

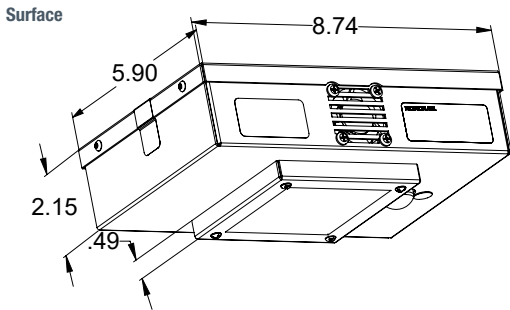


HIGHLIGHTS

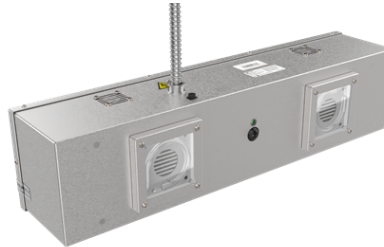
- Powered by Violet Defense® technology
- For use in unoccupied spaces
- Single UV light engine with pulsed xenon lamp for up to 10' x 10' coverage area
- Small scale, high intensity, UV disinfection unit
- Utilizes broad spectrum UV-C, UV-B, and UV-A light
- Installation available for drop-in grid ceiling, recessed hard ceiling, or surface ceiling/wall mount
- Factory programmed to operate for 30 minutes per cycle
- Built-in redundant protection features (motion sensor, LED indicator, safe stop) will cycle the unit off if motion or technical issues are detected
- For 120V/60Hz operation



DIMENSIONS



COMPANION LUMINAIRE(S)



HXMD S
UV Disinfection Dual Luminaire with Pulsed Xenon

PATHOGEN REDUCTION EFFECTIVENESS

Average Pathogen Reduction Over Specific Control Time

Pathogen	Study ID	Control Time	2 Meter (~ 6'-6") Distance	3 Meter (~ 9'-10) Distance
E. Coli	NG15214	30 Minutes	99.02%	98.93%
Salmonella	NG15214	30 Minutes	99.92%	99.76%
MRSA	NG15214	30 Minutes	>99.9998%	>99.9998%
Feline Calicivirus (FCV)	NG9046	4 Hours	99.77%	-----
Human coronavirus, Strain 229E	NG15862	30 Minutes	99.0%	-----
Human coronavirus, Strain 229E	NG15862	1 Hour	99.990%	-----
Influenza A (H1N1), Strain A/PR/8/34	NG15861	30 Minutes	96.84%	-----
Influenza A (H1N1), Strain A/PR/8/34	NG15861	1 Hour	99.76%	-----

Third Party Clinical Validation

The pathogen reduction effectiveness of an equivalent to the HXMS using Violet Defense® technology has been tested by independent accredited third-party testing lab (Microchem Laboratory, Round Rock, TX).

Reference: Study ID Number: NG15214 Tested May 2020, "Antibacterial Activity and Efficacy using Violet Defense® technology"

Reference: Study ID Number: NG9046 July 2017, "Determination of the Antiviral Effectiveness of Test Device Against Feline Calicivirus"

Reference: Study ID Number: NG15862 August 2020, "Virucidal Efficacy of a Test Device For Use on Inanimate, Nonporous Surfaces"

Reference: Study ID Number: NG15861 August 2020, "Virucidal Efficacy of a Test Device For Use on Inanimate, Nonporous Surfaces"

CATALOG NUMBER

Example: HXMS 1X1 F UVX 120 KSK PWS1636

Series	Size	Mounting	Wavelength	Voltage
HXMS Healthcare UV Disinfection Single Unit	<blank> Use w/ (S) Surface Mounting 1X1* 1' X 1' 2X2** 2' X 2' <i>*Available w/ F (Flange) mount only</i> <i>**Available w/ G (Grid) mount only</i>	S Surface F Flange (Hard Ceiling) G Grid	UVX Ultraviolet Pulsed Xenon	120 120 volt

Switching	Mount Adapter	External Options
<blank> Safety Control Solution (by others) KSK* Key Actuated Light Switch Kit <i>*Applicable as a one-way switch application only.</i> <i>**Reference page 7 for additional switch capacity</i> <i>A lockable switch or other safety device must be installed with the unit.</i>	<blank> Not required SVFM* Surface VESA 100x100 Fixed Mount Bracket SVTM* Surface VESA 100x100 Tilt Mount Bracket <i>*Available w/ S (Surface) mount only.</i> <i>Surface unit can also be mounted without adapter</i>	PWS1636 6' Pre-wire, 16AWG, 3/8" Dia, 3 Wire - 1 Circuit

For sale only in the United States of America and Mexico.

