DOLPHIN 1000 F

TOUCH-FREE ELECTRONIC LAVATORY FAUCET

SPECIFICATIONS

Touch-free electronic faucet for deck-mounted installations. Activated by infrared sensor. With mixer for water temperature adjustment for hot and cold water. Filters included. Latching solenoid valve is located above deck inside the product for added vandal protection. Solid brass one-piece construction. Adjustable settings by remote control: sensor range, security time, delay in, delay out, on-off and reset to factory settings.

OPERATION

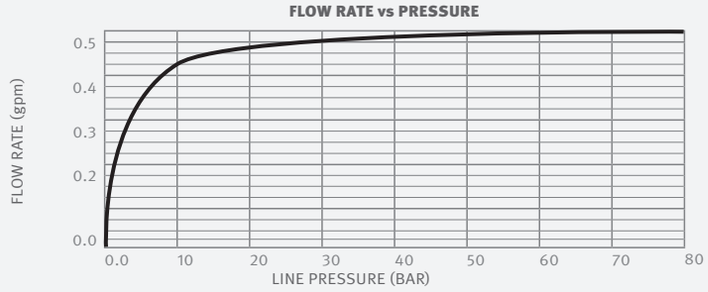
Touch-free electronic faucet. The faucet is automatically activated when users place their hands in the sensor range and stops when the users remove their hands.

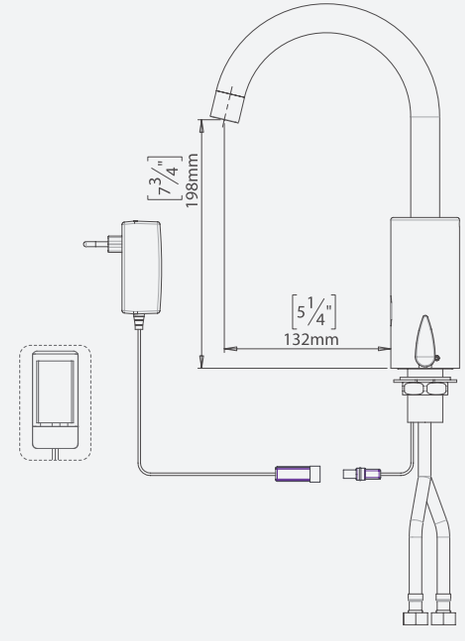
APPLICATION

Deck mounted faucet. Prevents cross contamination of a wide range of skin diseases, MRSA, flu and Legionnaire disease. Easy installation. Long lasting even in the harshest installation sites. Ideal for health care institutions, hospitals, clinics and nursing homes.

PRODUCT AT A GLANCE

Installation	Lavatory mounted
Power Supply	• 9V battery • 9V transformer
Operating pressure	0.5-8.0 Bar / 7.0-116.0 PSI
Water supply	Hot and cold water
Water flow	6 LPM / 1.58 GPM - SSR PCA stream
Water Saving Options	4 LPM / 1 GPM ; 3 LPM / 0.8 GPM 1.89 LPM / 0.5 GPM ; 1.3 LPM 0.35 GPM - PCA spray
Water temperature	70°C Maximum
Security Time	90 seconds Adjustable by remote control





ORDERING INFORMATION

MODEL	CODE	POWER	ADDITIONAL SPECIFICATIONS
DOLPHIN 1000 FB	270320	9V battery	With mixer for water temperature control
DOLPHIN 1000 FE	270330	9V transformer	

OPTIONS

OPTION	CODE
Remote control	07100005

STERN ENGINEERING LTD.

ADVANTAGES

LEED RATING

24 HOURS

OPTIONAL HYGIENE FLUSH

SOAP AND WATER

GERM FREE

ADJUSTABLE SETTINGS

EASY TO INSTALL

ADA DESIGNED

APPROVALS

ILGBC

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STERN ENGINEERING LTD.

