

Safety Technology



Hazlux® Industrial Lighting Fixtures

Thomas & Betts. Your best connection for innovative solutions.

Wire & Cable Management • Cable Protection Systems • Power Connection & Control • **Safety Technology**

Thomas & Betts

A Member of the ABB Group



Hazlux® Hazardous Location Lighting

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Strobe Lighting	
Class I Division 1	114
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Class II Division 1	112

Flood Lighting	LED	MH	HPS
Class I Division 2	104	106	106

Area Lighting	LED	MH	HPS	CFL	INC
Class I Division 1	-	70,76	70,76	—	—
Class I Division 2	13	22, 28,34,48,56,62,70,76	22, 28,34,48,56,62,70,76	92	86
Class I Zone 2	13	22, 28,34,48,56,62,70,76	22, 28,34,48,56,62,70,76	92	—
Class II Division 1	13	22, 28,34,48,56,70,76	22, 28,34,48,56,70,76	—	—
Class II Division 2	13	22, 28,34,48,56,70,76	22, 28,34,48,56,70,76	92	—
Class III	13	22, 28,34,48,56	22, 28,34,48,56	—	—
IECEX	13	—	—	—	—

Linear Lighting	LED	L. Fluo.
Class I Division 1	101	100
Class I Division 2	97	96,100
Class I Zone 1	101	100
Class I Zone 2	—	96
Class II Division 1	97,101	96,100
Class II Division 2	97,101	96,100
Class III	97,101	96,100

Introduction

Made in Canada at a Thomas & Betts production facility

Hazlux® products are assembled in Canada to meet strict Thomas & Betts quality standards and shipped quickly. We produce what you need when you need it - no waiting for large production runs or shipments from overseas.

Speed

Thomas & Betts offers a lead time advantage thanks to the dedicated Hazlux® production operation in Canada. When you need an order fulfilled right away, we have everything we need in house to meet your requirements. The flexible capacity of our assembly operation can easily accommodate both large and small production runs with a fast turnaround. All units are made to order and assembled by our efficient, experienced in-house Hazlux® team. Your complete order is sent out the door as quickly as possible.



Dependability

The reliability and high standards of the Thomas & Betts brand stand behind all Hazlux® products. We take extra steps to ensure that each unit is protected all the way from our production facility to your installation. Special expandable foam packaging is used on all units to prevent shifting in transport so that your order arrives safely.



All units are inspected on site and then professionally packed so that your order will arrive intact at your installation site. When you need speed and service without sacrificing quality or reliability. You can count on the Thomas & Betts Hazlux® production team.

Excellence

Our skilled professionals build quality into every product at every step of the process, from design to final assembly. Each product is inspected and tested to ensure that it meets strict Thomas & Betts quality standards.

To reduce the carbon footprint and minimize the environmental impact of operations, a Sustainable Development policy is in effect at the Thomas & Betts production facility. Through a series of initiatives, reductions in usage of water, water bottles, electricity and natural gas, packaging, and pallets have already been realized. Forward-looking initiatives include reduction to in paper, further recycling of pallets, and implementation of an eco-delivery schedule.

The Thomas & Betts production facility has been ISO 9001 compliant since 2001 as well as ISO 14001 and OHSAS 18001.



Introduction

Quality Products

Thomas & Betts is committed to delivering high quality industrial lighting fixtures designed, tested and certified for use in hazardous locations and adverse environment conditions.

Features & Benefits

- Nameplate displays third party certification for all electrical ratings and hazardous location ratings as required by the Canadian Electrical Code, OSHA regulations and CSA, allows for peace of mind, confirming the right lighting fixture is installed in certified condition
- Cast, copper-free aluminum construction for high strength, light weight and corrosion resistance meeting the highest life expectancy you can expect from a lighting fixture in a particular application
- The paint used in our standard finish is baked, electro-deposited, pure epoxy powder for maximum corrosion protection. Additional paint finishes are available, offering increased protection against harsh environment
- All exposed hardware is corrosion-resistant stainless steel will limit and ease all maintenance required on the lighting fixture
- Faster and easier installation with simple hinge arrangement that permits "hands-free" wiring

Certification Label



Hinge



You can rely on Hazlux® to safely provide light where you need it - even under the harshest indoor and outdoor conditions. If safety, labor reduction, quality and reliability are your priorities, consider Hazlux® lighting products to reduce maintenance and prevent downtimes Hazlux® production team.

Installation & operation

- Heat-sunk internal components results in cooler operation for extended ballast or driver life, higher lamp wattage and a broader range of hazardous locations.

Design & components

- Hazlux® 5 products are designed with top and bottom fins to provide maximum heat dissipation
- Hazlux® 5 fixtures feature electromechanical connect block for quick, safe fixture removal for bench relamping and/or maintenance
- Seizure-resistant threads make installation and maintenance easy over years, and Hazlux® 5, Dual pitch acme threads for easier, faster assembly
- In order to use the whole luminaire as a heat sink, the heat source are installed so that transfers heat to the luminaire body
- A metal plate provides two separate compartments for the ballast/driver and light source to maximize life expectancy
- High strength mechanical mounting, robust design and components to withstand ice, strong wind loads or heavy vibrations
- Heat tempered glass for greater strength and thermal shock resistance to selection of refractors to meet your application and lighting requirements

Hazlux® H5 Unit Fixture



Overview

Hazardous location - An area where the possibility of explosion and fire is created by the presence of flammable gases, vapors, dust, fibers or flyings.

Class I - Gas

Class I – Class I locations are those in which flammable gases, flammable liquid-produced vapors or combustible liquid-produced vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

Typical Class I Locations:

- Petroleum refineries and gasoline storage and dispensing areas
- Industrial firms that use flammable liquids in dip tanks for parts cleaning or other operations
- Petrochemical companies that manufacture chemicals from gas and oil
- Dry cleaning plants where vapors from cleaning fluids can be present
- Companies that have spraying areas where they coat products with paint or plastics
- Aircraft hangars and fuel serving areas
- Utility gas plants and operations involving storage and handling of liquified petroleum gas or natural gas

Class II - Dust

Class II – Class II locations are those that are hazardous because of the presence of combustible dust.

Typical Class II Locations:

- Grain elevators, flour and feed mills
- Plants that manufacture, use or store magnesium or aluminum powders
- Plants that have chemical or metallurgical processes: producers of plastics, medicines and fireworks, etc.
- Producers of starch or candies
- Spice-grinding plants, sugar plants and cocoa plants
- Coal preparation plants and other carbon handling or processing areas

Class III - Fibers

Class III – Class III locations are those that are hazardous because of the presence of easily ignitable fibers or where materials producing combustible flyings are handled, manufactured or used, but in which such fibers/flyings are not likely to be in suspension in the air in quantities sufficient to produce ignitable mixtures.

Typical Class III Locations:

Textile mills, cotton gins, cotton seed mills and flax processing plants. Any plant that shapes, pulverizes or cuts wood and creates sawdust or flyings

Note: Fibers and flyings are not likely to be suspended in the air but can collect around machinery or on lighting fixtures and where heat, a spark or hot metal can ignite them.

Division 1 - Normally Hazardous

Division 1 – Hazardous gases or dusts are present under normal operation conditions or during frequent repair and maintenance activity.

Groups A, B, C, D

Groups A, B, C and D – The gases and vapors of Class I locations are broken into four groups by the code A, B, C and D. These materials are grouped according to the ignition temperature of the substance, its explosion pressure and other flammable characteristics.

Groups E, F, G

Groups E, F, G – Class II dust locations groups E, F and G are classified according to the ignition temperature and the conductivity of the hazardous substance.

Division 2 - Not Normally Hazardous

Division 2 – Hazardous gases or dusts are not present under normal operating conditions.

Divisions vs. Zones: Area Classification		
Continuous Hazard	Intermittent Hazard	Hazard under Abnormal Conditions
Zone 0	Zone 1	Zone 2
Division 1		Division 2

** Note: These are simplified definitions complete data is in the Canadian Electrical Code (C.E.C)*

Four step method for selecting lighting fixtures for hazardous locations.

1. Select a fixture that meets your Class, Division and Group requirements, for example:

- Class I, Division 2, Group D
- Class II, Division 1, Group G

2. Determine the T-Number for your selected fixture. Be sure it is for the specific wattage, ballast housing, optical assembly and ambient temperature.

- Use the published information in this catalog or in Hazlux® product brochures

3. Determine the Maximum Allowable Temperature for the hazardous materials involved.

Class I Gas:

- Ignition Temperature for the Specific Gas (from NFPA497M)

Class II Dust:

- Group E - 200°C
- Group F - 200°C
- Group G - 165°C
- Or ignition temperature of dust if lower
- Above from NEC® Table 500-3(F)

4. Compare T-Number (from Step 2) to Maximum Allowable Temperature (from Step 3).

- If T-Number is cooler than the Maximum Allowable Temperature, the selected fixture is suitable.
- If T-Number is hotter than the Maximum Allowable Temperature, the selected fixture is not suitable.

T-Number Table

Class I, II, Div. 1, 2 T-Number	Max. Temperature
T1	450°C
T2	300°C
T2A	280°C
T2B	260°C
T2C	230°C
T2D	215°C
T3	200°C
T3A	180°C
T3B	165°C
T3C	160°C
T4	135°C
T4A	120°C
T5	100°C
T6	85°C

Overview

Hazlux® Applications

From an offshore oil rig in the Atlantic Ocean to the factory floor, there's a Hazlux® lighting fixture to stand up to virtually every hazardous location.

Here are some of the places you'll find Hazlux® fixtures:

- Chemical manufacturing and processing plants
- Oil refineries
- Oil drilling rigs
- Offshore platforms
- Pipeline pumping stations
- Pulp and paper plants
- Aluminum and copper smelting
- Steel mills and foundries
- Mining operations
- Grain handling facilities
- Flour, sugar and starch processing
- Food processing plants
- Paint and rubber manufacturing facilities
- Marine and coastal facilities
- Shipyards and shipbuilding plants
- Power generation plants
- Waste treatment facilities
- Paint, chemical and plastic mixing/storage areas
- Bulk truck terminals
- Solvent/cleaning areas

Hazlux® lighting fixtures are built to withstand the harsh environmental conditions that exist in real settings.

1. Hose Down

5. Corrosion

2. Vibration

6. Marine

3. High Ambient

7. Ice

4. Dust

8. Wind



Hose-Down and Wet Locations

- Certified for wet locations - NEMA 4X, IP66 (indoor and outdoor); UL1598A (marine) and CSA Listed
- Superior gasketing system - both tank and globe gasketing systems withstand hose-down pressures
- Uninterrupted globe thread - assures positive seal
- Baked-on, dry epoxy coating - not paint but 100% dry solids
- Globes, refractors and finish designed to withstand thermal shock during hose down

High-Ambient Temperature Areas

- All standard fixtures are tested and listed for at least 40°C ambient - even under heavy dust blanket and no air flow
- Exclusive heat sink design results in a cool operating fixture, extended ballast/lamp life and lower maintenance costs
- Unmatched selection of high-ambient, temperature rated fixtures- contact factory for fixtures certified for 55°C and 65°C applications
- Steam spray and thermal shock resistant

Corrosion and Abrasion

- Baked-on, dry epoxy coating - not paint but 100% dry solids
- Stainless steel external hardware
- Sand-blast resistant finish
- Superior silicone gasketing system on both tank and globe. Other gasketing systems available for special corrosive applications such as phosphates
- Aluminum components contain less than 0.4% copper - maximum corrosion resistance
- Special HazCote® corrosion fighter finish available for extremely corrosive areas; consult Thomas & Betts for details

Ice and Arctic Conditions

- Gasketing system and finish allow for expansion and contraction through wide temperature variations
- Metal halide ballasts start at -29°C; high-pressure sodium ballasts start as low as -51°C (consult Thomas & Betts for details)
- High-strength mechanical mountings withstand extra ice loading
- Tempered glassware available for extra thermal shock safety margin

Vibration, Seismic Shock and Vandalism

- Vibration tested by UL and CSA
- Vibration-resistant hardware throughout fixture
- Screw retainers on guard ensure retention even if screws are not completely tightened
- Vibration-resistant globe thread and sealing system
- Optional refractors, high-strength tempered glass and Teflon coated globes for protection from vandalism

Dust Blanket

- Tested and listed by UL and CSA
- Thermal performance is at 40°C ambient; optional thermal performance to 55°C and 65°C ambient available (consult factory)
- Cone pendant mount available (45° sloped sides) for areas where dust or other residue buildup is a problem
- Exclusive heat sink design - results in a cool operating fixture, extended ballast/lamp life and lower maintenance costs

Marine-Duty Option

- This feature is supplied as standard on most Hazlux® 3 fixtures
- Designed for abuse - hose down, arctic, hurricane, vibration and shock, high temperature, corrosion and other environmental conditions typical of adverse marine locations
- Exclusive combination of marine and hazardous location approvals on the same fixture line

Wind

- Wind-tunnel tested at McDonnell Douglas Corporation at air flow speeds in excess of 198 mph (320 km/h)
- Guard specially designed to secure reflector during high wind loading
- All fasteners are stainless steel
- High-strength mechanical mountings withstand strong wind loads



Area lighting

Hazlux® 3 DL Series LED

Hazlux® durability meets LED technology. Superior performance lighting for hazardous locations.

Safe, durable and now available with LED technology for superior energy efficiency.

Thomas & Betts Hazlux® luminaires are known as high quality industrial lighting fixtures designed, tested and certified for use in hazardous locations and adverse environment conditions. Specifiers rely on Hazlux® to safely provide light where it's needed - even under the harshest indoor and outdoor conditions. Safe, dependable, durable Hazlux® luminaires are now available with LED technology to offer longer life, enhanced energy efficiency, reduced maintenance, and a smaller footprint. All Hazlux® LED products are designed and assembled in Canada for exceptional service and support with reduced lead times. Experienced assembly operation easily accommodates both large and small production runs with a fast turnaround.

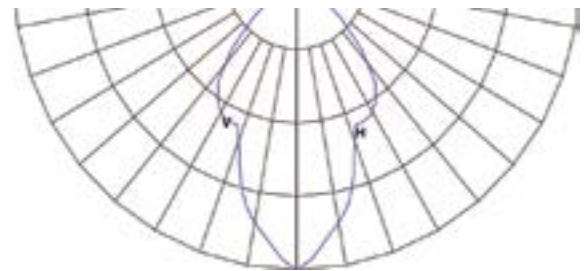
High-efficacy luminaire offers excellent performance and energy savings

Thomas & Betts has taken the rugged, reliable design of Hazlux® lighting fixtures and introduced the capabilities of LED technology to create a high-performance luminaire with an impressive lumen output.

High Efficacy Luminaire			
Model	AC Power (W)	Lumen	Lm/W
DL005	45	5,800	129
DL007	58	7,100	122
DL010	88	10,100	114
DL015	122	15,600	128
DL017	131	17,800	135
DL020	166	20,400	123

Versatile optics include reflector options for diffuse light distribution

The Hazlux® LED fixture is available with a thermal-resistant globe and a variety of reflectors for the ideal beam angle from 35° to 65°.



Higher T-ratings and optimal thermal management

With an exclusive design that maximizes heat dissipation, Hazlux® LED fixtures lower internal temperature allow for higher T-rating and extended LED and driver life in extreme ambient temperatures. With the entire luminaire acting as a heat sink, Hazlux® LED fixtures allow higher wattages for better performance.

T-Ratings & Thermal Management				
40°C		55°C		
Model	Class I Div 2	Class I Div 2 & Class II	Class I Div 2	Class I Div 2 & Class II
DL005	T5	T4A	T5	T4
DL007	T5	T4A	T5	T4
DL010	T4A	T4A	T4A	T4
DL015	T4	T3C	N/A	N/A
DL017	T4	T3C	N/A	N/A
DL020	T3C	T3C	N/A	N/A



Area lighting

Hazlux® 3 LED DL Series

Labor – saving installation and maintenance-friendly construction.

Designed for easy retrofit installation

Using the same mounting style options as existing Hazlux® lighting fixtures, the new LED luminaires can easily be attached as retrofit fixtures. The HazVector™ adapter ring makes it easy to replace Crouse-Hinds Champ® series lighting fixtures without removing the top hat from the conduit system.

Hinged design for hands-free wiring

Easy tank access allows Hazlux® lighting fixtures to be maintained quickly and safely. The hinged lid is designed to support the weight of the tank, leaving both the installer's hands free.



Certifications shown on external surface

An easily identifiable nameplate displays third party certification for all electrical and hazardous location ratings as required by the Canadian Electrical Code, OSHA regulations and CSA to provide peace of mind, confirming that the correct lighting fixture with the required certifications is in place.

Robust construction for long life expectancy

Cast, copper-free aluminum construction offers corrosion resistance in a strong, lightweight fixture for maximum life expectancy. Baked epoxy powder finishes and stainless steel exposed hardware provide additional corrosion resistance.

Field-replaceable LED engine and driver

The LED driver is designed in its own compartment so it can be easily replaced in the field using a connector, with no re-wiring required. A fiberglass insulator protects the driver from the heat of the LED engine.



Assembly guide

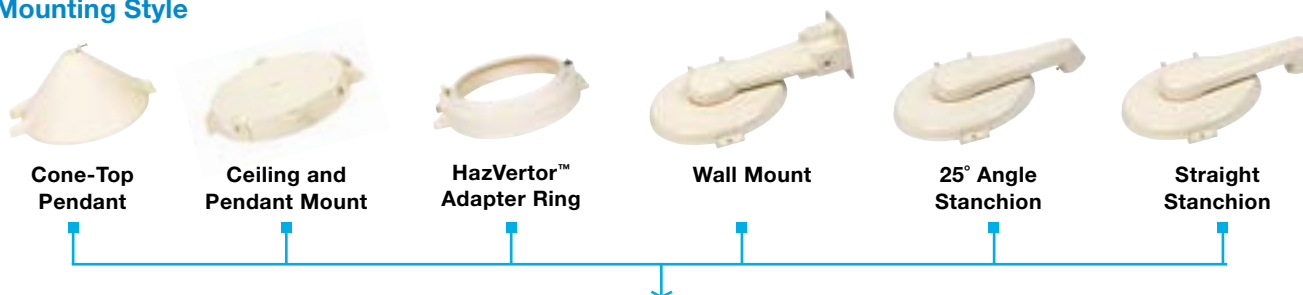
Complete luminaire consists of:

- A mounting style
- Driver Tank
- Globe or Refractor
- Optional Guard and/or Reflector



Hazlux® 3 LED DL Series- Assembly Guide

Mounting Style



Driver Tank



Standard Housing

Globe or Refractor



Refractor Globe



Heat-Resistant Prismatic Glass Globe

Guard



Polymeric Guard



Cast Guard

Optional Reflector*



30° Angle Reflector



Standard Dome

*Reflectors are sold separately

Area lighting

Hazlux® 3 LED DL Series

Catalog numbering system

UNIPAK™ =

- LED Driver Tank +
- Optics & Mountings +
- Options (if necessary)

LED driver tank						Optics and mounting				Options	
DL	0	10	E	UN	0	TG	C	C2	E	T	I
1	2	3	4	5	6	7	8	9	10	11	12

LED Driver Tank		
1. Fixture Series	DL	Hazlux® 3 Fixture
2. Fixture	0	Standard Fixture
3. Lumen Output	05	5,800 lumens, 45W
	07	7,100 lumens, 58W
	10	10,100 lumens, 88W
	15	15,600 lumens, 122W
	17	17,800 lumens, 131W
4. Fixture	20	20,400 lumens, 166W
4. Fixture	E	Electronic LED Driver
5. Voltage/Frequency	UN	120 to 277VAC 50/60Hz (voltage range includes 208V, 220V, 240V etc.)
	UN2	Universal 347/480VAC 50/60Hz (Not available for DL017 and DL020)
6. LED Driver Housing Style	0	Standard Housing
	S	Standard Housing with Stainless Steel Inserts

Optics & Mountings		
7. Optical Assembly Options*	TG	Thermal Shock-Resistant Globe
	R1	Type I Glass Refractor Globe
	R3	Type III Glass Refractor Globe
	R5	Type V Glass Refractor Globe
* For silicone coating, please add suffix "S" before the first digit (ex: STG)		
8. Guard Option	C	Cast Aluminium Guard
	L	Polymeric Guard
9. Mounting Style	A2	3/4" Cone-Top Pendant
	A3	1" Cone-Top Pendant
	B2	3/4" Wall Mount
	B3	1" Wall Mount
	C2	3/4" Ceiling / Pendant Mount
	C3	1" Ceiling Mount
	HV1	HazVector™ Ring - Class I, Div. 2, Zone 2
	HV2	HazVector™ Ring - Class I Div. 2 Zone 2, Class II
	L4	1-1/4" Straight Stanchion
	L5	1-1/2" Straight Stanchion
	S4	1-1/4" 25° Angle Stanchion
	S5	1-1/2" 25° Angle Stanchion
	Blank	No mounting (to replace existing fixture)
10. UNIPAK™ Options	E	UNIPAK™ with LED Light Source

Optics & Mountings		
11. Special Options	T	Hazcote® Black Custom Anti-corrosion Coating (Consult factory)
	G	Grey Colour Option
12. Light Distribution Options	I3	Internal reflector 35° beam angle*
	I4	Internal reflector 45° beam angle*
	I6	Internal reflector 65° beam angle*

*DL005, DL007 and DL010 only

Certifications & Standards	Approvals/Characteristics
Class I – Division 2, Groups A, B, C and D – Zone 2, Groups IIC, IIB, IIA Class II – Division 1 and 2, Groups E, F and G Class III – UL® Listed (UL1598A) for Marine Locations – UL844 – NEMA 4X – CSA C22.2 No. 137	  

Individual components (to be used with LED driver housing)



Cone-Top Pendant



Ceiling and Pendant Mount



HazVertor™ Adapter Ring



Wall Mount



25° Angle Stanchion



Straight Stanchion

Mounting Options

PART NO.	Description	Conduit Hub Size
VA2	Cone-Top Pendant	3/4"
VA3	Cone-Top Pendant	1"
VC2	Ceiling & Pendant Mount	3/4"
VC3	Ceiling & Pendant Mount	1"
VB2-VIB	Wall Mount	3/4"
VB3-VIB	Wall Mount	1"
VS4-VIB	25° Angle Stanchion	1-1/4"
VS5-VIB	25° Angle Stanchion	1-1/2"
VL4-VIB	Straight Stanchion	1-1/4"
VL5-VIB	Straight Stanchion	1-1/2"
HV1	HazVertor™ Adapter Ring	N/A
HV2	HazVertor™ Adapter Ring	N/A



Refractor Globe



Heat-Resistant Prismatic Glass Globe

Globes or Refractors*

PART NO.	Description
VG15	Heat-Resistant Prismatic Glass Globe
VGL15R1	IES Type I Refractor Globe
VGL15R3	IES Type III Refractor Globe
VGL15R5	IES Type V Refractor Globe

*For silicone coating, please add "TS" to part no. (ex: VG15TS)



Polymeric Guard



Cast Guard

Guards

PART NO.	Description
VGU22P	Polymeric Guard
VGU22	Cast Guard

Optional components



30° Angle Reflector



Standard Dome

Reflectors

PART NO.	Description
VR15P	Standard Dome, Fiberglass-Reinforced Polyester
VRA15P	Angular Dome, Fiberglass-Reinforced Polyester

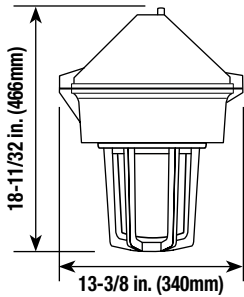
*Note: Reflectors are shipped bulk unless specified

Area Lighting

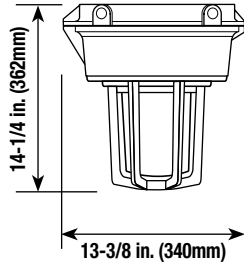
Hazlux® 3 DL Series LED

Dimensions

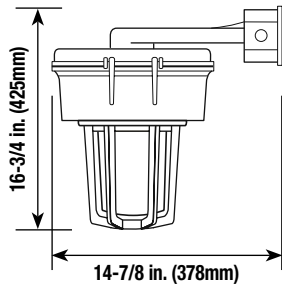
Standard housing with globe and guard



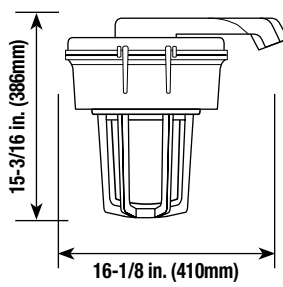
Cone-Top Pendant



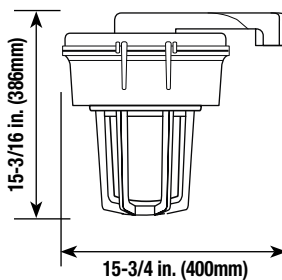
Ceiling Mount



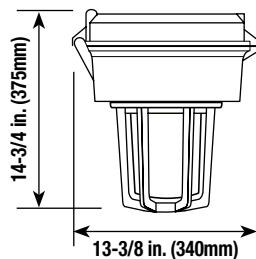
Wall Mount



25° Angle Stanchion Mount



Straight Stanchion



HazVector™ Ring

Photometry

Standard housing with globe and guard

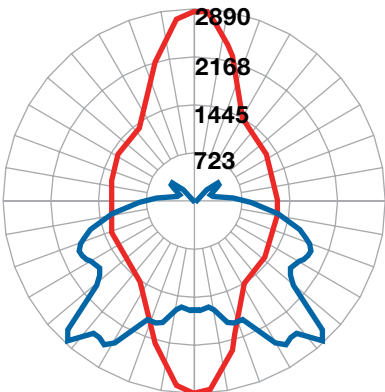
Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DL005EUN0TGC2E	
Luminaire Lumens	5,895	
Luminaire Efficacy Rating (LER)	131	
Input Watt	45	
Spacing Criterion	1.3	
Spacing Criterion (90-270)	1.3	
Spacing Criterion (diagonal)	1.44	

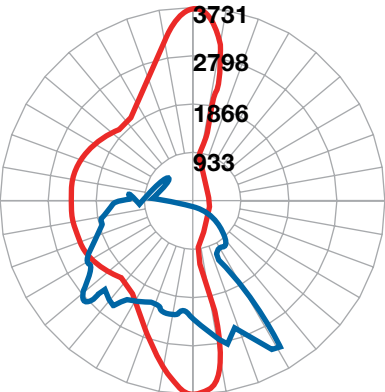
Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DL010EUN0TGC2E	
Luminaire Lumens	10,123	
Luminaire Efficacy Rating (LER)	115	
Input Watt	88.19	
Spacing Criterion	1.24	
Spacing Criterion (90-270)	1.24	
Spacing Criterion (diagonal)	1.4	

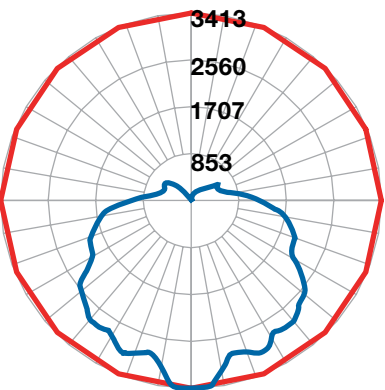
Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DL015EUN0TGC2E	
Luminaire Lumens	15,605	
Luminaire Efficacy Rating (LER)	128	
Input Watt	121.8	
Spacing Criterion	1.08	
Spacing Criterion (90-270)	1.08	
Spacing Criterion (diagonal)	1.42	

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DL020EUN0TGC2E	
Luminaire Lumens	20,476	
Luminaire Efficacy Rating (LER)	123	
Input Watt	166.1	
Spacing Criterion	1.46	
Spacing Criterion (90-270)	1.46	
Spacing Criterion (diagonal)	1.58	

Photometry Standard housing with glass

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DL010EUN0R1C2E	
Luminaire Lumens	8,047	
Luminaire Efficacy Rating (LER)	92	
Total luminaire watts	87	
Maximum Candela	2,890	
Maximum Candela (< 90° Vertical)	2,890	
Maximum Candela at 90° Vertical	887 (11.0% of luminaire lumens)	
Maximum Candela from 80 to < 90° Vertical	1.463 (18.2% of luminaire lumens)	

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DL010EUN0R3C2E	
Luminaire Lumens	8,649	
Luminaire Efficacy Rating (LER)	99	
Total luminaire watts	87.27	
Maximum Candela	3,731	
Maximum Candela (< 90° Vertical)	3,731	
Maximum Candela at 90° Vertical	883 (10.2% of luminaire lumens)	
Maximum Candela from 80 to < 90° Vertical	1,308 (15.1% of luminaire lumens)	

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DL020EUN0R5C2E	
Luminaire Lumens	17,004	
Luminaire Efficacy Rating (LER)	102	
Total luminaire watts	166.3	
Maximum Candela	3,413	
Maximum Candela (< 90° Vertical)	3,413	
Maximum Candela at 90° Vertical	1,171.3 (6.9% of luminaire lumens)	
Maximum Candela from 80 to < 90° Vertical	1,662.7 (9.8% of luminaire lumens)	



Area Lighting

Hazlux® 3 Series

Designed, tested and certified for use in hazardous locations and adverse environments.
New labor-saving features for Hazlux® 3 fixtures.

Hazlux® UNIPAK™ Packaging

- UNIPAK™ is the Hazlux customized packaging system that is designed to save money for all concerned
- UNIPAK™ fixtures are normally assembled and can include globes, guards, reflectors, lamps, fuses and other options
- Outlet boxes are normally shipped separately; consult factory regarding outlet boxes to be assembled to UNIPAK™ fixtures
- Assembled UNIPAK™ fixtures are shipped in one carton with the fixture foam packed in place

Refer to the "Catalog Numbering System" for each individual Hazlux® fixture series for ordering information

UNIPAK™ saves six ways:

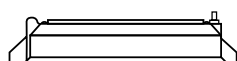
1. Fewer cartons to receive, count, move, open and dispose fewer storage problems
2. Reduces inventory expense
3. Eliminates lost or back-ordered parts
4. Eliminates mismatched fixtures or lamps
5. Significantly reduces labor costs
6. Reduces total installed cost per fixture

HazVerter™ Adapter Ring

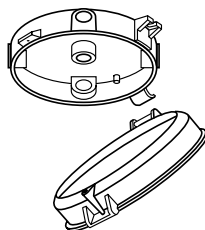
Replace other brand fixtures without removing the top hat

The HazVerter™ adapter ring gives you the freedom to replace Crouse-Hinds Champ® series lighting fixtures (VMV, DMV or LMV types) with Hazlux® 3 lighting fixtures without removing the Crouse-Hinds top hat from the conduit system, eliminating the need to replace conduit and wiring.

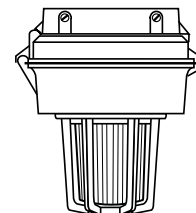
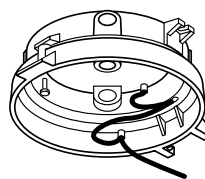
Save time and increase efficiency. The HazVerter™ can be ordered as a separate item or as part of a Hazlux® 3 fixture assembly. Look for the HV1 or HV2 mounting style options and switch to increased efficiency, wider suitability for hazardous locations, improved light distribution and improved T-numbers.



**Competitive
Top Hat**



Hazverter



Area Lighting

Hazlux® 3 Series

Fixtures for Class I, Division 2; Class II; wet and marine locations.



Applications

- Chemical Plants
- Oil Refineries
- Paint, Rubber Manufacturing
- Offshore Platforms
- Oil Drilling Rigs
- Oil, Gas Transmission
- Waste Treatment Facilities
- Airplane, Aerospace Facilities
- Electronics Manufacturing
- Pharmaceutical Plants
- Aircraft Manufacturing
- Vehicle Maintenance Facilities
- Grain Handling, Food Processing
- Coal Handling and Processing
- Flour, Sugar, Starch Processing
- Ammunition Manufacturing
- Coal, Gold and Copper Mining
- Pulp and Paper Manufacturing
- Copper, Aluminum Smelting
- Breweries, Malt Plants
- Shipyards, Shipbuilding Facilities
- Automobile Manufacturing
- Marine and Coastal Facilities
- Utility Power Plants
- Steel Mills, Foundries
- General Manufacturing Plants

Fixtures for Class I, Division 2; Class II; wet and marine locations.

