

AGRICULTURE SAFETY SOLUTIONS

# Agriculture Lighting and Visibility Products

Safety Solutions from Grote



The first name in vehicle  
safety systems®

# When You Just Can't Stop

## Our Lamps are Ready to Go



When your customers need to work around the clock, they need work lamps that are up to the task. Grote's Trilliant® Oval 1200 and 2500 lumen LED work lamps give you all the performance you need. They're from Grote, the company that introduced LED lamps to the professional vehicle community. Like all Grote work lamps, they're rugged, reliable, and powerful. They'll light up the night until the work is done.

## Why Grote - We are the first name in vehicle safety systems.

### Award Winning State-of-the-Art Facilities

- Advanced Manufacturing Systems
- Advanced Quality Assurance Systems
- Advanced Customer Service Systems

Grote Industries is a leading manufacturer and marketer of vehicle lighting and safety systems. Our company was founded in the heartland more than 100 years ago and has remained family owned from the day William Grote opened the doors for business.

We are an industry-leading manufacturer, the first to receive our TS16949 certification in the heavy duty lighting industry. With manufacturing locations in Canada, Mexico, and the United States, we are the only heavy duty lighting supplier that can truly say it is a NAFTA company.

Our company is steeped in tradition with a continued focus on innovation, as well as a strong commitment to providing quality products and services. We still hold firm to the family values and work ethics set forth by our founder all those years ago.



**Grote Industries World-Wide Headquarters** –  
Madison IN, USA



**Grote Industries Canada** – Toronto,  
Ontario, Canada



**Grote Electronics** –  
Waterloo, Ontario,  
Canada



**Grote de Mexico** –  
Monterrey, Mexico



**Grote Europe** –  
Niederwinkling, Germany



**Grote Asia** –  
Shanghai, China



# Lumen Guide

Understanding the value.

## LUMENS

0000 R 0000 I 0000 E

Raw

Instant-On

Effective

Rating classification systems that relate to lighting are often confusing and fail to accurately indicate the actual operational characteristics of the lamps they attempt to describe. Most of the time, a single term of measurement is insufficient to accurately describe the illumination characteristics of a specific lamp – even though that term may be completely accurate. So, if someone makes a statement that “this lamp is just what you need. It puts out 2500 lumens” the point may be technically correct, but may be inaccurate when it comes to the lighting characteristics the lamp has.

In order to help solve this problem, Grote has developed a descriptive lighting system that accurately communicates the true characteristics of lamps so users can make informed decisions on the lamps that fit their needs best.

The R in R.I.E. stands for the raw lumens that any given fixture can produce. This means that the number shown is the maximum amount of lumens that each LED diode can produce, times the number of diodes in the device. However, unless advanced design and professional standards are used in the creation of the device, there is very little chance that the lamp produces anywhere near the capability of the diodes. Light output is lost in reflection, diffusion through the lens, and by the inefficiencies of the circuit board design. The “R” number is the largest number in the rating system created by Grote Industries.

**R**  
RAW

The I in R.I.E stands for the light output that is produced the instant an LED lamp is turned on. In that moment, the lamp is at its brightest and will diminish somewhat until the lamp circuit “settles in” after about 30 minutes of operation. Unlike an incandescent bulb that gets brighter after it has been on for a few minutes, an LED gets less bright as the circuit heats up. That is why it is so important that the lamp manufacturer you choose has a high reputation for excellent circuit board design, like Grote does.

**I**  
INSTANT-ON

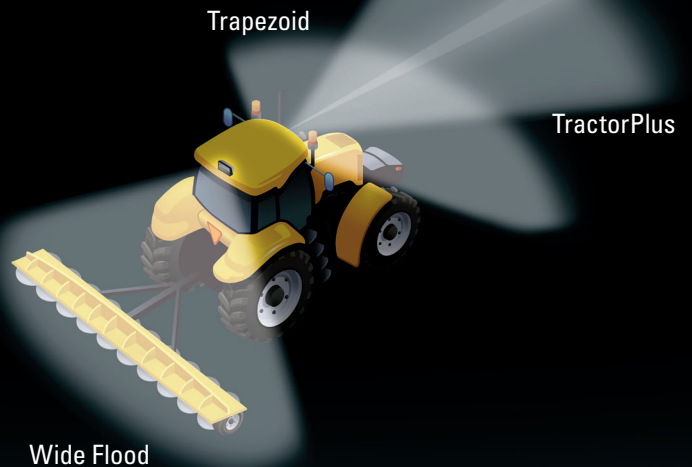
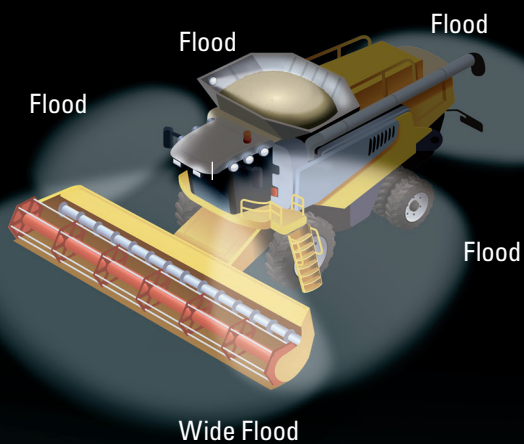
The E in R.I.E stands for the effective light output that a lamp produces after it has been on for 30 minutes. This important measurement is the key to making sure that all lamps you are considering for purchase are a true apples-to-apples comparison. For LED lamps, this third number is the lowest number and the safe number to use to understand exactly how much light and lumens you will have to work with in a real-life setting.

**E**  
EFFECTIVE

**LED**  
**lighting**  
**facts**  
LED Product Partner

# Light Pattern Guide

Correct lamp selection, vehicle lamp placement, and light pattern selection is crucial to provide the right pattern of light for the job you are doing. These illustrations will give you a good comparison of the different beam patterns available and their general illumination areas.



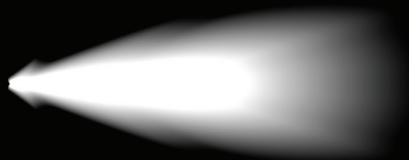


# Overhead Illumination Patterns

The illustrations below show a generic view of each of the major light patterns in use today. Specific patterns are determined by light output in lumens, lamp lens, positioning of the lamp on the vehicle, and the technology the lamp employs. LED lamp designs provide the brightest, truest color and the longest life of any lamp technology.

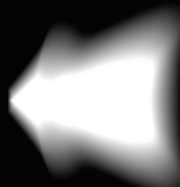
## TractorPlus

Grote Par 36/T36 LED lamp patterns that combine the characteristics of flood and longer range lamps. A good choice for night driving and field work.



