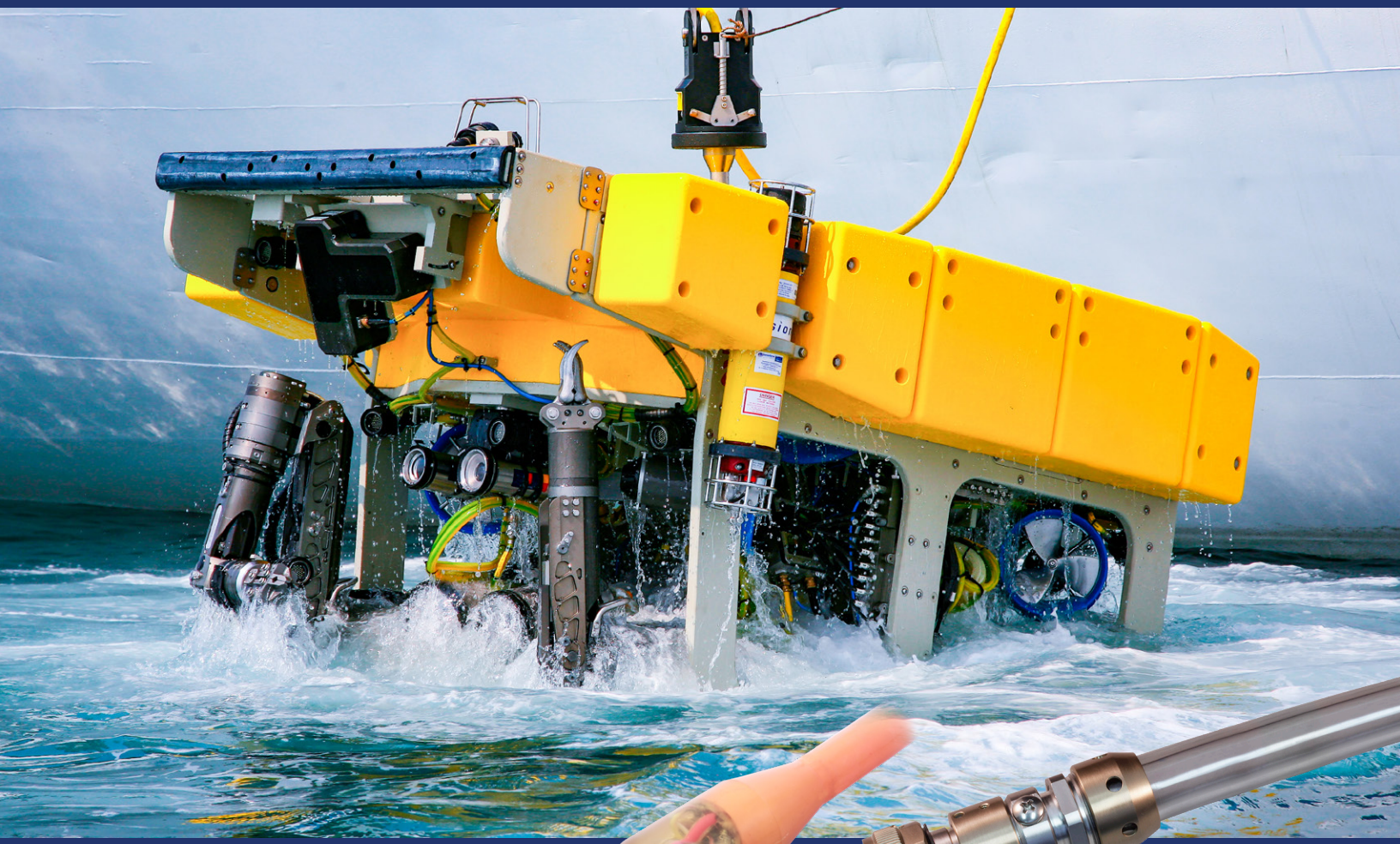
MISSION-CRITICAL
INTERCONNECT SOLUTIONS

Glenair®



Glenair
SIGNATURE SERIES



Underwater Connectors

Dry-Mate Subsea Connectors and PBOF Assemblies for High-Pressure Oil & Gas Industry Interconnect Applications