Features

- Modular fixture components enable hundreds of easy-to-assemble combinations
- Cast copper-free aluminum housings and mounting covers are lightweight and resist corrosion
- Electrostatically applied powder-coat finish for added corrosion resistance
- Thermal shock-resistant glass globes and refractors protect lamps in wet, marine and outdoor applications
- All glass globes and refractors are fully threaded and provide a dust-tight, watertight seal with silicone rubber gaskets
- Standard globe guards are made from rugged polycarbonate plastic or cast aluminum with keyhole slots for ease of installation and do not interfere with globe threads
- All exposed hardware is stainless steel for corrosion resistance and screws are slotted, hex head style to further ease installation
- Comprehensive UL Listings for Class I, Division 2; Class I, Zone 2; and Class II
- Available for use with high-pressure sodium and metal halide lamps up to 400 watts
- Eight different mounting styles – rigid pendant, flexible pendant, cone pendant, ceiling, wall, 25° angle stanchion, straight stanchion and HazVerter™ Adapter Ring
- Three ballast housing choices - standard housing, R-housing and large housing
- Heat sinks in ballast housings enable ballasts to operate cooler, provide longer life and improve temperature performance
- Bright white FRP (fiberglass-reinforced polyester) angle or dome reflectors resist corrosion while maximizing lighting effectiveness
- Many optical choices - standard globes, threaded refractor globes, 7-3/4" globes, 12" refractors, enclosed high-bay reflectors and more
- All mounting covers provided with dual-lead ground wire for connection to field and fixture grounds
- Optional HazCote® coating for extremely corrosive applications
- Optional stainless steel inserts for guard screws and ballast tank closure screw for enhanced corrosion resistance
- Optional silicone coating on glass optics contains fragments if glass is broken (for food processing)
- Optional instant restrike starter for HPS lamps up to 150 watts restarts hot HPS lamp after momentary power failure

Materials and Finishes

- Ballast Housings - Copper-free aluminum, powder finish
- Mounting Covers - Copper-free aluminum, powder finish
- Guards - Polycarbonate, copper-free aluminum or steel
- Globes - Tempered glass or borosilicate glass
- Refractor Globes - Borosilicate glass
- Refractors (12") - Borosilicate glass
- Hardware - Stainless steel
- Reflectors - Fiberglass-reinforced polyester (standard dome, angle); anodized aluminum (deep dome, high bay enclosed)
- Gaskets - High-temperature silicone rubber



Certifications/Compliances*

- UL® Listed (UL844) and CSA certified (csa C22.2 no. 137) for:
- Class I, Division 2, Groups A, B, C, D
 - Class I, Zone 2, Groups IIA, IIB, IIC
 - Class II, Divisions 1 & 2, Groups E, F, G
 - Class III
 - Wet locations

UL® Listed (UL1598A) for (only H3 Standard Tank):

- Marine Locations
- NEMA 4X, IP66

** Classification may vary upon light source and wattage. For details, see Thermal Performance Chart on P.40.*

Approvals/Characteristics



Area lighting

Hazlux® 3 Standard housing

Assembly guide

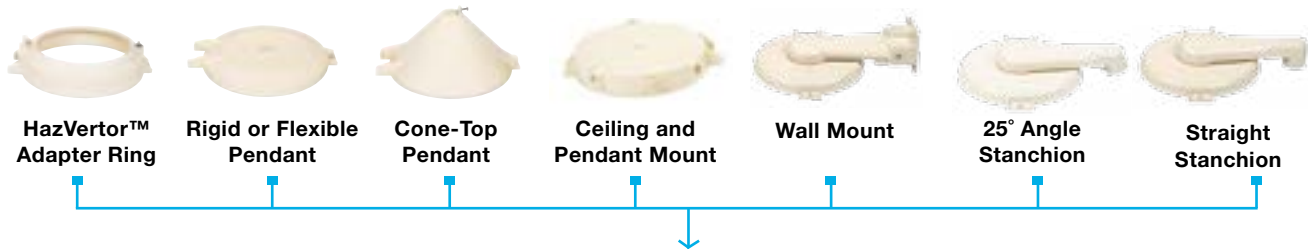
Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



Hazlux® 3 Standard Housing - Assembly Guide

Mounting Style



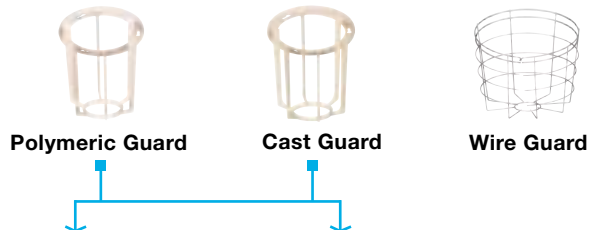
Ballast Tank



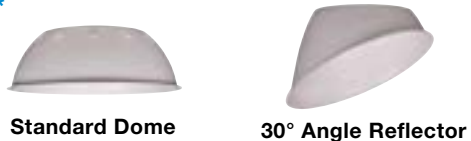
Globe or Refractor



Guard



Reflectors*



*Reflectors are sold separately

Catalog numbering system

UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

Ballast tank

D	S	Ø	15	H	04	Ø
1	2	3	4	5	6	7

Optics and mountings

TGL	-	P2	E
8		9	10

Options

T	F	-	C
11	12		13

Ballast Tank		
1. Fixture Series	D	Hazlux® 3 Fixture
2. Lamp Type	S	High-Pressure Sodium
	H	Metal Halide
	C	150-Watt HPS 100V Only
3. Starter Circuit/ Quartz Option	Ø	Standard Fixture (Without Options)
	P	Pulse Start (MH Only)*
	Q	Quartz Auxiliary Option (Not Hazardous Rated)
	R	Instant Restart (50 - 150W HPS)
	J	Auto Shutoff Starter (HPS Only)
4. Lamp Wattage	Metal Halide Lamps	
	07	70W ED28
	10	100W ED28
	17	175W ED28 20
	20	200W ED28PS
	25	250W ED28
	High Pressure Sodium Lamps	
	05	50W ED23 1/2
	07	70W ED23 1/2
	10	100W ED23 1/2
	15	150W ED23 1/2
5. Ballast Circuit	H	High Reactance
	C	Constant Wattage Autotransformer (CWA)
	I	Constant Wattage Isolated Transformer (ICWI)
	P	Reactor (All ballasts high power factor)
6. Voltage/ Frequency	03	120/277V, 60 Hz
	04	120/208/240/277V, 60 Hz
	09	120/277/347V, 60 Hz (CSA)
	12	120V, 60 Hz
	20	208V, 60 Hz
	24	240V, 60 Hz
	27	277V, 60 Hz
	34	347V, 60 Hz
	48	480V, 60 Hz
	225	220V, 50 Hz
7. Ballast Housing Style	Ø	Standard Housing
	S	Standard Housing with Stainless Steel Inserts

Optics & Mountings		
8. Optical Assembly Options*	TG	Thermal Shock-Resistant Globe
	TGC	Thermal Shock-Resistant Globe with Cast Guard
	TGL	Thermal Shock-Resistant Globe with PolymericGuard
	R2	12-in. Glass Refractor, Type II
	R5	12-in. Glass Refractor, Type V
	R2G	R2 with Wire Guard
	R5G	R5 with Wire Guard
	CBDL	Closed Bottom Refractor with Polycarbonate Lens

*For silicone coating, please add suffix "S" before the first digit (ex. STG)

9. Mounting style	A2	3/4" Cone-Top Pendant
	A3	1" Cone-Top Pendant
	B2	3/4" Wall Mount
	B3	1" Wall Mount
	C2	3/4" Ceiling Mount
	C3	1" Ceiling Mount
	F2	3/4" Flexible Pendant
	F3	1" Flexible Pendant
	HV1	HazVector™ Ring - Class I, Div. 2, Zone 2
	HV2	HazVector™ Ring Class I Div. 2, Zone 2, Class II
	L4	1-1/4" Straight Stanchion
	L5	1-1/2" Straight Stanchion
	P2	3/4" Rigid Pendant
	P3	1" Rigid Pendant
10. UNIPAK™ Options	S4	1-1/4" 25° Angle Stanchion
	S5	1-1/2" 25° Angle Stanchion
	E	UNIPAK™ with Clear Lamp
	D	UNIPAK™ with Dual Arc Lamp
	U	UNIPAK™ No Lamp

Options

11. Special Options	T	HazCote® black custom anti-corrosion coating (Consult factory)
12. Fusing Options	F	Fuse Block with Fuse*
13. Certification	C	Canadian Market

*Fuse Block are not available for Marine Locations

Certifications & Standards*

Approvals/Characteristics

- Class I** -Zone 2, Groups IIC, IIB, IIA
-Division 2, Groups A, B, C and D
- Class II** -Division 1 and 2, Groups E, F and G
- Class III**- UL® Listed (UL1598A) for Marine Locations
- UL844
- NEMA 4X , IP66
- CSA C22.2 No. 137



*Classification may vary upon light source and wattage. For details, see Thermal Performance Chart on P.40.

Area lighting

Hazlux® 3 Standard housing

Individual components (to be used with ballast housing)



Individual components



30° Angle Reflector

Standard Dome

Mounting Options

PART NO.	Description	Conduit Hub Size
VP2	Rigid Pendant	3/4"
VP3	Rigid Pendant	1"
VA2	Cone-Top Pendant	3/4"
VA3	Cone-Top Pendant	1"
VF2	Flexible Pendant	3/4"
VF3	Flexible Pendant	1"
VC2	Ceiling & Pendant Mount	3/4"
VC3	Ceiling & Pendant Mount	1"
VB2-VIB	Wall Mount	3/4"
VB3-VIB	Wall Mount	1"
VS4-VIB	25° Angle Stanchion	1-1/4"
VS5-VIB	25° Angle Stanchion	1-1/2"
VL4-VIB	Straight Stanchion	1-1/4"
VL5-VIB	Straight Stanchion	1-1/2"
HV1	HazVertor™ Adapter Ring	N/A
HV2	HazVertor™ Adapter Ring	N/A

Globes or Refractors*

PART NO.	Description
VGT22	5-1/2"-dia. Heat-Resistant Globe (250W max.)
VRF22C2	12"-dia. IES Type II Refractor, 5-1/2" thread
VRF22C5	12"-dia. IES Type V Refractor, 5-1/2" thread
VR22CBDL	Low-Bay Refractor with Plastic Lens

*For silicone coating, please add "TS" to part no. (ex: VGT22TS)

Guards

PART NO.	Description
VGU22P	Polymeric Guard for VGT22 Series Globe
VGU22	Cast Guard for VGT22 Series Globe
VGR48	Steel Wire Guard for All VRF Series 12"Refractors

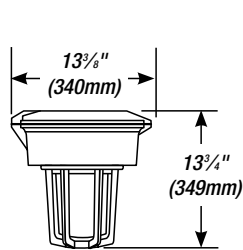
Reflectors

PART NO.	Description
VR22P	Standard Dome Fiberglass-Reinforced Polyester
VRA22P	30° Angle Reflector Fiberglass-Reinforced Polyester

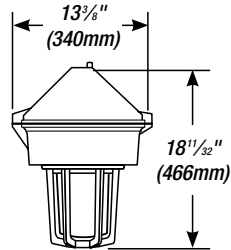
*Note: Reflectors are shipped bulk unless specified

Dimensions

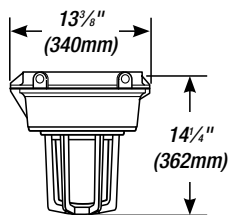
Standard housing with globe and guard



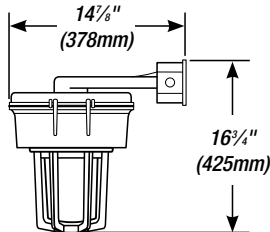
**Rigid and Flexible
Pendant**



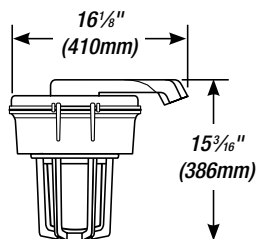
Cone-Top Pendant



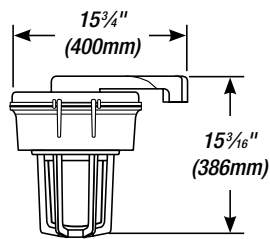
Ceiling Mount



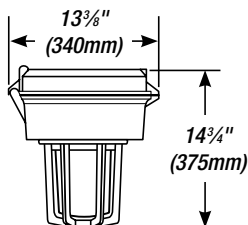
Wall Mount



25° Angle Stanchion



Straight Stanchion



HazVector™ Ring

Photometry

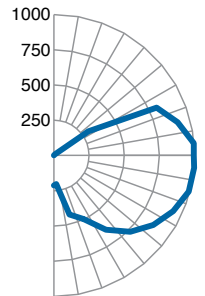
Standard housing with globe and guard

Ceiling Mount

Reference Data

Catalogue No.	DSO10H090-TGLA2E
Lamp	100W HPS ED23 1/2
Lamp Lumens	9500
Input Watt	130
Luminaire Lumens	8318
Efficiency	88%
Efficacy Rating (LER)	64.0
Spacing Criterion (0-180)	3.56
Spacing Criterion (90-270)	3.56
Spacing Criterion (diagonal)	3.42

Candlepower Curve

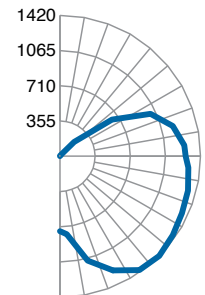


Ceiling Mount

Reference Data

Catalogue No.	DHO17C090-TGLA3E
Lamp	175W MH ED28
Lamp Lumens	14000
Input Watt	210
Luminaire Lumens	12719
Efficiency	91%
Efficacy Rating (LER)	60.6
Spacing Criterion (0-180)	2.38
Spacing Criterion (90-270)	2.38
Spacing Criterion (diagonal)	2.36

Candlepower Curve

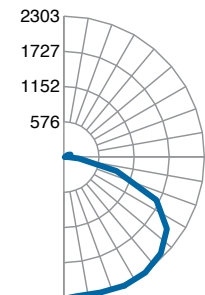


Ceiling Mount

Reference Data

Catalogue No.	DHO17C090-TGLA3E & VR22P
Lamp	175W MH ED28
Lamp Lumens	14000
Input Watt	210
Luminaire Lumens	10006
Efficiency	71%
Efficacy Rating (LER)	47.7
Spacing Criterion (0-180)	1.52
Spacing Criterion (90-270)	1.52
Spacing Criterion (diagonal)	1.68

Candlepower Curve

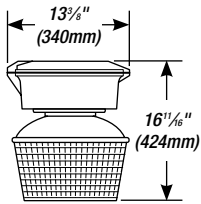


Area lighting

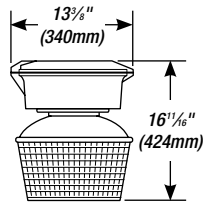
Hazlux® 3 Standard housing

Dimensions

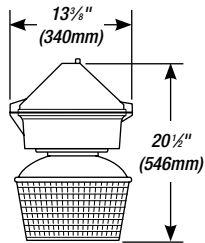
Standard housing with 12" refractor and guard



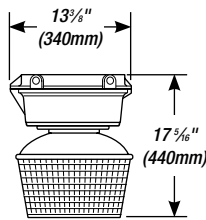
Rigid Pendant



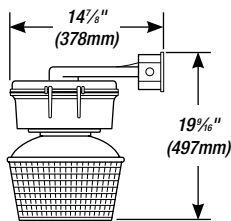
Flexible Pendant



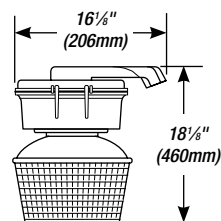
Cone-Top Pendant



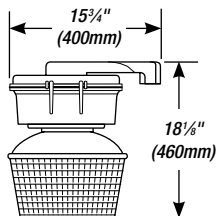
Ceiling Mount



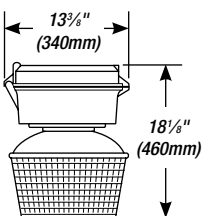
Wall Mount



25° Angle Stanchion Mount



Straight Stanchion



HazVertor™ Ring

Photometry

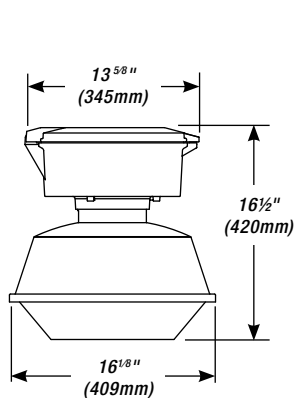
Standard housing with 12" refractor and guard

Ceiling Mount

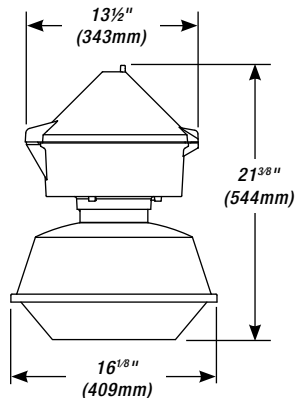
Reference Data		Candlepower Curve
Catalogue No.	DHO17C09O-R5A2E	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	11 690	
Efficiency	84%	
Efficacy Rating (LER)	55.7	
Spacing Criterion (0-180)	1.46	
Spacing Criterion (90-270)	1.46	
Spacing Criterion (diagonal)	1.74	

Dimensions

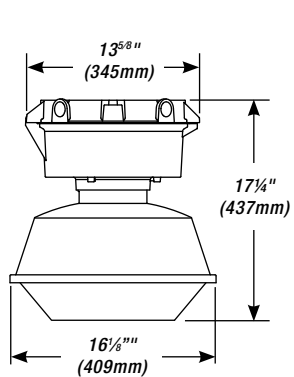
Standard housing with low bay refractor



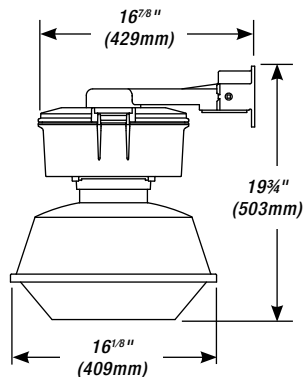
**Rigid and Flexible
Pendant**



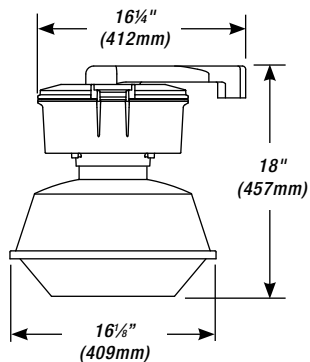
Cone-Top Pendant



Ceiling Mount



Wall Mount



Straight Stanchion

Photometry

Standard housing with low bay refractor

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DSO15H090-CBDL-A2E	
Lamp	150W HPS ED23 1/2	
Lamp Lumens	16000	
Input Watt	165	
Luminaire Lumens	8744	
Efficiency	55%	
Efficacy Rating (LER)	53	
Spacing Criterion (0-180)	0.66	
Spacing Criterion (90-270)	0.66	
Spacing Criterion (diagonal)	0.80	

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DHO25C090-CBDL-A2E	
Lamp	250W MH ED28	
Lamp Lumens	20500	
Input Watt	275	
Luminaire Lumens	11869	
Efficiency	58%	
Efficacy Rating (LER)	43	
Spacing Criterion (0-180)	0.68	
Spacing Criterion (90-270)	0.68	
Spacing Criterion (diagonal)	0.82	

Area lighting

Hazlux® 3 R-Housing

Assembly guide

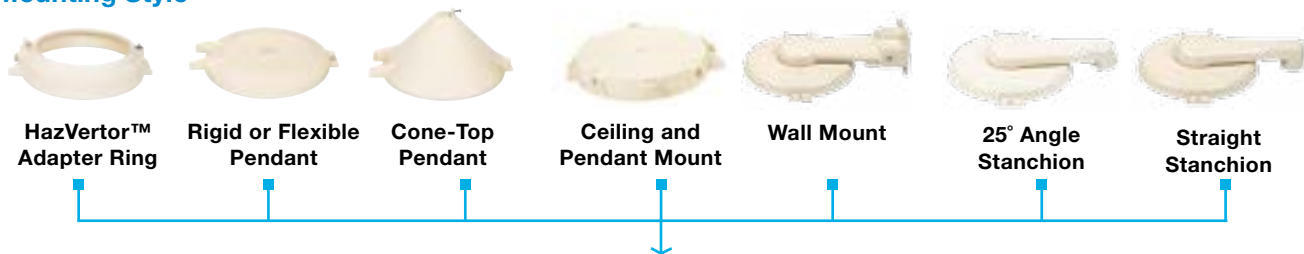
Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector

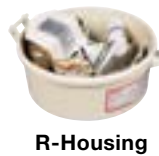


Hazlux® 3 R-Housing - Assembly Guide

Mounting Style

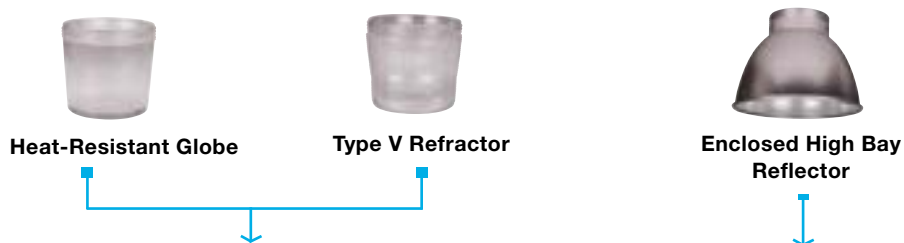


Ballast Tank

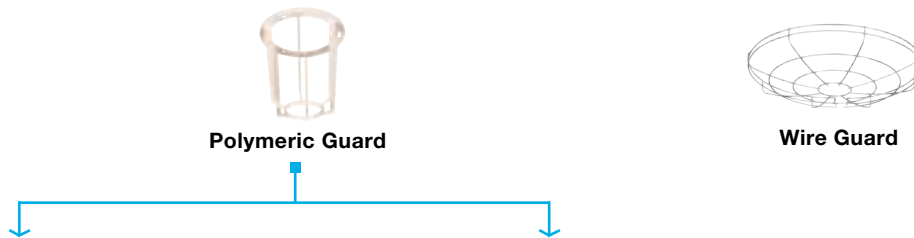


R-Housing

Globe or Refractor



Guard



Reflector*



*Reflectors are sold separately

Catalog numbering system

UNIPAK™ =

- Ballast Tank+
- Optics & Mountings+
- Options (if necessary)

Ballast tank

D	S	Ø	15	H	04	R
1	2	3	4	5	6	7

Optics and mountings

TGP	-	P2	E
8		9	10

Options

T	F	-	C
11	12		13

Ballast Tank		
1. Fixture Series	D	Hazlux® 3 Fixture
2. Lamp Type	S	High-Pressure Sodium
	H	Metal Halide
3. Starter Circuit/ Quartz Option	Ø	Standard Fixture (Without Options)
	P	Pulse Start (MH Only)*
	Q	Quartz Auxiliary Option (Not Hazardous Rated)
	R	Instant Restart (50 - 150W HPS)
	J	Auto Shutoff Starter (HPS Only)
4. Lamp Wattage	Metal Halide Lamps	
	07	70W ED28
	10	100W ED28
	17	175W ED28
	20	200W ED28PS
	25	250W ED28
	High Pressure Sodium Lamps	
	05	50W ED23 1/2
	07	70W ED23 1/2
	10	100W ED23 1/2
	15	150W ED23 1/2
5. Ballast Circuit	H	High Reactance
	C	Constant Wattage Autotransformer (CWA)
	I	Constant Wattage Isolated Transformer (CWI)
	P	Reactor (All ballasts high power factor)
6. Voltage/ Frequency	03	120/277V, 60 Hz
	04	120/208/240/277V, 60 Hz
	09	120/277/347V, 60 Hz (CSA)
	12	120V, 60 Hz
	20	208V, 60 Hz
	24	240V, 60 Hz
	27	277V, 60 Hz
	34	347V, 60 Hz
	48	480V, 60 Hz
	225	220V, 50 Hz
	245	240V, 50 Hz
7. Ballast Housing Style	R	R-Housing
	I	R-Housing with Stainless Steel Inserts

*For high ambient temperature (55°C, 65°C) please consult factory.

Optics & Mountings

8. Optical Assembly Options*	R1	7-3/4" Refractor Globe, Type I
	R3	7-3/4" Refractor Globe, Type III
	R5	7-3/4" Refractor Globe, Type V
	R1P	R1 with Polymeric Guard
	R3P	R3 with Polymeric Guard
	R5P	R5 with Polymeric Guard
	TG	7-3/4" Thermal Shock-Resistant
	TGP	TG with Polymeric Guard
	RCB	Enclosed High-Bay Reflector
	RCG	RCB with Steel Wire Guard

* For silicone coating, please add suffix "S" before the first digit (ex: STG)

9. Mounting style	A2	3/4" Cone-Top Pendant
	A3	1" Cone-Top Pendant
	B2	3/4" Wall Mount
	B3	1" Wall Mount
	C2	3/4" Ceiling Mount
	C3	1" Ceiling Mount
	F2	3/4" Flexible Pendant
	F3	1" Flexible Pendant
	HV1	HazVeror™ Ring - Class I, Div. 2, Zone 2
	HV2	HazVeror™ Ring - Class I Div. 2, Zone 2, Class II
	L4	1-1/4" Straight Stanchion
	L5	1-1/2" Straight Stanchion
	P2	3/4" Rigid Pendant
	P3	1" Rigid Pendant
10. UNIPAK™ Options	S4	1-1/4" 25° Angle Stanchion
	S5	1-1/2" 25° Angle Stanchion
	E	UNIPAK™ with Clear Lamp
	D	UNIPAK™ with Dual Arc Lamp
	U	UNIPAK™ No Lamp

Options

11. Special Options	T	HazCote® custom anti-corrosion coating (Consult factory)
12. Fusing Options	F	Fuse Block with Fuse*
13. Certification	C	Canadian Market

*Fuse Block are not available for Marine Locations

Certifications & Standards*

Approvals/Characteristics

- Class I** -Zone 2, Groups IIC, IIB, IIA
-Division 2, Groups A, B, C and D
- Class II** -Division 1 and 2, Groups E, F and G
- Class III** - UL844
- CSA C22.2 No. 137



* Classification may vary upon light source and wattage. For details, see Thermal Performance Chart on P46.

Area lighting

Hazlux® 3 R-Housing

Individual components (to be used with ballast housing)



Rigid Pendant



Ceiling and
Pendant Mount



Wall Mount



Cone-Top Pendant



25° Angle Stanchion



Flexible Pendant



HazVektor™
Adapter Ring



Straight Stanchion

Mounting Options

PART NO.	Description	Conduit Hub Size
VP2	Rigid Pendant	3/4"
VP3	Rigid Pendant	1"
VA2	Cone-Top Pendant	3/4"
VA3	Cone-Top Pendant	1"
VF2	Flexible Pendant	3/4"
VF3	Flexible Pendant	1"
VC2	Ceiling and Pendant Mount	3/4"
VC3	Ceiling and Pendant Mount	1"
VB2-VIB	Wall Mount	3/4"
VB3-VIB	Wall Mount	1"
VS4-VIB	25° Angle Stanchion	1-1/4"
VS5-VIB	25° Angle Stanchion	1-1/2"
VL4-VIB	Straight Stanchion	1-1/4"
VL5-VIB	Straight Stanchion	1-1/2"
HV1	HazVektor™ Adapter Ring	N/A
HV2	HazVektor™ Adapter Ring	N/A

Globes or Refractors*

PART NO.	Description
VG31S	7-3/4" dia. Heat-Resistant Globe (250W max.)
VGL31R1	7-3/4" dia. IES Type I Refractor Globe (250W max.)
VGL31R3	7-3/4" dia. IES Type III Refractor Globe (250W max.)
VGL31R5	7-3/4" dia. IES Type V Refractor Globe (250W max.)
VR31CB	Enclosed High-Bay, Anodized Aluminum with Lens

* For silicone coating please add "TS" to part no. (ex: VG31TS)

Guards

PART NO.	Description
VGU31RP	Polymeric Guard for VG31S Globe and VGL31R Series Refractor Globes
VGR64	Steel Wire Guard for VR31CB Enclosed High Bay Reflector



Heat-Resistant
Globe



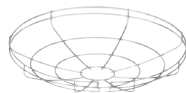
Type I, III or V
Refractor Globe



Enclosed High Bay
Reflector



Polymeric Guard



VGR64 Wire Guard

Optional components



Standard Dome



30° Angle Reflector



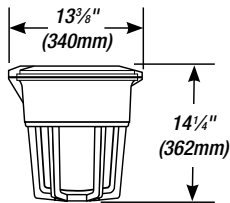
Deep Dome

Reflectors

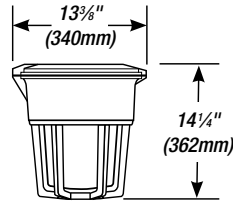
PART NO.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester
VRD31	Deep Dome, Anodized Aluminum

Note: Reflectors are shipped bulk unless specified

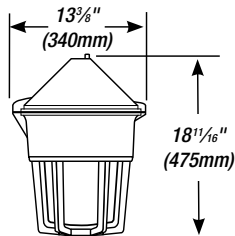
Dimensions R-Housing with 7-3/4" refractor and guard



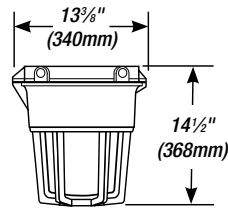
Rigid Pendant



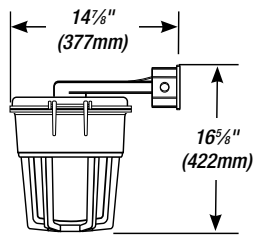
Flexible Pendant



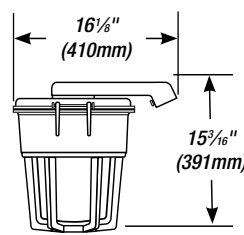
Cone-Top Pendant



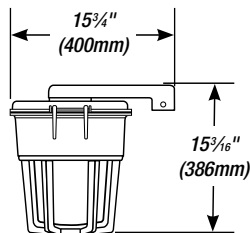
Ceiling Mount



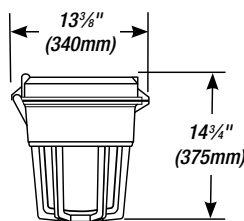
Wall Mount



Straight Stanchion Mount



Straight Stanchion



HazVertor™ Ring

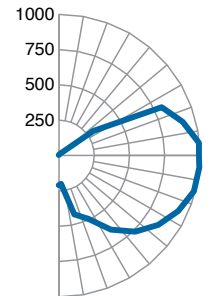
Photometry R-Housing with 7-3/4" refractor and guard

Ceiling Mount

Reference Data

Catalogue No.	DSO10H09R-TGA3E
Lamp	100W HPS ED23 1/2
Lamp Lumens	9500
Input Watt	130
Luminaire Lumens	8318
Efficiency	88%
Efficacy Rating (LER)	64.0
Spacing Criterion (0-180)	3.56
Spacing Criterion (90-270)	3.56
Spacing Criterion (diagonal)	3.42

Candlepower Curve

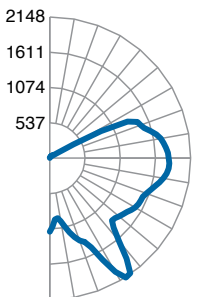


Ceiling Mount

Reference Data

Catalogue No.	DHP17C09R-TGA3E
Lamp	175W MH ED28PS
Lamp Lumens	17700
Input Watt	192.5
Luminaire Lumens	14969
Efficiency	85%
Efficacy Rating (LER)	78
Spacing Criterion (0-180)	1.86
Spacing Criterion (90-270)	1.86
Spacing Criterion (diagonal)	2.00

Candlepower Curve

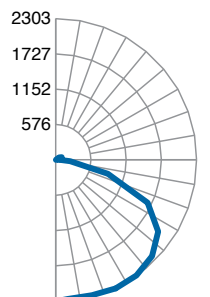


Ceiling Mount

Reference Data

Catalogue No.	DHO17C09R-TGA3E & VR31P
Lamp	175W MH ED28
Lamp Lumens	14000
Input Watt	210
Luminaire Lumens	10006
Efficiency	71 %
Efficacy Rating (LER)	47.7
Spacing Criterion (0-180)	1.52
Spacing Criterion (90-270)	1.52
Spacing Criterion (diagonal)	1.68

Candlepower Curve



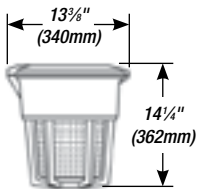
Area lighting

Hazlux® 3 R-Housing

Photometry

R-Housing with 7-3/4" refractor and guard

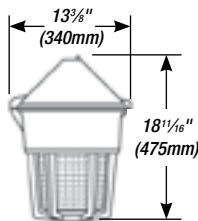
Dimensions R-Housing with 7-3/4" refractor and guard



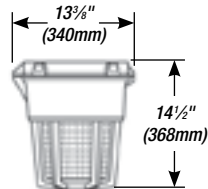
Rigid Pendant



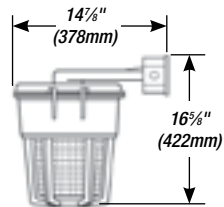
Flexible Pendant



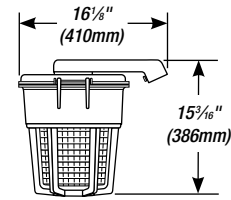
Cone-Top Pendant



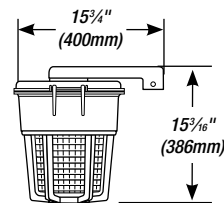
Ceiling Mount



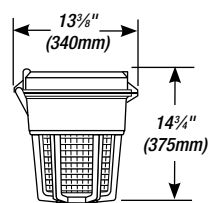
Wall Mount



25° Stanchion Mount

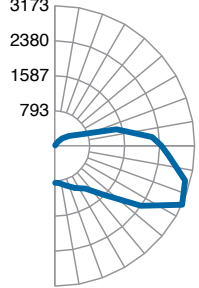


Straight Stanchion

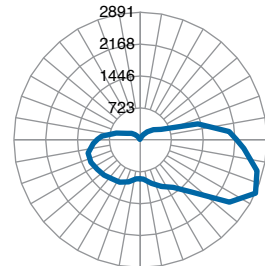


HazVector™ Ring

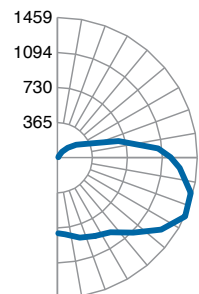
Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DHO17C09R-R1A3E	3173
Lamp	175W MH ED28	2380
Lamp Lumens	14000	1587
Input Watt	210	793
Luminaire Lumens	10352	
Efficiency	74%	
Efficacy Rating (LER)	49.3	
Spacing Criterion (0-180)	1.68	
Spacing Criterion (90-270)	3.02	
Spacing Criterion (diagonal)	2.02	



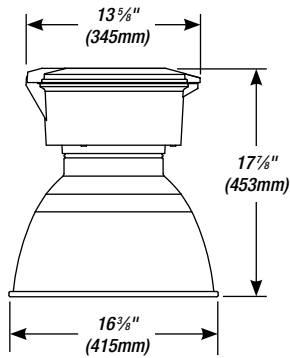
Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DHO17C09R-R3A3E	2891
Lamp	175W MH ED28	2168
Lamp Lumens	14000	1446
Input Watt	210	723
Luminaire Lumens	10609	
Efficiency	76%	
Efficacy Rating (LER)	50.5	
Spacing Criterion (0-180)	1.62	
Spacing Criterion (90-270)	2.28	
Spacing Criterion (diagonal)	2.10	



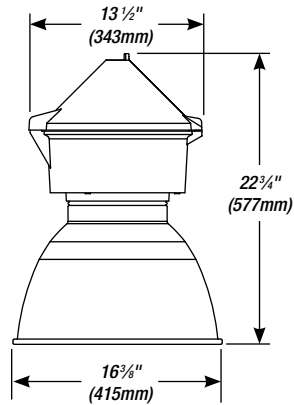
Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	DHO17C09R-R5A3E	1459
Lamp	175W MH ED28	1094
Lamp Lumens	14000	730
Input Watt	210	365
Luminaire Lumens	10221	
Efficiency	73%	
Efficacy Rating (LER)	48.7	
Spacing Criterion (0-180)	2.00	
Spacing Criterion (90-270)	2.00	
Spacing Criterion (diagonal)	2.30	



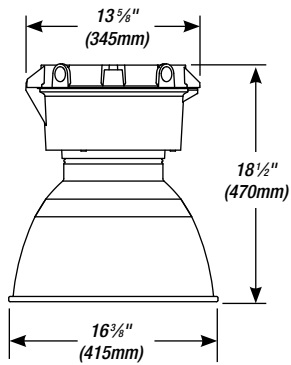
Dimensions R-Housing with high bay refractor



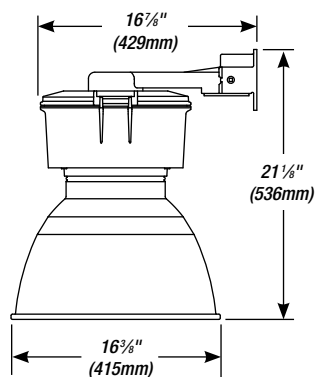
**Rigid and Flexible
Pendant**



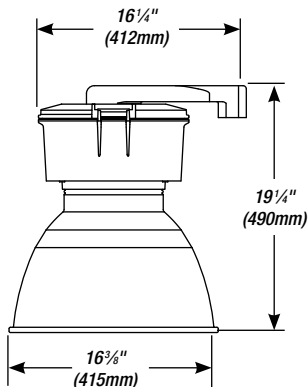
Cone-Top Pendant



Ceiling Mount



Wall Mount



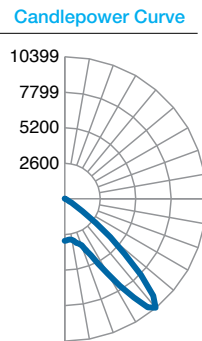
Straight Stanchion

Photometry R-Housing with high bay refractor

Ceiling Mount

Reference Data

Catalogue No.	DHP25C04R-RCB-P2E
Lamp	250W MH ED28PS
Lamp Lumens	25000
Input Watt	250
Luminaire Lumens	16988
Efficiency	68%
Efficacy Rating (LER)	68
Spacing Criterion (0-180)	2.28
Spacing Criterion (90-270)	2.28
Spacing Criterion (diagonal)	1.82



Area lighting

Hazlux® 3 Large housing

Assembly guide

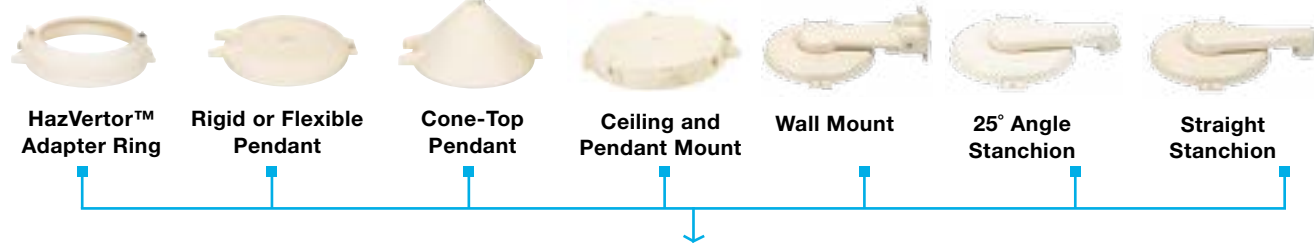
Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



Hazlux® 3 Large Housing - Assembly Guide

Mounting Style



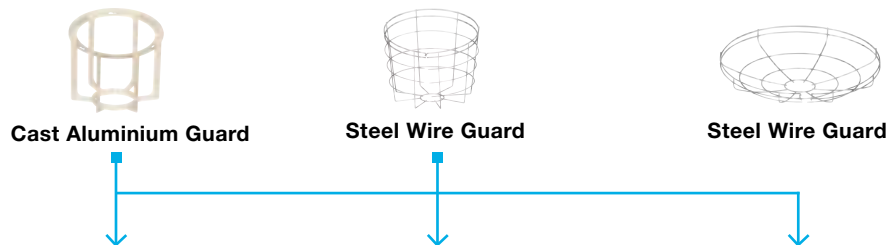
Ballast Tank



Globe or Refractor



Guard



Reflectors*



*Reflectors are sold separately

Catalog numbering system

UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

Ballast tank

D	S	Ø	25	H	04	L
1	2	3	4	5	6	7

Optics and mountings

TGC	-	P2	E
8		9	10

Options

T	F	-	C
11	12		13

Ballast Tank		
1. Fixture Series	D	Hazlux® 3 Fixture
2. Lamp Type	S	High-Pressure Sodium
	H	Metal Halide
3. Starter Circuit/ Quartz Option	Ø	Standard Fixture (Without Options)
	P	Pulse Start (MH Only)
	Q	Quartz Auxiliary Option (Not Hazardous Rated)
4. Lamp Wattage	Metal Halide Lamps	
	25	250W ED28
	32	320W ED28PS
	35	350W ED37PS
	40	400W ED37
	High Pressure Sodium Lamps	
	20	200W ED18
	25	250W ED18
	40	400W ED18
5. Ballast Circuit	H	High Reactance
	C	Constant Wattage Autotransformer (CWA)
	P	Reactor (All ballasts high power factor)
6. Voltage/ Frequency	03	120/277V, 60 Hz
	04	120/208/240/277V, 60 Hz
	09	120/277/347V, 60 Hz (CSA)
	12	120V, 60 Hz
	20	208V, 60 Hz
	27	277V, 60 Hz
	34	347V, 60 Hz
	48	480V, 60 Hz
	225	220V, 50 Hz
	245	240V, 50 Hz
7. Ballast Housing Style	L	Large Housing
	M	Large Housing with Stainless Steel Inserts

Optics & Mountings*

8. Optics and Guards	R2	12" Refractor Glass, Type II
	R5	12" Refractor Glass, Type V
	R2G	R2 with Steel Wire Guard
	R5G	R5 with Steel Wire Guard
	RCB	Enclosed High-Bay Reflector
	RCG	RCB with Steel Wire Guard
	TG	7-3/4" Thermal Shock-Resistant CBDL Resistant CBDL Globe
	TGC	TG with Cast Aluminum Guard

* For silicone coating, please add suffix "S" before the first digit (ex: STG)

9. Mounting style	A2	3/4" Cone-Top Pendant
	A3	1" Cone-Top Pendant
	B2	3/4" Wall Mount
	B3	1" Wall Mount
	C2	3/4" Ceiling Mount
	C3	1" Ceiling Mount
	F2	3/4" Flexible Pendant
	F3	1" Flexible Pendant
	HV1	HazVeror™ Ring - Class I, Div. 2, Zone 2
	HV2	HazVeror™ Ring - Class I Div. 2, Zone 2, Class II
	L4	1-1/4" Straight Stanchion
	L5	1-1/2" Straight Stanchion
	P2	3/4" Rigid Pendant
	P3	1" Rigid Pendant
	S4	1-1/4" 25° Angle Stanchion
	S5	1-1/2" 25° Angle Stanchion
10. UNIPAK™ Options	E	UNIPAK™ with Clear Lamp
	D	UNIPAK™ with Dual Arc Lamp
	U	UNIPAK™ No Lamp

Options

11 Special Options	T	HazCote® custom anti-corrosion coating (Consult factory)
12 Fusing Options	F	Fuse Block with Fuse*
13 Certification	C	Canadian Market

* Fusing is not available with Marine locations

Certifications & Standards*

Approvals/Characteristics

- Class I** - Zone 2, Groups IIC, IIB, IIA
- Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G
- Class III** - UL844
- CSA C22.2 No. 137



* Classification may vary upon light source and wattage. For details, see Thermal Performance Chart on P.47.

