

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

APPLICATION

FMV 1000 Series Floodlights are suitable for use in the following hazardous (classified) locations as defined by the National Electrical Code (NEC®):

- Class I, Division 2, Groups A, B, C D
- Class I, Zone 2, AEx nR (AEx nA nR with outlet box), Group IIC
- Wet Locations
- IP56

This luminaire is a restricted breathing product. Restricted breathing, identified by the marking nR, means that an enclosure is sufficiently well sealed to limit the entry of flammable gas.

The Champ® FMV 1000 Series comes standard as a “restricted breathing” luminaire. That means it restricts vapors and gases from entering inside the luminaire. Therefore, please retain and use the sealing cord connector (located on the bottom near trunnion mount of the luminaire) with 16-3 type SOW or equal

Read and follow these instructions carefully for installation and maintenance to achieve optimum performance.

⚠ WARNING

To avoid the risk of fire and electric shock, this product should be installed by a qualified electrician only.

⚠ WARNING

To avoid electric shock:

- Be certain power is OFF before and during installation and maintenance.
- Fixture must be supplied by a wiring system with an equipment grounding conductor.

To avoid decreased lamp and fixture life, as well as risk of ignition:

- Use only lamp type and wattage specified on nameplate of fixture.
- Keep tightly closed when in operation.
- Do not position the fixture beyond the aiming range limits.

To avoid burning hands:

While performing maintenance, make sure lens and lamp are cool.

cord.

Refer to the floodlight nameplate for specific classification information, maximum ambient temperature suitability, and corresponding operating temperature (T-Number).

Champ® FMV 1000 Series Floodlight is designed for use indoors and outdoors in industrial locations where moisture, dirt, corrosion, vibration, and rough usage may be present. Typical applications include process areas, storage areas, loading docks, rail yards, building perimeters, parking areas, sports applications, etc.

Champ® FMV 1000 Series Floodlights are trunnion mounted and provided with a choice of voltages for the following light sources and wattages:

- 1000W High Pressure Sodium (HPS)
- 1000W Metal Halide (MH)

⚠ WARNING

To avoid explosion:

Make sure the supply voltage is the same as the floodlight voltage.

Do not install where the marked operating temperatures exceed the ignition temperature of the hazardous atmosphere.

Do not operate in ambient temperatures above those indicated on the floodlight nameplate.

Do not position the floodlight beyond the aiming range limits depicted on page 2.

Use only the lamp and wattage specified on the floodlight nameplate.

Use proper supply wiring as specified on the floodlight nameplate.

All gasket seals must be clean.

Before opening, electrical power to the floodlight must be turned off. Keep tightly closed when in operation.

To maintain restricted breathing properties, do not substitute cable fitting supplied with fixture.

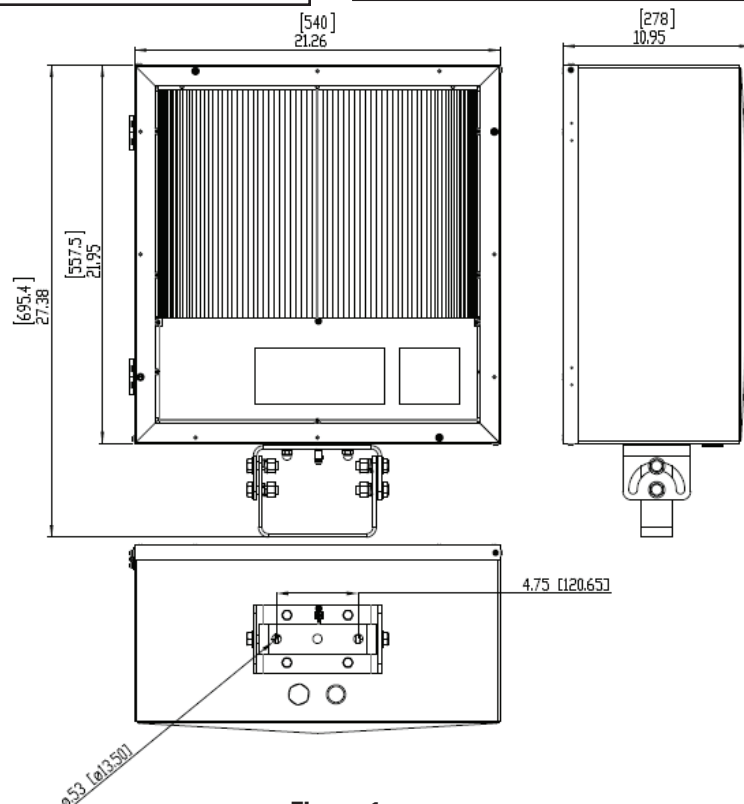


Figure 1

FLOODLIGHT INSTALLATION

A) Yoke (Trunnion Mount)

