# 10KSI Subsea Connectors
# with SpeedMaster™ 10G high-speed contacts

**G**lenair®

## 707-0407 10 KSI rated subsea environment

SeaKing 700 is an innovative 10K PSI rated underwater connector series that eliminates a broad range of mechanical design weaknesses found in many of today's high-pressure subsea connector families. From its double O-ring seals and retractable engaging nut, to its multi-keyed mating interface, the SeaKing underwater connector represents a far more reliable approach to subsea power and signal connectivity. Series 707 SeaKing CCP connectors incorporate a SpeedMaster 10G socket module in a Size L or Q shell, or in a hybrid arrangement with signal contacts in a Size R shell.

### Part Number Development

| Sample Part Number | | 707-0407 | -R31 | -T | -Z1 | S | N | -P1 | -1147 |
|---|---|---|---|---|---|---|---|---|---|
| **Series and Shell Style** | 707-0407 = SeaKing Cable Connector Plug | | | | | | | | |
| **Shell Size/Insert Arrangement** | See Insert Arrangements Table | | | | | | | | |
| **Shell Style** | **B** = Bandporch      **T** = Index Teeth | | | | | | | | |
| **Shell Material** | **Z1** = Stainless Steel      **TC** = Titanium | | | | | | | | |
| **Contact Style** | **S** = Socket      **P** = Pin | | | | | | | | |
| **Keyway Position** | See Polarization Table | | | | | | | | |
| **Cable Size** | See Cables Table | | | | | | | | |
| **Color Band** | **1147** = Color Band per Polarization Table      **Blank** = No Color Band | | | | | | | | |

### Contact Pinout



SOCKET MODULE FACE
858-100
858-103

PIN MODULE FACE
858-101
858-104

| Pin Out | |
|---|---|
| Location | Color |
| 1 | Orng/Wht |
| 2 | Orange |
| 3 | Blu/Wht |
| 4 | Blue |
| 5 | Brwn/Wht |
| 6 | Brown |
| 7 | Grn/White |
| 8 | Green |

### Insert Arrangements



| L1 | Q1 | R31 |
|---|---|---|

## NOTES

1. Standard seaking packaging box. Loose components bagged and tagged and pressed in snug with packaging foam.
2. Material / finish:
   - Barrel: see part number development
   - Coupling nut: marine bronze for stainless steel barrel; titanium for titanium barrel.
   - Contacts: copper alloy, gold plated.
   - Insert: rigid dielectric
   - Set screws: stainless steel for stainless steel barrel; titanium for titanium barrel.
   - O-rings: nitrile rubber. O-ring kits are available for each connector size. Refer to drawing 709-026 for details.
3. Electrical:
   - Dielectric withstanding voltage: 500 vac.
   - Insulation resistance: 5,000 megohms min at 500vdc.
4. Pressure ratings
   - Mated condition: 10,000 PSI
5. Compatible with AFT end accessories such as 709-003 PBOF backshells.
6. Retractable coupling nut accommodates o-ring servicing.
7. Mates with 707-0408 SeaKing receptacle.
8. Double o-ring sealing in mated condition.
9. These cables are not sealed or pressure rated.
10. L1 signal ground is common with shell ground.

**SeaKing**
SEVEN HUNDRED

1.92 (42.0)

1.04 (19.6)

.85 (14.9)

BAND PORCH

1.66 (42.2)

.77 (19.6)

.59 (43.1)

