

# 28

copper

An innovative fabrication process that manipulates both the temperature and the direction of air flow into blown glass. The result is a slightly distorted sphere with an interior landscape of satellite shapes, including an opaque milk glass diffuser that houses either a low-voltage xenon or LED lamp.

The flexible copper suspension provides a different compositional reading and a range of sculptural forms.



28  
copper



Lamping

1.8w LED or 20w xenon

Material

Blown glass, flexible copper tubing, electrical components, copper hardware, and white powder coated canopy.

Patent

US Patent # D687,740  
EU Patent # 001695834-001 to 004

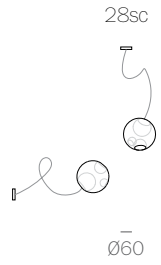


±165  
(6.5")

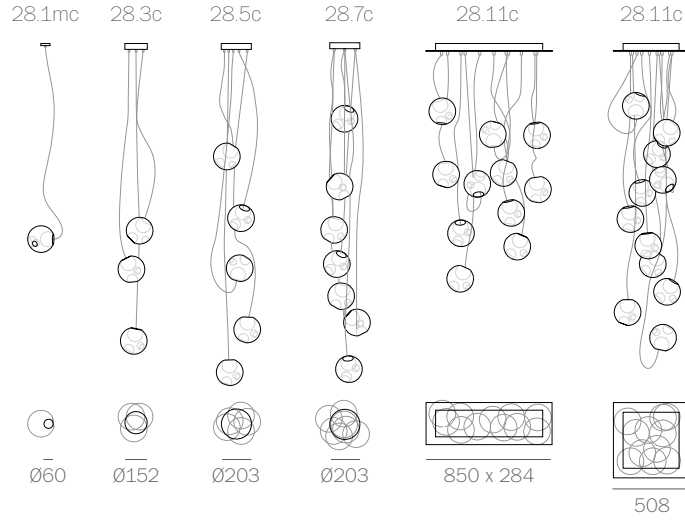
# 28

copper

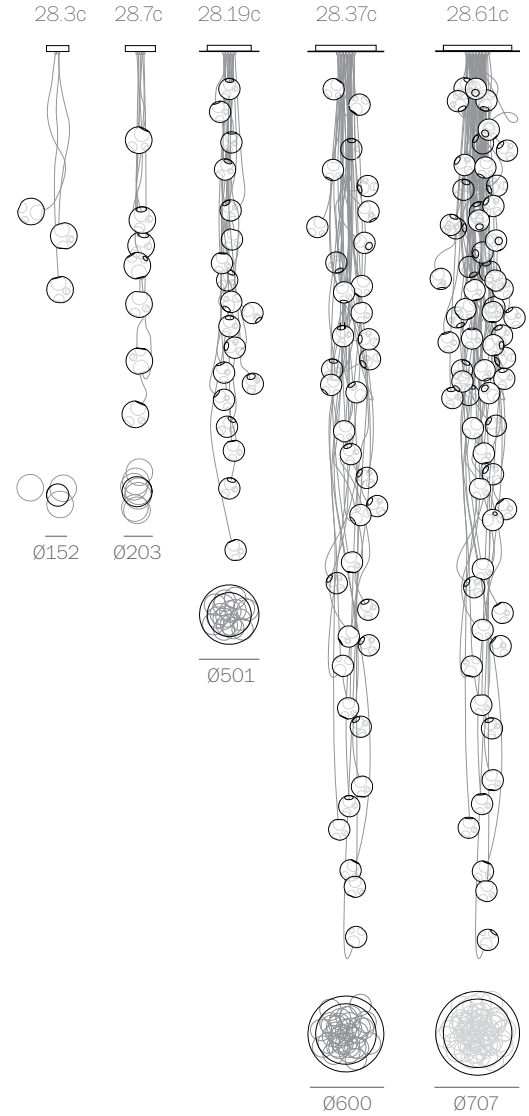
Surface Mount  
Wall/ceiling



Fixed Lengths  
Random canopies.

