### philips Stonco

#### Landscape

LytePro LED floodlights



# A perfect blend of design, performance and value

**Contractor friendly LED floodlighting** 

# Blending value and performance



Philips Stonco stays true to its heritage by providing contractor friendly products in a family of luminaires with the quality and performance you expect from a Philips Stonco product. The Philips Stonco LytePro LED Floodlight (LPF) is available in 4 sizes, each with its own unique offering of mountings, optics and options that provide a high level of flexibility from a value based line, suitable for a myriad of applications.

The LytePro LED Floodlights combine performance and the latest in Chip on Board (COB) technology with an architectural design that is sure to complement many projects and help stay on budget without sacrificing quality and performance.



# The LED evolution has led to an LED revolution

#### High source efficacy

In recent years, LEDs have become the light source of choice for relight and retrofit opportunities as well as for new construction

projects due to rapid improvements in lumen performance and efficacy (LPW). To date, bare LEDs have well surpassed 100 lumen per watt levels and the performance and efficiency levels continue to grow with advances in both technology and thermal management. Ultimately we are able to provide much more efficient luminaires compared to traditional HID products at significant energy savings.

#### Energy savings up to 79%

The optics designed around the Chip on Board (COB) platform are optimized for peak performance. They are extremely efficient in utilizing delivered lumens to the target, eliminating wasted light associated with legacy sources while improving beam uniformity.

Ultimately, this can translate to significant energy savings compared to traditional HID solutions by simply switching to an LED system solution like LytePro Flood. With its extremely efficient optical system and improved lumen maintenance over the life of the product, the LPF delivers excellent illumination to the target and may reduce energy consumption by as much as 79% (see chart below).

HID System	HID System Wattage	Rated Lamp Life	LytePro LED Flood Potential Equivalent	LPF System Wattage	Calculated L <sub>70</sub> Life at 25°C	LED Energy Savings	LED Savings
70W Pulse	90W	10,000	LPF1-E-4K-FL	20W	269,000 hrs	70W	77.7%
150W Pulse	190W	10,000	LPF2-E-4K-FL	40W	269,000 hrs	150W	78.9%
150W Pulse	208W	15,000	LPF3-C-4K-FL	85W	269,000 hrs	123W	59.1%
250W Pulse	288W	15,000	LPF3-C-4K-SP	85W	269,000 hrs	203W	70.5%
250W Pulse	288W	15,000	LPF4-C-4K-FL/SP	105W	269,000 hrs	183W	63.5%





### LytePro utilizes Chip on Board LEDs

There are many LED technologies to choose from today whereas just a few years ago, our options were very limited in terms of cost vs. performance. Products became handicapped in terms of size, photometrics and ultimately cost, thus making it difficult in some applications to adopt LEDs. The advancements in COB technology has made it an attractive LED platform to utilize and maximize performance while minimizing costs. As a result, COB was the ideal building block on which to establish a family of precision value driven floods and meet the demands of the continually changing lighting landscape.

#### COB, the little LED engine that could

Unlike discreet LEDs that utilize a single LED die of various sizes, COB technology uses multiple tiny LEDs (anywhere from 36-130 depending on the size of the board) to create a Light Emitting Surface area or LES. Thanks to the fact that COBs have extremely good thermal resistance values, it makes it a lot easier to extract heat away from the LEDs. As a result we are able to develop fixtures that deliver much higher lumen outputs from a much smaller luminous opening than ever before. Smaller fixtures and smaller heatsinks equals lower costs, and lower costs means we can provide products at a much more attractive price point that is competitive with today's low cost legacy HID products.



### Energy saving options

#### Dynadimmer saves more during off-peak hours

Why operate your outdoor luminaires at 100% power all night long if you don't have to? The HID answer was "you have to", thanks to the many limitations of dimming an HID lamp. With today's LEDs, we can easily control our luminaires to save additional energy during off-peak hours of operation, which can out number peak hours of illumination by 2 to 1 or longer.

LytePro Flood's DM25 Dynadimmer option is a standalone control option that automatically dims the luminaire to 25% low for a period of 6 hours during the evening instead of running at 100% high all night long. The module will calibrate itself to calculate the average midpoint of the evening and will dim to 25% from 3 hours before and 3 hours after the midpoint.