## Trapezoid

Low and wide light patterns, good for vehicles to use at moderate speed for traveling on roads, paths, or fence rows between fields. Excellent in foggy, rainy, or dusty conditions. Optimum mounting height is less than 3' off the ground.



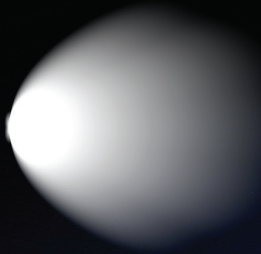
## Spot

Good for seeing a specific small area or object far down the field or row. Not suitable for general viewing. Useful for both front and side applications. Optimum mounting height is over 3' off the ground.



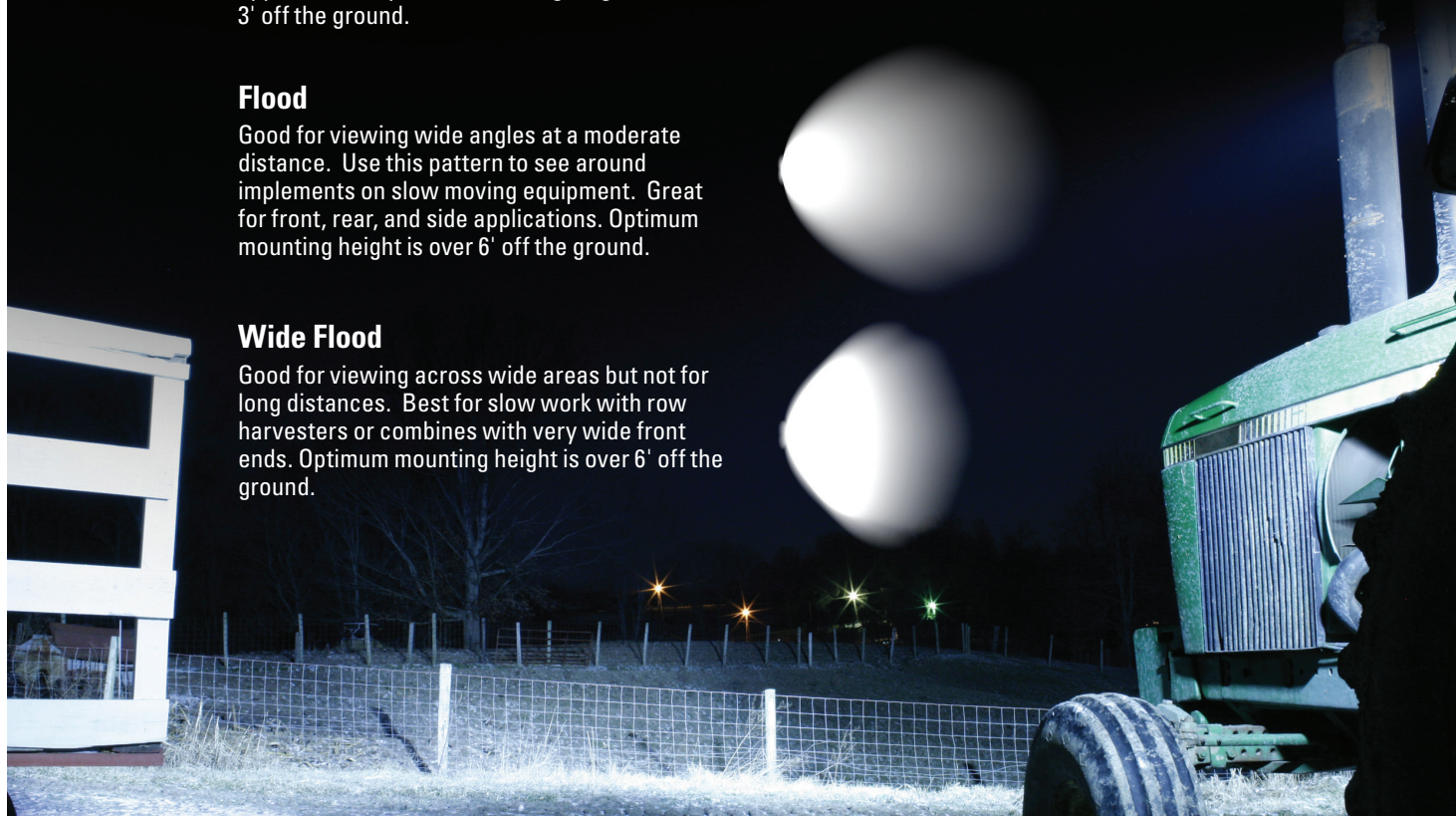
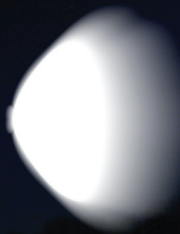
## Flood

Good for viewing wide angles at a moderate distance. Use this pattern to see around implements on slow moving equipment. Great for front, rear, and side applications. Optimum mounting height is over 6' off the ground.



## Wide Flood

Good for viewing across wide areas but not for long distances. Best for slow work with row harvesters or combines with very wide front ends. Optimum mounting height is over 6' off the ground.



# Exterior Illumination Perimeter and scene auxiliary lighting.



## TRILLIANT® OVAL LED WORK LAMP

This basic oval lamp design has been specifically styled for the agriculture market and has been recognized by OEMs for their performance, style, and light output on new equipment builds. Trilliant Oval lamps provide the ability to improve standard lighting while keeping the same shape and style that came on the original equipment. When you need more light, but don't want to change the style of your lamps or their mounting design, the Trilliant Oval is the right choice.



PN	Connection/Pattern	Voltage	Amp Draw	LUMENS		
				Raw	Instant-On	Effective
63J01	Amp SuperSeal, Flood	12/24	3/1.5	3540	2900	2468
63J11	Amp SuperSeal, Wide Flood	12/24	3/1.5	3540	2900	2376
63J21	Deutsch, Flood	12/24	3/1.5	3540	2900	2468
63J31	Deutsch, Wide Flood	12/24	3/1.5	3540	2900	2376
63F81	Amp SuperSeal, Flood	12/24	2/1	1872	1500	1162
63F91	Amp SuperSeal, Wide Flood	12/24	2/1	1872	1500	1026
63G01	Deutsch, Flood	12/24	2/1	1872	1500	1162
63G11	Deutsch, Wide Flood	12/24	2/1	1872	1500	1026

## TRILLIANT® CUBE LED WORK LAMP

Grote Trilliant Cubes are compact, bright, and fit where other lamps won't. Designed with a high lumen per watt rating, the Cube provides high quality light that fits where other lamps just won't work.