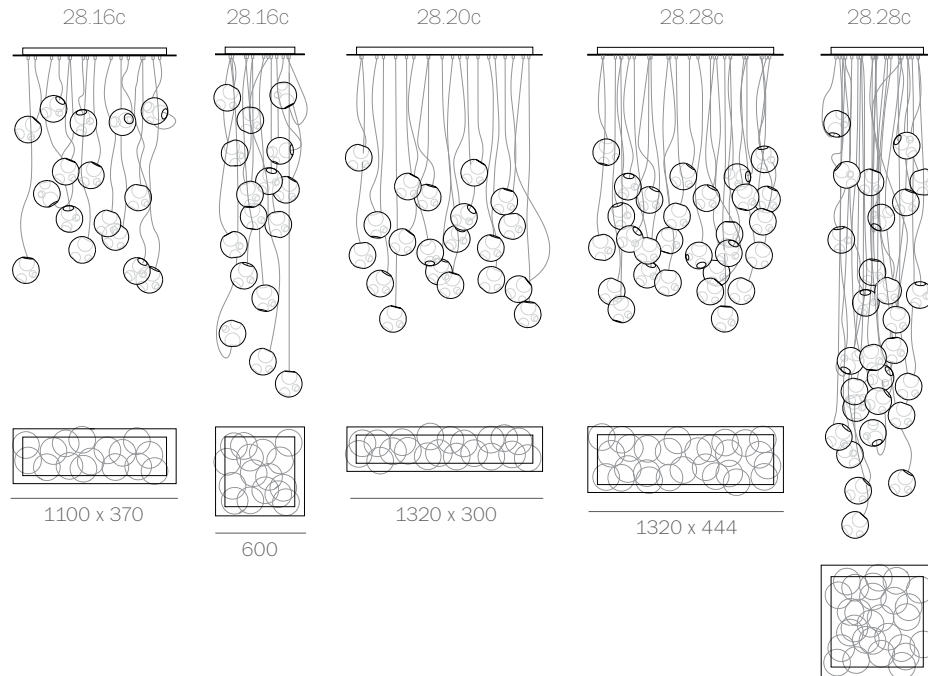


Fixed Lengths  
Cluster canopies.