If your system typically runs from 8PM to 8AM in the morning, your midpoint is at 2AM. With Dynadimmer, your fixture would run at 25% low from 11PM to 5AM. Thes are typical off-peak hours, and depending on your application, running your fixtures at 100% high during these hours adds little value and wastes energy.

### New Title-24 updates are coming and LytePro LED Floodlights are ready

The LytePro LED Floodlight, equipped with the Philips Dynadimmer (a part-night outdoor lighting control), helps comply with new provisions of California Title 24.



#### Photocontrol option

An optional factory installed photocell button 'PCB' is also available.





# Mounting flexibility

### Do not be constrained to a single mounting configuration

The LytePro LED Floodlight family is available in several mounting configurations to provide you with design flexibility and help simplify installation. Numbers embossed on knuckle and slipfitter mounts, along with set screws on the trunnion mounts, facilitate ease of installation and accuracy of aiming.









#### 'K' 1/2" NPT Knuckle Mount

The LPF1 and LPF2 come standard with a 1/2" NPT knuckle mount. A common mounting method for compact products, the threaded 1/2" NPT knuckle is compatible with a wide variety of off-the-shelf J-boxes and mounting accessories for even more mounting flexibility.



#### 'S' Slipfitter Mount

The LPF3 and LPF4 are available with a slipfitter style swivel mount that is designed to mount to a 2" (2-3/8" O.D.) pipe tenon or rigid conduit. Power can be directly run into the luminaire, eliminating exposed power cords and the need for a secondary J-box due to an integral UL splice compartment for ease of wiring and installation.



#### 'T' Trunnion Mount

Some fixture locations do not allow for tenon style mounting, or the need to mount a floodlight is an afterthought. Other times you just need something a bit more robust. In those instances it can be easier to bolt the product in place. The available trunnion mount in the LPF3 and LPF4 allows you to do just that.







Swivel mount allows for simple installation and cost savings

Saving time helps to save dollars when it comes to installing luminaires. Our contractor friendly slipfitter swivel mount allows you to do both.

#### Mounts directly to any 2" pipe tenon

The LPF3 and LPF4 slipfitters can easily mount to any 2" (2-3/8" O.D.) pipe tenon or rigid conduit mount that can feed power directly into the product. Simply place, orient and tighten the set screws to lock the fixture in place.

#### Integral splice compartment

Splice connections can be made inside the slipfitter's dedicated UL recognized splice compartment. Simply remove the access cover and make all of your wiring connections directly within the slipfitter. This eliminates the need for an additional costly junction box, while reducing installation time and costs, saving you money.





### Designed to eliminate water pooling if aimed straight up, IP66 rated

Occasionally floods are aimed in a position which could allow water to pool on the lens or doorframe. This can lead to staining and in worst case water intrusion. Each LytePro flood has some well designed and well hidden weep holes to allow water to always pass through, preventing any water pooling in the most extreme aiming conditions. Entire fixture is rated IP66 rated, including driver and optical assemblies.





# Typical applications

#### Tree and landscape lighting

Illuminating landscapes can create a dynamic visual effect at night. Whether you want to draw attention or just create a beautiful scene, the use of the LytePro LED flood or spot optics from various aiming points can create a wide variety of visual effects depending on your application.









#### Column and vertical lighting

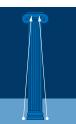
Vertical surfaces can become a primary focal point. In the case of tall, narrow surfaces such as a column or a chimney, accent lighting is possible with only one LytePro LED Floodlight using a spot optic to create a strong visual statement. Use additional floods surrounding a column to create more shadows for a different visual effect.

#### Facade & Wall Washing

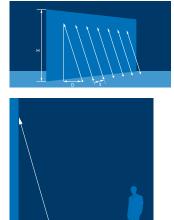
For basic facade and wall washing effects, the use of multiple LytePro LED Floodlights with the all purpose flood distribution can create a myriad of visual effects. Space fixtures closer together for a more uniform look, or space them further apart for a more dramatic scalloped effect. Playing with fixture setback and spacing is an easy way to make a unique visual statement.







