



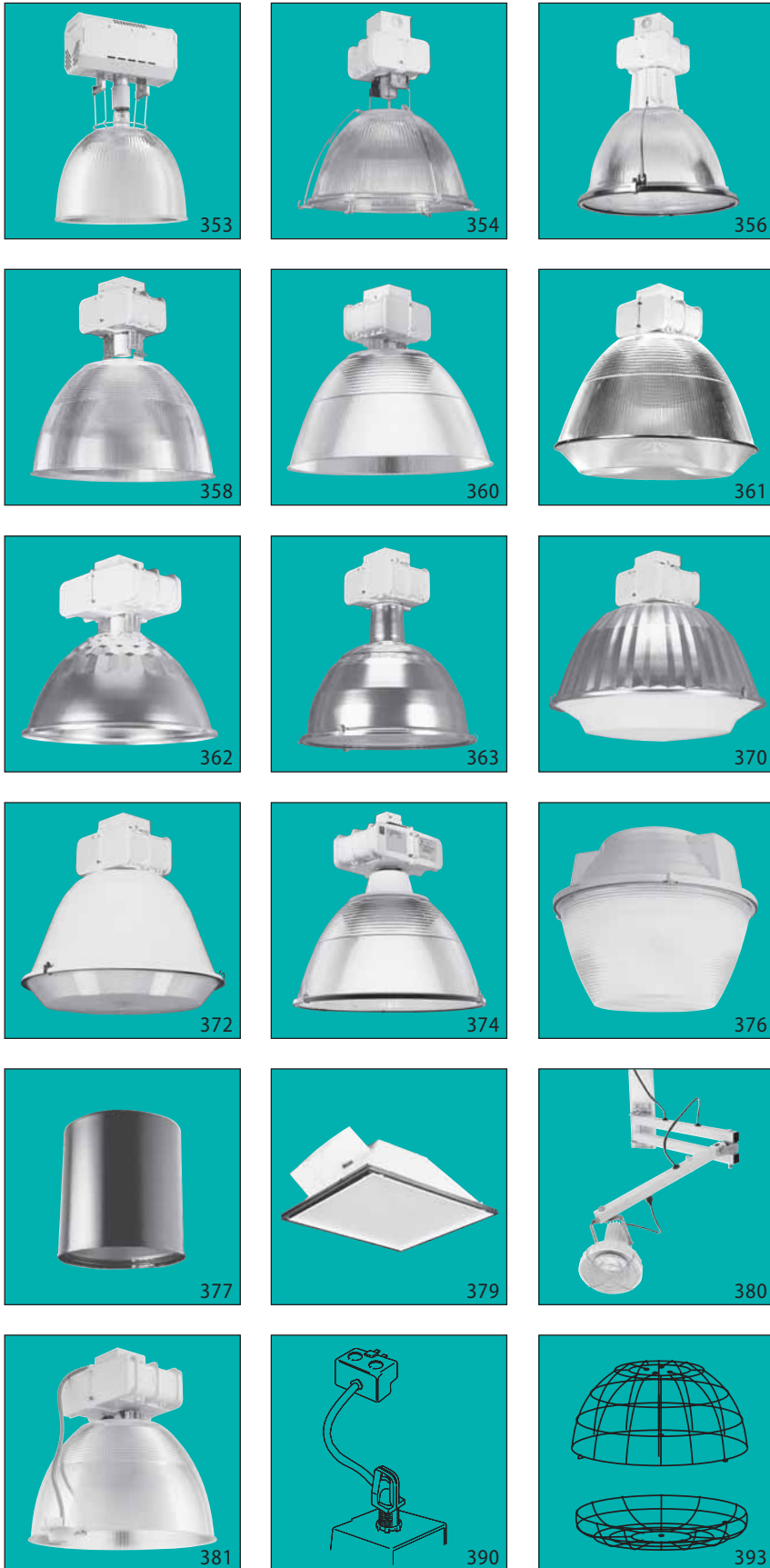
Indoor HID

Lithonia Lighting offers a wide selection of indoor HID products to address high-mount and low-mount lighting applications.

Lithonia industrial lighting withstands vibration, dirt, heat, moisture and corrosiveness while providing proper levels of efficient illumination. Lithonia commercial lighting provides a bright, cheerful and relaxed atmosphere that enhances customer and worker comfort. Lithonia recreational lighting delivers glare-free illumination so that playing surfaces and the surrounding environment are adequately illuminated for spectator and player safety.



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Low Bays/High Bays

Selecting the proper optical for your application is essential to obtain desirable results and a high quality lighting installation. Making the proper choice can become complicated with the many different aspects of a space to consider and the wide selection of optics from which to choose. Determining the mounting height for an application is the first step to narrowing the selection.

HID lighting fixtures are grouped in two general categories of low bays and high bays. Low bays are for areas with mounting heights typically under 20 feet. High bays are designed for spaces with mounting heights of approximately 18 feet and higher.

Low Bays



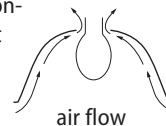
Low bays are designed with distributions to spread the light out in a space and prevent hot spots of light below the luminaire. The bottom prismatic lens bends the light to create wide distributions that improve uniformity and increase vertical illumination at lower mounting heights. Low bays perform best at mounting heights less than 20 feet and are available in various wattages up to 450 watts. The prisms reduce glare and

brightness by obscuring the lamp from view and spread out the lamp image across the lens, improving visual comfort within a space. All lenses are gasketed and supported by a door ring held in place with stainless spring steel latches that ensure a tight seal to minimize dirt entry. Optional charcoal filtering provides added protection against contaminant entry by controlling and cleaning airflow into the luminaire.

High Bays



High bays have distributions for directing light downward to maximize horizontal light levels on an area or task. Mounted at heights of 18 feet to more than 40 feet, they are available with narrower distributions and wattages up to 1000 watts. Glare and brightness are not as critical as for low bays since the luminaires are mounted high above and viewed from greater distances away. These reflectors typically are open to maximize output efficiency and minimize dirt accumulation. Open-top, open-bottom reflectors stay cleaner because the heat from the lamp creates a convective airflow that continually moves dirt and dust away from the reflector.



Enclosed high bays have a flat clear lens to minimize degradation of the anodized finish in harsh environments or contain the lamp if breakage occurs from impact to the luminaire or arc tube rupture. A flat lens typically will reduce luminaire efficiency by 5-10% compared to the same reflector open. All lenses are gasketed and supported by a door ring held in place with stainless spring steel latches that ensure a tight seal to minimize dirt entry. Optional charcoal filtering provides added protection against contaminant entry by controlling and cleaning airflow into the luminaire.

Material Choice

Low bays and high bays primarily are available in aluminum, acrylic and glass. Each material differs in performance, cost and durability making them suitable for a variety of applications for different reasons.

Hi-Tek® Aluminum



- Maximized horizontal light levels
- High ambient temperature
- Impact tolerant
- Oily and corrosive environments (high bays)
- Long service life

Aluminum is an economical and easily shaped material used to produce efficient reflectors that can withstand impact and high ambient temperatures. Different finishes are applied for protection and photometric performance. An anodized finish protects against corrosion, oily environments and increases control of the reflected light to produce distinct distributions with efficient photometric performance. A highly reflective white polyester powder coat paint finish provides excellent protection against many corrosive compounds and creates a widespread distribution for low bays that helps reduce glare from the lamp. Hi-Tek reflector designs are available in both low bays and high bays that maximize downward efficiency with very little or no upright component.

Hi-Tek low bay opticals combine aluminum reflectors with prismatic acrylic refractor lenses.

Together they produce wide distributions that maximize downward efficiency, minimize glare and enhance vertical illumination. These are ideal for applications with darker ceilings or where upright is not desired or beneficial in applications such as retail, sports facilities, manufacturing, heavy industrial and food processing. See Acrylume® acrylic section on next page for limitations of acrylic.

Hi-Tek open high bay reflectors have narrower distributions to maximize downward efficiency and horizontal light levels from high mounting heights. Applications for these reflectors include warehouses, manufacturing facilities, heavy industrial and other areas with high mounting heights or where upright is not desired or beneficial. Enclosed versions are available with a gasketed flat tempered glass lens and door.

Low Bays/High Bays

Prismatic acrylic reflector and refractor designs are a popular choice for many applications. Acrylume® optics boast higher luminaire efficiencies than aluminum reflectors through an added uplight component that smoothly illuminates the ceiling surface. A brighter ceiling reduces the background contrast so the luminaires do not appear to be as bright. The added uplight also contributes to better vertical illumination, greater uniformity and a more natural daylight feeling within a space.

Acrylume® low bay optics combine acrylic reflectors with prismatic acrylic refractor lenses. This combination is superior for glare and brightness control, vertical illumination and overall uniformity. The high quality of light delivered by these optics make them well suited for retail, institutional, sports facilities, food processing and light manufacturing applications at mounting heights less than 20 feet. A flat clear bottom lens is available in tempered glass or acrylic that produce narrower distributions suitable for mounting heights above 18 feet.

Acrylume® open high bay reflectors produce distributions for mounting heights above 18 feet. The prismatic reflector has an uplight component of 15 to 20% that illuminates surfaces above the luminaire. This eliminates shadows and scalloping along walls and at tops of warehouse aiseways. Applications include retail, light manufacturing, warehousing and institutional buildings.

Acrylume® acrylic optics are UV stabilized to prevent yellowing for ten years when operating at or below the luminaire's ambient temperature rating. Acrylic is susceptible to degradation from exposure to certain chemical compounds and oils. Compatibility must be verified for applications with air borne contaminants by referencing the acrylic environmental compatibility chart on page 735. Acrylic reflectors and refractors need to be replaced once they become visibly yellow or show signs of hazing or cracking from degradation by contaminants.

Acrylume® Acrylic



- | |
|-------------------------------------|
| • High luminaire efficiency |
| • Uplight and vertical illumination |
| • Brightness and glare control |
| • High uniformity |

Borosilicate glass is a material with many attributes that make it an ideal solution for HID lighting. DuraBay prismatic glass can withstand operation in 65° C ambient temperatures without ever discoloring, turning yellow or deforming. Glass does not have a static charge that attracts dirt, so it remains cleaner longer with higher maintained luminaire efficiency than aluminum or acrylic. It also endures corrosive and oily environments better than any other material or finish. Original optical performance is easily restored with proper cleaning.

DuraBay high bay distributions have an uplight component of 20 to 25% that evenly illuminates the ceiling above. This reduces background contrast and perceived brightness of the luminaire creating a more visually comfortable environ-

ment. Uplight also contributes to better vertical illumination, greater uniformity and a more natural daylight feeling within a space. The prismatic design minimizes reflector side wall brightness by breaking up the reflected lamp image increasing visual comfort. Enclosed versions are available with a gasketed flat tempered glass lens door and optional charcoal filter. Applications include retail, manufacturing, warehousing, sports facilities and institutional buildings.

DuraBay open and enclosed glass high bays with aluminum shroud maximize downward efficiency and horizontal light levels similar to aluminum high bays, but with the benefits and performance of glass. These reflectors deliver highest maintained efficiency, superior durability in the toughest environments, and excellent glare and brightness control. Applications include heavy industrial, manufacturing, warehousing and sports facilities.

DuraBay® Borosilicate Glass



- | |
|-------------------------------------|
| • Brightness & glare control |
| • Uplight and vertical illumination |
| • Highest maintained efficiency |
| • Oily and corrosive environments |
| • High ambient temperatures |
| • Longest service life |

Die-Cast Aluminum Housings, Interchangeable Opticals

TH High Bay



Modular ballast housing for high bay optics. Pre-attached adjustable legs accept a wide selection of anodized aluminum and prismatic acrylic high bay reflectors. A variety of distribution patterns at higher mounting heights can be achieved. These systems

provide minimum brightness and glare, and superior energy efficiency.

Large ballast housing utilized for optional high ambient temperature rating and for 450-1000W ballasts.

Housing	Reflector	Primary function	Typical mounting height	Page
TH	A14	Vertical illumination; aiseways.	18'-35'	368
TH	A15	Horizontal illumination.	18'-25'	366
TH	A16	High efficiencies; glare control.	18'-35'	364
TH	A17, A22 ¹	Optimum lamp shielding; glare control.	18'-40'+	362
TH	PA16, PA22, PA22E, PA22L	High efficiencies; vertical & horizontal illumination; uplight; glare control.	18'-35'	358
TH	PA22N, PA22SP, PA25 ¹	High efficiencies uplight; glare control; more narrow distributions for higher mounting heights.	20'-40'+	358

TX Low Bay



Modular ballast housing for enclosed low bay optics. Accepts various heavy-duty aluminum and prismatic acrylic low bay optical assemblies. Designed to provide uniform, glare-free energy-efficient lighting. Opticals are equipped with a heat-resistant, dust-inhibiting gasket at the point

of attachment and a fully gasketed lens door assembly.

Large ballast housing utilized for optional high ambient temperature ratings and for 450W ballasts.

Housing	Optical	Primary function	Typical mounting height	Page
TX	A121, A125	Lower wattage; vertical and horizontal illumination.	8'-16'	375
TX	A162, A165	Vertical and horizontal illumination.	14'-20'	375
TX	PA22C	High efficiencies; vertical illumination with uplight; glare control.	14'-20'	361
TX	PA25D	High efficiencies; vertical and horizontal illumination; glare control.	14'-20'	361
TX	PA22GLE, PA25ALE	High efficiencies; vertical and horizontal illumination (higher mounting).	14'-25'	360
TX	A20	Lower wattage; premium glare control.	10'-16'	370
TX	A26	Vertical and horizontal illumination; premium glare control.	14'-20'	370
TX	A30	High efficiencies; vertical and horizontal illumination; glare control; low brightness.	14'-20'	371
TX	A23	High efficiencies; glare control; vertical and horizontal illumination.	14'-20'	372

NOTES:

1 Suitable for 875W and 1000W using large ballast housing.

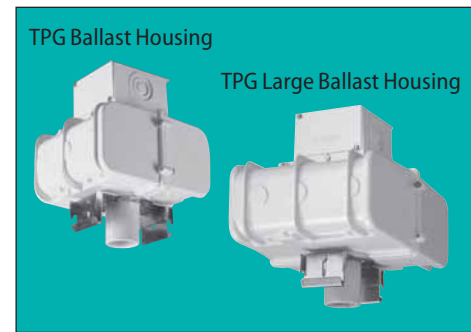
Die-Cast Aluminum Housing, Optic Specific

Provides reliable, simple installation of open glass and shrouded glass reflectors with heavy-gauge mounting brackets and sliding safety latches. Heavy-duty, die-cast splice box allows flexibility for surface, through-wire or pendant

mounting. Distributions are designated in the catalog number and factory-preset. Large ballast housing utilized for optional high ambient temperature rating and for 450-1000W ballasts.

Housing	Reflector	Primary function	Mounting height	Page
TPG	PG16	Optimum efficiencies; balance of uplight and downward distribution.	16'-35'	354
TPG	PG16A	Provides downward distributions and softens lamp image.	16'-35'	355
TPG	PG21 ¹	Optimum efficiencies; balance of uplight and downward distribution.	20'-40'+	354
TPG	PG21A ¹	Provides downward distributions and softens lamp image.	20'-40'+	355

TPG Open Glass High Bay



Accepts enclosed and gasketed glass optical assemblies in both the standard and shrouded versions. Optical are equipped with a heat-resistant, dust-inhibiting gasket at the point of attachment and a fully gasketed lens ring assembly. Heavy-duty, die-cast splice box allows flexi-

bility for surface, through-wire or pendant mounting. Distributions are designated in the catalog number and factory-preset. Large ballast housing utilized for optional high ambient temperature rating and 450-1000W ballasts.

Housing	Reflector	Primary function	Mounting height	Page
TPGE	PG16GLE	Optimum efficiencies and a balance of uplight and downward distributions while providing total enclosure of the lamp.	16'-35'	356
TPGE	PG16AGLE	Provides downward distributions and softens lamp image while providing total enclosure of the lamp.	16'-35'	357
TPGE	PG21GLE ¹	Optimum efficiencies and a balance of uplight and downward distributions while providing total enclosure of the lamp.	20'-40'+	356
TPGE	PG21AGLE ¹	Provides downward distributions and softens lamp image while providing total enclosure of the lamp.	20'-40'+	357

TPGE Enclosed Glass High Bay



Designed for E17 and E22 totally enclosed aluminum optical assemblies. Optical are equipped with a heat-resistant, dust-inhibiting gasket at the point of attachment and a fully-gasketed lens ring assembly. Distributions are

designated in the catalog number and factory-preset. Large ballast housing utilized for optional high ambient temperature rating and 450-1000W ballasts.

Housing	Reflector	Primary function	Mounting height	Page
TE	E17	Totally enclosed optics, optimum lamp shielding and glare control.	20'-40'+	363
TE	E22 ¹	Totally enclosed optics, optimum lamp shielding and glare control.	25'-40'+	363

TE Enclosed Aluminum High Bay



Designed for food processing areas and wet location applications. These assemblies feature fully gasketed construction, special FDA/USDA-compliant materials and finish, stainless steel and corrosion-resistant hardware with no ex-

posed threads and NSF certification. These systems provide glare-free, energy-efficient lighting. Large ballast housing is standard for optimal operating temperature.

Housing	Optical	Primary function	Mounting height	Page
TXF	A30F	High efficiencies; vertical & horizontal illumination; glare control; low brightness. Hose-down tested to 1200psi, IP65 rated. Wet location listed.	14'-20'	374
TXF	PA25ALEF	High efficiencies; vertical and horizontal illumination; glare control. IP65 rated. Wet location listed.	14'-25'	374

TXF Low Bay



NOTES:

¹ Suitable for 750W, 875W and 1000W using large ballast housing.

Steel Housings, Interchangeable Opticals

SH High Bay



Modular ballast housing for high bay opticals. Pre-attached adjustable legs accept a wide selection of anodized aluminum and prismatic acrylic high bay reflectors. A variety of distribution patterns at higher mounting heights can be achieved. These systems provide

minimum brightness and superior energy efficiency. Ventilated design optimizes thermal performance of enclosed electronic ballast housing. Optional heat shield provided for high ambient temperature rating.

Housing	Reflector	Primary function	Mounting height	Page
SH	A14	Vertical illumination aiseways.	18'-35'	369
SH	A15	Horizontal illumination.	18'-25'	367
SH	A16 A16GL	High efficiencies; glare control.	18'-35'	365
SH	PA22	High efficiencies; vertical & horizontal illumination; uplight; glare control.	18'-35'	359
SH	PA22N, PA22SP	High efficiencies; vertical & horizontal illumination; uplight; glare control; narrower distribution for higher mounting heights.	20'-40'+	359

SX Low Bay



Modular ballast housing for enclosed low bay opticals. Accepts heavy-duty aluminum optical assembly. Designed to provide uniform, glare-free energy-efficient lighting. Optical are equipped with a heat-resistant, dust-inhibitive

gasket at the point of attachment and a fully gasketed lens door assembly. Ventilated design optimizes thermal performance of enclosed electronic ballast housing. Optional heat shield provided for high ambient temperature rating.

Housing	Optical	Primary function	Mounting height	Page
SX	A23	High efficiencies; glare control; vertical and horizontal illumination.	14'-20'	373

SPG High Bay



Modular ballast housing for open glass high bay opticals. Provides reliable, simple installation of open glass and shrouded glass reflectors with heavy-gauge mounting brackets and sliding safety latches. Distributions are designated in the

catalog number and factory-preset. Vented design optimizes thermal performance of enclosed electronic ballast housing. Optional heat shield provided for high ambient temperature rating.

Housing	Reflector	Primary function	Mounting height	Page
SPG	PG15	Optimum efficiencies; balance of uplight and downward distribution.	16'-35'	353

SPG

DuraBay™

Intended Use

For high mounting heights that require high efficiencies, horizontal and vertical illumination and premium contrast control. Ideal for retail and warehouse applications. Steel ballast housing (SPG) should be used in areas with minimal airborne contaminants.

Features

Housing – Steel housing with white polyester powder coat finish. All electrical components are positioned to assure unit will hang straight. Housing is ventilated for optimal thermal performance.

Ballast – Electronic ballast is 100% factory tested. Ballast will operate pulse start metal halide lamps only from 200-277V.

Optics – High-efficiency, high-performance, heat-resistant borosilicate glass reflector is mounted with a heavy-gauge rigid wire form fitted to top of reflector. Opticals have a self-clean-

ing, ventilated design that carries optical contaminants out through top of reflector for maximum performance. Prismatic glass controls glare, reduces reflector-side wall brightness, and adds uplight component for greater visual comfort and improved uniformity.

Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. Protected version with pink exclusionary socket.

Installation – One-piece galvanized hook and spring steel latch with cord and plug (SC3P) is standard. Pendant splice box (PSB) with top entry for 3/4" conduit also available with other mounting options.

Listings


UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 40°C (High Ambient HA option for 55°C).



PG15

Ordering Information

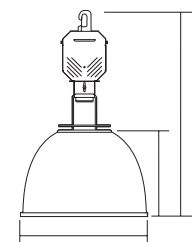
Example: **SPG 400M PG15 M 277 GEB SC3P**

Series SPG	Wattage Metal halide protected ¹ 320MP 350MP 400MP Metal halide 400M	Optical PG15	Distribution (select one) N Narrow C Concentrating M Medium S Spread W Widespread	Voltage 208 240 277 TVOLT²	Ballast  <u>Pulse start metal halide</u> GEB Electronic ballast	Options/Accessories See pages 386-397. HID lamps are available with luminaires. Consult factory.
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See pages 384-385 for details.

Lamp/fixture data						
Wattage	Standard ballast	Weight		Spacing criteria		
		lbs.	kgs.	N	C	M S W
<u>Metal halide (mog/clear)</u>						
400	GEB	21	9.5	0.7	1.0	1.3 1.7 2.1

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in **inches (centimeters)** unless otherwise noted.



SPG PG15
Overall height: 20-7/16 (51.95)
Reflector height: 10-9/16 (26.85)
Diameter: 15-9/16 (39.56)

NOTES:
1 See page 385 for details on protected sockets.
2 Tri-volt electronic ballast capable of operating on any line voltage between 200V and 277V at 50 or 60Hz. Pendant splice box (PSB) mounting required.

Premium Open Glass Optical

TPG

DuraBay™



Intended Use

For high mounting heights that require high efficiencies, horizontal and vertical illumination, and premium contrast control. Optimum performance for high ambient temperatures and dirty environments. Ideal for heavy manufacturing areas, retail and warehouse aisles.

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – High-efficiency, high-performance, heat-resistant borosilicate glass reflector mounted within heavy-gauge rigid wire forming rings and rods fitted to top of reflector and bottom of reflector. Yields high vertical footcandles

with low brightness and excellent contrast control. Self-cleaning, ventilated design carries optical contaminants out through top of reflector.

Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. 5KV pulse rated for 1000S. Protected version with pink exclusionary socket.

Installation – Cast-aluminum pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 55°C (High Ambient HA option for 65°C). 875W and 1000W pulse-start -30°C to 40°C.