JULY 2022

Glenair®

OIL & GAS INDUSTRY INTERCONNECT SOLUTIONS

- High-pressure, 10K PSI open-face subsea
- Ruggedized serial, high-speed, fiber optic, and power submersible connectors
- Ultra high-density solutions for ROVs and inline inspection applications
- Overmolded cable and PBOF assemblies

DOWN HOLE

SHALLOW WATER

DEEP WATER

High-performance, high-pressure interconnect technologies with proven sealing performance in shipboard, downhole and underwater applications



DEEP WATER SUBSEA, HIGH-PRESSURE 10K PSI / 700 BAR / 7000M CONNECTORS



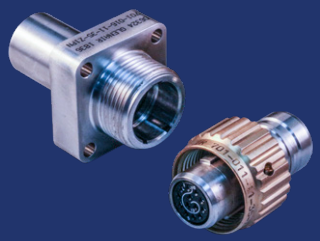
SeaKing™ 700 10K PSI subsea connectors and cables



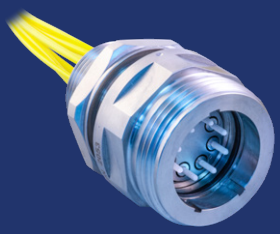
SeaKing™ PBOF assemblies, fittings, and accessories



SeaKing™ PEEK corrosion-free for anti-cathodic delamination applications



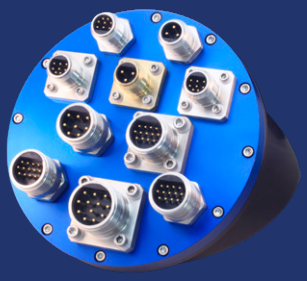
SeaKing Junior high-density small form-factor subsea connector



SeaKing Fiber open-face pressure-rated fiber optic connectors and cables



SeaKing™ POWER underwater primary power junction connectors



SuperG55™ dry-mate 10K PSI subsea electrical connectors

PIPELINE INSPECTION / ULTRAMINIATURE SUBSEA



Micro PSI microminiature high-pressure connectors and cables

SHALLOW WATER SUBSEA CONNECTORS



AquaMouse™ 3500 PSI miniature connectors and overmolded cables



Geo-Marine® 5000 PSI connectors and overmolded cables

DOWNHOLE HIGH-TEMPERATURE / HIGH PRESSURE CONNECTORS



High Temperature/High Pressure (HTHP) penetrators and feedthroughs

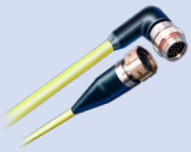
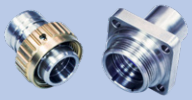


Well-Master® high temperature Micro-D connectors



Hydrostatic Test Lab

Dry-mate Underwater/Subsea Connector Selection Guide

SIZE	CONNECTOR SERIES	RUGGEDNESS LEVEL	OPEN-FACE SEALING	DEPTH RATING
Large	SeaKing POWER 	3 Mission-Critical	Yes	10K PSI (700 Bar)
Standard	SeaKing SEVEN HUNDRED 	3 Mission-Critical	Yes	10K PSI (700 Bar)
	G55 SUPER 	2 High-Reliability	Yes	10K PSI (700 Bar)
	Geo-Marine® 	2 High-Reliability	No	5K PSI (450 Bar)
Miniature	SeaKing Junior 	2 High-Reliability	No	10K PSI (700 Bar)
	aquamouse 	1 General Duty Harsh-Environment	No	3.5KPSI (240 Bar)
Micro	MICRO-PSI 	3 Mission-Critical	Yes	10K PSI (700 Bar)

