

TOKISTAR

PRODUCT GUIDE
EXHIBITOR LED
EX SOCKET SYSTEM



2F JS Progre, 4-1-23, Heiwajima,
Ota-ku, Tokyo 143-0006, Japan
TEL : +81-3-5763-6121
FAX : +81-3-5763-6130
www.toki.co.jp

2023.2 Ver. 1



#01 MARINE & WALK YOKOHAMA



EXHIBITOR LED

EXBK-500-VI-WW-G60C

▶▶ Page 3-5

#02 PABLO COFFEE
Shinsaibashi OPA & OPA Kireikan



EXHIBITOR LED

EXBK-100-VI-WW-S45C (Custom spacing)

Design : Supermaniac Inc.

Lighting Design : L.GROW lighting planning room Inc.

▶▶ Page 3-5

#03 Maruhon MakiArt Terrace
Ishinomaki Cultural Complex



EX SOCKET SYSTEM

EXSS-L4000-WH (Custom white wire)

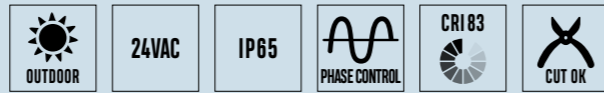
Architectural Design : Sou Fujimoto Architects

Lighting Design : LIGHTDESIGN INC.

Photographer : Akito Goto

▶▶ Page 7-10

EXHIBITOR LED



Voltage = 24VAC
 Wattage = 1.4W/LED
 Weight = EXBK-300 : 270g/m
 EXBK-500 : 210g/m
 Main Materials = PBT, PVC & PC
 Cable = AWG12 x 2 (AWG12 : eq. 3.3mm²)

EXBK-□□□-□□-□□-□□□□

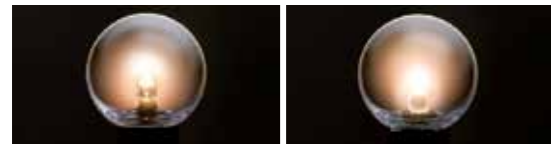
LED Spacing	LED Color	Globe Style	Globe Color
300 : 300mm	VI-WW : 2400K	S45 : S φ45	C : Clear
500 : 500mm	UB-WW : 2400K	G45 : G φ45	F : Frosted
	VI-27K : 2700K	G60 : G φ60	R : Red
	UB-27K : 2700K		G : Green
	VI-30K : 3000K	※S45 and G45 in Clear and Frosted only	A : Amber
	UB-30K : 3000K		B : Blue

※Custom spacing is available
 ※VI = Virtual Incandescent
 UB = Ultra Bright

Catalog#	Power	LED Q'ty/run
EXBK-300-VI-__-__	4.7W/m	2 ~ 120 LEDs
EXBK-500-VI-__-__	2.8W/m	2 ~ 100 LEDs
EXBK-300-UB-__-__	4.7W/m	2 ~ 120 LEDs
EXBK-500-UB-__-__	2.8W/m	2 ~ 100 LEDs

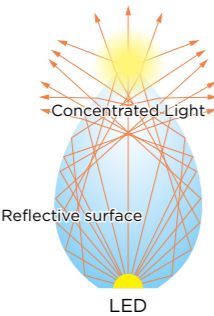
System Features

Point 01 A Classic and Refined Appearance

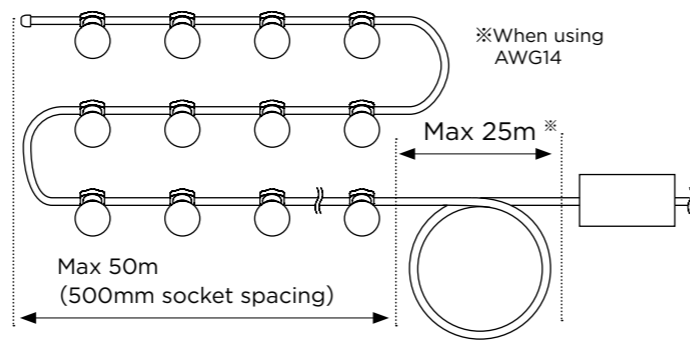


Incandescent lamp VI LED

By using virtual filament technology, we have developed our Virtual Incandescent™ (VI) LEDs. These LEDs do a remarkable job of emulating traditional incandescent lamps. Our proprietary Light Source Moving Technology transfers light to tip of the lens.