Ordering Information

Example: **TPG 400MP PG16 M TB SCWA QRS**

Series	Wattage	Optical	Distribution (select one)				
TPG	High pressure sodium						
	150S	PG16	N	C	M	S	W
	200S	PG16	-	C	M	S	W
	250S	PG16	-	C	M	S	W
	400S	PG16	-	C	M	S	W
	400S	PG21	-	C21	-	-	-
	1000S	PG21	-	-	M21	-	-
	Metal halide protected ¹						
	175MP	PG16	N	C	M	S	W
	200MP	PG16	N	C	M	S	W
	250MP	PG16	N	C	M	S	W
	320MP	PG16	N	C	M	S	W
	350MP	PG16	N	C	M	S	W
	400MP	PG16	N	C	M	S	W
450MP	PG16	N	C	M	S	W	
200MP	PG21	N21	-	-	-	-	
350MP	PG21	N21	-	-	-	-	
400MP	PG21	N21	-	-	-	-	
450MP	PG21	N21	-	-	-	-	
875MP	PG21	-	C21	-	-	-	
1000MP	PG21	-	C21	-	-	-	
Metal halide							
400M	PG16	N	C	M	S	W	
400M	PG21	N21	-	-	-	-	
1000M	PG21	-	C21	-	-	-	

Voltage	Ballast
120	Metal halide and high pressure sodium
208 ^{2,3}	(blank) Standard magnetic ballast
240 ^{2,3,4}	CWI Constant wattage isolated
277	MRB Magnetic regulator ballast
347	
480 ^{2,3}	
TB ⁵	
TBV ⁶	

Pulse Start H.I.D. Ballast/Lamp Systems

Voltage	Ballast
	Pulse start metal halide
	LLRPSL Linear reactor pulse start
	SCWA Super constant wattage autotransformer
	LLSCWA Low loss SCWA
	RLB Regulated lag ballast
	SCWI Isolated SCWA

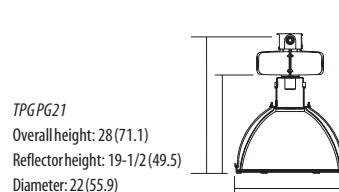
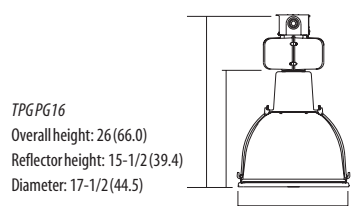
See pages 384-385 for details.

Options/Accessories
See pages 386-397. HID lamps are available with luminaires. Consult factory.

Lamp/fixture data							
Wattage	Standard ballast	Weight lbs. kgs.	Spacing criteria				
			N	C	M	S	W
High pressure sodium (mog/clear)							
150 (PG16)	CWA	32 15	0.7	1.0	1.3	1.7	2.0
200 (PG16)	CWA	35 16	-	0.8	1.2	1.6	1.9
250 (PG16)	CWA	35 16	-	0.8	1.2	1.6	1.9
400 (PG16)	CWA	38 17	-	0.8	1.2	1.7	2.0
400 (PG21)	CWA	55 25	-	1.1	-	-	-
1000 (PG21)	CWA	55 25	-	-	1.5	-	-
Metal halide (mog/clear)							
400 (PG 16)	CWA	36 16	0.7	1.0	1.3	1.7	2.0
400 (PG21)	CWA	55 25	0.7	-	-	-	-
1000 (PG21)	CWA	55 25	-	0.9	-	-	-

N = Narrow
C = Concentrating
M = Medium
S = Spread
W = Widespread

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



NOTES:

- See page 385 for details on protected sockets.
- Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

Premium Open Shrouded Glass Optical

Intended Use

For high mounting heights that require high efficiencies, horizontal illumination and premium contrast control. Optimum performance for high ambient temperature and dirty environments. Ideal for heavy manufacturing areas, retail and warehouse aisles.

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components are horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – High-efficiency, high-performance, heat-resistant borosilicate glass reflector with aluminum shroud to protect glass prisms from

oily dirt accumulation, emphasizing downward efficiency. Self-cleaning, ventilated design carries optical contaminants out through top of reflector.

Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. 5KV pulse rated for 1000S. Protected version with pink exclusionary socket.

Installation – Cast-aluminum pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 55°C (High Ambient HA option for 55°C). 875W and 1000W pulse-start - 30°C to 40°C.

TPG

DuraBay™



HIGH BAY

LITHONIA INDOOR HID

Ordering Information

Series	Wattage	Optical	Distribution (select one)				Voltage	Ballast
TPG	High pressure sodium							120
	150S	PG16A	N	C	M	S	W	208 ^{2,3}
	200S	PG16A	-	C	M	S	W	240 ^{2,3,4}
	250S	PG16A	-	C	M	S	W	277
	400S	PG16A	-	C	M	S	W	347
	400S	PG21A	-	C21	-	-	-	480 ^{2,3}
	1000S	PG21A	-	-	M21	-	-	TB ⁵
	Metal halide protected ¹							TBV ⁶
	175MP	PG16A	-	C	M	S	W	
	200MP	PG16A	-	C	M	S	W	
	250MP	PG16A	-	C	M	S	W	
	320MP	PG16A	-	C	M	S	W	
	350MP	PG16A	-	C	M	S	W	
	400MP	PG16A	-	C	M	S	W	
	450MP	PG16A	-	C	M	S	W	
	350MP	PG21A	N21	-	-	-	-	
	400MP	PG21A	N21	-	-	-	-	
	450MP	PG21A	N21	-	-	-	-	
	875MP	PG21A	-	C21	-	-	-	
	1000MP	PG21A	-	C21	-	-	-	
Metal halide								
400M	PG16A	N	C	M	S	W		
400M	PG21A	N21	-	-	-	-		
1000M	PG21A	-	C21	-	-	-		

N = Narrow
C = Concentrating
M = Medium
S = Spread
W = Widespread

Example: TPG 400MP PG16A M TB HC3P

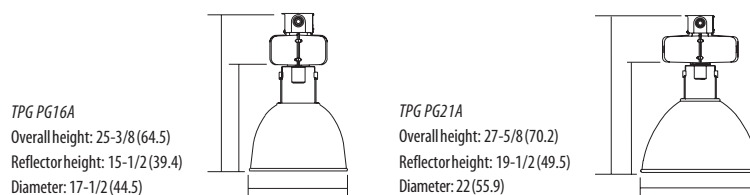
Options/Accessories	
See pages 386-397. HID lamps are available with luminaires. Consult factory.	

Lamp/fixture data							
Wattage	Standard ballast	Weight lbs. kgs.	Spacing criteria				
			N	C	M	S	W
High pressure sodium (mog/clear)							
150 (PG16A)	CWA	32 15	0.7	0.8	1.1	1.4	1.6
200 (PG16A)	CWA	35 16	-	0.8	1.3	1.7	2.0
250 (PG16A)	CWA	35 16	-	0.8	1.3	1.7	2.0
400 (PG16A)	CWA	38 17	-	1.2	1.4	1.7	2.0
400 (PG21A)	CWA	55 25	-	1.1	-	-	-
1000 (PG21A)	CWA	55 25	-	-	1.6	-	-
Metal halide (mog/clear)							
400 (PG16A)	CWA	36 16	0.7	1.0	1.3	1.7	2.1
400 (PG21A)	CWA	55 25	0.8	-	-	-	-
1000 (PG21A)	CWA	55 25	-	1.2	-	-	-

NOTES:

- See page 385 for details on protected sockets.
- Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



Premium Enclosed Glass Optical

TPGE

DuraBay™



Intended Use

For high mounting heights that require high efficiencies, horizontal and vertical illumination, and premium contrast control. Optimum performance for high ambient temperatures and harsh environments. Ideal for heavy manufacturing areas, retail, warehouse aisles and gymnasiums.

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – High-efficiency, high performance heat-resistant borosilicate glass reflector mounted within a heavy-gauge rigid wire form. Yields high vertical foot candles with low brightness and excellent contrast control. Cast-aluminum upper enclosure and corrosion-resistant steel

flange and clear tempered glass lens are fully gasketed. Lens assembly hinged and triple latched for tight seal and easy maintenance.

Socket – Glazed porcelain, vertically oriented, mogul base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV. 5KV pulse rated for 1000S.

Installation – Cast-aluminum pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 55°C (High Ambient HA option for 65°C). 750W, 875W and 1000W pulse-start -30°C to 40°C.

Ordering Information

Example: **TPGE 400M PG16GLE M TB SCWA**

Series	Wattage	Optical	Distribution (select one)				Voltage	Ballast
TPGE	High pressure sodium							
	150S	PG16GLE	-	C	M	S	W	120
	200S	PG16GLE	-	C	M	S	W	208 ^{1,2}
	250S	PG16GLE	-	C	M	S	W	240 ^{1,2,3}
	400S	PG16GLE	-	C	M	S	W	277
	400S	PG21GLE	-	C21	-	-	-	347
	1000S	PG21GLE	-	C21	-	-	-	480
								TB ⁴
								TBV ⁵
Metal halide								
175M	PG16GLE	N	C	M	S	W		
200M	G16GLE	N	C	M	S	W		
250M	PG16GLE	N	C	M	S	W		
320M	PG16GLE	N	C	M	S	W		
350M	PG16GLE	N	C	M	S	W		
400M	PG16GLE	N	C	M	S	W		
450M	PG16GLE	N	C	M	S	W		
350M	PG21GLE	N21	-	-	-	-		
400M	PG21GLE	N21	-	-	-	-		
450M	PG21GLE	N21	-	-	-	-		
750M	PG21GLE	N21	-	-	-	-		
875M	PG21GLE	N21	-	-	-	-		
1000M	PG21GLE	-	C21	-	-	-		

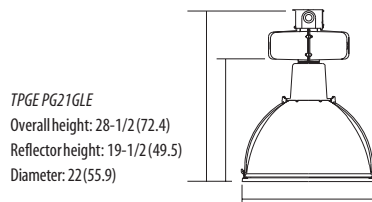
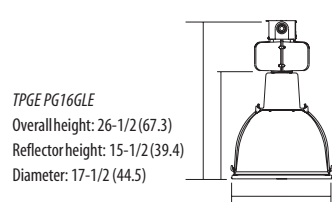
N = Narrow
C = Concentrating
M = Medium
S = Spread
W = Widespread

Options/Accessories
See pages 386-397. HID lamps are available with luminaires. Consult factory.

Wattage	Lamp/fixture data		Spacing criteria				
	Standard ballast	Weight lbs. kgs.	N	C	M	S	W
High pressure sodium (mog/clear)							
150 (PG16GLE)	CWA	32 15	-	0.9	1.3	1.5	1.8
200 (PG16GLE)	CWA	35 16	-	0.9	1.5	1.7	2.0
250 (PG16GLE)	CWA	35 16	-	0.9	1.5	1.7	2.0
400 (PG16GLE)	CWA	38 17	-	0.8	1.3	1.7	2.2
400 (PG21GLE)	CWA	55 25	-	1.0	-	-	-
1000 (PG21GLE)	CWA	55 25	-	1.4	-	-	-
Metal halide (mog/clear)							
175 (PG16GLE)	CWA	36 16	0.6	0.8	1.3	1.6	1.9
250 (PG16GLE)	CWA	36 16	0.6	0.8	1.3	1.6	1.9
400 (PG16GLE)	CWA	38 17	0.7	0.9	1.3	1.6	1.9
400 (PG21GLE)	CWA	55 25	0.9	-	-	-	-
1000 (PG21GLE)	CWA	55 25	-	1.2	-	-	-

Metal halide and high pressure sodium (blank) Standard magnetic ballast
CWI Constant wattage isolated
MRB Magnetic regulator ballast
Pulse Start H.I.D. Ballast/Lamp Systems
Pulse start metal halide
LLRPSL Linear reactor pulse start
SCWA Super constant wattage autotransformer
LLSCWA Low loss SCWA
RLB Regulated lag ballast
SCWI Isolated SCWA
See pages 384-385 for details.

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



NOTES:

- Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

Intended Use

For high mounting heights that require high efficiencies, horizontal illumination and premium contrast control. Optimum performance for high ambient temperatures and harsh environments. Ideal for heavy manufacturing areas, retail and warehouse aisles.

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – High-efficiency, high performance heat-resistant borosilicate glass reflector mounted in heavy-gauge rigid wire form. Aluminum shroud protects glass prisms from oily dirt accumulation, emphasizing downward efficiency. Cast-aluminum upper enclosure, corrosion-resistant steel

flange and clear tempered glass lens are fully gasketed to inhibit entrance of ambient contaminants. Lens assembly is hinged and triple latched for tight seal and easy maintenance.

Socket – Glazed porcelain, vertically oriented, mogul base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV. 5KV pulse rated for 1000S.

Installation – Cast-aluminum pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 55°C (High Ambient HA option for 65°C). 750W, 875W and 1000W pulse-start -30° C to 40° C.

TPGE

DuraBay™



Ordering Information

Example: TPGE 400M PG16AGLE M 277 HOCS

Series	Wattage	Optical	Distribution (select one)				Voltage	Ballast	Options/Accessories	
TPGE	High pressure sodium							120 208 ^{1,2} 240 ^{1,2,3} 277 347 480 ^{1,2} TB ⁴ TBV ⁵	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast <hr/> Pulse Start H.I.D. Ballast/Lamp Systems Pulse start metal halide LLRPSSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA RLB Regulated lag ballast SCWI Isolated SCWA See pages 384-385 for details.	See pages 386-397. HID lamps are available with luminaires. Consult factory.
	150S	PG16AGLE	-	C	M	S	W			
	200S	PG16AGLE	-	C	M	S	W			
	250S	PG16AGLE	-	C	M	S	W			
	400S	PG16AGLE	-	C	M	S	W			
	400S	PG21AGLE	-	C21	-	-	-			
	1000S	PG21AGLE	-	C21	-	-	-			
	Metal halide									
	175M	PG16AGLE	N	C	M	S	W			
	200M	PG16AGLE	N	C	M	S	W			
250M	PG16AGLE	N	C	M	S	W				
320M	PG16AGLE	N	C	M	S	W				
350M	PG16AGLE	N	C	M	S	W				
400M	PG16AGLE	N	C	M	S	W				
400M	PG21AGLE	N21	-	-	-	-				
750M	PG21AGLE	N21	-	-	-	-				
875M	PG21AGLE	N21	-	-	-	-				
1000M	PG21AGLE	-	C21	-	-	-				

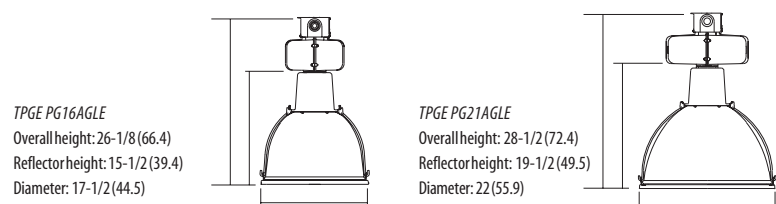
N = Narrow
 C = Concentrating
 M = Medium
 S = Spread
 W = Widespread

Wattage	Standard ballast	Weight		Spacing criteria				
		lbs.	kgs.	N	C	M	S	W
High pressure sodium (mog/clear)								
150 (PG16AGLE)	CWA	32	15	-	0.8	1.2	1.5	1.8
200 (PG16AGLE)	CWA	35	16	-	1.6	1.8	2.0	2.2
250 (PG16AGLE)	CWA	35	16	-	1.6	1.8	2.0	2.2
400 (PG16AGLE)	CWA	38	17	-	1.2	1.6	1.8	2.0
400 (PG21AGLE)	CWA	55	25	-	1.0	-	-	-
1000 (PG21AGLE)	CWA	55	25	-	0.8	-	-	-
Metal halide (mog/clear)								
175 (PG16AGLE)	CWA	36	16	-	1.3	1.5	1.7	2.0
250 (PG16AGLE)	CWA	36	16	-	1.3	1.5	1.7	2.0
400 (PG16AGLE)	CWA	36	16	0.8	1.2	1.4	1.6	1.9
400 (PG21AGLE)	CWA	55	25	0.8	-	-	-	-
1000 (PG21AGLE)	CWA	55	25	-	1.1	-	-	-

NOTES:

- Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



Open Acrylic Optical

TH PA22 TH PA25

Acrylume®



Intended Use

For high mounting heights that require higher efficiencies, general horizontal/high vertical illumination and premium contrast control. Ideal for light manufacturing areas, warehouse and retail aisles. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – UV-stabilized, high-efficiency, high-performance acrylic reflector yields high vertical footcandles while maintaining low brightness. Optical assembly is fully adjustable & accommodates a range of light distributions, while provid-

ing approximately 15–20% uplight. Open optics are self cleaning – ventilated design carries contaminants out top of reflector. Enclosed optical utilizes clear, tempered-glass lens. Hinged and latched for easy maintenance. Coated lamps provide optimum performance.

Socket – Glazed porcelain, vertically-oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. Protected version with pink exclusionary socket. UL Listed 1500W, 600V, 4KV pulse rated.

Installation – Pendant splice box (PSB) threaded for 3/4" conduit (standard). Other mounting options available. **Protect reflector from breakage. Use full wire guard (FWG) option for areas where reflectors are susceptible to impact.**

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations.

Ordering Information

Series	Wattage	Optical
TH	High pressure sodium	
	250S	PA16
	250S	PA22 or PA22N
	250S	PA22L ²
	400S	PA22 or PA22N
	400S	PA22L ²
	1000S	PA25
	Metal halide protected ¹	
	200MP	PA22, PA22N or PA22SP
	250MP	PA22, PA22N or PA22SP
	320MP	PA22, PA22N or PA22SP
	350MP	PA22, PA22N or PA22SP
	400MP	PA22, PA22N or PA22SP
	450MP	PA22, PA22N or PA22SP
875MP	PA25	
1000MP	PA25	
Metal halide		
175M	PA22E ³	
200M	PA22E ³	
250M	PA22E ³	
400M	PA22, PA22N or PA22SP	
400M	PA22L ²	
1000M	PA25	

Voltage	Ballast	Options/ Accessories	
120	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast Pulse start metal halide	See pages 386-397. HID lamps are available with luminaires. Consult factory.	
208 ^{4,5}			
240 ^{4,5,6}			
277			
347			
480 ^{4,5}			
TB ⁷			
TBV ⁸			
Pulse start metal halide			
			LLRPSL Linear reactor pulse start
	SCWA Super constant wattage autotransformer		
	LLSCWA Low loss SCWA		
	RLB Regulated lag ballast (175-400W)		
	SCWI Isolated SCWA (400W)		
See pages 384-385 for details.			

- PA16 = Standard
- PA22N = Narrow
- PA22SP = Concentrated
- PA22E = Standard
- PA22L = Standard
- PA25 = Standard

- NOTES:
- See page 385 for details on protected sockets.
 - Lensed bottom, open top. Periodic cleaning maintains performance. Does not meet UL lamp rupture containment.
 - Enclosed bottom, open top. Meets UL lamp rupture containment standards. Periodic cleaning maintains performance.
 - Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
 - Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
 - 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
 - Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
 - Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

Example: TH 350MP PA22 TB SCWA FWG

Lamp/fixture data				
Wattage	Standard ballast	Weight lbs. kgs.		S/mtg. height
High pressure sodium (mog/coated)				
250 (PA16)	CWA	21	10	1.2 to 1.9
400 (PA22)	CWA	35	16	1.3 to 2.0
250 (PA22N)	CWA	21	10	0.8 to 2.0
400 (PA22N)	CWA	35	16	0.8 to 2.0
1000 (PA25)	CWA	48	22	1.3 to 2.2
Metal halide (mog/coated)				
175 (PA22E)	CWA	20	9	1.3 to 2.0
250 (PA22E)	CWA	22	10	1.3 to 2.0
400 (PA22)	CWA	31	14	1.2 to 2.1
400 (PA22N)	CWA	31	14	0.8 to 2.1
400 (PA22SP)	CWA	31	14	0.8 to 2.1
1000 (PA25)	CWA	40	18	1.6 to 2.2

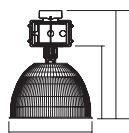
Ambient Parameters	-30° to 25°C (-22° to 131°F)	-30° to 40°C (-22° to 77°F)	-30° to 55°C (-22° to 104°F)
TH250SPA16, PA22/PA22N/PA22SP			■
TH175M, 250MPA22E			■
TH400M, 400SPA22/PA22N/PA22SP			■
TH400M, 400SPA22L		■	
TH1000M, 1000SPA25		■	

■ = COMPATABILITY

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

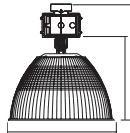
TH PA16

Reflector height: 10-3/4 (27.3)
Varies with distribution.
Overall height: 20-5/8 to 26 (52.4 to 66)
Diameter: 16-1/4 (41.3)



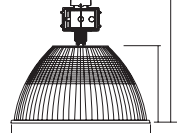
TH PA22/PA22L

Reflector height: 13-1/2 (34.3)
Varies with distribution.
Overall height: 20-5/8 to 26 (52.4 to 66)
Diameter: 22-3/8 (56.8)



TH PA25

Reflector height: 14 (35.6)
Varies with distribution.
Overall height: 23 to 26-3/8 (58.4 to 62)
Diameter: 25-1/2 (64.8)



lightquick^{XD}
Express delivery products.

See page 11 for details about LightQuick XD.

Description

TH 400 PA22 TB

SH PA22

Acrylume®

Intended Use

For high mounting heights that require higher efficiencies, high horizontal/vertical illumination and premium contrast control. Ideal for light manufacturing areas, warehouse and retail aisles. Steel ballast housings should be used in areas with minimal airborne contaminants. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Steel housing with white polyester powder coat finish. All electrical components are positioned to assure unit will hang straight. Housing is ventilated for optimal thermal performance.

Ballast – Electronic ballast is 100% factory tested. Ballast will operate pulse start lamps only from 200-277V.

Optics – UV-stabilized, high-efficiency, high-performance acrylic refractor yields high horizontal

footcandles while maintaining low brightness. Optical assembly is fully adjustable, accommodates a range of light distributions while providing approximately 15–20% uplight. Self-cleaning, ventilated design carries optical contaminants out top of refractor. Coated lamps provide optimum performance.

Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. Protected version with pink exclusionary socket.

Installation – One-piece galvanized hook and spring steel latch with cord and plug (SC3P) standard. Pendant splice box with top entry for 3/4" conduit also available with other mounting options. **Protect reflector from breakage. Use full wire guard (FWG) option for areas where reflectors are susceptible to impact.**


Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 40°C (High Ambient HA option for 55°C).



Ordering Information

Example: SH 400M PA22 277 GEB SC3P

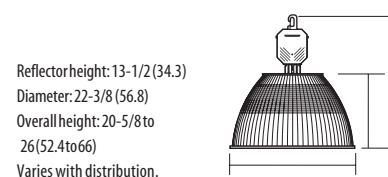
Series	Wattage	Optical	Voltage	Ballast	Options/Accessories
SH	Metal halide protected ¹ 320MP 350MP 400MP Metal halide 400M	PA22 Standard PA22N Narrow PA22SP Concentrated	208 240 277 TVOLT ¹	 Pulse start metal halide GEB Electronic ballast See pages 384-385 for details.	See pages 386-397. HID lamps are available with luminaires. Consult factory.

Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
Metal halide (mog/coated)				
400 (PA22)	GEB	14	6.5	1.2 to 2.1
400 (PA22N)	GEB	14	6.5	0.8 to 2.1
400 (PA22SP)	GEB	14	6.5	0.8 to 2.1

NOTES:

- See page 385 for details on protected sockets.
- Tri-volt electronic ballast capable of operating on any line voltage between 200V and 277V at 50 or 60 Hz. Pendant splice box (PSB) mounting required.

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



Reflector height: 13-1/2 (34.3)
Diameter: 22-3/8 (56.8)
Overall height: 20-5/8 to 26 (52.4 to 66)
Varies with distribution.

Ambient Parameters	-30° to 25°C (-22° to 77°F)	-30° to 40°C (-22° to 104°F)	-30° to 55°C (-22° to 131°F)
SH400MPA22/PA22N/PA22SP			■

■ = COMPATABILITY

Premium Enclosed Acrylic Optical

TXPA22GLE TXPA25ALE

Acrylume®



Intended Use

For controlled environments that require vertical and high horizontal illumination. Ideal for retail areas, light manufacturing areas and aisles. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – Injection-molded, virgin acrylic reflector with clear, tempered glass lens enclosure. UV-stabilized reflector. Lens is tempered glass for 22" reflector and flat clear acrylic for 25" reflector. Hinge and lens retainer latches facilitate tool-less removal for maintenance and cleaning.

Totally enclosed, gasketed lens and reflector inhibit the entrance of ambient contaminants. Meets UL lamp rupture containment specifications. Coated lamps provide optimum performance.

Socket – Glazed porcelain, vertically oriented mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated.

Installation – Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available. **Protect reflector from breakage. Use full wire guard (FWG) option for areas where reflectors are susceptible to impact.**

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. -30°C to 40°C ambient operations (High Ambient HA option for 55°C).