Meets California ozone emissions limits. California Air Resources Board (CARB) certified.

nLIGHT® CONTROLS

nLight UV controls solutions are available for specific applications, please contact your Acuity Brands representative for more information.

SPECIFICATIONS

Housing

Aluminum 16-gauge housing construction.
Detachable flange and grid options available.

Optics

Advanced patented lens technology allows for wider spectrum of UV to be used. Transmissive UV .02 thick lens at 170° beam angle

Finish

Housing is brushed aluminum. Flange and grid options provided in painted semi-gloss white polyester powder coat. VESA mount brackets are painted semi-gloss black polyester powder coat.

Mounting

Lay-in grid mounting requires 2X2 flanged kit for simple drop in to 24" x 24" or 24" x 48" grid ceiling. Sheet rock mounting requires 1X1 flanged kit enabling it to be placed in a hard ceiling recessed opening. Surface mount fixtures require access to back side of surface unless VESA 100mmx100mm bracket support is used. Reference installation instructions for more information.

Source

Proprietary Xenon Lamp
Powered by Violet Defense® technology

Flash Interval

1 UV flash every 6 seconds

Broad Spectrum UV

UV-C (200-280nm) Germicidal
UV-B (280-320nm) Germicidal
UV-A (320-400nm) Bactericidal

Range

Up to 10' x 10' typical (100 sq feet)

Expected Lamp Life

>2 million UV flashes. Operating Life is dependent on frequency and duration of operating cycles. Reference chart below.

Power Connection

All units ship with a 6' Pre-Wire Whip, 16AWG, 3/8" Diameter, 3-Wire for hardwire to power

Voltage

120v AC in 60Hz

Current

Maximum of 3.5amps

Wattage

60w during operation

Circuits

Single circuit

Fuse

Integral 250v, 4amp fuse. (Spare fuse supplied with fixture.)

Mode

Shipped standard with commissioned cycle mode of 30 minutes. Users will manually activate the fixture to start an operating cycle. The fixture will then run its pre-programmed 30-minute cycle one time before entering safe mode and until power is manually cycled off and on again. The mode is configured at the factory and cannot be changed on the fixture.

Controls

Controlled key lock-out switch option available or other safety controls supplied by others required.

Fixture Weight

(Weight may vary depending upon options or accessories selected.)

HXMS S: 2.6 lbs (1.2 kg)

HXMS 1X1 F: 4 lbs (1.8 kg)

HXMS 2X2 G: 6.5 lbs (2.9 kg)

Environment

Dry location only.

Ambient Operating Temperature

+41°F (+5°C) to +104°F (+40°C)

Ambient Operating Humidity

<80% relative humidity non-condensing

Disclaimer

All references to "disinfection" are referring generally to the reduction of pathogenic bioburden and are not intended to refer to any specific definition of the term as may be used for other purposes by the U.S. Food and Drug Administration or the U.S. Environmental Protection Agency. Reduction of the pathogenic bioburden is a function of fixture run time and the distance to the UV light source and the level of reduction will vary within a specific space. This fixture is not for use as a medical device. It is the obligation of the end-user to consult with a qualified Professional Engineer and a Certified Industrial Hygienist, if applicable, to determine whether this fixture meets the applicable requirements for system performance, code compliance, safety (including safety and hazard alerting signs), suitability and effectiveness for use in a particular application design. In no event will Acuity Brands Lighting be responsible for any loss resulting from any use of this fixture in an application design.

Certification

TUV Listed, Certified to UL STD 61010-1:2012 and CAN/CSA STD C22.2 No. 61010-1:2012

Tested to be compliant with FCC Part 15 Class A

RoHS Compliant

Internal components of this unit are UL Listed or UL Recognized

Registration Information

EPA Est. Reg. No.: 96911-FL-1

EPA Est. Reg. No.: 97727-MEX-1

Produced for:

Acuity Brands Lighting, Inc.