Point 02 Dependable Design and Construction



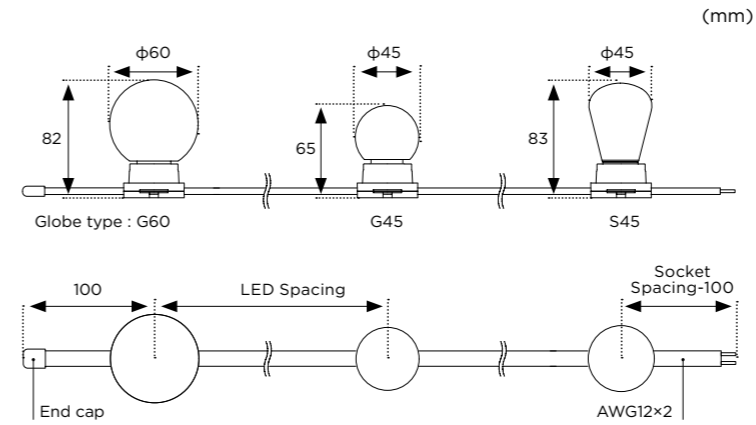
Exhibitor sockets are permanently sealed to flexible cable at on center intervals. Continuous lengths of Exhibitor with up to 120 LEDs at 300mm on center (36m) can be used in large scale applications

Point 03 Exhibitor is wet-location listed with an IP65 rating

The Exhibitor Series uses polycarbonate globes and has been safety tested for wet-locations. The globes are weather resistant, will not crack and safe to the touch. Exhibitor fixtures have been prominently featured in theme parks worldwide.

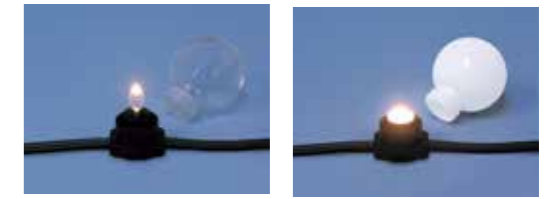


Specifications



Light Sources

VI : Virtual Incandescent UB : Ultra Bright



Not for use with Frosted Globes

Globe Selection

Clear



G60C G45C S45C

Frosted



G60F G45F S45F

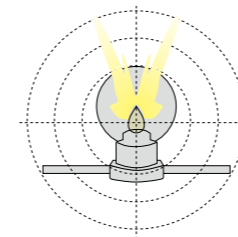
Colors



G60R Red G60G Green G60A Amber G60B Blue

Light Distribution

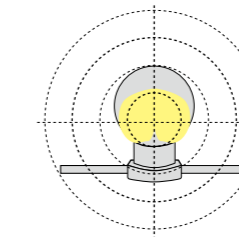
EXBK-300-VI-WW-G60C
 EXBK-500-VI-WW-G60C



Max 16.3 [cd]
 300mm = 133 lm/m
 500mm = 80 lm/m

Note : attenuation due to globes is not taken into account.

EXBK-300-UB-WW-G60F
 EXBK-500-UB-WW-G60F



Max 4.46 [cd]
 300mm = 150 lm/m
 500mm = 90 lm/m

Note : attenuation due to globes is not taken into account.