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Rev. 11.13.20

Dry-mate Underwater/Subsea Connector Selection Guide

SHELL MATERIALS	ELECTRICAL RATING	SHELL OD RANGE	CABLE / CONTACT TYPES	APPLICATIONS	NOTES
Super Duplex Stainless Steel or Titanium	5kV 350A Max	2.34" to 3.64"	Overmolded Solder	High-Voltage Power	API 16D and 17E-Compliant
Stainless Steel, Titanium, or PEEK	600VDC 3–10A,	1.15" to 2.14"	PBOF, Overmolded Solder	High-Speed Datalink, RF, Fiber Optic, Serial Databus, Low-Voltage Power	Glass-Sealed Contacts Dual O-Ring Sealing
Stainless Steel or PEEK Rubber Keyway	600VDC 5–18A	1.12" to 1.50"	PBOF, Overmolded Crimp, Solder	Serial Databus, Low-Voltage Power	55 Series Intermateable Full-Mate Inspection Port
Stainless Steel	500VDC 5–23A	1.03" to 2.03"	Overmolded Solder	Serial Databus, Low-Voltage Power	Arctic Coupling Nuts HTHP Pipeline Inspection
Stainless Steel or Titanium	500VDC 5–23A	.875" to 1.95"	Overmolded Crimp, Solder	High-Speed Datalink, RF, Serial Databus, Low-Voltage Power	High-Density From #12 to #30 AWG Wire Support
Stainless Steel or Marine Bronze	750VDC–1800VDC 5–23A	.5" to 1.562"	Overmolded Crimp, Solder	High-Speed Datalink, RF, Serial Databus, Low-Voltage Power	From 1 –130 Glass-Sealed Contacts
Stainless Steel or Titanium	300VDC 3A	.25" to .32"	Prewired Pigtails, Cables Solder	High-Speed Datalink, Serial Databus, Low-Voltage Power	Glass- and Piston O-Ring Sealed Ethernet-Ready



10K PSI OPEN-FACE

SeaKing™ 700 Dry-Mate Underwater Connectors

SeaKing™
SEVEN HUNDRED

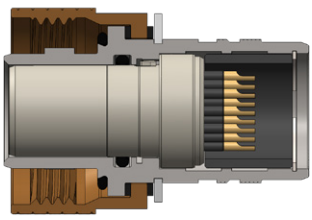
10K PSI / 700 Bar / 7000m open-face or mated, dual O-ring equipped, high-density, high-voltage, fiber optic and hybrid electrical/optical subsea connectors

SeaKing is an innovative 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.

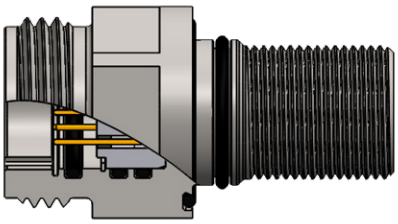
Ideally suited for deep water offshore oil & gas, military/defense, oceanographic research, and other harsh-environment subsea applications, the dry-mate connector series is built for optimal durability and reliability. Tested to 15,000 PSI (open face and mated), and equipped with integrated dual O-ring seals, marine bronze coupling nuts, corrosion-resistant stainless steel shells and high-pressure contact inserts with gold-plated signal contacts, special RF and fiber optic solutions, the Series 700 SeaKing is today's most advanced high-density signal and standard-density power underwater connector.