One Lithonia Way

Conyers, GA 30012

For sale only in the United States of America and Mexico.

Meets California ozone emissions limits. California Air Resources Board (CARB) certified.

Patent Reference

Protected by US & Foreign Patents (US Patents #8,993,988, #9,572,902, and #10,046,075; Canadian Patent CA2891152; Australian Patent AU2013344944; South Korea 10-1596653) and patents pending. Visit www.violetdefense.com/patents for current list.

Warranty

1-year limited warranty. Complete warranty terms located at www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

Consult installation instructions for additional guidelines and details.

Precautionary Statements



CAUTION HAZARDS TO HUMANS AND DOMESTIC ANIMALS

- ✓ Disconnect or turn off power to this equipment before performing maintenance on other elements in the space.
- ✓ Keep out of reach of children.
- ✓ RISK GROUP 3 – WARNING. UV emitted from the product. Possibly hazardous optical radiation emitted from the product. Avoid eye and skin exposure to unshielded product. Do not look at operating lamp. Eye injury may result.
- ✓ This luminaire emits UV radiation which can injure exposed eyes and skin. Eye injury can include pain, light sensitivity, and gritty sensation on the eye that manifest days later. Irritation similar to a sunburn can occur on exposed skin. People and pets should not be present at any time during the operation of the luminaire. Adequate engineering controls should be adopted to prevent the unit from operating when people or pets are present in a room where the luminaire is installed.



CAUTION PHYSICAL HAZARDS

- ✓ This unit emits UV radiation which can cause significant degradation of many materials. Remove or protect these materials prior to operation of the luminaire.
- ✓ Electrical and Shock Hazard. Disconnect or turn off power before installing or servicing luminaire.

