



The **BriLux™ V2-XRE** utilized Cree's new **XR-E** series power LED in the **MR16** base lamp that is capable of producing up to 180 lumens of white light with only 3W of power, offering the highest lumens per watt spotlight in the industry.

With our "Cool Beam" thermal solutions, specially designed for Cree's high performance LED, we are able to maximize the light output of our 3W V2-XRE series spotlight while maintaining a very low heatsink temperature of about 58°C. The V2-XRE series features one piece of XR-E power LED.

BriLux™ V2-XRE series MR16 retrofits into standard MR16 fixtures and housings, hence enables immediate replacement without any additional adjustments.

The **BriLux™ V2-XRE** series is available in 3W power rating. They are also available in three distinct white Kelvin temperatures: 3500K (warm white), 5000K (natural white) and 6000K (cool white). Other custom colors are also available.

The new LED driver is capable of providing 700mA constant current efficiently to the LED. Coupled with the highly optical efficient Cree LED, the heat generated by the lamp is lower and thus reducing the overall temperature of the product. This improvement makes the spotlight safer to touch and further enhance the product life to more than 50,000 hours.

BriLux™ V2-XRE series MR16 is equipped with optical grade polycarbonate collimator that allows highest light transmission at 60° beam angle.



Features

- Light source: 3W Cree XRE power LED
- Source life: More than 50,000 hours
- Low heat, less than 58°C for 3W
- No UV or IR light radiation
- Highest optical efficiency: 50lm/watt
- Homogeneous illumination
- Sleek designed heat fins with excellent thermal efficiency
- 3W MR16 can achieve directional light output equal to 30W halogen lamp yet consume 80% less power
- Reverse polarity protection
- Safety Standard: **CE**
- 1 year limited warranty (see page 7)
- Works with 12V AC/DC lighting systems

Typical Applications

- Landscape Accent/Spot lighting
- Architectural Lighting
- Display Case Accent
- Artwork Lighting
- Mood Lighting/General lighting





TRIM-POT

BriLux™ V2-XRE Series

PRODUCT SPECIFICATIONS

LIGHT SOURCE	1X 3W Cree XRE power LED
OPTICS	Optical grade PC lens
LENS DIAMETER	28 mm
BEAM ANGLE	60° (Very Wide Spot)
MIN BEAM DISTANCE	15cm (6 inches)
RENDERING INDEX (Ra)	>70 (for cool white) >80 (for warm white)
TOTAL LENGTH	53.4 mm (including pins)
WEIGHT	38 g
HOUSING	Molded aluminum with chrome or black anodize finish, 5 cm (2") diameter
BASE	GX5.3 pins
DIMMABILITY	Not Dimmerble

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE	Ambient: -20°C to 40°C; Surface of Lamp: 50°C to 60°C
HUMIDITY RANGE	0 to 95% non-condensing humidity

ELECTRICAL SPECIFICATIONS

VOLTAGE REQUIREMENT	12V AC or DC
POWER CONSUMPTION	3.6W
TRANSFORMER	Low voltage magnetic to provide 12V AC or 12V DC

DO NOT CONNECT LAMP TO ELECTRONIC TRANSFORMER

PRODUCT DIMENSIONS (mm)

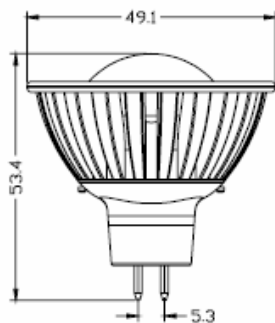


Fig. 1. MR16 side view

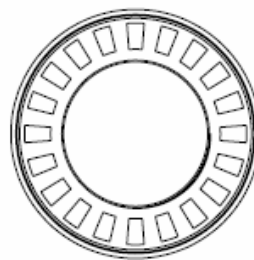


Fig. 2. MR16 Top view

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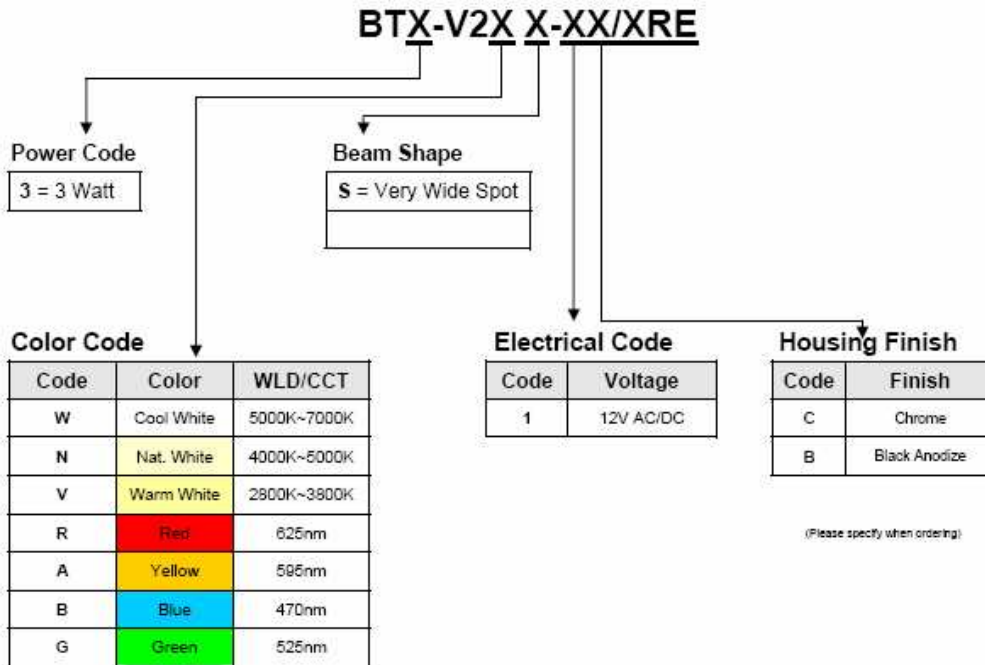
tel.: 0048/12/387-06-01
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kom.: 0600-368-887



