a hole at the place where you want to install the spout of the tap.
3. If your model includes an optional anti-rotation pin, drill a small hole just above the previous one for the anti-rotation pin.
4. Insert the flexible hose, the cable and the base of the faucet through the wall.
5. Insert the anti-rotation pin into the small hole (if needed)
6. Fix the base behind the wall with the hexagonal nut and the disk.
7. Insert the wall rosette through the faucet base. Fix the Quadrat spout by inserting the nipple into the faucet base. Make sure that this area is clean before proceeding. Secure the screw with the Allen key. Make sure that the aerator at the faucet spout will be installed facing the washbasin.



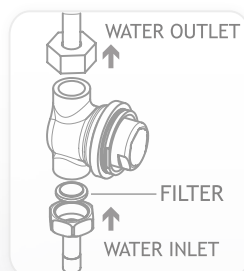
Step 2 - Connecting the water supply

1. Fit the flexible pipe coming from the faucet base to the solenoid valve housing.
2. Fit the water supply inlet to the adapter at the solenoid valve housing.

Inlet and outlet should follow the indicating arrow at the solenoid housing.

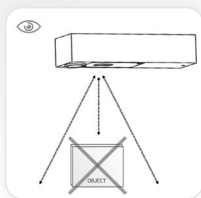
Note: make sure the filter is located between the solenoid housing and the adapter.

3. Connect the cable coming from the electronic unit to the solenoid valve.

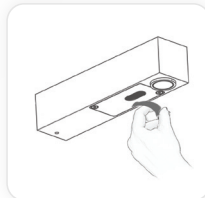


FAUCET INSTALLATION

Important: Quadrat was supplied with a Self Adjusting Sensor. The ideal sensor range for the specific location will be set automatically.



Before proceeding to step 3 check that no objects are in front of the sensor besides the washbasin.

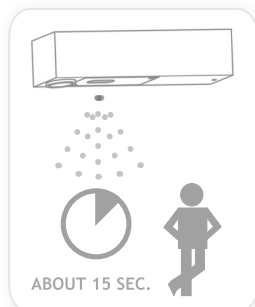


Now, remove the protecting sticker that covers the sensor.

Step 3 – Connecting the power source

1a. For Quadrat B, LB: Connect the other cable coming from the electronic unit at the Quadrat base to the battery box.

1b. For Quadrat E, LE: Connect the other cable coming from the electronic unit at the Quadrat base to the transformer. Plug the transformer into the electricity socket.



2. After you have connected the power source (Battery or Transformer) wait 15 seconds in order to allow the system to set the ideal sensor range. As an indication that the self adjusting is taking place, a red light in the sensor eye will flash continuously. **The solenoid valve will be opened and closed for 1 second as an indication that the ideal sensor range was set and the product is ready for use.**

3. Turn on the central water supply. Check for leaks.

Note: Quadrat includes a special aerator that allows you to adjust the water stream direction

on site in order to prevent water splashing if needed. To change the angle of the water stream, simply move the adjustable tilting plate by pressing it smoothly.

4. If the automatically adjusted sensor range is not satisfactory, please refer to the section entitled "Settings adjustment".



FAUCET INSTALLATION

Installation instructions for

QUADRAT 2030 B, 2030 LB, 2030 E, 2030 LE

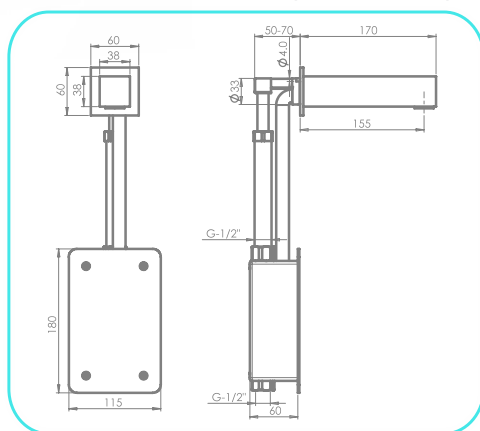
Step 1 – Installing the faucet

1. Shut off the water supply
2. Cut an adequate opening in the wall for the dimensions of the Quadrat box, the cables sleeve, the rigid pipe and the faucet base (at the place where you want to install the spout).

3. Insert the Quadrat box through the wall. Connect the water supply pipe to the nipple at the bottom of the Quadrat box.

4. Mount the faucet base through the wall opening.

Important: The faucet base should be installed so that the outside surface of the finished wall falls between the minimum and maximum lines marked at the base.



