America's Brightest Industrial Lighting

HALOGEN LIGHTING PRODUCTS COPPORATION

LIGHTING PRODUCTS CORPORATION 2019 Industrial Edition Excellence in Machine and Industrial Lighting **Halogen** • LED • Fluorescent

HALOGEN LIGHTING

EXCELLENCE IN MACHINE & INDUSTRIAL LIGHTING

PRESIDENT'S LETTER

We here at Halogen Lighting Products Corporation are totally committed to excellence in industrial lighting. We strive to bring the finest, the newest and the brightest machine lighting fixtures to the North American market. It's all we do! We specialize in the design and engineering of the best quality industrial lighting fixtures available today.

Halogen Lighting Products Corporation fixtures have been proven and field tested in rigorous industrial, machine tool, food processing and manufacturing sectors successfully for over two decades, solidly building up our reputation for unmatched reliability.

If your shop is at all like some others we supply, you are quite familiar with the noise, vibration, hot, cold or wet environments your machine tool centers call 'home.' Our machine lights are over engineered to shrug off dirt, debris, metal chips and coolants as all in a day's work. We have found that what we ship to our customers is the highest quality industrial lighting found in North America and what our customers are actually buying is a solid investment in improved product quality.

Very often, new customers find that a minor investment in proper machine lighting can be recovered within the very first hour of operation; simply by installing the intense natural white light demanded by precision machining! Providing machine operators with the correct, direct workpiece illumination is a simple and cost-effective way to reduce injury, reduce shrinkage, and lower the cost of manufacture. If our proven machine lighting fixtures can improve your overall product quality by just a fraction of one percent, can you not imagine the impact on your corporate profits?

We take great pride that Halogen Lighting Products Corporation machine and industrial fixtures play such a vital role in virtually every market and manufacturing segment in North America, helping to substantially improve our customers' product quality and productivity.

We listen to our customers and try hard to incorporate their wants and needs into our product line. We want to be your lighting supplier and I personally would very much appreciate your input.

We welcome your inquiries and we are humbly grateful to our many customers, old and new, for their friendship, support, loyalty, and continued business.



Gratefully yours,
Eric R. Erwin
President
Halogen Lighting
Products Corporation
(a small, woman-owned business)



HALOGEN LIGHTING PRODUCTS CORPORATION

Telephone: **1-800-HALOGEN (425-6436)** Fax: 1-800-700-6166 (U.S. and Canada)

Visit our website www.halogen-lighting.com

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HALOGEN LIGHTING

EXCELLENCE IN MACHINE & INDUSTRIAL LIGHTING

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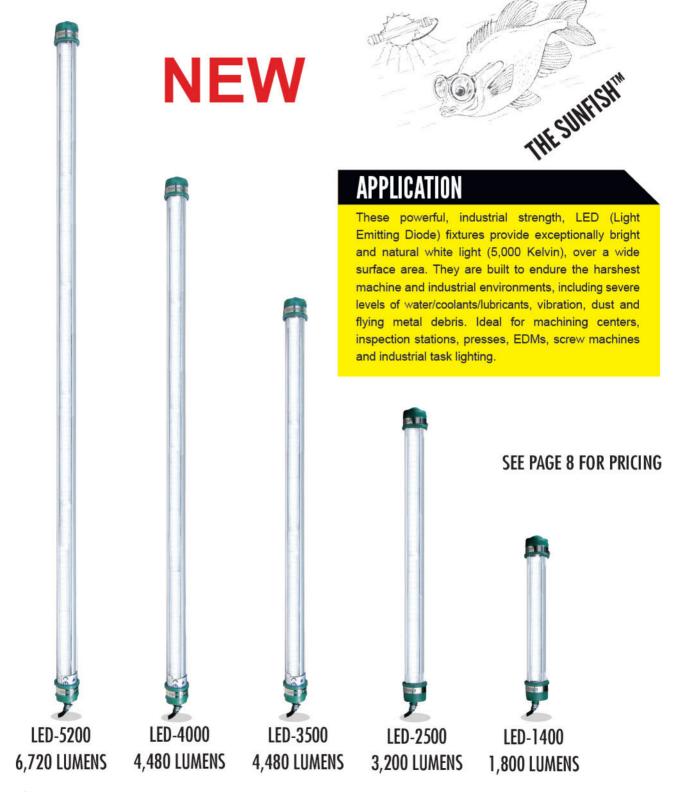
HALOGEN LIGHTING PRODUCTS CORPORATION™

Certification: IP67
(Waterproof Under Pressure)



THE SUNFISH™

Brighten-Up Your Work Area





HALOGEN LIGHTING PRODUCTS CORPORATION™

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SECOND GENERATION LED LIGHTING

NEW GLOBAL LEDs



APPLICATION

These powerful, industrial strength, LED (Light Emitting Diode) fixtures provide exceptionally bright and natural white light (5,000 Kelvin), over a wide surface area. They are built to endure the harshest machine and industrial environments, including severe levels of water/coolants/lubricants, vibration, dust and flying metal debris. Ideal for machining centers under high pressures and temperatures where lighting is needed in an area where serviceability would be difficult - virtually no maintenance or complications beyond installation for 10 years.



LED-712 - 16 WATTS - 1,248 LUMENS

SUPERIOR FEATURES

- Fixtures are powered with voltages between incoming 90 to 260 VAC. Driver automatically detects and adjusts to line voltage and 50/60 hertz.
- · Longer LED service life of 50,000 hours.
- Pure bright white illumination at 5000K.
- Enclosure is rated IP69K, ensuring superb protection from high-pressure/steam cleaning applications.
- Rugged aluminum construction serves as premium heatsink ensuring long life and cool operating temperature.
- Fixtures ship standard with 25 feet of SJT oil resistant cabling and grounded plug.
- · Brackets Included.

- These global fixtures are made of tough anodized aluminum with strong tempered glass covers.
 Our waterproof LEDs can handle repetitive washdowns from nearly any type of coolant or lubricant under high pressure and high temperatures.
- The external driver is in-line with the cord, this allows the fixture to be used in hostile applications while keeping the driver dry and out of harm's way.
- · Provides 80° of illumination.
- Meets CA-20 Appliance Efficiency Regulation.

Ships complete.

Prices are effective 01/01/2019.
All prices are in U.S. Dollars.

Import.
 Prices are subject to change.

Part Number	Length	Lumens	Watts	Description	Rated Hours	Technical Drawings	Price
LED-730	30"	4,160	52	30", 90-260V, 50/60Hz Heavy-Duty LED fixture	50,000	A, page 22	695.75
LED-719	19"	2,240	28	19", 90-260V, 50/60Hz Heavy-Duty LED fixture	50,000	B, page 22	657.00
LED-712	12"	1,248	16	12", 90-260V, 50/60Hz Heavy-Duty LED fixture	50,000	C, page 22	565.00



HALOGEN LIGHTING PRODUCTS CORPORATION"

LED-60-VP - 56 WATTS - 6,050 LUMENS

LED-30-VP - 28 WATTS - 3,024 LUMENS

BRIGHTEST LED IN AMERICA!

- · 5 times the efficiency of a 500-watt halogen work light!
- · Totally watertight enclosure is rated IP69K (Waterproof Under High Pressure/High Temperature) - the highest IP rating available.
- · Made of anodized aluminum, these LED fixtures will withstand high pressure, temperature, and heavy levels of machine coolants ideal for washdown applications.
- · Diffused optics provides optimal light output with minimal glare (reflections) and no shadowing.
- Provides 120° of illumination.
- · The internal driver is contained within the watertight fixture keeping the driver dry and out of harm's way, ensuring maximum reliability in hostile applications.
- Fixture is powered with variable voltage between 100 to 240 VAC 50/60Hz. Driver automatically detects and adjusts to incoming line voltage and hertz, allowing these fixtures to be used around the world.
- Pure bright white illumination at 5000K.