Area lighting

Hazlux® 3 Large housing

Individual components (to be used with ballast housing)



Mounting Options

PART NO.	Description	Conduit Hub Size
VP2	Rigid Pendant	3/4"
VP3	Rigid Pendant	1"
VA2	Cone-Top Pendant	3/4"
VA3	Cone-Top Pendant	1"
VF2	Flexible Pendant	3/4"
VF3	Flexible Pendant	1"
VC2	Ceiling Mount/ Pendant	3/4"
VC3	Ceiling Mount/ Pendant	1"
VB2-VIB	Wall Mount	3/4"
VB3-VIB	Wall Mount	1"
VS4-VIB	25° Angle Stanchion	1-1/4"
VS5-VIB	25° Angle Stanchion	1-1/2"
VL4-VIB	Straight Stanchion	1-1/4"
VL5-VIB	Straight Stanchion	1-1/2"
HV1	HazVector™ Adapter Ring	N/A
HV2	HazVector™ Adapter Ring	N/A



Globes or Refractors*

PART NO.	Description
VG31	7-3/4" dia. Heat-Resistant Globe (400W max.)
VRF31C2	12" dia. IES Type II Refractor, 7-3/4" Thread
VRF31C5	12" dia. IES Type V Refractor, 7-3/4" Thread
VR31CB	Enclosed High-Bay, Anodized Aluminum with Lens

* For silicone coating please add "TS" to part no. (ex: VG31TS)



Guards

PART NO.	Description
VG31	Cast Aluminum Guard for VG31 Globe
VGR48	Steel Wire Guard for All VRF Series 12" Refractors
VGR64	Steel Wire Guard for VR31CB Enclosed High Bay Reflector

Optional components



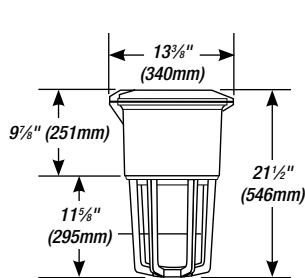
Reflectors

PART NO.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester
VRD31	Deep Dome, Anodized Aluminum

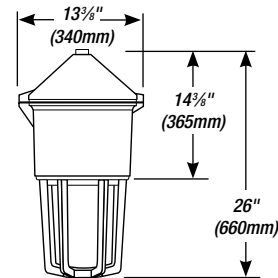
Note: Reflectors are shipped bulk unless specified

Dimensions

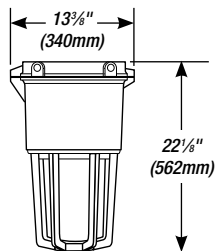
Large housing with globe and guard



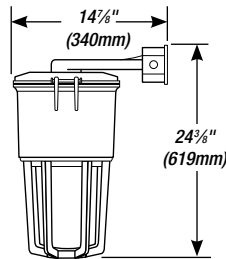
Rigid Pendant



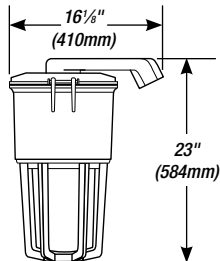
Cone-Top Pendant



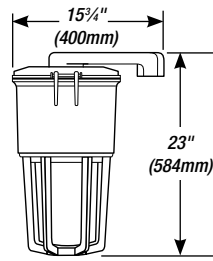
Ceiling Mount



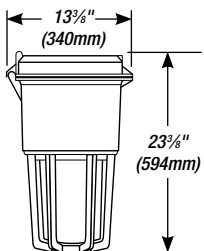
Wall Mount



25° Angle Stanchion Mount



Straight Stanchion



HazVector™ Ring

Photometry

Large Housing with globe and guard

Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	DSO20C09L - TGCA3E	
Lamp	200W HPS ED18	
Lamp Lumens	22000	
Input Watt	255	
Luminaire Lumens	18415	
Efficiency	84%	
Efficacy Rating (LER)	72.2	
Spacing Criterion (0-180)	N/A	
Spacing Criterion (90-270)	N/A	
Spacing Criterion (diagonal)	N/A	

Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	DHO35C09L - TGCA3E	
Lamp	350W MH ED37PS	
Lamp Lumens	34000	
Input Watt	400	
Luminaire Lumens	26392	
Efficiency	78%	
Efficacy Rating (LER)	66.0	
Spacing Criterion (0-180)	1.36	
Spacing Criterion (90-270)	1.36	
Spacing Criterion (diagonal)	1.58	

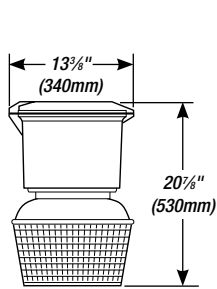
Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	DHP40C04L - TG-P2V & VRA31P	
Lamp	400W MH ED37PS	
Lamp Lumens	44000	
Input Watt	400	
Luminaire Lumens	30407	
Efficiency	69%	
Efficacy Rating (LER)	76	
Spacing Criterion (0-180)	2.32	
Spacing Criterion (90-270)	1.72	
Spacing Criterion (diagonal)	1.58	

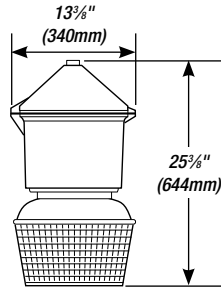
Area lighting

Hazlux® 3 Large housing

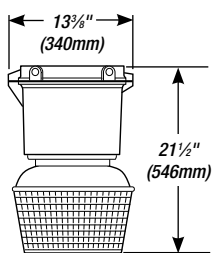
Dimensions Large housing with 12" refractor



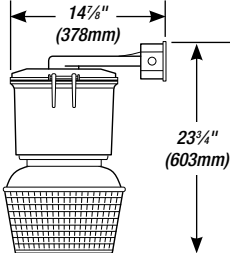
Rigid and Flexible Pendant



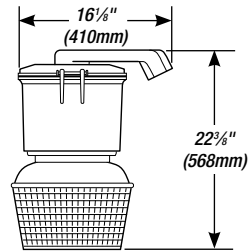
Cone-Top Pendant



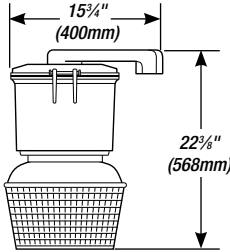
Ceiling Mount



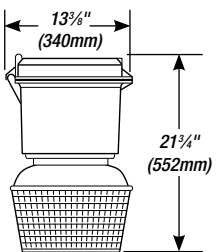
Wall Mount



25° Angle Stanchion Mount



Straight Stanchion Mount



HazVector™ Ring

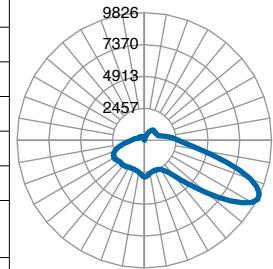
Photometry Large housing with 12" refractor

Ceiling Mount

Reference Data

Catalogue No.	DHP32C04L-R2-P2E
Lamp	320W MH ED28PS
Lamp Lumens	30000
Input Watt	352
Luminaire Lumens	21773
Efficiency	73%
Efficacy Rating (LER)	62
Spacing Criterion (0-180)	1.56
Spacing Criterion (90-270)	1.50
Spacing Criterion (diagonal)	1.90

Candlepower Curve

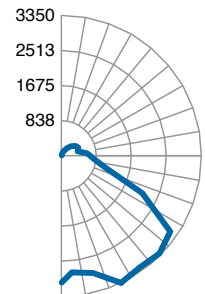


Ceiling Mount

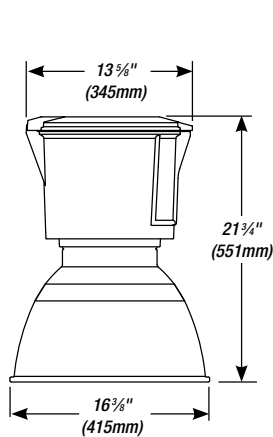
Reference Data

Catalogue No.	DSO20C04L-R5-P2E
Lamp	200W HPS ED18
Lamp Lumens	22000
Input Watt	240
Luminaire Lumens	16414
Efficiency	75%
Efficacy Rating (LER)	68
Spacing Criterion (0-180)	1.66
Spacing Criterion (90-270)	1.66
Spacing Criterion (diagonal)	1.80

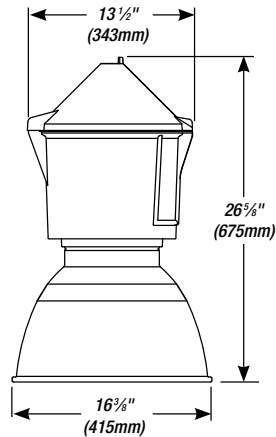
Candlepower Curve



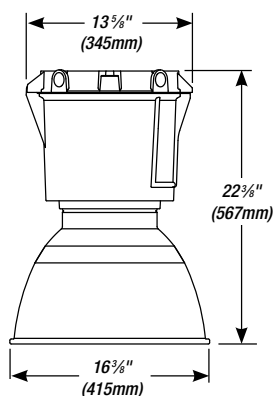
Dimensions Large housing with high bay refractor



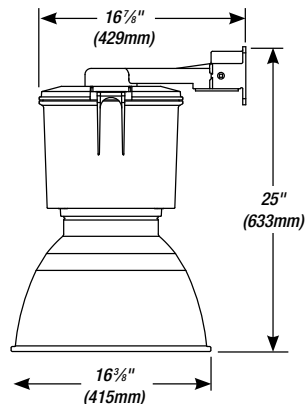
Rigid and Flexible Pendant



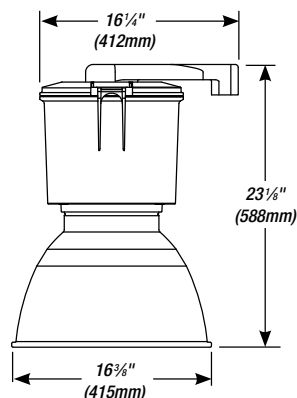
Cone-Top Pendant



Ceiling Mount



Wall Mount



Straight Stanchion

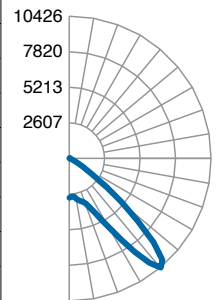
Photometry Large housing with high bay refractor

Ceiling Mount

Reference Data

Catalogue No.	DHP25C04-RCB-A3E
Lamp	250W MH ED28PS
Lamp Lumens	25000
Input Watt	250
Luminaire Lumens	17383
Efficiency	70%
Efficacy Rating (LER)	70
Spacing Criterion (0-180)	2.36
Spacing Criterion (90-270)	2.36
Spacing Criterion (diagonal)	1.86

Candlepower Curve

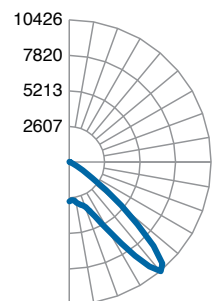


Ceiling Mount

Reference Data

Catalogue No.	DSO20C04L-RCB-A3E
Lamp	200W HPS ED18
Lamp Lumens	22000
Input Watt	240
Luminaire Lumens	12810
Efficiency	58%
Efficacy Rating (LER)	53
Spacing Criterion (0-180)	1.70
Spacing Criterion (90-270)	1.70
Spacing Criterion (diagonal)	1.38

Candlepower Curve



Area lighting

Hazlux® 3 Standard Housing

Thermal Performance Data (40°C)

Class I, Division 2 Group C & D - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture configuration									
Configuration		50W (S68 Lamp) (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 or S56 Lamp)	200W (S66 Lamp)	250W (S50 Lamp)	400W/D* (S50 Lamp)	Any HPS w/ (Auxiliary Qtz.)
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	A	T3C	T3A	T2C	T2A	T2	325	T2A	625
Globe, Guard & Dome Reflector	B	T3C	T3A	T2C	T2A	T2	325	T2A	625
Globe, Guard & Angle Reflector	C	T3C	T3A	T2C	T2A	T2	325	T2A	625
12" Refractor	D	T4	T3C	T2D	T2B	T2A	325	T2B	625
Enclosed Reflector	E	N/A	N/A	N/A	N/A	T2A	325	T2B	625
Supply Wire Temp. Rating		90°C	90°C	90°C	90°C	90°C	90°C	110°C	—

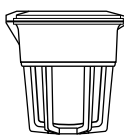
*Note: Temperature rating for all fixtures with the auxiliary quartz option is 625°C

Class I, Division 2 Group C & D - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

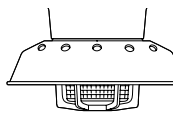
Metal Halide / Nameplate marked with Rating based on hottest fixture configuration							
Configuration		70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)	400W (M59 Lamp)	Any MH w/(Auxiliary Qtz.)
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	A	T3C	T3A	T2A	T2	350	625
Globe, Guard & Dome Reflector	B	T3C	T3A	T2C	T2	350	625
Globe, Guard & Angle Reflector	C	T3C	T3A	T2A	T2	350	625
12" Refractor	D	T2C	T2C	T2C	T2	325	625
Enclosed Reflector	E	N/A	N/A	N/A	N/A	325	625
Supply Wire Temp. Rating		90°C	90°C	90°C	125°C	110°C	—

*Note: Temperature rating for all fixtures with the auxiliary quartz option is 625°C

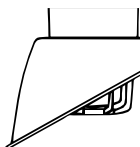
Section E Hazlux® 3



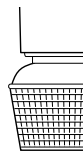
A



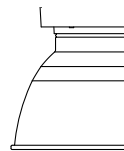
B



C



D



E

Thermal Performance Data (40°C)

Class II & III*, Division 1 & 2 - Maximum External Fixture Temperature In °C @ 40°C Ambient under a Dust Blanket

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture configuration									
Configuration			50W (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)	200W (S66 Lamp)	250W (S50 Lamp)	400W/D* (S51 Lamp)
			Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Standard	Globe, Guard & any Reflector	F	EFG	EFG	EFG	N/A	EFG	EFG	N/A
	Reflector	G	EFG	EFG	EFG	EFG	EFG	EFG	EFG
	Enclosed Reflector	H	N/A	N/A	N/A	N/A	EFG	EFG	EFG
With Quartz Auxiliary Lamp (100W)	Globe, Guard & any Reflector	F	N/A	N/A	N/A	N/A	EFG	EFG	N/A
	Reflector	G	EFG	EFG	EFG	EFG	EFG	EFG	EFG
	Enclosed Reflector	H	N/A	N/A	N/A	N/A	EFG	EFG	EFG
	Supply Wire Temp. Rating		90°C	90°C	90°C	90°C	90°C	90°C	110°C

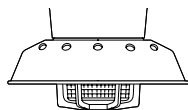
*Requires use of 400W Diffuse Lamp

Class II & III*, Division 1 & 2 - Maximum External Fixture Temperature In °C @ 40°C Ambient under a Dust Blanket

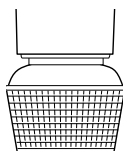
Metal Halide / Nameplate marked with Rating based on hottest fixture configuration							
Configuration			70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)	400W (M59 Lamp)
			Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Standard	Globe, Guard & any Reflector	F	EFG	EFG	N/A	EFG	EFG
	Reflector	G	EFG	EFG	EFG	EFG	EFG
	Enclosed Reflector	H	N/A	N/A	N/A	N/A	EFG
With Quartz Auxiliary Lamp (100W)	Globe, Guard & any Reflector	F	N/A	N/A	N/A	EFG	EFG
	Reflector	G	EFG	EFG	EFG	EFG	EFG
	Enclosed Reflector	H	N/A	N/A	N/A	N/A	N/A
	Supply Wire Temp. Rating		90°C	90°C	90°C	90°C	110°C

*Note: Fixtures certified for group G are also certified for Class III

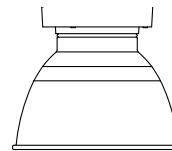
Section E Hazlux® 3



F



G



H

Area lighting

Hazlux® 3 Standard Housing

Thermal Performance Data (55°C)

Class I, Division 2 - Lamp Surface Temperature in °C @ 55° C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture configuration					
Configuration		70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)	Any HPS w/ (Auxiliary Qtz.)
		"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	A	T3	T2C	T2A	625 (2)
Globe, Guard & Dome Reflector	B	T3	T2C	T2A	625 (2)
Globe, Guard & Angle Reflector	C	T3	T2C	T2A	625 (2)
12" Refractor	D	T3B	T2D	T2B	625 (2)
Enclosed Reflector	E	N/A	N/A	N/A	N/A
Supply Wire Temp. Rating	F	90°C	90°C	90°C	90°C

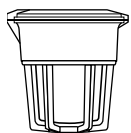
Class I, Division 2 - Lamp Surface Temperature in °C @ 55°C Ambient in Free Air

Metal Halide / Nameplate marked with Rating based on hottest fixture configuration					
Configuration		70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)
		"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	A	T3A	T3	T2 (2)	N/A
Globe, Guard & Dome Reflector	B	T3A	T3	T2 (2)	N/A
Globe, Guard & Angle Reflector	C	T3A	T3	T2 (2)	N/A
12" Refractor	D	N/A	N/A	T2B	T2A
Enclosed Reflector	E	N/A	N/A	N/A	N/A
Supply Wire Temp. Rating	F	60°C	75°C	90°C	125°C

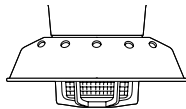
(1) Configuration not tested. (Rating based on hottest fixture configuration)

(2) Consult Factory

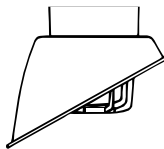
Section E Hazlux® 3



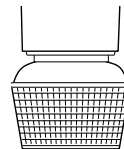
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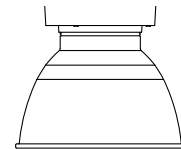
B



C



D



E

Thermal Performance Data (55°C)

Class II & III*, Division 1 & 2 - Maximum External Fixture Temperature @ 55°C Ambient under a Dust Blanket

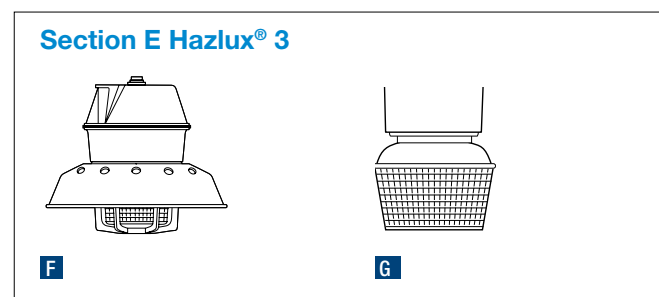
High Pressure Sodium / Nameplate marked with Rating based on hottest fixture configuration					
Configuration			70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)
			Class II Groups	Class II Groups	Class II Groups
Standard	Globe, Guard & any Reflector	F	EFG	N/A	N/A
	Reflector	G	EFG	EFG	EFG
With Quartz Auxiliary Lamp (100W)	Globe, Guard & any Reflector	F	N/A	N/A	N/A
	Reflector	G	EFG (2)	N/A	N/A
Supply Wire Temp. Rating			90°C	90°C	90°C

Class II & III*, Division 1 & 2 - Maximum External Fixture Temperature @ 55°C Ambient under a Dust Blanket

Metal Halide / Nameplate marked with Rating based on hottest fixture configuration						
Configuration			70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)
			Class II Groups	Class II Groups	Class II Groups	Class II Groups
Standard Fixture	Globe, Guard & any Reflector	F	N/A	N/A	N/A	N/A
	Reflector	G	N/A	N/A	EFG (2)	N/A
Supply Wire Temp. Rating			60°C	75°C	90°C	125°C

(2) Consult Factory

*Note: Fixtures certified for group G are certified for Class III



Area lighting

Hazlux® 3 Standard Housing

Thermal Performance Data (65°C)

Class I, Division 2 - Lamp Surface Temperature in °C @ 65°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture configuration					
Configuration		70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)	Any HPS w/ (Auxiliary Qtz.)
		"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	A	T3	T2C (2)	T2A (2)	N/A
Globe, Guard & Dome Reflector	B	T3	T2C (2)	T2A (2)	N/A
Globe, Guard & Angle Reflector	C	T3	T2C (2)	T2A (2)	N/A
Refractor	D	T3A	T2D (2)	T2B	625 (2)
Supply Wire Temp. Rating	E	125°C	125°C	125°C	125°C

Class I, Division 2 - Lamp Surface Temperature in °C @ 65°C Ambient in Free Air

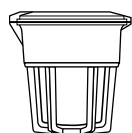
Metal Halide / Nameplate marked with Rating based on hottest fixture configuration			
Configuration		70W (M85 Lamp)	100W (M90 Lamp)
		"T" No.	"T" No.
Globe & Guard	A	T3A	T3
Globe, Guard & Dome Reflector	B	T3A	T3
Globe, Guard & Angle Reflector	C	T3A	T3
Refractor	D	N/A	N/A
Supply Wire Temp. Rating	E	75°C	90°C

(1) Configuration not tested.

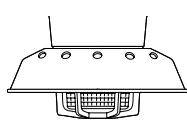
(Rating based on hottest fixture configuration)

(2) Consult Factory

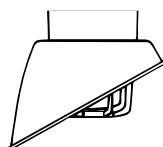
Section E Hazlux® 3



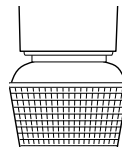
A



B



C



D

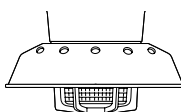
Thermal Performance Data (65°C)

Class II & III*, Division 1 & 2 - Maximum External Fixture Temperature @ 65°C Ambient under a Dust Blanket

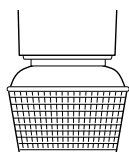
Metal Halide / Nameplate marked with Rating based on hottest fixture configuration					
Configuration			70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)
			Class II Groups	Class II Groups	Class II Groups
Standard	Globe, Guard & any Reflector	F	EFG	N/A	N/A
	Refractor	G	EFG	EFG (2)	EFG (2)
With Quartz Lamp (100W)	Globe, Guard & any Reflector	F	N/A	N/A	N/A
	Refractor	G	EFG (2)	N/A	N/A
Supply Wire Temp. Rating			125°C	125°C	125°C

(2) Consult Factory

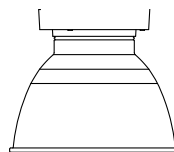
Section E Hazlux® 3



F



G



H

Area lighting

Hazlux® 3 R-Housing

Thermal Performance Data

Class I, Division 2 - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

High Pressure Sodium								
Configuration	50W (S68 Lamp)	70W (S62 Lamp)		100W (S54 Lamp)		150W (S55 or S56 Lamp)		50,70 or 100W
	Lamp	Lamp	Lamp w/ Instant Restart	Lamp	Lamp w/ Instant Restart	Lamp	Lamp w/ Instant Restart	Lamp w/ Auxilliary Qtz.
Refractor & Guard	T3C	T3A	T3A	T3	T3	T2B	T2B	625
Supply Wire Temp Rating	90°C	90°C	90°C	90°C	90°C	90°C	90°C	-

Class I, Division 2 - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

Metal Halide				
Configuration	70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)
	Lamp	Lamp	Lamp	Lamp
	"T" No.	"T" No.	"T" No.	"T" No.
Refractor & Guard	T3	T3	T2B	T2
Supply Wire Temp Rating	90°C	90°C	90°C	90°C

Hazlux® 3 R-Housing Thermal Performance Data (55°C) - Hazardous Location

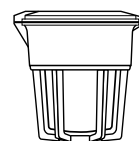
Class I, Division 2 - Lamp Surface Temperature in °C @ 55°C Ambient in Free Air

High Pressure Sodium							Metal Halide		
Configuration	50W (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 Lamp)	150W (S56 Lamp)	50W (S68 Lamp)	Configuration	50W (M98 Lamp)	100W (M90 Lamp)
	Lamp	Lamp	Lamp	Lamp	Lamp	Lamp w/ Auxiliary Qtz.		Lamp	Lamp
	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	Refractor & Guard	T3A	T3
Refractor & Guard	T3C	T3A	T2D	T2B	T2C	625	Supply Wire Temp Rating	90°C	90°C
Supply Wire Temp Rating	90°C	90°C	90°C	90°C	90°C	90°C			

Class II & III*, Division 1 & 2 - Lamp Surface Temperature in °C @ 40°C Ambient under a Dust Blanket

High Pressure Sodium							
Configuration	50W (S68 Lamp)	70W (S62 Lamp)		100W (S54 Lamp)		150W (S51 Lamp)	
	Lamp	Lamp	Lamp w/ Instant Restart	Lamp	Lamp w/ Instant Restart	Lamp	Lamp w/ Auxilliary Qtz.
	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Refractor & Guard	EFG	EFG	EFG	EFG	EFG	EFG	EFG
Supply Wire Temp Rating	90°C	90°C	90°C	90°C	90°C	90°C	90°C

Section E
Hazlux® 3



Hazlux® 3 R-Housing Thermal Performance Data (55°C) - Hazardous Location

Class II & III*, Division 1 & 2 - Lamp Surface Temperature in °C @ 40°C Ambient under a Dust Blanket

Metal Halide				
Configuration	70W (M98 Lamp)	100W (M90 Lamp)	175W (M57 Lamp)	250W (M58 Lamp)
	Lamp	Lamp	Lamp	Lamp
	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Refractor & Guard	EFG	EFG	EFG	EFG
Supply Wire Temp Rating	90°C	90°C	90°C	90°C

Hazlux® 3 R-Housing Thermal Performance Data (55°C) - Hazardous Location

Class II & III*, Division 1 & 2 - Lamp Surface Temperature in °C @ 55°C Ambient under a Dust Blanket

High Pressure Sodium				
Configuration	50W (S68 Lamp)	70W (S62 Lamp)	100W (S54 Lamp)	150W (S55 or S56 Lamp)
	Lamp	Lamp	Lamp	Lamp
	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Refractor & Guard	EFG	EFG	EFG	EFG
Supply Wire Temp Rating	90°C	90°C	90°C	90°C

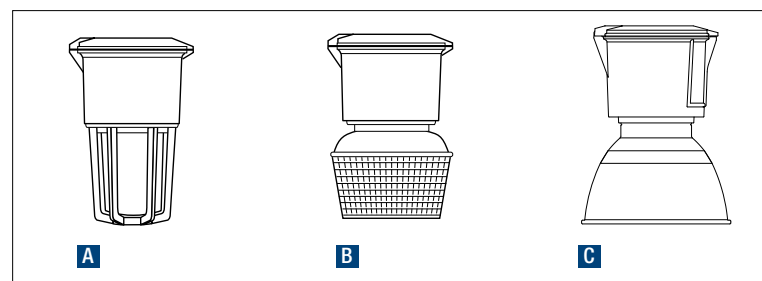
Hazlux 3 Large Housing thermal performance data

Class I, Division 2 - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

High Pressure Sodium					Metal Halide			
Configuration		200W (S66 Lamp)	250W (S50 Lamp)	400W (S51 Lamp)	250W (M58 Lamp)	320W (M154 Lamp)	350W (M131 Lamp)	400W (M59 Lamp)
		“T” No.	“T” No.	“T” No.	“T” No.	“T” No.	“T” No.	“T” No.
Globe	A	T2	325	T2A	T2	350	350	350
Refractor	B	T2A	325	T2B	T2A	325	325	325
High Bay Reflector	C	T2A	325	T2B	T2A	325	325	325
Supply Wire Temp. Rating		90°C	90°C	125°C	90°C	125°C	125°C	125°C

Class II, Division 1 & 2, Group E, F & G (165°C) - Lamp Surface Temperature in °C @ 40°C Ambient in Free Air

High Pressure Sodium					Metal Halide			
Configuration		200W (S66 Lamp)	250W (S50 Lamp)	400W (S51 Lamp)	250W (M58 Lamp)	320W (M154 Lamp)	350W (M131 Lamp)	400W (M59 Lamp)
		“T” No.	“T” No.	“T” No.	“T” No.	“T” No.	“T” No.	“T” No.
Globe	A	(200) T3	(200) T3	—	—	—	—	—
Refractor	B	(165) T3B	(165) T3B	(165) T3B	(165) T3B	(165) T3B	(165) T3B	(165) T3B
High Bay Reflector	C	(165) T3B	(165) T3B	(200) T3	(165) T3B	(200) T3	(200) T3	(200) T3
Supply Wire Temp. Rating		90°C	90°C	125°C	90°C	125°C	125°C	125°C



Area lighting

Hazlux® M3 Hazlite™

Assembly guide

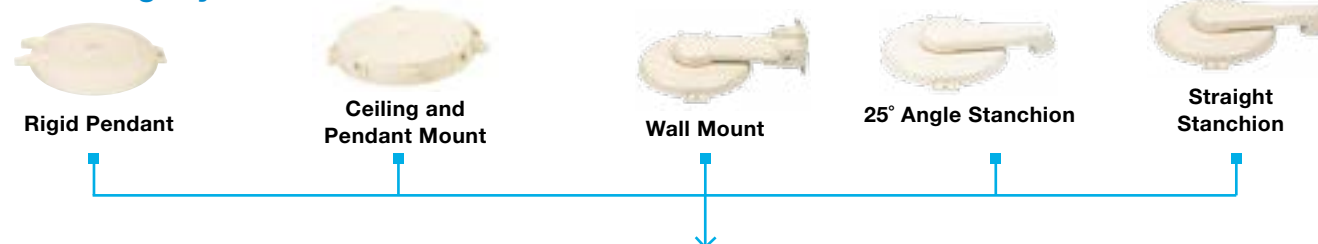
Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector

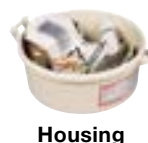


Hazlux® M3 Hazlite™ - Assembly Guide

Mounting Style



Ballast Tank



Globe or Refractor



Guard



Reflectors*



*Reflectors are sold separately

Catalog numbering system

UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

Ballast tank						Optics and mountings			Options	
D	S	M	07	P	12	- R5P	- C2	E	T	- C
1	2	3	4	5	6	7	8	9	10	11

Ballast Tank		
1. Fixture Series	D	Hazlite® M3 Fixture
2. Lamp Type	S	High-Pressure Sodium
	H	Metal Halide
3. Lampholder	M	Medium-Base Lampholder
4. Lamp Wattage	Metal Halide Lamps	
	05	50W ED17
	07	70W ED17
	10	100W ED17
	High Pressure Sodium Lamps	
	03	35W BD17
	05	50W BD17
	07	70W BD17
	10	100W BD17
	15	150W BD17
5. Ballast Circuit	H	High Reactance
	P	Reactor Type
6. Voltage	12	120 Volt

Optics & Mountings		
7. Optical Assembly Options*	TG	Tempered Globe Only
	TGP	Tempered Globe and Polymeric Guard
	R1	Type I (Long and Narrow) Refractor Globe
	R3	Type III (Assymetric) Refractor Globe
	R5	Type V (Symetric) Refractor Globe
	R1P	R1 with Polymeric Guard
	R3P	R3 with Polymeric Guard
	R5P	R5 with Polymeric Guard
* For silicone coating, please add suffix "S" first before the digit (ex: STG)		
8. Mounting style	P2	3/4" Rigid Pendant
	P3	1" Rigid Pendant
	B2	3/4" Wall Mount
	B3	1" Wall Mount
	C2	3/4" Ceiling Mount
	C3	1" Ceiling Mount
	L4	1-1/4" Straight Stanchion
	L5	1-1/2" Straight Stanchion
	S4	1-1/4" 25° Angle Stanchion
	S5	1-1/2" 25° Angle Stanchion
9. UNIPAK™ Options	D	UNIPAK™ with Diffused Coated Lamp
	E	UNIPAK™ with Clear Lamp
	U	UNIPAK™ No Lamp

Options		
10. Special Options	T	HazCote® Black Custom Corrosion Coating on all Aluminum Parts (Consult Factory)
11. Certification	C	Canadian Market

Certifications & Standards*

Approvals/Characteristics

- Class I** – Zone 2, Groups IIC, IIB, IIA
 – Division 2, Groups A, B, C and D
- Class II** – Division 1 and 2, Groups E, F and G
- Class III** – UL844
 – CSA C22.2 No. 137



* Classification may varie upon light source and wattage.
 For details, see Thermal Performance Chart on P53.

