

# ESF-20

- ▶ **Description**  
Wall Sensor Activated Deck Mounted Electronic Gooseneck Hand Washing Faucet for tempered or hot/cold water operation.
- ▶ **Flow Rate**  
 2.2 gpm/8.3 Lpm Vandal Resistant Laminar Flow Spray Head  
 For 2.2 gpm/8.3 Lpm Shower Spray Head, specify "H" variation  
 (See **Accessories** for other Spray Head options)
- ▶ **Specifications**  
 ADA Compliant, Wall Sensor Activated, 24 VAC, Chrome Plated Brass, Gooseneck Lavatory/Sink Faucet with the following features:
  - OPTIMA<sup>®</sup> EL-1500-LL Self-adaptive Sensor
  - Filtered Solenoid Valve with serviceable "Y" Strainer Filter
  - 120 VAC/24 VAC Transformer (specify Plug-in or Box Mount)
  - Vandal Resistant Spray Head with Pressure Compensating Flow Control
  - Chrome Plated Wall Cover Plate with mounting hardware and four (4) Vandal Resistant Screws (for 2-gang Electrical Box)
 Transformer must be specified separately.
- ▶ **Variations**  
(Add suffix to Model Number for inclusion with Faucet)
  - **Spout and Spray Head Variations**
    - H** Shower Spray Head (2.2 gpm/8.3 Lpm)
    - S** Surgical Bend
  - **Sensor and Sensor Box Variations**
    - T** Sensor with 30 second Time Out (overflow prevention)
    - YR** Surface Mount Sensor Box
  - **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
    - BDM** Below Deck Mechanical Mixing Valve
    - BDT** Below Deck Thermostatic Mixing Valve
 Bak-Chek<sup>®</sup> Tee not required or provided when a Temperature Mixing Valve is included with the faucet.

Consult Factory for Finish Variations

- ▶ **Accessories** (Specify separately)
  - **Bak-Chek<sup>®</sup> Tee**
    - ETF-617-A** Bak-Chek<sup>®</sup> Tee Fitting for Hot/Cold Mix
  - **Transformers**
    - ETF-233** 120 VAC/24 VAC, 50/60 Hz (35 VA) - Plug-in (will operate up to 2 faucets)
    - EL-248-40** 120 VAC/24 VAC, 50/60 HZ (40 VA) - Box Mount (will operate up to 2 faucets)
    - EL-154** 120 VAC/24 VAC, 50/60 Hz (50 VA) - Box Mount (will operate up to 3 faucets)
    - EL-208** 120 VAC/24 VAC, 50/60 HZ (100 VA) - Foot Mount (will operate up to 6 faucets)
    - EL-342** 240 VAC/24 VAC, 50/60 Hz (50 VA) - Box Mount (will operate up to 3 faucets)
  - **Vandal Resistant Spray Head**
    - ETF-1022-A** 2.2 gpm/8.3 Lpm Aerator
  - **Grid Strainer**
    - ETF-460-A** Chrome Plated Brass Grid Strainer w/1¼" Outlet Tube

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



Model ESF-20-H shown

- ▶ **ADA Compliant**
- ▶ **Automatic**  
The Sloan OPTIMA<sup>®</sup> ESF-20 Electronic Gooseneck Hand Washing Faucet operates by means of an infrared sensor. Once the user enters the sensor's effective range, the Solenoid activates the water flow. Tempered water flows from the Faucet until the user steps away. The Faucet then automatically shuts off.
- ▶ **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 health care applications.
- ▶ **Economical**  
Automatic operation provides water usage savings over other faucet devices. Reduces maintenance and operation costs.
- ▶ **Warranty**  
3 year (limited)
- ▶ **Made in the U.S.A.**



This space for Architect/Engineer approval	
Job Name _____	Date _____
Model Specified _____	Quantity _____
Variations Specified _____	
Customer/Wholesaler _____	
Contractor _____	
Architect _____	

# ESF-20

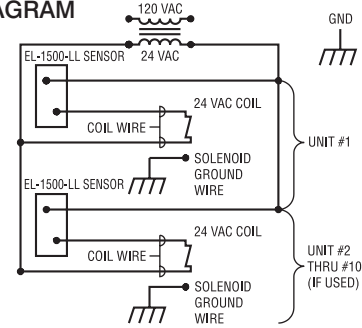
## Description

Wall Sensor Activated Deck Mounted Electronic Gooseneck Hand Washing Faucet for tempered or hot/cold water operation.

## Flow Rate

□ 2.2 gpm/8.3 Lpm Vandal Resistant Laminar Flow Spray Head  
For 2.2 gpm/8.3 Lpm Shower Spray Head, specify "H" variation  
(See **Accessories** for other Spray Head options)

## WIRING DIAGRAM



## ELECTRICAL SPECIFICATIONS

### Control Circuit

Solid State  
24 VAC Input/Output  
2 Second Arming Delay  
30 Second Time Out (optional "T" variation)

### Transformer

See other side of this sheet.