- · Virtually maintenance-free operation with an average rated lifespan of 50,000 hours.
- · Superior rugged, compact design, minimal footprint.
- · Anodized aluminum housing serves as a heatsink ensuring cool operation and long fixture life.
- · Fixtures ship standard with 6 feet of SVT oil resistant cabling and grounded plug.
- Optional: Tough, tempered glass lens mandatory for protection from applications using water based coolants.
- · Fixture ships complete with wiring and mounting hardware for plug-n-light operation.
- Meets CA-20 Appliance Efficiency Regulation.
- · Brackets Included.
- Import.

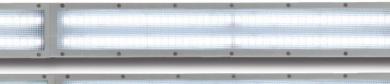
Part Number	Length	Lumens	Watts	Description	Rated Hours	Technical Drawings	Price
LED-138-VP	48.25"	13,820	112	48.25", 100-240V 50/60Hz, high output LED Luminaire	50,000+	Y, Page 26	1,295.00
LED-95-VP	36.6"	9,504	84	36.6", 100-240V 50/60Hz, high output LED Luminaire	50,000+	Z, Page 26	928.50
LED-60-VP	25.2"	6,050	56	25.2", 100-240V 50/60Hz, high output LED Luminaire	50,000+	AA, Page 26	731.25
LED-30-VP	13.75"	3,024	28	13.75", 100-240V 50/60Hz, high output LED Luminaire	50,000+	BB, Page 26	682.00
LED-138-VP/Glass	48.25"	13,820	112	48.25", 100-240V 50/60Hz, high output LED Luminaire	50,000+	Y, Page 26	1,350.00
LED-95-VP/Glass	36.6"	9,504	84	36.6", 100-240V 50/60Hz, high output LED Luminaire	50,000+	Z, Page 26	1,003.50
LED-60-VP/Glass	25.2"	6,050	56	25.2", 100-240V 50/60Hz, high output LED Luminaire	50,000+	AA, Page 26	796.25
LED-30-VP/Glass	13.75"	3,024	28	13.75", 100-240V 50/60Hz, high output LED Luminaire	50,000+	BB, Page 26	722.00



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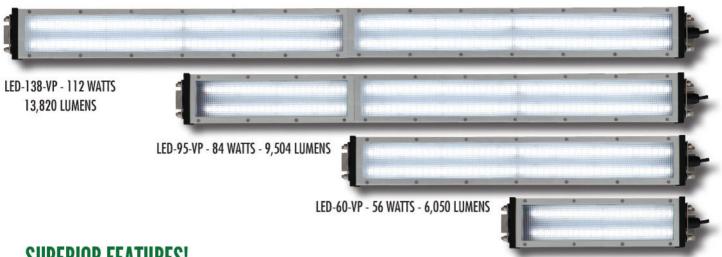


LED-95-VP - 84 WATTS - 9,504 LUMENS

LED SERIES 24 VOLT

VISION PRECISION SERIES™





SUPERIOR FEATURES!

- · Made of anodized aluminum, these LED fixtures will withstand high pressure, temperature, and heavy levels . Virtually maintenance-free operation with an average of machine coolants ideal for washdown applications.
- · 5 times the efficiency of a 500-watt halogen work light.
- · Totally watertight enclosure is rated IP69K (Waterproof Under High Pressure/High Temperature) - the highest IP rating available.
- . Diffused optics provides optimal light at 120° of illumination
- · The internal driver is contained within the watertight fixture keeping the driver dry and out of harm's way, ensuring maximum reliability in hostile applications.
- Optional: Tough, tempered glass lens mandatory for protection from applications using water based coolants.
- · Fixtures ship standard with 6 feet of SJT oil resistant cabling and grounded plug.
- Voltage input is 24V AC/DC.

LED-30-VP - 28 WATTS - 3.024 LUMENS

- · Pure bright white illumination at 5000K.
- rated lifespan of 50,000 hours.
- · Brackets Included.
- Fixture ships complete with wiring and mounting hardware for plug-n-light operation.
- Meets CA-20 Appliance Efficiency Regulation.
- · Import.

-When Precision Counts-



Prices are effective 01/01/2019. All prices are in U.S. Dollars. Prices are subject to change.

Part Number	Length	Lumens	Watts	Description	Rated Hours	Technical Drawings	Price
LED-138-VP/24V	48.25"	13,820	112	48.25", 24V AC/DC, high output LED Luminaire	50,000+	Y, Page 26	1,295.00
LED-95-VP/24V	36.6"	9,504	84	36.6", 24V AC/DC, high output LED Luminaire	50,000+	Z, Page 26	928.50
LED-60-VP/24V	25.2"	6,050	56	25.2", 24V AC/DC, high output LED Luminaire	50,000+	AA, Page 26	731.25
LED-30-VP/24V	13.75"	3,024	28	13.75", 24V AC/DC, high output LED Luminaire	50,000+	BB, Page 26	682.00
LED-138-VP/24V/Glass	48.25"	13,820	112	48.25", 24V AC/DC, high output LED Luminaire	50,000+	Y, Page 26	1,350.00
LED-95-VP/24V/Glass	36.6"	9,504	84	36.6", 24V AC/DC, high output LED Luminaire	50,000+	Z, Page 26	1,003.50
LED-60-VP/24V/Glass	25.2"	6,050	56	25.2", 24V AC/DC, high output LED Luminaire	50,000+	AA, Page 26	796.25
LED-30-VP/24V/Glass	13.75"	3,024	28	13.75", 24V AC/DC, high output LED Luminaire	50,000+	BB, Page 26	722.00



HALOGEN LIGHTING PRODUCTS CORPORATION

THE SUNFISH™



NEW

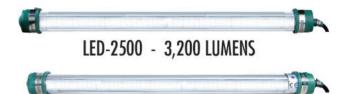
LED-4000 - 4,480 LUMENS



LED-3500 - 4,480 LUMENS

APPLICATION

These new and powerful, industrial strength LED (Light Emitting Diode) fixtures provide exceptionally bright and natural white light (5,000 Kelvin), over a wide surface area. They are built to endure the harshest machine and industrial environments, including severe levels of water/coolants/lubricants, vibration, dust and flying metal debris. Ideal for machining centers, inspection stations, presses, EDMs, screw machines and industrial task lighting.



LED-2400 - 2,240 LUMENS





SUPERIOR FEATURES

- · Average LED life of 43,800 hours.
- · Pure bright white illumination at 5000K.
- · Totally watertight IP67 (waterproof under pressure) to withstand heavy levels of water and coolants.
- · The casing is built with polycarbonate tubing. It is virtually unbreakable even in the most hostile environments of heat, vibration, and metal debris.
- · The external driver is in-line with the cord, this allows the fixture to be used in hostile applications while keeping the driver dry and out of harm's way.
- Provides 80° of illumination.
- Voltage input is 100 to 240 VAC.
- Fixtures ship standard with 25 feet of SJT oil resistant cabling and grounded plug.
- · A wide variety of mounting brackets are available.

- · Meets CA-20 Appliance Efficiency Regulation.
- Ships complete.
- Import.