Area lighting

Hazlux® M3 Hazlite™

Individual components (to be used with ballast housing)



Mounting Options

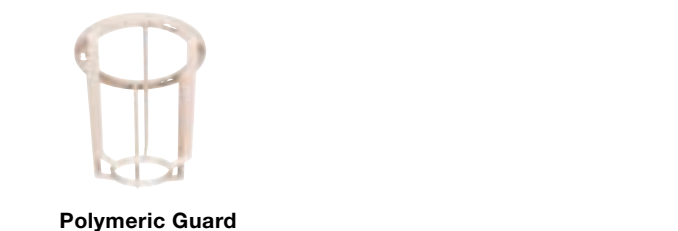
PART NO.	Description	Conduit Hub Size
VMP2	Rigid Pendant	3/4"
VMP3	Rigid Pendant	1"
VMC2	Ceiling Pendant Mount	3/4"
VMC3	Ceiling Pendant Mount	1"
VMB2	Wall Mount	3/4"
VMB3	Wall Mount	1"
VMS4	25° Angle Stanchion	1-1/4"
VMS5	25° Angle Stanchion	1-1/2"
VML4	Straight Stanchion	1-1/4"
VML5	Straight Stanchion	1-1/2"



Globes or Refractors*

PART NO.	Description
VGT15	Heat-Resistant Prismatic Glass Globe
VGL15R1	IES Type I Refractor Globe
VGL15R3	IES Type III Refractor Globe
VGL15R5	IES Type V Refractor Globe

* For silicone coating, please add "ST" to part no. (ex: VGT15TS)



Guards

PART NO.	Description
VGU15P	Polymeric for Use with Glass Globes or Refractors

Optional components

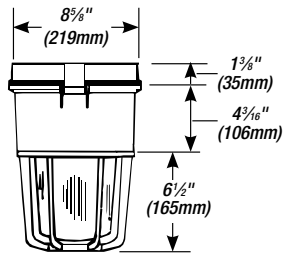


Reflectors

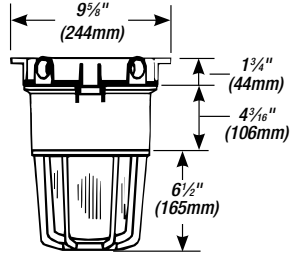
PART NO.	Description
VR15P	Standard Dome, Fiberglass-Reinforced Polyester
VRA15P	30° Angle Reflector, Fiberglass-Reinforced Polyester

Note: Reflectors are shipped bulk unless specified

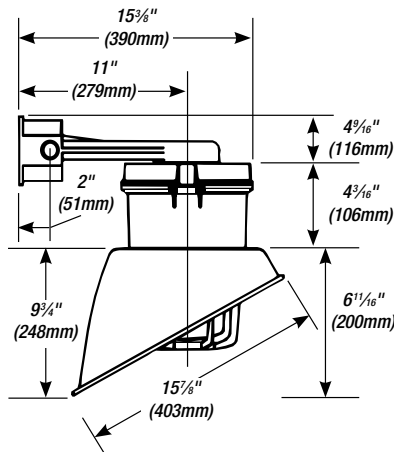
Dimensions Hazlite™ M3 fixtures with heat-resistant globe



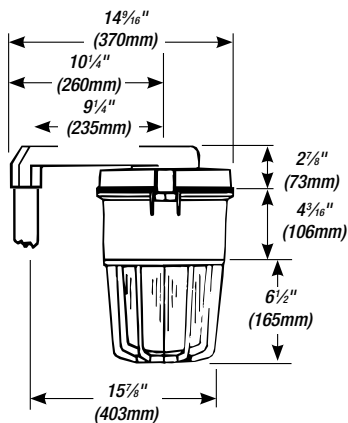
Rigid Pendant



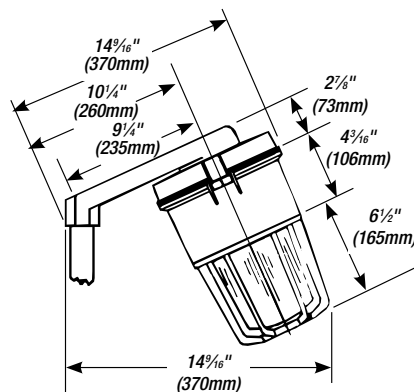
Ceiling Mount



Wall Mount

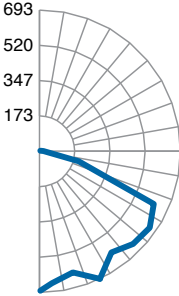


Straight Stanchion Mount



25° Angle Stanchion Mount

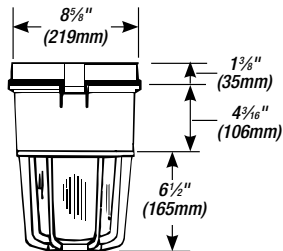
Photometry Hazlite™ M3 fixtures with heat-resistant globe

Ceiling Mount		Candlepower Curve 
Reference Data		
Catalogue No.	DSM05P12-TG-P2-E & VR15P	
Lamp	50W HPS BD17	
Lamp Lumens	4000	
Input Watt	62	
Luminaire Lumens	2865	
Efficiency	72%	
Efficacy Rating (LER)	46.2	
Spacing Criterion (0-180)	1.38	
Spacing Criterion (90-270)	1.38	
Spacing Criterion (diagonal)	1.70	

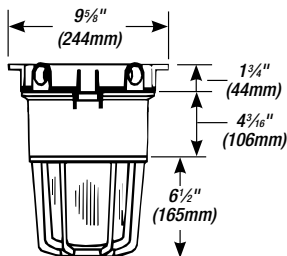
Area lighting

Hazlux® M3 Hazlite™

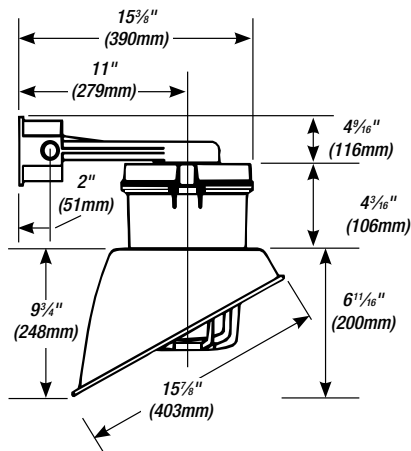
Dimensions Hazlite™ M3 fixtures with heat-resistant globe



Rigid Pendant



Ceiling Mount



Wall Mount

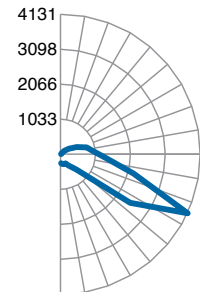
Photometry Hazlite™ M3 fixtures with heat-resistant globe

Ceiling Mount

Reference Data

Catalogue No.	DSM05P12-R1-P2-E
Lamp	50W HPS BD17
Lamp Lumens	4000
Input Watt	62
Luminaire Lumens	3340
Efficiency	83%
Efficacy Rating (LER)	53.9
Spacing Criterion (0-180)	1.44
Spacing Criterion (90-270)	3.60
Spacing Criterion (diagonal)	2.32

Candlepower Curve

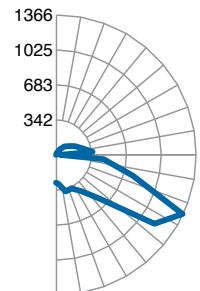


Ceiling Mount

Reference Data

Catalogue No.	DSM05P12-R3-P2-E
Lamp	50W HPS BD17
Lamp Lumens	4000
Input Watt	62
Luminaire Lumens	2979
Efficiency	74%
Efficacy Rating (LER)	48.1
Spacing Criterion (0-180)	1.30
Spacing Criterion (90-270)	1.70
Spacing Criterion (diagonal)	2.40

Candlepower Curve



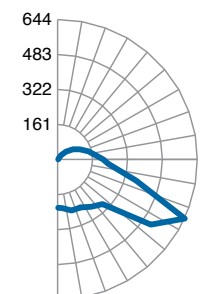
Photometry Hazlite™ M3 fixtures with heat-resistant globe

Ceiling Mount

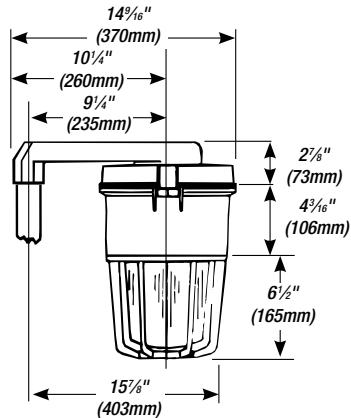
Reference Data

Catalogue No.	DSM05P12-R5-P2-E
Lamp	50W HPS BD17
Lamp Lumens	4000
Input Watt	62
Luminaire Lumens	2935
Efficiency	73%
Efficacy Rating (LER)	47.3
Spacing Criterion (0-180)	1.88
Spacing Criterion (90-270)	1.88
Spacing Criterion (diagonal)	2.84

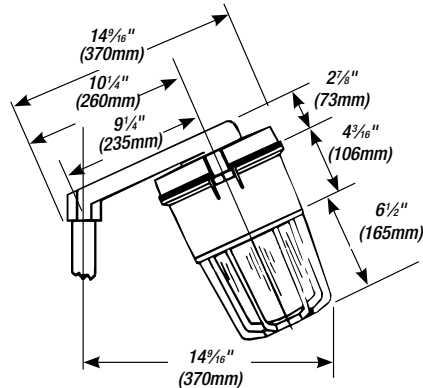
Candlepower Curve



Dimensions Hazlite™ M3 fixtures with heat-resistant globe



Straight Stanchion



25° Angle Stanchion Mount

Hazlite™ M3 Thermal Data - This data includes Globe, Guard and Reflector

Lamp Type	Ambient Temperature	Class II & III Globes or TR-REFR. Div 2 Temp. Code	8" REFR. Groups	Supply Wire Groups	Suitable °C	Voltage
35 Watt	40°C	T3A	EFG	EFG	75°C	120V
HPS	55°C	T3A	EFG	EFG	75°C	120V
Type S76	65°C	T3	EFG	EFG	85°C	120V
50 Watt	40°C	T3	EFG	EFG	75°C	120V
HPS	55°C	T2D	EFG	EFG	85°C	120V
Type S68	65°C	T2D	EFG	EFG	90°C	120V
70 Watt	40°C	T2B	EFG	EFG	75°C	120V
HPS	55°C	T2B	EFG	EFG	85°C	120V
Type S62	65°C	T2B	EFG	EFG	90°C	120V
100 WATT HPS	40°C	T2A	EF	EFG	85°C	120V
Type S54	55°C	T2	EF	EFG	110°C	120V
150 WATT HPS Type S55	40°C	325°C	EF	EFG	110°C	120V
Metal Halide 70 Watt Type M98	40°C	T2A	EF	—	90°C	120V
Metal Halide 100 Watt Type M90	40°C	T2A	EF	—	90°C	120V



Area lighting

Hazlux® 1 - Mogul base polymeric lighting fixtures are certified for use in Class I, Zone 2 and Division 2 locations and indoor or outdoor locations where lighting fixtures are exposed to corrosion accelerators such as dust, rain, hose-directed water and ice formation.

Features & benefits

- Fiberglass-reinforced polyester housing and mounting covers provide excellent strength, durability and corrosion resistance
- Impact-resistant and corrosion-resistant polycarbonate guards protect glass globes and refractors
- Guards have keyhole slots for ease of attachment to grounded, stainless steel guard screws
- Thermal shock-resistant globes and refractor globes provide superior protection for HID lamps and effective options for light distribution
- Polymeric reflectors are reinforced fiberglass that resist corrosion, UV rays and weathering and are bright white for maximum reflectant

Hazlux® 1 Certification Guide (40°C Ambient)

Lamp type	Wattage	Ambient Temperature	Class I Division 2 Temperature Code		Marine	NEMA 4X (Suitable for Hosedown)	Wet Locations	Supply wire Temperature Rating
			Globe/ Guard & Reflector	Refractor/ Guard				
High Pressure Sodium	50W	40°C	T3	T3	Yes	Yes	Yes	90°C
	70W	40°C	T3	T3	Yes	Yes	Yes	90°C
	100W	40°C	T3	T3	Yes	Yes	Yes	90°C
	150W	40°C	T2C	T2C	Yes	Yes	Yes	90°C
Metal Halide	70W	40°C	T3C	T3C	Yes	Yes	Yes	90°C
	100W	40°C	T3	T3	Yes	Yes	Yes	90°C
	150W	40°C	T2B	T2A	Yes	Yes	Yes	90°C
	175W	40°C	T2B	T2B	Yes	Yes	Yes	90°C

Hazlux® M1 Certification Guide

Lamp Type	Ambient Temperature	Marine	Ordinary	Class I Division 2 Globes - 'TR' Refractor with/without Reflectors		NEMA 4X (Suitable for Hosedown)	Supply wire Suitable	Voltage
				Temperature	Temp. Code			
35-Watt HPS Type S76	40°C	Yes	Yes	180°C	T3A	Yes	75°C	120V
	55°C	Yes	Yes	200°C	T3	Yes	90°C	120V
50-Watt HPS Type S68	40°C	Yes	Yes	215°C	T2D	Yes	75°C	120V
	55°C	Yes	Yes	215°C	T2D	Yes	90°C	120V
70-Watt HPS Type S62	40°C	Yes	Yes	260°C	T2B	Yes	75°C	120V
	55°C	Yes	Yes	260°C	T2B	Yes	90°C	120V
100-Watt HPS Type S54	40°C	No	Yes	280°C	T2A	Yes	125°C	120V
70-Watt MH T-rating	40°C	Yes	Yes	290°C	T2A	Yes	125°C	120V
100-Watt MH T-rating	40°C	No	Yes	290°C	T2A	Yes	125°C	120V

Area lighting

Hazlux® 1

Assembly guide

Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



Hazlux® 1 - Assembly Guide

Mounting Style



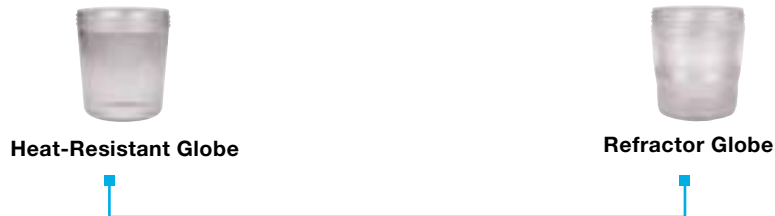
Ballast Tank



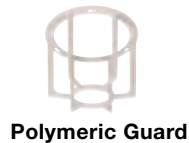
Standard Housing



Globe or Refractor



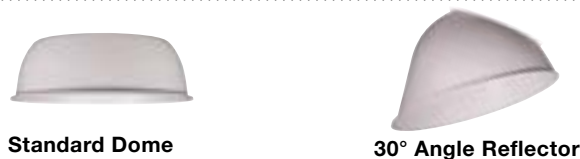
Guard



Polymeric Guard



Reflectors*



*Reflectors are sold separately

Catalog numbering system

UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

Ballast tank

P	S	Ø	07	H	04	Ø
1	2	3	4	5	6	7

Optics and Mountings

R5P	-	C2	E
8		9	10

Options

F	-	C
11		12

Ballast Tank		
1. Fixture Series	P	Hazlux® 1 Fixture
2. Lamp Type	H	Metal Halide
	S	High-Pressure Sodium
3. Starter Circuit/ Quartz Option	Ø	Standard Fixture
	J	Auto Shutoff (HPS only)
	P	Pulse Start (Metal Halide only)*
	R	Instant Restart (50-150W HPS)
4. Lamp Wattage	Metal Halide Lamps	
	07	70 Watts
	10	100 Watts
	15	150 Watts
	17	175 Watts
	High Pressure Sodium Lamps	
	05	50 Watts
	07	70 Watts
	10	100 Watts
	15	150 Watts
5. Ballast Circuit	C	Constant Wattage Auto Transformer
	H	High Reactance
	P	P Reactor Type
6. Voltage	03	120/277 Volt
	04	120/208/240/277 Volt
	09	120/277/347 Volt
	12	120 Volt
	20	208 Volt
	24	240 Volt
	27	277 Volt
	34	347 Volt
	48	480 Volt
7. Ballast Housing Style	Ø	Standard Housing

*150-Watt Metal Halide and 175-Watt Metal Halide not available with Pendant Mount

Optics & Mountings

8. Optical Assembly Options*	TG	Tempered Globe only
	TGP	Tempered Globe with Polymeric Guard
	R1	Refractor Globe (IES Type I)
	R3	Refractor Globe (IES Type III)
	R5	Refractor Globe (Type V)
	R1P	Refractor Globe (IES Type I) with Polymeric Guard
	R3P	Refractor Globe (IES Type III) with Polymeric Guard
	R5P	Refractor Globe (IES Type V) with Polymeric Guard

* For silicone coating, please add suffix "S" before the first digit (ex: STG)

9. Mounting Style	P2	3/4" Pendant Mount*
	B2	3/4" Wall Mount
	C2	3/4" Ceiling Mount
	S5	1-1/2" 25° Angle Stanchion
	L5	1-1/2" Straight Stanchion
10. UNIPAK™ OPTIONS	E	UNIPAK™ with Clear Lamp
	D	UNIPAK™ with Dual Arc Lamp
	U	UNIPAK™ without Lamp

Options

11. Fusing Options	F	Fuse Block with Fuse*
12 Certification	C	Canadian Market

* Fusing is not available with Marine locations

Certifications & Standards*

Approvals/Characteristics

- Class I** – Zone 2, Groups IIC, IIB, IIA
– Division 2, Groups A, B, C and D
- Class II** – Division 1 and 2, Groups E, F and G
- Class III**
– UL® Listed (UL1598A) for Marine Locations
– UL844
– NEMA 4X, IP66
– CSA C22.2 No. 137



Contact your Thomas & Betts sales representative to verify classification.

*Classification may vary upon light source and wattage. For details, see Thermal Performance chart on P.55.

Area lighting

Hazlux®1

Individual components (to be used with ballast housing)



Rigid Pendant



Ceiling Mount



**Wall Mount with
Metallic Arm**



25° Angle Stanchion



Straight Stanchion

Mounting Options

PART NO.	Description	Conduit Hub Size
VNP2	Rigid Pendant	3/4"
VNC2	Ceiling Mount	3/4"
VNB2	Wall Mount with Metallic Arm	3/4"
VNS5	25° Angle Stanchion	1-1/2"
VNL5	Straight Stanchion	1-1/4"

Designed for all Hazlux® 1 Ballasts Housings



**Heat-Resistant
Glass Globe**



Refractor Globe

Globes or Refractors*

PART NO.	Description
VGT31S	Heat-Resistant Glass Globe (7-3/4" dia.) 250 Watt Max
VGL31R1	IES Type I Light Distribution (Long and Narrow) Threaded Glass Globe
VGL31R3	IES Type III Light Distribution (Asymmetric) Threaded Glass Globe Refractor 7-3/4" dia.
VGL31R5	IES Type V Light Distribution (Symmetric) Threaded Glass Globe Refractor 7-3/4" dia.

** For silicone coating, please add "TS" to part no. (ex: VGT31TS)*



Polymeric Guard

Guards

PART NO.	Description
VGU31RP	Polymeric Guard for Use with Threaded Glass Globes and Refractors (7-3/4" dia.)

Optional components



Standard Dome

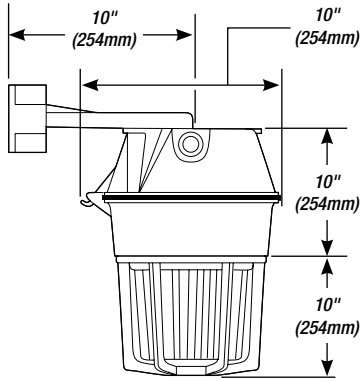


30 degree Angle Reflector

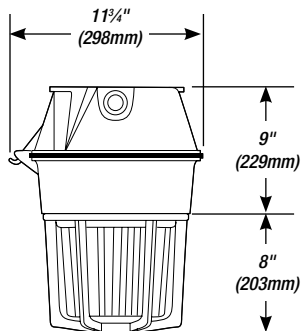
Reflectors

PART NO.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester, for use with 7-3/4"-dia. Globes
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester, for use with 7-3/4"-dia. Globes

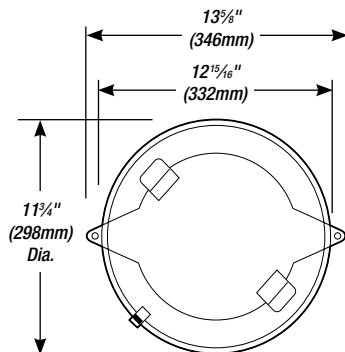
Dimensions Hazlux® 1 fixtures



Wall Arm Mount with Globe and Guard

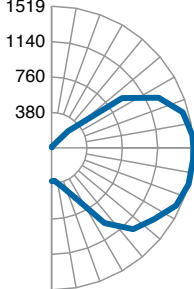


Ceiling Mount with Globe and Guard



Ceiling Mount Top View

Photometry Hazlux® 1 fixtures

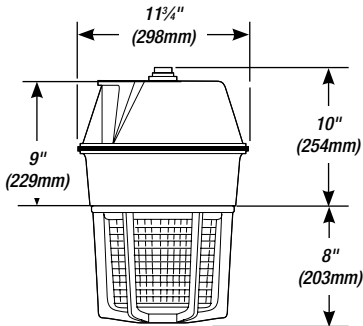
Ceiling Mount		Candlepower Curve 
Reference Data		
Catalogue No.	PSO15H090-TGP-C2E	
Lamp	150W HPS ED23 1/2	
Lamp Lumens	16000	
Input Watt	188	
Luminaire Lumens	13388	
Efficiency	84%	
Efficacy Rating (LER)	71.2	
Spacing Criterion (0-180)	NA	
Spacing Criterion (90-270)	NA	
Spacing Criterion (diagonal)	NA	

Area lighting

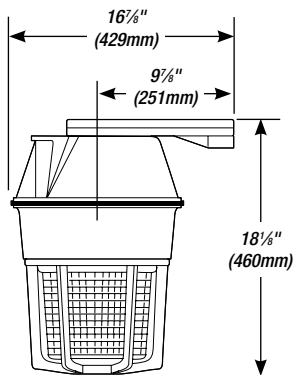
Hazlux® 1

Dimensions

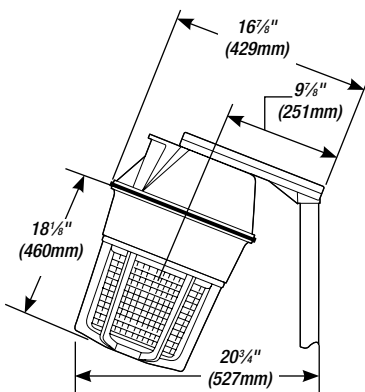
Hazlux® 1 fixtures



Pendant Mount with Refractor and Guard



Straight Stanchion Mount



25° Angle Stanchion Mount

Photometry

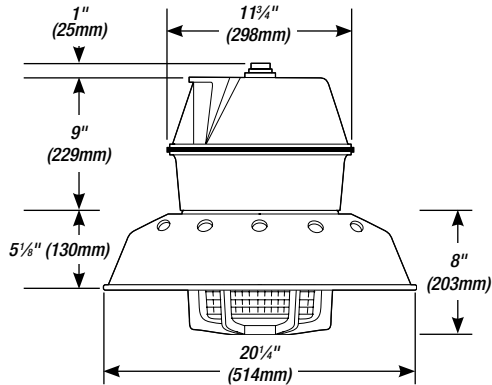
Hazlux® 1 fixtures

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	PHO17C090-R1-C2E	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	11973	
Efficiency	86%	
Efficacy Rating (LER)	57.0	
Spacing Criterion (0-180)	1.82	
Spacing Criterion (90-270)	6.64	
Spacing Criterion (diagonal)	3.10	

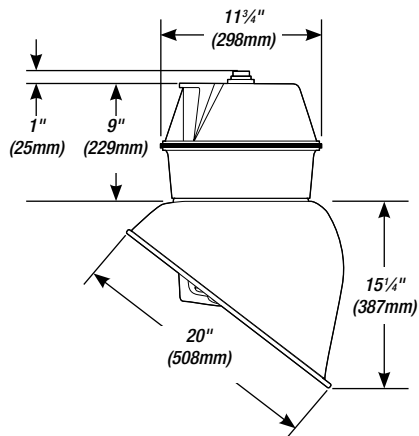
Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	PSO15H090-R3-C2E	
Lamp	150W HPS ED23 1/2	
Lamp Lumens	16000	
Input Watt	188	
Luminaire Lumens	14148	
Efficiency	88%	
Efficacy Rating (LER)	75.3	
Spacing Criterion (0-180)	1.44	
Spacing Criterion (90-270)	1.84	
Spacing Criterion (diagonal)	2.78	

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	PHO17C090-R5-C2E	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	12489	
Efficiency	89%	
Efficacy Rating (LER)	59.5	
Spacing Criterion (0-180)	2.38	
Spacing Criterion (90-270)	2.38	
Spacing Criterion (diagonal)	2.40	

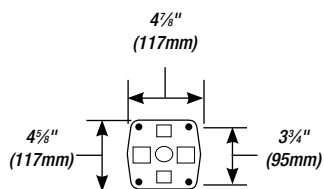
Dimensions Hazlux® 1 fixtures



Dome Reflector with Refractor and Guard



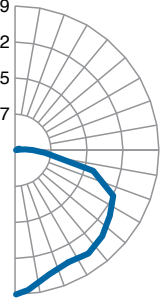
Angle Reflector with Globe and Guard



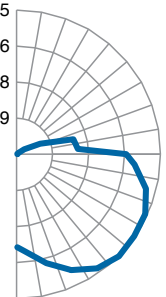
Wall-Mount Flange Template

Photometry Hazlux® 1 fixtures

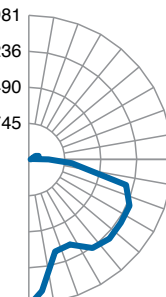
Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	PHO17C090-TGP-C2E & VR31P	2509
Lamp	175W MH ED28	1882
Lamp Lumens	14000	1255
Input Watt	210	627
Luminaire Lumens	10873	
Efficiency	78%	
Efficacy Rating (LER)	51.8	
Spacing Criterion (0-180)	1.36	
Spacing Criterion (90-270)	1.36	
Spacing Criterion (diagonal)	158	



Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	PHO17C090-TGP-C2E & VRA31P	2995
Lamp	175W MH ED28	2246
Lamp Lumens	14000	1498
Input Watt	210	749
Luminaire Lumens	9587	
Efficiency	68%	
Efficacy Rating (LER)	45.7	
Spacing Criterion (0-180)	2.14	
Spacing Criterion (90-270)	1.64	
Spacing Criterion (diagonal)	1.54	



Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	PSO15H090-TGP-C2E & VR31P	2981
Lamp	150W HPS ED23 1/2	2236
Lamp Lumens	16000	1490
Input Watt	188	745
Luminaire Lumens	12675	
Efficiency	79%	
Efficacy Rating (LER)	67.4	
Spacing Criterion (0-180)	0.90	
Spacing Criterion (90-270)	0.90	
Spacing Criterion (diagonal)	1.50	



Area lighting

Hazlux® M1 Hazlite™

Assembly guide

Complete luminaire consists of:

- A mounting style
- Ballast Tank
- Globe or Refractor
- Optional Guard and/or Reflector



Hazlux® M1 Hazlite™ - Assembly Guide

Mounting Style



Rigid Pendant Cone



Ceiling Mount

Ballast Tank



Standard Housing

Globe or Refractor



Heat-Resistant Globe



Refractor Globe

Guard



Polymeric Guard

Reflectors*



Standard Dome



30° Angle Reflector

*Reflectors are sold separately

Catalog numbering system

UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

High-Pressure Sodium / Metal Halide

Ballast tank

PD	S	M	05	P	12	Ø
1	2	3	4	5	6	7

Optics and mountings

TGP	C2	E
8	9	10

Options

F	-	C
11		12

Ballast Tank		
1. Fixture Series	PD	Hazlite™ M1 Fixture
2. Lamp Type	H	Metal Halide
	S	High-Pressure Sodium
3. Lampholder	M	Medium Base Lampholder
4. Lamp Wattage	Metal Halide Lamps	
	07	70W ED17
	10	100W ED17
	High Pressure Sodium Lamps	
	03	35W BD17
	05	50W BD17
	07	70W BD17
	10	100W BD17
5. Ballast Circuit	H	High Reactance
	P	Reactor Type
6. Voltage	12	120 Volt
7. Ballast Housing Style	Ø	Standard Housing

Optics & Mountings

8. Optical Assembly Options*	TG	Tempered Globe Only
	TGP	Tempered Globe with Polymeric Guard
	R1	Refractor Globe (IES Type I)
	R3	Refractor Globe (IES Type III)
	R5	Refractor Globe (IES Type V)
	R1P	Refractor Globe (IES Type I) with Polymeric Guard
	R3P	Refractor Globe (IES Type III) with Polymeric Guard
	R5P	Refractor Globe (IES Type V) with Polymeric Guard

* For silicone coating, please add suffix "S" before the first digit (ex: STG)

9. Mounting style	P2	3/4" Cone Pendant
	C2	3/4" Ceiling, 1 Hub
	C22	3/4" Ceiling, 2 Hubs
10. UNIPAK™ Options	E	UNIPAK™ with Clear Lamp
	U	UNIPAK™ without Lamp

Options

11. Fusing Options	F	Fuse Block(s) with Fuse(s)*
12. Certification	C	Canadian Market

* Fusing is not available with Marine locations

Certifications & Standards*

Approvals/Characteristics

- Class I** – Zone 2, Groups IIC, IIB, IIA
- Division 2, Groups A, B, C and D
 - UL844
 - CSA C22.2 No. 137



*Classification may vary upon light source and wattage. For details, see Thermal Performance chart on P.55.

Area lighting

Hazlux® M1 Hazlite™

Individual components (to be used with ballast housing)



Rigid Pendant Cone



Ceiling Mount



Refractor Globe



Heat-Resistant
Glass Globe



Polymeric Guard

Optional components



Standard Dome



30 degree Angle Reflector

Mounting Options

PART NO.	Description	Conduit Hub Size	Std. Pkg.
VPA2	Rigid Pendant Cone	3/4"	5
VPC2	Ceiling Mount	3/4"	5
VPC22	Feed-through	3/4"	5

Exit Sign

PART NO.	Description	Colour	Std. Pkg.
VRE22	Three-sided Exit Sign	Red	1

Globes or Refractors*

PART NO.	Description
VGT15	Heat-Resistant Globe
VGL15R1	IES Type I Refractor Globe
VGL15R3	IES Type III Refractor Globe
VGL15R5	IES Type V Refractor Globe

* For silicone coating, please add "TS" to part no. (ex: VGT15TS)

Guards

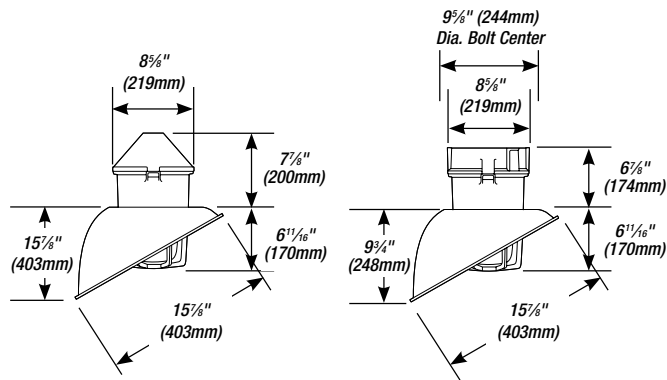
PART NO.	Description
VGU15P	Polymeric Guard for use with Glass Globes and Refractors

Reflectors

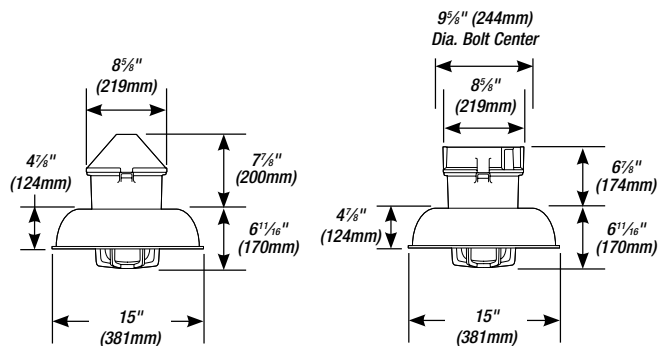
PART NO.	Description
VR15P	Standard Dome, Fiberglass-Reinforced Polyester
VRA15P	30° Angle Reflector, Fiberglass-Reinforced Polyester

Dimensions

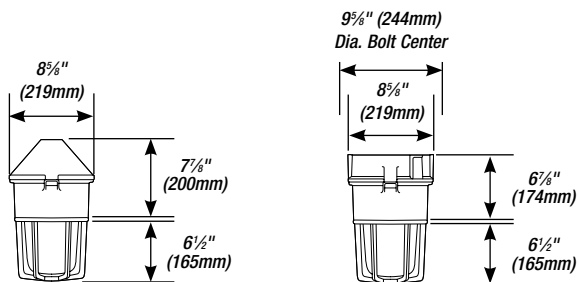
Cone pendant mount Ceiling mount



Glass Globe with Angled Reflector



Glass Globe with Dome Reflector



Glass Globe and No Reflector

Photometry

Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	PDHM07P120T-GLC2 & VR15P	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	3756	
Efficiency	66%	
Efficacy Rating (LER)	49	
Spacing Criterion (0-180)	1.42	
Spacing Criterion (90-270)	1.42	
Spacing Criterion (diagonal)	1.72	

Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	PDHM07P120T-GLC2	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	4804	
Efficiency	84%	
Efficacy Rating (LER)	62	
Spacing Criterion (0-180)	2.26	
Spacing Criterion (90-270)	2.26	
Spacing Criterion (diagonal)	2.38	

Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	PDHM07H120T-GLC22 & VRA15P	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	3855	
Efficiency	68%	
Efficacy Rating (LER)	50	
Spacing Criterion (0-180)	1.92	
Spacing Criterion (90-270)	1.38	
Spacing Criterion (diagonal)	1.64	

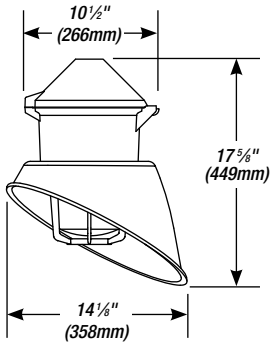
Area lighting

Hazlux® M1 Hazlite™

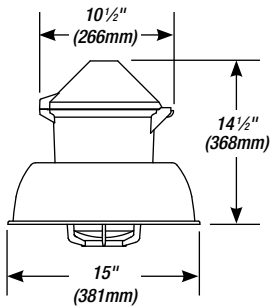
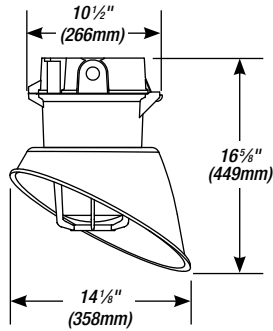
Dimensions

Cone pendant mount

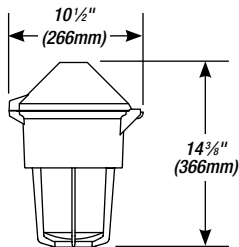
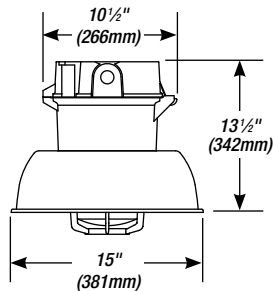
Ceiling mount



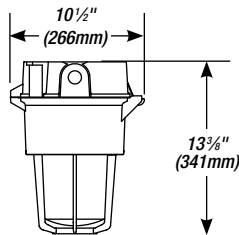
Glass Globe with Angled Reflector



Glass Globe with Dome Reflector



Glass Globe and No Reflector



Photometry

Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	PDHM07P120R1	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	4490	
Efficiency	79%	
Efficacy Rating (LER)	58	
Spacing Criterion (0-180)	1.42	
Spacing Criterion (90-270)	5.04	
Spacing Criterion (diagonal)	2.98	

Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	PDHM07P120R3	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	4864	
Efficiency	85%	
Efficacy Rating (LER)	63	
Spacing Criterion (0-180)	1.24	
Spacing Criterion (90-270)	1.62	
Spacing Criterion (diagonal)	1.62	

Ceiling Mount

Reference Data		Candlepower Curve
Catalogue No.	PDHM07P120R5	
Lamp	70W PSMH ED17	
Lamp Lumens	5700	
Input Watt	77	
Luminaire Lumens	4791	
Efficiency	84%	
Efficacy Rating (LER)	62	
Spacing Criterion (0-180)	1.68	
Spacing Criterion (90-270)	1.68	
Spacing Criterion (diagonal)	3.08	





Area lighting

Hazlux® 5 HID Lighting Fixtures for Class I, Division 1, Groups C and D - Hazardous Locations.