LED Colors, lm

VI-WW	: 40 lm/LED
UB-WW	: 45 lm/LED
VI-27K	: 42 lm/LED
UB-27K	: 48 lm/LED
VI-30K	: 44 lm/LED
UB-30K	: 50 lm/LED

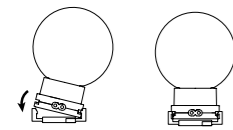
Instructions

Surface Mounting with Disks



Exhibitor Series can be surface mounted to structures using mounting disks. One disk is required for mounting each socket. The socket can be snapped into the disk first, and the entire assembly screwed in place to the structure.

1. Exhibitor fixture snaps directly into the Mounting Disk and locks in place.



Mounting disk

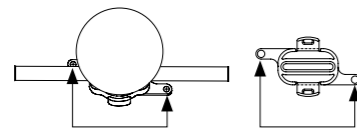
EXBK-MD/5 | Mounting disks

※ 5pcs/set

※ One Mounting disk is required for each socket.

Please check the required number of LEDs before placing an order.

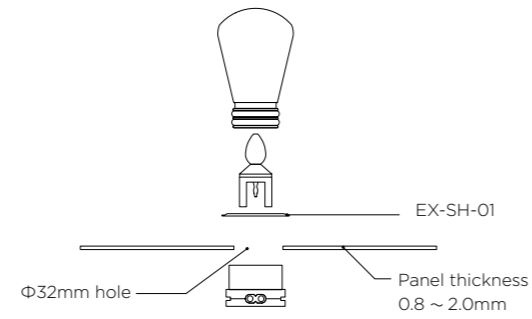
2. Mounting Disks attach with screws.



Screw holes

Panel-Extrusion Mounting with Socket Holder

For installations to flat panels or extrusions up to 0.8 ~ 2.0mm, we offer stainless-steel socket holders. The socket assembly is inserted from below, then the socket holder is pressed in place from above.



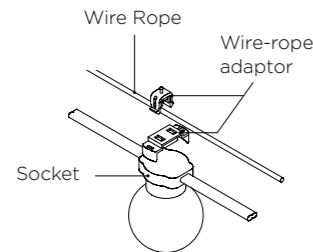
EX-SH-01/10 | Socket holders

※ 10pcs/set

※ Socket holders are required for each LED.

Please check the required number of LEDs before placing an order.

Festoon Mounting with Wire-rope Adaptors



For festoon applications to a catenary cable, our wire-rope adaptors securely hold each socket in place to a 3 ~ 5mm diameter wire rope.

Wire rope and all the associated mounting hardware is not provided with the system.

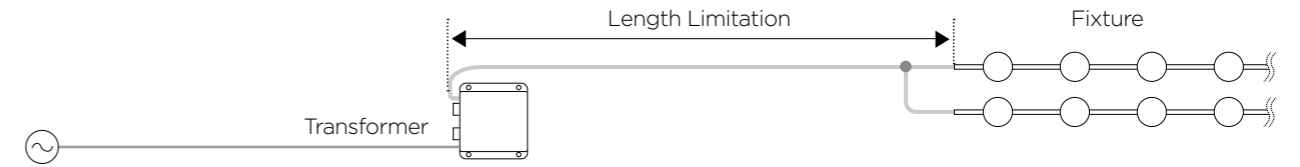
EXBK-MDW/5 | Wire-rope adaptors

※ 5pcs/set

※ A wire-rope adaptor is required for each socket.

Please check the required number of LEDs before placing an order.

Wiring Diagram



Recommended Lead Wire Size and Length Limitation

The distance from the power supply to the fixture, and the load of the fixture, will determine the proper size of secondary wire. Fixtures require an individual lead. If additional wire needs to be attached, refer to the recommendation in this chart.

Wire Size	Total Length
AWG14	Within 25m
AWG12	Within 44m

It is possible to connect the lighting fixtures and a remotely set power supply with an appropriate lead wire. Refer to the table for lead wire sizes and length limitation. The extension distance is a guideline distance for the fixture's maximum capacity. Depending on the type of power supply, lead wire, and number of LEDs, it may be possible to extend it further. Please contact us for more information.