SEE PAGE 18 FOR BRACKETS

IDEAL FOR EDM APPLICATIONS



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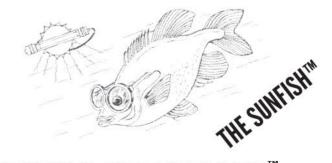
THE SUNFISH™

LED SERIES

Part Number	Length	Lumens	Watts	Description	Rated Hours	Technical Drawings	Price
LED-5200	52"	6,720	56	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	D, page 22	790.95
LED-5200/N	52"	6,720	56	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	D, page 22	790.95
LED-5200/Glass	52"	6,720	56	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	D, page 22	870.95
LED-5200/Glass/N	52"	6,720	56	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	D, page 22	870.95
LED-4000	40"	4,480	42	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	E, page 22	605.00
LED-4000/N	40"	4,480	42	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	E, page 22	605.00
LED-4000/Glass	40"	4,480	42	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	E, page 22	692.00
LED-4000/Glass/N	40"	4,480	42	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	E, page 22	692.00
LED-3500	35"	4,480	28	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	V, page 25	580.95
LED-3500/N	35"	4,480	28	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	V, page 25	580.95
LED-3500/Glass	35"	4,480	28	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	V, page 25	660.95
LED-3500/Glass/N	35"	4,480	28	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	V, page 25	660.95
LED-2500	25"	3,200	20	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	U, page 25	495.50
LED-2500/N	25"	3,200	20	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	U, page 25	495.50
LED-2500/Glass	25"	3,200	20	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	U, page 25	575.50
LED-2500/Glass/N	25"	3,200	20	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	U, page 25	575.50
LED-2400	24"	2,240	28	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	F, page 22	469.25
LED-2400/N	24"	2,240	28	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	F, page 22	469.25
LED-2400/Glass	24"	2,240	28	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	F, page 22	573.75
LED-2400/Glass/N	24"	2,240	28	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	F, page 22	573.75
LED-1400	14"	1,800	14	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	L, page 23	452.95
LED-1400/N	14"	1,800	14	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	L, page 23	452.95
LED-1400/Glass	14"	1,800	14	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	L, page 23	533.00
LED-1400/Glass/N	14"	1,800	14	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	L, page 23	533.00
LED-1100	11"	1,120	7	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	G, page 23	435.95
LED-1100/N	11"	1,120	7	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	G, page 23	435.95
LED-1100/Glass	11"	1,120	7	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	G, page 23	471.75
LED-1100/Glass/N	11"	1,120	7	LED 100-240V 50/60Hz, 5000K, 25 foot cord	43,800 +	G, page 23	471.75

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HALOGEN LIGHTING PRODUCTS CORPORATION™

LED DOCK LIGHTING

Certification: IP65 (Waterproof)

(RoHS

LED DOCK LIGHTING

Halogen Lighting Products Corporation introduces

A New Standard in Dock Lighting



Really Light Up a 53' Trailer

LED Trailer Illumination!

SUPERIOR FEATURES

- With light intensity of 1,200 lumens, while consuming only 18 watts of electricity, this very bright dock light is also highly energy efficient.
- Head is detachable allowing for easy replacement or upgrade to existing dock light arm configurations.
- Housing is designed for long term durability and reliability. A heavy-duty cast aluminum and polycarbonate head enables this fixture to withstand severe impact.
- LED technology eliminates the risk of breakage to any glass bulbs and/or filaments found in incandescent and fluorescent bulbs.
- Ideal for food and beverage areas, where potential glass and mercury contamination is unacceptable.
- Double-strut arm comes standard, providing a strong, versatile and solid mount for the fixture.
- Designed with wet environments in mind, this fixture is rated as IP65 (Waterproof)—ideal for produce docks.
- Voltage input is 100 to 240 VAC 50/60Hz.



The Dockmaster is energy efficient, consuming only 6% of the energy of an incandescent equivalent. With a virtually indestructible head, it's easily replaceable and retrofits to most, if not all existing dock light arms, reducing installation labor costs.

Complete Assembly LED-DOC-300

- Offers 50° of illumination.
- Intelligent driver automatically detects and adjusts to incoming power.
- 5,000 Kelvin color temperature provides a pure white light, eliminating any discoloration effects.
- 15° optics provide equal dispersion of light throughout the entire trailer.
- Recessed backplate, toggle switch, and waterproof cord protector offer further reduced risk of damage by equipment in busy dock locations.
- Operates between the temperatures of -20°F to 105°F
- Meets CA-20 Appliance Efficiency Regulation.



Head Only Version SP-5000-HEAD

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Part Number	Length	Lumens	Watts	Description	Rated Hours	Technical Drawings	Price
LED-DOC-300	45"	1,200	18	Complete Assembly, 100-240V, 50/60Hz	100,000	CC, page 26	349.99
SP-LED-ARM-DL	42"			Replacement Arm for Docklight			147.50
SP-5000-HEAD		1,200	18	LED Dock Light Head, 100-240V, 50/60Hz	100,000		195.50



HALOGEN LIGHTING PRODUCTS CORPORATION"

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LED SERIES

THE TOOL HELPER MARK II

APPLICATION

Machine Lighting: Totally watertight/ waterproof LED (Light Emitting Diode) fixture built to meet the harshest machine and industrial application in terms of heavy coolant, vibration and metal debris. These fixtures offer the same Exceptional Quality and Superior features as "The Tough Guy™" Series (Page 20) that are second to none in America.



LED-2000S LED-1000S

SUPERIOR FEATURES

- Totally watertight fixture receiving the IP67 certification (waterproof under pressure). Chip resistant glass lens. High Quality 6 foot SJT (oil resistant) grounded cable and pluq.
- 60° of illumination.
- Average LED life of 44,000 hours or 10 years of service life.

- aluminum that will not rust or corrode in harsh environments.
- · Available either in 100-240 VAC or 24V AC/DC.
- · Meets CA-20 Appliance Efficiency Regulation.
- · Ships complete.
- Import.



Certification: IP67

(Waterproof Under Pressure)

SUPERIOR FEATURES

- · Certification IP54 (Splash Proof)
- The 2½" diameter head is rated splash proof. Ideal for dry to light mist environments.
- · Exceptionally bright white illumination offering 980 lumens giving pure white illumination.
- · The driver is located in the base wired 100 to 277 VAC with plug providing "Plug-N-Light" operation.
- · Designed with durable Loc-Line beads; the neck will not loosen over time.
- · Magnets, machine brackets and surface plates are available.
- · Meets CA-20 Appliance Efficiency Regulation.

• Ships complete. Prices are effective 01/01/2019.

Import.	All prices are in U.S. Dollars.	
port.	Prices are subject to change.	

Part Number	Watts	Lumens	Description	Voltage	Rated Hours	Technical Drawings	Price
LED-2000L	20	1,200	5000K Long Arm	100-240	43,800 +	H, page 23	518.50
LED-2000M	20	1,200	5000K Medium Arm	100-240	43,800 +	I, page 23	495.50
LED-2000S	20	1,200	5000K Head & Base	100-240	43,800 +	J, page 23	484.00
LED-1000L	20	1,200	5000K Long Arm	24 AC/DC	43,800 +	H, page 23	461.00
LED-1000M	20	1,200	5000K Medium Arm	24 AC/DC	43,800 +	I, page 23	438.00
LED-1000S	20	1,200	5000K Head & Base	24 AC/DC	43,800 +	J, page 23	426.50
LED-005	7	980	Beaded Gooseneck	100-277	43,800 +	K, page 23	459.50
HLP-30			Magnet Base Assembly			page 21	74.95
HLP-22-2000			Wall Mounting Bracket				20.10
HLP-24-005			Magnet				25.75
HLP-29-005			Surface Plate				31.95
FLP-8			Magnetic Cord Holder			page 18	16.95



HALOGEN LIGHTING PRODUCTS CORPORATION™





CONVENIENT T8 FLUORESCENT DIRECT REPLACEMENT

Our LED-T8-5000 is the ONLY direct T8 replacement for any existing fluorescent fixture in current use today...





No ballast replacement! Totally self-adjusting!

Self-adjusting/self-conforming to all existing ballast systems! These drop-in LED replacements provide instant high efficiency alternatives to old fashioned, and costly fluorescent tubes of the past!

LED Technology Beyond the Expected

Truly a <u>direct replacement</u>. No ballast circumvention!