Features

- UL® Listed for Class I, Division 1 for safe, explosion-proof application in a variety of hazardous areas
- Factory-sealed assembly meets code requirements without the need for external sealing fittings
- Dual-pitch Acme threads make assembly easy and faster than designs with standard V-cut threads, greatly reducing the risk of cross threading
- Factory-wired connection block means ballast is pre-wired to lower half of electrical connection block, allowing wireless connection of ballast housing to mounting module
- Five mounting styles - pendant, ceiling, wall, angle stanchion and bulkhead - provide versatility for installation
- Thermal shock-resistant glass globes are factory assembled and pre-tested to ensure the highest quality and safety
- Die-cast aluminum guards are epoxy powder coated for corrosion resistance and have keyhole slots for easy attachment to stainless steel screws
- Choice of high-pressure sodium and metal halide light sources in wattages from 50 to 400 watts
- Polymeric reflectors are available in standard dome and 30° angle versions
- UL® Listed for Marine and Wet Locations, making Hazlux® 5 fixtures ideal for use in many outdoor, offshore, hosedown and coastal locations
- UL® Paint Spray Listed in wattages up to 100 watts

Applications

- Chemical Plants
- Oil Refineries
- Offshore Platforms
- Waste Treatment Facilities
- Automotive Manufacturing Plants
- Paint Manufacturing Facilities
- Paint Spray Locations
- Chemical and Plastic Mixing and Storage Areas
- Pipeline Pumping Stations
- Oil and Gas Terminals
- Defense and Government Facilities

Wattages and Voltages

- High-Pressure Sodium: 50-400 Watts
- Metal Halide: 70-400 Watts
- All Luminaires: Multi-Tap standard (120, 208, 240, 277V), wired 120V (Other voltages, frequencies available)

Materials and Finishes

- Ballast Housing: Copper-free aluminum, powder finish
- Mounting Modules: Copper-free aluminum, powder finish
- Hardware: Stainless steel
- Globes: Tempered glass
- Guard: Copper-free aluminum, powder finish
- Reflectors: Fiberglass-reinforced



Certifications & Standards*

- UL844 Class I, Division 1, Groups C, D
- UL844 Paint Spray (100W max.)
- UL844 Class II, Division 1, Groups E, F, G
- Outdoor Wet Locations
- Temperature Range: -30°C to 40°C

Approvals/Characteristics



**Classification may vary upon light source and wattage. For details, see Thermal Performance chart on P.80.*

Area lighting

Hazlux® 5

Assembly guide

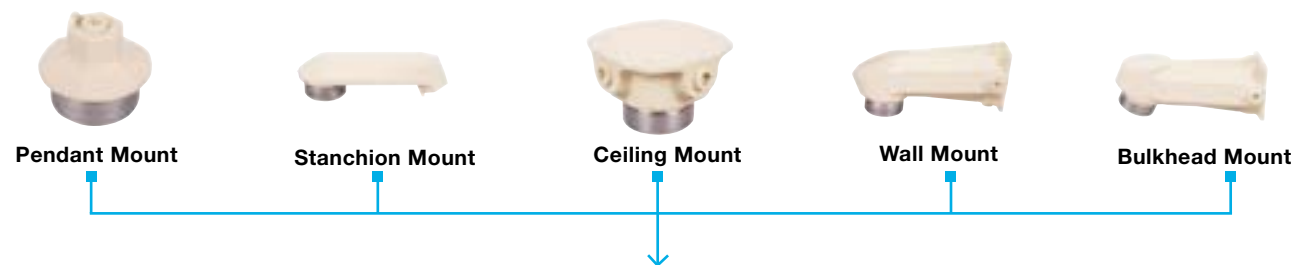
Complete luminaire consists of:

- A mounting style
- Fixture and Globe
- Optional Guard and/or Reflector



Hazlux® 5 - Assembly Guide

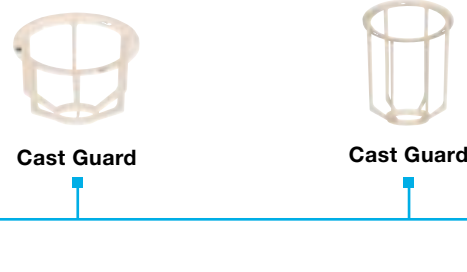
Mounting Style



Fixture and Globe



Guard



Reflectors*



*Reflectors are sold separately

Catalog numbering system

UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

Ballast tank

X	S	Q	07	H	04	0
1	2	3	4	5	6	7

Optics and mountings

- G	- C2	E
8	9	10

Options

T	F	- C
11	12	13

Ballast Tank		
1. Fixture Series	X	Hazlux® 5 Fixture
2. Lamp Type	S	High-Pressure Sodium
	H	Metal Halide
3. Starter Circuit/ Quartz Option	Ø	Standard Fixture (Without Options)
	P	Pulse Start (Metal Halide Only)
	Q	Quartz Auxiliary Option (Not Hazardous Rated)
	R	Fixture with Instant Restart Option (70, 100 and 150 HPS Only)
4. Lamp Wattage	Metal Halide Lamps	
	07	70W ED28
	10	100W ED28
	17	175W ED28
	25	250W ED28
	32	320W ED28PS
	40	400W ED37
	High Pressure Sodium Lamps	
	05	50W ED23 1/2
	07	70W ED23 1/2
	10	100W ED23 1/2
	15	150W ED23 1/2
	20	200W ED18
	25	250W ED18
	40	400W ED18
5. Ballast Circuit	C	Constant Wattage Autotransformer (CWA)
	I	Constant Wattage Insulated Transformer (CWI)
	H	High Reactance
	P	Reactor
6. Ballast Voltage	04	Multi-Tap 120/208/240/277 Volt
	09	120/277/347V Volt (CSA)
	12	120 Volt
	20	208V Volt
	24	240V Volt
	27	277V, 60 Hz
7. Ballast Housing Style	34	347V Volt
	48	480V Volt
	Ø	Standard Housing
	S	Standard Housing with Stainless Steel Inserts

Optics & Mountings

8. Guard	G	Cast Guard (Omit "G" if Guard Not Required)
9. Mounting style	P2	3/4" Pendant
	P3	1" Pendant
	C2	3/4" Ceiling
	C3	1" Ceiling
	B2	3/4" Wall
	B3	1" Wall
	J2	3/4" Bulkhead
	J3	1" Bulkhead
	S4	1-1/4" 25° Stanchion
	S5	1-1/2" 25° Stanchion
10. UNIPAK™ Options	D	UNIPAK™ with Dual Arc Lamp
	E	UNIPAK™ with Clear Lamp
	U	UNIPAK™ No Lamp

Options

11. Special Options	T	HazCote® Black custom anti-corrosion coating (Consult factory)
	PS	Paint Spray Label (100W max.)
12. Fusing Options	F	Fuse Block with Fuse*
13. Certification	C	Canadian Market

*Fusing is not available with Marine locations

Certifications & Standards*

Approvals/Characteristics

- Class I**
- Division 1, Groups C and D
 - Zone 1, Groups IIC, IIB and IIA
- Class II**
- Division 2, Groups A, B, C and D
 - Division 1 and 2, Groups E, F and G
 - UL844
 - CSA C22.2 No. 137



*Classification may vary upon light source and wattage. For details, see Thermal Performance chart on P.80.

Area lighting

Hazlux® 5

Individual components (to be used with ballast housing)



Pendant Mount



Stanchion Mount



Ceiling Mount



Wall Mount



Bulhead Mount



XGSA44 Replacement
Globe Assembly



XGSA44A Replacement
Globe Assembly

Optional components



XGU44 Cast Aluminum
Guard



VGU31 Cast Aluminum
Guard



Standard Dome



30° Angle Reflector

Mounting Options

PART NO.	Description	Conduit Hub Size
XP2	Pendant Mount	3/4"
XP3	Pendant Mount	1"
XS4	Stanchion Mount	1-1/4"
XS5	Stanchion Mount	1-1/2"
XC2	Ceiling Mount	3/4"
XC3	Ceiling Mount	1"
XB2	Wall Mount	3/4"
XB3	Wall Mount	1"
XJ2	Bulhead Mount	3/4"
XJ3	Bulhead Mount	1"

Replacement Globe Assemblies

PART NO.	Description
XGSA44	Hazlux® 5 Replacement Globe Assembly - 150 HPS
XGSA44A	Hazlux® 5 Replacement Globe Assembly - 400 Watts and 250 HPS/MH

Guards

PART NO.	Description
XGU44	Cast Aluminum Guard
VGU31*	Cast Aluminum Guard

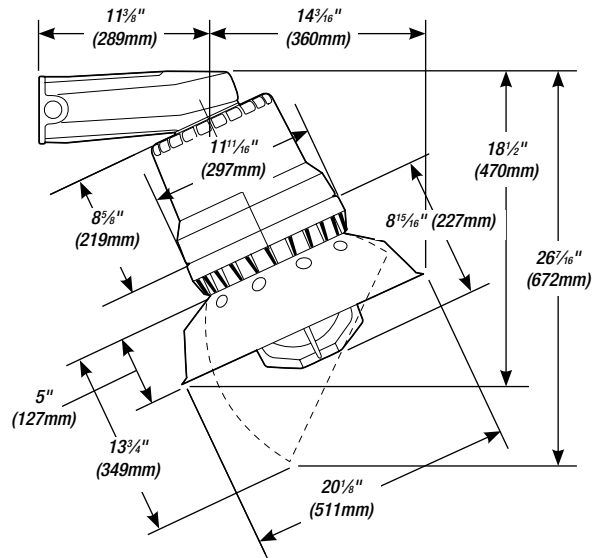
* Used on all 400-watt fixtures, 250-watt HPS fixtures and 250-watt metal halide fixtures

Reflectors

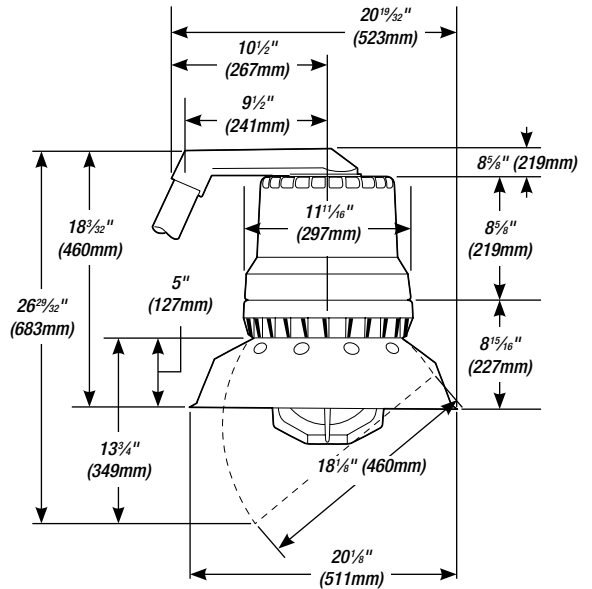
PART NO.	Description
VR31P	Standard Dome, Fiberglass-Reinforced Polyester
VRA31P	30° Angle Reflector, Fiberglass-Reinforced Polyester

Note: Reflectors are shipped bulk unless specified

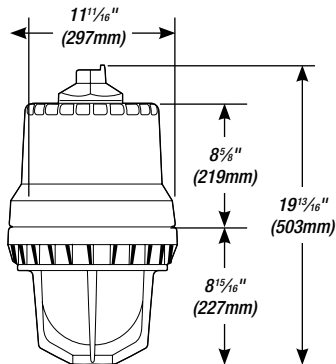
Dimensions Hazlux® 5 fixtures



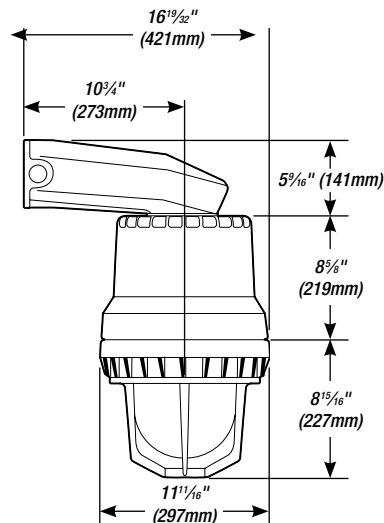
Bulkhead Mount with Globe, Guard and Reflector



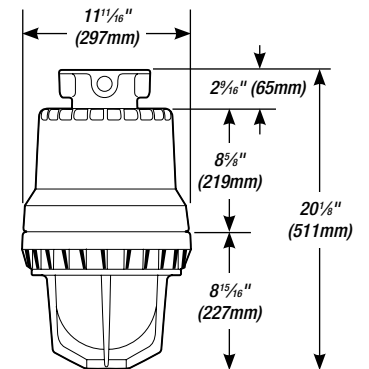
Stanchion Mount with Globe, Guard and Reflector



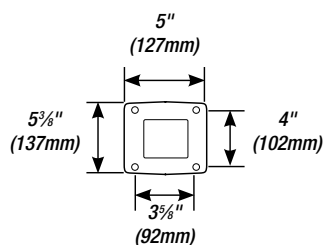
Pendant Mount with Globe and Guard



Wall Mount with Globe and Guard



Ceiling Mount with Globe and Guard



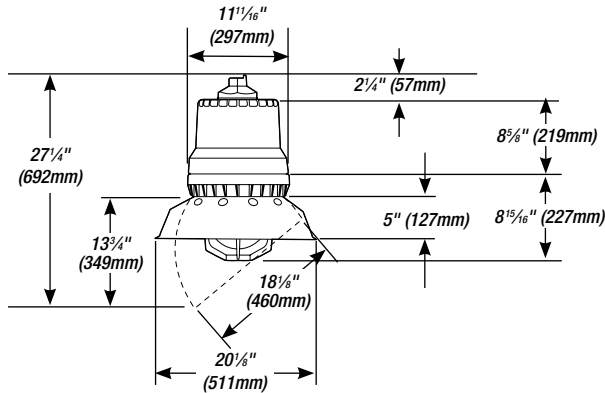
Template for Bulkhead for Wall Mount

Area lighting

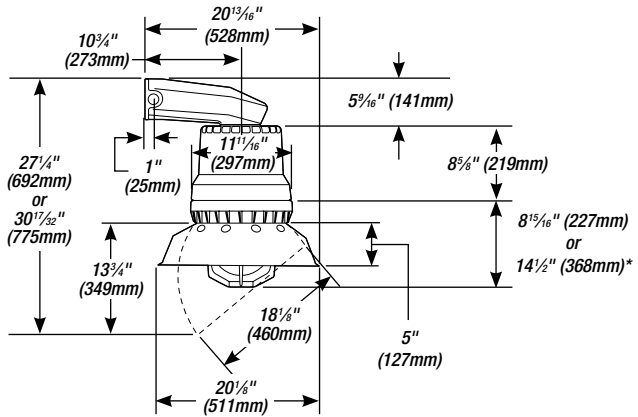
Hazlux® 5

Dimensions

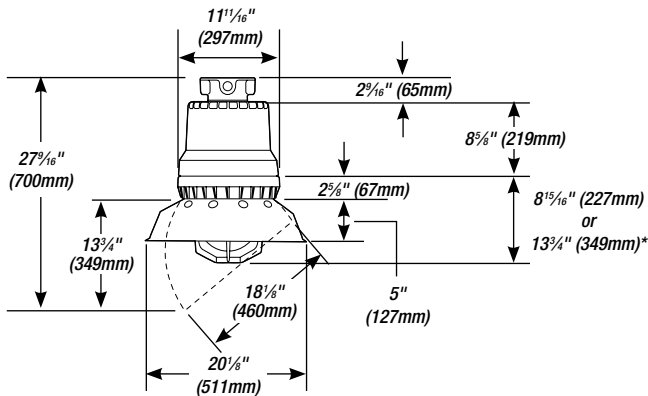
Hazlux® 5 fixtures (continued)



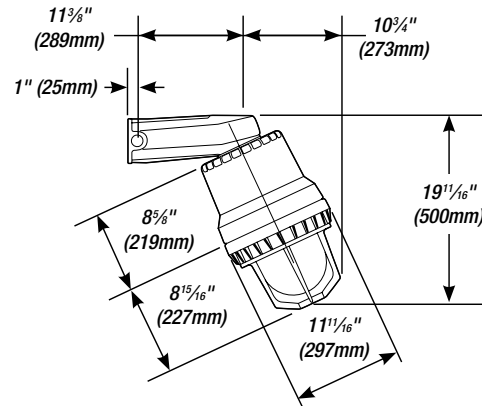
Pendant Mount with Globe, Guard and Reflector



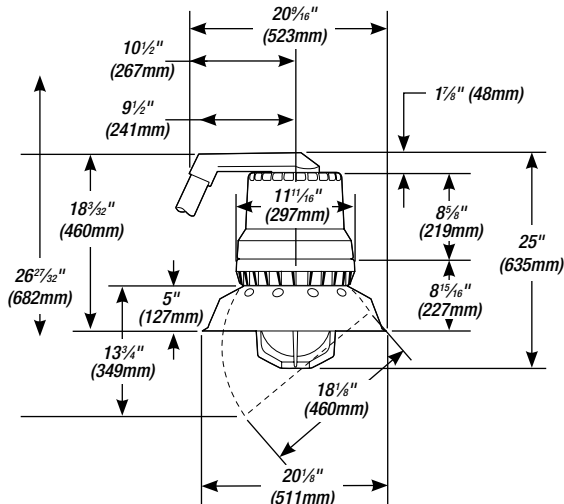
Wall Mount with Globe, Guard and Reflector



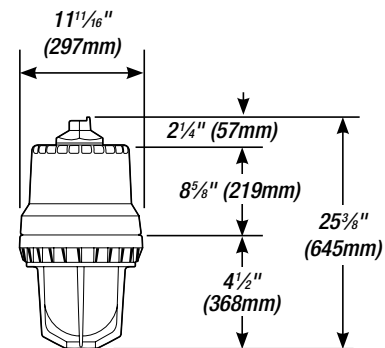
Ceiling Mount with Globe, Guard and Reflector



Bulkhead Mount with Globe and Guard



Stanchion Mount with Globe, Guard and Reflector*



Pendant Mount with Globe and Guard*

*When XGSA44A globe assembly is used with ED18 and ED37 lamps.

Photometry Hazlux® 5 fixtures

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	XSO10H090G-C2-E	
Lamp	100W HPS ED23 1/2	
Lamp Lumens	9500	
Input Watt	130	
Luminaire Lumens	7162	
Efficiency	75%	
Efficacy Rating (LER)	55.1	
Spacing Criterion (0-180)	2.66	
Spacing Criterion (90-270)	2.66	
Spacing Criterion (diagonal)	2.74	

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	XSO10H090G-C2-E & VR31P	
Lamp	100W HPS ED23 1/2	
Lamp Lumens	9500	
Input Watt	130	
Luminaire Lumens	6254	
Efficiency	66%	
Efficacy Rating (LER)	48.1	
Spacing Criterion (0-180)	1.60	
Spacing Criterion (90-270)	1.60	
Spacing Criterion (diagonal)	1.70	

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	XHO17C090G-C2-F	
Lamp	175W MH ED28	
Lamp Lumens	1400	
Input Watt	210	
Luminaire Lumens	9368	
Efficiency	67%	
Efficacy Rating (LER)	44.6	
Spacing Criterion (0-180)	1.82	
Spacing Criterion (90-270)	1.82	
Spacing Criterion (diagonal)	2.20	

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	XHO17C090G-C2-E & VR31P	
Lamp	175W MH ED28	
Lamp Lumens	14000	
Input Watt	210	
Luminaire Lumens	8264	
Efficiency	59%	
Efficacy Rating (LER)	39.4	
Spacing Criterion (0-180)	1.44	
Spacing Criterion (90-270)	1.44	
Spacing Criterion (diagonal)	1.54	

Ceiling Mount		Candlepower Curve
Reference Data		
Catalogue No.	XHO32C090-C2-E	
Lamp	320W MH ED28PS	
Lamp Lumens	30000	
Input Watt	368	
Luminaire Lumens	27341	
Efficiency	91%	
Efficacy Rating (LER)	74.3	
Spacing Criterion (0-180)	NA	
Spacing Criterion (90-270)	NA	
Spacing Criterion (diagonal)	NA	

Area lighting

Hazlux® M5 Hazlite™

Assembly guide

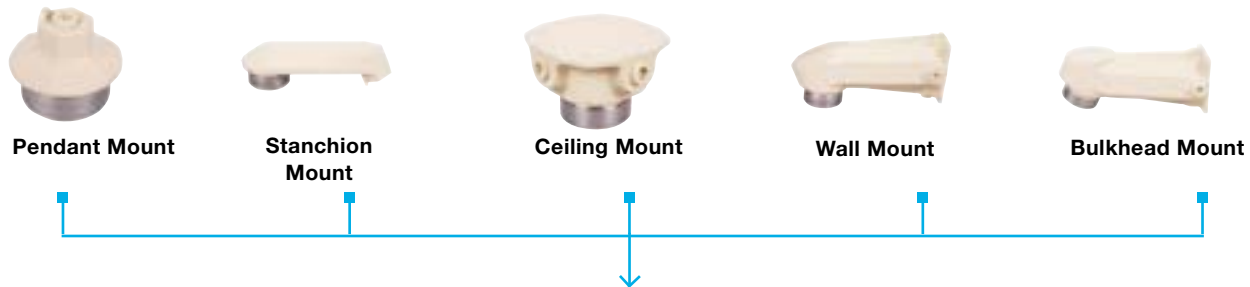
Complete luminaire consists of:

- A mounting style
- Fixture and Globe
- Optional Guard and/or Reflector



Hazlux® M5 Hazlite™ - Assembly Guide

Mounting Style



Fixture and Globe



Guard



Reflectors*



Standard Dome



30° Angle Reflector

*Reflectors are sold separately

Catalog numbering system

UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

**High-
Pressure
Sodium**

Fixture and globe

X	S	M	05	P	12	Ø
1	2	3	4	5	6	7

Optics and mountings

G	C2	E
8	9	10

Options

T	C
11	12

Ballast Tank		
1. Fixture Series	X	Hazlite™ M5 Fixture
2. Lamp Type	S	High-Pressure Sodium
3. Lampholder	M	Medium Base Lampholder
4. Lamp Wattage	High Pressure Sodium	
	05	50W BD17
	07	70W BD17
	10	100W BD17
	15	150W BD17
5. Ballast Circuit	P	Reactor Type
6. Voltage	12	120 Volt
7. Ballast Housing Style	Ø	Standard Housing
	S	Standard Housing with Stainless Steel Inserts

Optics & Mountings		
8. Optics and Guards	G	Cast Guard (Omit "G" if Guard is Not Required)
9. Mounting style	P2	3/4" Rigid Pendant
	P3	1" Rigid Pendant
	C2	3/4" Ceiling
	C3	1" Ceiling
	B2	3/4" Wall
	B3	1" Wall
	J2	3/4" Bulkhead
	J3	1" Bulkhead
	S4	1-1/4" 25° Angle Stanchion
	S5	1-1/2" 25° Angle Stanchion
10. UNIPAK™ Options	D	UNIPAK™ with Diffuse Coated Lamp
	E	UNIPAK™ with Clear Lamp

Options		
11. Special Options	T	HazCote® Black Custom Corrosion Coating on all Aluminum Parts (Consult Factory)
	PS	Paint Spray Label
12. Certification	C	Canadian Market

Certifications & Standards*

Approvals/Characteristics

- Class I** – Division 1, Groups C and D
 – Zone 1, Groups IIC, IIB and IIA
 – Division 2, Groups A, B, C and D
- Class II** – Division 1 and 2, Groups E, F and G
 – UL844
 – CSA C22.2 No. 137



*Classification may vary upon light source and wattage. For details, see Thermal Performance chart on P.82.

Area lighting

Hazlux® M5 Hazlite™

Individual components (to be used with ballast tank)



Pendant Mount



Stanchion Mount



Ceiling Mount



Wall Mount



Bulhead Mount



Mounting Options

PART NO.	Description	Conduit Hub Size
XP2	Pendant Mount	3/4"
XP3		1"
XS4	Stanchion Mount	1-1/4"
XS5		1-1/2"
XC2	Ceiling Mount	3/4"
XC3		1"
XB2	Wall Mount	3/4"
XB3		1"
XJ2	Bulhead Mount	3/4"
XJ3		1"

*Outlet Boxes include female electrical connectors and appropriate close-up plugs

Replacement Globe Assemblies

PART NO.	Description
XGSA15	Replacement Globe Assembly, 35-150 Watts

Optional components



Polymeric Guard



Standard Dome



30° Angle Reflector

Guards

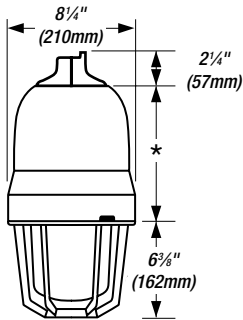
PART NO.	Description
XGU15	Cast Aluminum, Powder Finish

Reflectors

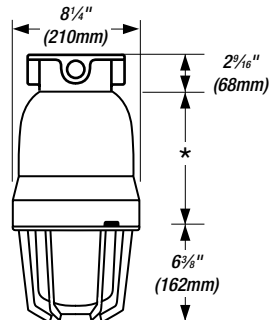
PART NO.	Description
VR15P	Standard Dome, Fiberglass-Reinforced Polyester
VRA15P	30° Angle Reflector, Fiberglass-Reinforced Polyester

*Note: Reflectors are shipped bulk unless specified

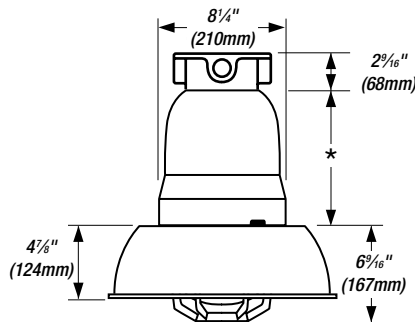
Dimension Hazlux® M5 Hazlite™ fixtures



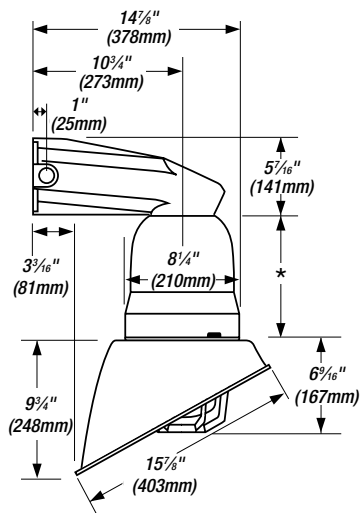
**Rigid Pendant
Globe/Guard**



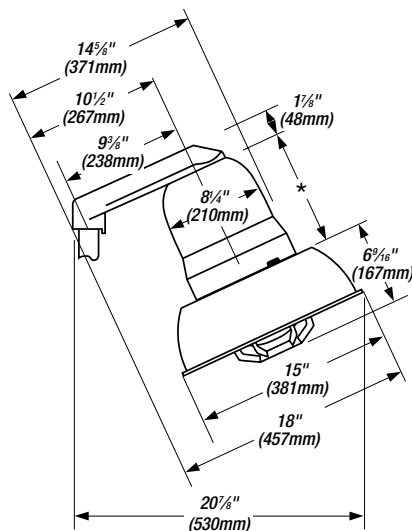
**Ceiling Mount
Globe/Guard**



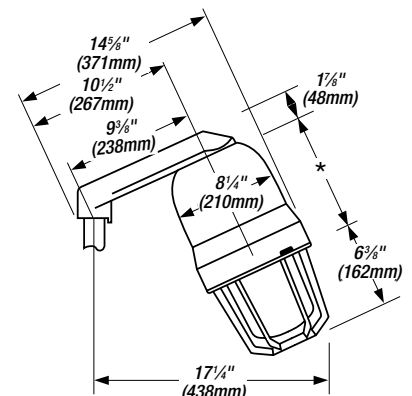
**Ceiling Mount Globe/Guard
with Dome Reflector**



**Wall Mount Globe/Guard with
30° Angle Reflector**



**Stanchion Mount Globe/Guard
with 30° Angle Reflector**



**Stanchion Mount
Globe/Guard**

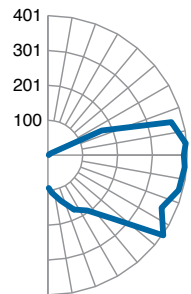
Photometry Hazlux® M5 Hazlite™ fixtures

Ceiling Mount

Reference Data

Catalogue No.	XSM05P12-O-P2E
Lamp	50W HPS BD17
Lamp Lumens	4000
Input Watt	66
Luminaire Lumens	2984
Efficiency	75%
Efficacy Rating (LER)	45.2
Spacing Criterion (0-180)	3.48
Spacing Criterion (90-270)	3.48
Spacing Criterion (diagonal)	3.22

Candlepower Curve

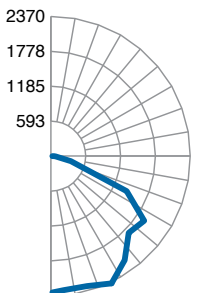


Ceiling Mount

Reference Data

Catalogue No.	XSM05P12-O-P2E & VR15P
Lamp	50W HPS BD17
Lamp Lumens	4000
Input Watt	66
Luminaire Lumens	2651
Efficiency	66%
Efficacy Rating (LER)	40.2
Spacing Criterion (0-180)	1.54
Spacing Criterion (90-270)	1.54
Spacing Criterion (diagonal)	1.88

Candlepower Curve



Area lighting

Hazlux® 5 Thermal performance data

Hazlux® 5 Thermal Performance Data (40°C) - Hazardous Location

Class I, Division 1, Group C & D - Maximum External Fixture Temperature in °C @ 40°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion								
Configuration		50W (S68 Lamp)		70W (S62 Lamp)		100W (S54 Lamp)		150W (S55 or S56 Lamp)
		Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.	Lamp
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	A	T6	T4A	T6	T4A	T5	T4	T4
Globe, Guard & Dome Reflector	B	T6	T4A	T6	T4A	T5	T4	T4
Globe, Guard & Angle Reflector	C	T6	T4A	T6	T4A	T5	T3C	T4

Class I, Division 1, Group C & D - Maximum External Fixture Temperature in °C @ 40°C Ambient in Free Air

Metal Halide / Nameplate marked with Rating based on hottest fixture congestion						
Configuration		100W (M90 Lamp)		175W (M57 Lamp)		250W (S56 Lamp)
		Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.	Lamp
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	A	T5	T4A	T3C (2)	T3C	T3C
Globe, Guard & Dome Reflector	B	T5	T4A	T3C (2)	T3C	T3C
Globe, Guard & Angle Reflector	C	T5	T4A	T3C (2)	T3C	T3C

Class II & III*, Division 1 & 2 - Maximum External Fixture Temperature in °C @ 40°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion								
Configuration		50W (S68 Lamp)		70W (S62 Lamp)		100W (S54 Lamp)		150W (S55 or S56 Lamp)
		Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.	Lamp
		Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups	Class II Groups
Globe & Guard	A	EFG	EFG	EFG	EFG	EFG	EF	EFG
Globe, Guard & Dome Reflector	B	EFG	EFG	EFG	EFG	EFG	EF	EFG
Globe, Guard & Angle Reflector	C	EFG	EFG	EFG	EFG	EFG	EF	EFG

Class II & III*, Division 1 & 2 - Maximum External Fixture Temperature in °C @ 40°C Ambient in Free Air

Metal Halide / Nameplate marked with Rating based on hottest fixture congestion			
Configuration		175W (M57 Lamp)	250W (M58 Lamp)
		Lamp	Lamp
		Class II Groups	Class II Groups
Globe & Guard	A	EF	EF
Globe, Guard & Dome Reflector	B	EF	EF
Globe, Guard & Angle Reflector	C	EF	EF

Hazlux® 5 Thermal Performance Data (55°C) - Hazardous Location

Class I, Division 1, Group C & D - Maximum External Fixture Temperature in °C @ 55°C Ambient in Free Air

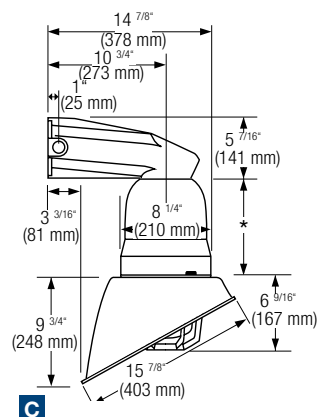
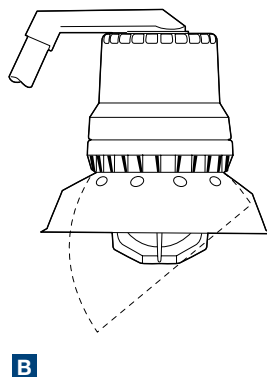
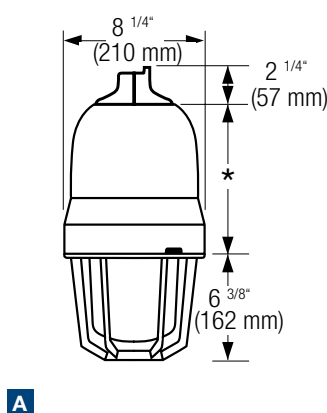
High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion									
Configuration		50W (S68 Lamp)		70W (S62 Lamp)		100W (S54 Lamp)		150W (S55 or S56 Lamp)	
		Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	A	T6	T4	T5	T4	T5	T4A	N/A	T4A
Globe, Guard & Dome Reflector	B	T6	T4	T5	T4	T5	T4A	N/A	T4A
Globe, Guard & Angle Reflector	C	T6	T4	T5	T4	T5	T4A	N/A	T4A

Hazlux® 5 Thermal Performance Data (55°C) - Hazardous Location

Class I, Division 1, Group C & D - Maximum External Fixture Temperature in °C @ 65°C Ambient in Free Air

High Pressure Sodium / Nameplate marked with Rating based on hottest fixture congestion							
Configuration		50W (S68 Lamp)		70W (S62 Lamp)		100W (S54 Lamp)	
		Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.	Lamp	Lamp w/ Auxiliary Qtz.
		"T" No.	"T" No.	"T" No.	"T" No.	"T" No.	"T" No.
Globe & Guard	A	T5	N/A	T4A	N/A	T4A	N/A
Globe, Guard & Dome Reflector	B	T5	N/A	T4A	N/A	T4A	N/A
Globe, Guard & Angle Reflector	C	T5	N/A	T4A	N/A	T4A	N/A

Section E Hazlux® 5



Area lighting

Hazlux® 5 Thermal data

Hazlite™ 5 (400 Series) Thermal Data

Hazlite™ 5 (400 Series) Thermal Data - This data includes Globe, Guard and Reflector				
Lamp Type	Ambient Temperature	Class I		Supply Wire Suitable Temperature
		Groups	Temp. Code	
250 Watt HPS Type S50	40	C,D	T4A	85
400 Watt HPS Type S51	40	C,D	T4A	85
400 Watt M.H. Type M59	40°C	C,D	T3B	85°C
	40°C	C,D	T3B	85°C

Hazlite™ M5 Thermal Data

Hazlite™ M5 Thermal Data - This data includes Globe, Guard and Reflector						
Lamp Type	Ambient Temperature	Class I		Class II		Supply Wire Suitable Temperature
		Groups	Temp. Code	Groups	Temp. Code	
50 Watt	40°C	C,D	T6	E,F,G	T4A	60°C
HPS	40°C	C,D	T6	E,F,G	T4A	75°C
Type S68	65°C	C,D	T5	E,F,G	T4	85°C
70 Watt	40°C	C,D	T5	E,F,G	T4	75°C
HPS	55°C	C,D	T4A	E,F,G	T3C	75°C
Type S62	65°C	C,D	T4A	E,F,G	T3C	85°C
100 WATT	40°C	C,D	T4A	E,F,G	T3C	75°C
HPS	55°C	C,D	T4A	E,F,G	T3C	85°C
Type S54	55°C	C,D	T4A	E,F,G	T3C	85°C





Area lighting

Hazlux® M4 Hazlite™

Hazardous Location Fixtures for Class I, Division 2; Class II; and Wet and Marine Locations.

