

BASE SPECIFICATIONS		
MODEL	FWC-FSLC-4BE, FWC-FSLC4B	FWC-FSLC-6BE, FWC-FSLC6B
Supply Voltage	41VDC (Max)	41VDC (Max)
Alarm Current	30mA (Max)	30mA (Max)
Remote LED Current	9.6mA (Max)	9.6mA (Max)
Operating Temperature Range	14F ~ 122F	14F ~ 122F
Listed Ambient Temperature Range	32F ~ 194F	32F ~ 194F
Storage Temperature Range	-4F ~ +140F	-4F ~ +140F
Dimensions	4.13" Dia x 0.31"	5.87" Dia x 0.47"
Mounting Box Compatibility	3"-O	3"-O, 4"-O, 4"-S

Multi-criteria Detectors use supplementary photoelectric, thermistor, and/or CO sensors to scale and/or shift the photoelectric smoke sensor output to reduce sensitivity to false alarms and increase sensitivity to fire conditions.

Connect the below listed detectors only to a listed-compatible control panel. Refer to the control panel installation manual for additional instructions. Detectors require minimum SLC firmware rev. 4.0 min. Smoke detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

Detectors must be installed and maintained in accordance with applicable NFPA standards, local codes and any authority having jurisdiction. Refer to NFPA 72 "National Fire Alarm and Signaling Code" and to NFPA 720 "Standard for Installation of Carbon Monoxide Detection and Warning Equipment" for installation guidelines and testing procedures. Smoke detectors should be tested in accordance with NFPA 72, section on "Inspection, Testing and Maintenance".

Seal conduit openings in the electrical box with 3M Weatherban #606 nonflammable sealing compound (or equivalent) to reduce the stack effect. Attach the detector to the base by turning the detector clockwise until it stops.

FWC-FSLC-SMK Intelligent Photoelectric Smoke Detector and Base Specifications					
Supply Voltage	Operating Voltage Range (High Signal)			24 - 41 VDC	
	Signal Voltage (Peak to Peak)			7 - 9 VDC	
Signal Voltage is measured during FACP transmission. 17V Minimum Voltage (Operating Voltage less Signal Voltage).					
Supply Current	Normal Standby	Alarm (LED Off)	Alarm (LED On)	Remote Indicator	Polling
	450µA	540µA	9.5mA	9.6mA	6.75mA
Remote Indicator is current limited by the detector not to exceed rated current. Actual Remote Indicator current is less for loads less than rating. Add Polling Current to total Normal Standby Current for each SLC in battery calculations. Do not include Polling Current in voltage drop calculations. When the total number active of alarm LEDs is limited by the FACP, additional detectors in Alarm will consume the Alarm (LED Off) current.					
Smoke Density Range	0.70 – 4.00%/ft @300 FPM Open Area				
Compatible Bases	FWC-FSLC-6BE, FWC-FSLC-4BE, FWC-FSLC4B, FWC-FSLC6B				
Environment	Operating Temp. & Humidity			UL Listed Ambient Temp.	
	14F ~ 122F, <95%RH at 104F, <80%RH at 120F			32F ~ 120F	
Physical	Dimensions		Color	Weight	
	3.94" diameter x 1.77" tall		Ivory	3.4 oz.	
Supervised Troubles	IR LED failure, Internal Memory failure, Contamination				