INSTALLATION INSTRUCTIONS:

- 1) Turn off power source to fixture
- 2) Remove fluorescent bulb
- 3) Place LED direct replacement in socket, ensure a secure fit
- 4) Power on fixture

For Heavy Duty Applications

Five Year Warranty

- · Light output 1,900 lumens
- · Average Power 19-22 watts
- CRI 75
- · Color Temperature 5000K
- · Average Lifespan 10 years
- · Non-toxic No glass, mercury, phosphors
- · Operates well at low temperatures
- Meets CA-20 Appliance Effeciency Regulation
- · Works with exitsing magnetic and electronic
- 100% designed and manufactured in the USA
- No degrading UV
- · No flicker or stroboscopic effect
- High performance LEDs
- Dimmable

Prices are effective 01/01/2019. All prices are in U.S. Dollars. Prices are subject to change.

Part Number	Length	Lumens	Watts	Description	Rated Hours	Price
LED-T8-5000	48"	1,900	20	LED 120 volt fixture 5000K	43,800 +	85.50



HALOGEN LIGHTING PRODUCTS CORPORATION

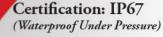
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SHATTERPROOF²

SHATTERPROOF FLUORESCENT LIGHTING







FOR CONTAMINATION-FREE ENVIRONMENTS

"SHATTERPROOF SQUARED"



A) The Needlefish (FLP-80W 90 - 260V - S2) - 80 Watts - 34.375



B) The Lanternfish (FLP-55W 90 - 260V - S2) - 55 Watts - 34"



C) The Devilfish (FLP-36W 90 - 260V - S2) - 36 Watts - 28.5"



D) The Sailfish (FLP-8000 - S2) - 80 Watts - 28.25"



E) The Lanternfish (FLP-5500 - S2) - 55 Watts - 26.25



F) The Devilfish (FLP-3600 - S2) - 36 Watts - 22.5



G) The Ladyfish (FLP-2600 - S2) - 26 Watts - 10.5"



Bulb Certifications:



FDA and USDA approved. Meets and exceeds all federal regulations.

Global Series



- The tubes are permanently fused with a patented nylon derivative compound of cross-linked polymers and nylon, a sealed beam unit is thus created guaranteeing total glass containment.
- From 1,500 lumens at 10.5" to 6,000 at 28.25", this series still offers the highest wattage in the smallest footprint.
- · Provides 120° of Illumination.
- · Meets CA-20 Appliance Efficiency Regulation.
- · Ships complete.
- Import.

Fixtures ideal for food, beverage, pharmaceutical, cosmetic, and where other applications and/or environments requiring industrial lighting no glass contamination is mandatory.

Part Number	Page Ref.	Watts	Lumen Rating	Voltage	Length	Technical Drawings	Bulb	Price
FLP-80W-90-260V-S2	A	80	6,000	90-260, 50/60Hz	34.375"	0, page 24	* PLL80W841	436.25
FLP-55W-90-260V-S2	В	55	4,800	90-260, 50/60Hz	34"	N, page 24	* DLL55W/841/4P	425.75
FLP-36W-90-260V-S2	C	36	2,900	90-260, 50/60Hz	28.5"	M, page 24	* FT36DL/841	303.75
FLP-8000-S2	D	80	6,000	120/240 50/60Hz	28.25"	P, page 24	* PLL80W841	385.75
FLP-5500-S2	E	55	4,800	120/240 50/60Hz	26.25"	Q, page 24	* DLL55W/841/4P	371.00
FLP-3600-S2	F	36	2,900	120/240 50/60Hz	22.5"	R, page 24	* FT36DL/841	329.00
FLP-2600-S2	G	26	1,500	120/240 50/60Hz	10.5"	G, page 23	* PL-C-26W-4	305.75

Prices are effective 01/01/2019. All prices are in U.S. Dollars. Prices are subject to change.



HALOGEN LIGHTING PRODUCTS CORPORATION

WATERPROOF FLUORESCENT

Certification: IP67 (Waterproof Under Pressure)

 \in

THE MILLENNIUM SERIES™



APPLICATION

The Millennium Series is one of, if not, the finest industrial lighting fixtures found in North America. These powerful, industrial strength fluorescent fixtures provide exceptionally bright and natural white light (4,100 Kelvin), over a wide surface area. They are built to endure the harshest machine and industrial environments, including severe levels of water, coolants/lubricants, vibration, dust and flying metal debris. Ideal for most machine and industrial applications in the harshest environments.

SEE PAGE 18 FOR BRACKETS (FLP-2600 & FLP-2215)

VIRTUALLY INDESTRUCTIBLE LENS

The "Super Acrylic" outer casing (lens) is remarkably resilient, virtually unbreakable, and watertight for use in the most hostile environment. It is built to endure extreme vibration while remaining waterproof in the wettest conditions. Optional polycarbonate and borosilicate glass lenses are also available to meet your needs.

Detailed specification sheets for the Millennium Series and all Halogen Lighting Products fixtures can be found at www.halogen-lighting.com

LARGEST SELECTION & HIGHEST QUALITY

Whether you need a 26 watt light in a small area, or need to illuminate a large EDM tank with 80 watts, THE MILLENNIUM SERIES is the right fluorescent fixture for even the harshest industrial applications. They are specifically designed for your machine tool and production machinery. The entire series is rated IP67 (waterproof under pressure) assuring watertight enclosures for moisture and coolant drenching. Secure bulb mounts ignore machine vibration. Provides 120° of illumination. Standard off the shelf, bulbs are available worldwide offering an average life of 10,000-12,000 hours. "Super Acrylic" lenses resist flying debris and chips. Oil resistant (SJT), 25ft., grounded, cording is standard. All fixtures ship complete with bulb for "Plug-N-Light" installation.



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PARTS AND PRICES

Certification: IP67 (Waterproof Under Pressure)



THE MILLENNIUM SERIES™

MILLENNIUM FLUORESCENT LIGHT FIXTURES - COMPLETE

Part Number	Previous Page Ref.	Watts	Lumen Rating	Voltage	Hertz	Switch	Length	Technical Drawings	Bulb	Price
FLP-8000	A	80	6,000	120/240	50/60	Υ	28.25"	P, page 24	PLL80W841	330.75
FLP-8000/N	A	80	6,000	120/240	60/50	N	28.25"	P, page 24	PLL80W841	330.75
FLP-8000/Glass	A	80	6,000	120/240	60/50	Υ	28.25"	P, page 24	PLL80W841	390.50
FLP-8000/Glass/N	A	80	6,000	120/240	60/50	N	28.25"	P, page 24	PLL80W841	390.50
FLP-5500	В	55	4,800	120/240	60/50	Υ	26.25"	Q, page 24	DLL55W/841/4P	325,00
FLP-5500/N	В	55	4,800	120/240	60/50	N	26.25"	Q, page 24	DLL55W/841/4P	325,00
FLP-5500/Glass	В	55	4,800	120/240	60/50	Υ	26.25"	Q, page 24	DLL55W/841/4P	405.00
FLP-5500/Glass/N	В	55	4,800	120/240	60/50	N	26.25"	Q, page 24	DLL55W/841/4P	405.00
FLP-3600	C	36	2,900	120/240	50/60	Υ	22.5"	R, page 24	FT36DL/841	340.50
FLP-3600/N	С	36	2,900	120/240	50/60	N	22.5"	R, page 24	FT36DL/841	340.50
FLP-3600/Glass	C	36	2,900	120/240	50/60	Υ	22.5"	R, page 24	FT36DL/841	425.50
FLP-3600/Glass/N	C	36	2,900	120/240	50/60	N	22.5**	R, page 24	FT36DL/841	425.50
FLP-2600	E	26	1,500	120/240	50/60	Υ	10.5"	G, page 23	PL-C26W-4	274.50
FLP-2600/N	E	26	1,500	120/240	50/60	N	10.5"	G, page 23	PL-C26W-4	274.50
FLP-2600/Glass	E	26	1,500	120/240	50/60	Υ	10.5"	G, page 23	PL-C26W-4	310.25
FLP-2600/Glass/N	E	26	1,500	120/240	50/60	N	10.5"	G, page 23	PL-C26W-4	310.25
FLP-2215J-25	D	15	870	110	60	Υ	22"	F, page 22	F15T8CW	288.50
FIP-2215J-25/24VDC	D	15	870	24	N/A	N	27.625"	EE, page 27	F15T8CW	257.50
FLP-1113J-25/24VDC	N/A	13	900	24	N/A	N	14.375"	S, page 25	PL-13/41CW	217.95

Note: Glass lens fixtures must be used for applications using water-based coolants.