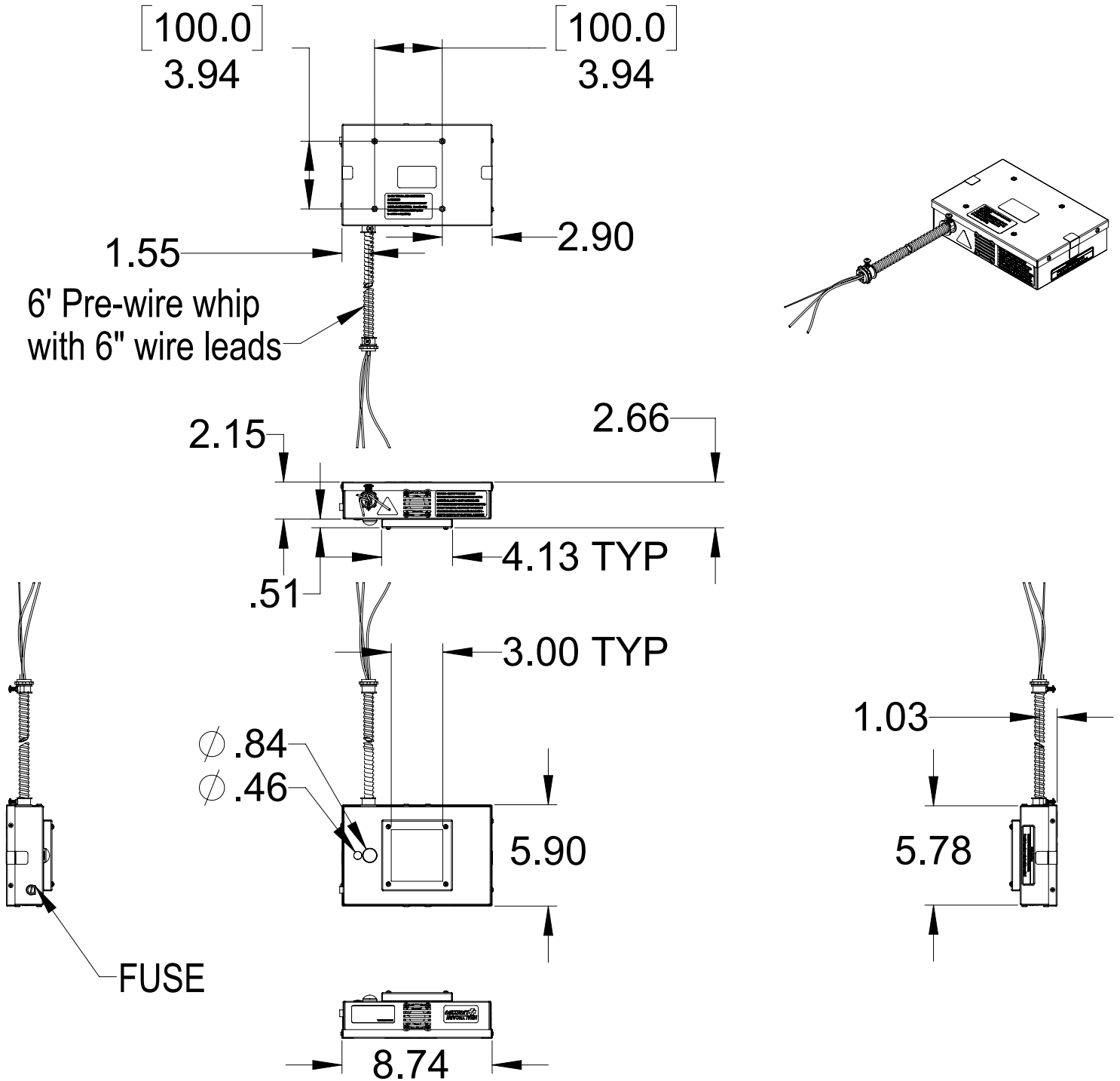
Expected Lamp Life Chart

Cycle	Time	Approx. Lamp Life Expected
Standard	30 min/day	18.3 years
Deep	1 hr/day	9.1 years
Terminal	2 hr/day	4.6 years

DIMENSIONS

Surface

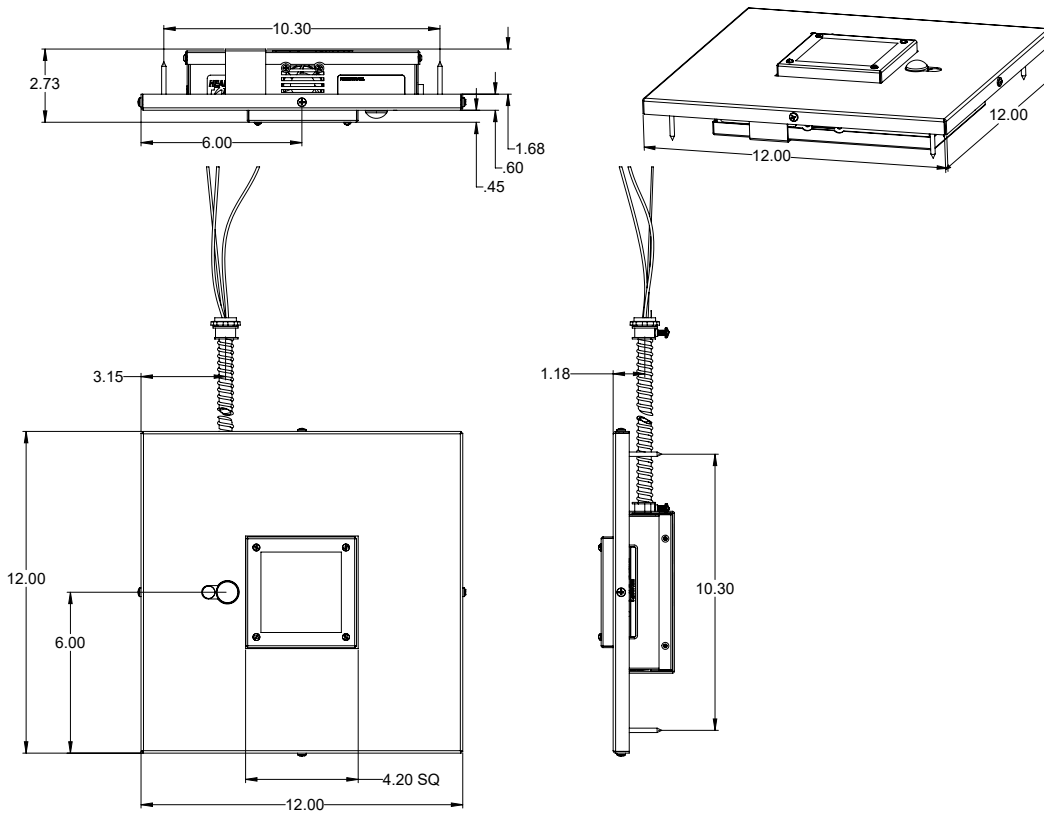
Installation: Surface ceiling or surface wall, with or without VESA mount



