



## PRIMUM SERIES

BIRNS Primum™ connectors are designed for extremely heavy-duty use—and are trusted in some of the most rigorous underwater applications on the planet. Made of 316 stainless steel passivated per ASTM A967, or custom built with practically any material specified, they come standard with high open face pressure resistance, and are rated to 500 volts, with high-voltage or special configurations available for specific applications.



### High Performance . . . Under Pressure®

These robust, versatile connectors are rated to 6,000m and designed for use with solid or oil filled cables, and tailored for the heaviest power signal, high voltage (to 3,000V) and electro-mechanical applications.

The BIRNS Primum series has extreme performance features like stainless steel machined keys, dual o-rings, positive stops to prevent over tightening, and BIRNS' exclusive molded 15° lead in chamfer, which ensures o-ring longevity and reliability. The series is engineered with positive stainless steel stops and thick, hexagonal engaging nuts to resist mechanical damage.



### EXCLUSIVE FEATURES

- Extreme resistance to physical abuse
- Exceptional performance with high power loads
- Open faced hydrostatic pressure tested to 6km
- 15° lead-in angle construction
- Replaceable inserts, with BIRNS' exclusive solder pot features
- 50 microns of hard gold contact plating
- Heat-treated BeCu sockets
- Integral keys
- Optional coupling ring locking set screws
- Captivated o-rings

Cable Plugs (CPs) are terminated to solid cables in straight (0°) and 90° styles. With an adapter, a CP may be installed onto an oil-filled cable, with a hose clamp tubing attachment (CP-OH) or a double-ferrule hydraulic fitting (CP-OF). Optional pressure-balancing valves (PBOF or PCOF) are also available.

Sealing caps are available, as is termination (electrical and/or mechanical, of Aramid/Kevlar or steel), and overmolding.

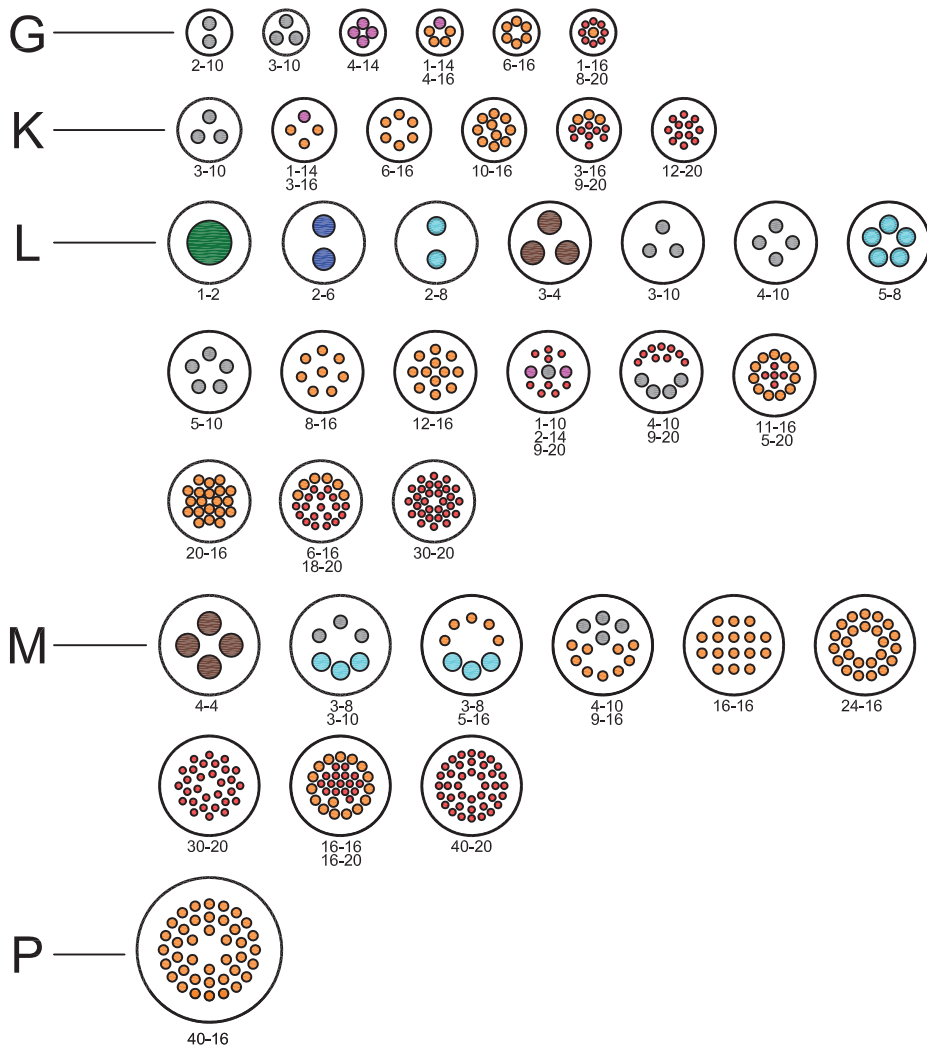


BIRNS' Quality Management System is  
ISO 9001:2015 Certified;  
BIRNS is NAVSEA PRO-020 Certified



*High Performance . . .  
Under Pressure®*

## PIN CONFIGURATIONS



### LEGEND

-  2 AWG (40mm<sup>2</sup>)
-  4 AWG (28mm<sup>2</sup>)
-  6 AWG (17mm<sup>2</sup>)
-  8 AWG (10mm<sup>2</sup>)
-  10 AWG (8mm<sup>2</sup>)
-  14 AWG (3mm<sup>2</sup>)
-  16 AWG (2mm<sup>2</sup>)
-  20 AWG (.8mm<sup>2</sup>)

### TECHNICAL SPECIFICATIONS

Mated Depth	6,000m
Temperature	-5°C to 60°C
Mechanical Load*	1000kg
Voltage-STD.	500VDC
Voltage-HV	3,000V
Insulation resistance	300MΩ (min)

\* Requires BIRNS' mechanical termination.