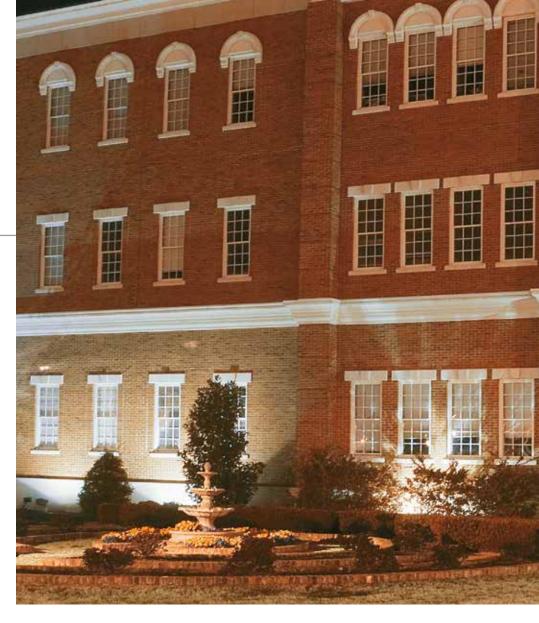




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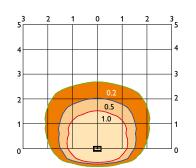
## All purpose optics

The LytePro Flood optics are designed to keep it simple. All four sizes are available with an all purpose NEMA 6H x 6V flood optic. This optic provides a very clean and uniform beam that is suitable for a wide range of flood applications. This includes but is not limited to building facades, wall washing, signage, landscaping, etc. The larger higher output LPF3 and LPF4 products are also available with nice NEMA 3H x 3V spot optic, for when a little more punch and focus is desired. Photometrics are available on-line or you can take advantage of in-house Application Engineering Department for design assistance if needed.



#### LPF1 flood optics

Beam Specs – Flood	
Initial Lumens	1,773
Average Wattage <sup>1</sup>	20
Lumens/Watt <sup>2</sup>	89
NEMA Beam	6H x 6V
50% beam (H X V)	100° x 100°
10% beam (H X V)	124° x 128°
Max Candela	748 cd



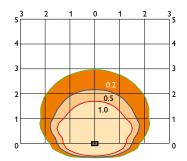
 LPF1 20W - 10'
 Mounting Height
 15
 12
 10
 8
 6

 Mounting Height
 15
 12
 10
 8
 6

 Multiplier
 0.38
 0.66
 1.0
 1.6
 2.6

#### LPF2 flood optics

Beam Specs – Flood	
Initial Lumens	3,460
Average Wattage <sup>1</sup>	40
Lumens/Watt <sup>2</sup>	87
NEMA Beam	6H x 6V
50% beam (H X V)	93° x 79°
10% beam (H X V)	127° x 105°
Max Candela	1,974 cd



 LPF2 40W - 12' Mounting Height, 30° Tilt

 Mounting Height
 18
 15
 12
 10
 8

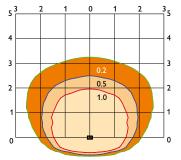
 Multiplier
 0.32
 0.56
 1.0
 1.5
 2.5

- Notes: Beam grid is in multiples of mounting height and values shown are in footcandles. Values shown are based on initial lumens.
- System input wattage may vary based on input voltage, by up to +/- 8%, and based on manufacturer forward voltage, by up to +/- 4%.
- 2. Lumen values based on photometric tests performed in compliance with IESNA LM-79.



#### LPF3 flood optics

Beam Specs – Flood					
Initial Lumens	7,012				
Average Wattage <sup>1</sup>	85W				
Lumens/Watt <sup>2</sup>	82				
NEMA Beam	6H x 6V				
50% beam (H X V)	101° x 97°				
10% beam (H X V)	130° x 125°				
Max Candela	3,100 cd				

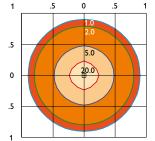


 LPF3 85W - 15' Mounting Height
 25 20 15 12 10

 Mounting Height
 25 20 0.44 1.0 1.7 2.7
 10

#### LPF3 spot optics

Beam Specs – Spot	
Initial Lumens	6,807
Average Wattage <sup>1</sup>	85W
Lumens/Watt <sup>2</sup>	80
NEMA Beam	3H x 3V
50% beam (H X V)	17° x 17°
10% beam (H X V)	41° x 38°
Max Candela	33,122 cd



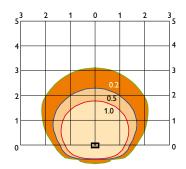
 LPF3 85W - 20' Mounting Height, 30
 25
 20
 15
 10