Ordering Information

Example: TX 400M PA22GLE 277 SCWA HOCS

Series	Wattage	Optical
TX	High pressure sodium, 22" glass lens	
	50S	PA22GLE
	400S	PA22GLE
	High pressure sodium, 25" acrylic lens	
	250S	PA25ALE
	400S	PA25ALE
	Metal halide, 22" glass lens	
	175M	PA22GLE
	200M	PA22GLE
	250M	PA22GLE
	320M	PA22GLE
	350M	PA22GLE
	400M	PA22GLE
	450M	PA22GLE
	Metal halide, 25" acrylic lens	
	200M	PA25ALE
	250M	PA25ALE
	320M	PA25ALE
350M	PA25ALE	
400M	PA25ALE	
450M	PA25ALE	

Voltage	Ballast
120	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast Pulse start metal halide LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSWCA Low loss SCWA RLB Regulated lag ballast SCWI Isolated SCWA See page 384-385 for details.
208 ^{1,2}	
240 ^{1,2,3}	
277	
347	
480 ²	
TB ⁴	
TBV ⁵	

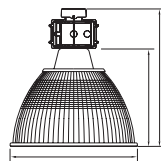
Options/Accessories				
See pages 386-397. HID lamps are available with luminaires. Consult factory.				
Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
High pressure sodium (mog/clear)				
250(PA22GLE)	CWA	33	15	1.6
400(PA22GLE)	CWA	36	16	1.6
250(PA25ALE)	CWA	39	18	1.1
400(PA25ALE)	CWA	39	18	1.1
Metal halide (mog/clear)				
250(PA22GLE)	CWA	30	14	1.7
400(PA22GLE)	CWA	33	15	1.7
250(PA25ALE)	CWA	35	16	1.2
400(PA25ALE)	CWA	35	16	1.2

Ambient Parameters	-30° to 25°C (-22° to 77°F)	-30° to 40°C (-22° to 104°F)	-30° to 55°C (-22° to 131°F)
TX250S, 250M PA22GLE		■	
TX400S, 400M PA22GLE		■	
TX250S, 250M PA25ALE			■
TX400S, 400M PA25ALE			■
TX450M PA25ALE		■	

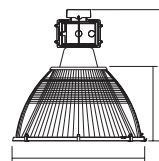
■ = COMPATIBILITY

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

TX PA22GLE
Overall height: 24-1/2 (62.2)
Reflector height: 17-1/2 (44.5)
Diameter: 23-3/8 (59.4)



TX PA25ALE
Overall height: 26-3/8 (66.9)
Reflector height: 15-3/8 (38)
Diameter: 25-3/4 (65.4)



NOTES:

- Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- Requires CWI or MRB option in Canada for HP. Available for 70-400W only.
- 220V and 240V, 50Hz and 60Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

Intended Use

For controlled environments that require a balance between high vertical and horizontal illumination. Ideal for retail areas, light manufacturing areas and aisles. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing: Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sinked to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – Injection-molded, virgin acrylic reflector and drop (PA25D) or conical (PA22C) lens. UV stabilized. Hinge and lens retainer latches facilitate tool-less removal for maintenance and cleaning. Totally enclosed, gasketed refractor

and reflector inhibit the entrance of ambient contaminants. Meets UL lamp rupture containment specifications. Coated lamps provide optimum performance.

Socket – Glazed porcelain, vertically oriented mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated.

Installation: Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available. **Protect reflector from breakage. Use full wire guard (FWG) option for areas where reflectors are susceptible to impact.**

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. -30°C to 40°C ambient operations. UL wet location available.

TX PA22C TX PA25D

Acrylume®



Ordering Information

Series	Wattage	Optical
TX	High pressure sodium, 22" acrylic conical lens	
	250S	PA22C
	400S	PA22C
	High pressure sodium, 25" acrylic drop lens	
	250S	PA25D
	400S	PA25D
	Metal halide, 22" acrylic conical lens	
	175M	PA22C
	200M	PA22C
	250M	PA22C
	320M	PA22C
	350M	PA22C
	400M	PA22C
	450M	PA22C
Metal halide, 25" acrylic drop lens		
175M	PA25D	
200M	PA25D	
250M	PA25D	
320M	PA25D	
350M	PA25D	
400M	PA25D	
450M	PA25D	

Voltage	Ballast
120	Metal halide and high pressure sodium (blank) Standard magnetic ballast
208 ^{1,2}	CWI Constant wattage isolated
240 ^{1,2,3}	MRB Magnetic regulator ballast
277	
347	
480 ^{1,2}	
TB ⁴	
TBV ⁵	

Pulse Start H.I.D. Ballast/Lamp Systems

Pulse start metal halide

LLRPSL	Linear reactor pulse start
SCWA	Super constant wattage autotransformer
LLSCWA	Low loss SCWA
RLB	Regulated lag ballast
SCWI	Isolated SCWA

See page 384-385 for details.

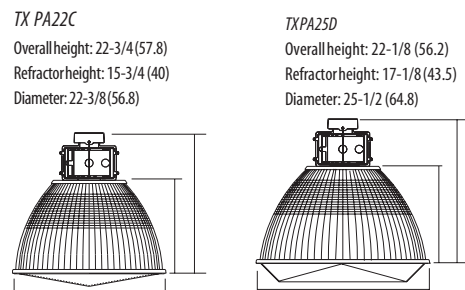
NOTES:

- Requires CWI option in Canada for metal halide, available for 175-450W only. Not available for 250W in 480V.
- Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V, 50Hz and 60Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

Example: TX 400M PA22C 120 SF QRS

Options/Accessories				
See pages 386-397. HID lamps are available with luminaires. Consult factory.				
Lamp/fixture data				
Wattage	Standard ballast	Weight lbs. kgs.		S/mtg. height
High pressure sodium (mog/coated)				
250 (PA22C)	CWA	31	14	2.7
250 (PA25D)	CWA	34	15	2.4
400 (PA22C)	CWA	31	14	2.7
400 (PA25D)	CWA	34	15	2.4
Metal halide (mog/coated)				
250 (PA22C)	CWA	31	14	3.0
250 (PA25D)	CWA	31	13	2.8
350 (PA22C)	CWA	31	14	2.8
350 (PA25D)	CWA	31	13	2.5
400 (PA22C)	CWA	31	14	2.8
400 (PA25D)	CWA	30	13	2.8

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



Ambient Parameters	-30° to 25°C (-22° to 77°F)	-30° to 40°C (-22° to 104°F)	-30° to 55°C (-22° to 131°F)
TX250S,250MPA22C		■	
TX250S,250MPA25D		■	
TX400S,400MPA22C		■	
TX400S,400MPA25D		■	

■ = COMPATIBILITY

Premium Open Aluminum Optical

TH A17

TH A22

Hi-Tek®



Ordering Information

Series	Wattage	Optical
TH	High pressure sodium	
	70S	A17
	100S	A17
	150S	A17
	200S	A17
	250S	A17
	400S	A17
	1000S	A22
	Metal halide protected ¹	
	175MP	A17
	200MP	A17
	250MP	A17
	320MP	A17
	350MP	A17
	400MP	A17
	450MP	A17
	875MP	A22
	1000MP	A22
	Metal halide	
	400M	A17
1000M	A22	

Intended Use

For high mounting heights that require high efficiencies, horizontal illumination and premium glare control. Ideal for manufacturing areas and aisles.

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cool operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – Premium spun aluminum, anodized reflector combines high efficiency with extended shielding angles for high performance. Exclusive fluted design minimizes arc tube voltage rise. Optical system is adjustable and accommodates

the full range of industrial light distributions. Self-cleaning, ventilated design carries optical contaminants out through open top of reflector.


Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. 5KV pulse rated for 1000S. Protected version with pink exclusionary socket.

Installation – Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 55°C (High Ambient HA option for 65°C). 875W and 1000W pulse-start - 30°C to 40°C.

Example: TH 400M A17 277 SCWA F1

Voltage	Ballast	Options/Accessories
120	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast  Pulse start metal halide LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA RLB Regulated lag ballast SCWI Isolated SCWA See pages 384-385 for details.	See pages 386-397. HID lamps are available with luminaires. Consult factory.
208 ^{2,3}		
240 ^{2,3,4}		
277		
347		
480 ^{2,3}		
TB ⁵		
TBV ⁶		

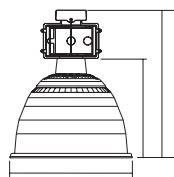
NOTES:

- See page 385 for details on protected sockets.
- Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V, 50Hz and 60Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

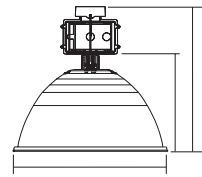
Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
High pressure sodium (mog/clear)				
70	HX-HPF	16	8	0.9 to 1.8
100	HX-HPF	17	8	0.9 to 1.8
150	HX-HPF	17	8	0.9 to 1.8
200	CWA	19	9	0.8 to 2.0
250	CWA	21	10	0.8 to 2.0
400 (A17)	CWA	33	15	0.8 to 1.9
1000 (A22)	CWA	56	26	0.8 to 1.6
Metal halide (mog/clear)				
400 (A17)	CWA	25	11	0.8 to 1.8
1000 (A22)	CWA	45	21	1.0 to 1.9

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

TH A22
 Overall height: 23-1/2 to 25 (59.7 to 63.5).
 Varies with distribution.
 Reflector height: 12-1/4 (31.1)
 Diameter: 23-1/4 (59.1)



TH A17
 Overall height: 21-1/2 to 23-1/2 (54.6 to 59.7).
 Varies with distribution.
 Reflector height: 12-1/8 (30.8)
 Diameter: 17-7/8 (45.4)



www.lithonia.com, keywords: TH-A17 or TH-A22

TE E17 TE E22

Hi-Tek®



Intended Use

For high-mounting heights that require high efficiencies, horizontal illumination, premium glare control and total enclosure. Ideal for heavy manufacturing areas, gymnasiums and wet location applications.

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components are horizontally opposed and heat-sunk to ballast housing for cool operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – One-piece, totally enclosed-and-gasketed spun aluminum, anodized reflector combines high efficiency with extended shielding angle for high-performance optical control. Exclusive fluting design minimizes arc tube voltage rise.

Gasketed, clear, tempered-glass lens inhibits the entrance of ambient contaminants. Hinge and lens retainer latches for tool-less access.

Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. 5KV pulse rated for 1000S. Protected version with pink exclusionary socket.

Installation – Pendant splice box (PSB) is threaded for 3/4" conduit (standard). Other mounting options available.

Listings


UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 55°C (High Ambient HA option for 65°C). 875W and 1000W pulse-start - 30°C to 40°C.

Ordering Information

Example: **TE 400M E17 M TB SCWA**

Series	Wattage	Optics	Distribution (select one)				
TE	High pressure sodium						
	70S	E17	N	C	M	S	W
	100S	E17	N	C	M	S	W
	150S	E17	-	C	M	S	W
	200S	E17	N	C	M	S	W
	250S	E17	N	C	M	S	W
	400S	E17	-	-	M	S	W
	400S	E22	N	C	-	-	-
	1000S	E22	N	C	-	-	-
	Metal halide						
	175M	E17	-	C	M	S	W
	200M	E17	-	C	M	S	W
	250M	E17	-	C	M	S	W
	320M	E17	-	-	M	S	W
	350M	E17	-	-	M	S	W
	400M	E17	-	-	M	S	W
350M	E22	N	C	-	-	-	
400M	E22	N	C	-	-	-	
450M	E22	N	C	-	-	-	
750M	E22	N	C	-	-	-	
875M	E22	N	C	-	-	-	
1000M	E22	-	C	M	S	-	

N = Narrow
C = Concentrated
M = Medium
S = Spread
W = Widespread

Voltage	Ballast
120	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast  Pulse start metal halide LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA RLB Regulated lag ballast SCWI Isolated SCWA See pages 384-385 for details.
208 ^{1,2}	
240 ^{1,2,3}	
277	
347	
480 ^{1,2}	
TB ⁴	
TBV ⁵	

Options/Accessories
See pages 386-397. HID lamps are available with luminaires. Consult factory.

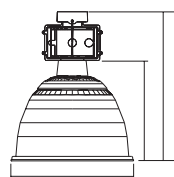
Lamp/fixture data											
Wattage	Standard ballast	Weight lbs. kgs.	Spacing/mounting height								
			E17N	E17C	E17M	E17S	E17W	E22N	E22C	E22M	E22S
High pressure sodium (mog/clear)											
70	HX-HPF	21 10	-	1.0	1.3	1.5	1.9	-	-	-	-
100	HX-HPF	21 10	-	1.0	1.4	1.5	1.9	-	-	-	-
150	HX-HPF	21 10	-	1.0	1.3	1.6	1.8	-	-	-	-
200	CWA	22 10	0.8	1.1	1.3	1.5	1.9	-	-	-	-
250	CWA	26 12	0.8	1.1	1.3	1.5	1.9	-	-	-	-
400	CWA	41 19	-	-	-	-	-	0.8	1.1	-	-
400	CWA	39 18	-	-	1.2	1.5	1.9	-	-	-	-
1000	CWA	65 29	-	-	-	-	-	0.8	1.0	-	-
Metal halide (mog/clear)											
175	CWA	22 10	-	1.0	1.4	1.6	2.0	-	-	-	-
250	CWA	24 11	-	1.0	1.3	1.6	1.9	-	-	-	-
400	CWA	31 14	-	-	-	-	-	0.8	1.0	-	-
400	CWA	31 14	-	-	1.4	1.6	1.9	-	-	-	-
1000	CWA	50 23	-	-	-	-	-	-	1.0	1.3	1.6

NOTES:

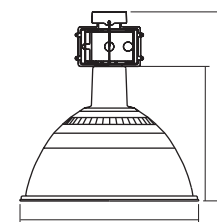
- Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- Requires MRB or CWI option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W and 1000W metal halide or high pressure sodium (CWA only).

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

TEE17
Overall height: 24-3/8 (61.9)
Reflector height: 17-3/8 (44.1)
Diameter: 17-7/8 (45.4)



TEE22
Overall height: 24-3/8 (61.9)
Reflector height: 17-3/8 (44.1)
Diameter: 23 (58.4)



Open or Lensed Aluminum Optical

TH A16 THA16GL

Hi-Tek®



Ordering Information

Series	Wattage	Optical
TH	High pressure sodium	
THD ¹	70S	A16
	100S	A16
	150S	A16
	200S	A16
	250S	A16
	250S	A16GL
	400S	A16
	400S	A16GL
	Metal halide protected ²	
	175MP	A16
	200MP	A16
	250MP	A16
	320MP	A16
	350MP	A16
	400MP	A16
	450MP	A16
	Metal halide	
	175M	A16GL
	200M	A16GL
	250M	A16GL
	320M	A16GL
	350M	A16GL
	400M	A16
	400M	A16GL
	450M	A16GL

Intended Use

For high mounting heights that require high efficiencies and horizontal illumination. Ideal for general manufacturing areas, storage areas and warehouse aisles.

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – High-efficiency, anodized, spun aluminum reflector with exclusive fluted design that minimizes arc-tube voltage rise for optimal lamp life. Open A16 opticals are self cleaning with a ventilated design that carries contaminants out top of reflector. Lensed A16GL optical

features a gasketed clear tempered glass lens with hinge and stainless steel latches for easy tool-less access.

Socket – Glazed porcelain, vertically oriented mogul-base socket with copper alloy nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. Protected version with pink exclusionary socket.

Installation – Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 55°C (High Ambient HA option for 65°C). A16GL meets UL lamp rupture containment specifications.

Example: TH 400MP A16 277 HOCS

Voltage	Ballast
120	Metal halide and high pressure sodium (blank)
208 ^{3,4}	Standard magnetic ballast
240 ^{3,4,5}	CWI Constant wattage isolated
277	MRB Magnetic regulator ballast
347	
480 ^{3,4}	
TB ⁶	
TBV ⁷	
	Pulse Start H.I.D. Ballast/Lamp Systems
	Pulse start metal halide
	LLRPSL Linear reactor pulse start
	SCWA Super constant wattage autotransformer
	LLSCWA Low loss SCWA
	RLB Regulated lag ballast
	SCWI Isolated SCWA
	See pages 384-385 for details.

Options/Accessories
See pages 386-397. HID lamps are available with luminaires. Consult factory.

Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
High pressure sodium (mog/clear)				
70	HX-HPF	12	5	0.9 to 1.8
100	HX-HPF	13	5	0.9 to 1.8
150	HX-HPF	14	6	0.9 to 1.8
200	CWA	14	6	1.1 to 1.9
250	CWA	17	8	1.1 to 1.9
400	CWA	25	11	1.1 to 2.0
Metal halide (mog/clear)				
175	CWA	16	7	1.2 to 2.1
250	CWA	20	9	1.2 to 2.1
400	CWA	21	10	1.2 to 1.9



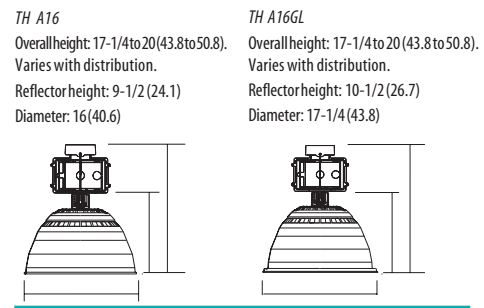
- NOTES:
- THD consists of TH housing and A16 reflector shipped in one carton. Available with tapped ballast or 480V only. Available only in 400S, 320MP, 400MP and 400M.
 - See page 385 for details on protected sockets.
 - Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
 - Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
 - 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
 - Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
 - Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W metal halide or high pressure sodium (CWA only).

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

lightquick[®] XD
Express delivery products.
See page 11 for details about LightQuick XD.

Description

TH 400M A16 TB



www.lithonia.com, keywords: TH-A16 or TH-A16GL

Open or Lensed Aluminum Optical

SH A16 SHA16GL

Hi-Tek®



Intended Use

For high mounting heights that require high efficiencies and horizontal illumination. Ideal for storage areas and warehouse aisles. Steel ballast housings should be used in areas with minimal airborne contaminants.

Features

Housing – Steel housing with white polyester powder coat finish. All electrical components are positioned to assure unit will hang straight. Housing is ventilated for optimal thermal performance.

Ballast – Electronic ballast is 100% factory tested and UL Listed. Ballast will operate pulse start lamps only from 200-277V.

Optics – High-efficiency, anodized, spun aluminum reflector with exclusive fluted design that minimizes arc-tube voltage rise for optimal lamp life. Open A16 optical is self-cleaning with a ventilated design that carries contaminants out top

of reflector. Lensed A16GL optical features a gasketed clear tempered glass lens with hinge and stainless steel latches for easy tool-less access.

Socket – Glazed porcelain, vertically-oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. Protected version with pink exclusionary socket.

Installation – One-piece galvanized hook and spring steel latch with cord and plug (SC3P) is standard. Pendant splice box (PSB) with top entry for 3/4" conduit also available with other mounting options.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 40°C (High Ambient HA option for 55°C). A16GL meets UL lamp rupture containment specifications.

Ordering Information

Example: SH 400M A16 208 GEB SC3P

Series SH	Wattage Metal halide protected ¹ 320MP 350MP 400MP Metal halide 320M 350M 400M 400M	Optical A16 A16 A16 A16GL A16GL A16GL A16	Voltage 208 240 277 TVOLT ²	Ballast Pulse Start H.I.D. Ballast/Lamp Systems Pulse start metal halide GEB Electronic ballast	Options/Accessories See pages 386-397. HID lamps are available with luminaires. Consult factory.
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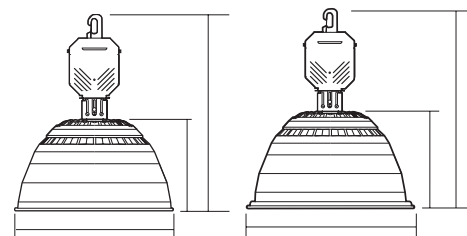
See pages 384-385 for details.

Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
Metal halide (mog/clear)				
400	GEB	12	5.5	1.2 to 1.9

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

SH A16
Overall height: 21 to 24-1/4 (53.3 to 61.6).
Varies with distribution.
Reflector height: 9-1/2 (24.1)
Diameter: 16 (40.6)

SH A16GL
Overall height: 21 to 24-1/4 (53.3 to 61.6).
Varies with distribution.
Reflector height: 10-1/2 (26.7)
Diameter: 17-1/4 (43.8)



- NOTES:
- See page 385 for details on protected sockets.
 - Tri-volt electronic ballast capable of operating on any line voltage between 200V and 277V at 50 or 60 Hz (available with GEB option only). Pendant splice box (PSB) mounting required.

www.lithonia.com, keywords: SH-A16 or SH-A16GL



Open Aluminum Optical

TH A15

Hi-Tek®



A15

Ordering Information

Series	Wattage	Optical
TH THD ¹	High pressure sodium	A15
	70S	
	100S	
	150S	
	200S	
	250S	
	400S	
	Metal halide protected ²	
	175MP	
	200MP	
	250MP	
	320MP	
	350MP	
	400MP	
	450MP	
Metal halide		
400M		

Intended Use

For high mounting heights that require high efficiencies and horizontal illumination. Ideal for general manufacturing areas, storage areas and warehouse aisles.

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – High-efficiency, anodized, spun aluminum reflector with exclusive fluted design that minimizes arc-tube voltage rise for optimal lamp life. Self-cleaning ventilated design that carries contaminants out top of reflector.

Socket – Glazed porcelain, vertically-oriented, mogul-base socket with copper alloy, nickel-


plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. Protected version with pink exclusionary socket.

Installation – Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 55°C (High Ambient HA option for 65°C).

Example: TH 400MP A15 TB

Voltage	Ballast
120	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast  Pulse start metal halide LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA RLB Regulated lag ballast SCWI Isolated SCWA See pages 384-385 for details.
208 ^{3,4}	
240 ^{3,4,5}	
277	
347	
480 ^{3,4}	
TB ⁶	
TBV ⁷	

Options/Accessories
See pages 384-385. HID lamps are available with luminaires. Consult factory.

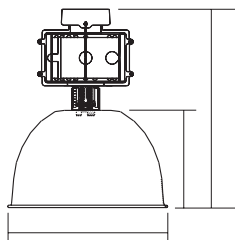
lightquick[®] XD
Express delivery products.
See page 11 for details about LightQuick XD.

Description

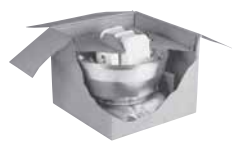
TH 400M A15 TB

Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
High pressure sodium (mog/clear)				
250	CWA	17	8	1.5
400	CWA	25	11	1.5
Metal halide (mog/clear)				
400	CWA	21	10	1.7

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



TH A15
Overall height:
250/400S: 19-1/2 (49.5)
400M: 21-1/4 (54.0)
Reflector height: 9 (22.9)
Diameter: 14-3/4 (37.5)



THD¹
Unitized Distributor Pack

- NOTES:
- THD consists of TH housing and A15 reflector shipped in one carton. Available with tapped ballast or 480V only. Available only in 400S, 320MP, 400MP and 400M.
 - See page 385 for details on protected sockets.
 - Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
 - Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
 - 220V and 240V 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
 - Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada.)
 - Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W and 1000W metal halide (CWA only).

www.lithonia.com, keyword: TH-A15

Open Aluminum Optical

SH A15

Hi-Tek®



A15

Intended Use

For high mounting heights that require high efficiencies and horizontal illumination. Ideal for general manufacturing areas, storage areas and warehouse aisles. Steel Ballast Housing (SH) should be used in areas with minimal airborne contaminants.

Features

Housing – Steel housing with white polyester powder coat finish. All electrical components are positioned to assure unit will hang straight. Housing is ventilated for optimal thermal performance.

Ballast – Electronic ballast is 100% factory tested and UL Listed. Ballast will operate pulse start lamps only from 200-277V.

Optics – High-efficiency, anodized, spun aluminum reflector with exclusive fluted design that minimizes arc-tube voltage rise for optimal lamp life. Self-cleaning ventilated design carries contaminants out top of reflector.

Socket – Glazed porcelain, vertically-oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. Protected version with pink exclusionary socket.


Installation – One-piece galvanized hook and spring steel latch with cord and plug (SC3P) is standard. Pendant splice box (PSB) with top entry for 3/4" conduit also available with other mounting options.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 40° (High Ambient HA option for 55°C).