- Using trunnion arm as a template, mark and drill desired location on mounting surface using only the mounting holes.
- Secure trunnion arm to mounting surface using 1/2" bolts or lag screws (provided by installer).
- To make final vertical adjustment, loosen pivot bolts (2) on floodlight yoke and position to desired vertical angle. Check to make sure the vertical angle is within the aiming range shown (see Figure 3). Securely tighten both pivot bolts.

B) Pole Mount with SFA6 Slipfitter

- Using the bolts, nuts, and lock washers provided, securely fasten the floodlight yoke to the flange on the SFA6 slipfitter. Refer to Figure 2. Torque the bolts to 45 lbs.-ft.

NOTE: Angular positioning of the floodlight will be done later.

- Place the SFA6 slipfitter adapter with the secured floodlight onto the 2" pole top tenon.
- Secure by tightening the slipfitter base bolts. Torque base bolts to 19 lbs.-ft.

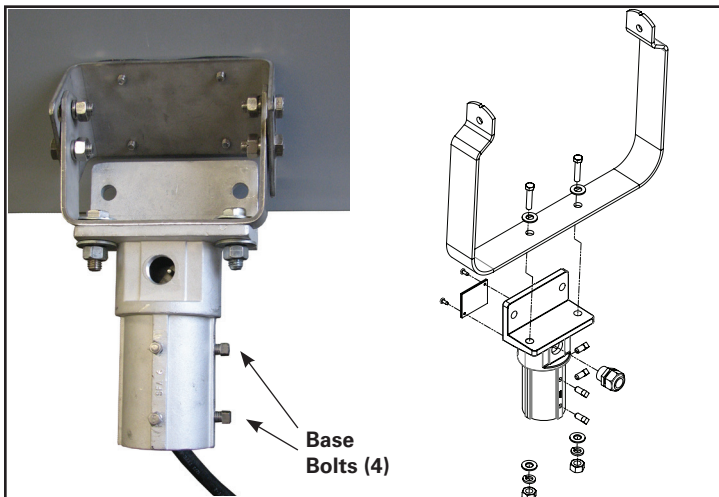


Figure 2 - SFA6

WARNING

To avoid decreased lamp and fixture life or overheating of fixture, do not position fixture beyond aiming range limits.

WIRING

A) Pole and Yoke Mount – F2MV, FMV, FMV1000 Series Floodlights and Champ® voyager nR Series Stainless Steel Floodlight

IMPORTANT!

Under no circumstances may wire splices be used in the slipfitter or pole. Use continuous length supply cord from fixture to approved customer supplied wiring chamber.

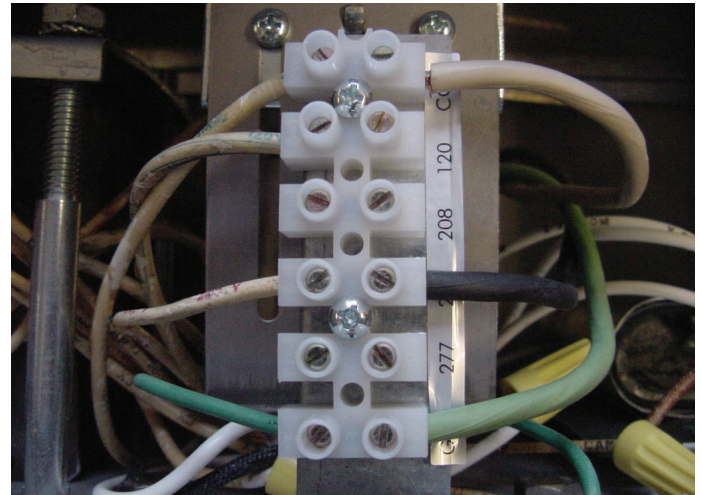
Note: For Class I, Zone 2 refer to NEC 505.15(c) or for Class I, Division 2, 501.10(b). Wiring must be installed in accordance with NEC 400.14.