Grote's sleek, rugged design with superior LED electronic circuitry outperforms lamps twice its size and weight. Quality electronic components and advanced Grote circuit design provides electronically quiet operation, consistent light output, and protection from voltage spikes and electromagnetic interference. Premium LEDs produce white light that reduces eye fatigue and operator stress. Rugged design withstands heavy vibration, corrosion, moisture, and dust. Sophisticated reflector optics put more light on the task. Multiple connector options, DT-2 Pin and Amp SuperSeal, increase operational flexibility. Advanced circuit design and thermal management ensures consistent light output for the life of the lamp.



PN	Connection/Pattern	Voltage	Amp Draw	LUMENS		
				Raw	Instant-On	Effective
63F61	Amp SuperSeal, Flood	12	3	3540	2800	2365
63F71	Amp SuperSeal, Wide Flood	12	3	3540	2800	2287
63F21	Deutsch, Flood	12	3	3540	2800	2365
63F31	Deutsch, Flood	24	1.5	3540	2800	2365
63F41	Deutsch, Wide Flood	12	3	3540	2800	2287
63F51	Deutsch, Wide Flood	24	1.5	3540	2800	2287
63E21	Deutsch, Flood	10/24	1.4/7	1404	1100	976
63E31	Deutsch, Wide Flood	10/24	1.4/7	1404	1100	960
63H31	Deutsch, Flood	48	.035	1404	1100	976
63981	Amp Superseal, Flood	10/24	1.4/7	1404	1100	976
63991	Amp Superseal, Wide Flood	10/24	1.4/7	1404	1100	960



# Exterior Illumination Perimeter and scene auxiliary lighting.

## Trilliant<sup>®</sup> 26



Pendant (Near)

### TRILLIANT<sup>®</sup> 26 LED WORK LAMP

Grote's T26 LED work lamp packs a wealth of features into its new, smallest addition to its work lamp line. Grote's T26 design packs 1436 lumens in a small three-inch diameter package that uses only 17.5 Watts across 10-48 Volts. The family includes a far pattern and near pattern flood design, with a choice of pinch or pedestal mountings. The T26's small size and rugged construction allows it to be mounted in places where larger or less rugged lamps cannot fit or survive. Once on the job, the T26's robust mechanical design ensures consistent performance and long life expectancy in the harshest environments.



Pendant (Far)



Pinch (Near)



Pinch (Far)

10-48  
VOLTS

#### LUMENS

PN	Connection/Pattern	Mount	Voltage	Amp Draw	Raw	Instant-On	Effective
64E01	Deutsch, Far Flood	Pinch	10-48	1.75-.36	1648	1570	1436
64E11	Deutsch, Near Flood	Pinch	10-48	1.75-.36	1648	1535	1413
64G01	Deutsch, Far Flood	Pendant	10-48	1.75-.36	1648	1570	1436
64G11	Deutsch, Near Flood	Pendant	10-48	1.75-.36	1648	1535	1413

## Trilliant<sup>®</sup> 36



### Trilliant<sup>®</sup> 36 LED WhiteLight<sup>™</sup> Conversion Bulb

*Turns Any PAR36 Incandescent Lamp Into an LED WhiteLight<sup>™</sup> Work Lamp*



REPLACES  
4411



Replace the following bulbs to LED WhiteLight<sup>™</sup> bulbs

Bulb	TractorPlus <sup>™</sup>	Wide Flood
4411	●	
4411-1	●	
4411-3	●	
4414	●	●
4422		●
4461	●	
4466	●	
4589	●	
H7606	●	
H7610	●	

Shown in a PAR36 Rubber Housing (Not Included)

### TRILLIANT<sup>®</sup> 36 LED WORK LAMP AND CONVERSION BULB

Grote T36 lamps provide the ability to quickly and inexpensively replace existing halogen bulbs with an LED replacement without changing any wiring. Just swap lamps and you are back in action. It's just that easy.

UV and hard coated lens for durability. Aluminum housing with black powder coating. Encapsulant potting for total circuit board protection against moisture and corrosion. Color temperature provides a natural contrast most like sunlight, reducing eye fatigue and optimizing job performance. Replaceable lens with three stainless steel Phillips head screws. Long-Life LED's rated at 40,000 hours, and last 100 times longer than incandescent PAR 36 lamps.

#### LUMENS

PN	Connection/Pattern	Discription	Voltage	Amp Draw	Raw	Instant-On	Effective
63971	AMP SuperSeal, TractorPlus	Replaceable bulb version	12/24	1.4/.7	1296	950	751
63H81	AMP SuperSeal, Wide Flood	Replaceable bulb version	12/24	1.4/.7	1296	1064	802
63H01	Deutsch, Wide Flood	Integrated bracket	12/24	1.4/.7	1296	1064	802
63H11	Deutsch, TractorPlus	Integrated bracket	12/24	1.4/.7	1296	950	751
63821	Spade/Screw Terminals, TractorPlus	Replaceable bulb version	12/24	1.4/.7	1296	950	751
63831	Spade/Screw Terminals, Wide Flood	Replaceable bulb version	12/24	1.4/.7	1296	1064	802
63861	AMP SuperSeal, TractorPlus	Integrated bracket	12/24	1.4/.7	1296	950	751
63871	AMP SuperSeal, Wide Flood	Integrated bracket	12/24	1.4/.7	1296	1064	802

# Exterior Illumination Perimeter and scene auxiliary lighting.

## Trilliant®



PN	Pattern	Voltage	Amp Draw	LUMENS		
				Raw	Instant-On	Effective
63571	Spot	12/24	4.2/2.1	3276	1262	1135
63581	Flood	12/24	4.2/2.1	3276	1600	1522
63591	Trapezoid	12/24	4.2/2.1	3276	2300	1603
63671	Spot	24	2.1	3276	1262	1738
63681	Flood	24	2.1	3276	1600	1522
63691	Trapezoid	24	2.1	3276	2300	1603
63761	Wide Flood	12/24	4.2/2.1	3276	2340	1738
63771	Wide Flood	24	2.1	3276	2340	1738
63881	Spot, Integrated Switched	12/24	4.2/2.1	3276	1262	1135
63E41	Flood, With Reflector	12/24	4.2/2.1	3888	2672	2175
63E51	Wide Flood, With Reflector	12/24	4.2/2.1	3888	2000	1613
63E61	Flood, With Reflector	24	2.1	3888	2672	2175
63E71	Wide Flood, With Reflector	24	2.1	3888	2000	1613
63951	Flood, Switched, With Reflector	12/24	4.2/2.1	3888	2800	2175
63961	Wide Flood, With Reflector, Switched	12/24	4.2/2.1	3888	2000	1613

### TRILLIANT® LED WHITELIGHT™

This 6" x 9" rugged surface mount, high-output lamp uses Grote's proven premier LED WhiteLight™ technology. The light output of the Trilliant® family rivals HIDs, eclipses halogen competitors, and provides beam pattern evenness and color temperature that produces a contrast most like that of natural sunlight.