Hazlite™ M4 lighting fixtures have a compact, low-profile design that is ideally suited for areas where space or fixture weight is restricted. While it is available for use with both incandescent and fluorescent lamps, the Hazlite™ M4 fixture with fluorescent lamps is particularly energy efficient.

- Easy-to-assemble, modular construction
- Fully threaded glass globes, refractors and silicone rubber gaskets seal out dirt, dust and moisture
- Bright white FRP material reflectors optimize light output and resist corrosion and abuse
- Clear glass globes are standard; tempered globes, colored glass globes and plastic globes are also available
- 1-3/4"-deep boxes are standard on ceiling and wall mount fixtures; 3"-deep boxes available for added wiring room
- Four mounting styles - pendant, ceiling, wall, angle stanchion - to meet all mounting needs
- Polycarbonate guards are corrosion and impact resistant and do not interfere with globe seal

Incandescent:

- Two basic sizes cover all popular wattages up to 300 watts

Fluorescent:

- Factory-wired integral ballasts for easy installation
- 10,000-hour rated lamp life - extremely energy efficient
- One or two 13-, 22- and 28-watt lamps provide up to 44 watts of fluorescent light
- 22-, 28- and 44-watt fixtures start and operate reliably in cold temperature applications (-29°C)

Hazlite™ M4 Incandescent - Temperature Ratings

Maximum Lamp Watts	Without Reflector	With Reflector
150	T2	T2
300	T1	T1

Certifications & Standards

Approvals/Characteristics

Class I – Division 2, Groups A, B, C and D
– Enclosed and Gasketed for Wet Locations



Hazlite™ M4 Compact Fluorescent Lighting Fixtures - Temperature Information Chart

Fixture Wattage	Ambient Temperature		Class I, Division 2 Supply Wire Temperature	T-Number	
	Minimum	Maximum		Globe, Guard	Globe, Guard & Reflector
13 Watt	0°C (32° F)	40°C (104° F)	110°C	T3	T3
22 Watt	-29°C (-20° F)	40°C (104° F)	110°C	T3	T3
26 Watt	0°C (32° F)	40°C (104° F)	110°C	T3	T3
28 Watt	-29°C (-20° F)	40°C (104° F)	110°C	T3	T3
44 Watt	-29°C (-20° F)	40°C (104° F)	110°C	T3	T3

Certifications & Standards

Approvals/Characteristics

Class I - Division 2, Groups A, B, C and D
Class II - Division 2, Groups E, F, and G*
– UL844
– Enclosed and Gasketed for Wet Locations



*Pendant mount only, 100 watts max.



Area lighting

Hazlux® M4 Hazlite™ Incandescent
Assembly guide

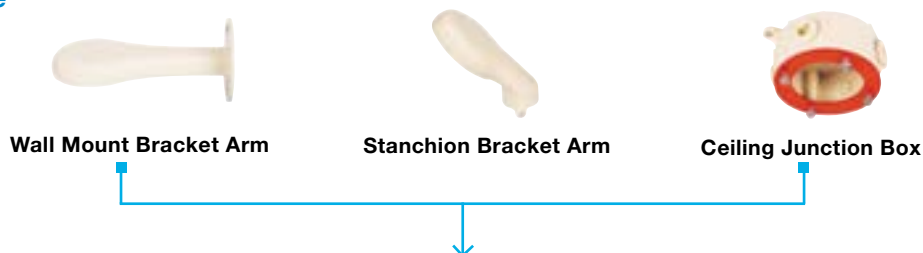
Complete luminaire consists of:

- A mounting style
- Fixture Assembly
- Globe or Refractor
- Optional Guard and/or Reflector

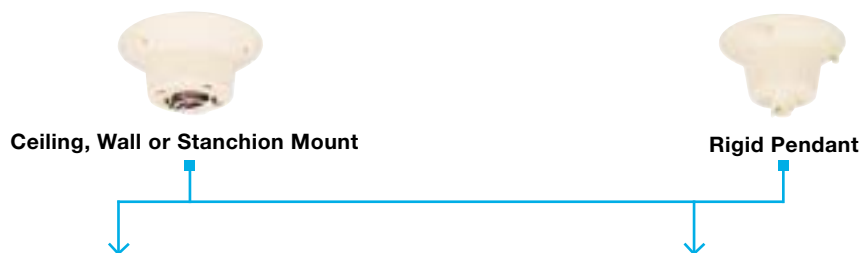


Hazlux® 5 Induction - Assembly Guide

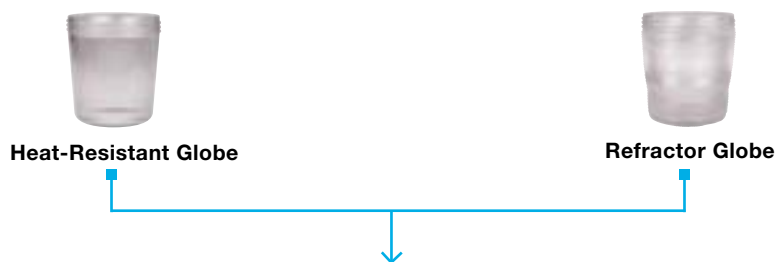
Mounting Style



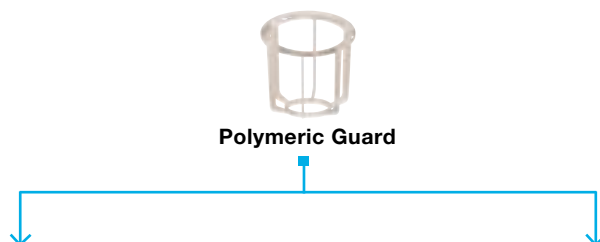
Fixture Assembly



Globe or Refractor



Guard



Reflectors*



*Reflectors are sold separately

Catalog numbering system



Ballast Tank

VDA	2	5	GP	-	C
1	2	3	4		5

Ballast Tank

1. Fixture Series and Mounting Style	VDA	M4 Incandescent Pendant Mount Fixture
	VXH	M4 Incandescent Fixture Body for Ceiling, Wall or Stanchion Mount
	VXHA	M4 Incandescent Stanchion Mount Fixture
	VXHB	M4 Incandescent Wall Mount Fixture
	VXHBF	Wall Mount Fixture with Box
	VXHF	Ceiling Mount with Box
2. Hub Size	2	3/4" in. NPT Hub
	4	1-1/4" in. NPT Hub
3. Lamp Wattage	1	100 Watt Maximum
	5	150 Watt Maximum
	2	300 Watt Maximum

Optics & Mountings

4. Optics and Guards*	GP	Clear Globe with Polymeric Guard
	TG	Tempered Globe
	TGP	Tempered Globe with Polymeric Guard
	ACG	Amber Globe
	BCG	Blue Globe
	GCG	Green Globe
	RCG	Red Globe
	ACGP	Amber Globe with Polymeric Guard
	BCGP	Blue Globe with Polymeric Guard
	GCGP	Green Globe with Polymeric Guard
	RCGP	Red Globe with Polymeric Guard
	R1	Reflector Globe (IES Type I)**
	R3	Reflector Globe (IES Type III)**
	R5	Reflector Globe (IES Type V)**
	R1P	R1P Reflector Globe (IES Type I) with Polymeric Guard
	R3P	Reflector Globe (IES Type III) with Polymeric Guard
	R5P	Reflector Globe (IES Type V) with Polymeric Guard

* For silicone coating, please add suffix "S" before the first digit (ex: STG)w
 **150 Watt maximum

Certifications & Standards

Class I – Division 2, Groups A, B, C and D
 – Enclosed and Gasketed for Wet Locations
 – CSA C22.2 No. 137



Approvals/Characteristics

Area lighting

Hazlux® M4 Hazlite™ Incandescent

Individual components



Wall Mount Bracket Arm



Stanchion Bracket Arm



Pendant Mount



Ceiling, Wall or
Stanchion Mount



1-3/4" Inside Depth



Cover



Gasket

Mounting Options

PART NO.	Description	Conduit Hub Size
VXB	Wall Mount Bracket Arm	N.A.
VXA4	Stanchion Bracket Arm	1-1/4"

Fixture Assembly

PART NO.	Watt max. Lamp Size	Conduit Hub Size
VDA15	150W	1/2"
VDA25	150W	3/4"
VDA12	200-300W	1/2"
VDA22	200-300W	3/4"
VXH15	150W	N.A.
VXH12	200-300W	N.A.

Junction Box for Wall or Ceiling

Part No. (4 Hubs)	Part No. (5 Hubs)	Conduit Hub Size
VXF10	VXFT10	1/2"

Covers and Gaskets

PART NO.	Description	Conduit Hub Size
VHC1	Fixture Hanger	1/2"
VHC2	Fixture Hanger Hub Cover for VXF	3/4"
GASK643	Gasket for Hub Covers, Flat Covers and Bracket Arms	N.A.



Clear*



Red



Green



Blue



Amber



Reflector Globe

*Not Heat-Resistant

Replacement Globe Assemblies*

Part No. 150W Max. Lamp Size	Part No. 200–300W Max. Lamp Size	Description
VGT15	VGT22	Clear, Heat Resistant
VGT15R	VGT22R	Red
VGT15G	VGT22G	Green
VGT15B	VGT22B	Blue
VGT15A	VGT22A	Amber
VGL15	VGL22	Clear, Not heat resistant
VGL15R1	VGL22R1	IES Type V Refractor
VGL15R3	VGL22R3	IES Type V Refractor
VGL15R5	VGL22R5	IES Type V Refractor

* For silicone coating, please add "TS" to part no. (ex: VGT15TS)

Optional Components



Polymeric Guard



Standard Dome



30° Angle Reflector

Guards

Part No. 150W Max. Lamp Size	Part No. 200–300W Max. Lamp Size	Description
VGU15P	VGU22P	Polymeric Guard

Reflectors

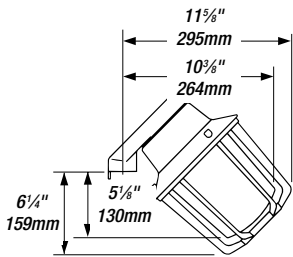
Part No. 150W Max. Lamp Size	Part No. 200–300W Max. Lamp Size	Description
VR15P	VR22P	Dome
VRA15P	VRA22P	Angled

* Note: Reflectors are shipped bulk unless specified

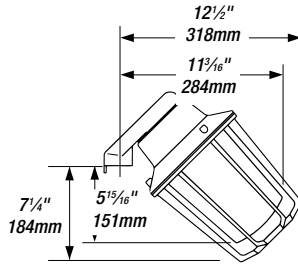
Area lighting

Hazlux® M4 Hazlite™ Incandescent

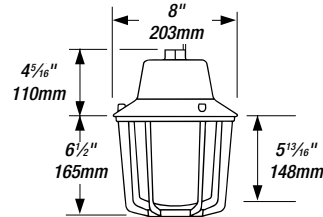
Dimensions - Hazlite™ M4 Incandescent fixtures



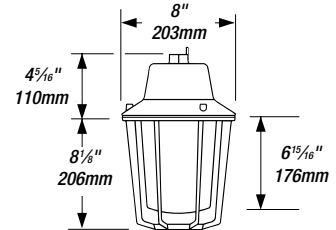
Angle Stanchion Mount
150 Watts Maximum



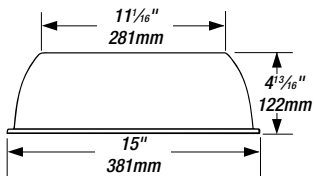
Angle Stanchion Mount
300 Watts Maximum



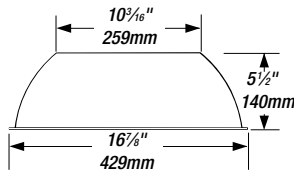
Pendant Mount
150 Watts Maximum



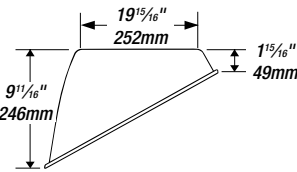
Pendant Mount
300 Watts Maximum



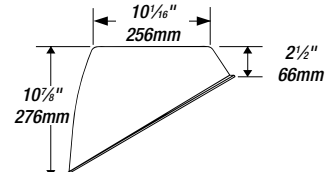
Dome Reflector
150 Watts Maximum



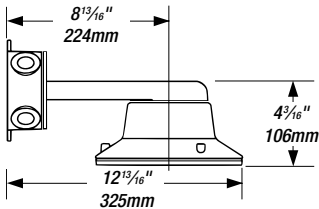
Dome Reflector
300 Watts Maximum



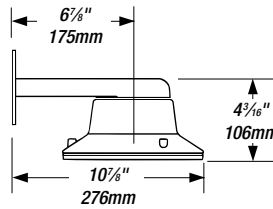
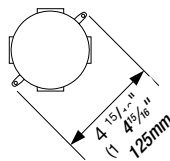
Angle Dome
150 Watts Maximum



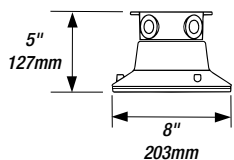
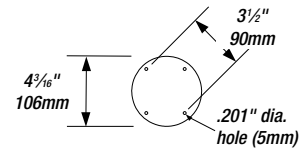
Angle Reflector
300 Watts Maximum



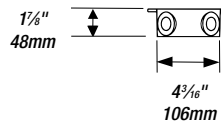
Wall Mount with Box



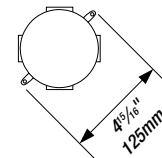
Wall Mount without Box



Ceiling Mount



Junction Box for Wall or Ceiling Mount



Area lighting

Hazlux® M4 Hazlite™ Fluorescent

Assembly guide

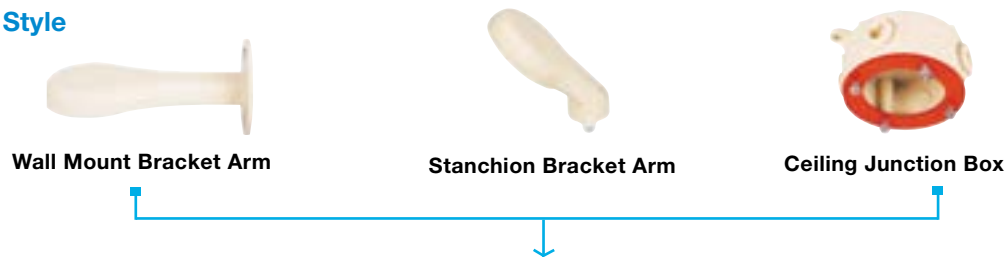
Complete luminaire consists of:

- A mounting style
- Fixture Assembly
- Globe or Refractor
- Optional Guard and/or Reflector



Hazlux® M4 Hazlite™ Fluorescent - Assembly Guide

Mounting Style



Fixture Assembly



Globe or Refractor



Guard



Reflectors*



**Reflectors are sold separately*

Area lighting

Hazlux® M4 Hazlite™ Fluorescent

Catalog numbering system

UNIPAK™ =

- Ballast Tank +
- Optics & Mountings +
- Options (if necessary)

Ballast tank				Optics and mountings		Options	
VFHA	2	44	12	GP	-	RD	-
1	2	3	4	5	6	7	8

Fixture Assembly		
1. Fixture Series and Mounting Style	VFA	M4 Fluorescent Pendant Mount
	VFH	M4 Fluorescent Body for Ceiling, Wall or Stanchion Mount
	VFHA	M4 Fluorescent Stanchion Mount
	VFHB	M4 Fluorescent Wall Mount (No Box)
	VFHBF	Fluorescent Wall Mount (Std. Box)
	VFHBFD	M4 Fluorescent Wall Mount (Deep Box)
	VFHF	M4 Fluorescent Ceiling Mount (Std. Box)
	VFHFD	M4 Fluorescent Wall Mount (Deep Box)
2. Hub Size	1	1/2" NPT Hub (Except VFH and VFHB)
	2	3/4" in. NPT Hub
	4	1-1/4" in. NPT Hub
3. Lamp Wattage	13	13 Watt (One 13W Lamp)
	22	22 Watt (One 22W Lamp)
	26	26 Watt (Two 13W Lamps)
	28	28 Watt (One 28W Lamp)
	44	44 Watt (Two 22W Lamps)
4. Voltage	12	120 VAC

Optics & Mountings		
5. Optics and Guards*	GP	Clear Globe with Polymeric Guard
	TG	Tempered Globe
	TGP	Tempered Globe with Polymeric Guard
	ACG	Amber Globe
	BCG	Blue Globe
	GCG	Green Globe
	RCG	Red Globe
	ACGP	Amber Globe with Polymeric Guard
	BCGP	Blue Globe with Polymeric Guard
	GCGP	Green Globe with Polymeric Guard
6. Packaging Options	RCGP	Red Globe with Polymeric Guard
	D	UNIPAK® Packaging (Completely Assembled with lamps in one carton)

* For silicone coating, please add suffix "S" before the first digit (ex: STG)

Options		
7. Certification	C	Canadian Market

* Note: If no packaging code is specified, fixture components will be shipped in separate cartons. All fixtures and fixture housings include lamp.

Certifications & Standards	Approvals/Characteristics
Class I – Zone 2, Groups IIC, IIB, IIA, – Division 2, Groups A, B, C and D Class II – Division 2, Groups E, F and G* – Enclosed and Gasketed for Wet Locations – UL844 – CSA C22.2 No. 137	 
*Pendant mount only	

Individual components



Wall Mount Bracket Arm



Stanchion Bracket Arm



Pendant Mount



Ceiling, Wall or
Stanchion Mount



13/4" Inside Depth



Cover



Gasket

Mounting Options

PART NO.	Description	Conduit Hub Size
VXB	Wall Mount Bracket Arm	N.A.
VXA4	Stanchion Bracket Arm	1 - 1/4"

Fixture Assembly

PART NO.	Conduit Hub Size
VFH	N.A.
VFA	1/2"

Junction Box for Wall or Ceiling

Part No. 4 Hubs	Part No. 5 Hubs	Conduit Hub Size
VXF10	VXFT10	1/2"
VXF20	VXFT20	3/4"

Covers and Gaskets

PART NO.	Description	Conduit Hub Size
VHC1	Fixture Hanger	1/2"
VHC2	Fixture Hanger Hub Cover for VXF	3/4"
GASK643	Gasket for Hub Covers, Flat Covers and Bracket Arms	N.A.

Area lighting

Hazlux® M4 Hazlite™ Fluorescent

Individual components (continued)



Globe

Globes*	
PART NO.	Description
VGL22	Clear, Non Heat Resistant
VG22	Clear, Heat Resistant
VG22R	Red
VG22G	Green
VG22B	Blue
VG22A	Amber

*For silicone coating, please add "TS" to part no. (ex: VG22TS)



Polymeric Guard

Guards	
PART NO.	Description
VG22P	Polymeric Guard

Optional components



Standard Dome

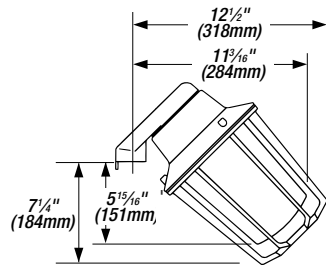


30° Angle Reflector

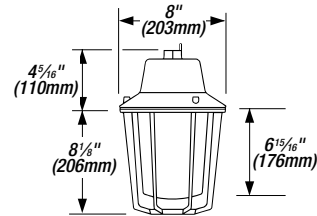
Reflectors	
PART NO.	Description
VR22P	Dome
VRA22P	Angled

* Note: Reflectors are shipped bulk unless specified

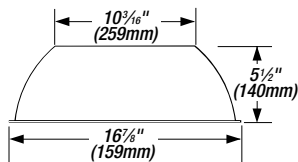
Dimensions - Hazlite™ M4 Fluorescent fixtures



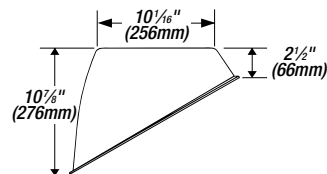
**Angle Stanchion Mount
Fluorescent**



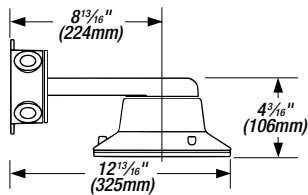
**Pendant Mount
Fluorescent**



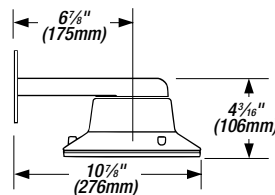
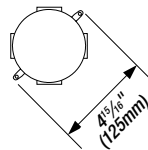
**Dome Reflector
Fluorescent**



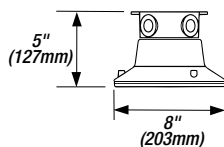
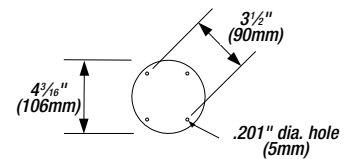
**Angle Reflector
Fluorescent**



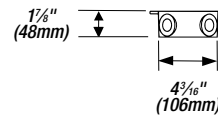
Wall Mount with Box



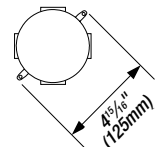
Wall Mount without Box



Ceiling Mount



Junction Box for Wall or Ceiling Mount



Area lighting

Hazlux® 6 DFP Series - Fluorescent
DFP Series - Vapor / Dust Proof Lighting



Standard Features

- Front access fixture for hazardous locations
- Hinged front door frame with hinged ballast tray
- Spring loaded lamp holders - standard
- Available in 2, 3, 4, 5 and 6 lamp configuration
- Multiple hub locations can meet most wiring needs

Construction

- Sturdy 18 Ga. steel white powder coated housing
- 3/16" tempered glass lens
- Zinc latches

Electrical

- Available with T5, T5HO, T8, T8HO
- Wattage available in 28, 32, 44 and 54 watts
- Through feed wiring
- Voltage of 120, 277, 347 and 480

Options

- Adjustable surface mount brackets
- Cable mount
- Wire guard
- Acrylic lens
- Polycarbonate lens
- HLO (high light output ballast for T8 32 watt lamp only)
- 8 ft. 3 wire whip

Accessories

- Chain mount kit

DFP	T5HO	4	UN	PFT	-SR
1	2	3	4	5	6

Ordering Information

1. Fixture Series	DFP	Hazlux® Vapor / Dust Proof Lighting 1
2. Lamp Type (lamps not included)	T5	28W T5 Fluorescent
	T5HO	54W T5HO Fluorescent
	T8	32W T8 Fluorescent
	T8HO	44W T8HO Fluorescent
3. Lamp Quantity	2	2 lamp configuration, 4' length
	3	3 lamp configuration, 4' length
	4	4 lamp configuration, 4' length
	5	5 lamp configuration, 4' length
	6	6 lamp configuration, 4' length
4. Voltages	UN	Universal voltage 120 - 277, 50/60Hz
	UN2	Universal voltage 347 - 480, 50/60Hz (T5HO only)
	34	347 Volt
5. Hub	PFT	1/2" NPT hubs on top and side
6. Options	KH	Adjustable surface mount brackets (galvanized)
	CX	5ft. Cable Mount
	PW	8 ft. 3 wire whip
	SR	Specular reflector
	WG	Wire guard
	F	Fusing (not listed for Canada)
	A	Acrylic lens
	P	Polycarbonate Shield

T-Ratings

Model	Rated Ambient Deg. C	Supply Wiring Temp.	Class I, Div 2	Class II, Div 2
			Operating Temperature Code	Operating Temperature Code
DFPT5	40	75	T3C (160°C)	T4A (120°C)
DFPT5HO	40	75	T3C (160°C)	T4A (120°C)
DFPT8HO	40	75	TT4A (120°C)	T4A (120°C)
DFPT8	55	75	T5 (100°C)	T4A (120°C)

Certifications & Standards

Approvals/Characteristics

Class I – Division 2, Groups A, B, C and D

Class II – Division I and 2, Groups F and G

Class III

Class I – Zone 2, Groups IIC, IIB and IIA

– UL844

– IP65, Wet Location

– CSA C22.2 No. 137



Area lighting

Hazlux® 6 DFP Series – LED

DFP Series - Vapor / Dust Proof Lighting

Standard Features

- Front access fixture for hazardous locations
- Hinged front door frame with hinged ballast tray
- Spring loaded lamp holders – standard
- Available in 2, 3, 4, 5 and 6 lamp configurations
- Multiple hub locations can meet most wiring needs

Construction

- Sturdy 18 Ga. steel white powder coated housing
- 3/16" tempered glass lens
- Zinc latches

Electrical

- Available with low, standard or high ballast factor
- Wattage ranging from 25W in the 2 lamp low ballast factor, to 111W in the 6 lamp high ballast factor configuration (see wattage table below)
- Through feed wiring
- Voltage of 120 to 277 and 347 available

Options

- Adjustable surface mount brackets
- Cable mount
- Wire guard
- Acrylic lens
- 3 wire whip

Accessories

- Chain or cable mount kit
- Adjustable surface or vertical mounting bracket

T-Ratings				
Model	Rated Ambient Deg. C	Class I, Div 2 Groups A, B, C & D	Class II, Div 2 Groups F & G	Class III
DFPLED	40°C	T5 (100°C)	T4A (120°C)	T4A (120°C)

Certifications & Standards

Approvals/Characteristics

Class I -Division 2, Groups A, B, C and D

Class II -Division 2, Groups F and G

Class III

- CSA 22.2 No. 137.0
- CSA 22.2 No. 250.0
- CSA C22.2 No. 250.13
- UL Listed (UL 1598) Wet/ Damp
- UL844
- UL8750
- IP65, Wet Location



*Contact your Thomas & Betts sales representatives to verify classification.



DFPLED	S	5K	2	UN	PFT	A
1	2	3	4	5	6	7

Ordering Information

1. Fixture Series	DFPLED	Hazlux® Vapor / Dust Proof Lighting
2. Ballast Factor	L	Low Ballast Factor
	S	Standard Ballast Factor
	H	High Ballast Factor
3. Colour Temperature	4K	4000K
	5K	5000K
4. Lamp Quantity	2	2 lamp configuration, 4' length
	3	3 lamp configuration, 4' length
	4	4 lamp configuration, 4' length
	5	5 lamp configuration, 4' length
	6	6 lamp configuration, 4' length
5. Voltage	UN	Universal Voltage 120-277 50/60 Hz
	34	347 Volt
6. Hub	PFT	1/2" NPT hubs on top and side
7. Options	KH	Adjustable Mounting Brackets for Surface Mount
	CX	Cable Mount (with 5' cable)
	PW	3 Wire Whip
	WG	Wire Guard
	F	Fusing
	A	Acrylic Lens
	P	Polycarbonate Lens

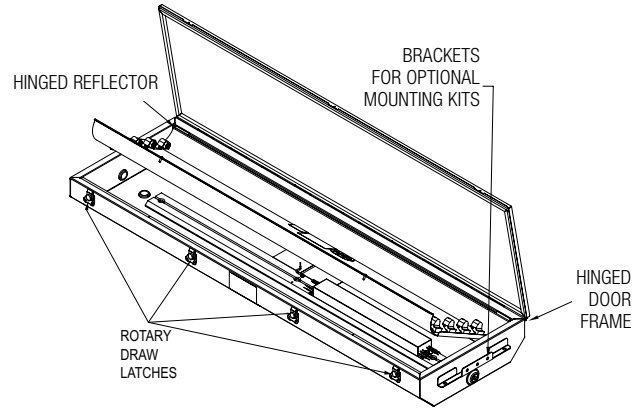
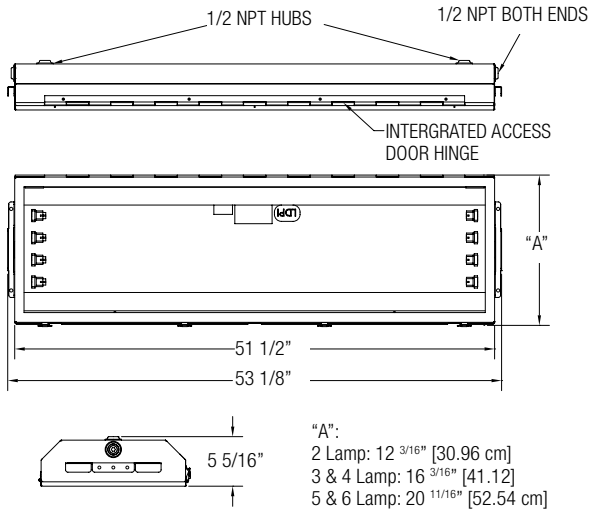
Performance

Lamp Qty.	Source (Ballast Factor)	Average System Watts	Initial Lumen Output	Colour Temperature
2 Lamp	L: Low	25	2800, 2900	4000K, 5000K
	S: Standard	29	3200, 3300	4000K, 5000K
	H: High	37	3700, 4000	4000K, 5000K
3 Lamp	L: Low	37.5	4200, 4350	4000K, 5000K
	S: Standard	43.5	4800, 4950	4000K, 5000K
	H: High	55.5	5550, 6000	4000K, 5000K
4 Lamp	L: Low	50	5600, 5800	4000K, 5000K
	S: Standard	58	6400, 6600	4000K, 5000K
	H: High	74	7400, 8000	4000K, 5000K
5 Lamp	L: Low	62.5	7000, 7250	4000K, 5000K
	S: Standard	72.5	8000, 8250	4000K, 5000K
	H: High	92.5	9250, 10000	4000K, 5000K
6 Lamp	L: Low	75	8400, 8700	4000K, 5000K
	S: Standard	87	9600, 9900	4000K, 5000K
	H: High	111	11100, 12000	4000K, 5000K

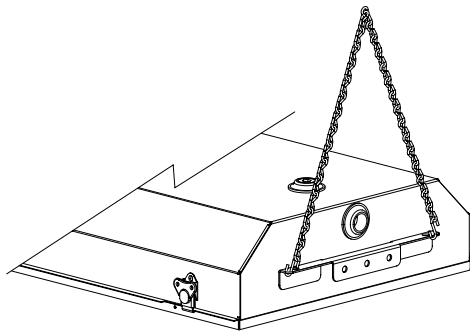
Area lighting

Hazlux® 6 DFP Series - Safety technology

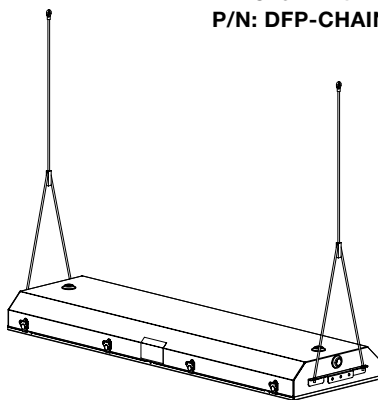
Dimensions - Nominal



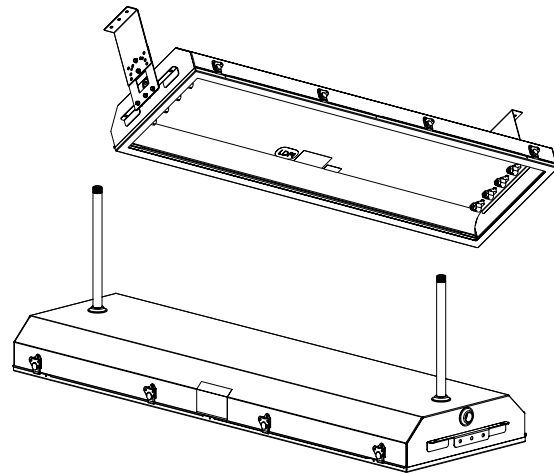
Mounting accessory drawings (order separately)



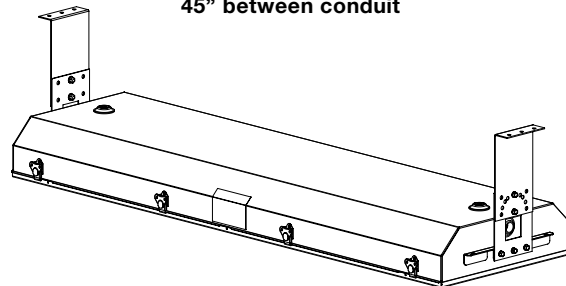
Chain Kit
P/N: DFP-CHAIN



Cable Hang Kit
P/N: DFP-CABLE (zinc coated), Qty 2 cables with toggle ends and qty 2 self locking gripples

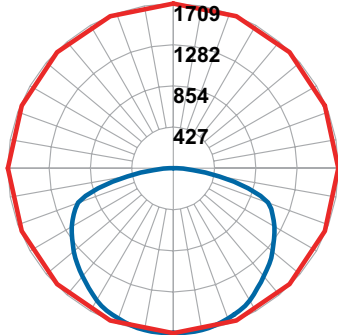


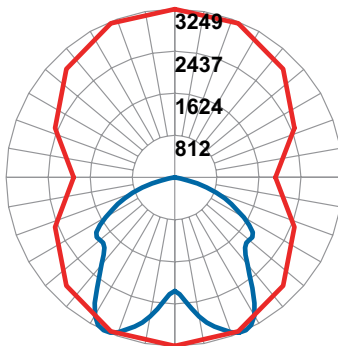
Pendant Style Mounting
Note: Conduit supply by others
45" between conduit

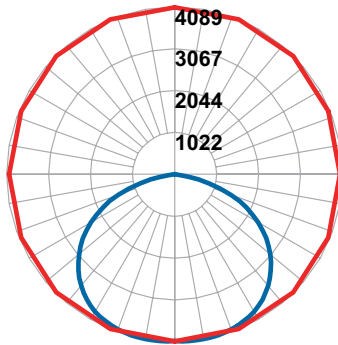


Adjustable Surface Mounting Bracket Kit
P/N: DFP-SURFACE (galvanized), toggle ends and qty 2 self locking gripples

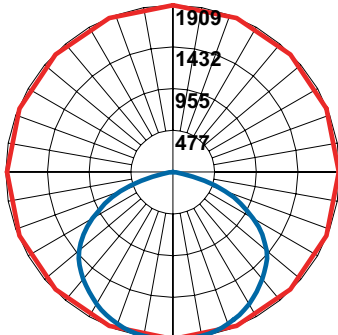
Photometry - Fluorescent

Ceiling Mount		
Reference Data		Candlepower Curve
Catalogue No.	DFPT84UNPFT	
Lamp	32W T8 (4 lamps)	
Lamp Lumens	3,100 Lumens	
Input Watt	103	
Luminaire Lumens	8927	
Efficiency	72%	
Spacing Criterion (0-180)	1.28	
Spacing Criterion (90-270)	1.42	
Spacing Criterion (diagonal)	1.50	