TRIM-POT

BriLux™ V2-XRE Series

PRODUCT ORDERING CODE



3W MR16 PRODUCT CODE

ORDER CODE	Color	Wavelength or CCT (nm/K)	Operating Voltage	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 1m (Lux)	BEAM ANGLE
BT3-V2WS-1X/XRE	Cool White	5000K~7000K	12V AC/DC	1X3W	125 lm	120	60° ±2°
BT3-V2NS-1X/XRE	Nat. White	4000K~5000K			110 lm	N.A.	
BT3-V2VS-1X/XRE	Warm White	2800K~3800K			100 lm	N.A.	

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Illumination Characteristics ($T_a=25^{\circ}\text{C}$)

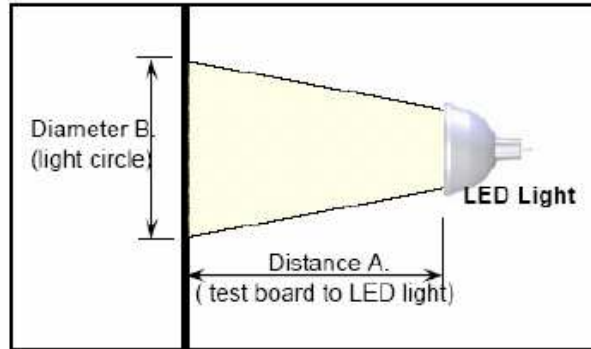


Fig 1. Set up for Illuminance Measurement

3W SpotModel

Distance		Typical Illuminance Measured at Center of Beam (Lux and foot-candle)									
Dist A (cm/inch)	Dia. B (cm/inch)	Cool White		Nat. White		Warm White					
		Lux	fc	Lux	fc	Lux	fc				
30/11.80	36/14.17	1260	120	N.A.	N.A.	N.A.	N.A.				
50/19.70	80/23.82	500	46	N.A.	N.A.	N.A.	N.A.				
100/39.40	120/47.24	100	12.5	N.A.	N.A.	N.A.	N.A.				
150/59.00	180/70.87	80	5.9	N.A.	N.A.	N.A.	N.A.				
200/78.70	240/94.48	38	3.5	N.A.	N.A.	N.A.	N.A.				

Note: a) Center beam lux is measured with Digital Lux Meter (Model TES-1334A)

b) fc: foot-candle

Typical Electrical Characteristics at $T_a=25^{\circ}\text{C}$

3W Model

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (AC)	V_{AC}	100	—	240	V
LED Forward Current	I_f	—	700	—	mA
Estimated Life ¹⁾		—	50,000	—	hours
Optimized Body Temperature (3W LED)	T	—	56	65	$^{\circ}\text{C}$



Optional Accessories

- 1) MR16 Connector without clip – Part No.: 21101

Approval: VDE, UL

Rating: 125V 100W/250V 4A

Material: Porcelain



- 2) MR16 Connector with spring clip – Part No.: 21105

Approval: VDE, UL

Rating: 125V 100W/250V 4A

Material: Porcelain



Optional Power Supply (Recommended for LED MR16 lamps)

- 1) 60W Ferro Magnetic Power Supply – Part No.: PS-60W-12

Specifications:

Input: AC110V or AC220V 50/60 Hz

Output Voltage: AC12V

Output Current: 5A max

Power: 60W max

Weight: 1.2Kg

Casing Size: 120X80X65 mm

Remarks: Other wattages is available, please inquire with our sales team



- 2) 60W Switching Power Supply – Part No.: SS-60W-12

Specifications:

Input: AC110V or AC220V 50/60 Hz

Output Voltage: DC12V

Output Current: 5A max

Power: 60W max

Weight: 0.5Kg

Casing Size: 150X96X40 mm

Remarks: Other wattages is available, please inquire with our sales team



60W Power Supply Installation Note:

3W MR16 – Maximum 15 lamps connection per power supply