Grote Trilliant® lamps give you a rugged, military grade lamp for the agriculture environment. Available in many patterns and two optic designs, the Grote Trilliant line is an excellent option for putting light where you need it.



Switched version are controlled on the back

#### Accessories:

- 94580 - Spot pattern replacement lens
- 94600 - Flood pattern replacement lens
- 94590 - Trapezoid pattern replacement lens
- 98100 - Chrome bezel
- 43652 - Black adjustable bracket

## Trilliant® mini



### TRILLIANT® MINI LED WHITELIGHT™

An excellent 4" x 6" work lamp for any instance where a high-output illumination source is needed. Like its big brother, this low-power, long-life lamp delivers the beam pattern evenness and color temperature that produce a contrast most like that of natural sunlight. Mount it anywhere and enjoy thousands of hours of brilliant LED WhiteLight™. All Trilliant® Minis can be installed with an optional flush-mount bracket.

PN	Pattern	Voltage	Amp Draw	LUMENS		
				Raw	Instant-On	Effective
63601	Spot	14	1.4	1296	800	655
63611	Flood	14	1.4	1296	875	786
63621	Trapezoid	14	1.4	1296	800	733
63731	Spot	28	.7	1296	800	655
63741	Flood	28	.7	1296	875	786
63751	Trapezoid	28	.7	1296	800	733



### RECTANGULAR HALOGEN WORK LAMP

Rugged corrosion and shock resistant construction. Available in trapezoid, spot and flood beam patterns for application needs on agricultural equipment.

- 63151-5 - Flood, Retail Pack
- 63161-5 - Spot, Retail Pack
- 63171-5 - Trapezoid, Retail Pack
- 63241-5 - Flood, 24 Volt, Retail Pack



### PAR 36 RUBBER TRACTOR AND UTILITY LAMP

Rugged corrosion and shock resistant construction. Available in trapezoid, spot and flood beam patterns for application needs on tractors and other agricultural equipment.

- 64931 - 12-Volt, Sealed Beam
- 64921 - 24-Volt, Sealed Beam
- 64991 - 12-Volt, Halogen Sealed Beam
- 64930 - Housing only



# Exterior Illumination

Perimeter and scene auxiliary lighting.





# Signal Lighting A complete ASABE S279 Lighting System.



Surface Mount



Pedestal Mount

## LED AMBER WARNING AND RED STOP/TAIL/TURN LAMPS

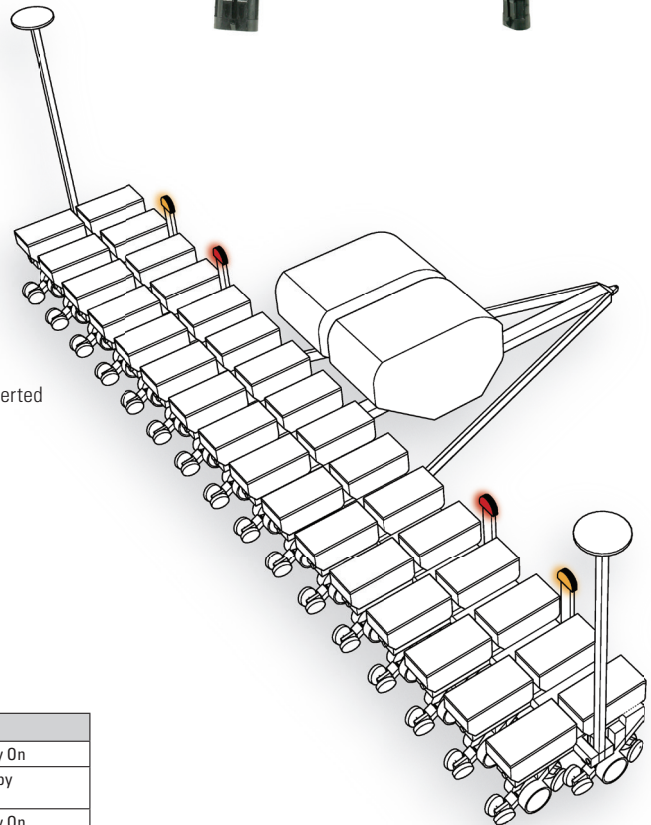
Grote's innovative signal lamps are specifically designed for mounting on agricultural, construction, and other off-highway equipment. The LED lamps incorporate advanced lens optics that increase mounting flexibility, while eliminating the need for extra circuit boards and LEDs specifically dedicated to side illumination. The lamp system includes a double-faced amber warning lamp, a single-side red stop/tail/turn lamp, and a control module that links powered vehicles to towed equipment with application-specific harnesses.

The lamps are available in pedestal and surface mount models. The surface mount lamps can be mounted in single-lamp or dual-lamp configurations, using a custom connector bracket. Either configuration can be mounted in vertical, horizontal, or inverted orientation and still meet ASABE S279 lighting specifications.



All lamps are available with either Packard or Deutsch connectivity.



Flasher Control Module



## HOW DOES THE FLASHER CONTROL MODULE WORK ?

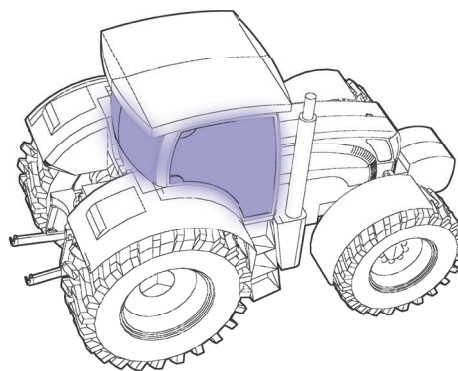
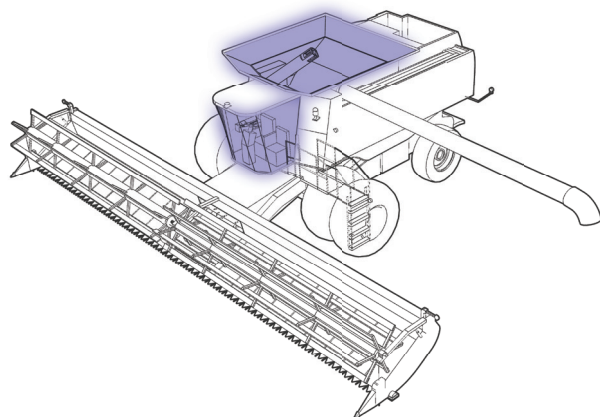
LAMP	DRIVING MODE	TURNING MODE
 <b>Amber / Amber Warning Lamps</b>	Flashing In Unison With Tractor. 60-85 Flashes Per Minute	Opposite Of Turn - Lamp is Steady On Turn Side - Flash Rate Increases by 20 Flashes Per Minute
 <b>Red / Black Stop/Tail/Turn Lamps</b>	Tail Function In Steady Burn Mode	Opposite Of Turn - Lamp is Steady On Turn Side - Lamp Flashes High Intensity/Low Intensity in Unison with Amber/Amber Lamp