DIMENSIONS

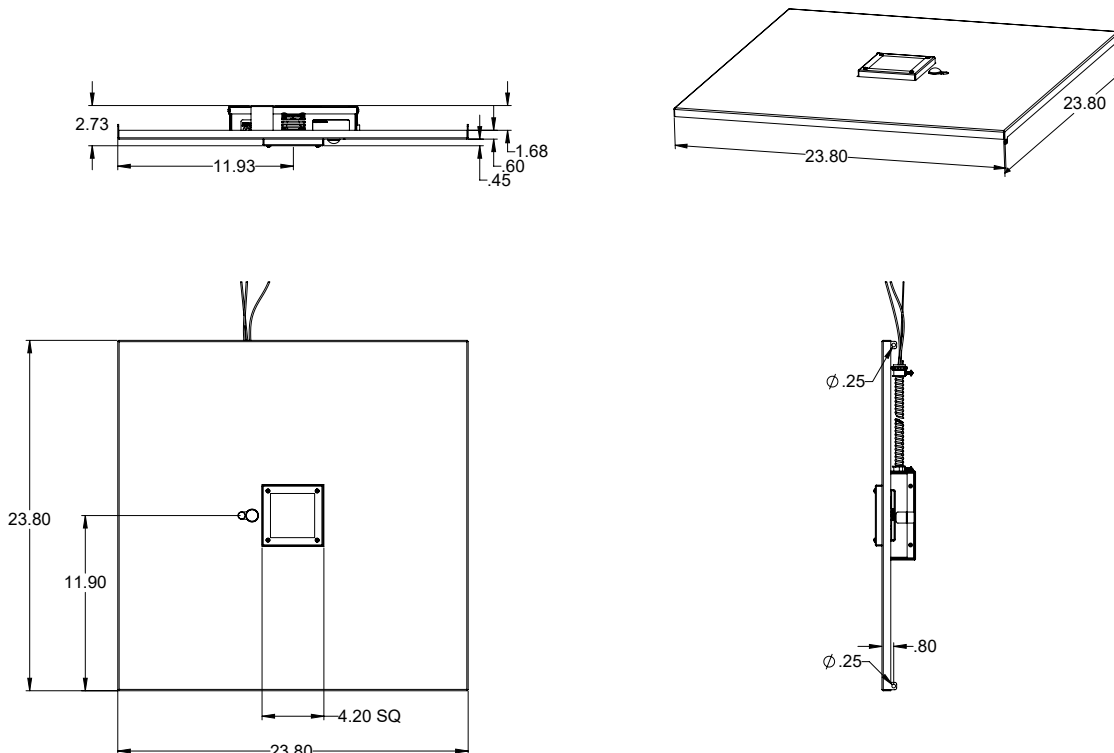
1x1 Flange

Installation: Recessed
in hard ceiling



2x2 Grid

Installation: Drop
in grid ceiling

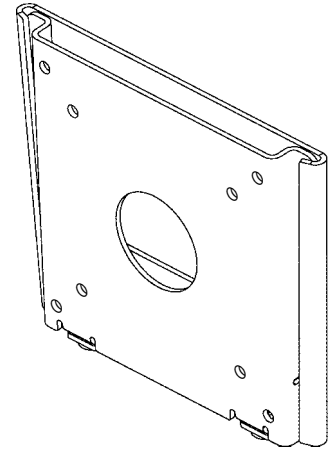
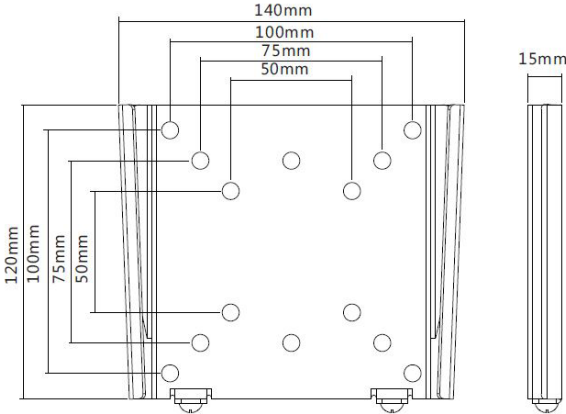