- **High density, small form-factor connector**
- **Dual O-ring seals ensure high-pressure performance for every leak path**
- **Signal, power, RF and optical insert arrangements**
- **Stainless steel with anti-galling marine bronze engaging nut, or cathodic delamination-free PEEK**
- **Full-mate inspection ports**
- **Easy O-ring replacement**
- **Key and keyway polarization**

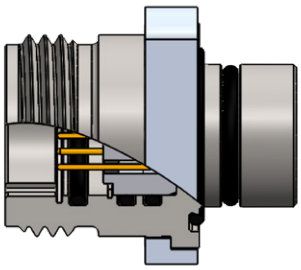
STANDARD CONFIGURATIONS



Cable Connector Plug (CCP)



Bulkhead Connector Receptacle (BCR)



Flange Connector Receptacle (FCR)

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SERIES 700 10K PSI / 700 BAR / 7000 M

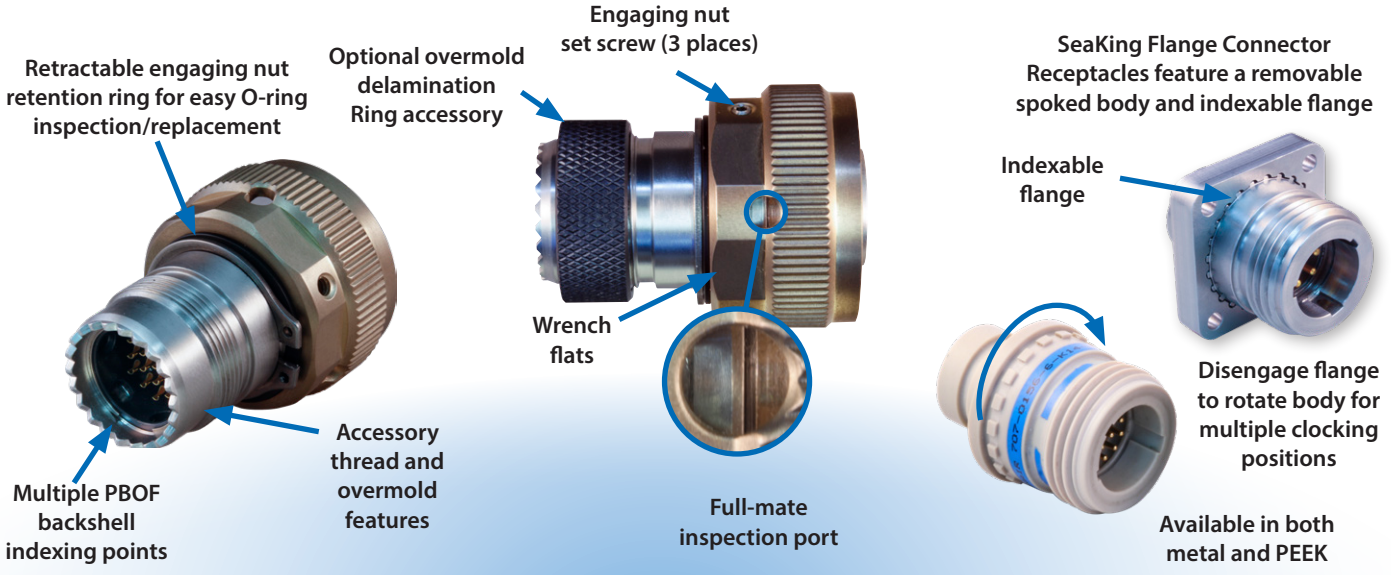
SeaKing™ High-Pressure Underwater Connectors, Cables, and PBOF Assemblies

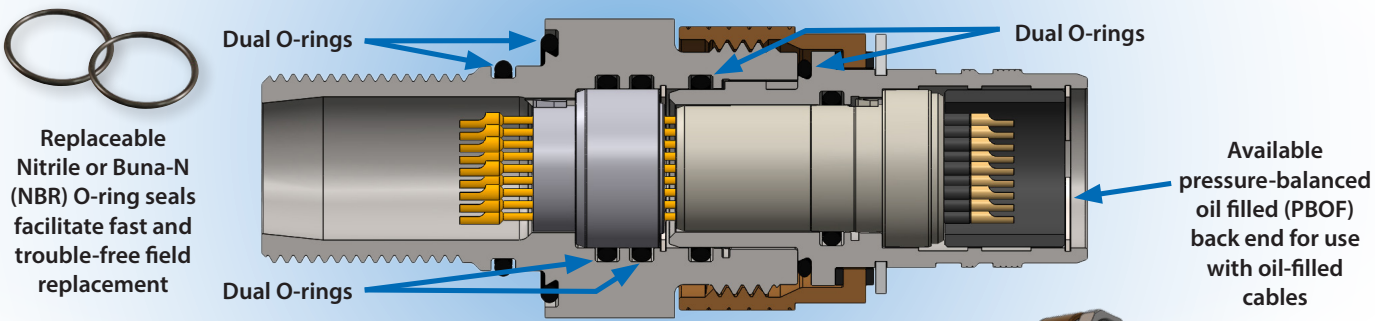
Key mechanical and environmental features