Part Number	Description	Mounting Configuration	Termination	Case Quantity
01-5615-70	LED Amber/Amber Warning	Pedestal	Packard 12010973	16 pcs
01-5616-70	LED Amber/Amber Warning	Surface	Packard 12010973	10 pcs
01-5616-72	LED Amber/Amber Warning	Surface	Deutsch DT04-2P	10 pcs
01-5617-70	LED Red/Black Stop/Tail	Pedestal	Packard 12010717	16 pcs
01-5618-70	LED Red/Black Stop/Tail	Surface	Packard 12010717	10 pcs
01-5618-72	LED Red/Black Stop/Tail	Surface	Deutsch DT04-3P	10 pcs



# Interior Illumination

Interior and supplemental compartment and cabinet illumination.



**LED .65 Amps**  
at 12.8VDC

## HIGH OUTPUT SLIMWHITE LAMP

High-output LED dome lamp emits low heat. Tough polycarbonate lens. Sturdy aluminum base. Profile is less than 3/4" high. Rated at 50,000 service hours.

- 61G81** 12V, 18", Clear Lens, 700 Lumen, .65A  
**61G01** 12V, 48", Clear Lens, 3 function  
 2100 Lumen  
 max, 1.3A, .65A, 1.95A



**LED 0.6 Amps**  
at 12VDC

**LED 1.2 Amps**  
at 12VDC

## LED SLIMWHITE

High-output 500 lumen LED dome lamp emits low heat. Tough polycarbonate lens, sturdy aluminum base and conformal coated circuits. Profile is less than 3/4" high. Rated at 50,000 service hours.

- 61E81** 12V, 18" - White - 500 Lumens  
**61F01** 12V w/Switch, 18" - White - 500 Lumens  
**61281** 12V, 48" 3 function - White - up to  
 1500 Lumens  
**61E91** 24V, 18" - Clear - 500 Lumens  
**61F11** 24V, 18" - Clear - 500 Lumens



**LED 0.48 Amps**  
at 12VDC

**LED 0.25 Amps**  
at 14VDC

## COURTESY AND DOME RECTANGULAR LED LAMP

LED lamp is rated to 50,000 hours. Fits existing, similar incandescent lamp mountings. Low heat will not melt lens. Encapsulant potting for total circuit board protection against moisture and corrosion. Dimensions 4.75x2.75.

- 61F51** 10-32 V, White, Black, Surface-Mount  
**61991** 12V, White, 6 Diodes, Recess-Mount



**LED 0.6 Amps**  
at 12VDC

## 4" LED WHITELIGHT™ LAMP

Uses 70% less power than incandescent options. Integrated flange for easy installation.

- 61G91** 12V, Flange Mount  
**61H21** 24V, Flange Mount  
**61H01** 12V, Grommet Mount  
**61H11** 24V, Grommet Mount



**LED 0.6 Amps**  
at 12VDC

## 6.5" S100 LED WHITELIGHT™ SURFACE MOUNT DOME LAMP

Moisture proof construction allows for a wide variety of uses. Surface mount allows quick and easy installation. 300 Lumens of output from the latest LED Whitelight™ technology. Operates at -40C to +50C. 12V / .6A; 24V / .38A.

- 61391** 12V  
**61401** 24V  
**61411** 12V, w/Motion Sensor  
**61421** 24V, w/Motion Sensor



**LED 0.6 Amps**  
at 12VDC

## LED WHITELIGHT™ SURFACE MOUNT DOME LAMP

Low power consumption for efficient light output. Long-life LEDs, rated to 50,000 service hours. Surface-mount bracket comes pre-wired to lamp with push-button switch

- 61171** White

Material: Polycarbonate/ABS  
 Finish: White/Gray  
 Voltage Amp: 12V - .6 Amp

# Warning and Support Products

LED



## GROTE CLASS I LED AMBER BEACON

- SAE J845 Class I • Amber only • 18 total flash patterns
- Polycarbonate base • Permanent mount • 12 and 24 VDC
- Low Dome Dimensions: 5 5/16" (H) x 6 7/16" (Dia)
- High Dome Dimensions: 6 13/16" (H) x 6 7/16" (Dia)

**76253** 12V, Yellow, Permanent Mount  
**76263** 24V, Yellow, Permanent Mount

### Class: Class I

Material: Polycarbonate

SAE: J845

Volts / Amps: 12V (76253) - 24V (76263) / 1.7A

## STEALTH LOW-PROFILE STROBE LIGHT



- Durable belt drive rotator • 160 flashes per minute
- Thread-on lens is secured quickly with a single screw
- Quick-connect base allows for easy installation and removal

**76493** Yellow

### Class: Class I

SAE: J845

Volts / Amps: 12V - 5.2 AMP

Replacement Bulb: H1, 55 watt;

Mounting Stem: 43665

## FLEXIBLE-BASE STROBE LAMP



- DIN fixing allows product to be quickly installed or moved with use of mounting stems • 75 flashes per minute (double flash), 7 joules • Flexible rubber stem allows for 30° angle deflection
- Shock-absorbing features make this lamp suitable in rugged applications, such as on forestry, agricultural and industrial vehicles • Robust polycarbonate thread-on lens is secured with a single set-screw • Corrosion-resistant materials • Mounting stems ordered separately

**76963** Yellow

### Class: II

Material: Polycarbonate

Finish: Yellow

Voltage Amp: 12 to 48V (DC) - 1.5 AMP

Mounting Stem 43665



## 17" LOW-PROFILE LED MINI LIGHTBAR

Low profile provides high performance characteristics of LED lighting in a small size • 6 internal LED modules provide 360° light output • Built-in electronic flasher with 46 Scan-LoK™ flash patterns (30 for 76770, 76983, 76993) plus 4 simulated rotating patterns (permanent-mount version only) • Permanent mount includes 6" pigtail; magnetic mount includes 8' straight cord with accessory plug that includes LED indicator switch • Permanent mount on 14 1/16" x 3 7/16" hole centers • Mounting hardware and instructions included