⚠ PRECAUTIONS

- Do not extend the lead wire too much, as it is very dangerous.
- Please contact us if you want to extend beyond the length of the table.
- Select a cable with a capacity, according to the site conditions. Select a cable that conforms to water and weather resistance standards, according to the site environment.

Power Supplies

Exhibitor LED series operate with 24VAC magnetic transformer.

Electronic transformers may not be used.

The primary input to the transformer may be dimmed from industry standard phase-control dimmers, also referred to as triac dimmers. While most show very favorable results, there may be compatibility issues with certain makes and models.

The following guidelines should be taken into account in selecting the proper dimming device:

1. Make sure the dimmer used is suitable for use with magnetic low-voltage transformers, not electronic low-voltage transformers.
2. Some dimmers have a minimum-load requirement. Since LEDs consume so little power, this should be given serious consideration in the selection of the dimmer.
3. Some dimmers not only require a minimum load, but may not function properly at certain levels/loads because they do not interpret an LED load as they do a standard incandescent load. In such cases, some dimming companies offer a "synthetic load" device to resolve this issue. Check with the dimmer manufacturer in such cases.
4. Tokistar has evaluated a wide range of dimmers, but cannot promise perfect dimming results with every make and model on the market. Additionally, manufacturers of dimmers occasionally make changes to their specifications without notice. Some older generations of a certain model might actually work more fluidly than a newer generation.
5. If there is any question on compatibility, consult with us on a case-by-case basis. We work closely with many dimming companies, and can provide samples of our fixtures for compatibility testing if necessary.

⚠ PRECAUTIONS

1. Read all instructions completely before beginning installation.
2. Turn off electricity before beginning installation.
3. All wiring is to be performed by a qualified electrician.

4. Installation must comply with the National Electrical Code, or related applicable regulations.
5. Turn main supply to magnetic down transformer on only after all connections have been made and tested.
6. Use only appropriate magnetic down transformer.

EX SOCKET SYSTEM



Voltage = 24VAC
 Wattage = 1.4W/LED
 Weight = (Refer to each item)
 Main Materials = PBT, PVC & PC
 Cable = AWG18 x 2 φ5.8mm (AWG18 : eq. 0.75mm²)

System Features

Point 01 The Standard is ideal for thin panel installation

EXSS-L□□□ (Standard)

The Standard is for both outdoor and indoor use. It is ideal for installation on thin panels such as built-in fixtures, signboards (panel mounting method), and metal panels.



Point 02 Ceiling and Panel mounted fixtures have a refined appearance

EXSS-CMPM/□ (NEW) (Ceiling & Panel Mounting)

Dedicated design for ceiling and panel mount applications. A small-diameter fixture trim provides a finished look.



Point 03 This newly launched Cord Pendant creates a decorative canopy of light

EXSS-CP/□-WT/□ (NEW) (Cord Pendant)

Exclusively designed as a Cord Pendant. The decorative mounting plate can easily be installed in ceiling applications. The socket cover has a classical, refined finish. It is possible to produce a space with a feeling of floating in indoors.



Belle Vie KOHRIYAMAKAN "WELLE"

EXSS-CMPM/B, EX-VI-WW & EXGL-G60C
 Interior Design : THE WHOLEDISIGN INC.
 Lighting Design : Mantle Inc.

※ Custom-made wire lengths are available. Please contact us for more information.

How to Order

A system is comprised of "Lighting Fixtures" + "LEDs & Globes" + "Options". Please follow the 3 steps below.



Step 1 Select Lighting Fixtures

For both Outdoors and Indoors
Standard

EXSS-L□□□

Wire length
 300 : 300mm
 1500 : 1500mm



Weight = L300 : 60g
 L1500 : 110g

For both Outdoors and Indoors

Ceiling & Panel Mounting (NEW)

EXSS-CMPM/□

Trim color
 B : Black
 W : White



Material = Trim :
 Stainless steel
 Weight = 110g

For Indoors

Cord Pendant (NEW)

EXSS-CP/□-WT/□

Mounting plate color
 B : Black
 W : White

Decorative cover color
 A : Brass, plated
 B : Black, painted
 W : White, painted



Material = Mounting plate & Decorative cover :
 Steel
 Weight = 160g

※ The wire length is 1500mm.
 ※ Custom-made wire lengths are available.
 ※ The decorative cover can also be configured in combination with the Standard.