fixed length  
up to  
3000 (10')  
standard

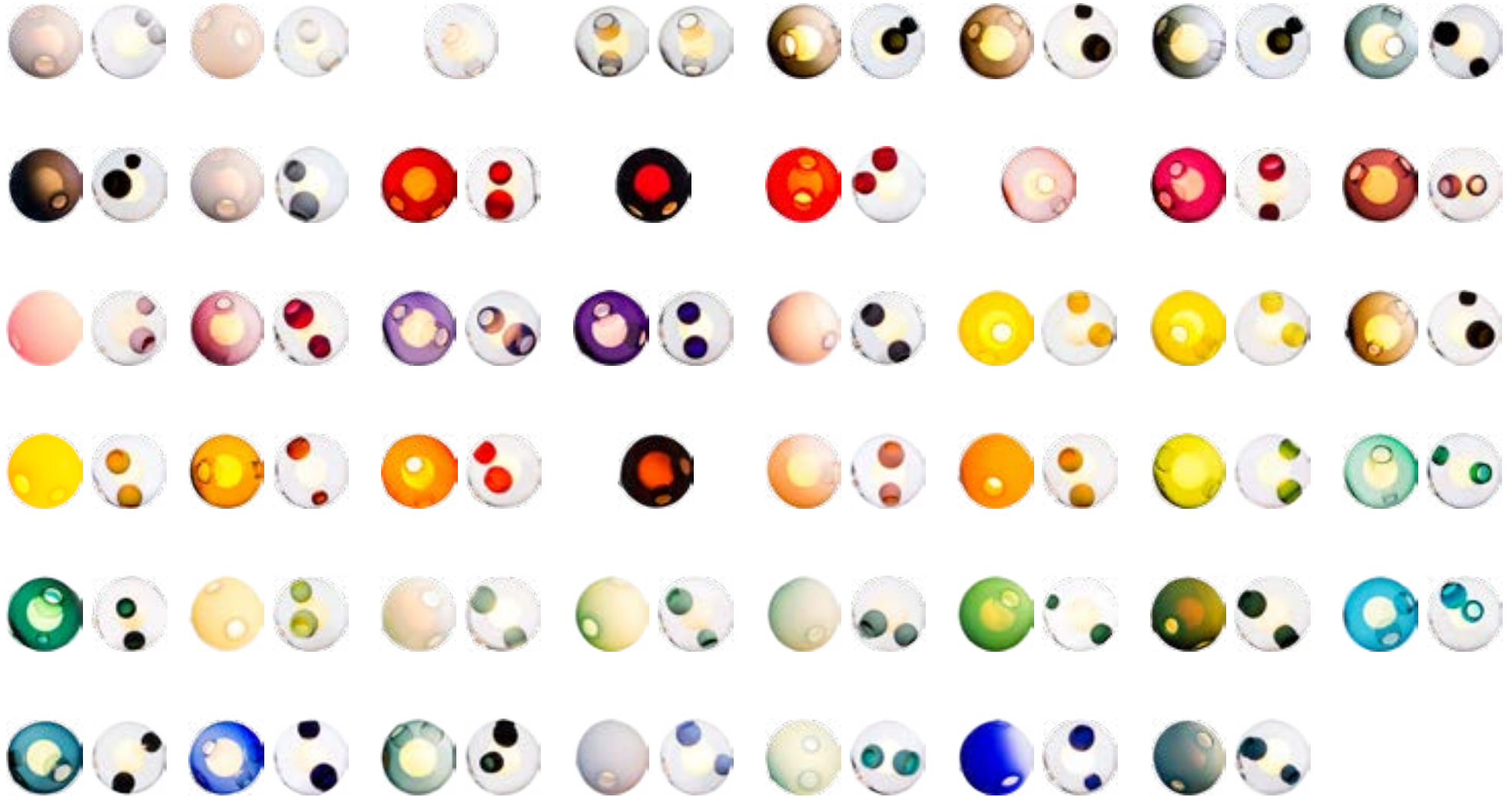
fixed length  
up to  
9900 (32')  
custom



# 28

copper

The 28 pendant comes in 90 different colours. Please visit the [28 colour app](#) for pendant colour compositions.



# 28

copper





28  
copper



28  
copper



**BOCCI**

© 2018, Bocci Design and Manufacturing Inc.  
Any inquiries should be directed to: info@bocci.ca

Omer Alber 2009

www.bocci.ca



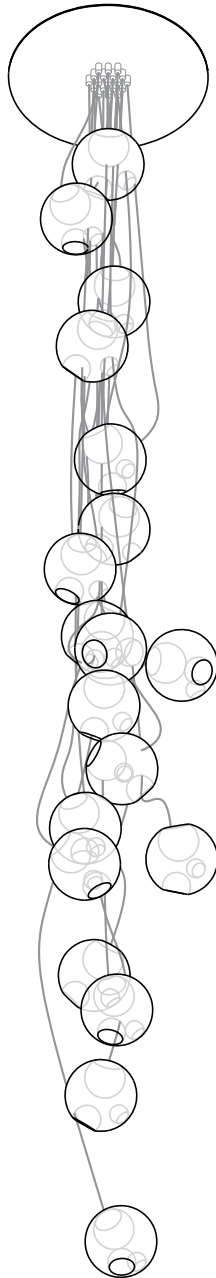
28  
copper

Designed by Omer Arbel, 2009  
www.bocci.com

**BOCCI**

© 2018, Bocci Design and Manufacturing Inc.  
Any inquiries should be directed to: [info@bocci.ca](mailto:info@bocci.ca)



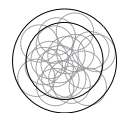


up to 3000  
(10')  
standard

up to 9900  
(32')  
custom



±165 (6.5')



371 (14.6')

501 (20')

approx 49.5kg (109lb)

PENDANTS: nineteen

MOUNTING: white powder coated round canopy 501mm (20') in diameter x 53mm (2") deep

LAMPING: 1.8w LED or 20w xenon

CABLE: fixed lengths. 3000mm (10') standard / up to 9900mm (32') maximum

MATERIALS: blown glass, flexible copper tubing, electrical components, copper hardware, white powder coated canopy

WEIGHT: approximately 49.5kg (109lb)

TRANSFORMERS: integral

## DESCRIPTION

28.19c is a cluster configuration of nineteen 28 pendants hung from a round canopy. The cluster designation in this configuration refers to the tight spacing of the copper jack connectors at the canopy, and not the composition of the pendants, which are random lengths. The result is an ambient installation or field of light.