### PERMANENT MOUNT:

**76983** Yellow  
**76943** Yellow, Clear Lens  
**76980** Yellow/White, Clear Lens

### MAGNET MOUNT WITH CIGARETTE LIGHTER

**76993** Yellow  
**76953** Yellow, Clear Lens  
**76990** Yellow/White, Clear Lens

### Class: I

Material: Polycarbonate

SAE: J845

Finish: Yellow

Volts / Amps: 12V / 3A peak / 1.2A avg

LED



## OVAL LED STROBE LIGHTS

Encapsulant potting offers maximum protection of the circuit board against dirt, moisture and corrosion • Internal circuitry eliminates the need for an external power supply or control module • Requires only a 12 Volt DC connection for power • Functions as either a dual flash strobe or a quad flash strobe • Lamps fit oval standard mounting holes • Lamps mount in any orientation • Grote's rugged Plug-and-Go® terminals ensure a quick, easy connections every time

**77363** Yellow

### Class: II

Material: ABS/Acrylic

Finish: Yellow

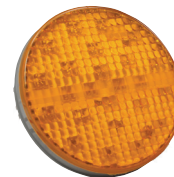
Volts / Amps: 12V / .25A

Bracket: 43362, 43952, 43220, 43223, 43222, 43100;

Grommet: 92420, 92720

Pigtail: 66815, 66841, 67002, 66842, 67013

LED



## 4" LED STROBE LIGHTS

Encapsulant potting offers maximum protection of the circuit board against dirt, moisture and corrosion • Internal circuitry eliminates the need for an external power supply or control module • Requires only a 12 Volt DC connection for power • Functions as either a dual flash strobe or a quad flash strobe • Lamps fit 4 inch standard mountings • Lamps mount in any orientation • Grote's rugged Plug-and-Go® terminals make for a quick, easy connection every time

**77353** Yellow

### Class: II

Material: Polycarbonate/Acrylic

Finish: Yellow

Volts / Amps: 12V / .25A

Bracket: 43253, 92510, 92512, 92513, 43572, 43642, 43655;

Grommet: 91740, 91950; Pigtail: 66815, 66841, 67002, 66842,

67013, 66816, 66845, 67005, 66823, 66830, 67016, 66846

LED



## SURFACE MOUNT CLASS I LED LIGHT HEAD

24 - 1-watt, high intensity LED's • 16 flash patterns including: Single, Double, Quad and Cycle All • Synchronizable with multiple light heads • UV stabilized polycarbonate lens and 9' cable • SAE J595 Class I • Temperature range: -22°F to +122°F (-30°C to +50°C)

**76651** Clear  
**76653** Yellow  
**76655** Blue

### Class: Class I

Material: Polycarbonate

Volts / Amps: 12V / .75A

LED



## LED STROBE LAMP IN RUBBER HOUSING

- Durable rubber lamp housings • Versatile mounting (hardware included) • Molded UBS .180 bullet terminals
- Pre-wired for quad or dual flash

**77192** Red  
**77193** Yellow

### Class: II - Red, Yellow; III - Blue

Material: Rubber/Polycarbonate/Acrylic

Finish: Black / Red / Yellow

Volts / Amps: 12V / .25A

Accessory: Lamp: Red 77352, Yellow 77353, Blue 77355, Clear 77351;

Housing 64930; Magnet Mount 43300



# Warning and Support Products



## 4" ZINC DIE-CAST DOUBLE-FACE LAMP

Less than 75 sq cm of effective, projected luminous lens area • For use on vehicles less than 80" wide

**53023** Yellow/Yellow

Material: Die-cast/Acrylic  
FMVSS: Double - I, P; Single - I  
Finish: Yellow  
Bulb: Double - 1157, 32/3 CP  
Voltage Amp: 12V - .59(P)/2.1(I) AMP



## THIN-LINE DOUBLE-FACE LAMP

Easy snap-on lenses • Molded-in baffle • Molded-in O-ring • Wire exit has a grommet to protect jacket against abrasion

**55223** Yellow/Yellow

Material: Acrylic/Polycarbonate  
FMVSS: Double - I, P; Single - I  
Finish: Yellow  
Bulb: Double - 1157, 32/3 CP  
Voltage Amp: 12V - 2.1(I) AMP



**LED** 0.03 Amps at 12VDC

## MICRONOVA® DOT CLEARANCE / MARKER LED LAMPS

Small size provides more flexibility. Available in PC and P2 versions. Sleek aerodynamic styling extrudes less than 3/8" from mounted surface. No fasteners required.

**49322** Red P2 w/ Grommet  
**49332** Red PC w/ Grommet  
**49333** Yellow P2 / PC w/ Grommet  
**49341** White, w/ Grommet (ECE Compliant)

Material: Acrylic  
Finish: Red, Yellow, White  
Voltage Amp: 12V / .05 Amp, .7 Watts  
Voltage Amp: 24V / .05 Amp, .7 Watts



**LED**

## DIRECTIONAL, PORTABLE, BATTERY-OPERATED LED WARNING LIGHT

Push button operation • 72 hours of operation on two AA batteries (not included) • Includes a magnetic base and is adjustable 180° • Additional reflective lens as added safety feature • 3 user-selectable flash patterns

**77923** Yellow

Material: Nylon/Polycarbonate  
Finish: Red/Yellow



**LED**

## 360° PORTABLE BATTERY OPERATED LED WARNING LIGHT

24 ultra-bright LEDs help conserve battery life • 300 - 400 hours of operation on two D batteries (not included) • 60 triple flashes per minute • Strong magnet base holds lamp in place on a metal surface • Photocell adjust intensity for low light situation

**77912** Red  
**77913** Yellow

Material: Nylon/Polycarbonate  
Finish: Red/Yellow



**LED** 0.3 Amps at 14VDC

## LED COURTESY STEPWELL LAMP

Electronics completely encapsulated with durable epoxy for maximum environmental protection. Connections can be easily adjusted for typical installations. Designed for bus electronics for seamless integration into existing platforms. ADA compliant. .3 AMPS @ 14V

**60571** 12V, Chrome

Material: Stainless Steel/Polycarbonate  
Finish: Stainless  
Voltage Amp: 14V - .3A



## MAGNETIC LED TOWING KIT

Kit includes lamps, harness and hook-up connectors • Kit specifications include truck harness and 20 ft. connecting harness • Plugs into a standard flat four-way vehicle trailer light connector

**65720-5** Red

Material: ABS/Acrylic/Polycarbonate/PVC  
Finish: Red  
Voltage Amp: 12V - .24(I,S)/.03(P2,T) AMP per lamp



## HEAVY DUTY SUPERNOVA® LED MAGNETIC TOWING KIT

Durable rubber housings • Strong 50lb. pull mounting magnets for each lamp • Rubber adhesive magnet covers prevent scratching paint of towed vehicle • Adjustable lamp mounting for maximum visibility and safety • Die-cast 4-pole round plug • 30 ft. of abrasion-resistant jacketed cable

