

# SEACON

## SEACON PHOENIX CAPABILITIES





# SEACON PHOENIX



## INTRODUCTION

**SEACON** Phoenix located in Ashaway, Rhode Island is an affiliate of the **SEACON** Group of companies and specializes in the manufacture of glass sealed electrical connectors, feed thrus and MIL-SPEC approved connectors and hull penetrators as well as neoprene and polyurethane cable assemblies, harsh environment connectors and military fiber optic cables and assemblies. Suitable for use in harsh environments, our high quality products can be used for a variety of applications including defense, energy, security, geophysical and telecommunications.

Our highly qualified engineering team offers assistance in all aspects of customer design and fabrication. We also provide in-house testing for helium leak detection as well as hydrostatic, mechanical, electrical and fiber optics. Many of our connector products are corrosion resistant, with pressure ratings of up to 20,000 psi and operating temperatures of between 500°F to 600°F (260°C to 315°C) with a hermeticity good at  $1 \times 10^{-9}$  leak rates.

**SEACON** Phoenix operate a Quality Management System certified to ISO 9001.



## MIL-SPEC CONNECTORS

### MIL-C-24231

SEACON Phoenix is a US Navy qualified source of MIL-C-24231 connectors. These rugged, dry mateable electrical connectors are designed for the harsh environment of a submarine, but can be used in any marine environment where performance is crucial.

#### KEY FEATURES

- Various configurations from 3 to 80 contacts.
- 8 to 15 amps.
- 2,000 psi rated.
- Polyurethane molded insert plugs.
- Receptacle inserts molded from high impact epoxy.
- Nickel copper and nickel copper aluminum body.
- Nickel aluminum bronze coupling rings.
- GRE (Glass Reinforced Epoxy) bands and non-conductive ceramic coatings available to help eliminate cathodic delamination.



### MIL-C-24217

SEACON Phoenix's glass to metal seal technology is incorporated in our line of MIL-C-24217 connectors. This series is widely used for deep submergence applications and is manufactured and tested to the strict requirements of the Navy MIL-C-24217.

#### KEY FEATURES

- Contact configurations from single coaxial to 48 contacts with 16 AWG conductors.
- 6 to 100 amps.
- 316 stainless steel body.
- Straight and right angle plugs available.
- Wide variety of receptacles including: welded type, flange-welded, inline, mid flange bolted, end flange bolted and locknut flange bolted.
- Up to 10,000 psi open face capability.



## FIBER OPTIC CONNECTORS AND CABLE ASSEMBLIES

SEACON Phoenix's fiber optic connectors and cable assemblies are designed to deliver data in the harshest of environments. Adhering to the strictest military and commercial standards SEACON Phoenix fiber optics are a reliable source to provide increased bandwidth where it is needed most!

#### KEY FEATURES

- Single-mode (8.3/125) and multi-mode (62.5/125, 50/125, 10 Gig).
- Multi channel connectors.
- Low insertion and return loss.
- Custom designs for specific requirements.
- Polyurethane molded boots and breakouts.





## HULL PENETRATORS

SEACON Phoenix specializes in the engineering and manufacture of Hull Penetrators. As a qualified source of the United States Navy to supply Sub Safe Level One products SEACON Phoenix is an industry leading supplier of electrical and fiber optic hull penetrators.

### KEY FEATURES

- Provides electrical and data path from outside pressure hull of submarine to the inside while maintaining a water tight seal.
- Custom configurations designed by our experienced engineering staff for specific requirements.
- Electrical and fiber optic varieties.
- Glass to metal sealing technology allows for maximum pressure rating.
- Material traceability reports prepared for all hull penetrators manufactured.



## GLASS TO METAL SEAL CONNECTORS AND PENETRATORS

SEACON Phoenix's glass to metal seal connectors are used in harsh environments in the military, marine and oil & gas industries. SEACON Phoenix's ability to create a water tight seal between the glass, electrical contact and metal shell of the connector gives our customers a reliable connection that they can count on. SEACON's MINI-CON and MSS (Metal Shell Series) are available in a glass seal version.

### KEY FEATURES

- Custom configurations for specific requirements.
- Available with boot seals.
- Stainless Steel, Monel™ and Inconel™ housings.
- Reliable connections in high pressure environments.
- Voltage rated up to 3KV.
- Pressure rated up to 20,000 psi.
- Temperature : -50°F to 400°F (10°C to 204°C).