Ceiling Mount		
Reference Data		Candlepower Curve
Catalogue No.	DFPT84UNPFTSR	
Lamp	32W T8 (4 lamps)	
Lamp Lumens	3,100 Lumens	
Input Watt	103	
Luminaire Lumens	8433	
Efficiency	68%	
Spacing Criterion (0-180)	1.26	
Spacing Criterion (90-270)	1.60	
Spacing Criterion (diagonal)	1.60	

Ceiling Mount		
Reference Data		Candlepower Curve
Catalogue No.	DFPT86UNPFT	
Lamp	32W T8 (6 lamps)	
Lamp Lumens	3,100 Lumens	
Input Watt	161	
Luminaire Lumens	12881	
Efficiency	69%	
Spacing Criterion (0-180)	1.28	
Spacing Criterion (90-270)	1.42	
Spacing Criterion (diagonal)	1.50	

Photometry - LED

Ceiling Mount		
Reference Data		Candlepower Curve
Catalogue No.	DFPLEDS4K434PFT	
Luminaire Lumens	5,737 Lumens (4 Lamps)	
Luminaire Efficacy Rating (LER)	97	
Input Watt	59.03	
Spacing Criterion (0-180)	1.26	
Spacing Criterion (90-270)	1.36	
Spacing Criterion (Diagonal)	1.44	

Area lighting

Hazlux® 7 XFM Series - Fluorescent

XFM Series - Explosion Proof Lighting



Standard Features:

- Factory sealed, lightweight cast natural aluminum
- 5 different 1/2" NPT hubs entries at each end
- Center ballast placement for better balanced and low profile
- Available with 2 lamp in 2ft and 4ft
- Available in 3 or 4 lamp in 4ft
- One piece painted aluminum reflector
- Suitable for use inside a spray booth

Construction

- Cast natural aluminum
- .189" wall Borosilicate glass tubes

Electrical

- Available with T5, T5HO, T8, T8HO
- 120V (T8HO), 277V (T8HO) and 347V (T5HO & T8 only)

Options

- Wall / Ceiling Mount Kit (4 Lamps)
- Wire guard
- Polycarbonate shield
- 93% reflective premium specular reflector insert

Accessories

- Wall / Ceiling and Drop Mount

XFM	T5HO	4	2	34	-SR
1	2	3	4	5	6

Ordering Information

1. Fixture Series	XFM	Hazlux® Linear Class I Div I
2. Lamp Type (lamps included)	T5	T5 Fluorescent
	T5HO	T5HO Fluorescent
	T8	T8 Fluorescent
	T8HO	T8HO Fluorescent
3. Lamp Quantity	2	2 lamp configuration
	3	3 lamp configuration
	4	4 lamp configuration
4. Length (Ft.)	2	2 Ft.
	4	4 Ft.
5. Voltage	UN	Universal voltage 120 - 277, 50/60Hz
	34	347 Volt
6. Options	WG	Stainless Steel Wire Guard
	P	Polycarbonate Shield
	SR	Premium Specular Reflector
	MK	Wall / Ceiling Mount Kit (4 Lamps)

Weights

Configuration	Fixture Weight	Shipping Weight
2L - 2 Ft.	30 lbs	33 lbs
2L - 4 Ft.	40 lbs	43 lbs
2L - 4 Ft. (EB)	57 lbs	60 lbs
3L - 4 Ft.	45 lbs	52 lbs
4L - 4 Ft.	80 lbs	84 lbs

T-Ratings - Operating Temperature Codes based on 40° Ambient

Fixture	Class I, Div 1 Groups C & D	Class I, Div 2 Groups A, B, C & D	Class II, Div 1 Groups E, F & G	Class III	Simultaneous Presence Class I & II
XFM	T6 = 85°C	T4 = 135°C	T4 = 135°C	T4 = 135°C	T4 = 135°C

Certifications & Standards

Approvals/Characteristics

- Class I** - Division 1, Groups C and D
 - Division 2, Groups A, B, C and D
- Class II** - Division 1 and 2, Groups E, F and G
- Class III**
- Class I** - Zone 1, Groups IIB and IIA
- UL Listed (UL1598) for Marine Locations
 - NEMA 4X
 - NFPA Standard 33 and NEC Article 516
 - UL844
 - CSA C22.2 No. 137



Lamp Wattage

2FT.	Watts	4FT.	Watts
T5	14 Watt	T5	28 W
T5HO	24 Watt	T5HO	54 W
T8.	17 Watt	T8	32 W
T8HO	N.A.	T8HO	44 W

Area lighting

Hazlux® 7 XFM Series - LED

XFM Series - Explosion Proof Lighting



Standard Features:

- Factory sealed, lightweight cast natural aluminum
- 5 Different 1/2" NPT hubs entries at each end
- Center ballast placement for better balanced and low profile
- Available with 2, 3 and 4 lamp in a 4 ft length
- One piece painted aluminum reflector
- Suitable for use inside a spray booth

Construction

- Cast natural aluminum
- .189" wall Borosilicate glass tubes

Electrical

- Available with low, standard or high ballast factor
- Wattage ranging from 25W in the 2 lamp low ballast factor, to 74W in the 4 lamp high ballast factor configuration (see wattage table below)
- Voltage of 120 to 277 (50/60Hz) and 347 available

Options

- Wall and ceiling mount kit (4 lamps)
- Wire guard
- Polycarbonate shield
- 93% reflective premium specular reflector insert

Accessories

- Wall, ceiling and drop mount kit

Certifications & Standards Approvals/Characteristics

Class I – Division 1, Groups C and D
 – Division 2, Groups A, B, C and D
Class II – Division 1 and 2, Groups E, F and G
Class II – Division 2, Groups E, F and G
Class III



Class I – Zone 1, Group IIB and IIA,
Class I and Class II Simultaneous Presence
 – CSA C22.2 No. 137.0
 – CSA C22.2 No. 250.0
 – CSA C22.2 No. 250.13
 – UL Listed (UL1598 Wet / Damp), (UL1598A Marine Outside)
 – UL844 Paint Spray
 – UL8750
 – NEMA 3, 4X, 7CD, 9EFG
 – NFPA 33
 – NEC Article 516

*Contact your Thomas & Betts sales representatives to verify classification

XFMLED	S	5K	2	4	UN	P
1	2	3	4	5	6	7

Ordering Information

1. Fixture Series	XFMLED	Explosion Proof Lighting
2. Ballast Factor	L	Low Ballast Factor
	S	Standard Ballast Factor
	H	High Ballast Factor
3. Colour Temperature	4K	4000K
	5K	5000K
4. Lamp Quantity	2	2 lamp configuration
	3	3 lamp configuration
	4	4 lamp configuration
5. Length	4	4' length
6. Voltages	UN	Universal voltage 120 - 277, 50/60Hz
	34	347 Volt
7. Options	P	Polycarbonate Shield
	WK	Stainless Steel Guard (not for sure in paint spray applications)
	MK	Wall/Ceiling Mount Kit (4 lamps)

Performance

Lamp Qty.	Source (Ballast Factor)	Average System Watts	Initial Lumen Output	Colour Temperature
2 Lamp	L: Low	25	2800, 2900	4000K, 5000K
	S: Standard	29	3200, 3300	4000K, 5000K
	H: High	37	3700, 4000	4000K, 5000K
3 Lamp	L: Low	37.5	4200, 4350	4000K, 5000K
	S: Standard	43.5	4800, 4950	4000K, 5000K
	H: High	55.5	5550, 6000	4000K, 5000K
4 Lamp	L: Low	50	5600, 5800	4000K, 5000K
	S: Standard	58	6400, 6600	4000K, 5000K
	H: High	74	7400, 8000	4000K, 5000K

T-Ratings

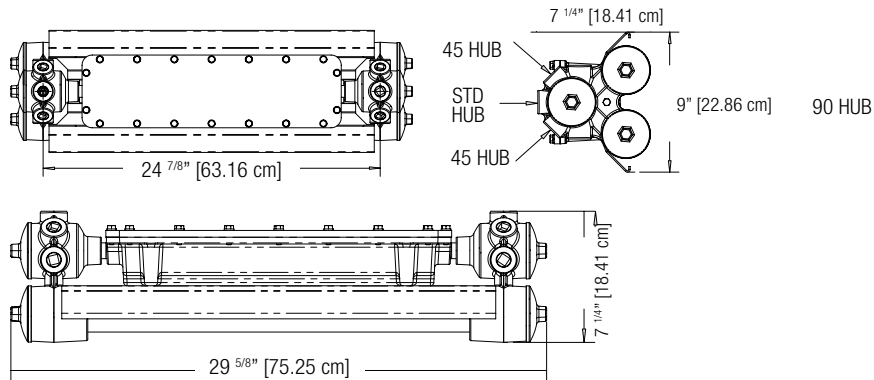
Model	Rated Ambient Deg. C	Class I, Div 1 Groups C & D	Class I, Div 2 Groups A, B, C & D	Class II, Div 1 Groups E, F & G	Class II, Div 2 Groups E, F & G	Class I and II Simultaneous Presence
XFM-LED	40°C	T6 = (85°C)	T6 = (85°C)	T4 = (135°C)	T4 = 135°C	T4 = 135°C

Area lighting

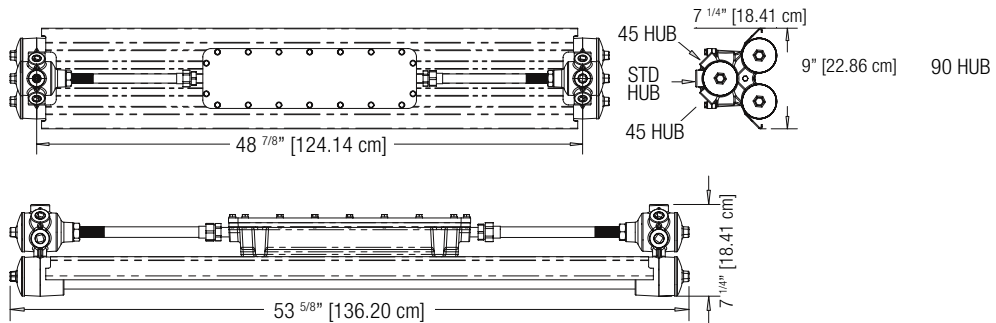
Hazlux® 7 XFM Series - Safety technology

Dimensions - Nominal

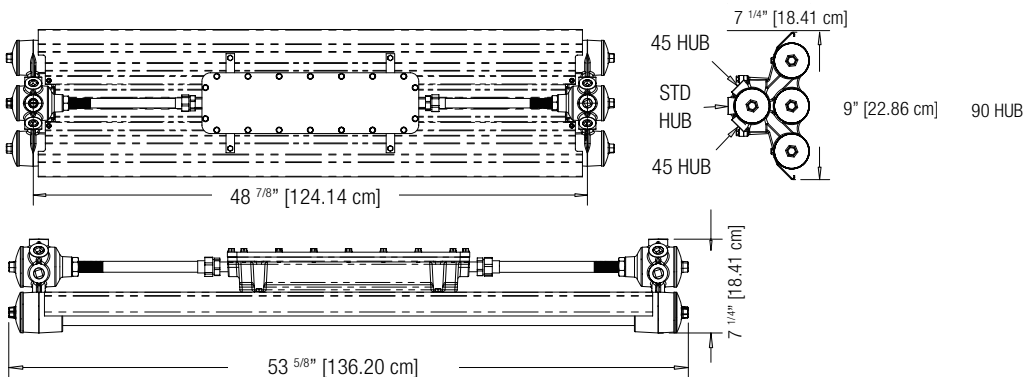
2L 2FT. Dimensions



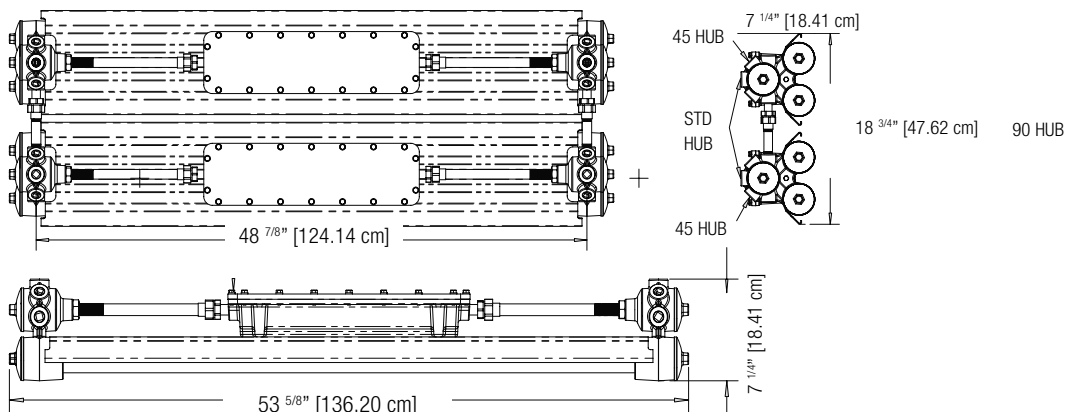
2L 4FT. Dimensions



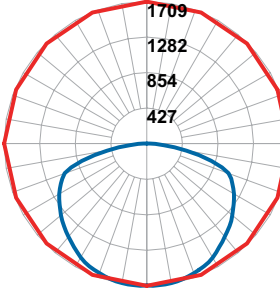
3L 4FT. Dimensions

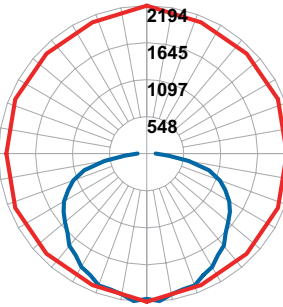


4L 4FT. Dimensions

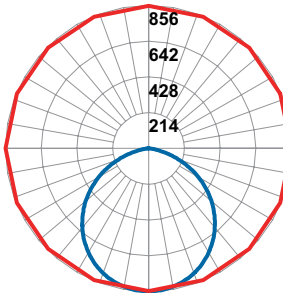


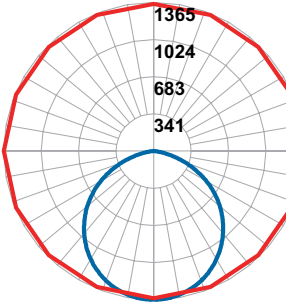
Photometry - Fluorescent

Ceiling Mount		
Reference Data		Candlepower Curve
Catalogue No.	XFMT5HO24UN	
Lamp	54W T5 HO (2 lamps)	
Lamp Lumens	4,500 Lumens	
Input Watt	102	
Luminaire Lumens	5862	
Efficiency	65%	
Spacing Criterion (0-180)	1.26	
Spacing Criterion (90-270)	1.38	
Spacing Criterion (diagonal)	1.46	

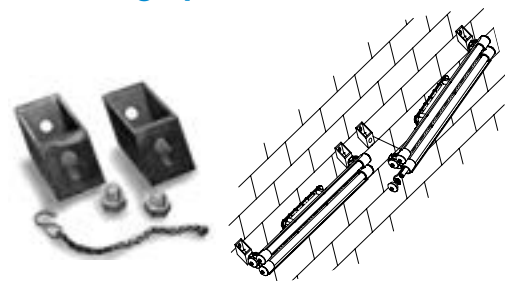
Ceiling Mount		Candlepower Curve 
Reference Data		
Catalogue No.	XFMT834UN	
Lamp	32W T8 (3 lamps)	
Lamp Lumens	2,850 Lumens	
Input Watt	117	
Luminaire Lumens	7262	
Efficiency	85%	
Spacing Criterion (0-180)	1.26	
Spacing Criterion (90-270)	1.34	
Spacing Criterion (diagonal)	1.44	

Photometry - LED

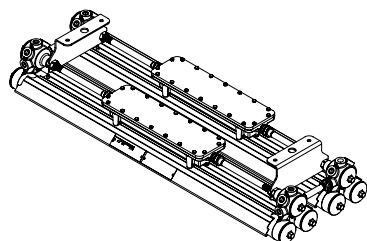
Ceiling Mount		
Reference Data		Candlepower Curve 
Catalogue No.	XFMLED5K24UN	
Luminaire Lumens	3,024 Lumens (2 Lamps)	
Luminaire Efficacy Rating (LER)	105	
Input Watt	28.68	
Spacing Criterion (0-180)	1.26	
Spacing Criterion (90-270)	1.40	
Spacing Criterion (Diagonal)	1.48	

Ceiling Mount		
Reference Data		Candlepower Curve
Catalogue No.	XFMLED5K34UN	
Luminaire Lumens	4,803 Lumens (3 Lamps)	
Luminaire Efficacy Rating (LER)	110	
Input Watt	43.72	
Spacing Criterion (0-180)	1.26	
Spacing Criterion (90-270)	1.40	
Spacing Criterion (Diagonal)	1.48	

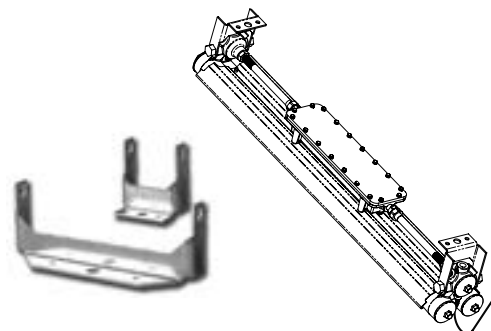
Mounting options



Wall/Ceiling mount kit for 2 or 3 lamps
P/N: XFM-4401



Drop mount kit for 2 or 3 lamps
P/N: XFM-4405
For 4 lamps
P/N: XFM-4403



Wall/Ceiling mount kit for 4 lamps
P/N: XFM-4400

These are factory fitted please contact sales office for further details.

FDL Series

Hazlux® 7 - Vapor/Dust Proof Lighting



Features:

- Energy efficient alternative to hazardous location Metal Halide and High Pressure Sodium
- Designed for outdoor, hazardous, Marine, low-bay and flood applications
- Gray powder coat finish
- Multiple distribution patterns, Type V
- Selection of Frosted film, 16°, 70° or 120° Lens
- CCT of 5000K
- Selection of mounting style
- Tamper-proof screws
- > 120,000 hours Rated Lifetime Projection (L70)

Construction

- Cooper-free cast aluminum housing
- Captive stainless steel fasteners and insert
- 24 high-power LED's

Electrical

- 50W (6400 Lumens), 80W (9000 Lumens), 105W (11000 Lumens)
- 120-277V
- 277-480V (6400 Lumens only)

Options

- Mounting: Ceiling, Pendant, Yoke, Wall, Straight or angled
- stanchion
- Cord with Blunt End
- Lens Guard
- Black or White finish

FDL	10	UN	Y1	M	LG
1	2	3	4	5	6

Ordering Information

1. Fixture Series	FDL	Hazlux® Floodlights LED Class I Div 2
2. Lumen	05	6,400 Lumen (50 Watts)
	08	9,000 Lumen (80 Watts)
	10	11,000 Lumen (105 Watts)
3. Voltage	UN	120-277V
	UN2	277-480V (on 05 models only)
4. Mounting Style	C1	Ceiling 1/2"
	C2	Ceiling 3/4"
	P2	Pendant 3/4"
	Y1	Yoke Mount 1/2"
	B3	Wall Mount 1"
	L4	Stanchion 1-1/4"
	S4	Angled stanchion 1-1/4"
	L5	Stanchion 1-1/2"
5. Optics	F	Frosted film
	N	Narrow 16° FWHM
	M	Medium 70° FWHM
	W	Wide 120° FWHM
6. Options	LG	Lens Guard
	PW	Pre-wired 3ft cord with blunt end*
	GRY	Gray powder coat finish
	BLK	Black powder coat finish
	WHT	White powder coat finish

(*) Y1 mount only

Thermal Performance Data

Model	Rated Ambient °C	Class I, Div 2 Operating Temperature Code	Class II, Div 2 Operating Temperature Code
FDL05	50°C	T3C (160°C)	T5 (100°C)
FDL08	50°C	T3C (160°C)	T5 (100°C)
FDL10	50°C	T3C (160°C)	T5 (100°C)

Certifications & Standards

Approvals/Characteristics

Class I -Division 2, Groups A, B, C and D

Class II -Division 2, Groups F and G

– UL1598 For Marine Locations

– UL844

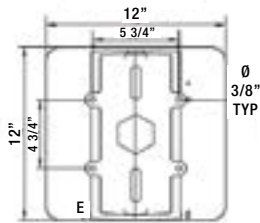
– IP66, Wet Location



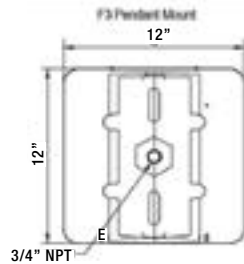
Contact your Thomas & Betts sales representatives to verify classification.

Dimensions

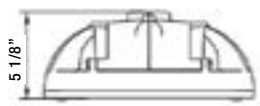
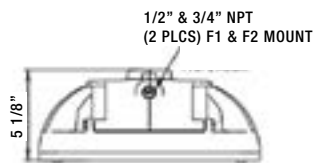
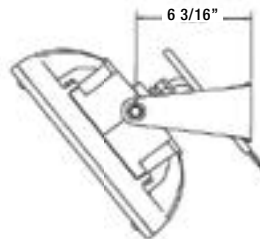
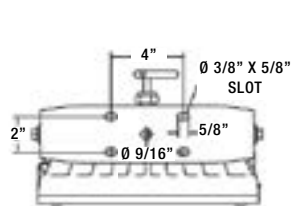
C1 and C2 Ceiling Mount
(Ceiling spacers provided)



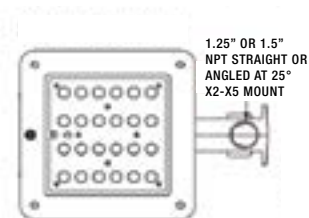
P2 Pendant Mount



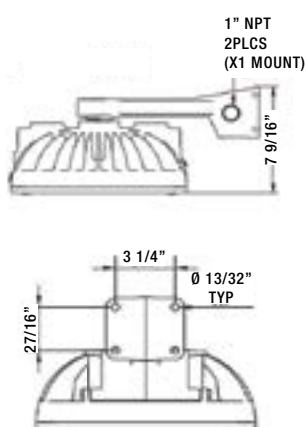
Y1 Yoke Mount



L4-S4 L5-S5 Wall/ Stanchion Mount



B3 Mount



Photometry

Catalogue	FDL10UNC1-N	Axial Candela Display
Luminaire Lumens	12,059	
Input Watt	106.6	
NEMA Type	2 H x 2 V	
Maximum Candela	117901	
Maximum Candela Angle	0H 0V	
Horizontal Beam Angle (50%)	15.3	
Vertical Beam Angle (50%)	15.2	
Horizontal Field Angle (10%)	28.6	
Vertical Field Angle (10%)	28.3	

Catalogue	FDL10UNC1-M	Axial Candela Display
Luminaire Lumens	10,714	
Input Watt	106.1	
NEMA Type	6 H x 6 V	
Maximum Candela	9539.4	
Maximum Candela Angle	0H 0V	
Horizontal Beam Angle (50%)	68.2	
Vertical Beam Angle (50%)	68.2	
Horizontal Field Angle (10%)	100.1	
Vertical Field Angle (10%)	100.5	

Catalogue	FDL10UNC1-W	Axial Candela Display
Luminaire Lumens	11,025	
Input Watt	107	
NEMA Type	6 H x 6 V	
Maximum Candela	4241	
Maximum Candela Angle	0H -47.5V	
Horizontal Beam Angle (50%)	87.3	
Vertical Beam Angle (50%)	120.2	
Horizontal Field Angle (10%)	106.4	
Vertical Field Angle (10%)	129.6	

Floodlights

Hazlux® 3 Marine-duty floodlights

Marine-Duty Floodlights - Class I, Division 2



Applications

- Chemical plants
- Oil refineries
- Offshore platforms
- Waste treatment facilities
- Food processing plants
- Steel mills, foundries
- Power plants
- Pulp and paper facilities
- General manufacturing plants
- Shipyards and shipbuilding facilities
- Airplane manufacturing plants
- Defense and government facilities

Features and Benefits

- Computer-Designed Reflectors - for optimal light distribution and efficiency
- Die-Cast Aluminum - housings and covers for excellent strength, light weight, and corrosion resistance; Marine-duty floodlights are copper-free aluminum alloy
- Polyester Powder Finish - provides superior corrosion resistance and attractive appearance
- Fully Pivoting Steel Yoke - is standard for ease of aiming and mounting flexibility
- Tempered Glass Lens - resists thermal shock and is fully sealed and mechanically retained
- Hinged Door - swings down for easy lamp replacement; is easily removable for maintenance
- Aiming Sight - is standard on all Hazlux UltraFlood® floodlights which makes installation faster and easier

Wattages, Voltages

- High-Pressure Sodium: 70-1000 watts
- Metal Halide: 175-1000 watts
- All Floodlights: 120, 277, 480 or Multi-tap voltages available

Materials, Finishes

- Housings, Covers: Powder-coated aluminum
- Hardware: Corrosion-resistant steel
- Lens: Tempered glass

Certifications & Standards

Approvals/Characteristics

Class I - Division 2, Groups A, B, C, D
- AII (UL844)CSA C22.2 No 137

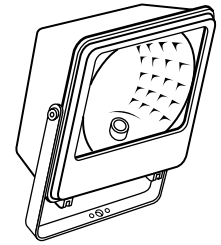
- Outdoor Wet Locations - All
- Marine Locations (UL1598A) -FDM Series
- Temperature Range:
- 70W-400W (AII) -30°C to 40°C
- 1000W HPS -30°C to 40°C
- 1000W MH -30°C to 25°C



Catalog numbering system

Ballast Tank

FD	S	0	40	C	48	0	-	Y	W	E	-	FF	C
1	2	3	4	5	6	7		8	9	10		11	12



Ballast Tank

1. Fixture Series	FD	Class I, Division 2, Groups A, B, C, D
	FDM	Class I, Division 2, Groups A, B, C, D and Marine Locations*
2. Lamp Type	S	High-Pressure Sodium
	H	Metal Halide
3. Starter Circuit	0	Standard Fixture (Without Options)
	R	Instant Restart (HPS) 150W max
	P	Pulse Star (MH)
4. Lamp Wattage	Metal Halide Lamps	
	10	100W ED28
	17	175W ED23 1/2
	25	250W ED18
	40	400W ED37
	00	1000W BT37
	High Pressure Sodium Lamps	
	10	100W ED23 1/2
	15	150W ED23 1/2
	20	200W ED18
	25	250W ED18
	40	400W ED18
	00	1000W ED37

Ballast Circuit

5. Ballast Circuit	C	Constant Wattage Autotransformer
	H	High Reactance
	I	Constant Wattage Insulated Transformer (for 208,240,480 Volts)
6. Voltage	04	120/208/277/240VAC (wired to 120VAC)
	08	120/277/347VAC (wired to 120V)
	09	120/277/347VAC (wired to 277V)
	10	120/277/347VAC (wired to 347V)
	12	20VAC
	20	208VAC
	24	240VAC
	27	277VAC
	48	480VAC

*Contact the factory for other available voltages

Certifications & Standards

Approvals/Characteristics

Class I – Division 2, Groups A, B, C and D

- UL844
- UL1598A for Marine Locations
- NEMA 4X (FDM Series)
- NEMA 3R
- CSA C22.2 No 137



Optics & Mountings

7. Housing Size	0	Standard Housing (400W max.)
	L	Large Housing (1000W)
8. Mounting style	Y	Yoke (Trunnion) Mount
9. Beam Type	W	Wide Beam
	N	Narrow Beam (Not available with 1000W MH)
10. Packaging	E	UNIPAK™ with Clear Lamp
	D	UNIPAK™ with Diffuse Lamp
11. Options	OF	Single Fuse
	FF	Double Fuse
	BRZ	Bronze Color
	BLK	Black Color
12. Certification	C	Canadian Market

* Note: Standard color is grey

* Minimum order quantity applies; consult customer service for details

Yoke Mount Floodlights - Mounting Brackets

	Cat. No.	Description
	9901H-TB	Steel Cross-Arm Mounting Bracket
	9902H-TB	Pole-Top Mounting Bracket
	9920H-TB	Universal Wall Mounting Bracket

Accessories

Cat. No.	Description
75-8-TB	Polycarbonate Vandal Shield
75-V-TB	Glare Control Shield

Yoke Mount Floodlights - Mounting Brackets

	Cat. No.	Description
	9605	Wall Mount Pipe Bracket (2") with Flange (Prime Coated)
	9605-G	Wall Mount Pipe Bracket (2") with Flange (Galvanized)
	9352-TB	Pole-Top Mounting Bracket
	9333-TB	Universal Wall Mounting Bracket

Floodlights

Hazlux® 3 HID Floodlights for wet locations

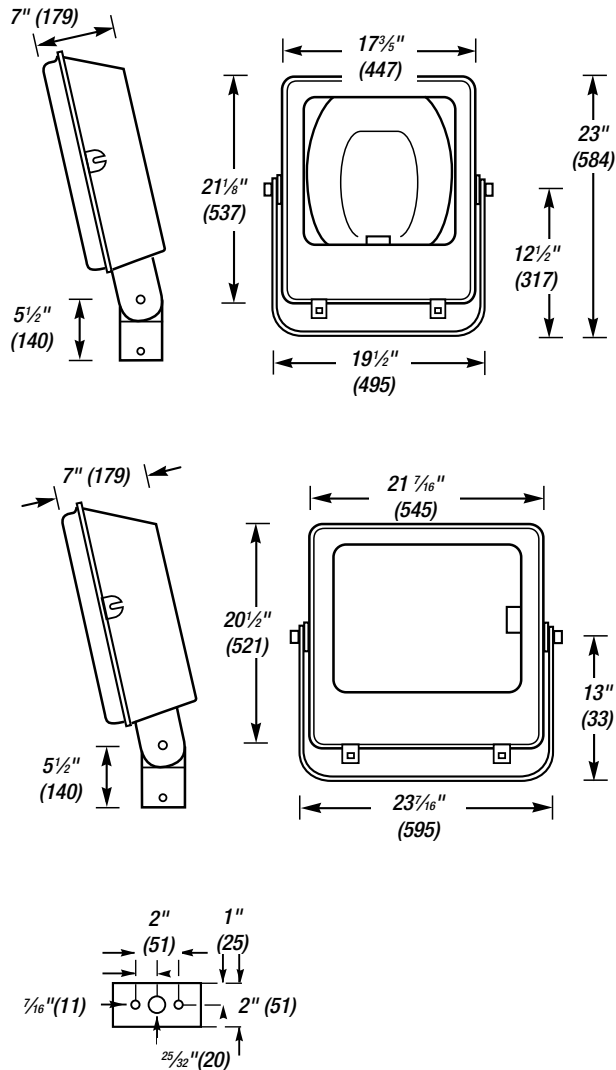
Hazlux® 3 - Class I, Division 2 HID Floodlights for Wet Locations				
Lamp Type	Lamp Watts	Voltage	Yoke (Trunnion) Mount	Beam Type*
High-Pressure Sodium	100 W	120 V	FDS010P120-YW	Wide
		MT	FDS010H080-YW	
	150 W	120 V	FDS015P120-YW	Wide
		MT	FDS015H080-YW	
	200 W	120 V	FDS020C120-YW	Wide
		MT	FDS020C080-YW	
	250 W	120 V	FDS025C120-YW	Wide
		MT	FDS025C080-YW	
	400 W	120 V	FDS040C120-YW	Wide
		MT	FDS040C080-YW	
	1000 W	120 V	FDS000C120-YW	Wide
		MT	FDS000C080-YW	
Metal Halide	100 W	120 V	FDH010H120-YW	Wide
		MT	FDH010H080-YW	
	175 W	120 V	FDH017C120-YW	Wide
		MT	FDH017C080-YW	
	250 W	120 V	FDH025C120-YW	Wide
		MT	FDH025C080-YW	
	400 W	120 V	FDH040C120-YW	Wide
		MT	FDH040C080-YW	
	1000 W	120 V	FDH000C12L-YW	Wide
		MT	FDH000C08L-YW	

*For narrow-beam floodlights, replace 'W' at the end part number with 'N'.

Hazlux® 3 - Class I, Division 2 HID Floodlights for Marine Locations				
Lamp Type	Lamp Watts	Voltage	Yoke (Trunnion) Mount	Beam Type*
High-Pressure Sodium	100 W	120 V	FDMS010P120-YW	Wide
		MT	FDMS010H080-YW	
	150 W	120 V	FDMS015P120-YW	Wide
		MT	FDMS015H080-YW	
	200 W	120 V	FDMS020C120-YW	Wide
		MT	FDMS020C080-YW	
	250 W	120 V	FDMS025C120-YW	Wide
		MT	FDMS025C080-YW	
	400 W	120 V	FDMS040C120-YW	Wide
		MT	FDMS040C080-YW	
	1000 W	120 V	FDMS040C080-YW	Wide
		MT	FDMS040C080-YW	
Metal Halide	100 W	120 V	FDMS000C120-YW	Wide
		MT	FDMS000C080-YW	
	175 W	120 V	FDMH010H120-YW	Wide
		MT	FDMH017C080-YW	
	250 W	120 V	FDMH025C120-YW	Wide
		MT	FDMH025C080-YW	
	400 W	120 V	FDMH040C120-YW	Wide
		MT	FDMH040C080-YW	
	1000 W	120 V	FDMH000C12L-YW	Wide
		MT	FDMH000C08L-YW	

*For narrow-beam floodlights, replace 'W' at the end part number with 'N'.