 Mounting Height
 30
 25
 20
 15
 10

 Multiplier
 0.44
 0.64
 1.0
 1.8
 4.0

#### LPF4 flood optics

Beam Specs – Flood	
Initial Lumens	9,191
Average Wattage <sup>1</sup>	105W
Lumens/Watt <sup>2</sup>	88
NEMA Beam	6H x 6V
50% beam (H X V)	101° x 98°
10% beam (H X V)	127° x 125°
Max Candela	4,010 cd



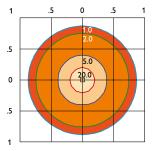
 LPF4 105W - 20' MUNTUR Height
 30
 25
 20
 15
 12

 Mounting Height
 30
 25
 20
 15
 12

 Multiplier
 0.33
 0.54
 1.0
 2.1
 3.2

#### LPF4 spot optics

Beam Specs – Spot	
Initial Lumens	8,442
Average Wattage <sup>1</sup>	105W
Lumens/Watt <sup>2</sup>	79
NEMA Beam	3H x 3V
50% beam (H X V)	18° x 17°
10% beam (H X V)	43° x 44°
Max Candela	38,212 cd



 LPF4 105W - 25'
 Bounting Height
 30
 25
 20
 15

 Mounting Height
 0.50
 0.68
 1.0
 1.5
 2.7



PHILIPS

Stylish outdoor lightmi

# Contractor friendly service program

Philips Lighting offers a smart service program to better meet your needs for predictable lead-times on our luminaires, such as the Philips Stonco LytePro LED Floodlight. The goal of our service program is to ensure we fully support your shelf stocking requirements and provide our customers with reliable leadtimes to address the demanding timelines of construction and retrofit lighting projects. This program allows customers to select the product and corresponding lead-time to meet their specific needs. Please refer to the tables on page 15 to learn which of the LytePro LED Floodlights are included in this smart service program. The "stocked luminaires" listed are in stock (at the time of this printing) and will be shipped within 48 hours from our warehouses.

Also note the ordering information for our made-to-order LytePro LED Floodlights that are available with options such as fusing, Photocontrol and Dynadimmer. All of these MTO configurations are assembled in the USA and will typically ship within 4-6 weeks. Additional 10-day configurations will be available in the future. Always check our LPF spec sheets for latest 48-hour and 10-day offerings. For a complete listing of LytePro LED Floodlights and their availability, please refer to our separate Luminaire Smart Service guide online at www.philips.com/smartserviceguide. This guide is up-to-date and will reflect any changes concerning the availability of both stocked and made-to-order LytePro LED Floodlights.

## Written specifications

#### General Description

The Philips Stonco LytePro LED Floodlights combine excellent performance, design and value to meet the needs for the energy and budget conscious. The LPF1 and LPF2 are available with 1/2" NPT knuckles for ease of installation and an all-purpose flood optical distribution suitable for use on a wide range of applications. The LPF3 and LPF4 are available with slipfitter or trunnion mounting and flood or spot optical distributions. 5 SKUs are available in stock for 2-day quick ship while a more comprehensive offering is available made-to-order with multiple offerings that include fusing, photocontrol, Dynadimmer, NW and CW color temps and three standard finishes

#### Housing

Die-cast housing houses both the LED and driver assemblies. Design incorporates integrated heatsinking to maximize thermal performance and reliability.

#### Mounting

The LPF1 and LPF2 come standard with 1/2" NPT knuckle mounts to allow for wide range of aiming and adjustability. The LPF3 and LPF4 are available with slipfitter or trunnion mounting and flood or spot optical distributions. Caution: Philips Stonco is not responsible for failure of mounting components supplied by others. Proper care should be exercised in mounting component selection and installation to insure adequate luminaire support, given system weight, vibration potential, exposure to the elements, thermal conditions present in the given application, etc. If luminaires are not properly supported and installed correctly per local codes and requirements, this may result in

damage or injury caused by the luminaire, for which Philips Stonco is not responsible.

#### **IP** Rating

Entire fixture is rated IP66 rated, including driver and optical assemblies.

#### LED Board and Array

The LPF floodlights utilize the Citizen CLL032 COB (Chip On Board) LED platform. Provides up to 89 lm/W at the system level. Standard color temp is 4000K +/- 250K, with optional 5000K available. Both color temps have a minimum 80 CRI.