### Solenoid Valve

24 VAC 50/60 Hz  
Serviceable "Y" Strainer  
3/8" NPT Inlet/Outlet

### OPTIMA® Sensor Range

Nominal: 22" - 42" (559 mm - 1067 mm) ± 8" (203 mm) Self-adaptive Window

## Transformer

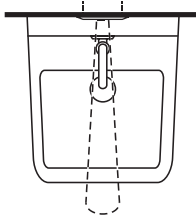
All Sloan Transformers are 50/60 Hz.

Multiple faucets can be powered by a single transformer, provided that the transformer has been properly sized. Allow a minimum of 15 VA of current rating for each faucet being used.

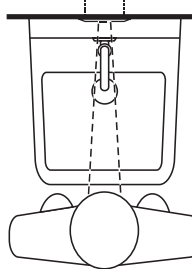
<b>Plug-in</b>	ETF-233	120 VAC/24 VAC - 35 VA (supplied with "P" variation)
<b>Box Mount</b>	EL-248-40	120 VAC/24 VAC - 40 VA (supplied with "B" variation)
<b>Box Mount</b>	EL-154	120 VAC/24 VAC - 50 VA
<b>Foot Mount</b>	EL-208	120 VAC/24 VAC - 100 VA
<b>Box Mount</b>	EL-342	240 VAC/24 VAC - 50 VA

## OPERATION

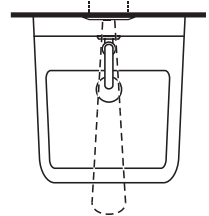
1. A continuous invisible light beam is emitted from the OPTIMA® Sensor.



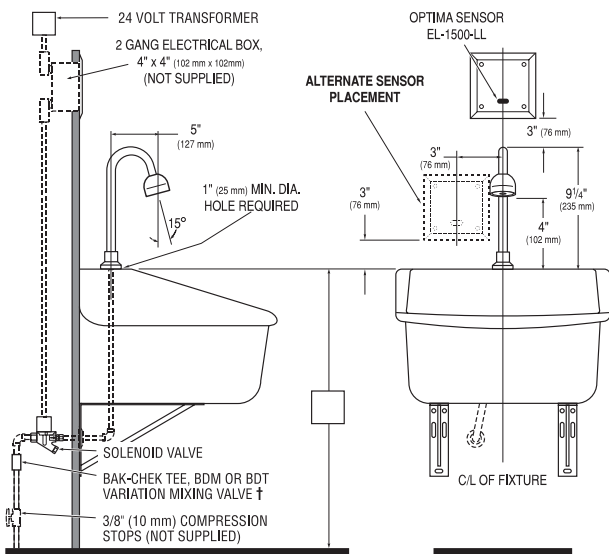
2. As the user's hands enter the beam's effective range (22" to 42" / 559 mm to 1067 mm), the beam is reflected back into the OPTIMA® Scanner Window and activates a two-second Time Delay Circuit. Once completed, the Output Circuit activates the Solenoid Valve allowing tempered water to flow from the spout into the sink.



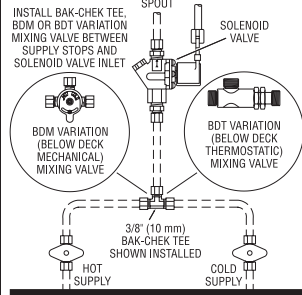
3. When the user steps away from the OPTIMA™ Sensor, the loss of reflected light initiates an electrical signal that deactivates the Solenoid Valve, shutting off the water flow. The Circuit then automatically resets and is ready for the next user.



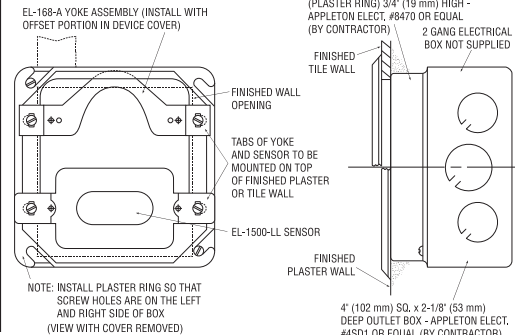
## ROUGH-IN DIMENSIONS



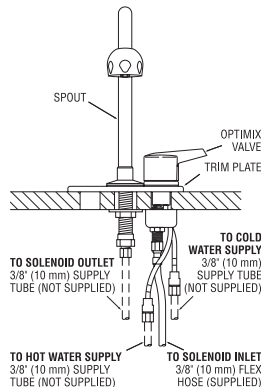
## BAK-CHEK® TEE, BDM & BDT VARIATION VALVES †



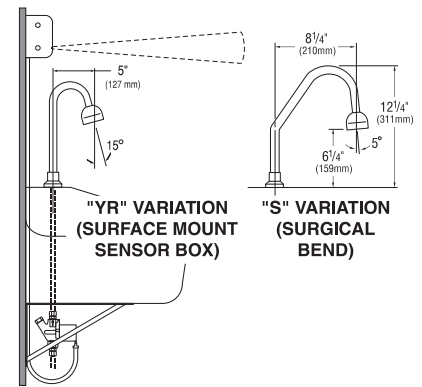
## ELECTRICAL BOX INSTALLATION



## ADM VARIATION MIXING VALVE



## "YR" VARIATION AND FAUCET DIMENSIONS



**SLOAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131**  
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