BIRNS®

TUBELIGHT

The BIRNS TubeLight™ delivers powerful 10,000+ lumen brilliance for 360° drop-light use in confined spaces. It's compact (only 48mm diameter) and versatile, 100W to 500W, with a wide range of accessories to tailor it to a variety of demanding nuclear applications.



High Performance . . . Under Pressure[®]

The BIRNS TubeLight, BIRNS Model 5710, is a brilliant tungsten halogen system that delivers 360 degree illumination and is rated to 300m. With a sturdy stainless steel construction, it provides easy decontamination, and can be relamped, tool-free, in 60 seconds. The unique design delivers unmatched performance and safety, and is available with an optional suspension assembly.



Pictured with optional stainless bulkhead connector



BIRNS' Quality Management System is ISO 9001:2015 Certified; NRC 10CFR50, App. B Compliant

EXCLUSIVE FEATURES

- Brilliant 360° illumination
- Small size (Ø48mm/ 1.9" OD)
- Easy decontamination
- Customizable lamp, dome, reflector and mount options
- Tungsten-halogen, commerciallyavailable white light lamps
- No warm-up time, no ballast needed

- Case ground (earth)
 connection compatible
 with all commercially available Class A
 GFCIs (ELCBs)
- 10,000+ lumens
- Choice of 120 or 240 volt use (AC or DC)
- 60-second tool-free relamping
- Tool-free matable subsea-grade underwater connector

APPLICATIONS

Perfect for blazing illumination of narrow inspection tubes, or for complete, easy to manipulate 360° lighting of any pool. It is easily suspended by its cable for general-purpose drop light use, and can be mounted singly or in pairs for use with underwater cameras.



TUBELIGHT

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SPECIFICATIONS

EQUIPMENT

Unless specified otherwise, the default standard lamp installed in the BIRNS TubeLight is the 120V/500W 32B-005. However, both 120V and 240V (100W to 500W) are available.

Lens

Two lenses are available: Standard (35B-002), for general purpose use, and Non-Browning (35B-009), which is impervious to radiation-induced coloration.

Reflector

Two types of reflectors are available for different applications, and changing them is guick and simple. The Flat Reflector (54C-001) eliminates glare and wasteful "overthrow". The Axial Reflector (54B-004, shown), changes the 360° radial beam to a mediumflood downward beam.



Flat Reflector

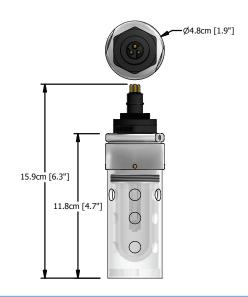
Axial Reflector

ORDERING INFORMATION

- BIRNS Model 5710 [specify voltage/wattage]
- Power Cable Assembly CEF3S16-XXX/ [specify length]

Optional Upgrades

- Non-Browning Lens 35B-009 (silica crystal)
- Stainless Steel Bulkhead Connector SBEM3P-S4
- Flat Reflector 54C-001
- Axial Reflector 54B-004
- Super-Vutron Power Cable Assembly CEF3S16-SV-XXX [specify length]



PHYSICAL

Length: 15.9cm (6.3 in.) Ø4.8cm (Ø1.9 in.) Diameter: Weight in Air: 450g (1.0 lb)

LIGHTING/PHOTOMETRIC

Lamp Type: Incandescent Tungsten-halogen Time To Full Brightness: <1 second after application of power

Universal (i.e. any position) Operating Position: Light Output: 10,450 initial lumens, depending on installed lamp

Dimming Range:

Correlated Color Temp.:

2,950K, depending on installed lamp ENVIRONMENTAL

Protection Level: IP 68

Depth Rating: 300m (1,000 FSW)

ELECTRICAL

Input Voltage:*

115 +/- 15 VAC or VDC (standard) 220 +/- 20 VAC or VDC (available) 500 Watts (standard):

Lamp wattage:

100, 150, and 250 watts also available

Supply Frequency: 60Hz standard; 50Hz OK

16 AWG type SO, 3 conductor (standard) Cable Size:

Cable Current Rating: 12 amperes maximum Cable Voltage Rating: 600 Volts maximum

MATERIALS

All Housing Parts: Stainless steel AISI type 304, electropolished

Dome:

Borosilicate Pyrex Glass (standard); optional non-browning quartz also available

Lexan polycarbonate

Dome Protector Assembly:

Silicone

Lens Gasket: O-ring seals:

Nitrile (Buna N), compound N674-70; optional EPDM also available

Connector:

Glass-reinforced epoxy (GRE); optional stainless-steel body also available

Connector Pins:

Brass 360 per ASTM B16, gold-plated per MIL-G-45204

^{*}Substantive input voltage variation will affect lamp performance characteristics, including light output, lamp life, consumed power, color temperature, etc. Generally, higher voltage use will increase light output, power, and color temperature and will lessen lamp life, and lower voltages will have converse effects. However, the relationships are linear only near the rated input voltage value.