ELECTRONIC LAVATORY FAUCET

DOLPHIN F ⋮ DOLPHIN 1000 F

INSTALLATION AND MAINTENANCE GUIDE

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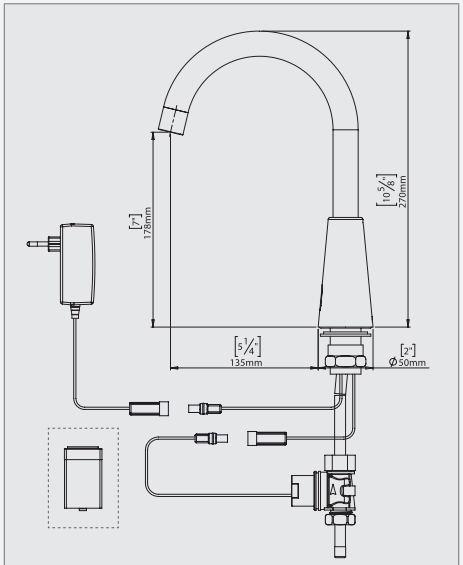
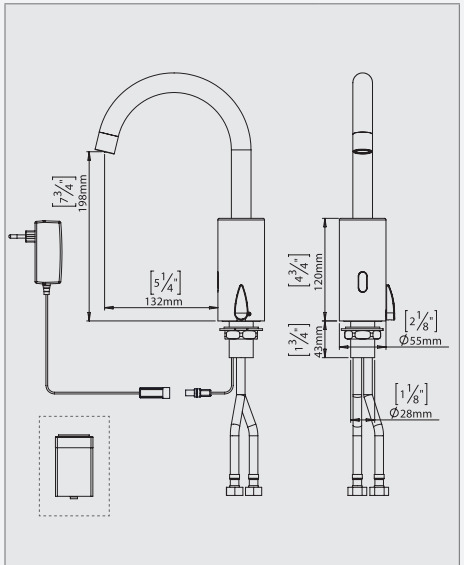
TECHNICAL DATA



DOLPHIN FB	270170
DOLPHIN FE	270180



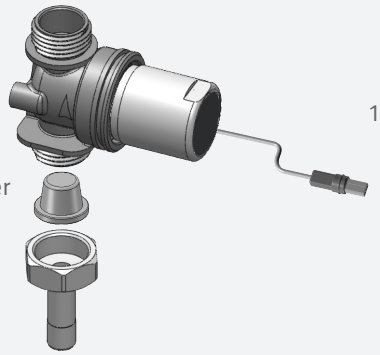
DOLPHIN 1000 FB	270320
DOLPHIN 1000 FE	270330

Power supply:	9V battery or 9V transformer
Recommended water pressure:	0.5-8.0 bar (7-116 PSI) With water pressure of more than 8 bars, use a pressure reducing valve for reduction.
Preset sensor range:	200 mm / 7.87” (customizable with optional remote control)
Minimum sensor range:	80 mm / 3.15”
Maximum sensor range:	300mm / 11.81”
Security time:	90 seconds (can be reduced with optional remote control)
Hot water temperature:	Max 70˚C