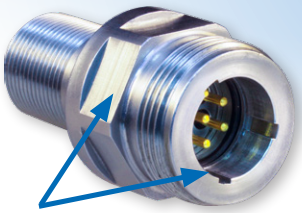
Sealing: SeaKing 700 is the best-sealed subsea connector on the market. All critical interfaces, including bulkhead seals, glass-to-metal insert seals, mating interface bore seals, and face seals are fully redundant ensuring 10K PSI protection, even in the event of a single-seal failure.

Mating: SeaKing utilizes a modified UNC (coarse) mating interface with added clearance to reduce bio-fouling and facilitate rapid-advance mating. The marine bronze coupler on the plug is equipped with thread flats as well as knurling and is less susceptible to galling than standard steel engaging nuts. Polarized keys and keyways prevent both thread damage and mismating.

Ease-of-Use: Multiple PBOF backshell indexing points, indexable flange FCRs, full-mate inspection ports, retractable engaging nuts, and other features make SeaKing the most user-friendly subsea connector on the market.



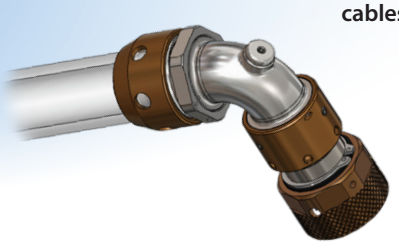




BCR showing keyway-assisted mating and polarization feature and wrench flats for reliable, secure attachment to pressure bulkheads



SeaKing™ 700 cable assemblies are available from the factory with special 10,000 PSI overmolded cable-to-plug connector environmental sealing.

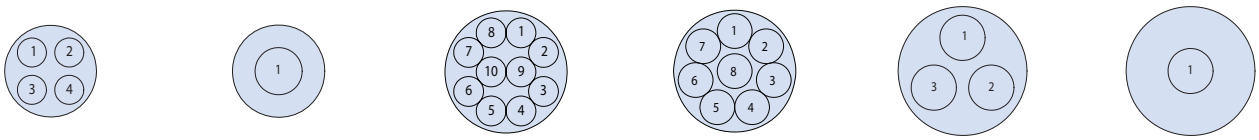


Revolutionary PBOF swivel assembly features kink-proof hose swivel, straight, 45° and 90° routing, and superfast assembly

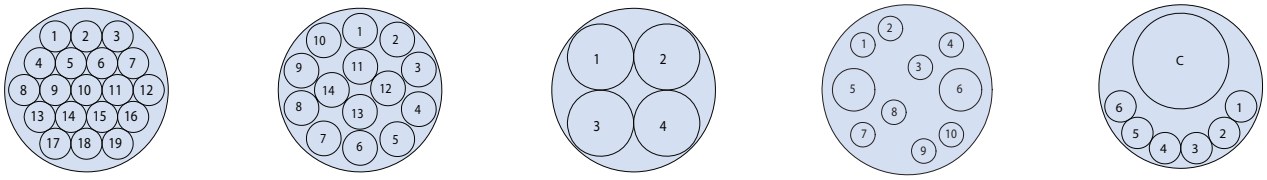
SeaKing™ High-Pressure Subsea Connectors, Cables, and PBOF Assemblies