Prices are effective 01/01/2019. All prices are in U.S. Dollars. Prices are subject to change.

LENSES

Lenses	Page Ref.	Length	Material	Price
8000/Glass	A, page 13	27.25"	Borosilicate Glass	95.50
8000/Acrylic	A, page 13	27.25"	Super Acrylic	49.14
5500/Glass	B, page 13	25.5"	Borosilicate Glass	86.95
5500/Acrylic	B, page 13	25.5"	Super Acrylic	49.14
3600/Glass	C, page 13	21.5"	Borosilicate Glass	86.95
3600/Acrylic	C, page 13	21.5"	Super Acrylic	49.14
1300&2600/Glass	E, page 13	10.5"	Borosilicate Glass	35.70
1300&2600/ Polycarbonate	E, page 13	10.5"	Polycarbonate	35.70
4030/Glass	N/A	40"	Polycarbonate	86.95
4030/Acrylic	N/A	40"	Polycarbonate	40.74

REPLACEMENT BULBS

Bulbs	Page Ref.	Watts	Lumen Rating	Rated Hours	rs Price	
PLL80W841	A, pages 13	80	6,000	10,000	54.90	
DLL55W/841/4P	B, page 13	55	4,800	10,000	45.75	
F30T8CW	N/A	30	2,200	10,000	31.14	
FT36DL/841	C, page 13	36	2,900	12,000	46.74	
PL-C-26W-4	E, page 13	26	1,500	10,000	31.14	
F15T8CW	D, page 13	15	870	7,500	27.54	
PL-13/41CW	E, page 13	13	900	10,000	31.14	



HALOGEN LIGHTING PRODUCTS CORPORATION™

A Special Application

NASA Crawler — Transporter



NASA Crawler-Transporter Illuminated by Halogen Lighting Products Corporation

Halogen Lighting Products Corporation's FLP-4030 industrial light fixtures were chosen to illuminate the crawler tracks on the 12 million-pound Kennedy Space Center Rocket Transporters. Bearing failure at the crawler tracks cannot be tolerated and illumination at key lubrication points for visual inspection at rest and underway is vital.

The Crawler—Transporters are articulated in such a way as to be able to raise and lower their sides and corners independently, enabling them to maneuver beneath a loaded launch platform, pick it up and smoothly carry it over four miles to a launch pad. Once there the Crawler hydraulically maintains a level attitude as it moves up a sloping platform to place the launch vehicle into position.

With the complexity caused by no less than sixteen 375hp diesel locomotive traction motors and two 2,750hp Alco diesel engines, plus two 2,220hp AC diesel generators and an enormous array of hydraulic pumps, motors, rams, and cylinders all operating at once there is no room for bearing failure at the treads.

Small wonder why the world's finest industrial lighting, by Halogen Lighting Products Corporation was chosen to meet the challenge in this hot, gritty, salt-misted environment. Our incredibly rugged, bright, waterproof, dust and debris proof, oil proof and vibration proof industrial lights are on the job at NASA.



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A Special Application

NASA Crawler — Transporter



These are public domain photos from: http://www.nasa.gov/



HALOGEN LIGHTING PRODUCTS CORPORATION™

MACHINE TOOL & PRESS LIGHTING

FLUORESCENT



Ideal for portable light-duty applications



Barracuda



APPLICATION

Ideal for dry or damp locations where light portability is of high importance such as machine or automobile servicing.





SUPERIOR FEATURES

- Durable 2½" diameter, shatterproof polycarbonate casing.
- 4100 Kelvin (pure white light) bulbs found locally.
- PVC (poly vinyl chloride) end caps provide a water tight seal.
- Temperature tolerance is approximately 5°F to 140°F.

- These fixtures draw 0.2 to 0.6 amps.
- External in-line ballasts are encased in a ballast box for easy serviceability and cord adjustment.
- The Sawfish™ and The Barracuda™ are built with SJTOW-A oil resistant 16 gauge copper, 3 conductor cable.
- The 120 Volt fixtures have a 3 prong grounded plug.
- We offer a variety of mounting brackets, see page 18. We do recommend two brackets per lighting fixture.

SEE PAGE 18 FOR BRACKETS

Prices are effective 01/01/2019. All prices are in U.S. Dollars. Prices are subject to change.

Part Number	Voltage	On / Off Switch	Cord Length	Watts	Length	Lumens	Rating Hours	Technical Drawings	Price
FLP-1113-6 Sawfish™	120	Yes	6 ft.	13	11"	900	10,000	X, page 25	224.50
FLP-1113-25 Sawfish™	120	Yes	25 ft.	13	11"	900	10,000	X, page 25	224.50
FLP-2215-6 Barracuda™	120	Yes	6 ft.	15	22"	870	7,500	W, page 25	268.00
FLP-2215-25 Barracuda™	120	Yes	25 ft.	15	22"	870	7,500	W, page 25	288.75
FLP-1113-25/24VDC	24	No	25 ft.	13	14"	900	10,000	S, page 25	250.75
FLP-2215-25/24VDC	24	No	25 ft.	15	26"	870	7,500	T, page 25	257.50

Replacement Bulb Part Number	Watts	Equivalents to Incandescent	Lumens	Rating Hours	Price
PL-13/41CW	13	100 watts	900	10,000	31.14
F15T8CW	15	75 watts	870	7,500	27.54

FOR HEAVY COOLANT AND WET APPLICATIONS, SEE THE MILLENNIUM SERIES ON PAGE 13.



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MOUNTING BRACKETS

FLUORESCENT & LED



FLP-1 Nylon Grip with Screw Hole (\$11.75 each)



FLP-2 90# Magnet with Nylon Grip (\$17.95 each)



FLP-3
Machine Bracket with Grip
(\$17.95 each)



FLP-4 2" Clamp with Grip (2¾" Beads) (\$18.75 each)



FLP-5 58# Magnet with 8¾" Beads / Grip (\$21.75 each)



FLP-6 Machine Bracket with 8¾" Beads / Grip (\$28.75 each)



FLP-7 2" Clamp with 6¾" Beads / Grip (\$22.75 each)



FLP-8
58# Magnet with Cord Holder
(\$16.95 each)



FLP-1J Super Sized Nylon Grip with Screw Hole (\$19.75 each)



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90-260V FLUORESCENT

Certification: IP67 (Waterproof Under Pressure)



THE GLOBAL SERIES™



World Class Versatility and Performance

If your company has three of the same machines, each of them in different countries, and all machines require three different voltages. With the Global Series, this is not an issue. Equipped with an intelligent electronic ballast located in the enclosure, these rugged luminaires can take any electrical input from 90 to 260 volts in either 50 or 60 hertz, eliminating the concern for electronic customization. Electrically universal. Providing 120° of illumination.

APPLICATION

These fluorescent luminary powerhouses are ideal for machining environments where high output lighting and varied voltage requirements are necessary. Able to handle any voltage between 90 to 260 in either 50 or 60 hertz included with mounting brackets, these fixtures Plug-N-Light anywhere in the world!