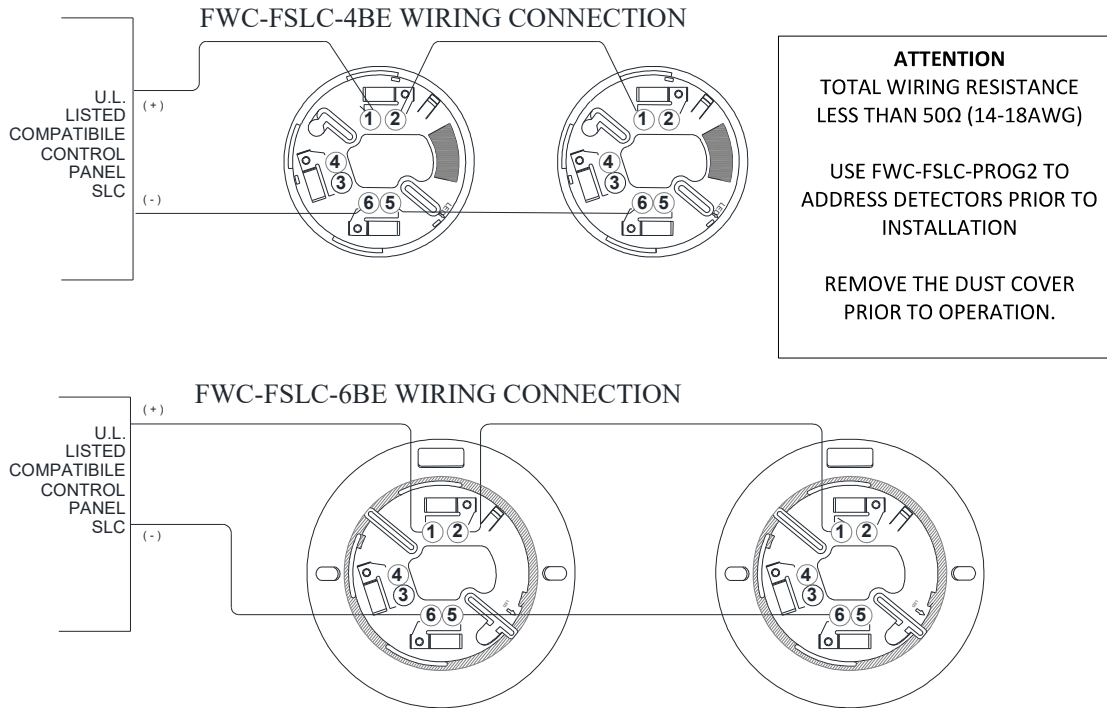
FWC-FSLC-SMK-E Intelligent Photoelectric Smoke Detector and Base Specifications					
Supply Voltage	Operating Voltage Range (High Signal)			24 - 41 VDC	
	Signal Voltage (Peak to Peak)			7 - 9 VDC	
Supply Current	Normal Standby	Alarm (LED Off)	Alarm (LED On)	Remote Indicator	Polling
	340μA	340μA	8.5mA	9.2mA	6.75mA
Smoke Density Range	1.40 – 3.30%/ft @300 FPM Open Area				
Compatible Bases	FWC-FSLC-6BE, FWC-FSLC-4BE				
Environment	Operating Temp. & Humidity			UL Listed Ambient Temp.	Storage Temp.
	32F ~ 120F, <95%RH at 104F, <80%RH at 120F			32F ~ 120F	-22F ~ +140F
Physical	Dimensions		Color	Weight	
	3.94" diameter x 1.68" tall		Ivory	3.4 oz.	
Supervised Troubles	IR LED failure, Blue LED failure, Internal Memory failure, Contamination				



FWC-FSLC-SH Intelligent Multi-sensor Smoke and Heat Detector and Base Specifications					
Supply Voltage	Operating Voltage Range (High Signal)			24 - 41 VDC	
	Signal Voltage (Peak to Peak)			7 - 9 VDC	
Supply Current	Normal Standby	Alarm (LED Off)	Alarm (LED On)	Remote Indicator	Polling
	450μA	540μA	9.5mA	9.6mA	6.75mA
Smoke Density Range		0.70 – 4.00%/ft @300 FPM Open Area			
Heat Fixed Temperature Range		135 ~ 150F			
Compatible Bases		FWC-FSLC-6BE, FWC-FSLC-4BE, FWC-FSLC4B, FWC-FSLC6B			
Environment	Operating Temp. & Humidity			UL Listed Ambient Temp.	Storage Temp.
	14F ~ 122F, <95%RH at 104F, <80%RH at 120F			32F ~ 120F	-4F ~ +140F
Physical	Dimensions		Color	Weight	
	3.94" diameter x 1.77" tall		Ivory	3.4 oz.	
Supervised Troubles		IR LED failure, Thermistor failure, Internal Memory failure, Contamination			