#### LED Thermal Management

Housing design integrates thermal heatsinking between the optical and driver assemblies, allowing for pass-through convective cooling which promotes airflow for improved and maximum heat dissipation. This results in maximized performance and reliability of critical components to ensure long LED system life.

#### **Optical Systems**

LPF LED Floodlights are standard with specular vacuum metalized reflectors that provide very uniform and highly efficient all purpose flood distributions, suitable for use in wide range of applications. The LPF3 and LPF4 are also available with Spot 'SP' optic which consists of a TIR lens to provide a tight spot. Both optics are suitable for use in wide range of applications.

#### Energy saving benefits and controls

Lumen package ranges from 1,700 to 9,000+ with efficacies of 79-89 lumens per watt. These luminaires provide significant energy

savings over traditional HID systems less controls. Optional Dynadimmer controls provides additional maximum energy savings by dimming to 25% low for 6 hours.

#### Electrical

Driver efficiency (>90% standard). 120-347V available (restrictions apply). Temp range: -40°C (-40°F) to 40°C (104°F). Open/short circuit protection. RoHS compliant. Surge protector standard and is in accordance with IEEE / ANSI C62.41.2 guidelines, with a surge current rating of 10,000 amps (10KVA).

#### Listings

Product is UL and cUL listed to the UL1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40°C to 40°C (-40°F to 104°F). Stock SKUs of the LPF family are made in China while all made-to-order configurations are assembled in the USA.

#### Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard finish on all stocked LPF luminaires is Textured Dark Bronze. Textured White and Dark Gray are also available as optional colors for made-to-order products.

#### Warranty

LPF luminaires, the LED arrays, and the drivers are all covered by a 5-year limited warranty. See philips.com/warranties for details.

### Performance and life specifications

#### Predicted Lumen Depreciation Data<sup>1</sup>

Ambient Temp. °C	TM-21 Calculated L <sub>70</sub> hrs <sup>1,2</sup>	Reported L <sub>70</sub> Per TM-21 <sup>2,3</sup>	Lumen Maint. % @60,000 hrs
up to 40°C	269,000 hrs	>48,000 hrs	91.5%

1 Calculated performance derived from LED manufacturer's data and engineering design estimates, based

on IESNA LM-80 methodology. Actual experience may vary due to field application conditions  $L_{20}$  is the predicted time when LED performance depreciates to 70% of initial lumen output.

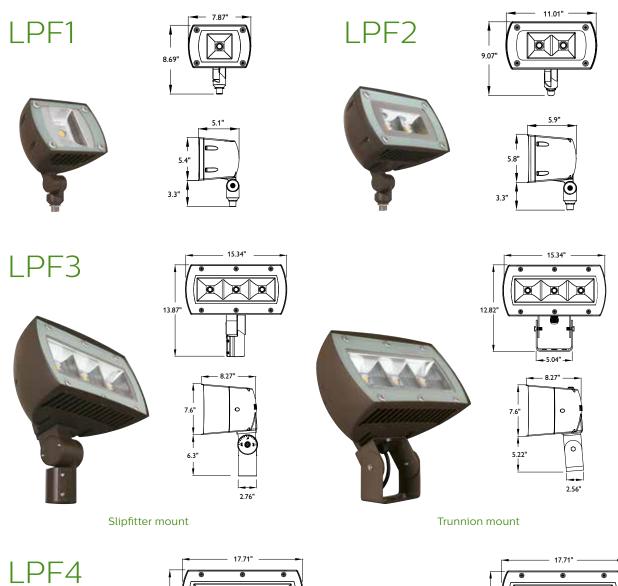
Reported per IESNA TM21-11. Published L<sub>70</sub> hours limited to 6 times actual LED test hours.

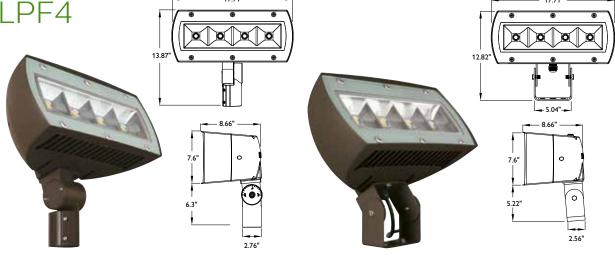
Specifications	LPF1	LPF2	LP	F3	LP	F4
Average Wattage <sup>4</sup>	20	40	8	5	10	)5
Initial Lumens (4K & 5K) <sup>5</sup>	1,773	3,460	7,012	6,807	9,191	8,442
Lumens/Watt	89	87	82	80	88	79
NEMA Beam	6H x 6V	6H x 6V	6H x 6V	3H x 3V	6H x 6V	3H x 3V
50% beam (hor. X vert.)	100° x 100°	93° x 79°	101° x 97°	17° x 17°	101° x 98°	18° x 17°
10% beam (hor. X vert.)	124° x 128°	127° x 105°	130° x 125°	41° x 38°	127° x 125°	43° x 44°