## CABLE ASSEMBLIES

SEACON Phoenix's cable assemblies can be found on the most sophisticated systems of a submarine including sonar systems, vertical launch systems and dry deck shelter platforms. SEACON Phoenix's expertise in polyurethane and neoprene molding, along with in-house hydrostatic pressure testing capabilities, allows for a controlled manufacturing process.

### KEY FEATURES

- Engineering staff are highly knowledgeable of submarine systems.
- Experienced Technicians and Quality Control staff.
- In-house molding and hydrostatic testing capabilities.



## 50 OHM COAX CABLE ASSEMBLIES

SEACON Phoenix's high pressure 50 ohm coax cable assembly incorporates a small dry mateable coax connector. The connector is mated together via a robust stainless steel locking sleeve and sealed by a piston and face o-ring seal. The bulkhead connector has a gold plated pin and a sleeve glass sealed into the stainless steel body. The coax cable on the free half connector is molded to the connector shell and the cable in polyurethane.

### KEY FEATURES

- 50 ohms.
- 1,000 MHz maximum.
- 10,000 psi hydrostatic pressure.



#### SEACON PHOENIX

15 Gray Lane, Suite 108,  
Hopkinton Industrial Park,  
Ashaway, RI 02804, USA.  
TEL: +1 (401) 637-4952  
FAX: +1 (401) 637-4953  
E-Mail: sales@seaconphoenixllc.com  
Website: www.seaconphoenix.com

#### SEACON

1700 Gillespie Way,  
El Cajon, California 92020, USA.  
TEL: +1 (619) 562-7071  
FAX: +1 (619) 562-9706  
E-Mail: seacon@seaconworldwide.com  
Website: www.seaconworldwide.com

#### SEACON US GULF AREA SALES OFFICE

14511 Old Katy Road, Suite 300,  
Houston, Texas 77079, USA.  
TEL: +1 (281) 599-3509  
FAX: +1 (281) 599-3517  
E-Mail: gulfcoastsales@seaconworldwide.com  
Website: www.seaconworldwide.com

#### SEACON US EAST COAST SALES OFFICE

50 Airport Road,  
Westerly, RI 02891, USA.  
TEL: +1 (401) 348-0155  
FAX: +1 (401) 348-0227  
E-Mail: eastcoastsales@seaconworldwide.com  
Website: www.seaconworldwide.com

#### SEACON ADVANCED PRODUCTS, LLC

1321 Nelius Road, P.O. Box 767,  
Bellville, Texas 77418, USA.  
TEL: +1 (979) 865-8846  
FAX: +1 (979) 865-8859  
E-Mail: sales@seacon-ap.com  
Website: www.seacon-ap.com

#### SEACON BRAZIL

Rua Conde de Bonfim 120 sala 212,  
Tijuca, Rio de Janeiro,  
Brazil, CEP: 20520-053.  
TEL #1: +55 (21) 3592-0920  
TEL #2: +55 (21) 3594-0920  
CELL: +55 (21) 8849-3336  
E-Mail: renata@seacon-ap.com

#### SEACON (europe) LTD

Seacon House, Hewett Road,  
Gapton Hall Industrial Estate,  
Great Yarmouth, Norfolk, NR31 0RB, UK.  
TEL: +44 (0) 1493-652733  
FAX: +44 (0) 1493-652840  
E-Mail: sales@seaconeurope.com  
Website: www.seaconeurope.com

#### SEACON GLOBAL PRODUCTION

Callejon Terrazos #8, Local 2-C,  
Las Brisas 1ra. Seccion,  
Tijuana, B.C., Mexico C.P. 22610.  
TEL: +52 (664) 626-2726  
FAX: +52 (664) 686-8922  
E-Mail: sales@seaconglobal.com  
Website: www.seaconglobal.com  
**Dial from U.S.A.** TEL: +1 (619) 308-7901  
TOLL FREE: (888) 562-7072  
FAX: +1 (619) 308-7900

#### LL ROWE COMPANY

66 Holton Street, Woburn,  
MA 01801, USA.  
TEL: +1 (781) 729-7860  
E-Mail: llrowe@llrowe.com  
Website: www.llrowe.com

All reasonable efforts have been taken to ensure that the information contained herein is accurate at the date of publication, but no representation or warranty as to the accuracy or completeness of such information is intended or to be implied by its inclusion herein. Any and all representations and warranties pertaining to the information and products referred to herein shall be set forth in SEACON standard sales order form. In addition, SEACON reserves the right to make changes to the contents hereof without notice, therefore it is suggested that at the time of inquiry, the appropriate sales office or factory be contacted directly for verification of published specifications and products availability.

© 2014 SEACON  
ALL RIGHTS RESERVED