**65432-4** Red

Material: Rubber/ABS/Acrylic  
Finish: Red  
Voltage Amp: 12V - .24(I,S)/.03(P2,T) AMP per lamp



## HEAVY DUTY MAGNETIC TOWING KIT

Durable rubber lamp housings • Strong 40lb. mounting magnets for each lamp • Rubber adhesive magnet covers to prevent scratching of towed vehicle • Adjustable lamp mounting for maximum visibility and safety • Durable die-cast 4 pole plug • Abrasion resistant double jacketed cable on all components

**65402-4** Red

Material: Rubber/Polycarbonate  
Finish: Red  
Voltage Amp: 12 V - .48(P2,T)/2.1(I,S) AMP per lamp

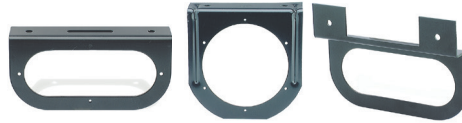
# Warning and Support Products



## GROMMET FOR 6" OVAL OR 4" ROUND LAMPS

Fits 6" oval or 4" round lamps. Oval fits 2.5" x 6.76" size hole and round fits 4.5" hole. Both fit panel thickness up to 1/4".

92420 - Oval, Open Back    92720 - Oval, Closed Back  
91740 - Round, Open Back    91950 - Round Closed Back  
\*Theft-resistant Mounting flanges also available



## MOUNTING BRACKET FOR OVAL OR 4" ROUND LAMPS

90° angle bracket. For use with oval or round lamps. Grommet required for mounting.

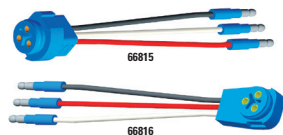
43362 - 90°, Oval, Black    43572 - 90°, 4" Round, Black  
43952 - "Z" Mount, Black    42052 - 45°, 4" Round, Black



## SURFACE MOUNT SNAP-IN FLANGE FOR OVAL LAMPS

Allows for quick and easy surface mount application.

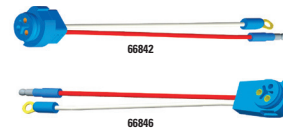
42153 - Chrome  
42152 - Black



## STOP / TAIL / TURN THREE-WIRE PLUG-IN PIGTAILS FOR MALE-PIN LAMPS

Dual function for S / T / T lamps. O-ring seal resists moisture and corrosion. Quality ULTRA-BLUE-SEAL® construction. Grease grooves for additional sealing protection.

66815 - 6" Long, Ground Return System, Slim-line .180 Male  
66816 - 6" Long, Ground Return System, 90° Plug, Slim-line .180 Male



## TWO-WIRE PLUG-IN PIGTAILS FOR MALE-PIN LAMPS

Straight-in pigtail. Single function. O-ring seal resists moisture and corrosion. Quality ULTRA-BLUE-SEAL® construction. Grease grooves for additional sealing protection.

66842 - 10" Long, Chassis Ground, Slim-line .180 Male  
66846 - 10" Long, Chassis Ground, 90° Plug, Slim-line .180 Male



## ADAPTER PLUGS

Female to male pin lamp termination, and male to female pin lamp termination

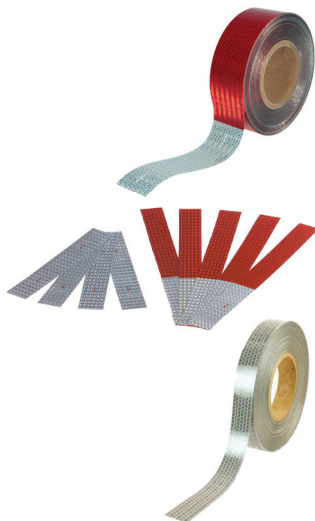
66836 - 6" Long, Female Pin to 90° Male Pin Lamp Termination  
66830 - 6" Long, Female Pin to Male Pin Lamp Termination



## ULTRA-SEAL CORROSION-PREVENTIVE SEALANT

Cost-effective product prevents rust and corrosion • Good mechanical stability • Added tackifiers improve adhesion and resistance to washout • Has a 25% higher non-conductivity rating compared to the competition • Operating range -40°F to 302°F

99180 - 8 oz. (236 ml.) Tub



## CONSPICUITY TAPE

Exceeds DOT requirements • Durable, impact and solvent resistant • Easy installation • Reflects light even in daytime • Bright prismatic appearance

### ALTERNATING 7" SILVER/11" RED:

40650    2" x 150' Roll  
40650-5    2" x 18" (5) Strips  
41160    2" x 150' Roll  
41080    1 1/2" x 150' Roll

### ALTERNATING 6" SILVER/6" RED:

41050    2" x 150' Roll

### SILVER:

40641    2" x 150' Roll  
40641-5    2" x 12" (4) Strips, Poly Bag, 10 Year Warranty

### WHITE:

40701    1" x 150' Roll

FMVSS: DOT-C2 (40650, 40650-5, 41160)

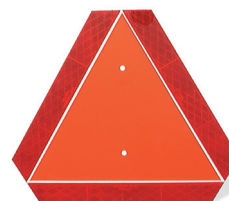


## HEAVY-DUTY SMART ALARM® BACKUP ALARM

Electronics sealed in epoxy for protection against dust, vibration and moisture • Measures ambient noise level and instantly self-adjusts to at least 5 decibels louder • Automatically adjusts to eliminate users confusion on which volume to select • Volume 87 to 112 decibels • Universal mount

73080 - 87 to 112 Decibels, Smart Alarm

Material: Steel  
FMVSS: F  
Finish: Blue  
Voltage Amp: 12V - 24V / .4A



## SLOW-MOVING VEHICLE EMBLEM

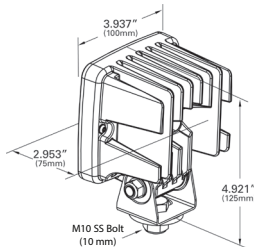
13 3/4" yellow-orange center for daytime warning • Outer 1 5/8" red reflex border for nighttime warning

71152 - Orange & Red

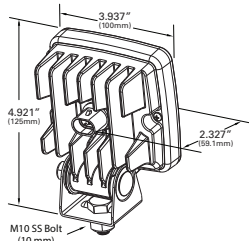
Material: Acrylic/ABS  
SAE: J943a, ASAE: S276.3  
Bracket: 43325, 43335



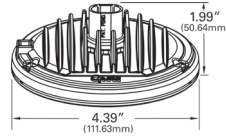
# Dimensions - Lamps, Brackets, and Grommets



