SLOAN®
OPTIMA SYSTEMS

OPTIMA® plus

Battery Powered Hand Washing Faucet

EBF-615

Description
Battery Powered, Sensor Activated, Chrome Plated Brass Pedestal Electronic Hand Washing Faucet for tempered or hot/cold water operation.

Flow Rate
0.5 gpm/1.9 Lpm Vandal Resistant Spray Head
(See Accessories for other Spray Head options)

Specifications
ADA Compliant, Battery Powered, Sensor Activated, Chrome Plated Cast Brass, Pedestal Hand Washing Faucet with the following features:

- Splash-proof Circuit Control Module
- Sensor Range Adjustment Screw
- Low Battery LED Indicator Light
- User friendly Variable Time Out Settings
- Filtered Solenoid Valve with serviceable Strainer Filter
- Bak-Chek® Tee for Hot/Cold Supply
- Vandal Resistant Spray Head with Pressure Compensating Flow Control
- Metal Jacketed Wire Protection for Sensor Lead
- Includes four (4) AA-size Alkaline Batteries
- Includes appropriate Mounting Hardware
- Mounts on a single-hole lavatory or deck
- Optional 6 VDC Plug-in Transformer available (Batteries act as backup when using optional transformer)

Variations
(Add suffix to Model Number for inclusion with Faucet)

- **Trim Plate (must be specified)**
  - ☐ -4 — Trim Plate for 4" Centerset Sink
  - ☐ -8 — Trim Plate for 8" Centerset Sink
- **Temperature Mixing Valves (optional)**
  - ☐ ADM — Above Deck Mechanical Mixing Valve (only available for installation on 8" centerset sinks)
  - ☐ BDM — Below Deck Mechanical Mixing Valve
  - ☐ BDT — Below Deck Thermostatic Mixing Valve

Bak-Chek® Tee not required or provided when a Temperature Mixing Valve is included with the faucet.

Consult Factory for Finish Variations

Accessories (Specify separately)

- **Vandal Resistant Spray Heads**
  - ☐ ETF-1029-A — 2.2 gpm/8.3 Lpm Laminar Flow Spray Head (recommended for medical applications)
  - ☐ ETF-1024-A — 2.2 gpm/8.3 Lpm Aerator
- **Grid Strainer**
  - ☐ ETF-460-A — Chrome Plated Brass Grid Strainer w/1¼" Outlet Tube
- **Transformer**
  - ☐ SFP-6 — 120 VAC/6 VDC Plug-in Transformer

See OPTIMA Accessories Section of the Sloan Catalog for a complete listing of OPTIMA Faucet Accessories and Variations.

ADA Compliant

Automatic
The Sloan OPTIMA *Plus*® EBF-615 Battery Powered Hand Washing Faucet operates by means of an infrared sensor. Once the user's hands enter the sensor's effective range, the Solenoid activates the water flow. Tempered water flows from the Faucet until hands are moved away. The Faucet then automatically shuts off and resets for the next use.

Hygienic
The ultimate in sanitary protection — there are no handles to turn or buttons to push. Helps to control the spread of infectious diseases. Ideal for high traffic commercial installations.

Economical
Automatic operation provides water usage savings over other faucet devices. Reduces maintenance and operation costs. Battery operation is ideal for Retrofit installations. Optional plug-in transformer available.

Warranty
3 year (limited)

Compliant to:
ASME A112.18.1M

LOW-LEAD UPC C ®

This product may contribute to LEED credits. See details on LEED calculation worksheet.

This space for Architect/Engineer approval

Job Name _____ Date _____

Model Specified _____ Quantity _____

Variations Specified _____

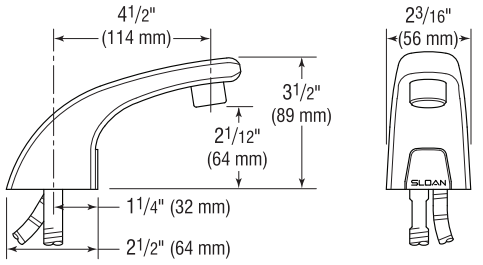
Customer/Wholesaler _____

Contractor _____

Architect _____

EBF-615

FAUCET DIMENSIONS



Description
Battery Powered, Sensor Activated, Chrome Plated Brass Pedestal Electronic Hand Washing Faucet for tempered or hot/cold water operation.