PACK CONTENTS DOLPHIN F

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

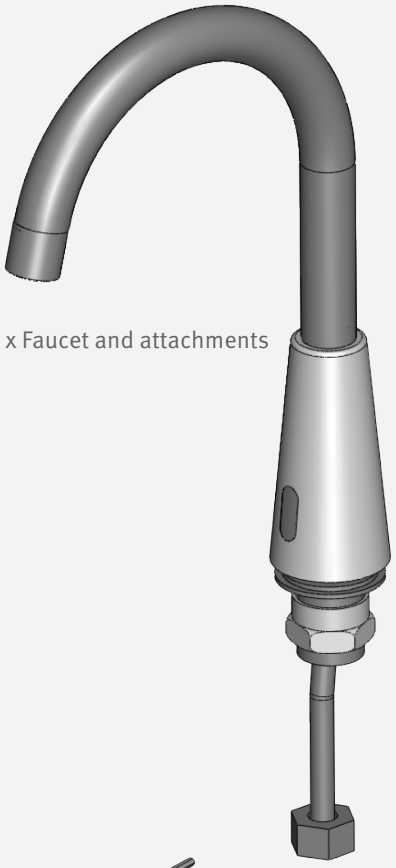
1 x solenoid and housing



1 x Filter

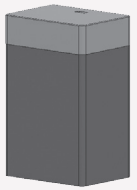
1 x Filter adapter

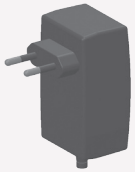
1 x Faucet and attachments



1 x Allen Key

B VERSIONS	E VERSIONS
9V BATTERY BOX	9V SWITCHING TRANSFORMER

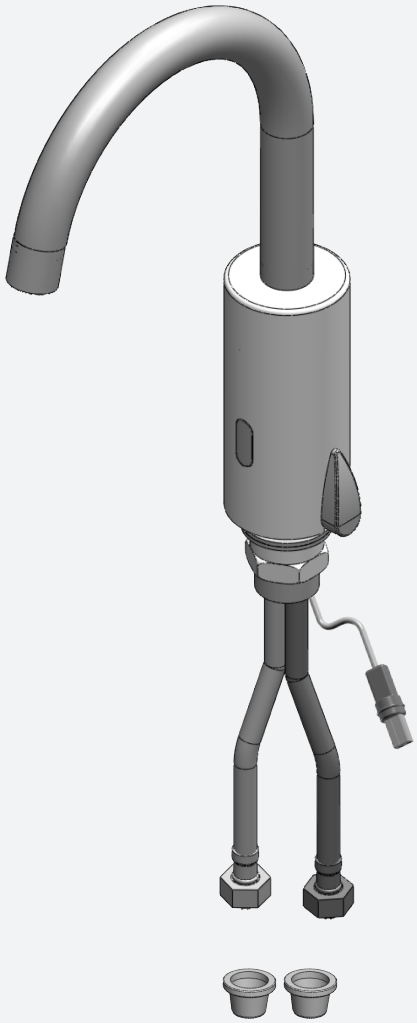




PACK CONTENTS DOLPHIN 1000 F

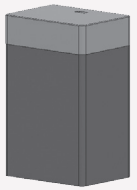
Familiarize yourself with the part names and confirm that the parts are included.

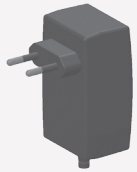
1 x Faucet and attachments



2 x Allen Keys

B VERSIONS	E VERSIONS
9V BATTERY BOX	9V SWITCHING TRANSFORMER





2 x Filters

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

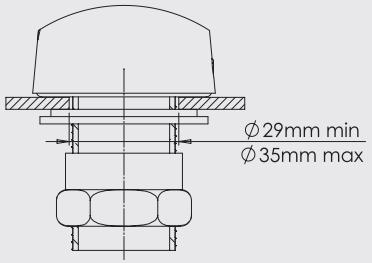
Flush water supply lines thoroughly before installing the faucet. Do not allow dirt, Teflon tape or metal particles to enter the faucet.

Shut off water supply.

IMPORTANT

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

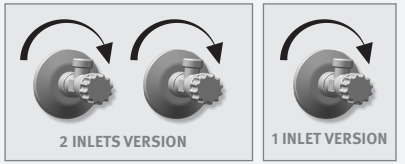
RECOMMENDED HOLE SIZE



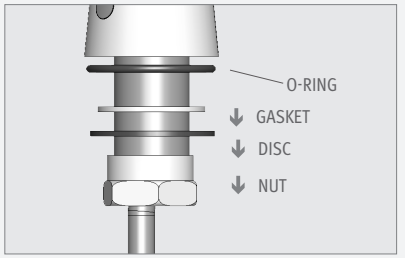
INSTALLATION

STEP 1 – PREPARATION FOR MOUNTING THE FAUCET

1. Shut off the water supply.

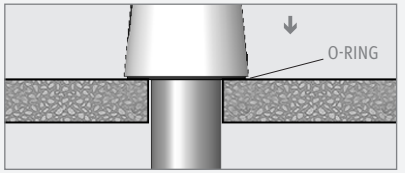


2. Remove the hexagonal nut, the disk and the gasket. Do not remove the O-ring from the base of the faucet.

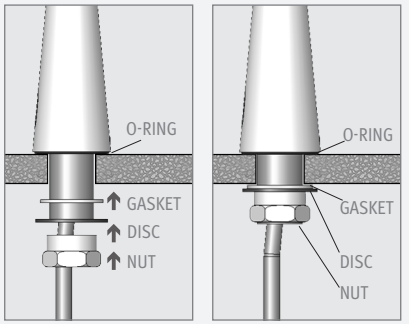


STEP 2 – INSTALLING THE FAUCET

1. Place the faucet with O-ring into the hole in deck or lavatory. Make sure the O-ring is located between the deck or lavatory and the bottom of the faucet.