5. Assemble the rigid pipe from the nipple at the box to the inlet at the Quadrat base.
6. Pull the wires of the power supply (transformer/battery) and sensor cable out of the faucet base.
7. Lead the wires through the cable sleeve.
8. Connect the electronic unit's connector coming from the faucet base to the solenoid's connector.
9. If your model is Quadrat 2030 E or 2030 LE:
 - a. Place the transformer near the electricity plug and thread the transformer's wire to the box.
 - b. Connect the power supply connector from the electronic unit coming from the faucet base to the transformer.

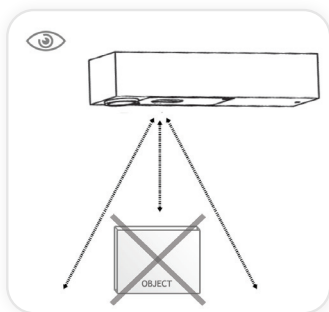
FAUCET INSTALLATION

10. Assemble the temporary protective cover panel to the Quadrat box.
11. Once the works on electricity, plumbing and tiles have been finished, insert the wall rosette through the faucet base.
12. Connect the cable leading to the solenoid and the power supply cable at the spout to those at the faucet base. Fix the faucet spout by inserting the nipple into the faucet base. Make sure that this area is clean before proceeding. Secure the screw with the Allen key. Make sure that the aerator at the Quadrat spout will be installed facing the washbasin.

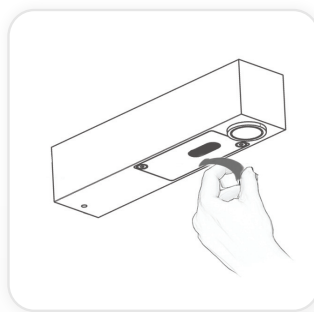
Step 2 – Connecting the power source

1. Remove the temporary protective cover panel.

Important: Quadrat was supplied with a Self Adjusting Sensor. The ideal sensor range for the specific location will be set automatically.



Check that no objects are in front of the sensor besides the washbasin.



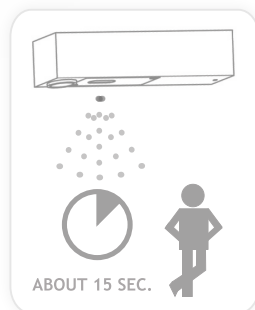
Now, remove the protecting sticker that covers the sensor.

FAUCET INSTALLATION

2. If your model is Quadrat 2030 B or 2030 LB the battery box is attached to the cover panel. Connect the battery box connector to the electronic unit connector.

3. If your model is Quadrat 2030 E or 2030 LE, plug the transformer into the electricity socket.

4. After you have connected the power source (Battery or Transformer) wait 15 seconds in order to allow the system to set the ideal sensor range. As an indication that the self adjusting is taking place, a red light in the sensor eye will flash continuously. **The solenoid valve will be opened and closed for 1 second as an indication that the ideal sensor range was set and the product is ready for use.**



Step 3 - Connecting the water supply

1. Turn on the central water supply.

2. Check for leaks.

3. Assemble the permanent cover panel by screwing the four screws.

Note: Quadrat includes a special aerator that allows you to adjust the water stream direction on site in order to prevent water splashing. To change the angle of the water stream, simply move the adjustable tilting plate by pressing it smoothly.



4. If the automatically adjusted sensor range is not satisfactory, please refer to the section entitled "Settings adjustment".

SETTINGS ADJUSTMENT



Adjusting the sensor range with the remote control

This faucet was supplied with a Self Adjusting Sensor. The ideal detection range for the specific location will be set automatically.



DETECTION RANGE: Only if necessary, use the remote control to adjust the sensor range as follows:

Shut off the water supply. Hold the remote control straight in front of the sensor in a distance of about 6 - 8" (15 - 20cm). Choose the function RANGE by pressing once at the range function button. After pressing this function button, a quick flashing of the red light at the front of the sensor will occur. At this stage, you can increase or decrease the sensor range by pressing the (+) or the (-) buttons, every push will increase or decrease one level.

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. To get back to the self adjustment mode, use the ADJ button only.

SETTINGS ADJUSTMENT

Adjusting other settings with the remote control



ENTRANCE TO THE SELF ADJUSTMENT MODE: Check that no objects are in front of the sensor. Press the ADJ button. Once a quick flashing of the red light of the sensor eye is perceived, remove your hand holding the remote control and move away from the sensor area. The ideal sensor range for the specific location will be set automatically. Once the self adjustment has taken place the solenoid valve will be opened and closed for 1 second as an indication that the ideal sensor range was set and the product is ready for use.



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 of 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 of 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 of the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.

SETTINGS ADJUSTMENT



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).

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.

Note: To enter the self adjusting mode, use the ADJ button. To change the sensor range, use the RANGE button.