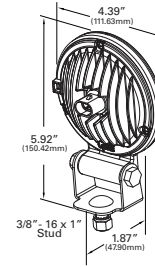
**TRILLIANT®  
CUBE 2500**



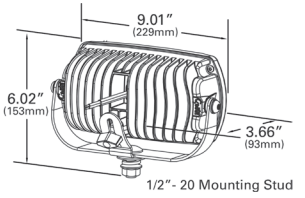
**TRILLIANT®  
CUBE 1200**



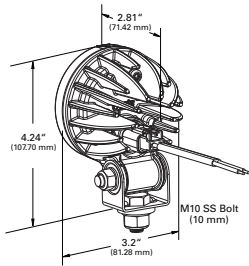
**TRILLIANT® 36  
LED BULB**



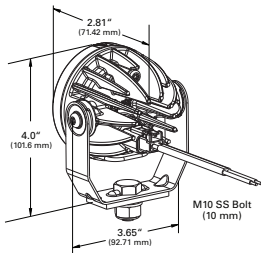
**TRILLIANT® 36  
BRACKETED**



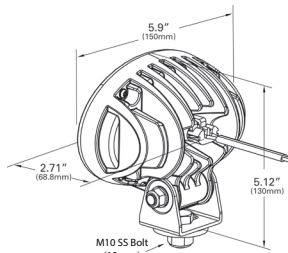
**TRILLIANT®**



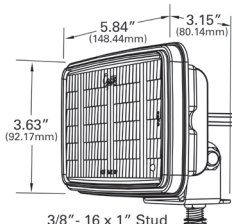
**TRILLIANT® 26  
PENDANT MOUNT**



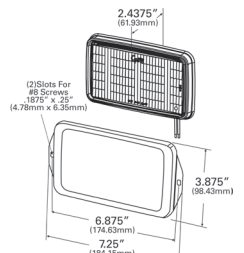
**TRILLIANT® 26  
PINCH MOUNT**



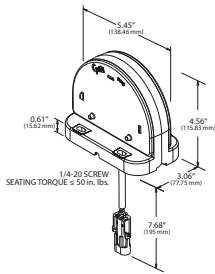
**TRILLIANT® OVAL**



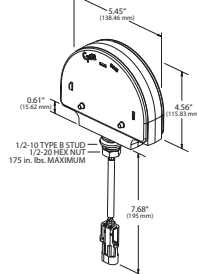
**TRILLIANT® MINI**



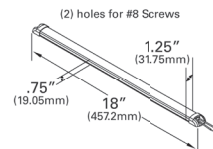
**TRILLIANT® MINI  
FLUSH MOUNT**



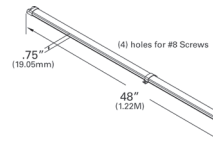
**WARNING AND  
STOP/TAILO  
SURFACE  
MOUNT LAMPS**



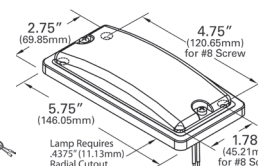
**WARNING AND  
STOP/TAILO  
PEDESTAL  
MOUNT LAMPS**



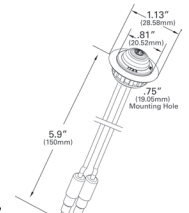
**18\"/>**



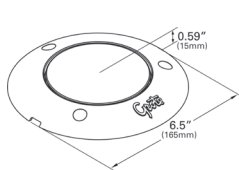
**48\"/>**



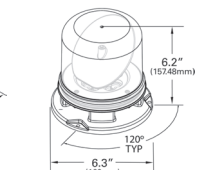
**RECTANGULAR LED  
LAMP**



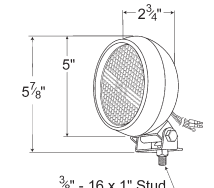
**SMALL ROUND  
STEPWELL  
LAMP**



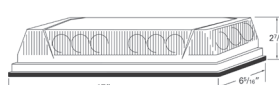
**S100**



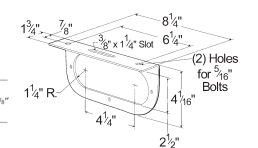
**ROTO LED™  
CLASS I LED  
HYBRID BEACON**



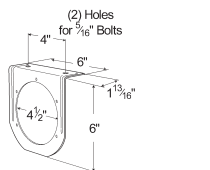
**LED STROBE  
LAMP IN RUBBER  
HOUSING**



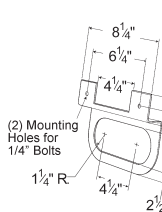
**17\"/>**



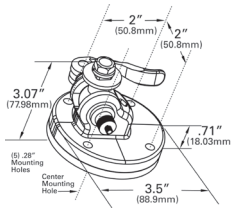
**MOUNTING  
BRACKET FOR  
OVAL LAMPS**



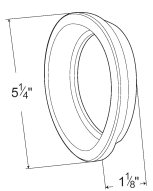
**MOUNTING  
BRACKET FOR  
4\"/>**



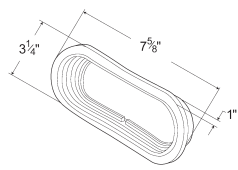
**"Z" MOUNTING  
BRACKET FOR  
OVAL LAMPS**



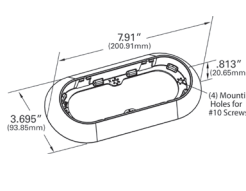
**ADJUSTABLE  
BRACKET FOR  
TRILLIANT®**



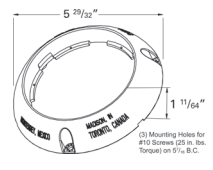
**GROMMET  
FOR 4\"/>**



**GROMMET FOR  
OVAL LAMPS**











**SURFACE MOUNT  
SNAP-IN FLANGE  
FOR OVAL LAMPS**



**SURFACE  
MOUNT  
BRACKET FOR  
4\"/>**

# Work Lamp Connection Guide

	 <b>Deutsch</b>	 <b>AMP Superseal</b>	<b>Hardwire Blunt Cut</b>	<b>Spade/Screw Terminals</b>
 <b>Trilliant® Cube</b>	63F21, 63F31, 63F41, 63F51, 63E21, 63E31, 63H31,	63F61, 63F71, 63981, 63991		
 <b>Trilliant® Oval</b>	63J21, 63J31, 63G01, 63G11	63J01, 63J11, 63F81		
 <b>Trilliant® Mini</b>			All Part Numbers	
 <b>Trilliant®</b>			All Part Numbers	
 <b>Trilliant® 26</b>	64E01, 64E11, 64G01, 64G11			
 <b>Trilliant® 36</b>	63H01, 63H11	63971, 63H81, 63861, 63871		63821, 63831



68610 - Deutsch  
Pigtail, Blunt Cut



68580 - AMP SuperSeal  
Pigtail, Blunt Cut

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Fax: 812-265-8440  
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