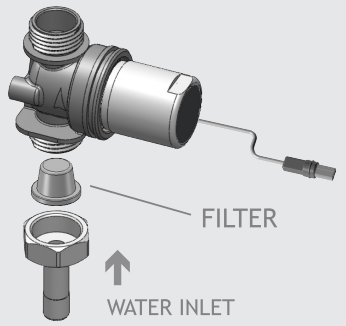


2. Slide the gasket, disk and hexagonal nut over the flexible hose and secure the faucet into place.



STEP 3 – CONNECTING THE WATER SUPPLY

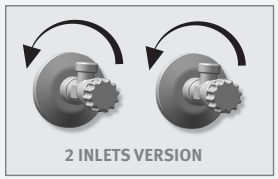
1. **For Dolphin F version:**
   Fit the flexible pipe coming from the faucet to the solenoid valve housing.
   IMPORTANT: Inlet and outlet should follow the indicating arrow in the solenoid housing



NOTE:
Make sure that the filter is assembled between the housing of the solenoid valve and the inlet nipple.

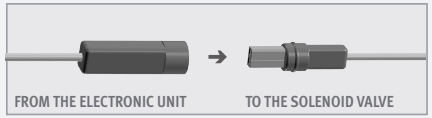
2. The faucet is provided with an inlet nipple, if needed, fit the water supply inlet to the adapter at the solenoid valve housing.

3. Turn on the central water supply and the shut-off valve (angle valve) and check for leaks.



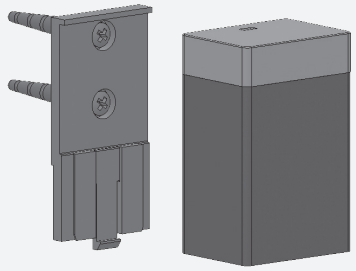
STEP 4 – CONNECTING THE POWER SOURCE

1. Connect the waterproof connector coming from the electronic unit to the solenoid valve connector.

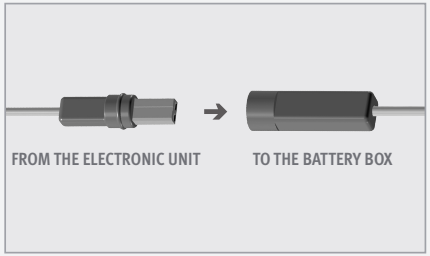


2. FOR BATTERY VERSION:

a. Install the battery box slide on holder, on the wall underneath the sink using the two screws and anchors provided.



b. Connect the waterproof connector coming from the electronic unit to the battery box.

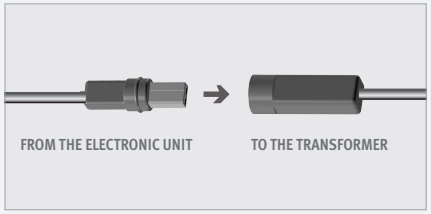


INSTALLATION

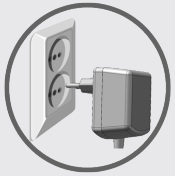
FOR TRANSFORMER VERSION:

2

a. Connect the waterproof connector coming from the electronic unit to the transformer.



b. Plug the transformer into the electricity socket.



IMPORTANT: Wait 10 seconds before operating the system.

3 If the range is unsatisfactory, refer to the section titled ”Settings adjustment”.

NOTE This faucet 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.

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 once on one of the function buttons. After pressing once on a specific function button, a quick flashing of the LED at 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 finishing 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 LED in the sensor eye is perceived. Then, press + to increase the one level and – to reduce it 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.