DIMENSIONS

SVFM - Surface VESA 100mm x 100mm Fixed Mount Bracket

**Available with S (Surface) mount only*

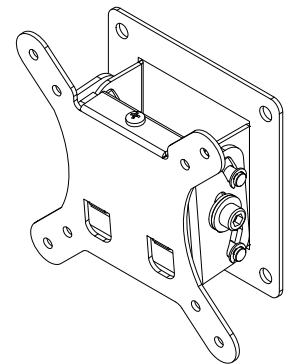
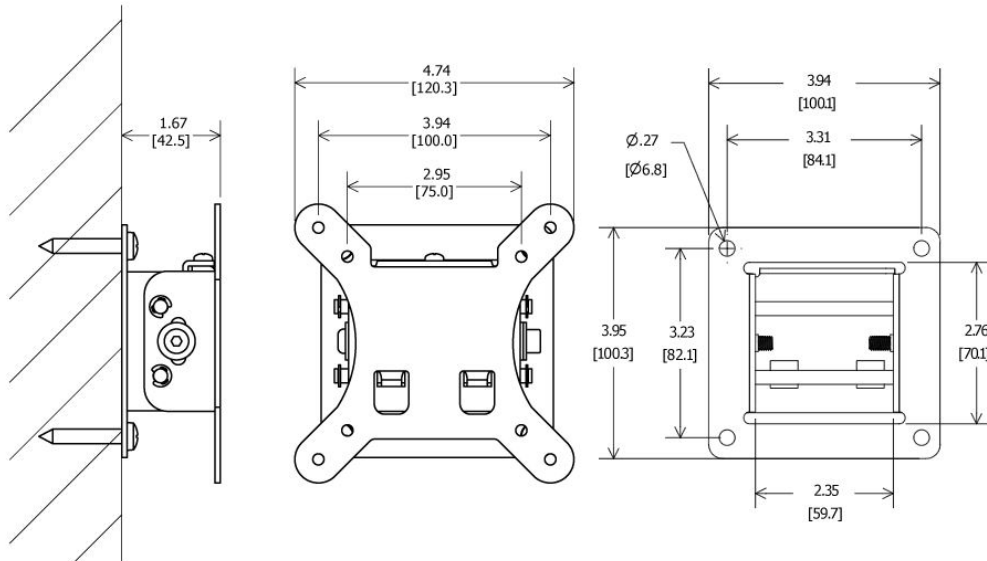
Approx. Overall Dimensions: 5-1/2" Wide x 4-3/4" High x 5/8" Deep
 Construction: Steel
 Finish: Painted Black
 Support Weight: Maximum 66 lbs.



SVTM - Surface VESA 100mm x 100mm Fixed Mount Bracket

**Available with S (Surface) mount only*

Approx. Overall Dimensions: 4-3/4" Wide x 4-3/4" High x 1-5/8" Deep
 Tilt Range: +0/-15 degrees
 Construction: Steel
 Finish: Painted Black
 Support Weight: Maximum 30 lbs.

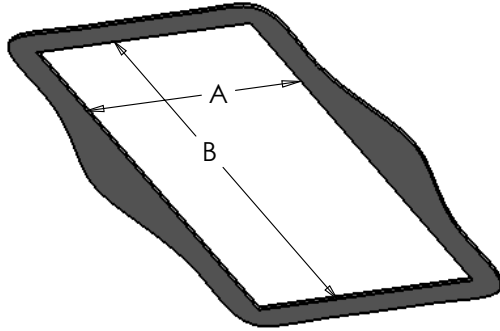


MOUNTING

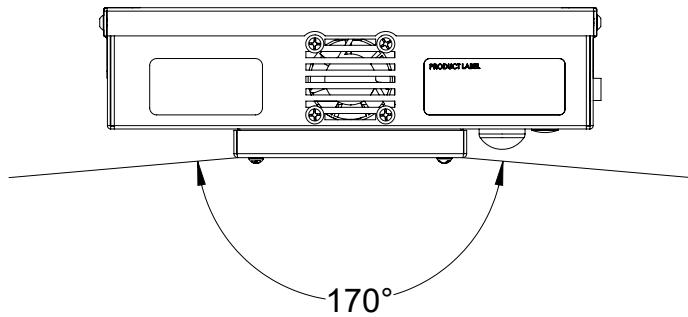
Rough-In Dimensions

For more mounting information and detailed views please read the installation instructions

Size	A (Inches)	B (Inches)
1X1	8"	10"



BEAM ANGLE



SWITCHING

KSK - Key Actuated Light Switch Kit

(Only applicable as a one-way switch application.)