Contact arrangements and specifications

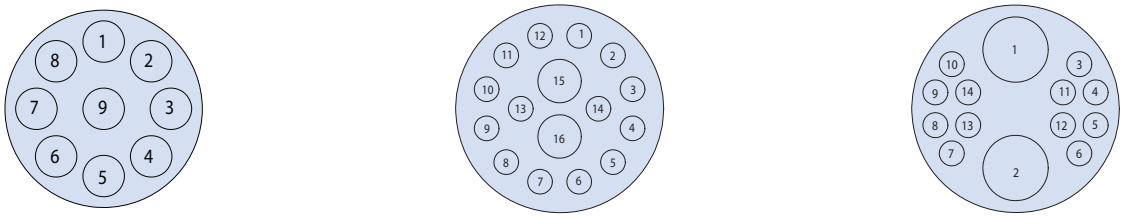
SEAKING™ CONTACT ARRANGEMENTS Mating face view of pin insert (socket insert IDs are reversed)



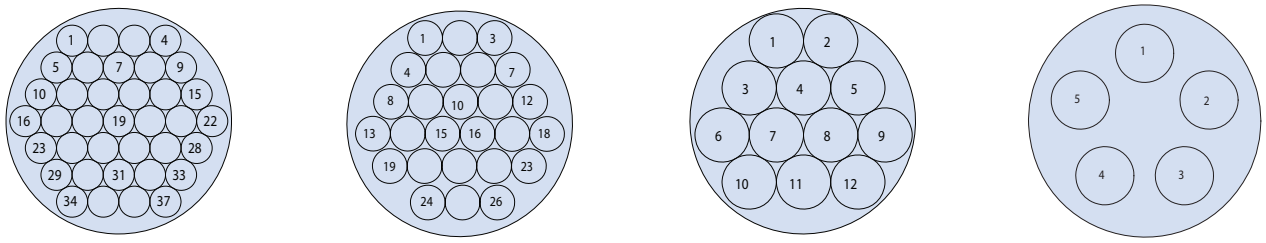
Size E		Size G			
E4	**E1**	**G10**	**G8**	**G3**	**GC**
4 Size #22 Contacts	1 Size #16 Contact	10 Size #22 Contacts	8 Size #20 Contacts	3 #16 Contacts	1 Coax Contact



Size K				
K19	**K14**	**K4**	**KX10**	**KC6**
19 Size #22 Contacts	14 Size #20 Contacts	4 Size #16 Contacts	2 #16 Contacts, 8 #22 Contacts	Single 75 Ohm Coax, 6 #22 Contacts



Size L		
L9	**LX16**	**LX14**
9 Size #16 Contacts	14 #22 Contacts 2 #16 Contacts	2 #12 Contacts 12 #22 Contacts



Size M			
M37	**M26**	**M12**	**M5**
37 Size #22 Contacts	26 Size #20 Contacts	12 Size #16 Contacts	5 #12 Contacts 850VDC / 600VAC

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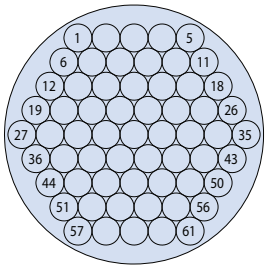
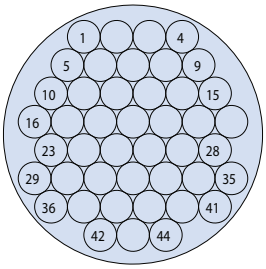
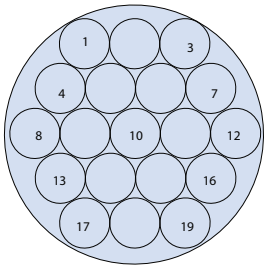
SeaKing™ High-Pressure Subsea Connectors, Cables, and PBOF Assemblies