28 is an exploration of specificity in manufacturing. Instead of designing form itself, here the intent was to design a system of making that yields form. Individual 28 pendants result from a complex glass blowing technique whereby air pressure is intermittently introduced into and then removed from a glass matrix which is intermittently heated and then rapidly cooled. The result is a distorted spherical shape with a composed collection of imploded inner shapes, one of which acts as a shade for the light source.

The 28 copper series provides a different compositional reading that results from shaping the copper tubing during installation. Pendants can be angled in any direction to provide a range of sculptural forms. The copper will weather and tarnish, registering the passage of time in its patina.

Standard 28s are made with clear glass exterior spheres and milk white interior lamp holder cavities. 28s are possible with infinite versatility in colour compositions, sizes and shapes.

## NOTES

- + Purchase replacement lamps online at [www.bocci.ca/lamps](http://www.bocci.ca/lamps)
- + Unless otherwise noted when ordering, all fixtures will be outfitted to be xenon compatible
- + Preset lengths may have a variance of +/- 50mm (2")
- + As an alternative to a built-in transformer, Bocci recommends mounting transformers remotely in an easily accessible and hidden location for ease of long-term maintenance.

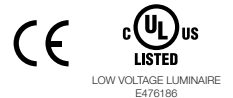
US Patent # D687,740

EU Patent # 001695834-001 to 004

Made in Vancouver, Canada

Vancouver  
sales@bocci.ca  
www.bocci.ca

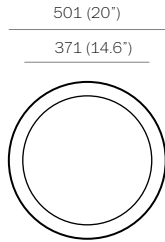
Berlin  
europe@bocci.ca  
www.bocci.ca



CLUSTER

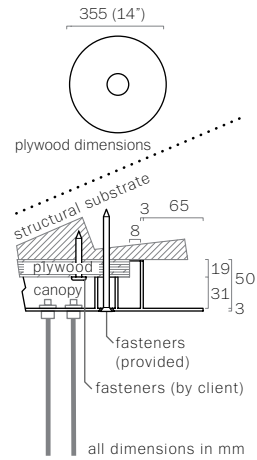
# 28.19c

Design by Omer Arbel  
PRODUCT SPECIFICATION



1

Measure and mark the light fixture canopy position on the ceiling



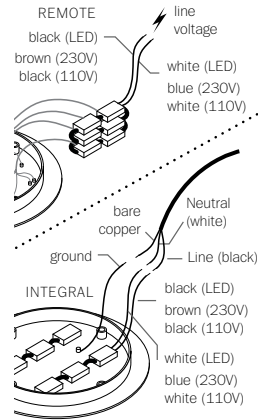
2

Note: The client is responsible for providing a robust 19mm (3/4") plywood backing or wood blocking to securely anchor to the structural substrate.

Connections from the plywood to the structural substrate are the client's responsibility.

Measure the plywood so that it fits within the canopy side walls (refer to detail above).

Anchor the plywood backing to the structural ceiling substrate.



3

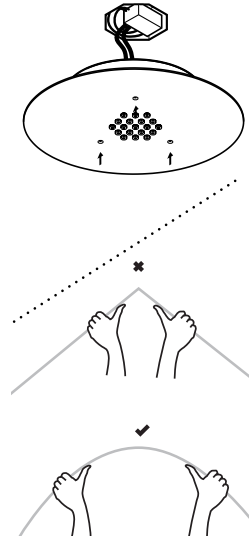
Connect transformers inside the canopy to line voltage.