Part Number	Page Ref.	Watts	Lumen Rating	Voltage	Length	Technical Drawings	Bulb	Price
FLP-80W-90/260V	A	80	6,000	90-260V 50/60Hz	34.375"	0, page 24	PLL80W841	406.60
FLP-80W-90/260V/N	A	80	6,000	90-260V 50/60Hz	34.375"	0, page 24	PLL80W841	406.60
FLP-80W-90/260V/Glass	A	80	6,000	90-260V 50/60Hz	34.375"	0, page 24	PLL80W841	449.50
FLP-80W-90/260V/Glass/N	A	80	6,000	90-260V 50/60Hz	34.375"	0, page 24	PLL80W841	449.50
FLP-55W-90/206V	В	55	4,800	90-260V 50/60Hz	34"	N, page 24	DLL55W/841/4P	380.00
FLP-55W-90/260V/N	В	55	4,800	90-260V 50/60Hz	34"	N, page 24	DLL55W/841/4P	380.00
FLP-55W-90/260V/Glass	В	55	4,800	90-260V 50/60Hz	34"	N, page 24	DLL55W/841/4P	448.00
FLP-55W-90/260V/Glass/N	В	55	4,800	90-260V 50/60Hz	34"	N, page 24	DLL55W/841/4P	448.00
FLP-36W-90/260V	С	36	2,900	90-260V 50/60Hz	28.5"	M, page 24	FT36DL/841	542.50
FLP-36W-90/260V/N	С	36	2,900	90-260V 50/60Hz	28.5"	M, page 24	FT36DL/841	542.50
FLP-36W-90/260V/Glass	С	36	2,900	90-260V 50/60Hz	28.5"	M, page 24	FT36DL/841	595.50
FLP-36W-90/260V/Glass/N	С	36	2,900	90-260V 50/60Hz	28.5"	M, page 24	FT36DL/841	595.50

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HALOGEN LIGHTING PRODUCTS CORPORATION™

THE TOUGH GUY™

HALOGEN





APPLICATION

The Halogen Lighting Products Tough Guv™ series light fixtures are designed and built to perform in the most hostile industrial environment heavy coolant / lubricants, vibrations, flying metal chips, etc. are all in a days work for the Tough Guy series of industrial fixtures.

SUPERIOR FEATURES

- · 5" diameter cast anodized aluminum head is formed as a mono block, one piece unit without a leak-prone back plate. This provides a rigid, water tight housing against water or coolant intrusion; ensuring maximum reliability in harsh production applications.
- · Large, easy to grasp positioning knobs are standard. Once positioned, the fixture can withstand the most hostile coolant and vibration conditions without movement. Up to 5 points of adjustment and 320° swiveling allows pinpoint light distribution to the workplace area.
- · Chip resistant tempered glass lenses provide you with rugged maintenance free operation, and easy to clean lenses. No protective guards are needed that can diminish and distort illumination.
- · 67° of illumination, fully articulated arms, joints and bases are totally waterproof and

ergonomically designed for ease of use in positioning fixture for optimum operator safety.

- · HLP-2000 transformers built into base.
- · T-bar handle and easy to grasp knobs provide easy positioning without special tooling or maintenance personnel. Bulbs are long life yet easily replaced by removing 6 screws and the gasketed tempered glass lens. 75 watt, 24 volt halogen bulbs are standard, offering intense white light for the

The Tough Guy™ HLP-1000 series fixtures operate either with an external 24 volt transformer, or they can be wired directly to the 24 volt power source at the machine control panel. For a 12 volt application, simply replace with a 12 volt bulb.

· Import.

Prices are effective 01/01/2019. All prices are in U.S. Dollars. Prices are subject to change.

Intense **Brightness!**



Part Number	Description	Watts	Voltage	Cord Length	Transformer	Technical Drawings	Price
HLP-2000L	30.75" Long Arm 120 volt	75	120	6 ft. w/plug	Yes/Base	H, page 23	406.75
HLP-2000M	17.125" Medium Arm 120 volt	75	120	6 ft. w/plug	Yes/Base	I, page 23	389.75
HLP-2000S	Short Arm 120 volt	75	120	6 ft. w/plug	Yes/Base	J, page 23	349.50
HLP-1000L	30.75" Long Arm	75	24	6 ft.	No	H, page 23	339.25
HLP-1000M	17.125" Medium Arm	75	24	6 ft.	No	I, page 23	336.75
HLP-1000S	Short Arm	75	24	6 ft.	No	J, page 23	321.50
HLP-75-BI-24	75 Watt Bulbs (photo on page 26)	75	24			DD, page 26	17.75
HLP-50-BI-24	50 Watt Bulbs (photo on page 26)	50	24			DD, page 26	17.75
HLP-70-H3-24	70 Watt Bulb (photo on page 26)	70	24			DD, page 26	17.75
HLP-T24-2000	Replacement Transformer		120/24				63.54
HLP-30	Magnet Base Assembly (8" X 8")					page 21	74.95
HLP-24-005	Magnet						25.75
HLP-29-005	Surface Plate						31.95





HALOGEN LIGHTING PRODUCTS CORPORATION™

GOOSENECKS

Certification: IP54 (Splash Proof)

Positioning



-Pinpoint



HALOGEN AND FLUORESCENT

HLP-005 SERIES

SUPERIOR FEATURES

- · Certification: IP54 (Splash Proof)
- · Recommended for Dry Environments.
- · 35 watts of halogen natural white light.
- · Offers 36° beam angle.
- · "Any which way" arm.
- Transformer built into the watertight base. Fixture can be plugged directly into a 120 volt power source.
- Loc-line beads for permanent stay. Neck will not loosen over time.
- Heavy duty plastic head with on/off switch offers maximum safety.
- Fixtures available with magnetic base or surface plate.
- Magnets, machine bracket and surface plate available.
- · Built-in dimmer switch.
- Meets CA-20 Appliance Efficiency Regulation.
- Import.

Outstanding as a QC/Inspection Light Source!



HLP-24-005





Halogen HLP-005-14





HLP-30

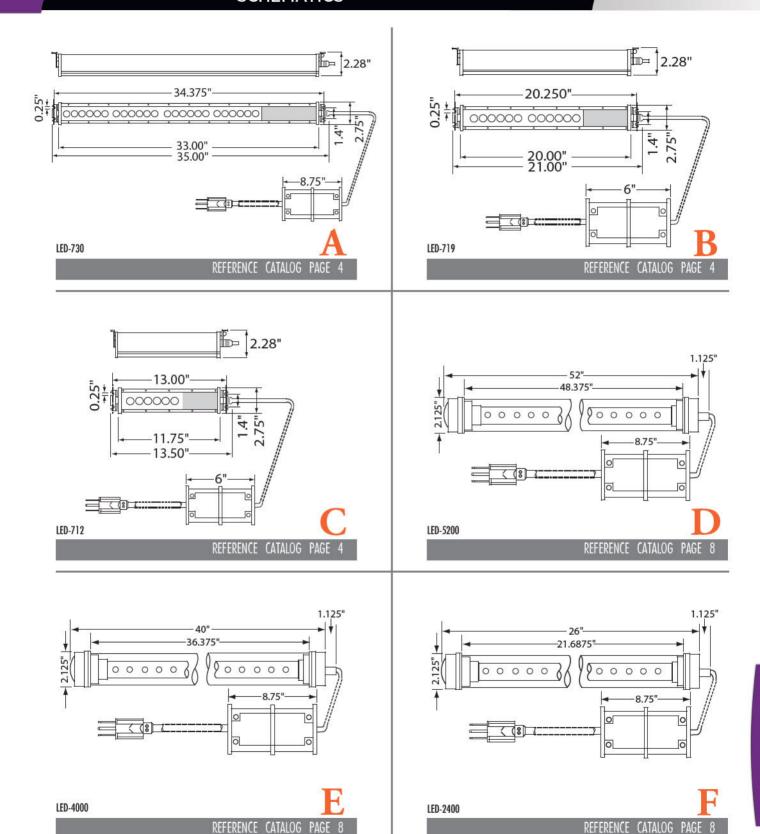
Part Number	Description	Watts	Voltage	Cord Length	Transformer	Technical Drawings	Price
HLP-005-20 & HLP-24-005	Long Neck - 20 Beads 35 Watts 120 Volts with magnet	35	120	6 ft. w/plug	Yes/base	K, page 23	203.95
HLP-005-20 & HLP-29-005	Long Neck - 20 Beads 35 Watts 120 Volts with a surface plate	35	120	6 ft. w/plug	Yes/base	K, page 23	209.95
HLP-005-14	Long Neck - 14 Beads 35 Watts 120 Volts	35	120	6 ft. w/plug	Yes/base	K, page 23	172.95
HLP-005-20	Long Neck - 20 Beads 35 Watts 120 Volts	35	120	6 ft. w/plug	Yes/base	K, page 23	178.75
HLP-24-005	Magnet						25.75
HLP-29-005	Surface Plate						31.95
FLP-8	Magnetic Cord Holder					page 18	16.95
HLP-35-MR16-12	35 Watt 12 Volt Replacement Bulb						17.75
HLP-30	Magnetic Base (8" x 8")					page 21	74.95