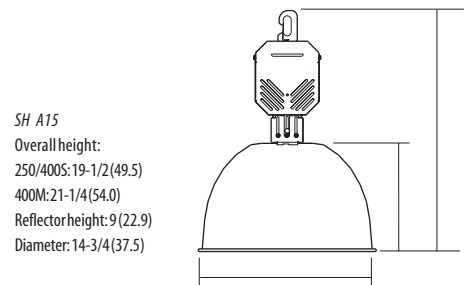
Ordering Information

Example: **SH 400M A15 TVOLT GEB PSB**

Series SH	Wattage Metal halide protected ¹ 320MP 350MP 400MP Metal halide 400M	Optical A15	Voltage 208 240 277 TVOLT²	Ballast  Pulse start metal halide GEB Electronic ballast See pages 384-385 for details.	Options/Accessories See pages 386-397. HID lamps are available with luminaires. Consult factory.
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Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
Metal halide (mog/clear)				
400	GEB	12	5.5	1.7

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in **inches (centimeters)** unless otherwise noted.



- NOTES:
- 1 See page 385 for details on protected sockets.
 - 2 Tri-volt electronic ballast capable of operating on any line voltage between 200V and 277V at 50 or 60Hz. Pendant splice box (PSB) mounting required.

www.lithonia.com, keyword: SH-A15

Premium Open Aluminum Optical

TH A14

Hi-Tek®



A14

Intended Use

For high-mounting heights that require high efficiencies, horizontal illumination and vertical illumination. Ideal for manufacturing and warehouse aisles.

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components are horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – One-piece hydroformed, anodized aluminum reflector provides rectangular distribution for maximum luminaire spacing and vertical illumination.

Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy nickel-plat-

ed screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. Protected version with pink exclusionary socket.


Installation – Pendant splice box is threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 55°C (High Ambient HA option for 65°C.)

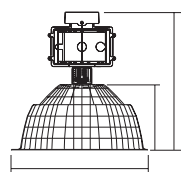
Ordering Information

Example: **TH 320MP A14 TB SCWA KW1S**

Series	Wattage	Optical	Voltage	Ballast	Options/Accessories
TH	High pressure sodium 150S 200S 250S 400S Metal halide protected ¹ 175MP 200MP 250MP 320MP 350MP 400MP 450MP Metal halide 400M	A14	120 208 ^{2,3} 240 ^{2,3,4} 277 347 480 ^{2,3} TB ⁵ TBV ⁶	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast  Pulse start metal halide LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA RLB Regulated lag ballast SCWI Isolated SCWA See page 384-385 for details.	See pages 386-397. HID lamps are available with luminaires. Consult factory.

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

TH A14
Overall height: 17-3/4 to 19-1/2 (45.1 to 49.5).
Varies with distribution.
Reflector height: 8-1/2 (21.6)
Diameter: 17-3/4 (45.1)



NOTES:

- See page 385 for details on protected sockets.
- Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W metal halide and high pressure sodium (CWA only).

Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
High pressure sodium (mog/clear)				
150	HX-HPF	16	7	2.7
200	HX-HPF	16	7	2.5
250	CWA	19	9	2.5
400	CWA	27	12	2.5
Metal halide (mog/clear)				
400	CWA	23	10	2.4

Intended Use

For high-mounting heights that require high efficiencies, horizontal illumination and high vertical illumination. Ideal for manufacturing and warehouse aisles. Steel ballast housings should be used in areas with minimal airborne contaminants.

Features

Housing – Steel housing with white polyester powder coat finish. All electrical components are positioned to assure unit will hang straight. Housing is ventilated for optimal thermal performance.

Ballast – Electronic ballast is 100% factory tested. Ballast will operate pulse start lamps only from 200-277V.

Optics – One-piece hydroformed, anodized aluminum reflector provides rectangular distribution for maximum luminaire spacing and high illumination.

Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated. Protected version with pink exclusionary socket.

Installation – One-piece galvanized hook and spring steel latch with cord and plug (SC3P) is standard. Pendant splice box (PSB) with top entry for 3/4" conduit also available with other mounting options.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 40°C (High Ambient HA option for 55°C).


SH A14

Hi-Tek®



Ordering Information

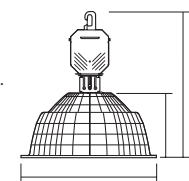
Example: **SH 400M A14 277 GEB**

Series SH	Wattage Metal halide protected ¹ 320MP 350MP 400MP Metal halide 400M	Optical A14	Voltage 208 240 277 TVOLT ²	Ballast  Pulse start metal halide GEB Electronic ballast See pages 384-385 for details.	Options/Accessories See pages 386-397. HID lamps are available with luminaires. Consult factory.
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Lamp/fixture data			
Wattage	Standard ballast	Weight lbs. kgs.	S/mtg. height
Metal halide (mog/clear)			
400	GEB	12 5.5	2.4

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in **inches (centimeters)** unless otherwise noted.

SH A14
Overall height: 17-3/4 to 19-1/2 (45.1 to 49.5).
Varies with distribution.
Reflector height: 8-1/2 (21.6)
Diameter: 17-3/4 (45.1)



- NOTES:
- See page 385 for details on protected sockets.
 - Tri-volt electronic ballast capable of operating on any line voltage between 200V and 277V at 50 or 60 Hz. Pendant splice box (PSB) mounting required.

Premium Enclosed Aluminum Optical

TX A20 TX A26

Hi-Tek®

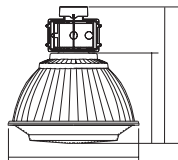


Ordering Information

Series	Wattage	Optical ¹
TX	High pressure sodium, 20" diameter	
	50S	A20
	70S	A20
	100S	A20
	150S	A20
	200S	A20
	250S	A20
	High pressure sodium, 26" diameter	
	250S	A26
	400S	A26
	Metal halide, 20" diameter	
	100M	A20
	150M	A20
	175M	A20
	200M	A20
	250M	A20
	Metal halide, 26" diameter	
	250M	A26
	320M	A26
	350M	A26
400M	A26	
450M	A26	

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

TX A20
Overall height: 21-3/8 (54.3)
Reflector height: 14-1/2 (36.2)
Diameter: 20-3/4 (52.7)



Intended Use

For areas that require good vertical illumination with excellent glare control at low mounting heights. Ideal for general open areas, retail spaces, aisles and manufacturing areas. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – Injection-molded virgin acrylic lens, fully fluted anodized aluminum reflector. Hinge and lens retainer latches facilitate tool-less removal for maintenance and cleaning. Totally enclosed, gasketed refractor and reflector inhibit

the entrance of ambient contaminants. All distribution patterns are widespread.


Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse-rated.

Installation – Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed -30°C to 40°C ambient operation and damp locations (High Ambient HA option for 55°C). UL wet location available. Meets UL lamp rupture containment specifications.

Example: TX 400M A26 277 SCWA HOCS

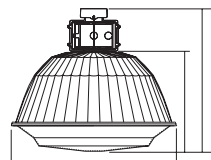
Voltage	Ballast
120	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast  Pulse start metal halide LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA RLB Regulated lag ballast SCWI Isolated SCWA See pages 384-385 for details.
208 ^{2,3}	
240 ^{2,3,4}	
277	
347	
480 ³	
TB ⁵	
TBV ⁶	

Options/Accessories
See pages 386-397. HID lamps are available with luminaires. Consult factory.

Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
High pressure sodium (mog/clear)				
50 (TXL A20)	HX-HPF	11	5	1.9
70 (TXL A20)	HX-HPF	12	5	1.8
100 (TXL A20)	HX-HPF	14	6	1.9
150 (TXL A20)	HX-HPF	15	7	1.9
200 (TXL A20)	CWA	17	8	1.9
250 (TXL A20)	CWA	21	9	1.7
250 (TXL A26)	CWA	29	13	2.0
400 (TXL A26)	CWA	37	17	2.0
Metal halide (med (100) mog/clear)				
100 (TXL A20)	CWA	16	7	1.8
175 (TXL A20)	CWA	17	8	1.8
250 (TXL A20)	CWA	20	9	1.7
250 (TXL A26)	CWA	25	11	2.2
400 (TXL A26)	CWA	32	15	2.2

- NOTES:
- 1 Replace **A** in optical nomenclature with **P** for polycarbonate lens.
 - 2 Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
 - 3 Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
 - 4 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
 - 5 Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
 - 6 Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W metal halide and high pressure sodium (CWA only).

TX A26
Overall height: 24-3/8 (61.9)
Reflector height: 17-1/16 (43.3)
Diameter: 27-1/2 (69.9)



www.lithonia.com, keywords: TX-A20 and TX-A26

Intended Use

For areas that require high efficiencies, high horizontal and vertical illumination and good glare control at low mounting heights. Ideal for general open areas, retail spaces, aisles and manufacturing areas. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – Injection-molded virgin acrylic lens, fully fluted, anodized aluminum reflector; exclusive spun-fluted anodized reflector. Hinge and lens retainer latches facilitate tool-less removal for

maintenance and cleaning. Totally enclosed, gasketed refractor and reflector inhibit the entrance of ambient contaminants. All distribution patterns are widespread.

Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse-rated.

Installation – Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed. CSA Certified. NOM Certified. UL Listed -30°C to 40°C ambient operation and damp locations (High Ambient HA option for 55°C). UL wet location available. Meets UL lamp rupture containment specifications.


TX A30

Hi-Tek®



Example: TX 400M A30 TB SCWA

Ordering Information

Series	Wattage	Optical	Voltage	Ballast
TX	High pressure sodium 250S 400S Metal halide 175M 200M 250M 320M 350M 400M 450M	A30 ¹	120 208 ^{2,3} 240 ^{2,3,4} 277 347 480 ³ TB ⁵ TBV ⁶	<u>Metal halide and high pressure sodium</u> (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast  <u>Pulse start metal halide</u> LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA RLB Regulated lag ballast SCWI Isolated SCWA See pages 384-385 for details.

Options/Accessories
See pages 386-397. HID lamps are available with luminaires. Consult factory.

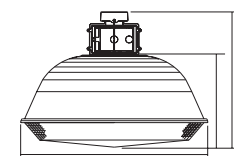
Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
<u>High pressure sodium (mog/clear)</u>				
250	CWA	26	12	2.0
400	CWA	31	14	2.0
<u>Metal halide (mog/clear)</u>				
250	CWA	26	12	2.1
400	CWA	28	13	2.1

NOTES:

- 1 Replace **A** in optical nomenclature with **P** for polycarbonate lens.
- 2 Requires **CWI** or **RLB** option in Canada for metal halide. Available for 175-450W only.
- 3 Requires **CWI** or **MRB** option in Canada for high pressure sodium. Available for 70-400W only.
- 4 220V and 240V, 50Hz and 60Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- 5 Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- 6 Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W metal halide and high pressure sodium (CWA only).

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in **inches (centimeters)** unless otherwise noted.

TX A30
Overall height: 22-1/4(56.5)
Reflector height: 15-1/4(38.7)
Diameter: 30-3/4(78.1)



Enclosed Aluminum Optical

TX A23

Hi-Tek®



A23

Intended Use

For areas that require vertical illumination and glare control at low mounting heights. Ideal for general open areas, retail spaces and aisles. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sunk to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – Injection-molded, virgin acrylic lens and highly reflective, white polyester powder painted reflector. UV stabilized. Hinge and lens retainer latches facilitate tool-less removal for maintenance and cleaning. Inhibits entrance of outside contaminants.

Socket – Glazed porcelain, vertically oriented socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated.


Installation – Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. Meets UL lamp rupture containment specifications. UL Listed for damp locations. Ambient operation: -30° to 40°C (High Ambient HA option for 55°C). UL wet location available.

Ordering Information

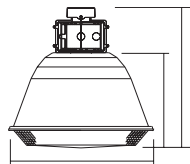
Example: **TX 400M A23 TB SCWA**

Series	Wattage	Optical	Voltage	Ballast	Options/Accessories
TX	High pressure sodium	A23 ²	120	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated MRB Magnetic regulator ballast	See pages 386-397. HID lamps are available with luminaires. Consult factory.
TXD ¹	250S 400S		208 ^{3,4} 240 ^{3,4,5}		
	Metal halide		277 347 480 ^{3,4}	 Pulse start metal halide LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA RLB Regulated lag ballast SCWI Isolated SCWA	
	175M 200M 250M 320M 350M 400M 450M		TB ⁶ TBV ⁷		



TXD¹

TX A23
Overall height: 22-1/4 (56.5)
Reflector height: 15-1/4 (38.7)
Diameter: 23 (58.4)



Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
High pressure sodium (mog/clear)				
250	CWA	23	10	1.6
400	CWA	29	13	1.6
Metal halide (mog/clear)				
250	CWA	21	10	1.7
400	CWA	25	11	1.7

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in **inches (centimeters)** unless otherwise noted.

lightquick[®] XD
Express delivery products.

See page 11 for details about LightQuick XD.

Description
TX 250M A23 TB
TX 400M A23 TB

NOTES:

- TXD consists of TX housing and A23 optical assembly shipped in one carton. Available with tapped ballast or 480V only. Available only in 250M, 320M and 400M.
- Replace **A** in optical nomenclature with **P** for polycarbonate lens.
- Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V, 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W metal halide and high pressure sodium (CWA only).

www.lithonia.com, keyword: TX-A23

SX A23

Hi-Tek®

Intended Use

For areas that require vertical illumination and glare control at low mounting heights. Ideal for general open areas, retail spaces and aisles. Steel ballast housing should be used in areas with minimal airborne contaminants. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Steel housing with white polyester powder coat finish. All electrical components are positioned to assure unit will hang straight. Housing is ventilated for optimal thermal performance.

Ballast – Electronic ballast is 100% factory tested. Ballast will operate pulse start lamps only from 200-277V.

Optics – Injection-molded, virgin acrylic lens and highly reflective, white polyester powder painted reflector. UV stabilized. Hinge and lens retain-

er latches facilitate tool-less removal for maintenance and cleaning. Inhibits entrance of outside contaminants.

Socket – Glazed porcelain, vertically oriented socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated.

Installation – One-piece galvanized hook and spring steel latch with cord and plug (SC3P) is standard. Pendant splice box (PSB) with top entry for 3/4" conduit also available with mounting options.

Listings


UL Listed to U.S. and Canadian safety standards. NOM Certified. Meets UL lamp rupture containment specifications. UL Listed for damp locations. Ambient operations: -30°C to 40°C (High Ambient HA option for 55°C).



A23

Ordering Information

Example: **SX 400M A23 TVOLT GEB PSB**

Series SX	Wattage Metal halide 320M 350M 400M	Optical A23 ¹	Voltage 208 240 277 TVOLT ²	Ballast  Pulse start metal halide GEB Electronic ballast See pages 384-385 for details.	Options/Accessories See pages 386-397. HID lamps are available with luminaires. Consult factory.
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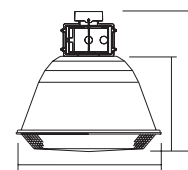
Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
Metal halide (mog/clear)				
400	GEB	12	5.5	1.7

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

NOTES:

- 1 Replace **A** in optical nomenclature with **P** for polycarbonate lens. HID lamps are available with luminaires. Consult factory.
- 2 Tri-volt electronic ballast capable of operating on any line voltage between 200V and 277V at 50 or 60Hz (available with GEB option only). Pendant splice box (PSB) mounting required.

SXA23
Overall height: 23-1/2 (59.7)
Reflector height: 15-1/4 (38.7)
Diameter: 23 (58.4)



Premium Enclosed NSF Certified Optical

TXF A30F TXF PA25ALEF

Acrylume® and Hi-Tek®



Intended Use

For general area illumination of food processing and hose-down areas requiring high efficiencies, horizontal illumination, premium glare control, ease of cleanability, compliance to FDA/USDA requirements and/or NSF splash-zone certification. For more NSF information, see page 733. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Fully gasketed, heavy-duty, die-cast copper free (<0.4%) aluminum ballast housing. Finish meets FDA CFR 21 175.300 for resinous and polymeric coatings. Electrostatically applied white polyester powder paint. Electrical components heat-sinked and horizontally opposed. External hardware is stainless steel or corrosion-resistant with no exposed threads.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – PA25ALEF: Enclosed and gasketed, injection-molded, UV stabilized, virgin acrylic reflector and flat lens. A30F: anodized aluminum and UV-stabilized virgin acrylic lens. Gasketed reflector and lens inhibit entrance of contaminants.

Installation – Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.


Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for -30°C to 55° C ambient operation and wet locations. NSF International certified splash-zone and meets FDA/USDA guidelines. Meets UL lamp rupture containment specifications. **A30F is IP65 rated against ingress of water and contaminants and is suitable for high-pressure hose-downs up to 1200 psi.**

Ordering Information

Series	Wattage	Optical
TXF	High pressure sodium	PA25ALEF A30F
	250S	
	400S	
	Metal halide	
	175M	
	200M	
	250M	
	320M	
	350M	
	400M	
450M		

Voltage	Ballast
120	Metal halide and high pressure sodium
208 ^{1,2}	(blank) Standard magnetic ballast
240 ^{1,2,4}	CWI Constant wattage isolated
277	MRB Magnetic regulator ballast
347	
480 ²	
TB ³	 Pulse start metal halide
TB ⁵	LLRPSL Linear reactor pulse start
	SCWA Super constant wattage autotransformer
	LLSCWA Low loss SCWA
	RLB Regulated lag ballast
	SCWI Isolated SCWA

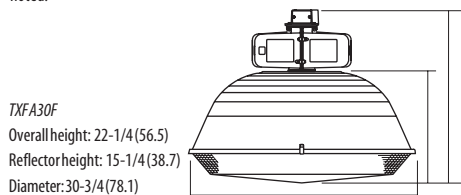
See pages 384-385 for details.

Example: TXF 400M A30F TB LLSCWA

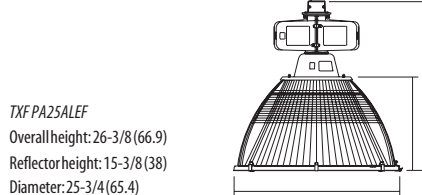
Options/Accessories
See pgs 386-397. HID lamps are available with luminaires. Consult factory.

Lamp/fixture data			
Wattage	Standard ballast	Weight lbs. kgs.	S/mtg. height
High pressure sodium (mog/clear)			
250 (TXF PA25ALEF)	CWA	39 18	1.1
250 (TXF A30F)	CWA	26 12	2.0
400 (TXF PA25ALEF)	CWA	39 18	1.1
400 (TXF A30F)	CWA	31 14	2.0
Metal Halide (mog/clear)			
250 (TXF PA25ALEF)	CWA	35 16	1.2
250 (TXF A30F)	CWA	26 12	2.1
400 (TXF PA25ALEF)	CWA	35 16	1.2
400 (TXF A30F)	CWA	28 13	2.1

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



TXF A30F
Overall height: 22-1/4 (56.5)
Reflector height: 15-1/4 (38.7)
Diameter: 30-3/4 (78.1)



TXF PA25ALEF
Overall height: 26-3/8 (66.9)
Reflector height: 15-3/8 (38)
Diameter: 25-3/4 (65.4)

NOTES:

- 1 Requires CWI or RLB option in Canada for metal halide. Available for 175-450W only.
- 2 Requires CWI or MRB option in Canada for high pressure sodium. available for 70-400W only.
- 3 Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- 4 220V and 240V 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- 5 Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

Intended Use

For areas that require high vertical illumination and wide spacings. Ideal for aisles, service areas and parking garages. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Rugged, heavy-duty, die-cast aluminum with white polyester powder finish. Electrical components horizontally opposed and heat-sinked to ballast housing for cooler operation.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – 12" diameter (A125, A121): Anodized aluminum reflector with one-piece injection-molded acrylic or polycarbonate refractor and bottom enclosure. 16" diameter (A165, A162): High efficiency, optical-quality, white polyester powder finish with one-piece injection-molded acrylic or polycarbon-

ate refractor and bottom enclosure. Consult factory. Type I and II: Asymmetrical long and narrow distribution. Type V: Symmetrical circular distribution. OB optics are open bottom.

Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated.

Installation – Pendant splice box threaded for 3/4" conduit (standard). Other mounting options available.

Listings

UL Listed to U.S. and Canadian safety standards. NOM Certified. UL Listed for damp locations and -30°C to 40°C ambient operation (High Ambient HA option for 55°C). UL wet location available, closed bottom only. Meets UL lamp rupture containment specifications (except OB open bottom optics).

TX A121/A125 TX A162/A165


Hi-Tek®



Example: TX 150S A125 277 HC3P

Ordering Information

Series	Wattage	Optical ³ (select one)	
TX	High pressure sodium, 12" diameter		
		Type V	Type I
	70S	A12	A121
	100S	A125	A121
	150S	A125	A121
	200S ²	A1250B	A1210B
	250S ²	A1250B	A1210B
	Metal halide, 12" diameter		
		Type V	Type I
	100M	A125	A121
	High pressure sodium, 16" diameter		
		Type V	Type II
	200S	A165	A162
	250S	A165	A162
	400S ²	A1650B	A1620B
Metal halide protected, 16" diameter ¹			
	Type V	Type II	
320MP ²	A1650B	A1620B	
350MP ²	A1650B	A1620B	
400MP ²	A1650B	A1620B	
450MP ²	A1650B	A1620B	
Metal halide, 16" diameter			
	Type V	Type II	
100M	A165	A162	
150M	A165	A162	
175M	A165	A162	
200M	A165	A162	
250M	A165	A162	
400M ²	A1650B	A1620B	

Voltage	Ballast
120	Metal halide and high pressure sodium
208 ^{4,5}	(blank) Standard magnetic ballast
240 ^{4,5,6}	CWI Constant wattage isolated
277	MRB Magnetic regulator ballast
347	
480 ^{4,5}	 Pulse start metal halide
TB ⁷	LLRPSL Linear reactor pulse start
TBV ⁸	SCWA Super constant wattage autotransformer
	LLSCWA Low loss SCWA
	RLB Regulated lag ballast
	SCWI Isolated SCWA
	See pages 384-385 for details.

NOTES:

- See page 385 for details on protected sockets.
- Open bottom only.
- Change A in nomenclature to P. Example: P125. All except open-bottom fixtures meet UL lamp rupture containment specifications.
- Requires CWI option in Canada for metal halide. Available for 175-400W only. Not available for 250W in 480V.
- Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-400W only.
- 220V and 240V 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).
- Optional five-tap ballast (120V, 208V, 240V, 277V, 480V). Available for 250W, 400W, 1000W metal halide and high pressure sodium (CWA only).

Options/Accessories

See pages 386-397. HID lamps are available with luminaires. Consult factory.

Lamp/fixture data			
Wattage	Standard ballast	Weight lbs. kgs.	S/mtg. height
High pressure sodium (mog/clear), 12", Type V			
70	HX-HPF	15 7	1.8
100	HX-HPF	17 8	1.8
150	HX-HPF	17 8	1.8
200	CWA	20 9	2.7
250	CWA	23 10	2.6
High pressure sodium (mog/clear), 16", Type V			
200	CWA	22 10	1.9
250	CWA	25 11	2.6
400	CWA	36 16	1.8
Metal halide (med/clear), 12", Type V			
100	CWA	15 7	1.8
Metal halide (med (100) mog/clear), 16", Type V			
100	CWA	20 10	1.3
175	CWA	21 10	1.3
250	CWA	23 10	1.3
400	CWA	30 14	1.8

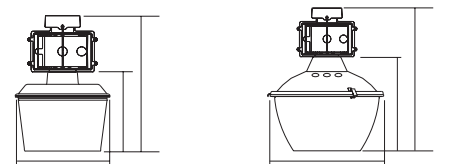
Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.

TX A125/A121

Overall height: 17 (43.2)
Reflector height: 10 (25.4)
Diameter: 12-1/4 (31.1)

TX A165/A162

Overall height: 19-5/8 (49.8)
Reflector height: 13-5/8 (34.6)
Diameter: 16-3/4 (42.6)



www.lithonia.com, keywords: TX-A121, TX-A125, TX-A162 and TX-A165

Enclosed Prismatic Acrylic Optical

TGL TGR



Intended Use

For areas that require optimum vertical illumination with glare control at low mounting heights. Ideal for parking garages, greenhouses, garden centers and low-profile industrial aisles. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility Chart on page 735 for suitable uses.**

Features

Housing – Rugged, heavy, die-cast aluminum housing. Standard finish is natural aluminum polyester powder finish.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Induction lighting: High Frequency Generator/Ballast - Supplies high-frequency current to the lamp to initiate and maintain a gas discharge for a rated 100,000 hours of life.