Step 2 Select LEDs and Globes

We recommend using VI LEDs with Clear globes and UB LEDs with Frosted globes.

EX-□□-□□

LED Color

VI-WW : 2400K
 UB-WW : 2400K
 VI-27K : 2700K
 UB-27K : 2700K
 VI-30K : 3000K
 UB-30K : 3000K

EXGL-□□□□

Globe Style & Color

G45C : Φ45 Clear
 G45F : Φ45 Frosted
 G60C : Φ60 Clear
 G60F : Φ60 Frosted

Light Sources

VI : Virtual Incandescent

UB : Ultra Bright



Voltage : 24VAC
 Wattage : 1.4W/LED



Voltage : 24VAC
 Wattage : 1.4W/LED

Globes

Clear



EXGL-G60C EXGL-G45C

Frosted



EXGL-G60F EXGL-G45F

Step 3 Options

EXGL-G45_	Replacement globes
EXGL-G60_	Replacement globes

Please specify the symbol of _

C : Clear F : Frosted

Socket holders for the Standard (for thin panel)

EXSS-SH	Socket holder (panel thickness 0.8~6.0mm)
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※ Required for the number of LEDs.

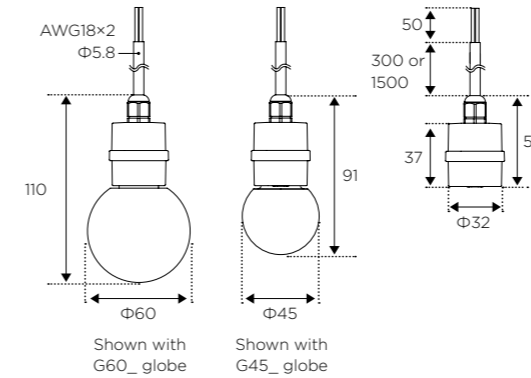
The mounting parts require when installing the Standard lighting fixture (EXSS-L_) on a thin panel.

If the panel thickness exceeds the above, select the Ceiling & Panel Mounting lighting fixture (EXSS-CMPM/_).

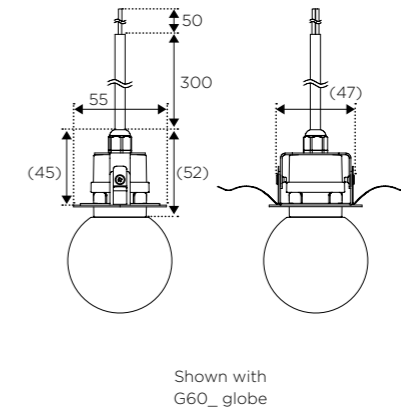
Specifications

(mm)

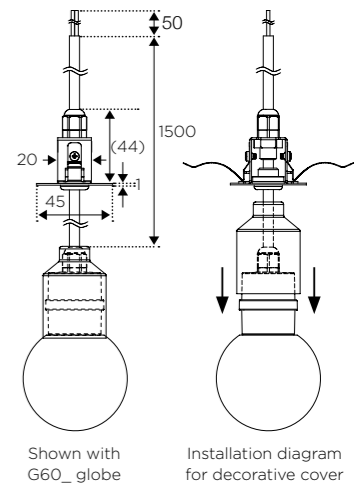
Standard



Ceiling & Panel Mounting

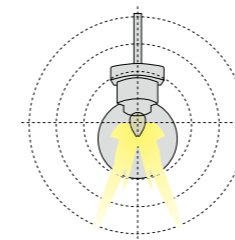


Cord Pendant



Light Distribution

EXSS-L300 / EX-VI-WW / EXGL-G60C

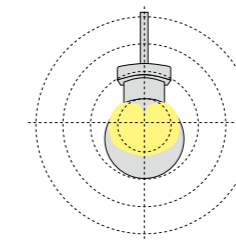


Max 16.3 [cd]

300mm = 133 lm/m
 500mm = 80 lm/m

Note : attenuation due to globes is not taken into account.