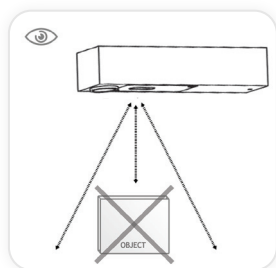
BATTERY REPLACEMENT

Battery models only

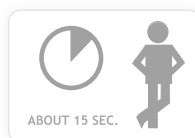
When the battery weakens, the red indicator light will blink at a constant rate when the user's hands are within the sensor range. The battery must be replaced within two weeks.

To replace the battery (battery models only):

1. For Quadrat B or Quadrat LB: Open carefully the batteries' box and remove the old batteries. Replace the used batteries with six new 1.5V AA batteries. Close the box.
2. For Quadrat 2030 B or Quadrat 2030 LB: Release the screws at the panel and remove it. The battery box is located behind the panel. Carefully open the battery's box and replace the used battery with a new 9V battery (Lithium battery is recommended). Close the box and re-assemble the wall cover panel.



Check that there are no objects in front of the sensor after the battery replacement was completed.



After you have replaced the battery, move away from the sensor range. Wait 15 seconds in order to allow the system to set the ideal sensor range. Then after the self adjustment has taken place the solenoid valve will be opened and closed for 1 second as an indication that the ideal sensor range was set and the product is ready for use.

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

This faucet is provided with a stainless steel filter preventing foreign particles to enter the lines. If the water flow has decreased, this may be because the filter is clogged. The filter can be cleaned as follows:

1. For Quadrat B, Quadrat E, Quadrat LB and Quadrat LE:
 - a. Shut-off the water shut off valve.
 - b. Disconnect the water supply pipe from the adaptor and disassemble the filter from it.
 - c. Wash the filter under running water.
 - d. Reassemble the parts.
 - e. Restore the incoming water supply.
 - f. Make sure that there is no water leakage.
2. For Quadrat 2030 B, Quadrat 2030 LB, Quadrat 2030 E, Quadrat 2030 LE:
 - a. Release the screws at the panel and remove it. Turn off the regulating valve.
 - b. Disassemble the solenoid valve by opening the nuts.
 - c. Remove the filter and wash it under running water.
 - d. Reassemble the filter.
 - e. Reassemble the solenoid valve.
 - f. Turn on the regulating valve and adjust the flow capacity.
 - g. Make sure that there is no water leakage. Re-assemble the wall cover panel.

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

SPARE PARTS LIST

Sensor kit Cat.No. 07220056

Solenoid valve kit for Quadrat B, Quadrat E, Quadrat LB
and Quadrat LE Cat.No. 07230017

Solenoid valve kit for Quadrat 2030 B, Quadrat 2030 LB,
Quadrat 2030 LE and Quadrat 2030 LE Cat.No. 07230037

Solenoid housing kit for Quadrat B, Quadrat E, Quadrat
LB and Quadrat LE Cat.No. 07231001

Transformer Cat.No. 06522025

IP67 Battery box Cat.No. 06522020

Diaphragm Cat.No. 04500001

Optional accessories

Remote control Cat.No. 07100005

Battery box for 1 x 9V battery Cat.No. 06530008

IP67 Transformer box with transformer Cat.No. 06530021

Transformer junction box Cat.No. 06530013

Transformer junction box exit with 3 meter cable and
male connector Cat.No. 06000067

Mixing valve Cat.No. 200070

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.

TROUBLE SHOOTING

PROBLEM	INDICATOR	CAUSE	SOLUTION
No water coming out of the tap:	1. Sensor flashes continuously when user's hands are within the sensor's range.	Low battery.	Replace battery.
		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.
	3. Red light in the sensor flashes when user's hands are within the sensor's range.	4. Unit is in "Security Mode"*	
		5. Sensor is picking up reflections from the washbasin or another object.	Eliminate cause of reflection.
		1. Connectors between the electronic unit and solenoid are disconnected.	Connect the electronic unit connectors to the solenoid.
		2. 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.
		3. The central orifice in the diaphragm is plugged or the diaphragm is torn	Clean the orifice or replace diaphragm.
		4. The water supply pressure is higher than 8 bar.	Reduce the supply water pressure.
Water flow from spout does not stop:	1. Sensor flashes when user's hands are within the sensor's range. 2. Red light in the sensor does not flash when user's hands are within the sensor's range	Debris or scale in diaphragm	Clean the orifice or replace diaphragm.
		1. Sensor is dirty or covered.	Clean or eliminate cause of interference.
Water flow diminished		2. Sensor is picking up reflections from the washbasin or another object.	1. Decrease the range or eliminate cause of reflection.
		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 to re-establish operation.



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