Optics – One-piece, injection-molded, 100% virgin acrylic refractor. TGL Type V (A165), Type II

(A162), TGR Type V (A125), and Type 1 (A121) distributions are available. Polycarbonate refractor available.

Socket – Glazed porcelain, vertically oriented mogul-base socket with copper alloy, nickel-plated screw shell and center contact. Medium-base (100M only): UL Listed 660W, 600V, 4KV pulse rated.

Discharge Vessel/Lamp – Glass bulb that contains a mixture of low-pressure mercury vapor and inert buffer gas. The wall of the lamp is coated with a fluorescent powder that produces light.

Listings

TGL: UL Listed to US and Canadian safety standards. NOM Certified. TGR: UL Listed and CSA Certified. NOM Certified. UL Listed for damp locations. Ambient operation: -30°C to 40°C (250M); -40°C to 25°C (85IL). UL wet location optional.

Ordering Information

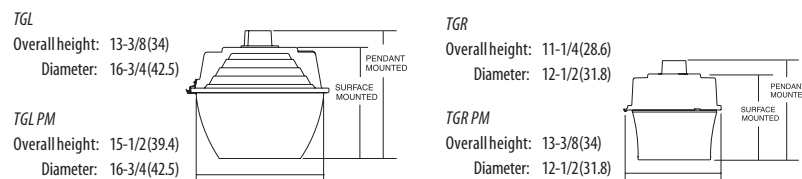
Series	Wattage	Optical ²		Voltage	Ballast	
High pressure sodium TGL	705	A165	A162	120	<u>Metal halide and high pressure sodium</u> (blank) Standard magnetic ballast Pulse Start H.I.D. Ballast/Lamp Systems <u>Pulse start metal halide</u> LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer See pages 384-385 for details.	
	1005	A165	A162	208^{3,4}		
	1505	A165	A162	240^{4,5}		
	TGR	705	A125	A121		277
	1005	A125	A121	347		
	1505	A125	A121	480⁴		
Metal halide TGL	100M	A165	A162	TB⁶		
	175M	A165	A162			
	200M	A165	A162			
	250M¹	A165	A162			
	TGR	100M	A125	A121		
	175M	A125	A121			
Induction TGL	85IL	A165	A162			
	55IL	A165	A162			

- NOTES:
 1 Not available with SCWA.
 2 Polycarbonate lens: Replace **A** in optical nomenclature with **P** for polycarbonate lens.
 3 Requires CWI option in Canada. Only available in 250M.
 4 Requires CWI or MRB option in Canada for high pressure sodium. Available for 70-150W.
 5 220V and 240V, 50Hz and 60Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
 6 Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).

Example: TGL 175M A165 TB PM

Options/Accessories			
See pages 386-397. HID lamps are available with luminaires. Consult factory.			
Lamp/fixture data			
Wattage	Standard ballast	Weight lbs. kgs.	S/mtg. height
TGL Type V			
High pressure sodium (mog/clear)			
70	HX-HPF	21 9	2.3
100	HX-HPF	23 10	2.3
150	HX-HPF	23 10	2.3
Metal halide [med(100)/mog(175-250)/clear]			
100	CWA	20 9	1.2
175	CWA	23 10	1.7
250	CWA	26 12	1.7
TGR Type V			
High pressure sodium (mog/clear)			
70	HX-HPF	11 5	1.8
100	HX-HPF	13 6	1.7
150	HX-HPF	14 6	1.8
Metal halide [med(100)/mog(175)/clear]			
100	CWA	13 6	1.7
175	CWA	14 6	1.8

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



Ambient Parameters	-40°C to 25°C (-22° to 77°F)	-30° to 40°C (-22° to 104°F)	-30° to 55°C (-22° to 131°F)
TGR		■	
TGL 100-175M			■
TGL 250M		■	
TGL 70-150S			■
TGL 55-85IL	■		

■ = COMPATIBILITY

Intended Use

For areas that require low mounting heights. Used in applications including parking garages, stairwells, entrances or aisles.

Features

Housing – Rugged, heavy-duty aluminum housing. Standard finish is dark bronze polyester powder finish.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation.

Optics – One-piece, spun-aluminum, anodized reflector provides widespread distribution. High-impact, shock-resistant, tempered glass lens is fully gasketed to seal out contaminants.

Socket – Glazed porcelain, vertically oriented socket with copper alloy, nickel-plated screw shell and center contact. Medium-base: UL Listed

660W, 600V, 4KV pulse rated; mogul-base: UL Listed 1500W, 600V, 4KV pulse rated.

Installation – Quick-mount attachment plate mounts to 4" square or octagonal J-box. Plate is hinged to fixture housing during installation. Fixture is then twist-locked into place and secured in a tamperproof installation. Internal trigger mechanism releases fixture from J-box. **Factory-installed pendant mount option (PSB) available.**

Listings


UL Listed. CSA Certified. NOM Certified. UL Listed for damp locations.

TG



Ordering Information

Example: TG 175M E13 TB PSB

Series	Wattage	Optical	Voltage	Ballast	Options/Accessories
TG	High pressure sodium, wide distribution 70S 100S 150S 200S Metal halide 100M ¹ 175M 200M 250M	E13	208 ¹ 240 ^{1,2} 277 347 480 ¹ TB ³	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated  Pulse start metal halide LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA	See pages 386-397. HID lamps are available with luminaires. Consult factory.

See pages 384-385 for details.

Ambient Parameters	-30° to 25°C (-22° to 77°F)	-30° to 40°C (-22° to 104°F)	-30° to 55°C (-22° to 131°F)
TG 175M			■
TG 250M		■	
TG 70-150S			■
TG 200S		■	

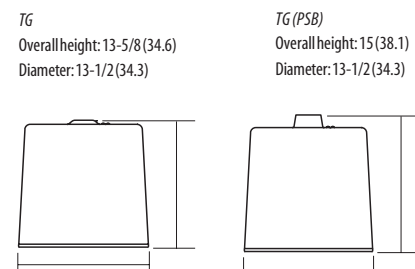
■ = COMPATABILITY

Lamp/fixture data				
Wattage	Standard ballast	Weight		S/mtg. height
		lbs.	kgs.	
High pressure sodium (mog/clear)				
70	HX-HPF	13	6	1.8
100	HX-HPF	15	7	2.2
150	HX-HPF	16	7	2.5
200	CWA	19	9	1.7
Metal halide (med/mog(175-250)/clear)				
100	CWA	15	7	2.2
175	CWA	17	8	2.2
250	CWA	19	9	2.2

NOTES:

- 1 Not available in Canada.
- 2 220V and 240V 50 Hz and 60 Hz ballasts available for use with U.S. metal halide and high pressure sodium lamps.
- 3 Optional multi-tap ballast (120V, 208V, 240V, 277V; 120V, 277V, 347V in Canada).

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



2' x 2' Recessed Squares

GPV

Parabolic Louvers



Ordering Information

Series	Wattage ¹
GPV Vertical lamp	Metal halide
	175M
	200M ²
	250M
	320M ²
	350M ²
	400M

NOTES:

- Mogul-base lamps required. Coated lamps recommended.
- Available only when ordered with pulse start ballast.
- Multi-tap ballast. US: 120V, 208V, 240V, 277V; Canada: 120V, 277V, 347V.

Intended Use

Use in recessed hard ceiling and T-bar applications that require optimum horizontal illumination with superior brightness control and lamp shielding. Ideal for open office, retail and commercial areas.

Features

Optics – Specular clear parabolic 16-cell or 9-cell, 4" deep aluminum louvers float in the middle of a black reveal with tempered glass overlay. Louver door attached with T-hinges and spring loaded latches for positive retention. Coated lamps provide optimum performance.

Housing – 20-gauge steel housing with high reflectance, white polyester paint.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation. Thermally activated insulation detector included.


Socket – Mogul-based porcelain socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated.

Installation – 2' nominal aperture. Power door contains all electrical components. Pre-wired 7', 16-gauge leads and 90° connector, no flex. Power door swings down for easy access or can be removed for servicing. Overlapping flange kit (GF-KIT) available for non-T-Bar applications.

Listings

UL Listed. CSA Certified. UL Listed for recessed mounting and damp locations.

Example: **GPV 400M 9AGL 120**

Specular louver	Voltage	Ballast	Options/Accessories
16 cells	120	Metal halide and high pressure sodium (blank) Standard magnetic ballast	See page 379. HID lamps are available with luminaires. Consult factory.
16AGL Specular clear with glass overlay	208	CWI Constant wattage isolated	
9 cells	240		
9AGL Specular clear with glass overlay	277	 Pulse start metal halide	
	347	LLRPST Linear reactor pulse start	
	TB ³	SCWA Super constant wattage autotransformer	
STANDARD PACKAGING			
To order, use single master catalog number. Example:			
(21) GPV 175M 9AGL 120			
Housings and door assemblies ship separately in unit cartons.			
Example above ships as:			
(Qty 21)	GPV 175M GL 120HSG	(21 cartons of 1 housing)	
(Qty 21)	GP 9A U	(21 cartons of 1 door assembly)	
		LLSCWA Low loss SCWA	
		SCWI Isolated SCWA	
		See pages 384-385 for details.	

Round Reflector

GS



Ordering Information

Series	Wattage ¹
GS Vertical lamp, flat pan, round reflector	Metal halide
	175M
	200M ²
	250M
	320M ²
	350M ²
	400M

NOTES:

- Mogul-base lamps required. Coated lamps recommended.
- Available only when ordered with pulse start ballast.
- Multi-tap ballast. US: 120V, 208V, 240V, 277V; Canada: 120V, 277V, 347V.

Intended Use

Use in recessed hard ceiling and T-bar applications that require downlight illumination with brightness control. Ideal for recreation facilities, retail and other commercial areas.

Features

Housing – Square steel pan finished in polyester matte white powder paint.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation. Thermally activated insulation detector included.

Optics – One-piece, semi-specular, spun aluminum reflector. Exclusive design with extended shielding provides wide distribution with mini-

mal brightness. White painted steel door assembly with clear tempered glass lens, retention hinge and latch. Coated lamps provide optimum performance.


Socket – Glazed porcelain, vertically oriented, mogul-base socket with copper alloy nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated.

Installation – Electrical components factory assembled to the pan and ready to lay in a 2'x2' grid ceiling. Pre-wired 7', 16-gauge leads and 90° connector, no flex.

Listings

UL Listed. CSA Certified. UL Listed for recessed mounting and damp locations.

Example: **GS 175M 120**

Voltage	Ballast	Options/accessories
120	Metal halide and high pressure sodium (blank) Standard magnetic ballast	See page 379. HID lamps are available with luminaires. Consult factory.
208	CWI Constant Wattage Isolated	
240		
277	 Pulse start metal halide	
347	LLRPST Linear reactor pulse start	
TB ³	SCWA Super constant wattage autotransformer	
	LLSCWA Low loss SCWA	
	SCWI Isolated SCWA	
	See pages 384-385 for details.	

2' x 2' Recessed Squares

G2V G3V

Prismatic Lenses



Example: **G2V 400M FS T73 120**

Intended Use

Use in hard ceiling and T-bar applications with low mounting heights that require optimum horizontal illumination with brightness control. Ideal for office, retail and commercial areas. Prismatic tempered glass lens with polycarbonate underlay suitable for gymnasiums and racquetball courts.

Features

Optics – Anodized aluminum top reflector. Door assemblies available with choice of prismatic tempered glass, prismatic acrylic and tempered prismatic glass with polycarbonate underlay. Door attaches to housing with T-hinges and two opposing cam latches for positive retention. G3V series rough service door assembly secured by additional four screws.

Housing – 20-gauge steel housing with high reflectance, white polyester paint.

Ballast – 100% factory tested. High power factor ballast with a minimum of class H insulation. Thermally activated insulation detector included.


Socket – Mogul-based porcelain socket with copper alloy, nickel-plated screw shell and center contact. UL Listed 1500W, 600V, 4KV pulse rated.

Installation – 2x2 lay-in housing design with power door containing all electrical components. Pre-wired 7', 16-gauge leads and 90° connector, no flex. G2V power door swings down for easy access or can be removed for servicing. G3V uses four Philips flathead retaining screws for positive retention. Overlapping flange kit available (GFKIT) for non-T-Bar applications.

Listings

UL Listed. CSA Certified. UL Listed for recessed mounting and damp locations.

Ordering Information

Series	Wattage ¹	Door frame	Shielding	Voltage	Ballast	Options/Accessories										
G2V G3V	Metal halide 175M 200M² 250M 320M² 350M² 400M	RW Regressed white aluminum FW Flush white aluminum FS Flush white steel ³	T73 Tempered prismatic glass lens 84YGL Holophane #8224Y acrylic lens with tempered glass overlay A12GL Prismatic acrylic lens with tempered glass overlay T73/PCL Tempered prismatic glass lens with polycarbonate underlay ⁴	120 208 240 277 347 TB⁵	Metal halide and high pressure sodium (blank) Standard magnetic ballast CWI Constant wattage isolated	See below. HID lamps are available with luminaires. Consult factory.										
		<table border="1"> <thead> <tr> <th colspan="2">Doorframes</th> </tr> <tr> <th>G2V</th> <th>G3V</th> </tr> </thead> <tbody> <tr> <td>RW</td> <td>Option</td> </tr> <tr> <td>FW</td> <td>Option</td> </tr> <tr> <td>FS</td> <td>Standard</td> </tr> </tbody> </table>	Doorframes		G2V	G3V	RW	Option	FW	Option	FS	Standard			 <p>Pulse start metal halide LLRPSL Linear reactor pulse start SCWA Super constant wattage autotransformer LLSCWA Low loss SCWA SCWI Isolated SCWA</p>	
Doorframes																
G2V	G3V															
RW	Option															
FW	Option															
FS	Standard															
						See pages 384-385 for details.										

NOTES:

- Mogul-base lamps required. Coated lamps recommended.
- Available only when ordered with pulse start ballast.
- Available with G2V luminaires only.
- Available with G3V luminaires only.
- Multi-tap ballast. US: 120V, 208V, 240V, 277V; Canada: 120V, 277V, 347V.

G Series Options

Series	Description	Ships		G2V	G3V	GPV	GS
		Attached	Separately				
TRW	White flange trim, baked-on satin enamel finish	X		STD	STD		
QFC	Quick-Flex [®]	X		X	X	X	X
SF	Single fuse, 120/277/347V only, N/A multi-tap ballast	X		X	X	X	X
DF	Double fuse, 280/240/480V only, N/A multi-tap ballast	X		X	X	X	X
QRS	Quartz restrrike system (D.C. base)	X		X	X	X	X
QRSTD	Quartz restrrike system with time delay	X		X	X	X	X
EC	Emergency circuit (D.C. base)	X		X	X	X	X
TA	Top access	X		X	X	X	
PWS1436	Prewire with 14-gauge THHN leads, 6' flex	X		X	X	X	X
SCWA	Super CWA pulse start ballast	X		X	X	X	X
LLRPSL	Linear reactor pulse start ballast	X		X	X	X	X
KW1	KiloWatch [®] 120V control relay, 50% wattage reduction	X		X	X	X	X
KW4	KiloWatch [®] 277V control relay, 50% wattage reduction	X		X	X	X	X
KW150	KiloWatch [®] 120V control relay, 50% light (lumen) reduction	X		X	X	X	X
KW450	KiloWatch [®] 277V control relay, 50% light (lumen) reduction	X		X	X	X	X
TCPF	Plaster frame		X	1	1		
HTC	Earthquake clips		X	2	2	2	2
WG12	Wireguard (for grid ceiling)		X	2	2	2	2
GPFKIT	Flange kit		X			X	
GFKIT	Flange kit		X	X	X		

NOTES:

- Available flange trim units G2V and G3V only.
- Available T-bar ceiling units only.

Dock and Trailer Lighting

DSA

FSSA

Intended Use

Ideal for illuminating the interior of tractor trailers during initial inspection, loading or unloading.

Features

Construction – Arms and struts constructed of heavy-duty 1-1/2" cross-section, 14-gauge square steel tubing. Reinforcement mounting brackets provide maximum support of arm and head for

long service without sagging or bending. Hinged ends reinforced internally with aluminum inserts. Corrosion-resistant hardware. Nuts are locking and exposed threads are plastic capped. Arm and strut ends feature injection-molded end caps.

Finish – Safety-yellow polyester powder paint is standard on arm, strut and metal lamp head. Polycarbonate lamp heads colored safety yellow.

Electrical System: 120V only. Provided with three-prong plug and 8' cord. Lamp head includes on/off switch and porcelain medium-base socket with copper alloy screw shell and center contact. Electrical cord lengths secured via grommets. High pressure sodium models feature reactor type ballasts.

Optical System - Lamp head for 150W incandes-

cent is polycarbonate and metal for 300W incandescent. Both include metal wireguard standard. Polycarbonate 50W high pressure sodium lamp head with reflective coating, integral ballast and flush polycarbonate guard. Optional SED acrylic lens suitable for use in food service dock areas.

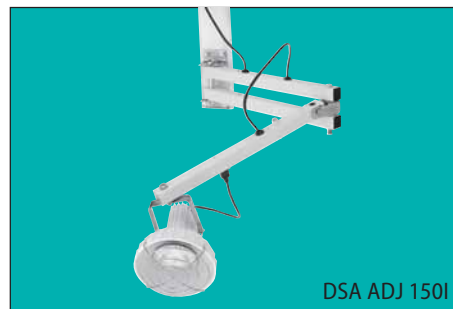
Installation – Arm and strut-mounting bracket included. Arm assembly attaches to wall mounting bracket with single bolt. Lamp head attaches with a single bolt to arm and is powered by a NEMA plug and receptacle assembly in arm. Heavy-duty wall bracket (HDWB) recommended for fan/light combinations.

Listings

Listings – UL Listed to U.S. and Canadian safety standards.



DSA 150I



DSA ADJ 150I



FSSA ADJ 300I

Ordering Information

Example: **DSA40 ADJ 50S LPI**

Series	Length	Knuckle	Lamp	Options
DSA Double-strut arm	24 24"	ADJ Adjustable knuckle joint ¹	150I 150W incandescent polycarbonate lamp head with wireguard	SED Special environment diffuser (acrylic lens) ³
	40 40"			
	60 60"			
	90 90"			
	114 114"			
FSSA Folding single-strut arm	40 40"		300I 300W incandescent metal lamp head with wireguard	FAN 3-speed fan ⁴
	60 60"		50S 50W high pressure sodium polycarbonate lamp head with polycarbonate guard ²	LPI Lamp included ⁵

NOTES:

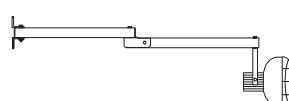
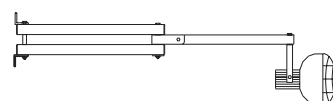
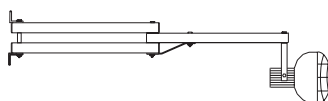
- Required for FSSA. Optional for DSA. Not available with DSA24, DSA114.
- Vacuum metalized polycarbonate lamp head. 90" maximum length.
- Available for 50S high pressure sodium only.
- Heavy-duty wall bracket (HDWB) recommended. For fan and DSA arm without lamp head, leave "Lamp" field blank.
- Standard in 50S models. Not available for incandescent.

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in **inches (centimeters)** unless otherwise noted.

DSA
Lamp head height: 7-7/8 to 8-3/4
(20.0 to 22.2)
Arm length: 26 to 95-1/4
(66.0 to 23.5)

DSA ADJ
Lamp head height: 7-7/8 to 8-3/4
(20.0 to 22.2)
Arm length: 40 to 96-1/4
(101.6 to 244.5)

FSSA ADJ
Lamp head height: 7-7/8 to 8-3/4
(20.0 to 22.2)
Arm length: 47-3/4 to 96-1/4 (121.3 to 244.5)



150W incandescent



300W incandescent



50W high pressure sodium

Accessories (Order separately)

- DLMAG KIT** Portable magnetic mounting kit for lamp heads. Includes magnet, 6' cord adaptor and hardware.
- FAN** 3-speed fan.⁴
- HDWB** Heavy-duty wall bracket.
- MLH** 300W incandescent metal lamp head with wireguard.
- PLHI** 150W incandescent polycarbonate lamp head with wireguard.
- PLHS** 50W high pressure sodium polycarbonate lamp head with polycarbonate guard.²
- MLHWG6** Replacement wireguard for 300W incandescent metal lamp head.
- PLHWG8** Replacement wireguard for 150W incandescent polycarbonate lamp head.
- PLHPG** Replacement polycarbonate guard for 50W high-pressure sodium polycarbonate lamp head.
- SED** Special environment diffuser (acrylic lens).³

Dual-Level Lighting with Integral Sensor System

Intended Use

The KiloWatch® II Integral Sensor System provides individual luminaire dual-level lighting control for maximum energy savings and flexibility. Each luminaire contains an integral sensor that mounts directly to the reflector. Application opportunities include warehouses or select storage areas within manufacturing facilities.

Features

Integral passive infrared motion sensor mounts to the reflector and connects to the ballast housing with flexible metal conduit to control one luminaire based on occupancy. Sensor detects moving temperature differentials against background radiation. When motion is detected, luminaire is switched to high mode for 1.25 to 20 minutes (field adjustable) after motion no longer is detected. Sensor includes timing circuit for automatic high mode start up of lamp for 20 minutes. A self-timing, 100-hour high-mode burn function is field-activated for initial operation of a new lamp.

Sensor is designed for use in indoor applications with 15' to 45' mounting heights. Sensor provides 360° of coverage within the luminaire's lighting distribution. Standard operating temperature range from 14°F to 131°F (-10°C to 55°C). Low temperature option (LT) range from -40°F to 131°F (-40°C to 55°C).

KiloWatch II options listed below only are available with CWA/SCWA ballast configurations. The

desired option must be designated in the luminaire catalog number Options field.

TH/TX Series

KW1S – Reduces wattage by 50%. (Light output reduces by 70-80%.) Luminaire supplied with motion sensor control and sensor mounting bracket.

KW1S LT – Reduces wattage by 50%. (Light output reduces by 70-80%.) Luminaire supplied with motion sensor control for low temperature and sensor mounting bracket.

SH/SX/SPG Series

ISM - Reduces wattage by 50%. (Light output reduces by 70-80%.) Luminaires supplied with motion sensor control and sensor mounting bracket. For GEB electronic ballast only.

Listings

UL Listed to U.S. and Canadian safety standards. Not for use with dual wattage rated lamps. Lamp manufacturer requires 100 hours high-mode burn-in of new lamps prior to low-mode operation and 15 to 20 minutes of high-mode operation thereafter upon start-up.

KiloWatch® II



Example: TH 400M PA22 120 KW1S

Ordering Information

Series	Wattage		Optical		Voltage	Ballast
TE	High pressure sodium	Metal halide	E17	A125	120	(blank) CWA
TH	150S	175M	E22	A165	208	Pulse Start H.I.D. Ballast/Lamp Systems
TX	250S	200M	A15	PA16	240	
	400S	250M	A16	PA22	277	Pulse start metal halide
	1000S	320M	A17	PA22C	347	SCWA Super constant wattage autotransformer
	Metal halide protected ¹	350M	A22	PA22SP	480	See pages 384-385 for details.
	175MP	400M	A14	PA25ALE		
	200MP	450M	A26	PA25D		
	250MP	1000M	A30	PA22GLE		
	320MP		A23	PA22N		
	350MP		A20			
	400MP					
	450MP					
	1000MP					

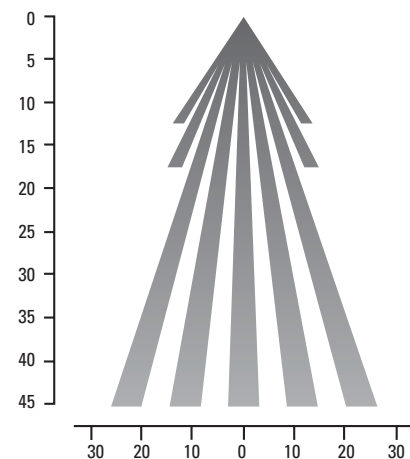
NOTES:
 1 See page 385 for details on protected sockets.
 2 50% power.