Flow Rate
0.5 gpm/1.9 Lpm Vandal Resistant Spray Head
(See Accessories for other Spray Head options)

ELECTRICAL SPECIFICATIONS

Control Circuit
6 VDC — operates on four (4) alkaline AA-size batteries.
Optional 6 VDC plug-in Transformer

Battery Life
2 years at 8,000 cycles/month

Indicator Lights
Range Adjustment/Low Battery

OPTIMA® Sensor Range
Factory Set: 4" - 5"
(102 mm - 127 mm)
Adjustable: 2" - 7"
(51 mm - 178 mm)

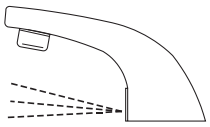
Solenoid Valve
Filtered Solenoid Valve with serviceable Strainer Filter

Time Out Adjustment Settings
30 seconds — The Faucet Time Out Setting determines the maximum time the faucet will run upon continuous activation. The EBF-615 is factory set at the 30 second time out. Consult factory for time out settings to meet individual application requirements.

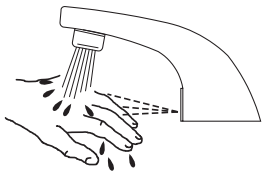
Max. Distance Control Module may be Installed from Spout
With Standard Cable: 15" (381 mm)

OPERATION

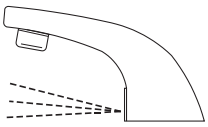
1. A continuous invisible beam of light is emitted from the OPTIMA® Sensor located at the base of the lavatory faucet.



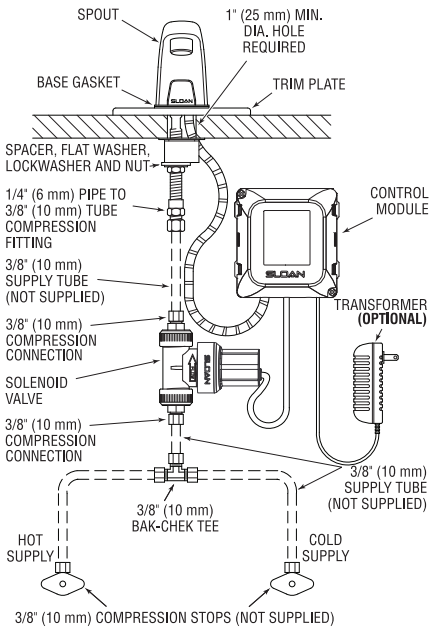
2. As the user's hands enter the beam's effective range, the beam is reflected back into the Sensor Receiver and activates the Solenoid Valve allowing tempered water to flow from the faucet. Water will flow until the hands are removed or until the faucet reaches its automatic time out limit setting.



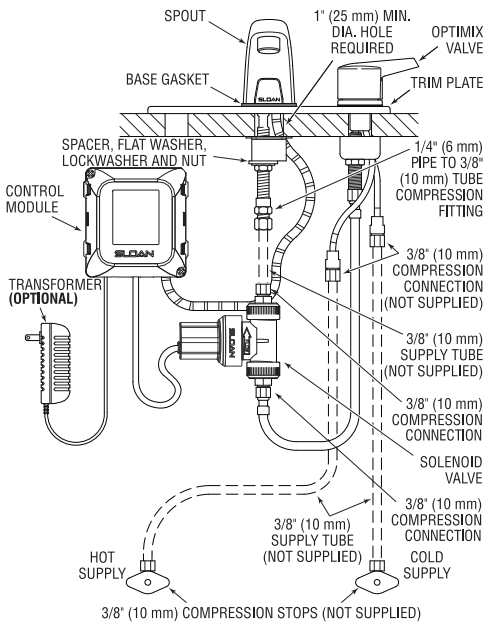
3. When hands are moved away from the OPTIMA® Sensor, the loss of reflected light initiates an electrical signal that deactivates the Solenoid Valve, shutting off the water flow. The Circuit then automatically resets and is ready for the next user.