EXSS-L300 / EX-UB-WW / EXGL-G60F



Max 4.46 [cd]

300mm = 150 lm/m
 500mm = 90 lm/m

Note : attenuation due to globes is not taken into account.

LED Colors, lm

VI-WW : 40 lm/LED

UB-WW : 45 lm/LED

VI-27K : 42 lm/LED

UB-27K : 48 lm/LED

VI-30K : 44 lm/LED

UB-30K : 50 lm/LED

Instructions

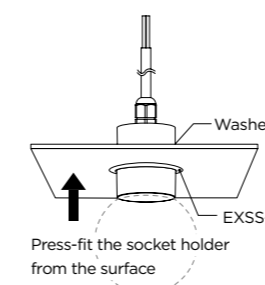
The Standard for panel mounting installation

The socket holders are press-fit fastening parts. Provide a 32mm ø hole, then insert the socket. Use the socket holders when mounting in thin panels.

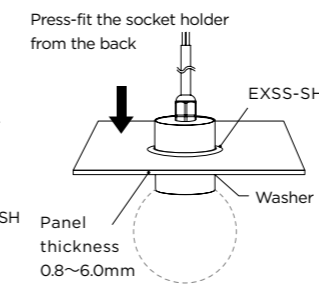
EXSS-SH	Socket holder
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※ 1pc/unit

When press-fitting from the surface



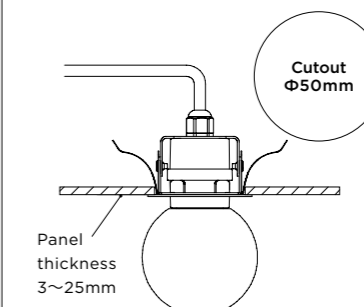
When press-fitting from the back



Cutout Φ32mm

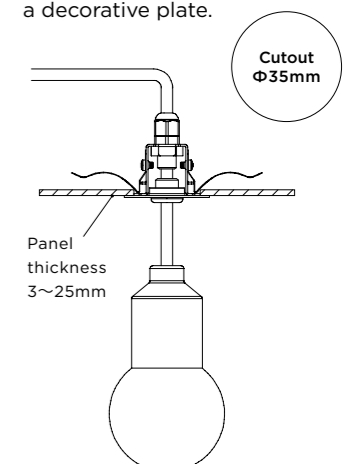
Ceiling & Panel Mounting

Panel thickness can be from 3mm, up to 25mm with 2 pasted boards.

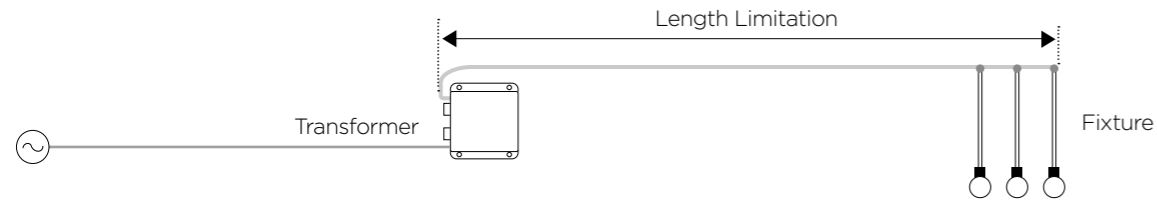


Cord Pendant

This Cord Pendant is inserted into the 35mm Φ ceiling opening. The flange becomes a decorative plate.



Wiring Diagram



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