Options			Accessories		
KW1S ²	TOB	LCPP	DCY	HKMG	SCK48
KW1S LT ²	T73	LC3P	DHX	LC3P	SCK108
SF	CR	HC3P	DSQ	LGG	SMB18
DF	CRT	HOC3	FWG	LPF	TMB24
QRS	TEF	HOCU	GFWG	LPM	SMB30
QRSTD	TR	LOCS	HC3P	LPMG	TMB48
EC	SCWA	LOCU	HKF	PPH	WG
GL	RC3NP	CF	HKM	TPH	WGG
				SCK	

Series	Wattage	Optical	Voltage	Ballast	Options/Accessories
SH	Metal halide protected ¹	A15	208	Pulse start metal halide	ISM ² OCS
SX	320MP	A16	240	GEB Electronic ballast	SF HA
SPG	350MP	A16GL	277		DF PSB
	400MP	A23	TVOLT		EL SC3P
	Metal halide	PA22			QRSTD WG
	320M	PA22N			See pages 386-397 for details.
	350M	PA22SP			
		PG15			

NOTES:
 1 See page 385 for details on protected sockets.
 2 50% power.

SENSOR COVERAGE CHART



Dual-Level Lighting

KiloWatch®



Intended Use

KiloWatch® dual-level HID luminaire option provides capability to switch ballast between high mode and low mode operation. Choose from 100% to 50% power operation or 100% to 50% lumen output operation. Luminaires must be combined with motion sensors, photocells and/or control transformers for complete system. Ideal for energy reduction or light level control in warehouses, storage areas, parking garages, shipping docks and gymnasiums.

Features – Components

KWTD – Time delay control. Solid-state, digital timing circuit automatically provides high mode start-up of each lamp for 15 minutes, guaranteeing lamp stabilization. For 120V AC manually switched or 120V AC photocell (KWPC) applications.

KWTXTD – Time delay control voltage transform-

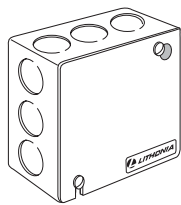
er. Provides 120V AC control circuit power for 208/240/277/347/480V AC applications controlled by photocells or manual switching*. Includes solid-state, digital timing circuit for automatic high mode start-up of each lamp for 15 minutes, guaranteeing lamp stabilization. One KWTXTD required for each on/off control zone of up to 30 fixtures.

KWTX – Control voltage transformer. Provides 120V AC control circuit power for 208/240/347/480V AC applications in conjunction with KWIR motion sensors. High mode start-up of each lamp for 20 minutes performed by KWIR sensors. One KWTX required for each on/off control zone of up to 30 fixtures.

KWIR – Passive infrared motion sensor. Switches 120V or 277V control relays in each lighting fixture based on occupancy. Sensor detects moving temperature differentials against background

Manual Controls

shipped separately



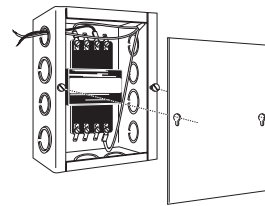
System for 120V AC (one component)

KWTD Time delay control, manually switched. Automatic timer keeps fixtures in high mode for 15 minutes after start-up.¹

Must add **KW1** or **KW150** to fixture description – 120V control.

NOTES:

1 Manual control switches and wall boxes by others.



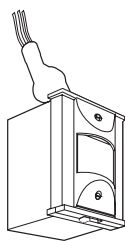
System for 208/240/277/347/480V AC (one component)

KWTXTD Control voltage transformer with time delay. Steps supply voltage down for 120V control. Automatic timer keeps fixture in high mode for 15 minutes after start-up.¹

Must add **KW1** or **KW150** to fixture description – 120V control.

Motion Sensor Controls

shipped separately



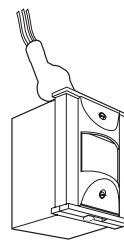
System for 120/277V AC (one component)

KWIR Motion sensor^{2,3}
KWIR LT Motion sensor, low temperature (-30°)^{2,3}
KWIR WA Motion sensor, wide angle^{2,3}

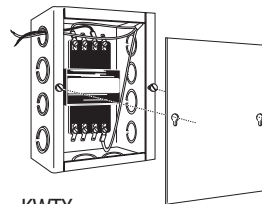
Must add **KW1** or **KW150** to fixture description – 120V control.
 Must add **KW4** or **KW450** to fixture description – 277V control.

NOTES:

2 Consult factory when using with Reloc® wiring.
 3 Sensors have automatic timer to keep fixture in high mode for 20 minutes after start-up.



KWIR



KWTX

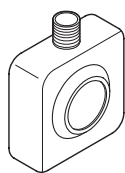
System for 208/240/347/480V AC (two components)

KWIR Motion sensor^{2,3}
KWIR LT Motion sensor, low temperature^{2,3}
KWIR WA Motion sensor, wide angle^{2,3}
KWTX Control voltage transformer; steps supply voltage down for 120V control

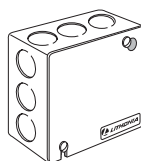
Must add **KW1** or **KW150** to fixture description – 120V control.

Photocell Controls

shipped separately



KWPC

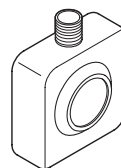


KWTD

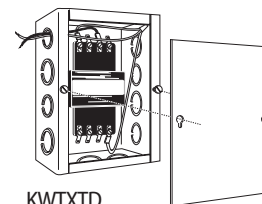
System for 120V AC (two components)

KWPC Photocell
KWTD Time delay control; automatic timer keeps fixture in high mode for 15 minutes after start-up

Must add **KW1** or **KW150** to fixture description – 120V control.



KWPC



KWTXTD

System for 208/240/277/347/480V AC (two components)

KWPC Photocell
KWTXTD Control voltage transformer with time delay steps supply voltage down for 120V control; automatic timer keeps fixture in high mode for 15 minutes after start-up

Must add **KW1** or **KW150** to fixture description – 120V control.

radiation. When motion is detected, lighting system is switched to high mode for one to 20 minutes (field adjustable) after motion no longer is detected. Sensor includes timing circuit for automatic high mode start-up for 20 minutes. Sensor is factory-preset at optimum performance angle (43°) and can be field-adjusted. Sensor is designed for use in indoor applications with 15' to 35' mounting heights where a long and narrow coverage pattern is desired (14°F to 160°F).

KWIR WA – Same as KWIR sensor with wide angle lens designed for use in indoor applications with 7' to 8' mounting heights where a short, wide coverage pattern is desired (14°F to 160°F).

KWIR LT– Passive Infrared Motion sensor. Same as KWIR sensor designed for low temperature operation (-40°F to 160°F).

KWPC –Photo-diode sensors. Sensors switch luminaires to low output based on predetermined

ambient illumination levels (field adjustable).

Features – Luminaires

KiloWatch options listed below only are available with CWA/SCWA ballast configurations. The desired option must be designated in the fixture catalog number option field.

KW1 – Reduces wattage by 50% (light output reduces by 70-80%). Luminaire supplied with 120V AC control components for use with all manually switched*, KWPC photocell (120/208/240/277/347/480V) or KWIR sensor (120/208/240/347/480V) controlled systems.

KW150 – Reduces light output by 50% (power reduces by 30-40%). Luminaire supplied with 120V AC control components for use with all manually switched*, KWPC photocell (120/208/240/277/347/480V), or KWIR motion sensor (120/208/240/347/480V) controlled systems.

KW4 – Reduces wattage by 50% (light output reduces by 70-80%). Luminaire supplied with 277V AC control components. For use with KWIR motion sensor controlled systems.

KW450 – Reduces light output by 50% (power reduces by 30-40%). Luminaire supplied with 277V AC control components for use with KWIR motion sensor-controlled systems.

Consult factory when using Reloc® with KiloWatch®.

Lamp manufacturers require 100 hours high mode burn-in of new lamps prior to low mode operation and 15 to 20 minutes of high mode operation thereafter upon start-up.

Not for use with dual wattage rated lamps.

* Manual switches and wall boxes by others.

Consult factory for field start-up service.

Ordering Information

Series	Wattage	Optical		Voltage	Ballast
TE	High pressure sodium	E17	PA16	120	(blank) CWA
TH	150S	E22	PA22	208	Pulse Start H.I.D. Ballast/Lamp Systems
TPG	250S	A15	PA22C	240	
TPGE	400S	A16	PA22SP	277	Pulse start metal halide
TX	1000S	A17	PA25ALE	347	SCWA Super constant wattage autotransformer
TGL	Metal halide protected ¹	A22	PA25D	480	
TGR	175MP	A14	PA22GLE		
	200MP	A15	PA22N		
	250MP	A26	PG16		
	320MP	A30	PG16A		
	350MP	A23	PG16GLE		
	400MP	A20	PG16AGLE		
	450MP	A30F	PG21		
	1000MP ²	A125	PG21A		
	Metal halide	A165	PG21GLE		
	175M	A1250B	PG21AGLE		
200M	A1650B				
250M					
320M					
350M					
400M					
450M					
1000M ²					

Example: TH 400M A16 277 SCWA KW4

Options		Accessories	
KW1 ³	T73	DCY	LPM
KW150 ⁴	CR	DHX	LPMG
KW4 ⁵	CRT	DSQ	PPHKR
KW450 ⁶	TEF	FWG	TPHKR
SF	TR	GFWG	SCK
DF	LCKPP	HC3KP	SCK48
QRS	LC3KP	HKF	SCK108
QRSTD	HC3KP	HKM	SMB18
EC	HOCU ⁷	HKMG	SMB24
GL	LOCU ⁷	LC3KP	TMB30
TOB	CF	LGG	TMB48
		LPF	WG
			WGG

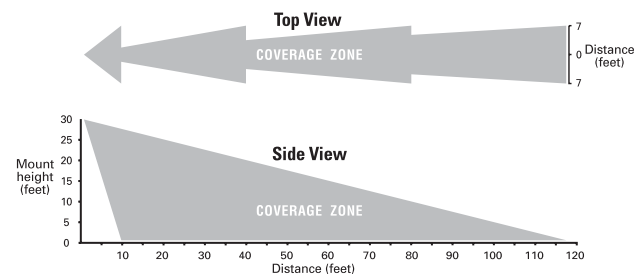
- NOTES:
- See page 385 for details on projected sockets.
 - Not available on 1000W metal halide.
 - 120V control relay, 50% wattage.
 - 120V control relay, 50% light output.
 - 277V control relay for 277V sensor applications only, 50% wattage.
 - 277V control relay for 277V sensor applications only, 50% light output.
 - Consult factory when using Reloc® with KiloWatch®.

Ordering Information Example: KWIR

Controls	
Control transformers	Sensors
KWTX	KWIR
KWXTD	KWIR WA
	KWIR LT
	KWPC

KWIR Motion Detector Coverage
The sensor coverage shown is under ideal conditions. Consult specification sheets for specific information.

The KWIR-WA mounted at 8' has coverage zone of 120° and distance at 40'.



Indoor HID Ballast Selection Guide

Metal Halide and High Pressure Sodium Ballasts

The characteristics of high pressure sodium, metal halide and mercury vapor high intensity discharge lamps require a ballast for controlling voltage and current to operate the lamp at its proper wattage. Lamps that are not operated within the optimal performance range will not produce proper light output or experience full life. There are several ballast types to choose that will provide proper control, but offer differing lamp wattage regulation, voltage dip tolerance, watts loss and cost.

CWA – Constant Wattage Autotransformer Ballast

- Operates metal halide and high pressure sodium lamps
- 175W, 250W, 400W, 1000W metal halide and 100W, 200W, 250W, 400W, 1000W high pressure sodium lamps
- Input line voltage 120V, 208V, 240V, 277V, 347V, 480V
- Voltage dip tolerance; 30%
- Moderate watts loss
- Two coils with mid-size core
- Regulation $\pm 10\%$ line voltage / $\pm 10\%$ lamp wattage
- Crest factor 1.7 to 1.8
- Metal halide ballasts rated to operate mercury lamps; 175W, 250W, 400W, 1000W only
- Ideal for manufacturing and assembly type areas, general industrial, recreational and retail

CWI – Constant Wattage Isolated Ballast

- Operates 250W, 400W, 1000W metal halide and 150W, 200W, 250W, 400W high pressure sodium lamps
- Isolated 2-coil system meets Canadian electrical code requirements for 208V and 240V applications in Canada
- Input line voltage 120V, 208V, 240V, 480V
- Voltage dip tolerance; 30%
- Moderate watts loss
- Regulation $\pm 10\%$ line voltage / $\pm 10\%$ lamp wattage
- Crest factor 1.7 to 1.8
- Adds increased safety during lamp replacement

MRB - Magnetic Regulator Ballast

- Operates 70-400W high pressure sodium lamps
- Isolated 3-coil system meets Canadian electrical code requirements for 208V and 240V applications
- Input line voltage 120V, 240V, 277V, 480V
- Voltage dip tolerance; 50%
- High watts loss
- Excellent regulation $\pm 10\%$ line voltage / $\pm 3\%$ lamp wattage
- Crest factor 1.5
- Ideal for heavy industrial application or areas with voltage dips and spikes

HX – High Reactance

- Operates 70W, 100W, 150W metal halide and 50W, 70W, 100W, 150W high pressure sodium
- Input line voltage 120V, 277V, 347V
- Low watts loss
- Regulation $\pm 5\%$ line voltage / $\pm 12\%$ lamp wattage
- Crest factor 1.5
- HPF high power factor 90%+ (standard)
- NPF normal power factor 50%+ (available)
- Starting current higher than operating

Pulse Start Metal Halide Ballasts

Pulse start metal halide lamps provide higher lumens per watt and up to 15% better mean lumens than standard probe start lamps with an additional 15% gain in combination with electronic ballasts. These lamps have different operating characteristics that require different ballast designs with an igniter to generate a starting pulse of 2,000 to 3,000 volts. Pulse start lamps will start quicker and reach full brightness sooner during cold and hot starts.

SCWA – Super Constant Wattage Autotransformer SCWI – SCWA Isolated Ballast

- Operates 150W, 175W, 200W, 250W, 320W, 350W, 400W, 450W, 750W, 875W, 1000W pulse start metal halide lamps
- Input line voltage 120V, 208V, 240V, 277V, 347V, 480V
- SCWI isolated 2-coil system meets Canadian electrical code requirements 400W only – 120V, 208V, 240V only
- Voltage dip tolerance; 45%
- Moderate watts loss
- Regulation $\pm 10\%$ line voltage / $\pm 10\%$ lamp wattage
- Crest factor 1.6
- Ideal for manufacturing and assembly type areas, general industrial, recreational and retail

LLRPSL – Low Loss Reactor Pulse Start Ballast

- Operates 150W, 200W, 320W, 350W, 400W and 450W pulse start metal halide lamps
- Input line voltage 277V only
- Voltage dip tolerance; 25%
- Low watts loss – energy saving ballast
- Single coil with smallest core design
- Regulation $\pm 5\%$ line voltage / $\pm 12\%$ lamp wattage
- Crest factor 1.4 to 1.5
- Starting current higher than operating
- Energy saver in areas where line dip tolerance is not critical; well suited for retail, light manufacturing, assembly type areas, institutional and recreational

RLB – Regulated Lag Ballast

- Operates 175W, 250W, 400W, 450W pulse start metal halide lamps (450W for 277V only)
- Input line voltage 120V, 208V, 240V, 277V, 347V, 480V
- Voltage dip tolerance; 50%
- High watts loss
- Excellent regulation $\pm 10\%$ line voltage / $\pm 3-7\%$ lamp wattage
- Crest factor 1.5
- Ideal for heavy industrial application or areas with voltage dips and spikes

GEB - Electronic Pulse Start Ballast

- Operates 320W, 350W, 400W pulse start metal halide lamps
- Auto-sensing input line voltage 200V to 277V 50/60Hz
- Voltage dip tolerance; 56%, automatically reduce lamp power 50% for dip below 180V
- Low watts loss – energy-saving ballast
- 0-10VDC dimming control 50% to 100% lamp power
- Total harmonic distortion 15% maximum
- Excellent regulation $\pm 10\%$ line voltage / $\pm 0.5\%$ lamp wattage
- Ideal for clean manufacturing and assembly type areas, institutional, recreational and retail

Quieter Operation

Conventional core and coil ballasts have an inherent hum from magnetic elements generated by the ballast circuit. The level of noise created by the luminaire depends on the ballast design, load characteristics, component mounting in the housing, luminaire mounting and acoustical characteristics of the application area. Encapsulating the ballast reduces the noise level created by the ballast for areas where sound levels are critical.

The GEB electronic pulse start ballast also provides a solution to eliminate ballast noise. The electronic ballast uses electronic circuitry to operate the lamps and does not have a core and coil to create the hum of conventional ballasts. The electronic ballast operates the lamp at a frequency that is beyond the audible range for silent operation.

ENC – Encapsulated Ballast

- Provides quieter operation; not available in all fixtures
- Class A sound rating up through 175W
- Class B for 250W and 400W

GEB – Electronic Pulse Start Ballast

- Provides silent operation
- High frequency operation beyond audible range
- See GEB (page 384) for other operating characteristics

☐ = Standard ■ = Option available

Ballast selection table																	
Series	SH	SPG	SX	TE	TH	THD	TPG	TPGE	TX	TXD	TXF	TG	TGL	TGR	G	GPV	GS
CWA ¹				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
HX ¹					■				■			■	■	☐			
CWI				■	■		■	■	■		■	■	■		■	■	■
MRB				■	■		■	■	■		■						
LLRPSL				■	■		■	■	■		■	■	■		■	■	■
SCWA				■	■	■ ²	■	■	■	■ ²	■	■	■		■	■	■
RLB				■	■		■	■	■		■						
GEB	■	■	■														
ENC				■	■		■	■	■		■	■	■	■	■	■	■

NOTES:

1 CWA is standard for 175W and above, and HX is standard for 150W and below for metal halide and high pressure sodium.

2 Not available on 250W.

Protected Sockets

Mogul Lamp Socket and Metal Halide Mogul Lamp Base Differences

The 2005 National Electric Code NFPA Code 70 Article 410.73 (F)(5) mandates indoor metal halide luminaires with open rated optics to have a means that will permit the luminaire to operate only with an ANSI Type O lamp. This article requires a protected lamp and socket for installations of open rated metal halide luminaires. The differences between the lamp base and socket types are explained below.

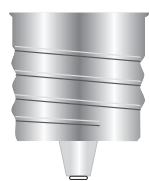
ANSI Type E – Type E metal halide lamps are enclosed rated and only suitable for enclosed luminaires that have a glass lens or plastic lens rated for arc tube containment. These lamps have a standard mogul base design with a broad contact point as shown. Typical for 175-1500W metal halide lamps.

ANSI Type S – Type S metal halide lamps are rated suitable for use in enclosed luminaires or in open luminaires if certain lamp manufacturer operating conditions are followed. These lamps have a standard mogul base design with a broad contact point as shown. The Type S lamp rating is currently applied to metal halide lamps 350W or greater and will be available after January 1, 2005 for replacement of existing lamps.

ANSI Type O – Type O metal halide lamps are open rated protected lamps for use in open or enclosed luminaires. These lamps have "EX" style exclusionary bases designed specifically for operation with pink protected sockets. The mogul bases of these lamps have a narrow contact point designed for protected lamp sockets. Type O lamps most commonly have a cylindrical quartz barrier around the arc tube while some ceramic metal halide arc tubes are wrapped with wire. Typical for 175-1500W metal halide lamps.

Standard Mogul Base Sockets – Standard sockets are constructed of porcelain and are white in color. The center contact tab will accept ANSI Type E, S and O rated lamps. These sockets will continue to be used for metal halide HID lamps in indoor luminaires with enclosed optics.

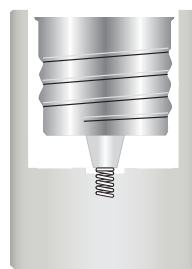
Protected Mogul Base Sockets – Protected sockets are constructed of porcelain and are pink in color. The center contact tab is surrounded by a barrier that excludes ANSI Type E and S lamps by preventing contact between the center pin on the lamp base and center tab on the lamp socket. Type O rated lamps have a narrow center pin that fits in the barrier to make contact with the center tab. These sockets will be required for indoor HID metal halide luminaires with open optics to comply with 2005 NEC.



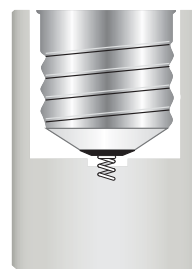
Type O – "EX" mogul base



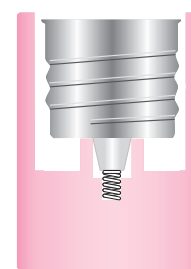
Type E and S mogul base



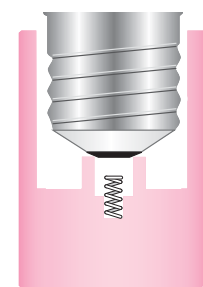
Type O lamp in white standard mogul socket



Type E and S lamp in white standard mogul socket

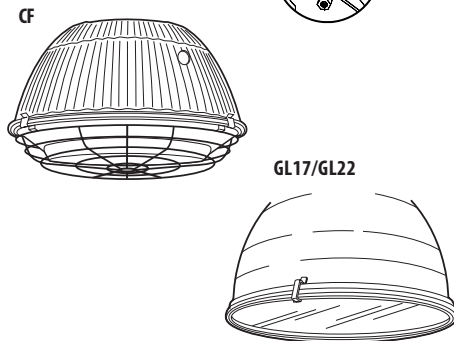
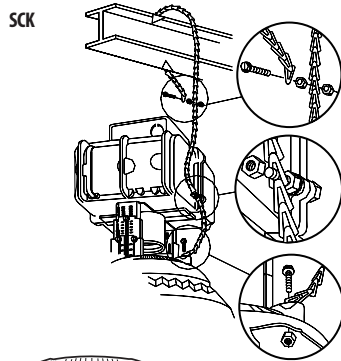
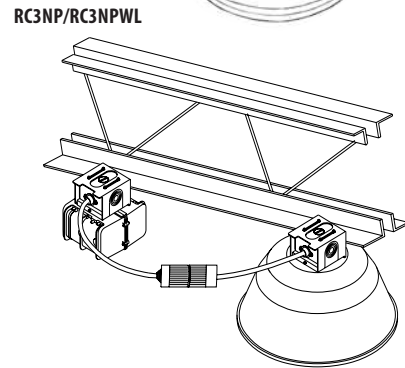
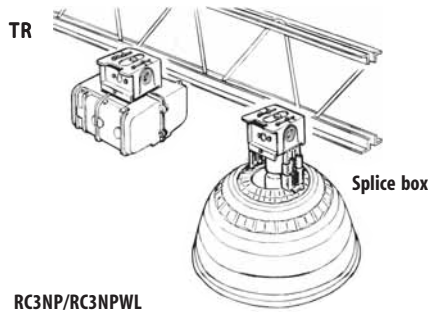
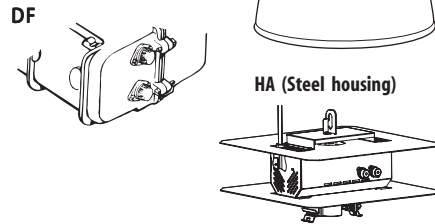
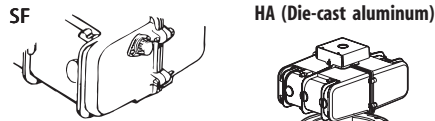


Type O lamp in pink protected mogul socket



Type E and S lamp in pink protected mogul socket

Options & Accessories



See Option & Accessories matrix on pages 394-395 for compatibility.