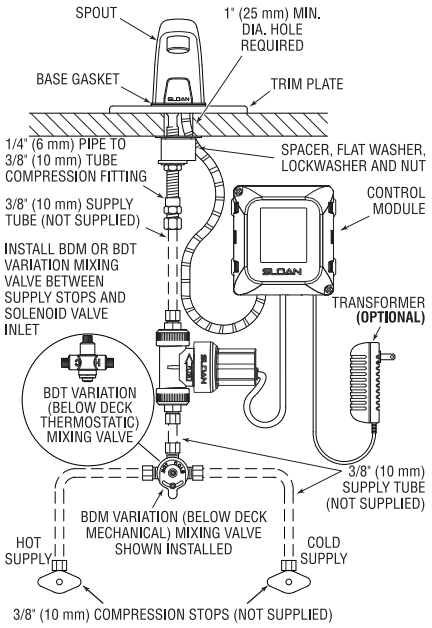
EBF-615 Faucet with Bak-Chek® Tee for Hot and Cold Water Supply (shown with 4" trim plate)



EBF-615 Faucet with ADM Variation Mixing Valve for Hot and Cold Water Supply (shown with 8" trim plate)



EBF-615 Faucet with BDM and BDT Variation Mixing Valves for Hot and Cold Water Supply (shown with 4" trim plate)



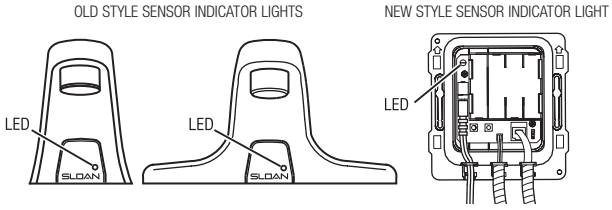
SLOAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131
Phone: 1-800-9-VALVE-9 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380 • www.sloanvalve.com

Optima Plus® EBF-615/EBF-650

TROUBLESHOOTING GUIDE

1. Sensor LED does not function (Sensor indicator light does not flash during initial 10 minute set-up mode).

A. There is no visible indicator light. Normal operation.
This is a normal operating feature of the faucet.



2. Faucet does not deliver any water when Sensor is activated.

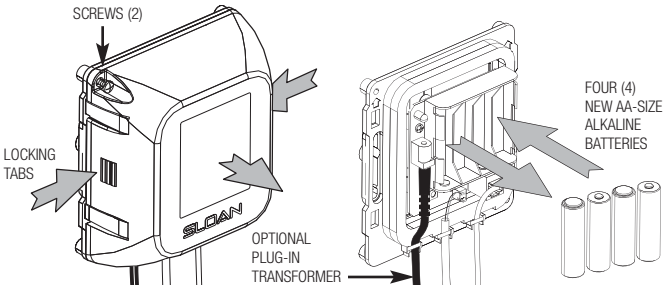
INDICATOR: Solenoid valve produces audible "CLICK."

A. Water supply stop(s) closed.
Open supply stop(s) completely.

INDICATOR: Solenoid valve DOES NOT produce an audible "CLICK."

B. Solenoid Lead is not properly connected to the Control Module.
Disconnect and reconnect Solenoid Lead to the Control Module.

C. No battery or Transformer (optional) power is being supplied to Sensor.
Ensure that the batteries are installed properly. Check that the orientation of each battery matches the positive (+) and negative (—) symbols shown on the bottom of the battery compartment. Reinsert the Batteries into the Control Module. Transformer (optional) is unplugged or wall receptacle has no power.