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HALOGEN LIGHTING PRODUCTS CORPORATION

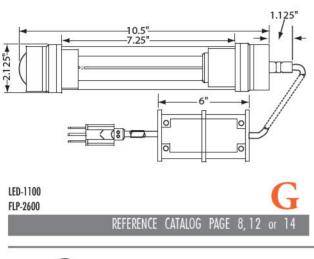
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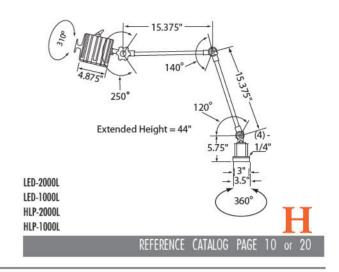


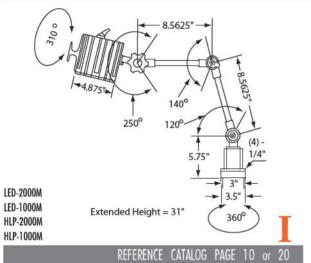


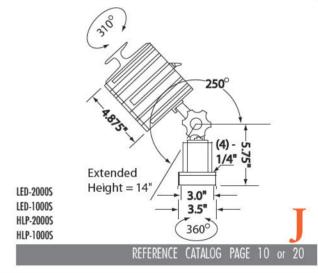
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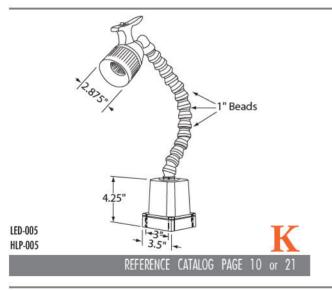
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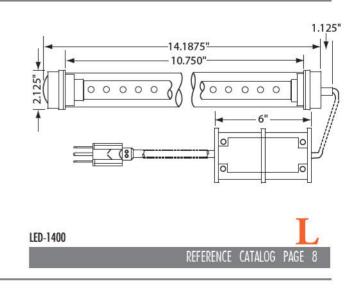








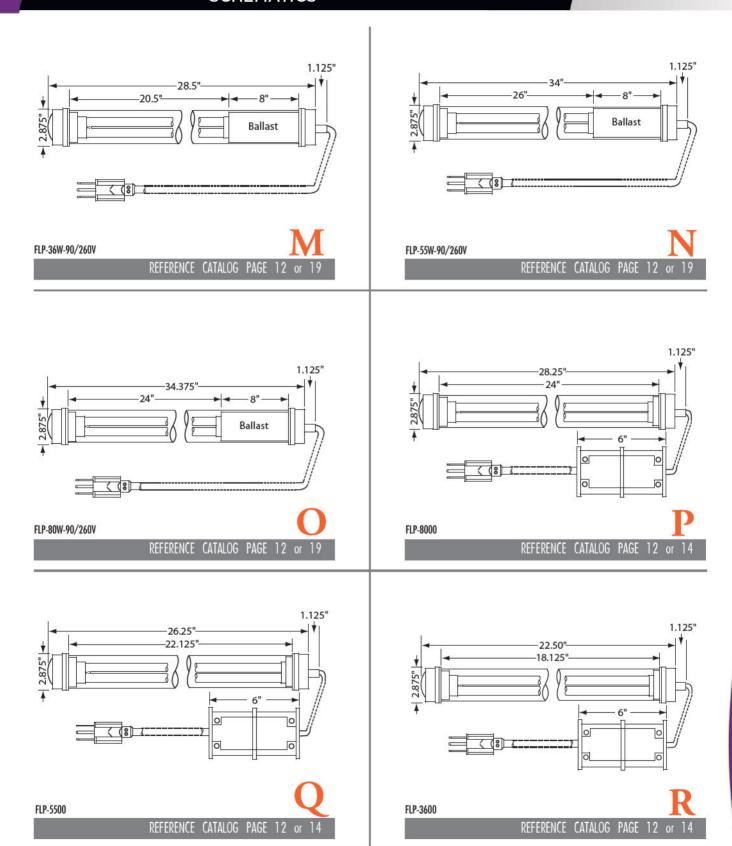






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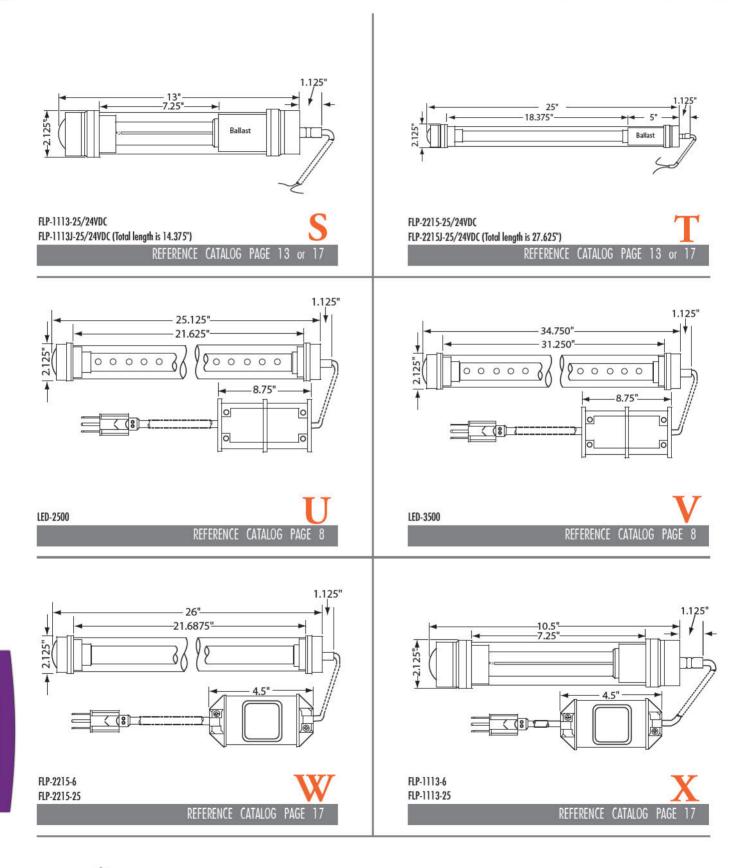
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HALOGEN LIGHTING PRODUCTS CORPORATION™

