



DOUBLY-SAFE CHAMBER LIGHT-LED™

The BIRNS Doubly-Safe Chamber Light-LED™ provides both unmatched safety and brilliant illumination in pressurized HeO₂ systems. The long-lasting LED lamp keeps it running cool, and the system is energy efficient, low profile and lightweight, making it ideal for demanding PVHO applications.



(Model 4123 shown)

High Performance . . . Under Pressure®

The BIRNS Doubly-Safe Chamber Light-LED™ provides brilliant illumination with a 35,000 hour rated lamp life for pressurized helium/oxygen vessel use. This versatile 450 lumen LED light features the exclusive BIRNS Doubly-Safe dual helium release method. It allows gas to escape through the front of the unit with a unique spring loaded wave washer and through the stainless steel backup valve on the base.

The BIRNS Doubly-Safe Chamber Light-LED comes with a choice of six different interchangeable lens options, to seamlessly adapt to a wide range of lighting applications, from bright to ambient illumination. Plus, this unique system has a superior heat-sink design to keep it operating safely and efficiently.

Two options are available: Model 4123, which offers the convenience of a detachable power cable, and Model 4124, which includes an on/off switch and a 10-foot (3m) power cable.



KEY FEATURES

- Brilliant 5,700K white LED illumination
- 35,000 hour rated lamp life
- 450 lumens
- 12VDC/6.5W
- Two helium release methods for unmatched safety
- Superior heat-sink design
- Low profile (Ø76mm / 3" OD)
- Case ground (earth) connection
- Six lens options
- Seamlessly mounts to a variety of ceilings or structure walls; optional magnetic base mount

APPLICATIONS

The compact BIRNS Doubly-Safe Chamber Light-LED is ideal for use in a range of PVHO applications, from submarines and diving bells to decompression and recompression chambers.



BIRNS' Quality Management System is
ISO 9001:2015 Certified;
BIRNS is NAVSEA PRO-020 Certified



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SPECIFICATIONS

ORDERING INFORMATION

Step 1: Specify **Model 4123** BIRNS Doubly-Safe Chamber Light-LED or

Model 4124 BIRNS Doubly-Safe Chamber Light-LED with switch and integral 10 foot power cable.

Step 2: Specify lens

Item	Description
35A-007	Clear (default)
35A-009	Frosted
35A-011	Blue
35A-012	Blue frosted
35A-014	Red
35A-015	Red frosted

Step 3: Select cable (includes CEF3S cable connector on 16/3 Aquaprene SO cable)*

Part Number	Length (feet)	Length (m)
CEF3S16-5	5	1.5
CEF3S16-10	10	3
CEF3S16-33	33	10

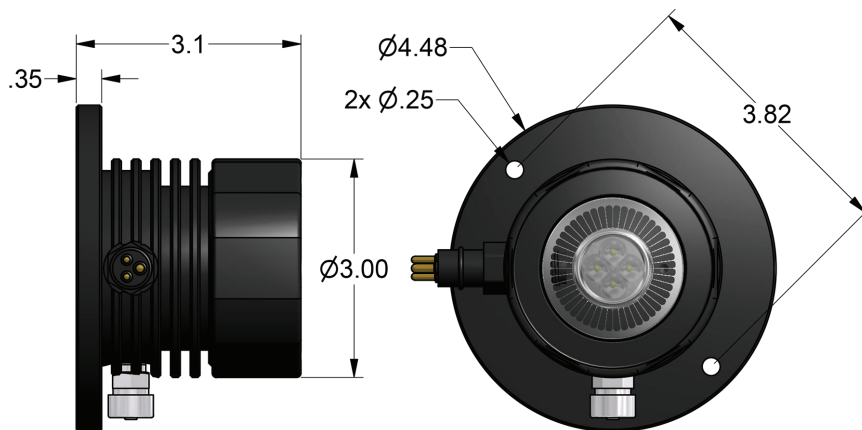
*Note: there is no need to order a power cable with the Model 4124, as a 10-foot (3m) cable is included with it.

Step 4: Select mount (optional)

Item	Description
44M-001	Chamber Light Magnetic Base Mount



Model 4123 shown here with optional Chamber Light Magnetic Base Mount.



(All dimensions shown in inches)

PHYSICAL

Length:	79 mm (3.1 in.)
Body diameter:	Ø76 mm (Ø3.0 in.)
Base diameter:	Ø114 mm (Ø4.5 in.)
Mounting:	2 x Ø6.4 mm (Ø.25 in.) holes on Ø97 mm (Ø3.82 in.) bolt circle
Weight in Air:	450 g (1.0 lb)

PHOTOMETRIC

Lamp Type:	LED
Luminous Flux:	450 lm
Time To Full Brightness:	<1 second after application of power
Operating Position:	Universal (i.e. any position)
Color Temperature:	5700K
Rate Lamp Life:	35,000 hours

ENVIRONMENTAL

Protection Level:	IP 68
Depth Rating:	300 M (1000 FSW)
Helium Release Valve	
Cracking pressure:	5 ± 1 PSI (0.34 ± 0.07 bar)
Helium Release Valve	
Resealing pressure:	4 ± 1 PSI (0.28 ± 0.07 bar)

ELECTRICAL

Input Voltage:	12 VDC
Power Consumption:	6.5 watts
Cable Size:	16 AWG type SO, 3 conductor (standard)
Cable Current Rating:	12 amperes maximum
Cable Voltage Rating:	600 V maximum
Ground (Earth) wire size:	16 AWG; case ground to housing

MATERIALS

All Housing Parts:	6061 Aluminum, hard black anodized per MIL-A-8625, Type III, Class 2
Lens:	Tempered Borosilicate glass
Connector:	Glass-reinforced epoxy (GRE) [Model 4123]
Penetrator:	Brass with Delrin switch housing assembly and neoprene overmold [Model 4124]