

OPTIMIZED  
FOR USE WITH



**SeaKing**  
PRESSURE-RATED CABLES



High-density, dry-mate,  
harsh-environment  
connectors and cables for  
lighter-duty ROV applications  
such as lights and sensors



High-density Series 701 SeaKing Junior connectors are the perfect choice for harsh-environment Oil & Gas industry equipment that does not require open-face pressure rating, PBOF cable construction, or back-pressure performance. All designs are equipped with single piston-seal nitrile O-rings to withstand exposure to corrosive chemicals and high-pressure environments in the mated condition. These 5K psi pressure-rated connectors feature high-density crimp-contact or solder cup inserts and are significantly smaller than heavy-duty series 700 SeaKing interconnects. Connectors are backfilled with epoxy potting compound for easy incorporation into overmolded cables. Crimp-contact versions for field installation and repair are also available. SeaKing Junior is specifically designed for high-pressure, mated condition applications that do not require the extra fail-safe features and cost of an open-face rated solution such as SeaKing™ 700.



Harsh-environment polyurethane  
overmolded point-to-point cables with  
10 GbE SpeedMaster insert



SeaKing Junior Bulkhead Connector  
Receptacle with hybrid signal and high-  
frequency RF contacts

- **5000 psi (mated condition) pressure rated connector for overmolded (non-PBOF) applications**
- **High density, small form-factor solution—up to 50% reduction in size and weight compared to industry standard solutions**
- **Micro miniature high-density pin configurations: #22D, #20, #20HD, #16, #12, #8 signal, power, and high-speed datalink shielded contacts**

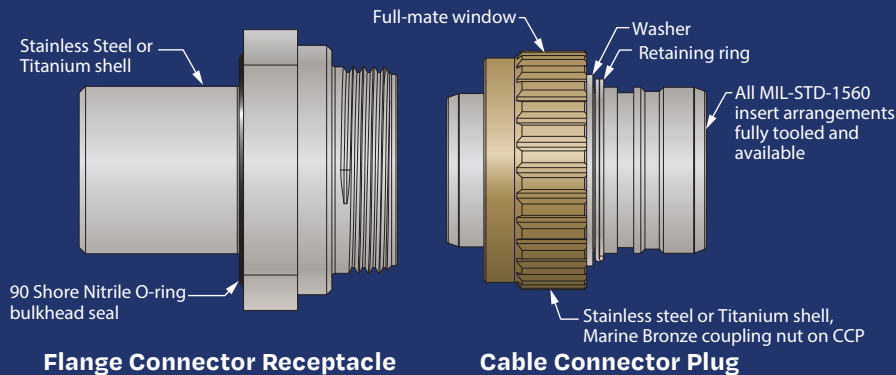


# HIGH-DENSITY DRY-MATE SeaKing™ Junior Connectors



5000 psi piston-sealed connectors and cables

## SERIES 701 SEAKING™ JUNIOR MECHANICAL FEATURES AND CONFIGURATIONS



**Stainless Steel or Titanium shells, Marine Bronze coupling nuts**

Available in nine sizes from 2 to 128 contacts, Series 701 connectors feature stainless steel or marine bronze shells. Nitrile O-rings resist high temperature and corrosive chemicals.

**5,000 psi**

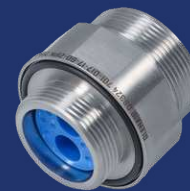
These connectors withstand up to 5,000 psi hydrostatic pressure in a mated condition.



Series 701-011 Cable Connector Plug (CCP) supplied as overmolded cables only



Series 701-016 Flange Connector Receptacle (FCR) supplied as discrete connectors or in pigtail assemblies



Series 701-017 Bulkhead Connector Receptacle (BCR) supplied as discrete connectors or in pigtail assemblies

## SEAKING™ JUNIOR CONTACT SPECIFICATIONS, MATERIALS AND FINISHES, AND CRIMP TOOLS

SERVICE RATINGS			
Service Rating	Sea Level DWV (VAC)	Operational	
		VAC	VDC
M	1300	433.3	612.8
N	1000	333.3	471.4
I	1800	600.0	484.5
II	2300	766.7	1084.2

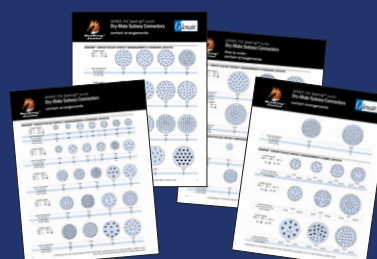
CURRENT RATING		
Contact Size	Amps	Wire Size
#8	46.0	8 AWG
#10	33.0	10 AWG
#12	23.0	12-14 AWG
#16	13.0	16-20 AWG
#20	7.5	20-24 AWG
#22D	5.0	22-28 AWG

PERFORMANCE SPECIFICATIONS	
Insulation Resistance	5000 megohms at 500 VDC
Operating Temperature	-65° C to +175° C
Hydrostatic Pressure	5,000 psi mated condition, tested per ISO 13628-6
Durability	300 mating cycles

SERIES 701 POLARIZATION			
Plug		Receptacle	
		Key Position	Key Rotation
			A° B°
		Normal (N)	150° 210°
		A	75° 210°
		B	95° 230°
		C	140° 275°

MATERIAL AND FINISH	
Shells, Jam Nuts	Stainless steel or Titanium
CCP Coupling Nuts	Marine bronze, unplated
Contacts	Copper alloy, gold plated.
Insulators	Composite thermoplastic
Retaining ring and hardware	Stainless steel
Interfacial Seal (pin inserts only) and Grommet	Fluorosilicone
O-rings and Seals	Nitrile, 90 shore Viton®, 90 shore Viton® O-rings offer wider temperature range

CONTACT CRIMP TOOLS		
Contact Size	Crimp Tool	Positioner
#12	809-136	809-137
#16	809-136	809-137
#20	809-136	809-137
#22D	809-015	K42 Pin
		K40 Skt



Tooled insert arrangements include high-density and combo layouts for Coax, Twinax, and El Ochito® contacts