Xenon (110V) or LED: connect the black wire to black and white wire to white wire.

Xenon (230V): connect black wire to brown wire and white wire to blue wire.

For the ground connection, connect the green wire with yellow stripe to the bare copper wire or green wire in the junction box.

Note: As an option, Bocci recommends mounting transformers remotely in a close, accessible and hidden location for ease of long term maintenance. Installation to be done by certified personnel to insure compliance with the code.



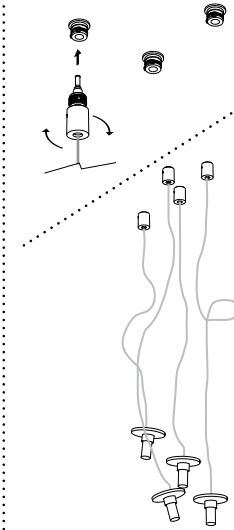
4

Anchor canopy into the plywood backing using the fasteners provided.

Separate the copper tubes according to length.

Very carefully uncoil the copper tube with both hands to avoid kinking.

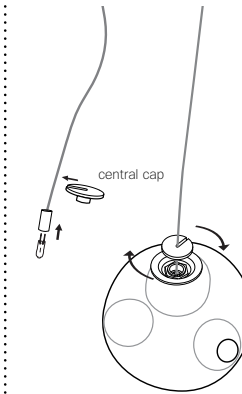
Note: be very careful not to overbend the copper tubes as it will leave a permanent kink that can not be removed.



5

Each copper length terminates in a "headphone jack" type connector, which plugs into a receiving receptacle in the canopy. After plugging in each pendant, turn the threaded sheath into place by hand ensuring that it is adequately tightened. Tools are not required.

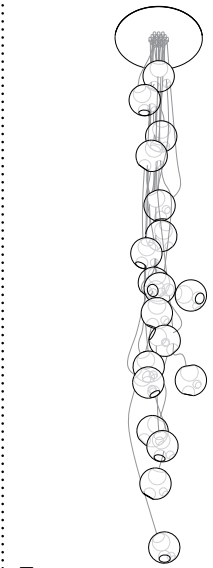
Compose the copper tubing according to the intended design aesthetic.



6

Plug the lamp into the socket. Install 28 pendant by inserting the socket into the opening and then threading the copper cap into the pendant by hand. Do not over tighten.

Note: Once the pendant is added, it will pull the copper downwards. The pendant will try to hang directly below the canopy as the copper is not rigid enough for long horizontal compositions.



7

Clean fingerprints from glass surfaces.

Turn fixture on.

For additional assistance, please contact Bocci:

Vancouver  
sales@bocci.ca  
www.bocci.ca

Berlin  
europe@bocci.ca  
www.bocci.ca

US Patent # D687,740  
EU Patent # 001695834-001 to 004

Made in Vancouver, Canada



CLUSTER

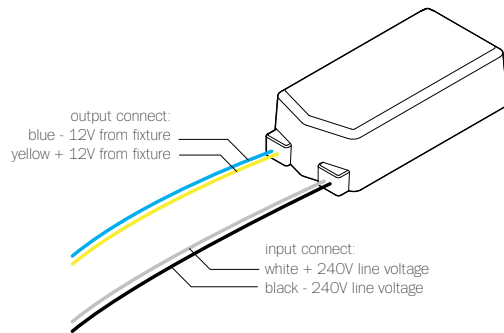
28.19c

Design by Omer Arbel  
PRODUCT INSTALLATION INSTRUCTIONS

© 2017, Bocci Design and Manufacturing Inc. All rights reserved. Any inquiries should be directed to: info@bocci.ca

**BOCCI**

## 120V Transformer



### WH-601E6A-3C

PRIMARY: AC 120V 50/60Hz, 500mA

SECONDARY: 12V AC (10w min. - 60w max.)