Ballast Housing Options & Accessories

- SF** *Single fuse.* Use with 120V, 277V, 347V. Externally accessible in-line fusing isolates luminaire from circuit. Specify tap voltage if combined with multi-tap ballast (TB1=120V, TB4=277V, TB5=347V) or five-tap ballast (TBV1=120V, TBV4=277V).
- DF** *Double fuse.* Use with 208V, 240V, 480V. Externally accessible in-line fusing isolates luminaire from circuit. Specify tap voltage if combined with multi-tap ballast (TB2=208V, TB3=240V) or five-tap ballast (TBV2=208V, TBV3=240V, TBV6=480V).
- HA** *High ambient.* Allows the industrial luminaires to be operated in higher ambient temperatures. TX low bay series is 55°C. TH, TE, TPG, TPGE high bay series is 65°C. Large die-cast aluminum ballast housing included for TH, TE, TX, TPG, TPGE. Steel housing SH, SX, SPG series is 55°C and includes external heat shield.
- WL** *Wet location label.* Signifies that the luminaire meets all UL requirements for proper, safe operation in environments subject to spray of non-corrosive and nonflammable liquids. Fixture requires rigid pendant mounting or wet location HC3PC3RWT assembly.
- TR** *Remote ballast luminaire.* Add TR to end of complete fixture catalog number. Includes ballast housing, optic and appropriate remote optical splice box. Does not include inter-connecting wiring. Ballast, optic and splice box ship separately.
- RC3NP** *Remote ballast luminaire with pre-wired cord.* Add RC3NP to end of complete fixture catalog number. Includes ballast housing, optic and appropriate remote optical mounting box and 3 feet of pre-wired cable harness with male and female 20A twist lock plug (C3NP) factory attached. Ballast, optic and splice box ship separately.
- RC3NPWL** *Remote ballast luminaire with pre-wired cord for wet location.* Add RC3NPWL to end of complete fixture catalog number. Same as RC3NP except listed for wet location.
- SCK** *Safety chain kit.* Kit includes chain and attachment hardware for field installation. Add SCK (5'), SCK84 (7'), SCK120 (10') to fixture catalog number or order separately as SCK (5'), SCK84 (7'), SCK120 (10').

Optic Options & Accessories

- CF** *Charcoal filter.* Used with enclosed and gasketed luminaires. Filter prevents particulate contaminants from entering the optical assembly during start-up and cool-down periods. Filter consists of activated charcoal granules freely suspended between multiple layers of polyester filtering material.
- GL17/GL22** *Glass lens for TH A17/A22.* Frequent cleaning maintains performance. (Does not meet UL lamp rupture containment specifications.) RK1 MHINGE U kit must be specified when ordering lens separately for field modification.
- T73** *Corning C73.* Prismatic tempered glass lens
- UP** *Uplight.* Glass enclosure for TE E17/E22.

	SF	DF	HA	WL	TR	RC3NP	RC3NPWL	SCK	CF	GL17/GL22	T73	UP
Ships attached	●	●	●	●					●	●	●	●
Ships separately					●	●	●	●		●		

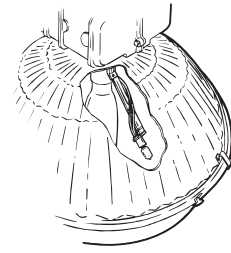
Quartz Lamp Options

EC *Emergency circuit.* Factory-installed, double-contact, 120V bayonet-base quartz socket with socket leads for use with separate external emergency power system. Reference Quartz Lamp Wattage table for maximum wattage. 120V quartz lamp not included.

QRS *Quartz restrike system.* Factory-installed, double-contact, bayonet-base quartz socket with socket leads. Automatically switches quartz lamp on if there is a power interruption or brownout significant enough to cause the primary HID lamp to drop out. The quartz lamp stays on until the HID fixture restrikes. QRS does not energize during cold start of HID luminaires. Wiring for the quartz lamp is internal to the ballast assembly; the ballast supplies voltage required to operate the quartz lamp. The fixture must be energized for quartz lamp to operate. Reference Quartz Lamp Wattage table for maximum wattage. 120V quartz lamp not included.

QRSTD *Quartz restrike system time delay.* Factory-installed, double-contact, bayonet-base quartz socket with socket leads. Functions same as QRS, but quartz lamp energizes under hot and cold starting conditions. Quartz lamp will come on when luminaire is energized and remain on for two minutes after startup or restrike. Wiring for the quartz lamp is internal to the ballast assembly; the ballast supplies voltage required to operate the quartz lamp. The fixture must be energized for quartz lamp to operate. Reference Quartz Lamp Wattage table for maximum wattage. 120V quartz lamp not included.

EC/QRS/QRSTD



Quartz Lamp Wattage Table															
Maximum Rating for EC, QRS, QRSTD Options															
	TE/E17/E22	TH/A14/A15/A16/A17/A22	TH/A16GL	TH/PA16	TH/PA22/PA22N/PA22SP	TH/PA22L/PA22E	TH/PA25	TX/PA22GLE/PA22C/PA25D	TX/A20/A23/A26/A30	TX/A162/A165	TGR/TGL	TPG/PG16/PG21/PG16N/PG21A	TPGE/PG16GLE/PG21GLE	TPGE/PG16AGLE/PG21AGLE	TX/A121/A125
Metal halide HID lamp wattage	Quartz Lamp Wattage														
150	-	-	-	-	-	-	-	100	100	100	100	-	-	-	100
175	100	100	100	-	150	150	150	150	150	150	100	150	150	150	-
200	150	150	100	-	150	150	150	150	150	150	100	150	150	150	-
250	250	250	100	-	250	150	150	150	250	150	100	250	150	150	-
300	250	250	100	-	250	150	150	150	250	150	-	250	150	150	-
320	250	250	100	-	250	150	150	150	250	150	-	250	150	150	-
350	250	250	100	-	250	150	150	150	250	150	-	250	150	150	-
400	250	250	100	-	250	150	150	150	250	150	-	250	150	150	-
450	250	250	100	-	250	150	150	150	250	150	-	250	150	150	-
750	250	500	-	-	-	-	150	-	-	-	-	500	150	150	-
875	250	500	-	-	-	-	150	-	-	-	-	500	150	150	-
1000	250	500	-	-	-	-	150	-	-	-	-	500	150	150	-
High pressure sodium HID lamp wattage	Quartz Lamp Wattage														
50	-	-	-	-	-	-	-	100	-	-	-	-	-	-	100
70	100	100	-	-	-	-	-	100	100	100	-	-	-	-	100
100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
150	150	150	150	150	150	150	150	150	150	150	100	150	100	100	150
200	150	150	150	150	150	150	150	150	150	150	100	150	100	100	150
250	250	250	150	250	250	150	150	150	250	150	100	250	250	250	150
400	250	250	150	-	250	150	150	150	250	150	-	250	250	250	-
1000	500	500	-	-	-	-	150	-	-	-	-	500	250	250	-

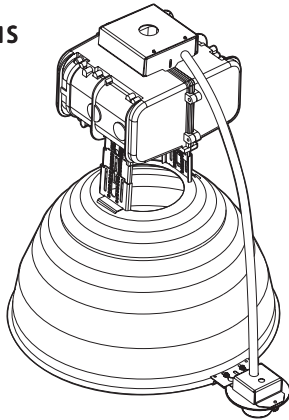
Add QxxxDC to fixture Catalog # to include lamp (xxx denotes wattage).

	EC*	QRS*	QRSTD*
Ships attached	●	●	●
Ships separately			

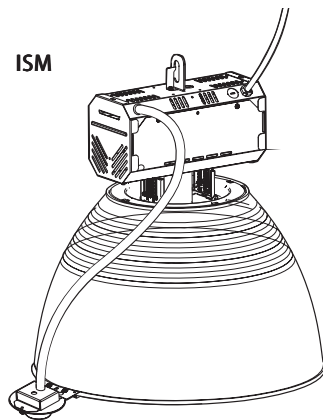
* Cannot be field installed.

Options & Accessories

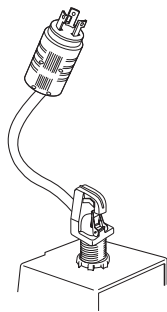
KW1S



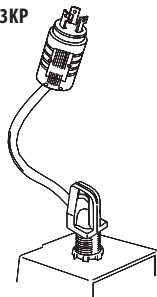
ISM



HC3P/HC3KP



LC3P/LC3KP



HID Dimming Options

- KW1** *KiloWatch® 50% power reduction. 120V AC control circuit for dual-level control system. Requires additional system components. See KiloWatch® data (pages 382-383) or consult factory.*
- KW4** *KiloWatch® 50% power reduction. 277V AC control circuit for dual-level control system. Requires additional system components. See KiloWatch® data (pages 382-383) or consult factory.*
- KW150** *KiloWatch® 50% lumen reduction. 120V AC control circuit for dual-level control system. Requires additional system components. See KiloWatch® data (pages 382-383) or consult factory.*
- KW450** *KiloWatch® 50% lumen reduction. 277V AC control circuit for dual-level control system. Requires additional system components. See KiloWatch® data (pages 382-383) or consult factory.*
- KW1S** *KiloWatch® II 50% power reduction. Integral sensor unit for individually controlled dual-level system. See KiloWatch® II data (page 381) or consult factory.*
- KW1SLT** *KiloWatch® II 50% power reduction for low temperature. Integral low temperature sensor unit for individually controlled dual-level system. See KiloWatch® II data (page 381) or consult factory.*
- ISM** *Individually sensed motion detector. 50% power reduction for individually controlled GEB electronic dimming ballast. See page 381 or consult factory for details.*

Cord Mounting Options and Accessories

- HC3P** *Hook, 3' cord and NEMA twist-lock plug. For use where receptacle and support means are provided by others. Includes die-cast aluminum hook, 3' of 16-gauge, 105°C cord and NEMA configuration twist-lock plug. Add HC3P to fixture catalog number for factory installed or order separately as HC3P Lx-xxP (Lx-xxP denotes plug configuration. Specify from NEMA Plug Table below). Height 3-1/2".*
- HC3KP** *Hook, 3' cord and NEMA twist-lock plug for KiloWatch®. Identical in function to HC3P except with NEMA L23-20P plug configuration for KiloWatch®.*
- LC3P** *Loop, 3' cord and NEMA twist-lock plug. For use where receptacle and support means are provided by others. Includes die-cast aluminum loop, 3' of 16-gauge, 105°C cord and NEMA configuration twist-lock plug. Add LC3P to fixture catalog number for factory installed or order separately as LC3P Lx-xxP (Lx-xxP denotes plug configuration. Specify from NEMA Plug Table below). Height 3-1/2".*
- LC3KP** *Loop, 3' cord and NEMA twist-lock plug for KiloWatch®. Identical in function to LC3P except with NEMA L23-20P plug configuration for KiloWatch®.*

NEMA Plug Table							
Ships attached					NEMA plug configuration	Amp rating	Ships separately
Fixture option field		Fixture voltage field					Accessory item
Hook, 3' cord & plug	Loop, 3' cord & plug	Voltage	TB ballast	TBV ballast			Catalog number
HC3P	LC3P	120	TB1	TBV1	L5-15P	15	HC3P L5-15P
HC3P	LC3P	208	TB2	TBV2	L6-15P	15	HC3P L6-15P
HC3P	LC3P	240	TB3	TBV3	L6-15P	15	HC3P L6-15P
HC3P	LC3P	277	TB4	TBV4	L7-15P	15	HC3P L7-15P
HC3P	LC3P	347	TB5	--	L37-20P	20	HC3P L37-20P
HC3P	LC3P	480	--	TBV6	L8-20P	20	HC3P L8-20P
HC3P20	LC3P20	120	TB1	TBV1	L5-20P	20	HC3P L5-20P
HC3P20	LC3P20	208	TB2	TBV2	L6-20P	20	HC3P L6-20P
HC3P20	LC3P20	240	TB3	TBV3	L6-20P	20	HC3P L6-20P
HC3P20	LC3P20	277	TB4	TBV4	L7-20P	20	HC3P L7-20P

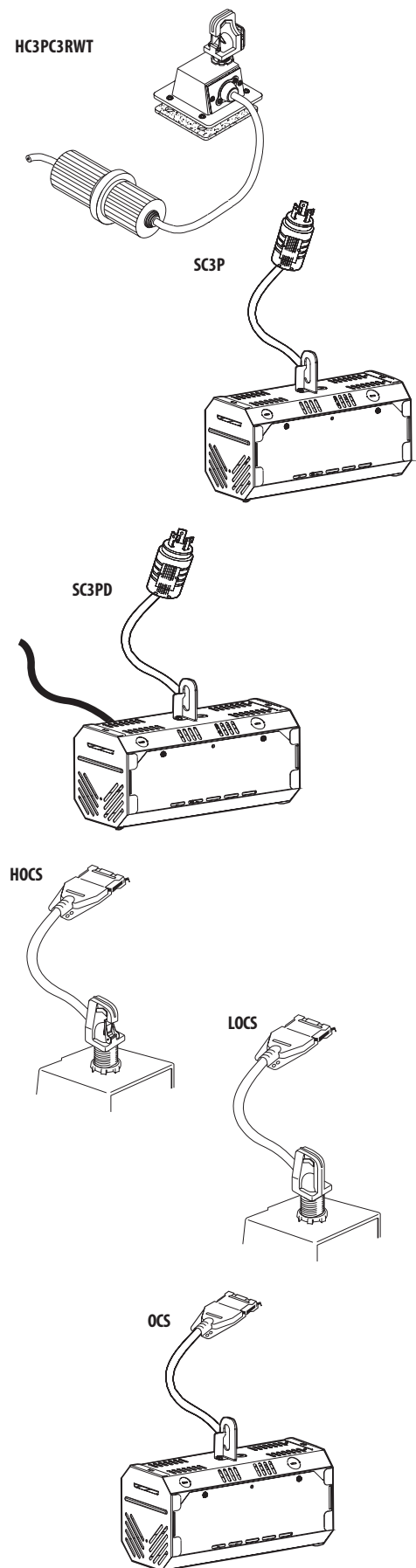
	KW1	KW4	KW150	KW450	KW1S	KW1SLT	ISM	HC3P	HC3KP	LC3P	LC3KP
Ships attached	●	●	●	●	●	●	●	●	●	●	●
Ships separately								●		●	

Cord Mounting Options and Accessories (continued)

- HC3PC3RWT** *Hook, 3' cord, NEMA twist-lock and receptacle for wet location.* For use where support means are provided by others. Includes grommeted die-cast aluminum safety hook, 3' of 16-gauge, 105°C cord and NEMA twist-lock 20A plug and compatible NEMA receptacle.
- SC3P** *Steel hook, 3' cord and NEMA twist-lock plug.* Used on steel ballast housing only. For use where receptacle and support means are provided by others. Includes steel hook, 3' of 16-gauge, 105°C cord and NEMA configuration twist lock plug. 15A plug standard for 120V, 208V, 240V, 277V; 20A plug standard for 347V, 480V. Height 2-5/8".
- SC3PD** *Steel hook, 3' cord with NEMA twist-lock plug and 3' low voltage cord.* Same as SC3P with 3' of low voltage control cord for 0-10VDC dimming. Used on steel ballast housing with GEB electronic ballast only.

Reloc® Mounting Options

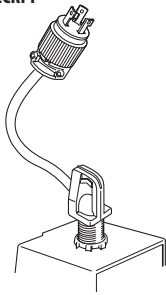
- HOCS** *Hook, cord and Reloc® OCS connector.* For use where support means are provided by others. Requires Reloc® wiring system. Includes die-cast aluminum hook, 5' of 16-gauge, 105°C white cord and Lithonia Reloc® module. Allows the desired hot conductors needed to energize the fixture to be selected in the field. Allows fixture to be removed from line without interruption of branch circuit. Factory prewired. Height 3-1/2". In Canada, available in 120V or 347V only. To order, specify voltage. For additional information, see Reloc® OCS component on page 692.
- LOCS** *Loop, cord and Reloc® OCS connector.* For use where support means are provided by others. Requires Reloc® wiring system. Includes die-cast aluminum loop, 5' of 16-gauge, 105°C white cord and Lithonia Reloc® module. Allows the desired hot conductors needed to energize the fixture to be selected in the field. Allows fixture to be removed from line without interruption of branch circuit. Factory prewired. Height 3-1/2". In Canada, available in 120V or 347V only. To order, specify voltage. For additional information, see Reloc® OCS component on page 692.
- OCS** *Hook, cord and Reloc® OCS connector.* For use where support means are provided by others. Requires Reloc® wiring system. Includes steel hook, 5' of 16-gauge, 105°C white cord and Lithonia Reloc® module. For SH/SX/SPG steel housing only. Allows the desired hot conductors needed to energize the fixture to be selected in the field. Allows fixture to be removed from line without interruption of branch circuit. Factory prewired. Height 3-1/2". In Canada, available in 120V or 347V only. To order, specify voltage. For additional information, see Reloc® OCS component on page 692.



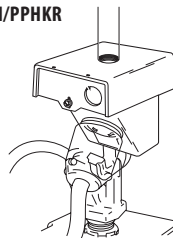
	HC3PC3RWT	SC3P	SC3PD	HOCS	LOCS	OCS
Ships attached	●	●	●	●	●	●
Ships separately						

Options & Accessories

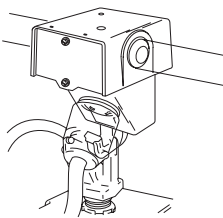
LCPP/LCKPP



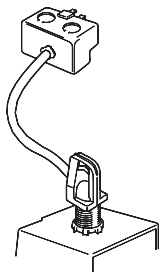
PPH/PPHKR



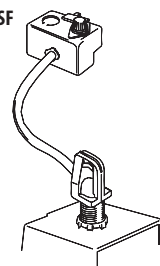
TPH/TPHKR



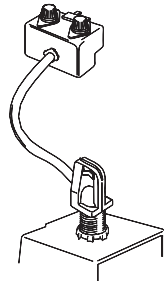
LUCP



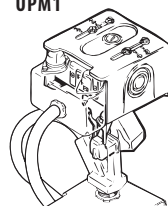
LUCPSF



LUCPDF



UPM1



Power Hook Options & Accessories

- LCPP** *Loop, cord and plug.* Use with PPH and TPH only. Includes loop, 14" of 16-gauge, 105°C cord and twist-lock 14A non-NEMA plug configuration for power hooks. Receptacle is part of PPH or TPH accessory. Add LCPP to fixture catalog number for factory installed or order separately as LCPP.
- LCKPP** *Loop, cord and plug for KiloWatch®.* Use with PPHKR and TPHKR only. Includes loop, 14" of 16-gauge, 105°C cord and twist-lock NEMA L23-20P plug for power hooks for KiloWatch®. Receptacle is part of TPHKR and PPHKR accessory. Factory installed.
- PPH** *Pendant power hook.* UL listed as primary disconnect, load break device. Threaded 3/4" top entry. **Fixture requires LCPP option (loop, cord and plug).** Add PPH to fixture catalog number or order separately as PPH xxx. (xxx – denotes voltage. Specify 120, 208, 240, 277, 347, 480.) Height 5-1/8"; width and depth 4-1/2".
- PPHKR** *Pendant power hook for KiloWatch® system.* UL listed as primary disconnect, load break device. Threaded 3/4" top entry. **Fixture requires LCKPP option (loop, cord and plug for KiloWatch® system).** Add PPHKR to fixture catalog or order separately as PPHKR xxx. (xxx – denotes voltage. Specify 120, 208, 240, 277, 347, 480.) Height 5-1/8"; width and depth 4-1/2".
- TPH** *Through-wire power hook.* UL listed as primary disconnect, load break device. Permits side entry for 1-1/4" or 3/4" conduit through concentric knockouts. **Fixture requires LCPP option (loop, cord and plug).** Add TPH to fixture catalog number or order separately as TPH xxx. (xxx – denotes voltage. Specify 120, 208, 240, 277, 347, 480.) Height 6-1/4"; width and depth 4-1/2".
- TPHKR** *Through-wire power hook for KiloWatch® system.* UL listed as primary disconnect, load break device. Permits side entry for 1-1/4" or 3/4" conduit through concentric knockouts. **Fixture requires LCKPP option (loop, cord and plug for KiloWatch® system).** Add TPHKR to fixture catalog or order separately as TPHKR xxx. (xxx – denotes voltage. Specify 120, 208, 240, 277, 347, 480.) Height 6-1/4"; width and depth 4-1/2".

Universal Power Module Hook & Loop Mounting Options

- LUCP** *Loop, universal cord and plug. Requires UPM1 option (universal power module with hook adapter).* Provides die-cast aluminum loop, 3' of 16-gauge, 105°C cord and UCP plug. Factory prewired. Height is 3-1/2".
- LUCPSF** *Loop, universal cord, plug with single fusing. Requires UPM1 (universal power module with hook adapter).* Provides die-cast aluminum loop, 3' of 16-gauge, 105°C cord and UCP plug. Factory prewired. Height is 3-1/2".
- LUCPDF** *Loop, universal cord, plug with double fusing. Requires UPM1 (universal power module with hook adapter).* Provides die-cast aluminum loop, 3' of 16-gauge, 105°C cord and UCP plug. Factory prewired. Height is 3-1/2".
- UPM1** *Universal power module with hook adapter.* UL listed as primary disconnect, load break device. Concentric knockouts for side entry of 1-1/4" or 3/4" conduit. Threaded 3/4" top entry for pendant. **Fixture requires LUCP options (loop, universal cord and plug).** Allows surface, through-wire or pendant mounting. Add UPM1 to fixture catalog number or order separately as UPM1 xxx. (xxx – denotes voltage. Specify 120, 208, 240, 277, 347, 480.) Height 7", width and depth 4-1/2".

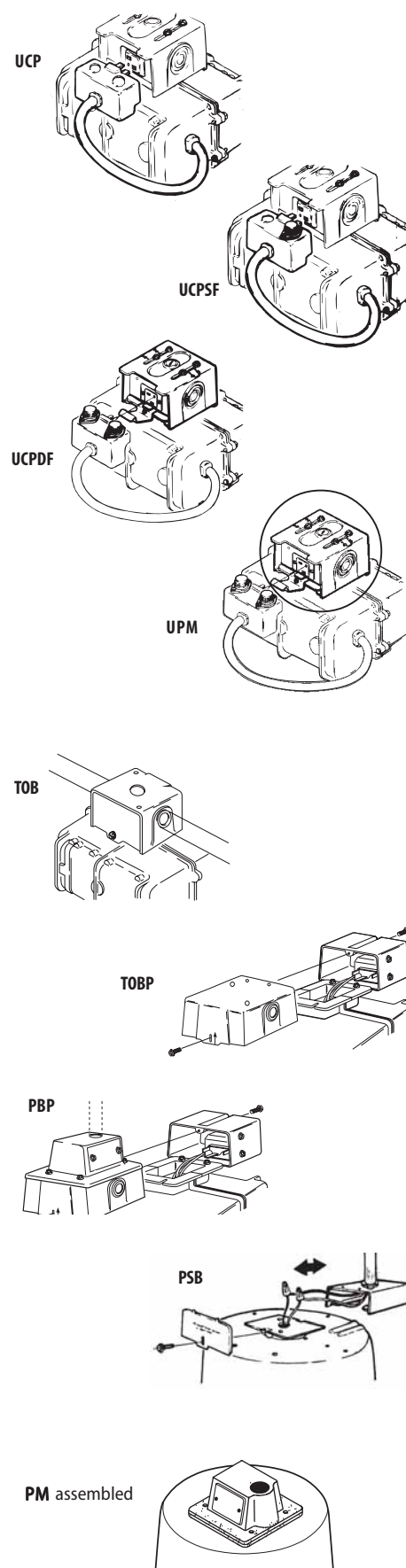
	LCPP	LCKP	PPH	PPHKR	TPH	TPHKR	LUCP	LUCPSF	LUCPDF	UPM1
Ships attached	●	●					●	●	●	
Ships separately	●		●	●	●	●				●

Universal Power Module Mounting Options

- UCP** *Universal cord and plug. Requires UPM (universal power module) option.* 16-gauge, 105°C cord and plug. Connect to UPM to provide complete power module assembly. Factory prewired module.
- UCPSF** *Universal cord and plug with single fuse. Requires UPM (universal power module) option.* 16-gauge, 105°C cord and plug module with single fuse (120V, 277V). Connect to UPM to provide complete power module assembly. Fuse is factory-installed in UCPSF plug module. Factory prewired.
- UCPDF** *Universal cord and plug with double fuse. Requires UPM (universal power module) option.* 16-gauge, 105°C cord and plug module double fuse (208V, 240V, 480V). Connect to UPM to provide complete power module assembly. Fuses are factory-installed in UCPDF plug module. Factory prewired.
- UPM** *Universal power module.* UL listed as primary disconnect, load break device. Concentric knockouts for side entry of 1-1/4" or 3/4" conduit. Threaded 3/4" top entry. **Fixture requires UCP (universal cord and plug) options.** Allows flat horizontal surface, through-wire or pendant mounting. Add UPM to fixture catalog number or order separately as UPM xxx. (xxx – denotes voltage. Specify 120, 208, 240, 277, 347, 480.) Height 3-1/2", width and depth 4-1/2".

