

# BIRNS NUCLEAR KELVIN

UNDERWATER FUEL POND LIGHT



- *Brilliant illumination*
- *Safe, easy maintenance*
- *60-second tool-free relamping*
- *Long-life lamps*



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## UNDERWATER FUEL POND LIGHT

The KELVIN is ideal for use in new and spent fuel ponds. Its sealed-beam tungsten-halogen lamps provide up to 38,000 lumens and a choice of 3 beam angles to suit your requirements perfectly. Our clear Lexan lamp protector doesn't cut down the light output (unlike steel mesh), and our adjustable



Impact-resistant Lexan protects lamp but does not cut down light output.

yoke collar provides the best horizontal/vertical format.

### Easy Maintenance

The KELVIN relamps in 60 seconds, without tools, with long-life lamps (300 and 4000 rated hours\*). Its stainless steel housing is earthed and is easily decontaminated, as is our AQUAPRENE underwater cable. And the KELVIN's rugged underwater electrical connector was first developed for the rough-and-tumble offshore world.

### Adaptable

The BIRNS KELVIN mounts on our pan-and-tilt yoke or our Pond Light Mounting Pole, or suspends on our Suspension Assembly. It uses either 120 or 240 volts, 500 or 1000 watts. And it is available either with its standard 240mm diameter (model 5801) or with a 220mm width (model 5805) for insertion into access holes.



Few parts for fast and easy maintenance.

\*These ratings are determined by the lamp manufacturer under laboratory conditions, and are average values. Your own field results may vary.

## TECHNICAL SPECIFICATIONS

### MATERIALS

		RADIATION RESISTANCE
<b>Housing:</b>	spun 304 stainless steel, electropolished to 63AA	
<b>Lens:</b>	Lexan (polycarbonate)	10 <sup>4</sup> Gy*
<b>Connector:</b>	glass-reinforced epoxy delrin moulded polyurethane	10 <sup>6</sup> Gy 10 <sup>4</sup> Gy 10 <sup>7</sup> Gy
<b>Cable:</b>	AQUAPRENE neoprene-jacketed underwater cable, type 50	10 <sup>5</sup> Gy
<b>Yoke:</b>	type 304 stainless steel	
<b>Earth Wire:</b>	high-temperature Teflon	10 <sup>2</sup> Gy

### PHYSICAL

<b>Height:</b>	with yoke: 13.25" (337mm)
<b>Width:</b>	with yoke: 9.50" (241mm)
<b>Length:</b>	10.00 (254mm)
<b>Outside Diameter:</b>	without yoke Model 5801: 9.06" (230mm) Model 5805: 8.50" (216mm)
<b>Weight in Air:</b>	with yoke: 11.0lbs (5.0 kilos) without yoke: 7.3lbs (3.4 kilos)
<b>Weight in Water:</b>	with yoke: 4.0lbs (1.84 kilos) without yoke: 1.3lbs (.59 kilos)

Depth Rating: 66ft (20m)

### ELECTRICAL

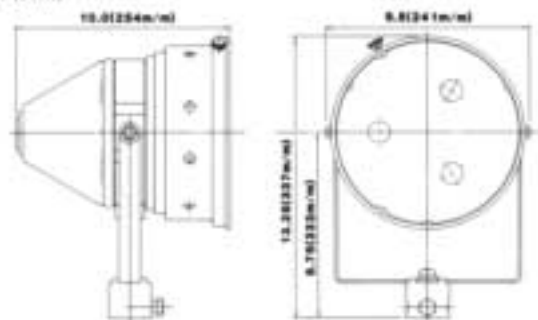
**Lamp Voltage:** 120 or 240 volts AC or DC  
**Wattage:** Model 5802: 500 watts  
Model 5801: 1000 watts

**Housing Earthed**  
**Cable Current Rating:** 15 amps  
**Cable Voltage Rating:** 600 volts  
**Connector Arc Resistance (between contacts):** 500 volts  
**Arc Resistance (between connector and housing):** 1000 volts

### LIGHTING

<b>Beam Angles:</b>	120 volts	240 volts
wide:	45°x71"	20°x38"
medium:	21°x44"	20°x22"
narrow:	20°x24"	17°x20"
<b>Rated Lifetimes:</b>		
19,400 lumens:	4000 hours	not available
38,000 lumens:	300 hours	300 hours
<b>Colour Temperature:</b>	3200K	

\* We now use the SI unit for absorbed dose, the gray (Gy), where 1 Gy = 1 J/kg = 100 rad, and 1 rad = 100 erg/gm.



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