RETAINING RING

INDEX TEETH

ACCESSORY THREADS

Ø B

PLUG INSERT O-RING

FACE SEAL O-RING

INSERT SHOWN FOR REFERENCE ONLY

Ø A

MASTER KEY
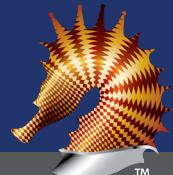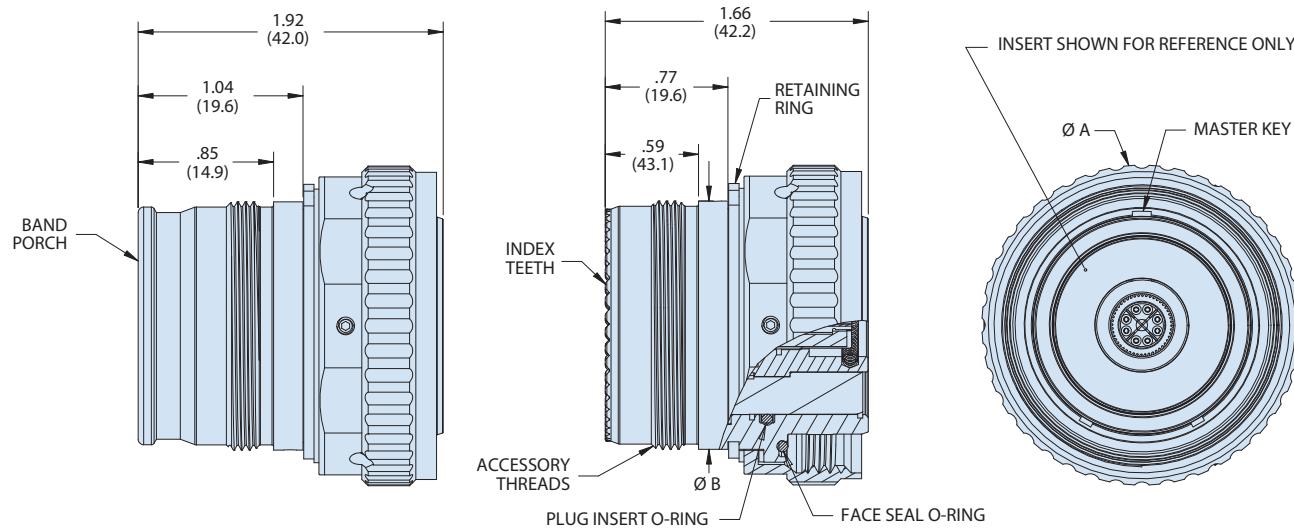
## Bulkhead Size

| Size | ØA | ØB | Retaining Ring | Face Seal O-Ring | Plug Insert O-Ring | Accessory Threads (Un-2a) | Mating Torque (Ft-Lbs) |
|------|------|------|------|------|------|------|------|
| L | 1.390 (35.2) | .938 (23.8) | 709-063-093 | 2-019 | N/A | .9375-28 | 12 |
| Q | 2.014 (51.2) | 1.562 (39.7) | 709-063-156 | 2-028 | 2-024 | 1.5625-20 | 15 |
| R | 2.139 (54.3) | 1.688 (42.9) | 709-063-168 | 2-029 | 2-026 | 1.6875-20 | 15 |

## Polarization

A°

B°

| Position Code | A | B | Color Band (Optional) |
|------|------|------|------|
| N | 150 | 210 | Blue |
| A | 75 | 210 | Yellow |
| B | 95 | 230 | Orange |
| C | 140 | 275 | Red |

## Cables*

| Cable P/N | Cable Category | Cable Construction | Wire Gage | Cable Ø | Cable Size Option | Assembly Instructions |
|------|------|------|------|------|------|------|
| 963-066-24 | Cat 6A | S/FTP | 24 | .260 (6.60) | 2 | AI85082 |
| 963-066-26 | Cat 6A | S/FTP | 26 | .238 (6.05) | 5 | |
| 963-075-24 | Cat 6A | SF/UTP | 24 | .265 (6.73) | 2 | |
| 963-139** | Cat 6A | S/FTP | 24 | .650 (16.51) | P1 | AI85225 |
| 963-173-24** | Cat 6A | S/FTP | 24 | .675 (17.15) | P1 | AI85225 |

*Consult factory for use with other cable
**Pressure-rated
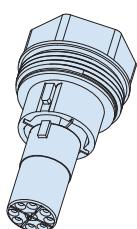
SOCKET MODULE
FOR PRESSURE RATED CABLES
858-103
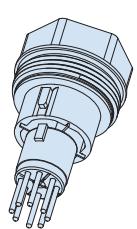
PIN MODULE
FOR PRESSURE RATED CABLES
858-104
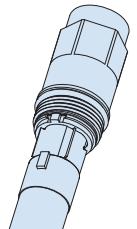
SOCKET MODULE
858-100

PIN MODULE
858-101