- For yoke mount with SFA6 Slipfitter Adapter: Remove the access cover by loosening the two (2) self-tapping screws. Set aside for reassembly later.
- Using access opening, pull #16-3 type SO cord (or other extra hard usage portable cord) supply wire from customer supplied wire chamber through pole. Using the NCG7575 cable connector provided, position a minimum overall length of 3 ft. cord for final connection to light fixture. Use a small amount of HTL thread lubricant when installing cord connector and install according to instructions supplied with connector. Securely tighten cord connector into slipfitter.
- Strip cord insulation jacket back 3 inches and strip each conductor 3/8".
- Secure the access cover as follows: For SFA6 slipfitter, secure cover by tightening the two (2) self-tapping screws against SFA body. For SFA6 SS slipfitter, attach access plate with four (4) screws and lock washers.

Proceed to B) Wiring the Floodlight.

B) Wiring the Floodlight

- Loosen the twelve (12) captive floodlight cover screws on the door and completely open the cover. Remove the four (4) screws that secure the cover plate over the ballast housing. Be sure to retain the screws in a safe place.
- Ensure that line power is not connected to the SOW cord. Strip 3/8" of the wires of the SOW cord for termination. Notice that all components in the ballast assembly area are prewired. You will only need to wire line power to the terminal block and ground wire.
- Loosen the screws on the terminal block for the appropriate line voltage, ground (GND), and common (COM) connections. Run the SOW cord through the sealing cord connector, which is the connector on the bottom of the luminaire. Terminate the equipment grounding conductor (green) of the SOW cord first, the common (usually white), and finally the line voltage (usually black) to the marked terminal blocks.



WARNING

To avoid explosion: On ballasts with multiple supply voltage taps (MT, TT, etc.), all unused leads must terminate at the terminal block or be capped with closed end wire connectors.

- Tighten the sealing cord connector around the SOW cord so that the cord is held securely in place. Place the ballast assembly cover back over the ballast assembly area and fasten in place with the four (4) screws.
- Install the lamp as specified on the nameplate. See LAMP INSTALLATION AND REPLACEMENT section.
- Close floodlight cover door making sure that all wires are safely inside and positioned away from the ballast area. Securely tighten all cover screws. For proper gasket seal, torque the cover screws to 22 lbs.-in.
- To make final vertical adjustment, loosen the two (2) pivot bolts on the floodlight yoke to position floodlight at the desired angle (within the acceptable aiming range limits). See Figure 3. Tighten the two (2) pivot bolts to 45 lbs.-ft.

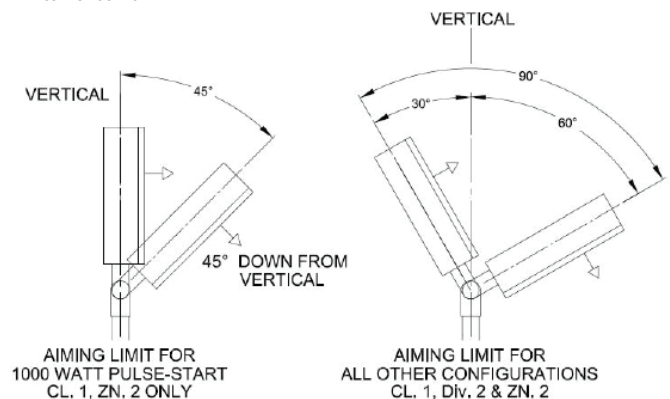


Figure 3

WARNING

To avoid ignition of the hazardous atmospheres or overheating of the floodlight:

Do not position the floodlight beyond the aiming range limits.

8. To make the final horizontal (radial) adjustment, loosen the four (4) slipfitter base bolts.
9. Rotate the floodlight housing to the desired position.
10. Tighten the slipfitter base bolts to 19 lbs.-ft. to lock in position.
11. Turn power on.

LAMP INSTALLATION AND REPLACEMENT

WARNING

Luminaire must be de-energized during lamp installation and replacement.