Dimensions Hazlux® 3 Floodlight HID fixtures



Photometry Hazlux® 3 Floodlight HID fixtures

Ceiling Mount		
Reference Data		Candlepower Curve
Catalogue No.	FDH040H090-YWE	19153 14365 9577 4788
Lamp	400W MH ED37	
Lamp Lumens	34000	
NEMA Type	7H x 6V	
Maximum Candela	19153	
Maximum Candela Angle	25H 0V	
Horizontal Beam Angle (50%)	108.2	
Vertical Beam Angle (50%)	33.8	
Horizontal Field Angle (10%)	137.2	
Vertical Field Angle (10%)	123.3	
Luminaire Lumens	25756	33506 25130 16753 8377
Total Efficiency	76%	
Total Luminaire Watts	465	
Ballast Factor	1.00	

Ceiling Mount		
Reference Data		Candlepower Curve
Catalogue No.	FDH0100H090-YWE	33506 25130 16753 8377
Lamp	1000W MH BT37	
Lamp Lumens	107800	
NEMA Type	6H x 6V	
Maximum Candela	33506	
Maximum Candela Angle	0H 33V	
Horizontal Beam Angle (50%)	86.2	
Vertical Beam Angle (50%)	95.5	
Horizontal Field Angle (10%)	128.5	
Vertical Field Angle (10%)	126.1	
Luminaire Lumens	68208	33506 25130 16753 8377
Total Efficiency	63%	
Total Luminaire Watts	1069	
Ballast Factor	1.00	

Class I, Division 2 Thermal Performance Data

High Pressure Sodium		Configuration		
	Ambient Temp. in Free Air	Standard Housing	Large Housing	Supply Wire Temp. Rating
		"T" No.	"T" No.	
100W (S54 Lamp)	40°C	T2D (215)	—	60°C
150W (S55 Lamp)	40°C	T2B (260)	—	75°C
200W (S66 Lamp)	40°C	T1 (450)	—	75°C
250W (S50 Lamp)	40°C	T1 (450)	—	75°C
400W (S51 Lamp)	40°C	T1 (450)	—	90°C
1000W (S52 Lamp)	40°C	—	T1 (450)	125°C
Metal Halide				
100W (M90 Lamp)	40°C	T1 (350)	—	75°C
175W (M57 Lamp)	40°C	T1 (350)	—	90°C
250W (M58 Lamp)	40°C	T1 (350)	—	125°C
400W (M59 Lamp)	40°C	T1 (350)	—	125°C
1000W (M52 Lamp)	25°C	—	T1 (450)	125°C



Introduction

Strobe lights

Strobe Series and Suitability

- DXS = HazFlash® M4 Xenon Strobe
- Class I, Division 2, Groups A, B, C, D
- Class II, Division 1, Groups E, F, G
- Class II: Pendant-Mount Strobes Only

Flash Rate

- 6 = 60 Flashes per Minute

Voltage

- 1 = 120 Volts AC, 50/60 Hz (Standard)
- 2 = 240 Volts AC, 50/60 Hz
- 8 = 10-30 Volts DC
- 9 = 90-130 Volts DC

Lens Color

- R = Red
- B = Blue
- C = Clear
- G = Green
- A = Amber

Optical Assembly Options

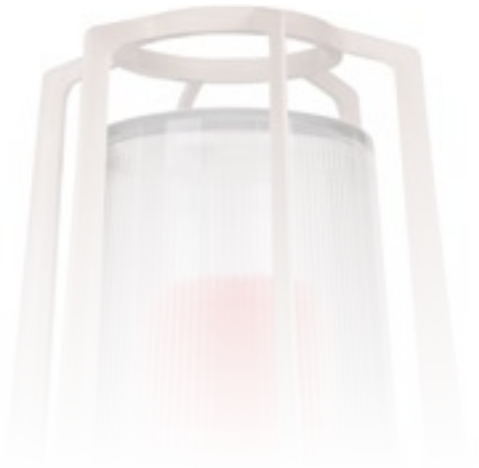
- TG = Tempered Glass Globe
- TGP = Tempered Globe and Polymeric Guard

Mounting Style

- P2 = 3/4" Pendant Mount
- C2 = 3/4" Ceiling Mount
- B2 = 3/4" Wall Mount with Box
- S4 = 1-1/4" Angle Stanchion Mount

Options

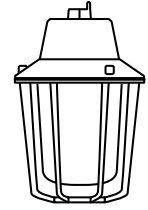
- SR = Sealing Ring Kit for Inverted Mounting
(Maintains Marine Listing in Globe-Up Position)



Strobe lights

Hazlux® M4 HazFlash Series - Hazardous area strobe lights

Catalog numbering system



Ballast Tank

X4S	6	1	R	-	G	-	P2	SR	-	C
1	2	3	4		5		6	7		8

Ballast Tank		
1 Strobe Series and Suitability	DXS	HazFlash® M4 Xenon Strobe Class I, Division 2, Groups A, B, C, D Class II, Division 1, Groups E, F, G*
2. Flash Rate	6	60 Flashes per Minute
Electronical Rating		
3. Electronical Rating	1	120 Volts AC, 50/60 Hz (Standard)
	2	240 Volts AC, 50/60 Hz
	8	10-30 Volts DC
	9	90-130 Volts DC
Lens Color		
4. Lens Color	R	Red
	B	Blue
	C	Clear
	G	Green
	A	Amber

Optics & Mountings

5. Optical Assembly	TG	Tempered Glass Globe
	TGP	Tempered Globe and Polymeric Guard
6. Mounting style	P2	3/4" Pendant Mount
	C2	3/4" Ceiling Mount
	B2	3/4" Wall Mount with Box
	S4	1-1/4" Angle Stanchion Mount

Options

7. Options	SR	Sealing Ring Kit for Inverted Mounting (Maintains Marine Listing in Globe-Up Position)
8. Certification	C	Canadian Market

*Class II: Pendant Mount Strobes only

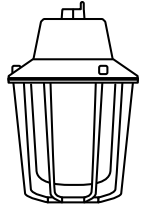
**Sealing Ring Option required when mounting in globe-up position

Certifications & Standards

Approvals/Characteristics

- Class I** – Division 2, Groups A, B, C and D
- Class II** – Division 1, Groups E, F, and G*
- CSA - NRTL/C
- Outdoor Wet Locations, NEMA 3R
- Outdoor Marine**, NEMA 4X*





Hazlux® M4 HazFlash Series - Hazardous area strobe lights

Mounting Style	Conduit Size	120 VAC, 50/60 HZ Cat. No.	240 VAC, 50/60 HZ Cat. No.	10–30 VDC Cat. No.	90–130 VDC Cat. No.
Red Lens HazFlash® M4 DXS Strobe Lights					
Pendant	3/4"	DXS61RGP-P2	DSX62RGP-P2	DXS68RGP-P2	DXS69RGP-P2
Ceiling	3/4"	DXS61RGP-C2	DXS62RGP-C2	DXS68RGP-C2	DXS69RGP-C2
Wall	3/4"	DXS61RGP-B2	DXS62RGP-B2	DXS68RGP-B2	DXS69RGP-B2
Stanchion	1-1/4"	DXS61RGP-S4	DXS62RGP-S4	DXS68RGP-S4	DXS69RGP-S4
Blue Lens HazFlash® M4 DXS Strobe Lights					
Pendant	3/4"	DXS61BGP-P2	DSX62BGP-P2	DXS68BGP-P2	DXS69BGP-P2
Ceiling	3/4"	DXS61BGP-C2	DXS62BGP-C2	DXS68BGP-C2	DXS69BGP-C2
Wall	3/4"	DXS61BGP-B2	DXS62BGP-B2	DXS68BGP-B2	DXS69BGP-B2
Stanchion	1-1/4"	DXS61BGP-S4	DXS62BGP-S4	DXS68BGP-S4	DXS69BGP-S4
Clear Lens HazFlash® M4 DXS Strobe Lights					
Pendant	3/4"	DXS61CGP-P2	DSX62CGP-P2	DXS68CGP-P2	DXS69CGP-P2
Ceiling	3/4"	DXS61CGP-C2	DXS62CGP-C2	DXS68CGP-C2	DXS69CGP-C2
Wall	3/4"	DXS61CGP-B2	DXS62CGP-B2	DXS68CGP-B2	DXS69CGP-B2
Stanchion	1-1/4"	DXS61CGP-S4	DXS62CGP-S4	DXS68CGP-S4	DXS69CGP-S4
Green Lens HazFlash® M4 DXS Strobe Lights					
Pendant	3/4"	DXS61GGP-P2	DSX62GGP-P2	DXS68GGP-P2	DXS69GGP-P2
Ceiling	3/4"	DXS61GGP-C2	DXS62GGP-C2	DXS68GGP-C2	DXS69GGP-C2
Wall	3/4"	DXS61GGP-B2	DXS62GGP-B2	DXS68GGP-B2	DXS69GGP-B2
Wall	1-1/4"	DXS61GGP-S4	DXS62GGP-S4	DXS68GGP-S4	DXS69GGP-S4
Amber Lens HazFlash® M4 DXS Strobe Lights					
Pendant	3/4"	DXS61AGP-P2	DSX62AGP-P2	DXS68AGP-P2	DXS69AGP-P2
Ceiling	3/4"	DXS61AGP-C2	DXS62AGP-C2	DXS68AGP-C2	DXS69AGP-C2
Wall	3/4"	DXS61AGP-B2	DXS62AGP-B2	DXS68AGP-B2	DXS69AGP-B2
Stanchion	1-1/4"	DXS61AGP-S4	DXS62AGP-S4	DXS68AGP-S4	DXS69AGP-S4

*Use pendant mount strobes only for Class II locations

*Use sealing ring kit (below) to maintain Outdoor Marine and NEMA 4X ratings when installing in the inverted position

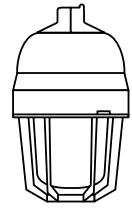
*To order DXS strobe light with sealing ring kit for inverted mounting (globe pointing up), add suffix "-SR" to the catalog number. Example: DXS61RGP-P2-SR

DXS Strobe Light Replacement Parts

Cat. No..	Description
XSFT	Replacement Flash Tube
XSFL-R	Replacement Fresnel Lens - Red
XSFL-B	Replacement Fresnel Lens - Blue
XSFL-C	Replacement Fresnel Lens - Clear
XSFL-G	Replacement Fresnel Lens - Green
XSFL-A	Replacement Fresnel Lens - Amber
VGU22P	Replacement Polycarbonate Guard
VGL22	Clear Globe
VGT22	Tempered Globe
SRKIT-1	Sealing Ring Kit - includes sealing ring and gasket

Strobe lights

Hazlux® M5 HazFlash Series - Explosion-proof strobe lights
Catalog numbering system



Ballast Tank

X4S	6	1	R	-	G	-	P2	SR	-	C
1	2	3	4		5		6	7		8

Ballast Tank

1. Strobe Series and Suitability	XXS	HazFlash® M5 Xenon Strobe Class I, Division 1, Groups C, D Class II, Division 1, Groups E, F, G
2. Flash Rate	6	60 Flashes per Minute
	4	40 Flashes per Minute (Standard)
	8	80 Flashes per Minute

Electrical Ratings

3. Electrical Ratings	1	120 Volts AC, 50/60 Hz (Standard)
	2	240 Volts AC, 50/60 Hz
	8	10-30 Volts DC
	9	90-130 Volts DC

Lens Color

4. Lens Color	R	Red
	B	Blue
	C	Clear
	G	Green
	A	Amber

Optics & Mounting

5. Guard	G	Cast Guard (Omit "G" if guard is not required.)
6. Mounting style	P2	3/4" Pendant Mount
	P3	1" Pendant Mount
	C2	3/4" Ceiling Mount
	C3	1" Ceiling Mount
	B2	3/4" Wall Mount with Box
	B3	1" Wall Mount with Box
	J2	3/4" Bulkhead Mount
	J3	1" Bulkhead Mount
	S4	1-1/4" Angle Stanchion Mount
	S5	1-1/4" Angle Stanchion Mount

Options

7. Options	SR	Sealing Ring Kit for Inverted Mounting (Maintains Marine Listing Globe-Up Position)
8. Certification	C	Canadian Market

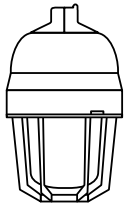
*Pendant Mount only

Certifications & Standards

Approvals/Characteristics

Class I – Division 1, Groups C and D
Class II – Division 1, Groups E, F, and G*
 – Outdoor Wet Locations*, NEMA 4X
 – UL864, UL1598, UL844
 – CSA C22.2 No. 137





Hazlux® M5 HazFlash Series - Explosion-proof strobe lights

Mounting Style	Conduit Size	120 VAC, 50/60 HZ Cat. No.	240 VAC, 50/60 HZ Cat. No.	10-30 VDC Cat. No.	90-130 VDC Cat. No.
Red Lens HazFlash® M5 XXS Strobe Lights					
Pendant	3/4"	XXS61R-G-P2	XXS62R-G-P2	XXS68R-G-P2	XXS69R-G-P2
Ceiling	3/4"	XXS61R-G-C2	XXS62R-G-C2	XXS68R-G-C2	XXS69R-G-C2
Wall	3/4"	XXS61R-G-B2	XXS62R-G-B2	XXS68R-G-C2	XXS69R-G-B2
Stanchion	1-1/4"	XXS61R-G-S4	XXS62R-G-B2	XXS68R-G-S4	XXS69R-G-S4
Blue Lens HazFlash® M5 XXS Strobe Lights					
Pendant	3/4"	XXS61B-G-P2	XXS62B-G-P2	XXS68B-G-P2	XXS69B-G-P2
Ceiling	3/4"	XXS61B-G-C2	XXS62B-G-C2	XXS68B-G-C2	XXS69B-G-C2
Wall	3/4"	XXS61B-G-B2	XXS62B-G-B2	XXS68B-G-B2	XXS69B-G-B2
Stanchion	1-1/4"	XXS61B-G-S4	XXS62B-G-S4	XXS68B-G-S4	XXS69B-G-S4
Clear Lens HazFlash® M5 XXS Strobe Lights					
Pendant	3/4"	DXS61C-G-P2	DXS62C-G-P2	DXS68C-G-P2	DXS69C-G-P2
Ceiling	3/4"	DXS61C-G-C2	DXS62C-G-C2	DXS68C-G-C2	DXS69C-G-C2
Wall	3/4"	DXS61C-G-B2	DXS62C-G-B2	DXS68C-G-B2	DXS69C-G-B2
Stanchion	1-1/4"	DXS61C-G-S4	DXS62C-G-S4	DXS68C-G-S4	DXS69C-G-S4
Green Lens HazFlash® M5 XXS Strobe Lights					
Pendant	3/4"	XXS61G-G-P2	XXS62G-G-P2	XXS68G-G-P2	XXS69G-G-P2
Ceiling	3/4"	XXS61G-G-C2	XXS62G-G-C2	XXS68G-G-C2	XXS69G-G-C2
Wall	3/4"	XXS61G-G-B2	XXS62G-G-B2	XXS68G-G-B2	XXS69G-G-B2
Wall	1-1/4"	XXS61G-G-S4	XXS62G-G-S4	XXS68G-G-S4	XXS69G-G-S4
Amber Lens HazFlash® M5 XXS Strobe Lights					
Pendant	3/4"	XXS61A-G-P2	XXS62A-G-P2	XXS68A-G-P2	XXS69A-G-P2
Ceiling	3/4"	XXS61A-G-C2	XXS62A-G-C2	XXS68A-G-C2	XXS69A-G-C2
Wall	3/4"	XXS61A-G-B2	XXS62A-G-B2	XXS68A-G-B2	XXS69A-G-B2
Stanchion	1-1/4"	XXS61A-G-S4	XXS62A-G-S4	XXS68A-G-S4	XXS69A-G-S4

* Note: To order XXS strobe light with sealing ring kit for inverted mounting (globe pointing up), add suffix "-SR" to the catalog number. Example: XXS61RGP-P2-SR

DXS Strobe Light Replacement Parts

Cat. No.	Description
XSFT	Replacement Flash Tube
XSFL-R	Replacement Fresnel Lens - Red
XSFL-B	Replacement Fresnel Lens - Blue
XSFL-C	Replacement Fresnel Lens - Clear
XSFL-G	Replacement Fresnel Lens - Green
XSFL-A	Replacement Fresnel Lens - Amber
XGU15	Replacement Guard
XGSA15	Replacement Globe Assembly

Technical section

Ignition temperatures and group classifications

Ignition Temperatures and Group Classifications for Flammable Gases and Vapors							
Material	Group	Autoignition Temperature		Material	Group	Autoignition Temperature	
		Degrees F	Degrees C			Degrees F	Degrees C
Acetaldehyde	C	347	175	Di-N-Propylamine	C	570	299
Acetic Acid	D	867	464	Diacetone Alcohol	D	1118	603
Acetic Anhydride	D	600	316	o-Dichlorobenzene	D	1198	647
Acetone	D	869	465	1,1-Dichloroethane	D	820	438
Acetone Cyanohydrin	D	1270	688	1,2-Dichloroethylene	D	860	460
Acetonitrile	D	975	524	Dicyclopentadiene	C	937	503
Acetylene	A	581	305	Diethyl Benzene	D	743–842	395–450
Acrolein (Inhibited)	B (C)	455	285	Diethyl Ether	C	320	160
Acrylic Acid	D	820	438	Diethylamine	C	594	312
Acrylonitrile	D	898	481	Diethylene Glycol Monobutyl Ether	C	442	228
Allyl Alcohol	C	713	378	Diethylene Glycol Monomethyl Ether	C	465	241
Allyl Chloride	D	905	485	n-n-Dimethyl Aniline	C	700	371
Alpha-Methyl Styrene	D	1066	574	Dimethyl Formamide	D	833	455
Ammonia	D	928	498	Dimethyl Sulfate	D	370	188
n-Amyl Acetate	D	680	360	Dimethylamine	C	752	400
Aniline	D	1139	615	1,4-Dioxane	C	356	180
Benzene	D	928	498	Dipentene	D	458	237
Benzyl Chloride	D	1085	1085	Dodecene	D	491	255
1,3-Butadiene	B (D)	788	420	Du-Isopropylamine	C	600	316
Butane	D	550	288	Epichlorohydrin	C	772	411
1-Butanol	D	650	343	Ethane	D	882	472
2-Butanol	D	761	405	Ethanol	D	685	363
n-Butyl Acetate	D	790	421	Ethyl Acetate	D	800	427
n-Butyl Acrylate (Inhibited)	D	559	293	Ethyl Acetate (Inhibited)	D	702	372
Butylamine	D	594	312	Ethyl Benzene	D	810	432
Butylene	D	725	385	Ethyl Chloride	D	966	519
n-Butyraldehyde	C	425	218	Ethyl Formate	D	851	455
n-Butyric Acid	D	830	443	2-Ethyl Hexanol	D	448	231
Carbon Disulfide	*	194	90	2-Ethyl Hexyl Acrylate	D	485	252
Carbon Monoxide	C	1128	609	Ethyl Mercaptan	C	572	300
Chlorobenzene	D	1099	593	Ethylamine	D	725	385
Cresol	D	1038–1110	559–599	Ethylene	C	842	450
Crotonaldehyde	C	450	232	Ethylene Chlorohydrin	D	797	425
Cumene	D	795	424	Ethylene Dichloride	D	775	413
Cyclohexane	D	473	245	Ethylene Glycol Monobutyl Ether	C	460	238
Cyclohexanol	D	572	300	Ethylene Glycol Monobutyl Ether Acetate	C	645	340
Cyclohexanone	D	473	245	Ethylene Glycol Monoethyl Ether	C	455	235
Cyclohexene	D	471	244	Ethylene Glycol Monoethyl Ether Acetate	C	715	379
Cyclopropane	D	938	503	Ethylene Glycol Monomethyl Ether	D	545	285
p-Cymene	D	817	436	Ethylene Oxide	B (C)	804	429
n-Decanol	D	550	288	Ethylenediamine	D	725	385
Decene	D	455	235	Ethylenimine	C	608	320
Di-Isobutyl Ketone	D	745	396	2-Ethylhexaldehyde	C	375	191
Di-Isobutylene	D	736	391	Formaldehyde (Gas)	B	795	429

*Carbon Disulfide has characteristics which require safeguards beyond those required for any of the above groups

Ignition Temperatures and Group Classifications for Flammable Gases and Vapors (continued)

Material	Group	Autoignition Temperature		Material	Group	Autoignition Temperature	
		Degrees F	Degrees C			Degrees F	Degrees C
Fuel Oils	D	410–765	210–407	Monoethanolamine	D	770	410
Furfural	C	600	316	Monoisopropanolamine	D	705	374
Furfuryl Alcohol	C	915	490	Monomethyl Aniline	C	900	482
Gasoline	D	536–880	280–471	Monomethyl Hydrazine	C	382	194
Heptane	D	399	204	Morpholine	C	590	310
Heptene	D	500	260	Naphtha (Coal Tar)	D	531	277
Hexane	D	437	225	Naphtha (Petroleum)	D	550	288
2-Hexanone	D	795	424	Nitrobenzene	D	900	482
Hexenes	D	473	245	Nitroethane	C	778	414
Hydrazine	C	74–518	23–270	Nitromethane	C	785	418
Hydrogen	B	968	520	2-Nitropropane	C	802	428
Hydrogen Cyanide	C	1000	538	1-Nitropropane	C	789	421
Hydrogen Sulfide	C	500	260	Nonane	D	401	205
Iso-Butyl Acetate	D	790	421	Octane	D	403	206
Iso-Octyl Aldehyde	C	387	197	Octene	D	446	230
Isoamyl Acetate	D	680	360	Pentane	D	470	243
Isoamyl Alcohol	D	662	350	1-Pentanol	D	572	300
Isobutyl Acrylate	D	800	427	2-Pentanone	D	846	452
Isobutyraldehyde	C	385	196	1-Pentene	D	527	275
Isophorone	D	860	460	Propane	D	842	450
Isoprene	D	428	220	2-Propanol	D	750	399
Isopropyl Acetate	D	860	460	1-Propanol	D	775	413
Isopropyl Ether	D	830	443	Propionaldehyde	C	405	207
Isopropylamine	D	756	402	Propionic Acid	D	870	466
Kerosene	D	410	210	Propionic Anhydride	D	545	285
Liquified Petroleum Gas	D	761–842	405–450	N-Propyl Acetate	D	842	450
Mesityl Oxide	D	652	344	N-Propyl Ether	C	419	215
Methane	D	999	537	Propyl Nitrate	B	347	175
Methanol	D	725	385	Propylene	D	851	455
Methyl Acetate	D	850	454	Propylene Dichloride	D	1035	537
Methyl Acrylate	D	875	468	Propylene Oxide	B (C)	840	449
Methyl Ether	C	662	350	Pyridine	D	900	482
Methyl Ethyl Ketone	D	759	404	Styrene	D	914	490
Methyl Formal	C	460	238	Tetrahydrofuran	C	610	321
Methyl Formate	D	840	449	Tetrahydronaphthalene	D	725	385
Methyl Isobutyl Ketone	D	840	449	Toluene	D	896	480
Methyl Isocyanate	D	994	534	Turpentine	D	488	253
Methyl Methacrylate	D	792	422	Unsymmetrical Dimethyl Hydrazine (Udmh)	C	480	249
Methyl N-Amyl Ketone	D	740	393	Valeraldehyde	C	432	222
2-Methyl-1-Propanol	D	780	416	Vinyl Acetate	D	756	402
2-Methyl-2-Propanol	D	892	478	Vinyl Chloride	D	882	472
Methylamine	D	806	430	Vinyl Toluene	D	921	494
Methylcyclohexane	D	482	250	Vinylidene Chloride	D	1058	570
Methylcyclohexanol	D	565	296	Xylenes	D	867–984	464–529

Technical section

Lamp charts

Hazlux® 3 - Standard Tank / R-Tank - Lamp Chart							
Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temperature	CRI
Metal Halide Lamps							
100	ED28	M140/M90/E	Mog.	10,000	9,000	4100	92
175	ED28	M57/E	Mog.	10,000	14,000	4000	65
175	ED28PS	M152/M137-0	Mog.	14,000	16,000	3500	62
200	ED28PS	M136/E	Mog.	15,000	21,000	4000	68
250	ED28	M58	Mog.	10,000	21,250	4000	65
250	ED28PS	M153/0	Mog.	24,000	21,300	4200	90
High Pressure Sodium							
50	ED23 1/2	S68	Mog.	24,000+	4,000	2100	21
70	ED23 1/2	S62	Mog.	24,000+	6,500	2100	21
100	ED23 1/2	S54	Mog.	24,000+	9,400	2100	21
150	ED23 1/2	S55	Mog.	24,000+	15,800	2100	21

Hazlux® 3 - Large Tan - Lamp Chart							
Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temperature	CRI
Metal Halide Lamps							
200	ED28PS	M136/E	Mog.	15,000	21,000	4000	68
250	ED28	M58	Mog.	10,000	21,250	4000	65
250	ED28PS	M153/0	Mog.	24,000	21,300	4200	90
320	ED28PS	M154/M132/E	Mog.	20,000	30,000	4100	62
350	ED37PS	M131/E	Mog.	20,000	37,000	4000	68
400	ED37	M59	Mog.	20,000	39,000	3900	65
400	ED37PS	M155/M128/ M135/S	Mog.	15,000	40,000	3800	65
High Pressure Sodium							
200	ED18	S66MN-200	Mog.	24,000+	21,400	2100	21
250	ED18	S50	Mog.	24,000+	28,500	2100	21
400	ED18	S51	Mog.	24,000+	50,000	2100	21
150	ED23 1/2	S55	Mog.	24,000+	15,800	2100	21

Hazlux® 3 - M3 Hazlite™ - Lamp Chart							
Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temperature	CRI
Metal Halide Lamps							
50	ED17	M148/M110/0	Med.	20,000	3,750	4000	92
70	ED17	M143/M98/E	Med.	20,000	5,900	4000	92
100	ED17	M140/M90/E	Med.	20,000	9,000	4000	92
High Pressure Sodium							
35	BD17	S76	Med.	24,000+	2,250	2100	21
50	BD17	S68	Med.	24,000+	4,000	2100	21
70	BD17	S62	Med.	24,000+	6,300	2100	21
100	BD17	S54S	Med.	24,000+	9,500	2100	21
150	BD17	S55	Med.	24,000+	16,000	2100	21

Hazlux® 1 - Lamp Chart							
Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temperature	CRI
Metal Halide Lamps							
100	ED28	M140/M90/E	Mog.	10,000	9,000	4100	92
175	ED28	M57/E	Mog.	10,000	14,000	4000	65
High Pressure Sodium							
50	ED23 1/2	S68	Mog.	24,000+	4,000	2100	21
70	ED23 1/2	S62	Mog.	24,000+	6,500	2100	21
100	ED23 1/2	S54	Mog.	24,000+	9,400	2100	21
150	ED23 1/2	S55	Mog.	24,000+	15,800	2100	21

Hazlux® M1 Hazlite™ - Lamp Chart							
Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temperature	CRI
Metal Halide Lamps							
50	ED17	M148/M110/O	Med.	20,000	3,600	4000	92
70	ED17	M143/M98/E	Med.	20,000	5,900	4000	92
100	ED17	M140/M90/E	Med.	20,000	9,000	4000	92
High Pressure Sodium							
35	BD17	S76	Med.	24,000+	2,250	2100	21
50	BD17	S68	Med.	24,000+	4,000	2100	21
70	BD17	S62	Med.	24,000+	6,300	2100	21
100	BD17	S54S	Med.	24,000+	9,500	2100	21

Hazlux® 5 - Lamp Chart							
Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temperature	CRI
Metal Halide Lamps							
100	ED28	M140/M90/E	Mog.	10,000	9,000	4100	92
175	ED28	M57/E	Mog.	10,000	14,000	4000	65
175	ED28PS	M152/M137-O	Mog.	14,000	16,000	3500	62
250	ED28	M58	Mog.	10,000	21,250	4000	65
250	ED28PS	M153/O	Mog.	24,000	21,300	4200	90
400	ED37	M59	Mog.	20,000	39,000	3900	65
400	ED37PS	M155/M128/ M135/S	Mog.	15,000	40,000	3800	65
High Pressure Sodium							
35	BD17	S76	Med.	24,000+	2,250	2100	21
50	BD17	S68	Med.	24,000+	4,000	2100	21
70	BD17	S62	Med.	24,000+	6,300	2100	21
100	BD17	S54S	Med.	24,000+	9,500	2100	21
150	BD17	S55	Med.	24,000+	16,000	2100	21

Technical section

Lamp charts

Hazlux® M5 Hazlite™ - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temperature	CRI
Metal Halide Lamps							
50	BD17	S68	Med.	24,000+	4,000	2100	21
70	BD17	S62	Med.	24,000+	6,300	2100	21
100	BD17	S54S	Med.	24,000+	9,500	2100	21
150	BD17	S55	Med.	24,000+	16,000	2100	21

Hazlux® 3 Floodlight - Lamp Chart

Wattage	Description	ANSI Ballast Code	Base	Rated Life	Initial Lumens	Colour Temperature	CRI
Metal Halide Lamps							
175	ED28	M57/E	Mog.	10,000	14,000	4000	65
175	ED28PS	M152/M137-0	Mog.	14,000	16,000	3500	62
250	ED28	M58	Mog.	10,000	21,250	4000	65
250	ED28PS	M153/0	Mog.	24,000	21,300	4200	90
400	ED37	M59	Mog.	20,000	39,000	3900	65
400	ED37PS	M155/M128/M135/S	Mog.	15,000	40,000	3800	65
400	ED37PS	M47E	Mog.	10,000	110,000	3700	65
High Pressure Sodium							
70	ED23 1/2	S62	Mog.	24,000+	6,500	2100	21
100	ED23 1/2	S54	Mog.	24,000+	9,400	2100	21
150	ED23 1/2	S55	Mog.	24,000+	15,800	2100	21
250	ED18	S50	Mog.	24,000+	28,500	2100	21
400	ED18	S51	Mog.	4,000+	50,000	2100	21
1000	ED37	S52	Mog.	24,000	125,000	2100	21





Introduction

Hazlux® Quick pole assembly

Quick pole assembly

- Operates in any kind of weather
- Overall length is 10' (3 m)
- Pole trade size is 1-1/2" treaded NPT
- Aluminum pole trade size is 2" treaded NPT
- Top pole section is 70" (1.78 m) long
- Lower pole section is 50" (1.27 m) long
- Set screws secure top and bottom section into the quick knuckle

Quick knuckle assembly

- Rotates 180° (90° left and right) around knuckle's center axis allowing freedom of installation and easy adjustment
- Easy one man operation. After center bolt is loosen, use the pull pin to lock and unlock the assembly
- Pre-fished with tape to ease wiring

Brackets

- Universal mounting for 2" to 3" angle iron railings
- Quick mounting brackets can be installed inside or outside the guardrails
- Quick knuckle assembly should be mounted above hand rail allowing the pole sections to rotate before final positioning

Features & benefits

- Sphere shaped, quick knuckle features round edges, preventing injuries and contaminant build-up of components
- The quick release mechanism is activated using one hand and one pull pin
- The quick pole assembly blocks at a 90° angle when the pull pin reaches the stopper
- All quick knuckle hardware is made of stainless steel
- All mounting brackets hardware are hot dip galvanized



The quick pole assembly blocks at a 90° angle



Hazlux® - Quick pole assembly

Standard kit & Retro kit

Standard kit

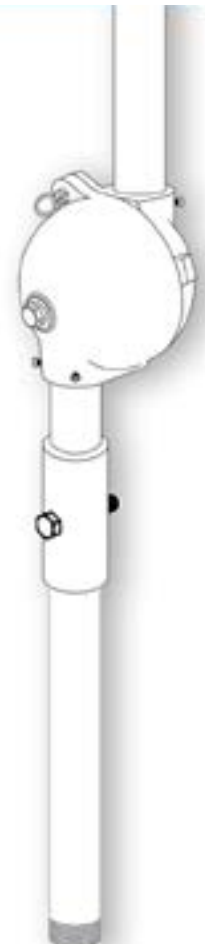
- Overall height of 10' (3 m)
 - 1-1/2" NPT treads at both ends
 - Installed with two rail mounting brackets
1. Rotating Quick Knuckle Assembly
 2. Angle Iron Mounting Brackets allowing the pole section to rotate before final positioning



Q-P-5-10-N (Galvanised 2" O.D.)
Q-P-A-5-10-N (Aluminum 2" ½ O.D.)
Standard Kit

Retrofit kit

- Overall maximum and predetermined height of 10' (3 m) once assembled
 - Can be adapted to existing pole
 - Upgrades existing assembly with quick and easy maintenance features
 - See instruction sheets provided with product for installation details
1. Rotating Quick Knuckle Assembly
 2. Tapered Adaptor, fits over Standard 1-1/4" or 1-1/2" NPT Pipe



RQ-P-5-10-N (Galvanised 2" O.D.)
RQ-P-A-5-10-N (Aluminum O.D. 2" ½ O.D.)
Retrofit Kit

Safety first

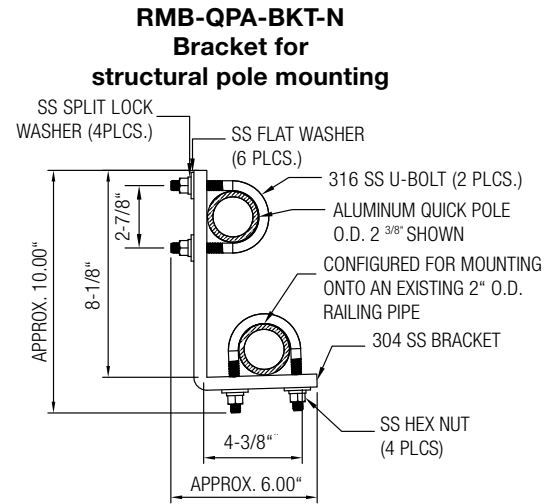
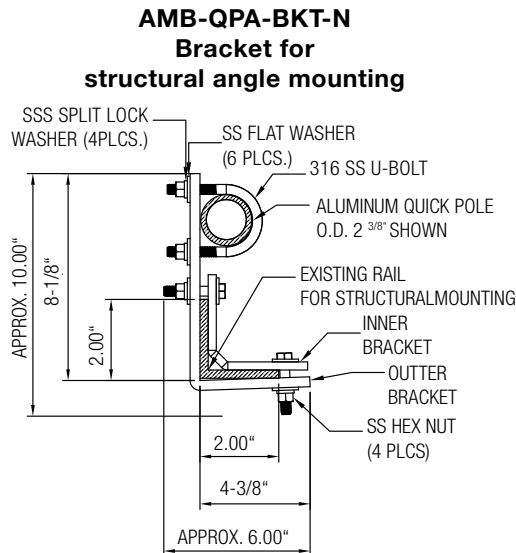
- One person operation
- No ladders or lifts required
- Simplified maintenance
- Hot dipped galvanized steel and aluminum finishes
- Free's up catwalks and walkways during maintenance
- Epoxy coated finishes available
- Suitable for 180km/h winds* as per AASHTO LTS-4 2001
- Steel pole treads are treated and protected to prevent galvanic reaction as per AASHTO LTS-4 2001
- CSA certified products



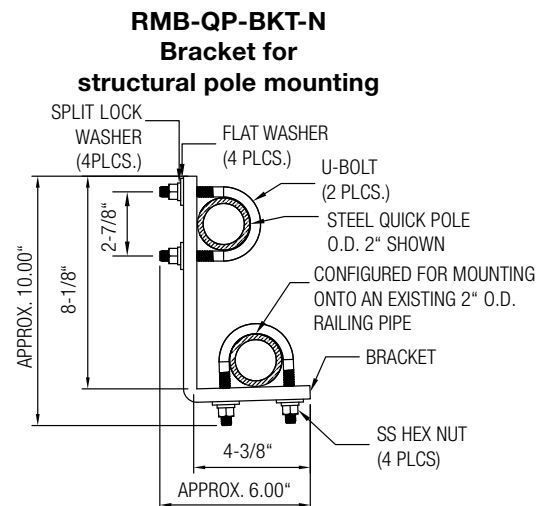
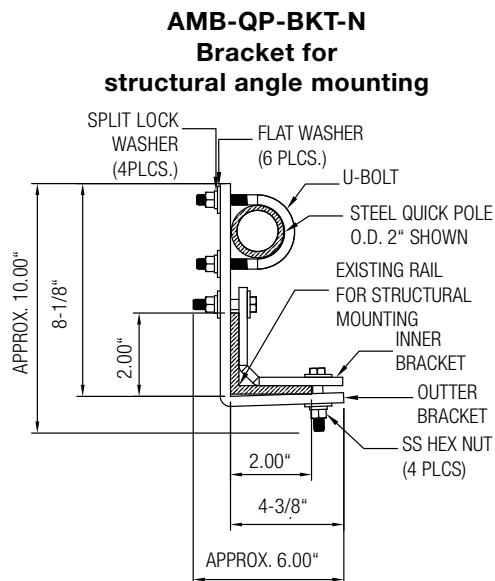
Hazlux® - Quick pole assembly

Universal bracket kit

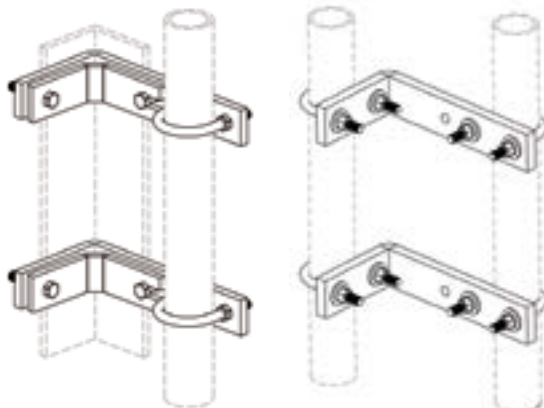
Stainless Steel (Aluminium Pole)



Galvanised Steel



Quick bolt-on installation



Universal bracket kit

- Quick bolt-on installation, no welding or drilling
- Can be attached to angle iron guardrails up to 3"
- Supplied to be installed on tubular structures less than 2" O.D. but designed for up to 2-3/8" U-Bolt in both position
- Allows the pole sections to rotate before final positioning



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