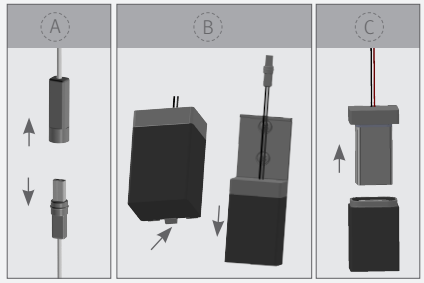
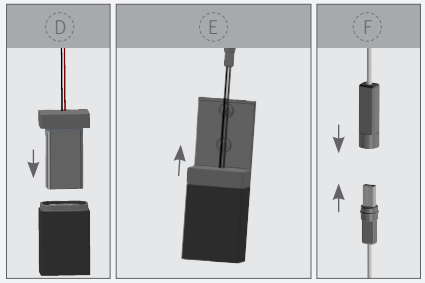
SETTINGS ADJUSTMENT

IN	DELAY IN TIME: If required, the delay in time can also be modified as follows: Press the IN button. Wait until a quick flashing of the LED in the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.
OUT	DELAY OUT TIME: This button allows modifying the flushing start time after the user moves away from the product. A delay out time close to o 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 LED in the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce 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 product 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 restores all the factory settings except for the sensor range. If required, press the Reset button and without releasing it, press the + button once.
SEC	SECURITY TIME: The Security time, prevents continuous flushing 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 LED of the sensor eye is perceived. Then, press + to increase the security 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 LED in the sensor eye is perceived. Then press + to activate the hygiene flush. To disable it again, press – to deactivate it.
	COMFORT FLUSH: If your model includes a COMFORT FLUSH setting, it can be activated by pressing the flush button. When the button is pressed, one blink of the LED in the sensor eye is perceived. The pre-programmed flush cycle will take place then. The Comfort flush cannot be interrupted or deactivated by pressing any button until it is over.

BATTERY REPLACEMENT

When the battery weakens, the LED 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 follow the steps below:

1	A. Disconnect the water proof connector between the battery box and the electronic unit. B. Pull out the battery box from the battery box holder by releasing the bottom clip. C. Pull out the battery cover.	
2	D. Replace the used battery with a new 9V battery (Lithium battery is recommended). E. Close the battery box and slide it back on the battery holder starting from the bottom upwards. F. Connect the connectors.	
3	IMPORTANT: Wait a few seconds before activating the product. Close the battery compartment and refit the cover plate.	

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

1. Shut-off the water shut off valve (angle valve).
2. Remove the filter located between the solenoid valve housing and the inlet adapter \ shut off valve.
3. Wash the filter under running water.
4. Reassemble the parts.
5. Make sure that there is no water leakage.

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 use 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.

SOLENOID VALVE SERVICING

The solenoid valve diaphragm requires periodical cleaning every six (6) months. 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.

SPARE PARTS LIST

SEALS & SCREWS KIT DOLPHIN FB/FE	07210099
SEALS & SCREWS KIT DOLPHIN 1000FB/1000FE	07210100
10-PACK SENSOR KIT DOLPHIN FB/FE	07220430
10-PACK SENSOR KIT DOLPHIN 1000FB/1000FE	07220362
10-PACK SOLENOID VALVE KIT	07232000
INSERT KIT DOLPHIN FB/FE	07240006
INSERT KIT DOLPHIN 1000FB/1000FE	07240028
8-PACK SOLENOID HOUSING KIT DOLPHIN FB/FE	07221119
SPOUT KIT DOLPHIN FB/FE	07271035
SPOUT KIT DOLPHIN 1000FB/1000FE	07271016
NIPPLE KIT DOLPHIN 1000FB/1000FE	07246007
HANDLE KIT DOLPHIN 1000FB/1000FE	07260013
MIXER HANDLE KIT DOLPHIN 1000FB/1000FE	07260012
BATTERY BOX FOR 9V BATTERY	06530080
12-PACK 9V TRANSFORMER (EU PLUG)	06540002
REMOTE CONTROL 13B (OPTIONAL)	07100005
SOAP & WATER REMOTE CONTROL (OPTIONAL)	07100014

LIMITED WARRANTY

Y. Stern Engineering Ltd. warrants that its electronic products 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 product.

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, 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 or soap tank.
- Use of the soap outside of viscosity specifications.
- Alteration of the original soap/foam dispenser components (including pipes).

TROUBLESHOOTING

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. LED 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"*	
		5. Sensor is picking up reflections from the washbasin or another object.	Eliminate cause of reflection.
	3. LED in the sensor flashes once when user's hands are within the sensor's range.	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.
		5. 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 back check 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.	Debris or scale in diaphragm	Clean the orifice or replace diaphragm.
	2. LED in the sensor does not flash once when user's hands are within the sensor's range.	1. Sensor is dirty or covered.**	Clean or eliminate case 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.

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