Box Mounting Options & Accessories

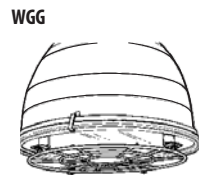
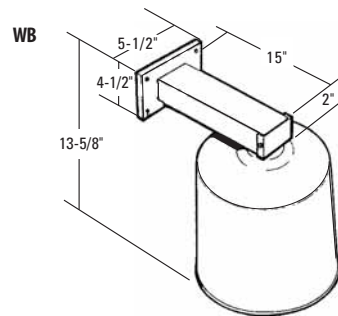
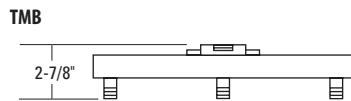
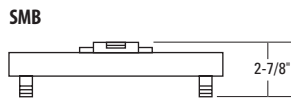
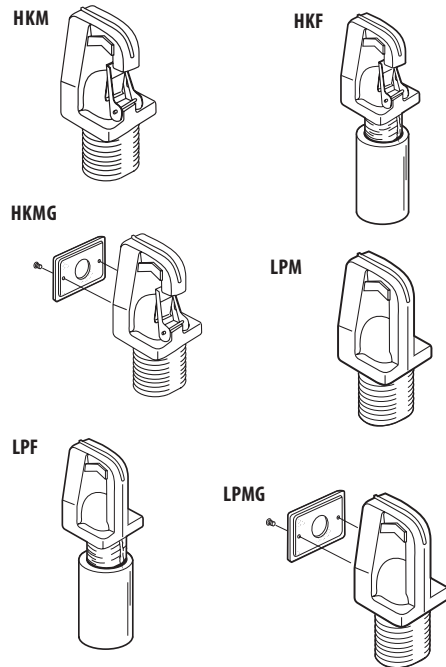
- TOB** *Through-wire outlet box.* Combination outlet box and splice compartment. Permits side entry for 1-1/4" or 3/4" conduit or top entry for 3/4" conduit through concentric knockouts. May be suspension or surface mounted. Height 2-7/8"; width and depth 4-1/2".
- TOBP** *Through-wire outlet box plug-in.* Provides plug-in flexibility of conventional power hook and reduces overall height. Permits side entry for 1-1/4" or 3/4" conduit through concentric knockouts. Female receptacle part of TOBP box ships separately. Male plug is factory installed to ballast housing. Not rated as a load break device. Height 2-7/8"; width and depth 4-1/2".
- PBP** *Pendant box plug-in.* Pendant-mount plug-in outlet box provides plug-in flexibility of conventional power hook. Female receptacle part of PBP box ships separately. Male plug is factory-installed to ballast housing. Not rated as a load break device. Threaded 3/4" entry permits top entry of pendant stem. Height 4-1/2"; width and depth 4-1/2".
- PSB** *Pendant splice box.* Permits pendant mounting of TG and SH/SX/SPG steel housing series. TG box has 3/4" threaded top entry. SH/SX/SPG box has 3/4" top knockout.
- PM** *Pendant splice box.* Permits pendant mounting of TGL and TGR series. Die-cast aluminum box has 3/4" threaded top entry.



	UCP	UCPSF	UCPDF	UPM	TOB	TOBP	PBP	PSB	PM
Ships attached	●	●	●		●	●	●	●	●
Ships separately				●		●	●		

Options and Accessories

Drawings are for dimensional detail only and may not represent actual mechanical configuration.



Mounting Hooks

- HKM** *Fixture hook male.* Die-cast aluminum construction with spring steel safety clasp. Overall height is 3-3/4" including 1" of threaded nipple. Thread diameter is 3/4".
- HKF** *Fixture hook female.* Die-cast aluminum construction with spring steel safety clasp with coupling added for female entry. Overall height is 5-1/4" including threaded coupling. Thread diameter is 3/4".
- HKMG** *Fixture hook male grommeted.* Die-cast aluminum construction with spring steel safety clasp. Gasketed cord exit design keeps dirt from entering hook/cord entry. Overall height is 3-3/4" including 1" of threaded nipple. Thread diameter is 3/4".
- LPM** *Fixture loop male.* Die-cast aluminum construction with closed loop design. Overall height is 3-3/4" including 1" of threaded nipple. Thread diameter is 3/4".
- LPF** *Fixture loop female.* Die-cast aluminum construction with closed loop design with coupling added for female entry. Overall height is 5-1/4" including threaded coupling. Thread diameter is 3/4".
- LPMG** *Fixture loop male grommeted.* Die-cast aluminum construction with closed loop design. Gasketed cord exit design keeps dirt from entering Loop/cord entry. Overall height is 3-3/4" including 1" of threaded nipple. Thread diameter is 3/4".

Mounting Bars

- SMB** *Single mounting bar.* White painted steel channel with 3/4" pipe couplings suspend remote ballast housing at one end with remote reflector assembly at the other. SMB includes end snap-in closure strips for wire access. Order as **SMB18** for 18" (overall length) or **SMB24** for 24" (overall length). Center line of pipe couplings are 3" from each end.
- TMB** *Twin mounting bar.* White painted steel channel with 3/4" pipe couplings suspends two complete fixtures, one at each end. Order as **TMB30** for 30" (overall length) or **TMB48** for 48" (overall length). Centerlines of pipe couplings are 3" from each end.
- WB** *TG Series wall-mounting bracket.* Extruded aluminum wall bracket for TG, TGL, TGR luminaires. Bracket mounts directly to flat, vertical surface with four bolts (not included). Fixture slides directly onto WB. All wiring connections are made inside wall mounting bracket. **TG requires PSB option** (pendant splice box on page 391). **TGL and TGR fixture require PM option** (pendant splice box on page 391).

Wireguards for Hi-Tek® Aluminum High Bays and Low Bays

- WGA** *Wireguard for Hi-Tek® open aluminum high bay reflectors.* Use with TH A15/A16/A17/A22 and SH A15/A16 open aluminum reflector high bays. Add WG to fixture catalog number or order separately as WGxxx. (xxx – denotes reflector. Specify A15, A16, A17, A22.)
- WGG** *Wireguard for enclosed high bay reflectors.* Use with TE E17/E22; TH A17 with GL17/A22 with GL22; TPGE PG16GLE/PG16AGLE/PG21GLE/PG21AGLE reflector high bays. Wireguard is factory installed to glass lens door. **Must be ordered with fixture.** Add WG to fixture catalog number.
- WG** *Wireguard for Hi-Tek® aluminum low bays.* Use with TX A20/A23/A26/A30 or SX A23. **Must be ordered with fixture.** Add WG to fixture catalog number. Wireguard is factory attached to lens door. Add WG to fixture catalog number.

	HKM	HKF	HKMG	LPM	LPF	LPMG	SMB	TMB	WB	WGA	WGG	WG
Ships attached											●	●
Ships separately	●	●	●	●	●	●	●	●	●	●		

Louver Guard Accessories

- LGA** Louver guard for open aluminum high bay reflectors. Use with TH A16/A17/A22 or SH A16 open aluminum high bays. **Must be ordered with fixture.** Reflector requires factory modification for louver mounting. Add LGAx to fixture catalog number. (xx – denotes reflector. Specify 16, 17, 22.)
- LGG** Louver guard for enclosed aluminum high bay reflectors. Use with TE E17/E22 enclosed aluminum high bays. **Must be ordered with fixture.** Reflector requires factory modification for louver mounting. Louver mounts to reflector above lens door. Add LGGxx to fixture catalog number. (xx – denotes reflector size. Specify 17, 22.)

Wireguards DuraBay® Prismatic Glass High Bays

- WGPG** Wireguard for open prismatic glass high bay reflectors. Use with prismatic glass reflector high bay TPG PG16/PG21 and shrouded prismatic glass reflector high bay TPG PG16A/PG21A. Wireguard covers bottom opening of reflector. Field installed to bottom of reflector. Add WGxxx to fixture catalog number or order separately as WGxxx. (xxxx – denotes reflector. Specify PG16, PG21, PG16A, PG21A.)
- GFWG** Wireguard for enclosed prismatic glass high bay reflectors. Use with enclosed prismatic glass reflector high bay TPGE PG16GLE/PG21GLE/PG16AGLE/PG21AGLE. Two-piece wireguard protects top reflector and bottom glass lens door. Top portion field installed to reflector neck casting. Bottom portion factory installed to glass lens door. Add GFWGxx to fixture catalog number or order separately as GFWGxx. (xx – denotes reflector size. Specify 16, 21.) Optic, top wireguard and lens door with wireguard ship separately.

Wireguard Acrylume® Prismatic Acrylic High Bays and Low Bays

- FWG** Full wireguard. Use with the TH high bay or TX low bay Acrylume® fixtures. Attaches to bottom of ballast housing. Ships separately as: FWG U (Unit).

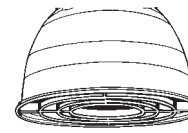
Decorative Shades

Fixture series and size	Cylinder DCY	Square DSQ	Hexagonal DHX	Dia.	Height
TH A16 and TH A17	DCY19 400 (color)	DSQ19 400 (color)	DHX19 400 (color)	19"	30"
TH A17 with WGA, WGG or LGA	DCY22 400 (color)	DSQ22 400 (color)	DHX22 400 (color)	22 ½"	30"
TH A22	DCY24 400 (color)	DSQ24 400 (color)	DHX24 400 (color)	24"	30"
TH A22 with WGA, WGG or LGA	DCY26 1000 (color)	DSQ26 1000 (color)	DHX26 1000 (color)	26"	30"
TE E17	DCY22 400 (color)	DSQ22 400 (color)	DHX22 400 (color)	22½"	30"
TE E22	DCY26 1000 (color)	DSQ26 1000 (color)	DHX26 1000 (color)	26"	30"

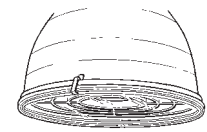
24-gauge steel construction with baked polyester enamel finish. Designed for pendant mounting on rigid conduit only. Not for use on swivel hangers or any self-leveling hanging device. Available in all architectural colors. Custom colors may involve substantial setup fees; consult factory. Mounting and fixture attachment hardware not included.

	LGA	LGG	WGPG	GFWG	FWG	DCY	DSQ	DHX
Ships attached								
Ships separately	●	●	●	●	●	●	●	●

LGA



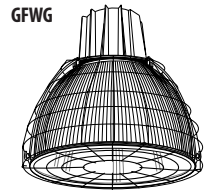
LGG



WGPG



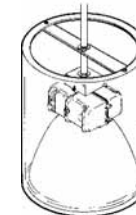
GFWG



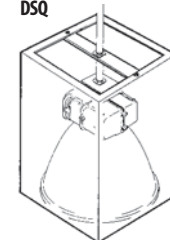
FWG



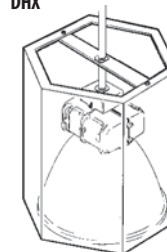
DCY



DSQ



DHX



Options & Accessories

		Ships attached	Ships separately
Ballast Housing Options & Accessories			
SF	Single fuse; 120/277/347V only ¹	●	
DF	Double fuse; 208/240/480V only ¹	●	
HA	55°C ambient operation ²	●	
HA	65°C ambient operation ²	●	
WL	Wet location; UL Listed	●	
TR	Remote ballast luminaire		●
RC3NP	Remote ballast (TR) luminaire with pre-wired cord and plug ³		●
RC3NPWL	Remote ballast (TR) luminaire with pre-wired cord for wet location		●
SCK	Safety chain kit 60"		●
SCK84	Safety chain kit 84"		●
SCK120	Safety chain kit 120"		●
Optic Options			
CF	Charcoal filter ³	●	
GL	Glass lens (tempered) door enclosure	●	
T73	Corning C73 prismatic tempered glass lens door enclosure	●	
UP	Uplight glass enclosure ³	●	
Quartz Lamp Options			
EC	Emergency circuit (lamp not included); see page 387 for maximum wattage	●	
QRS	Quartz restrike system (lamp not included); see page 387 for maximum wattage	●	
QRSTD	QRS time delay (lamp not included); see page 387 for maximum wattage	●	
HID Dimming Options			
KW1	KiloWatch® 120V control relay; 50% wattage reduction	●	
KW4	KiloWatch® 277V control relay; 50% wattage reduction	●	
KW150	KiloWatch® 120V control relay; 50% light (lumen) reduction	●	
KW450	KiloWatch® 277V control relay; 50% light (lumen) reduction	●	
KW15	KiloWatch® II integral sensor unit; 50% wattage reduction ³	●	
KW15LT	KiloWatch® II integral low temperature sensor unit; 50% wattage reduction ³	●	
ISM	Integral sensor unit; 50% wattage reduction (GEB electronic ballast only)	●	
Cord Mounting Options			
HC3P	Hook, 3' cord & 15A NEMA twist-lock plug (20A for 480V) ^{1,3}	●	●
HC3KP	Hook, 3' cord & NEMA L23-20P KiloWatch® plug ³	●	
LC3P	Loop, 3' cord & 15A NEMA twist-lock plug (20A for 480V) ^{1,3}	●	●
LC3KP	Loop, 3' cord & NEMA L23-20P KiloWatch® plug ³	●	
HC3PC3RWT	Wet location hook, cord and receptacle ¹	●	
SC3P	Steel hook, 3' cord and 15A NEMA twist-lock plug	●	
SC3PD	Steel hook, 3' cord and 15A NEMA twist-lock plug and 3' low voltage control cord	●	
Reloc® Mounting Options			
HOCS	Hook, 5' white cord, Reloc® OCS ^{1,3,4}	●	
LOCS	Loop, 5' white cord, Reloc® OCS ^{1,3,4}	●	
OCS	Steel hook 5' white cord, Reloc® OCS	●	
Power Hook Options			
LCPP	Loop, cord and plug; requires PPH or TPH ³	●	●
LCKPP	Loop, cord and KiloWatch® plug; requires PPHKR or TPHKR ³	●	●
PPH	Pendant power hook outlet box; luminaire requires LCPP ³		●
PPHKR	Pendant power hook outlet box for KiloWatch®; luminaire requires LCKPP ³		●
TPH	Through-wire power hook outlet box; luminaire requires LCPP ³		●
TPHKP	Through-wire power hook outlet box for KiloWatch®; luminaire requires LCKPP ³		●

NOTES:

- 1 Must specify voltage tap for TB and TBV in catalog number voltage field (TB1=120V, TB2=208V, TB3=240V, TB4=277V, TBV1=120V, TBV2=208V, TBV3=240V, TBV4=277V, TBV6=480V).
- 2 Not available all wattages and voltages. Consult factory.
- 3 Cannot be combined with (WL) wet location option.
- 4 Available 120V or 347V only in Canada.
- 5 Requires (PSB) pendant splice box option.
- 6 Requires (PM) pendant splice box option.

☐ = Standard
 ■ = Option available

	High bays											Low bays																				
	SHA14	SHA15	SHA16	SH PA22	SPG PG15	TE E17/E22	THA14	THA15	THA16/A16GL	THA17/A22	TH PA22*/PA25	THDA15/A16	TPG	TPGE	SXA23	TG	TGL	TGR	TXA125/A165	TXA20	TXA23	TXA26	TXD A23	TXA30	TXF A30F	TXF PA25ALEF	TX PA22C	TX PA22GLE	TX PA25ALE	TX PA25D		
Ballast housing options & accessories	SF	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	DF	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	HA (55° C)	■	■	■	■	■	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	HA (65° C)						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	WL						■											■	■	■	■	■	■	■	■	☐	☐	■	■	■	■	■
	TR						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	RC3NP						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	RC3NPWL						■													■	■	■	■	■	■	■	■	■	■	■	■	■
	SCK	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	SCK84	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	SCK120	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Optic options	CF					■							■	■						■	■	■		■								
	GL17/GL22																															
	T73						■																									
	UP						■																									
Quartz lamp options	EC	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	QRS						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	QRSTD	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
HID dimming options	KW1						■	■	■	■	■	■	■	■	■	■	■	2	2	■	■	■	■	■	■	■	■	■	■	■	■	
	KW4						■	■	■	■	■	■	■	■	■	■	■	2	2	■	■	■	■	■	■	■	■	■	■	■	■	
	KW150						■	■	■	■	■	■	■	■	■	■	■	2	2	■	■	■	■	■	■	■	■	■	■	■	■	
	KW450						■	■	■	■	■	■	■	■	■	■	■	2	2	■	■	■	■	■	■	■	■	■	■	■	■	
	KW1S						■	■	■	■	■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■	■	■	
	KW1SLT						■	■	■	■	■	■	■	■	■	■	■			■	■	■	■	■	■	■	■	■	■	■	■	
	ISM	■	■	■	■										■																	
Cord mounting options	HC3P						■	■	■	■	■	■	■	■	■	■	5	6	6	■	■	■	■	■	■	■	■	■	■	■	■	
	HC3KP						■	■	■	■	■	■	■	■	■	■	■	6	6	■	■	■	■	■	■	■	■	■	■	■	■	
	LC3P						■	■	■	■	■	■	■	■	■	■	5	6	6	■	■	■	■	■	■	■	■	■	■	■	■	
	LC3KP						■	■	■	■	■	■	■	■	■	■	■	6	6	■	■	■	■	■	■	■	■	■	■	■	■	
	HC3PC3RWT						■													■	■	■	■	■	■	■	■	■	■	■	■	
	SC3P	■	■	■	■	■									■																	
Reloc [®] mounting options	HOCS						■	■	■	■	■	■	■	■	■	■	5	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	LOCS						■	■	■	■	■	■	■	■	■	■	5	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	OCS	■	■	■	■										■																	
Power hook options	LCPP						■	■	■	■	■	■	■	■	■	■	5	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	LCKPP						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PPH						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	PPHKR						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	TPH						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
	TPHKP						■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	

Options & Accessories

		Ships attached	Ships separately
Universal power module hook and loop mounting			
LUCP	Loop, cord and plug; for use with UPM ^{1,2}	●	
LUCPSF	LUCP, single fuse; dead front fusing; 120/277V only; for use with UPM ^{1,2}	●	
LUCPDF	LUCP, double fuse; dead front fusing; 208/240/480V only; N/A multi-tap ballast; for use with UPM ^{1,2}	●	
UPM1	Universal power module/hook adapter (specify voltage); luminaire requires LUCP, LUCPSF or LUCPDF		●
Universal power module mounting			
UCP	Universal cord and plug; for use with UPM ^{1,2,3}	●	
UCPSF	UCP with single fuse; dead front fusing; for use with UPM ^{1,2,3}	●	
UCPDF	UCP with double fuse; dead front fusing; for use with UPM ^{1,2,3}	●	
UPM	Universal power module (specify voltage); luminaire requires UCP, UCPSF or UCPDF		●
Box mounting			
TOB	Through-wire outlet box ²		●
TOBP	Through-wire outlet box plug-in ^{1,2}	●	●
PBP	Pendant box plug-in ^{1,2}	●	●
PSB	Pendant splice box (steel box) ²	●	
PM	Pendant splice box (die-cast aluminum box)	●	
Mounting hooks and loops			
HKM	Fixture hook, male		●
HKF	Fixture hook, female (3/4" threaded coupler)		●
HKMG	Grommited fixture hook, male		●
LPM	Fixture loop, male		●
LPF	Fixture loop, female (3/4" threaded coupler)		●
LPMG	Grommited fixture loop, male		●
Mounting bars			
SMB18	18" single-mounting bar; requires TR remote ballast option ^{2,4}		●
SMB24	24" single-mounting bar; requires TR remote ballast option ^{2,4}		●
TMB30	30" twin-mounting bar ²		●
TMB48	48" twin-mounting bar ²		●
WB	TG Series wall mounting bracket		●
Wireguards			
WGA	Wire guard for open Hi-Tek® high bay reflectors (specify reflector size 15, 16, 17 or 22)		●
WGG	Wireguard for enclosed high bay reflectors (add WG to catalog number)	●	
WG	Wire guard for Hi-Tek® low bays	●	
LGA	Louver guard for open Hi-Tek® high bays (specify reflector size 16, 17 or 22)		●
LGG	Louver guard for enclosed Hi-Tek® high bays (specify reflector size 17 or 22)		●
WGP	Wire guard for prismatic glass high bays (specify reflector size 16, 21, 16A or 21A)		●
GFWG	Full wire guard enclosed glass optic		●
FWG	Full wire guard for Acrylume® optics		●
Decorative shades			
DCY	Cylinder shade (specify reflector size and color) ⁵		●
DSQ	Square shade (specify reflector size and color) ⁵		●
DHX	Hexagonal shade (specify reflector size and color) ⁵		●
Paint options			
CR	Enhanced corrosion-resistant finish (polyester), housing and reflector ⁶	N/A	N/A
CRT	Non-stick protective coating, housing and reflector ⁶	N/A	N/A
Lamp options			
LPI	Lamp shipped in carton with fixture (N/A with incandescent)	●	
W/LAMP	Lamp ships separately (N/A with incandescent)		●

NOTES:

- 1 Must specify voltage tap for TB and TBV in catalog number voltage field (TB1=120V, TB2=208V, TB3=240V, TB4=277V, TBV1=120V, TBV2=208V, TBV3=240V, TBV4=277V, TBV6=480V).
- 2 Cannot be combined with (WL) wet location option.
- 3 Available 120V or 347V only in Canada.
- 4 Requires (TR) remote ballast option.
- 5 Pendant mount on rigid conduit. Not for use with any self-leveling hanger.
- 6 Consult factory for environmental compatibility.
- 7 Requires (PM) pendant splice box option.
- 8 Must be ordered with (GL17/GL22) tempered glass lens door enclosure.
- 9 Housing only.

Optional Architectural Colors

DNA	Natural aluminum
DSB	Steel blue
DMB	Medium bronze
DTG	Tennis green
DSS	Sandstone
DBL	Black
DWH	White
DGC	Charcoal gray
DBR	Bright red
DDB	Dark bronze

☐ = Standard
 ■ = Option available

	High bays													Low bays																	
	SH A14	SH A15	SH A16	SH PA22	SPG	TE	TH A14	TH A15	TH A16/A16GL	TH A17/A22	TH PA22/PA25	TH DA15/A16	TPG	TPGE	SXA23	TG	TGL	TGR	TX A125/A165	TX A20	TX A23	TX A26	TXD A23	TX A30	TXF A30F	TXF PA25ALE	TX PA22C	TX PA22GLE	TX PA25ALE	TX PA25D	
Universal power module hook and loop mounting	LUCP					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	LUCPSF					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	LUCPDF					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	UPM1					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Universal power module mounting	UCP					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	UCPSF					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	UCPDF					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	UPM					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Box mounting	TOB	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	TOBP					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	PBP					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	PSB	■	■	■	■	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	PM																	■	■						☐	☐					
Mounting hooks and loops	HKM	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	HKF	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	HKMG	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	LPM	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	LPF	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	LPMG	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Mounting bars	SMB18					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	SMB24					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	TMB30					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	TMB48					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	WB															■		■													
Wireguards	WGA		■	■				■	■	■			■								■	■	■	■							
	WGG					■			■	■	■	■	■	■																	
	WG																				■	■	■	■							
	LGA			■				■	■	■																					
	LGG					■																									
	WGPG												■																		
	GFWG													■																	
	FWG				■						■									■								■	■	■	■
Decorative shades	DCY					■		■	■	■	■	■	■	■																	
	DSQ					■		■	■	■	■	■	■	■																	
	DHX					■		■	■	■	■	■	■	■																	
Paint options	CR					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	CRT					■				■				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Lamp options	LPI											☐												☐							
	W/LAMP	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■