SCHEMATICS





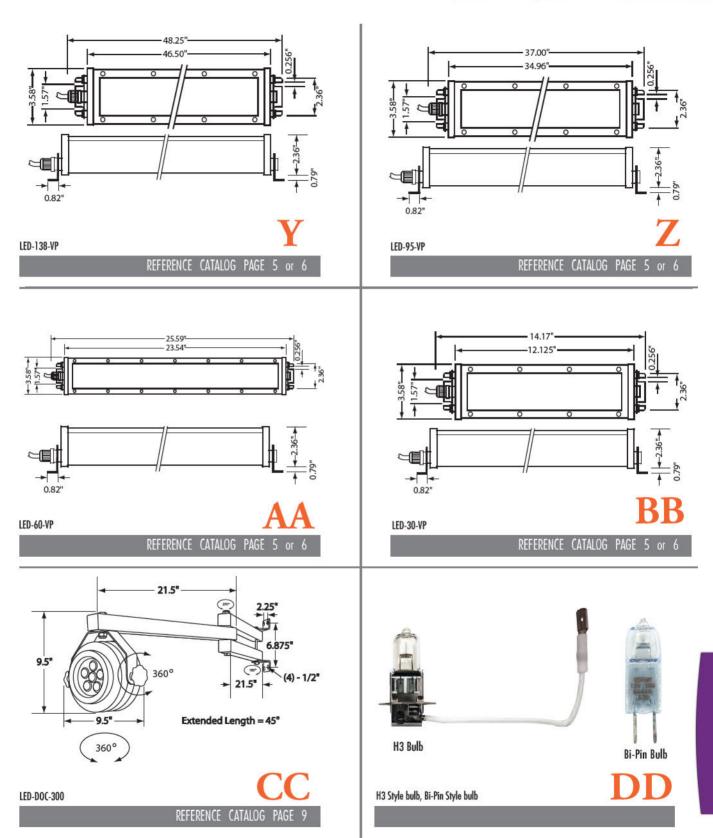
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DIAGRAMS

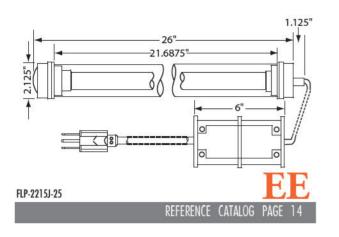
SCHEMATICS





HALOGEN LIGHTING PRODUCTS CORPORATION™

SAFETY AND POLICIES



WARNING

IMPORTANT SAFETY INFORMATION

- 1. Power must be disconnected before performing any servicing to your light fixture. This includes but is not limited to: Replacing bulbs, adjusting ballast voltage, replacing ballasts, adjusting or replacing cording, or replacing any other parts of the fixture.
- 2. Never handle a powered fixture, or turn one on with wet hands. Never handle a powered fixture standing in water, or on any damp or wet surface.
- Follow all applicable electrical and safety codes and regulations. All highvoltage lights should be plugged directly into a properly grounded 3-prong outlet. All wiring should be done by a qualified electrician.
- 3. Surfaces of halogen light fixtures will be hot to the touch and can cause burns. Before servicing and/or moving your fixture, be sure it has had time to cool to ensure safe handling.
- Your fixture should only be plugged into a power source that meets its requirements.
- These fixtures are not made for use in flammable/explosive environments as they are hot enough to ignite flammable or explosive vapors.
- 6. Do not operate these fixtures near combustible materials or substances.
- 7. Repair or replace damaged cords immediately.
- 8. All external transformers, ballasts, and plugs are **NOT** waterproof and must be kept away from damp or wet locations.

Servicing and Parts

Halogen Lighting Products provides its customers with full-service. This includes technical support, full repairs and/or refurbishing, fixture customization per customer specifications or requests, sale of all parts, and technical assistance via both telephone (800-621-0001) and online at halogen-lighting.com

Warranty

All fixtures are warranted for one year from the date of purchase and applies only to normal usage. This warranty does not apply to fixtures that have been altered, abused, neglected, or misused, and does not cover any deviation from the specified voltage and current that is specified for each fixture. This warranty is limited to repair, refurbishing, or replacement at the discretion of Halogen Lighting Products Corporation.

Return Policy

Any product may be accepted for return within 90 days of purchase when authorized by Halogen Lighting Products. Call us at 1-800-621-0001 for issuance of a return authorization number. Only new or unused fixtures can be returned for full credit less a 25% restocking fee (at a minimum of \$20) for handling, repacking, restocking, and shipment both ways. Halogen Lighting Products Corporation reserves the right to refuse any return at our discretion. Halogen Lighting Products is not responsible for error. Any custom-made or modified fixtures cannot be returned or refunded for any reason.

Damaged Goods

If an item is received damaged, customer must submit an insurance/damage claim with the carrier (i.e., UPS) and must also supply Halogen Lighting Products Corporation with a copy of the claim before any further action is taken to replace the fixture.

FAILURE TO FOLLOW ANY OF THESE SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.



HALOGEN LIGHTING PRODUCTS CORPORATION™

REFERENCE

GLOSSARY

Electrical and Photometric Units of Measurement

Ampere (Amp): The measure of the flow of electrical charge going through a circuit at any given time. Amp draw can be calculated by dividing wattage by voltage. (W / V = A)

Candela: The unit of luminous intensity in any given direction from its origin. I.e., one candle emitting light in a horizontal direction equates to one candela. This is the most basic measurement of light.

Lumen: A unit of measuring the total amount of visible light from a source such as a bulb or diode. The lumen is related to the candela by multiplying candelas by the light source's steradian, which is a measure of a direct cone-like or triangular solid angle projecting from the center of a sphere.

Lux: The total amount of visible light over a given area, regardless of direction. One lux is equal to one lumen falling perpendicularly, over a square meter. This can be measured with an instrument known as a luxometer.

Voltage: A measure of an electric charge through a medium, such as a power cord, between an outlet and a lighting fixture.

Watt: The standard unit used to measure power, which is equal to one joule per second. In electricity, wattage is equal to amperes multiplied by voltage. (W = A • V)

Electrical Safety Certifications

CE Mark: Also known as the European Conformity mark. This certification is required for all electronics to be sold in Europe. A product given the CE Mark adheres to all safety and health standards in European legislation.

CSA: The Canadian Standards Association is a safety standard organization that tests, evaluates, certifies, and marks products meeting safety requirements in Canada. They also offer a CSA-US mark to meet safety standards of the United States.

TÜV Rheinland: Independent safety certification provider originated in Germany. TUV is one of the strictest safety certification providers in the world.

UL: (Underwriters Laboratories) An independent safety certification provider originating in the United States. It is the most recognized safety certification provider in the world.

Waterproof Certifications

IP Code: Ingress Protection rating is the standard used to determine a product's protection against intrusion from solids or fluids. Under the format of IPXX, the first number indicates the amount of protection against solids, the second indicates the amount of protection against fluids.

IP20 (Dustproof): Protected against intrusion from objects up to 12.5mm in diameter with no protection against water.

IP54 (Splashproof): Completely watertight. While not entirely dustproof, any dust entering the fixture will not compromise the performance and safety of the product, and is also protected from splashing water from any direction up to 10 litres per minute.

IP65 (Waterproof): Completely protected from dust particles and intrusion of water from spraying jets.

IP67 (Waterproof Under Pressure): Entirely sealed from dust and can be submerged in water up to 1 metre deep.

IP69K (Waterproof Under High Pressure and Temperature): German standard exceeding the normal IP code rated for high temperature and high pressure washdown applications.

NEMA (National Electrical Manufacturers Association): Provides a list of ratings gauging the degree of protection against dust and liquids for electrical enclosures. NEMA and IP ratings can be compared. Some direct examples are: IP20 to NEMA 1, IP54 to NEMA 3, IP65 to NEMA 4 and 4X, and IP67 to NEMA 6.



HALOGEN LIGHTING PRODUCTS CORPORATION

Our Business Home

Corporate Headquarters









Telephone: **1-800-HALOGEN (425-6436)** Fax: **1-800-700-6166 (U.S. and Canada)**

Visit our website www.halogen-lighting.com

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