FWC-FSLC-SCH Intelligent Multi-criteria Smoke, Heat, and CO Detector and Base Specifications					
Supply Voltage	Operating Voltage Range (High Signal)			24 - 41 VDC	
	Signal Voltage (Peak to Peak)			7 - 9 VDC	
Supply Current	Normal Standby	Alarm (LED Off)	Alarm (LED On)	Remote Indicator	Polling
	600µA	600µA	30mA	9.6mA	6.75mA
Smoke Density Range		0.77 – 3.47%/ft @300 FPM Open Area			
Heat Fixed Temperature Range		135 ~ 150F			
Heat Rate of Rise Range		15F/min			
CO Range		30~150ppm			
COHb Range		6.2% (Response time 70ppm 60-240 minutes)			
Compatible Bases		FWC-FSLC-6BE, FWC-FSLC-4BE, FWC-FSLC4B, FWC-FSLC6B			
Environment	Operating Temp. & Humidity			UL Listed Ambient Temp.	Storage Temp.
	14F ~ 122F, <95%RH at 104F, <80%RH at 120F			32F ~ 120F	-4F ~ +95F
Physical	Dimensions		Color	Weight	
	3.94" diameter x 1.77" tall		Ivory	3.7 oz.	
Supervised Troubles		IR LED failure, Thermistor failure, CO Sensor failure, CO Sensor end-of-life, Internal Memory failure, Contamination			

FWC-FSLC-HEAT-E Intelligent Combination Heat Detector Specifications					
Supply Voltage	Operating Voltage Range (High Signal)			24 - 41 VDC	
	Signal Voltage (Peak to Peak)			7 - 9 VDC	
Supply Current	Normal Standby	Alarm (LED Off)	Alarm (LED On)	Remote Indicator	Polling
	350μA	500μA	9.5mA	9.6mA	6.75mA
Heat Fixed Temperature Range		135 ~ 194F			
Heat Rate of Rise Range		15F/min			
Compatible Bases		FWC-FSLC-6BE, FWC-FSLC-4BE, FWC-FSLC4B, FWC-FSLC6B			
Environment	Operating Temp. & Humidity			UL Listed Ambient Temp.	Storage Temp.
	14F ~ 100F for ORDINARY [135~174F] rating 14F ~ 122F for INTERMEDIATE [135~194F] rating <95%RH at 104F, <80%RH at 120F			32F ~ 120F	-4F ~ +140F
Physical	Dimensions		Color	Weight	
	3.94" diameter x 1.77" tall		Ivory	3.4 oz.	
Supervised Troubles		Thermistor failure, Internal Memory failure			



Placement of Detectors

Following the guidelines in NFPA 72 and local codes, base the number and location of detectors on an engineering survey of the area to be protected. Factors to consider include: Contents to be protected, Type of construction and use of structure, Human occupancy, Burning characteristics of contents, Space involved, Height and Surface condition of ceiling, Total area, Air movement (stratification), Vent location (velocities and dilution), Deflections and obstructions

- One smoke detector covers 450 to 900sft, max spacing 30ft
- One heat detector covers up to 2500sft, FWC-FSLC-HEAT max spacing 70ft, FWC-FSLC-SH and FWC-FSLC-SCH max spacing 50ft
- * Beams or other obstructions extending more than 8" but less than 18" require reduced spacing at the perpendicular of the obstructions. Beams or other obstructions extending more than 18" below the ceiling should designate a new separation point and be considered a border for a new section.

WARNING: Do not install smoke detectors in the following areas:

- Where temperatures are likely to exceed the operating temperature ranges specified by detector
- Closer than 4" to any side wall
- Where forced ventilation can dilute the smoke from a fire
- In known areas of combustion such as kitchens or furnace rooms
- In known areas of sustained corrosive atmospheres such as industrial chemical processing areas

Maintenance

Replacement

The following troubles require detector replacement: IR LED failure, Blue LED failure, Thermistor failure, Internal Memory failure, CO Sensor failure, CO Sensor end-of-life.