LAMPING: 10w lamps: 1-6  
20w lamps: 1-3

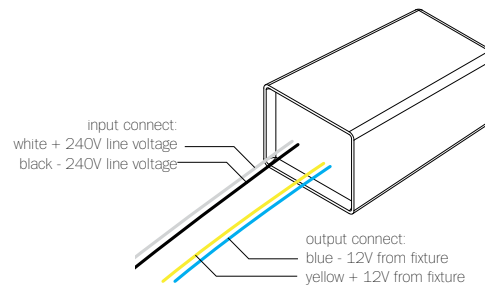
DIMMING: Dimmable using minimum 2 x 10w lamps or 1 x 20w lamp using low voltage electronic and trailing edge dimmers only.

NOTES: Auto stop protected  
Class 2 power unit  
Electronic transformer for xenon lamps only

DIMENSION: 70mm (2.8") x 36mm (1.4") x 20mm (0.75")

DESIGNATION:  

## 240V Transformer



### WH-602W

PRIMARY: AC 230V-240V 50Hz, 260mA

SECONDARY: 11.5V AC (10w min. - 60w max.)

LAMPING: 10w lamps: 1-6  
20w lamps: 1-3

DIMMING: Dimmable using minimum 2 x 10w lamps or 1 x 20w lamp using low voltage electronic and trailing edge dimmers only.

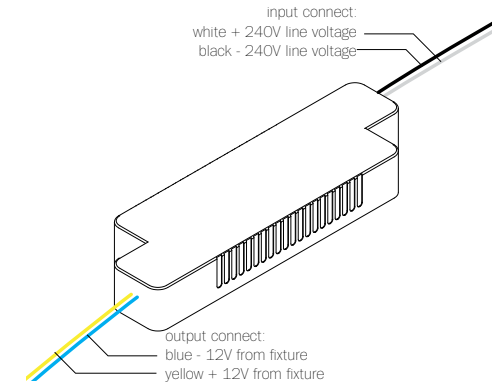
NOTES: Auto stop protected  
Class 2 power unit  
Electronic transformer for xenon lamps only

DIMENSION: 63mm (2.5") x 35mm (1.4") x 26mm (1")

DESIGNATION:    

IP65   ta: 50°C  
tc: 80°C

## 240V Transformer



### WH-602S

PRIMARY: AC 230V-240V 50Hz, 260mA

SECONDARY: 11.5V AC (10w min. - 60w max.)

LAMPING: 10w lamps: 1-6  
20w lamps: 1-3

DIMMING: Dimmable using minimum 2 x 10w lamps or 1 x 20w lamp using low voltage electronic and trailing edge dimmers only.

NOTES: Auto stop protected  
Class 2 power unit  
Electronic transformer for xenon lamps only

DIMENSION: 117mm (4.5") x 36mm (1.4") x 16mm (0.6")

DESIGNATION:   

XENON

# Transformers

PRODUCT SPECIFICATION

For additional assistance, please contact Bocci:

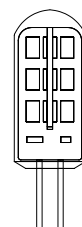
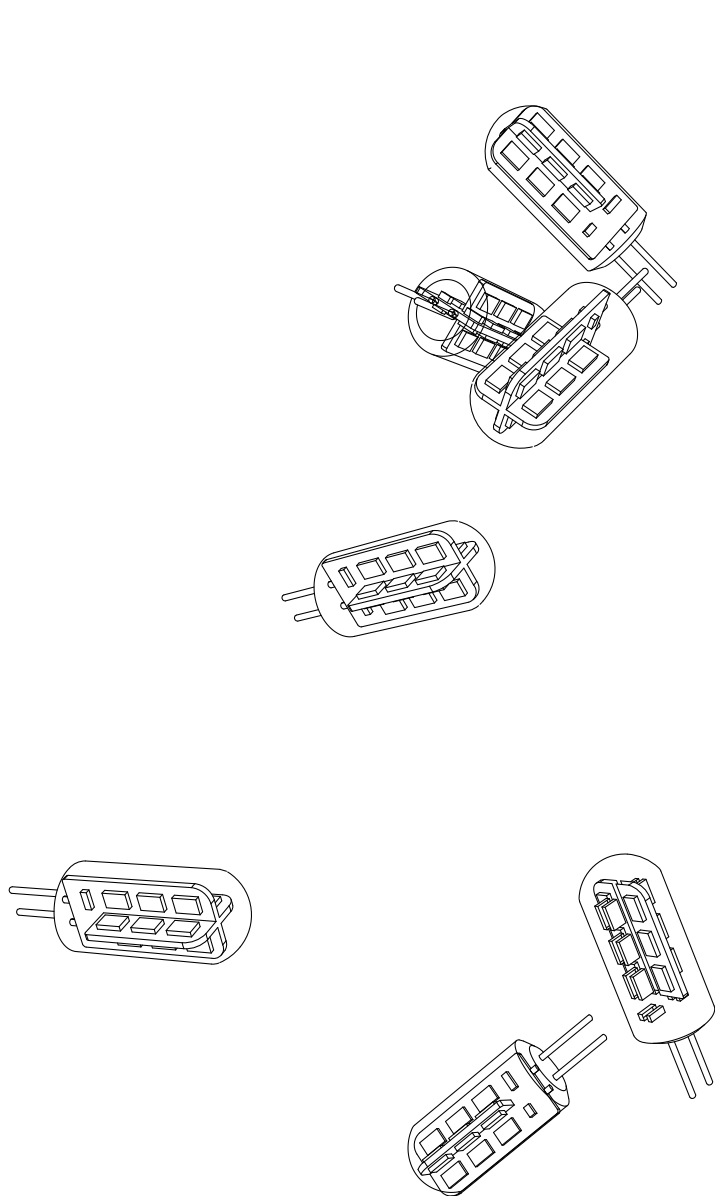
Vancouver  
sales@bocci.ca  
www.bocci.ca

Berlin  
europe@bocci.ca  
www.bocci.ca

© 2018, Bocci Design and Manufacturing Inc. All rights reserved. Any inquiries should be directed to: info@bocci.ca

# BOCCI





38 (1.5")



12.5 (0.5")

WATTAGE: 1.8w  
 COLOUR TEMPERATURE: 2600k  
 CRI: 75 (100 is daylight)  
 LIGHT OUTPUT: 142 lumens  
 EFFICIENCY: 60 lm/w  
 LAMP LIFE: 25,000 hours

#### DESCRIPTION

The Bocci 1.8w LED lamping option offers a longer-life, energy efficient alternative to typical halogen or xenon lamps. This proprietary and worldwide patent pending design utilizes Bocci's standard G4 lamp holder (9.1mm/0.36" in diameter), which is designed to accept either the Bocci xenon lamp or the Bocci LED lamp. The possibility of dual usage allows the opportunity for existing chandeliers with xenon lamping to be retrofitted on site to LED along with the appropriate driver.

This unique replacement design is unlike typical embedded xenon fixtures as it eliminates the waste associated with catastrophic failures that leave no choice but to replace the entire fixture. When it comes time to relamp, the xenon heads may simply be replaced, as with conventional lamps. Bocci xenon lamp keeps the fixture out of landfills in the future, protects your investment and introduces a significant saving of energy.

#### NOTES

+ Purchase replacement lamps online at [www.bocci.ca/lamps](http://www.bocci.ca/lamps)