System input wattage may vary based on input voltage, by up to +/- 8%, and based on manufacturer forward voltage, by up to +/- 4%. 4

5 Lumen values based on photometric tests performed in compliance with IESNA LM-79.

## Product details





Slipfitter mount

Trunnion mount

## Ordering information

#### Made to order luminaires<sup>1</sup>

#### example: LPF1-E-4K-FL-K-F1-PCB-1-BZ

**Finishes** 

ΒZ

WH

DGY

Series	/ # of COB	Drive Current	Color Temperature	Distribution	Mounting	Options	Voltage	Finish
	-	-	-	-	-	-	-	
LPF1 LPF2	Micro Small	<b>E</b> 500 mA	<b>4K</b> 4000K <sup>2</sup> <b>5K</b> 5000K <sup>2</sup>		<b>K</b> Knuckle 1/2" NPT	F13Single FusingF24Double FusingF35Double Fusing,	<ol> <li>1 120V</li> <li>2 208V</li> <li>3 240V</li> </ol>	BZ Textured Dark Bronze WH Textured White
LPF3 LPF4	Medium Large	<b>C</b> 700 mA		FL Flood SP Spot	<ul> <li>S Slipfitter 2-3/8"</li> <li>O.D.</li> <li>T Trunnion</li> </ul>	Canada PCB <sup>6</sup> Photocontrol DM25 <sup>7,8</sup> Dynadimmer	<ul><li>4 277V</li><li>6 347V</li><li>8 120-277V</li></ul>	DGY Textured Dark Gray

#### Stocked configurations9,10,11,12

Catalog #	Description	Master Pack, QTY	UPC Code
STKLPF1K-8	LPF1, 4000K Neutral White, Flood, Knuckle Mount, 120-277V, Dark Bronze	Yes, 4	786034956925
STKLPF2K-8	LPF2, 4000K Neutral White, Flood, Knuckle Mount, 120-277V, Dark Bronze	Yes, 4	786034956932
STKLPF3S-8	LPF3, 4000K Neutral White, Flood, Slipfitter Mount, 120-277V, Dark Bronze	Yes, 2	786034956949
STKLPF4S-8	LPF4, 4000K Neutral White, Flood, Slipfitter Mount, 120-277V, Dark Bronze	1	786034956956
STKLPF4T-8	LPF4, 4000K Neutral White, Flood, Trunnion Mount, 120-277V, Dark Bronze	1	786034956963

MTO configurations are assembled in the USA 1 Both 4K and 5K options have a minimum 80 CRI 2.

'F3' for 208, 240V Canadian double pull

'DM25' only available 120-277V and dims to 25% for 6 hours 8. Dynadimmer is suitable for use from -30°C to 40° temperature ambient only

- All stock products are 'BZ' Textured Dark Bronze, '4K' Neutral White and 'FL' Flood Optics. 9.

6. Specify voltage. 'PCB' not available with '8' universal voltage option

'F1' for 120, 277, 347V

'F2' for 208, 240V

3

4

5.

10. Stock LPF products ship out of our Carrollton Distribution facility within 2-days of receipt of order.

11. Always consult factory for current inventory levels. Larger guantities may be converted to MTO if necessary

12. LPF1, LPF2 & LPF3 are provided with full 4-color POP packaging. LPF4 is provided in a standard shipper box

### Accessories

7



#### Accessories (order separately)

Wire guards and stone guards are available for each model.

Catalog No.	Description
LPF(*)WG <sup>13,14</sup>	Wire Guard (*Specify size: 1, 2, 3, 4)
LPF(*)SG <sup>13,14</sup>	Stone Guard (*Specify size: 1, 2, 3, 4)

13. Limited quantities stocked in our Carrollton RDC.

14. Contact factory for availability of large order quantities.



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