CO Sensor Lifetime

Replace the FWC-FSLC-SCH sensor in either the following conditions:

- Control panel indicates the end of life trouble (10 years from the initial power up)
- Indicated date on the product label





Cleaning

Contamination trouble can be corrected by cleaning or replacement. Use clean, dry compressed air to remove dust from a detector, or return to Napco for service. Disassembly of the detector may result in the failure of the detector to initiate an alarm condition or initiation of a false alarm condition.

Testing

For a smoke detector to operate efficiently, the combustion products must enter the outer chamber. Air flow, stratification, velocity, stagnation, and migration all affect the efficiency and accuracy of the detector. Use an air flow meter to determine the movement of the air within a structure. Consult local codes and ordinances for maintenance requirements. Napco recommends a bi-annual functional testing and visual inspection.

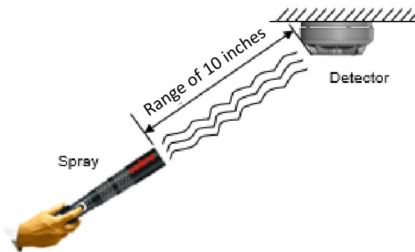
Prior to testing any detector, care should be exercised to ensure proper disabling of live signals and notification circuits of the Fire Alarm Control Panel. Consult FACP literature for use of walk test functions for this purpose. Failure to exercise this procedure may result in false alarm signals which could place life and property in jeopardy.

Caution: Excessive aerosol smoke can contaminate a detector.

Use Walk Test Mode. Do not spray in bursts longer than 1 second.

Wait 20 seconds between sprays.

Spray 10 inches from detector.



Test smoke detectors with Smoke Sabre aerosol cans or the Testifier 1000/1001 or 2000/2001 with TS3 smoke capsules; test CO detectors with TC3 CO capsules. Testifier usage described below, refer to Testifier manual for additional information:

1. To insert the battery baton, hold the Testfire head unit by the handle and depress the upper spring button on the battery baton. Align the button with the location hole in the handle and push the battery baton into the handle until the button snaps into place.
2. Insert the other end of the battery baton into the Solo access pole and depress the lower spring button. Align it with the location hole and push the battery baton further into the pole until the button snaps into place.
3. Remove the capsule from its outer carton and Anti-Static bag.
4. Remove the spring clip protector cap from the new capsule.
5. Holding the capsule by spring clips with the label on the underside, carefully insert the new capsule into the capsule port. Push it into position, ensuring that the clips spring out positively on both sides of the capsule.
6. Close the access cover securely.
7. Program the tester to the following options available: Smoke, Heat or CO. Refer to the panel manual for additional information regarding detector test modes which may be necessary to prevent long test intervals.
8. Raise Testfire over the detector. The detector should touch the base of the inner clear cup.
9. Lower Testfire from the sensor after testing is complete.

Test heat detectors with Testifier 1000/1001/2000/2001 or a hand-held hair dryer aimed at the detector. Do not use a heat gun. Hold the hair dryer nozzle at least 4 inches away from the detector. Stop testing when alarm operation is observed.

Address Programming Procedure with FWC-FSLC-PROG2 Handheld Programmer

1. Install detector onto programmer, aligning detector tabs with programmer grooves.
2. Press the left button to switch programmer to on.
3. Increment to the desired address by pressing the left and right buttons.
4. When the desired address is displayed, press the top center button to program.



Display Diagnostic Messages:	
bAt:	Approximately 3000 addresses can be programmed in low battery condition.
E0:	Return Programmer for Service
E1:	Attempting to program an address with no device connected.
E2:	Cannot find device after power up. Check Connection and retry.
E3:	Invalid sensor response. Check Connection and retry.
E4:	Return Programmer for Service
E5:	Device read error.
E6:	Fail to read analog value.