RoHS 

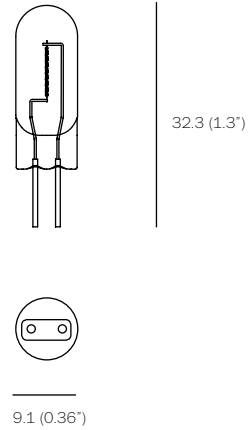
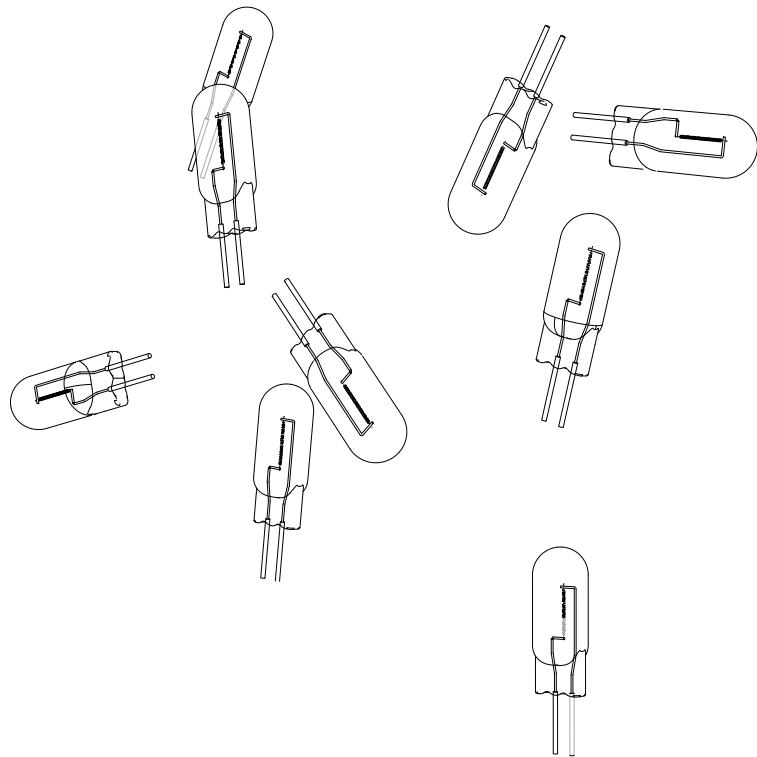
Vancouver  
[sales@bocci.ca](mailto:sales@bocci.ca)  
[www.bocci.ca](http://www.bocci.ca)

Berlin  
[europe@bocci.ca](mailto:europe@bocci.ca)  
[www.bocci.ca](http://www.bocci.ca)

LED

1.8W

Design by Omer Arbel  
 PRODUCT SPECIFICATION



WATTAGE: 20w  
 COLOUR TEMPERATURE: 2600k  
 CRI: 100 (100 is daylight)  
 LIGHT OUTPUT: 196 lumens  
 EFFICIENCY: 19.03 lm/w  
 DIMMABLE: yes  
 LAMP LIFE: 20,000 hours

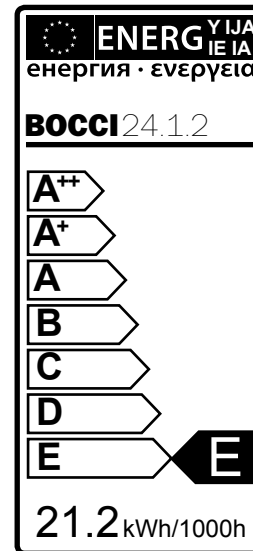
**DESCRIPTION**

The Bocci 20w xenon lamping option offers a longer-life, energy efficient alternative to typical halogen or xenon lamps. This proprietary and worldwide patent pending design utilizes Bocci's standard G4 lamp holder (9.1mm/0.36" in diameter), which is designed to accept either the Bocci xenon lamp or the Bocci LED lamp. The possibility of dual usage allows the opportunity for existing chandeliers with xenon lamping to be retrofitted on site to LED along with the appropriate driver.

This unique replacement design is unlike typical embedded xenon fixtures as it eliminates the waste associated with catastrophic failures that leave no choice but to replace the entire fixture. When it comes time to relamp, the xenon heads may simply be replaced, as with conventional lamps. Bocci xenon lamp keeps the fixture out of landfills in the future, protects your investment and introduces a significant saving of energy.

**NOTES**

- + Purchase replacement lamps online at [www.bocci.ca/lamps](http://www.bocci.ca/lamps)
- + Requires electronic low-voltage, trailing edge dimmer
- + When replacing, do not touch bulb with bare hands



RoHS

Vancouver  
[sales@bocci.ca](mailto:sales@bocci.ca)  
[www.bocci.ca](http://www.bocci.ca)

Berlin  
[europe@bocci.ca](mailto:europe@bocci.ca)  
[www.bocci.ca](http://www.bocci.ca)

XENON  
**20W** Design by Omer Arbel  
 PRODUCT SPECIFICATION