Kit includes:

- (1) Key Locking Wall Switch
- (2) Mating Keys
- (1) Single Gang Brushed Stainless Steel Cover Plate w/ Spanner Screws



Switch Capacity

Maximum (4) HXMS or
Maximum (2) HXMD or
Maximum (2) HXMS + (1) HXMD

Technical Information

Device Type: Key Lock Barrel Switch
Function: Single-Pole
Grade: Extra Heavy-Duty Industrial Specification Grade
Grounding: Self-Grounding

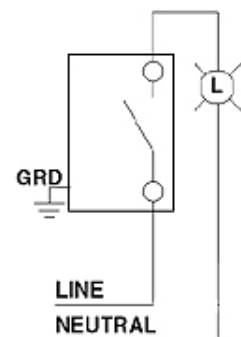
Amperage: 20 amps
Endurance: 50,000 cycles minimum
Voltage: 120/277 VAC

Operating Temperature: -40°F (-40°C) to +149°F (+65°C)

Termination: Back or Side Wire
Terminal Accom.: 14-#10 AWG back wired; #14-#12 AWG side wired

CSA C22.2 No. 111: File #152105
UL Standard: UL 20

**Wiring Diagram
Single Pole**

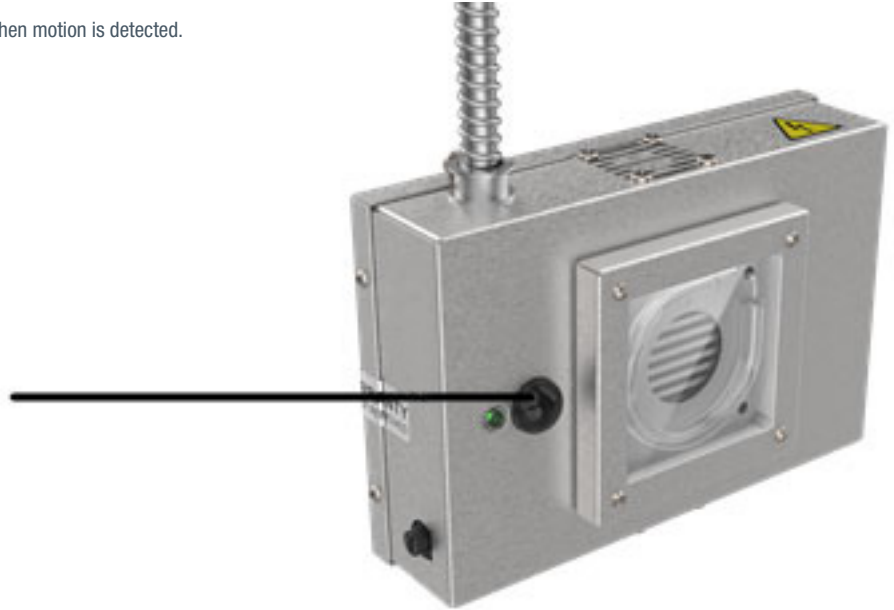


SENSOR DATA

Embedded PIR Motion Sensor

Will actively monitor the space and not allow the unit to activate when motion is detected.

- Long distance detection lens to 12meters maximum



Embedded LED Indicator Light

Clear indication of the status of the unit

- Flashing Green The fixture has completed self-test and is ready to begin operating when room becomes unoccupied. Remains flashing green until cycle is completed or unit detects motion.
- Solid Green The fixture has successfully completed its treatment cycle. Remains solid green until power is disconnected or unit detects motion.
- Solid Red The fixture was interrupted after commencement of the treatment cycle.
- Flashing Red One of the safety sensors has detected an issue. Please see troubleshooting section of installation instructions for further information.