1. Note both vertical and radial aiming angles. If these are disturbed during relamping, they should be readjusted after relamping.
2. Disconnect power to the floodlight and allow to cool completely. Allow the capacitor to discharge for 15 minutes.
3. Completely loosen the twelve (12) captive cover screws and swing open the cover. See Figure 4.

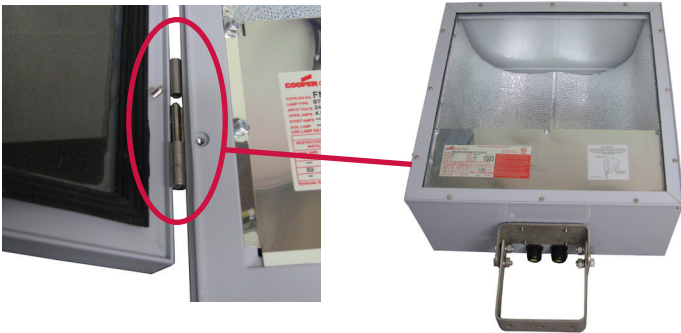


Figure 4 - Swing Open Cover with Lift-Off Door

4. Remove lamp.
5. Perform cleaning and inspection as noted in the MAINTENANCE section.
6. Screw new lamp into lampholder and securely tighten lamp. New lamp must be identical type, size, and wattage as marked on the floodlight nameplate.

CAUTION

To prevent ballast damage on high pressure sodium floodlights, replace burned out lamps as soon as possible.

To avoid shortened lamp life, lampholder failure, wiring faults, or ballast failure, tighten lamp firmly and completely.

To avoid injury, guard against lamp breakage.

7. Thoroughly clean lens and cover gasket seal with a clean, damp cloth. If this is not sufficient, use a mild soap or a liquid cleaner such as Collinite NCF or Duco #7. Do not use an abrasive, strong alkaline, or acid cleaner. Damage may result.
8. Close floodlight cover door making sure that all wires are safely inside and positioned away from the ballast area. Securely tighten all cover screws. For proper gasket seal, torque the cover screws to 22 lbs.-in.

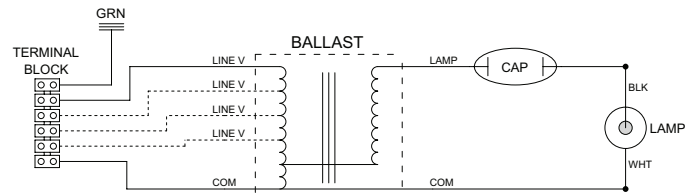
MAINTENANCE

Perform visual, electrical, and mechanical inspections on a regular basis. This should be determined by the environment and frequency of use. However, it is recommended that checks be made at least once a year. We recommend an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA No. 70B. The lens should be cleaned periodically to ensure continued lighting performance. To clean, wipe the lens with a clean, damp, soft cloth. If this is not sufficient, use a mild soap or a liquid cleaner such as Collinite NCF or Duco #7. DO NOT use an abrasive, strong alkaline or acid cleaner.

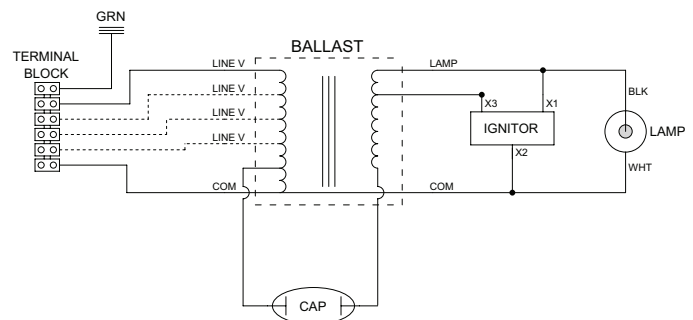
- Relamp high pressure sodium fixtures as soon as possible after the lamp burns out to prevent damage to the ballast.
- Visually check for undue heating evidenced by discoloration of wires or other components, damaged parts, or leakage evidenced by water or corrosion in the interior. Replace all damaged or malfunctioning components before putting the fixture back into service.
- Electrically check to make sure that all connections are clean and tight.
- Mechanically check that all parts are properly assembled.

WIRING DIAGRAMS

METAL HALIDE (MH)



PULSE START METAL HALIDE (MH) HIGH PRESSURE SODIUM (HPS)



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