D. Sensor Cable is not properly connected to the Control Module.
Disconnect and reconnect Sensor Cable to the Control Module.

E. Sensor range is set at minimum distance.
Increase Sensor range. Refer to Step 9, Range Adjustment in your installation instructions.

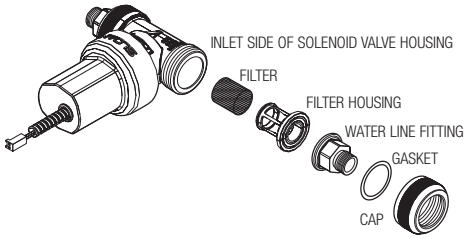
F. Control Module assembly is not working properly.
Replace Control Module assembly.

3. Faucet delivers only a slow flow or dribble when Sensor is activated.

A. Water supply stop(s) partially closed.
Open supply stop(s) completely.

B. Solenoid Filter is clogged.
Remove, clean and reinstall Filter. Turn off water supply at supply stop(s). Activate Faucet to relieve system pressure. Remove Water Supply Line from Inlet Side of Solenoid Valve. Remove Cap, Water Line Fitting, Gasket, Filter Housing and Filter from Solenoid Valve Housing. Slide Filter off Filter Housing. Clean Filter using fresh tap water only. If necessary, use a small brush to clean. Use caution while cleaning to prevent damage to Filter. If any Filter components are damaged, replace as necessary. Examine the Gasket for wear or damage; replace if necessary. Reinstall Filter on Filter Housing. Install Filter Housing, Gasket, Water Line Fitting and Cap onto Solenoid Valve Housing. Tighten Cap securely. Reinstall Water supply Line to Inlet Side of Solenoid Valve.

C. Aerator is clogged.
Remove, clean and reinstall Aerator.



4. Faucet does not stop delivering water or continues to drip after user is no longer detected (automatic shut-off fails even when batteries are removed).

A. Solenoid Valve has been connected backwards.
Disconnect Solenoid Valve compression fittings at both the inlet and outlet positions. The water should flow from inlet through the Solenoid Valve to the outlet according to the direction of the arrow shown on the side of the Solenoid Valve. Reconnect the compression fittings in the correct orientation.

B. Solenoid Valve is dirty.
Backflush by reversing water flow (opposite to the direction shown by the arrow on the side of the Solenoid Valve) through the Solenoid Valve. Reconnect the compression fittings in the correct orientation. Activate faucet.

C. Solenoid Valve Module is not working properly.
Replace Solenoid Valve Module.

5. The water temperature is too hot or too cold on a faucet connected to hot and cold supply lines with Bak-Chek Tee.

A. Supply stops are not adjusted properly.
Adjust supply stops.

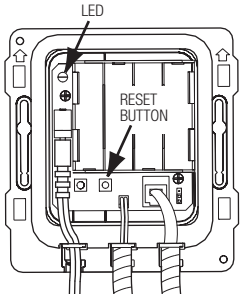
NOTE: For some systems, a Thermostatic Mixing Valve may be required.

6. The Red LED turns on in the control module (below deck).

A. One (or more) of the batteries is "dead".
To ensure proper operation, insert four (4) new AA-size Alkaline batteries. Check that the orientation of each battery matches the positive (+) and negative (–) symbols shown on the bottom of the battery compartment. Reinsert Batteries into the Control Module.

B: Upon start-up mode the control module circuitry also tests the batteries and the Red LED turns on if the battery voltage is low, no Red LED light indicates normal battery voltage.

C. If reset (initiates start up mode) button is pressed, the battery voltage is checked. If voltage is too low, product is stopped from operating and Red LED will turn on. No Red LED light indicates normal battery voltage.



7. The Green LED initially turns on in the control module (below deck) during start up mode, then will not appear again.

INDICATOR: For the 1st ten minutes of operation (batteries inserted or reset button pressed) the Green LED will turn on when there is a target present (hands in front of sensor). After ten minutes, the Green LED will no longer turn on.

A. This is a normal operating feature of the faucet.