

The BIRNS Corona Major™ is an exceptionally durable and dependable tungsten halogen fuel pool lighting fixture. It delivers 50,000 lumens of 3200K white light, yet is easily decontaminated and relamps in 60 seconds, tool-free. It requires no heavy ballast to operate, and is designed for underwater use in areas with high levels of radiation and nuclear contamination.



High Performance . . . Under Pressure®

EXCLUSIVE FEATURES

The BIRNS Corona Major, BIRNS Model 5214, features a parabolic reflector and a tempered borosilicate glass lens, and its lamp operates inside a dry, one-atmosphere chamber, which is further protected by a rugged polycarbonate shield. It includes a robust mounting yoke, and can secure to a selection of different BIRNS mounting poles. The BIRNS Corona Major's housing is free flooding for high-efficiency water cooling, yet is compatible with all commercial grade Class A GFCIs (ground-fault circuit interrupters). The system incorporates a BIRNS subsea grade stainless steel connector, so that the power cord can be quickly detached, without tools, and includes a lamp and a Lexan protector. It features instant ON/OFF and hot-restrike capability, with complete dimming capability (0-100%).

- Brilliant 3200K/ 50,000 lumen illumination
- 60-second tool-free relamping / very easy maintenance
- Instant ON/OFF and ballast-free operation
- Complete dimming capability (0-100%)
- Parabolic reflector
- Compatible with commercially-available lamps
- Rugged, all stainless steel inside-containment construction
- Integral subsea-grade underwater connectors, designed for easy operation
- All captivated hardware
- Engineered for the ultimate in worker safety; all smooth, rounded edges

APPLICATIONS

The BIRNS Corona Major is widely used as a general-area lighting fixture in new and spent fuel pools, and tailored for localized inspection and for in-core use during refuel operations. It can be tilted on its axis for seamless directional lighting and is trusted for long-term illumination of fuel pools and transfer canals and used extensively for other large-scale activities.



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

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SPECIFICATIONS

ORDERING INFORMATION

- BIRNS Model 5214
- Power Cable Assembly 17F-059

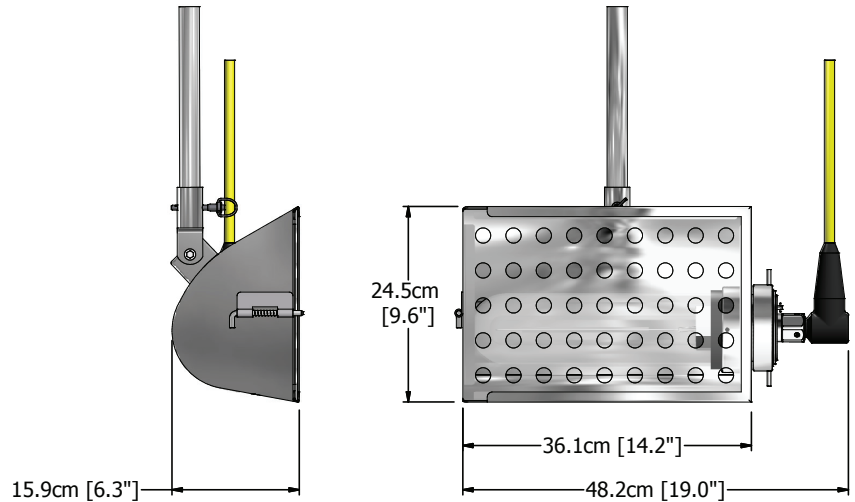
Optional Mounting Poles

Std. 1.5m/5 ft. long; other lengths optional

- 44N-002 - with bail and T-bar
- 44N-010 - with bail, T-bar and hook

Mounts

BIRNS offers a wide range of poles and other standard mounting and suspension products, and engineers custom mounting products to suit specific configurations and requirements.



Weight in air: 10.5kg (23.0 lbs.)



Bail and T-bar
(44N-002)



Bail, T-bar and hook
(44N-010)

MATERIALS

All Housing Parts:	AISI type 304 stainless steel, electropolished
Lens:	Tempered borosilicate glass
All hardware:	18-8 Stainless steel
Electrical connector:	52G-012 Glass-reinforced epoxy
Lamp socket:	5kV pulse-rated ceramic
O-rings:	Nitrile (Buna N), compound N674-70
Cable (Super-Vutron):	CSPE jacket, EPDM insulation

ELECTRICAL

Input voltage:	220 VAC (standard); 120VAC and 240VAC available
Supply frequency:	50 or 60Hz
Cable size:	16 AWG type SO, 3 conductor (standard)
Cable current rating:	12 amperes maximum
Cable voltage rating:	600 Volts maximum

LIGHTING/PHOTOMETRIC

Lamp type:	Tungsten-halogen, E39 base/T10 bulb
Time to full brightness:	<1 s after application of power
Operating Position:	Universal (any position)
Correlated Color Temp.:	3200K typical
Luminous Flux:	50,000 lumens typical
Luminous Efficacy:	25 lm/w

ENVIRONMENTAL

Protection level:	IP68
Depth rating:	30m (100 FSW)