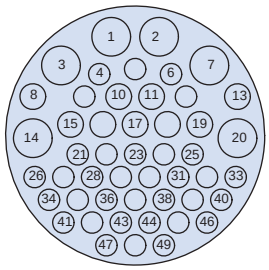
Contact arrangements and specifications

Consult factory for custom insert arrangements including a wide range of shielded RF microwave and high frequency contact configurations

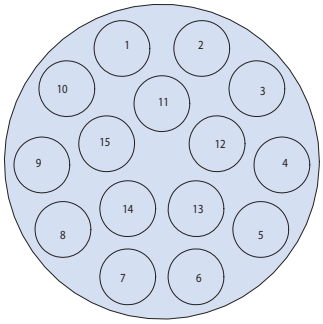


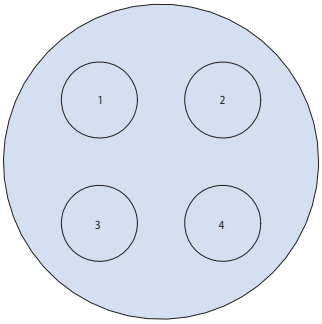


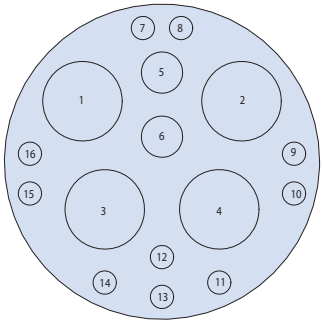




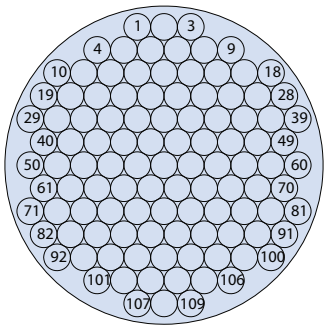
Size O			
O61	**O44**	**O19**	**OX49**
61 Size #22 Contacts	44 Size #20 Contacts	19 Size #16 Contacts	49 Contacts 6 #16 • 9 #20 • 34 #22

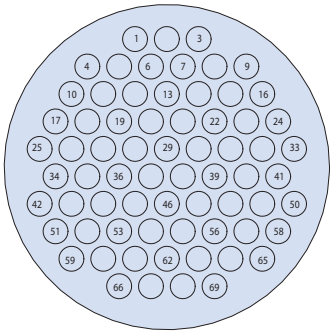


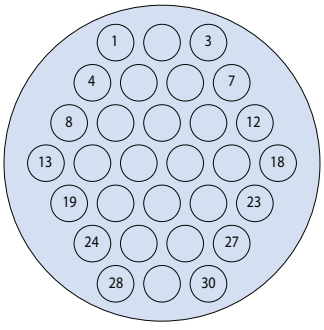


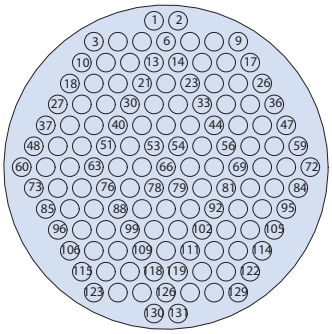


Size P		
P15	**P4**	**PX16**
15 Size #12 Contacts	4 Size #8 Contacts 1kV	16 Contacts 4 #8 • 2 #16 • 10 #22





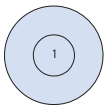




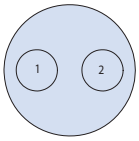
Size Q			Size R
Q109	**Q69**	**Q30**	**R131**
109 Size #22 Contacts	69 Size #20 Contacts	30 Size #16 Contacts	131 Size #22 Contacts

SEAKING™ FIBER OPTIC AND HYBRID FIBER-ELECTRICAL ARRANGEMENTS

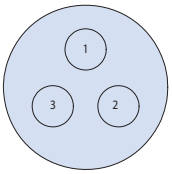
Mating face view of pin insert (socket insert IDs are reversed)



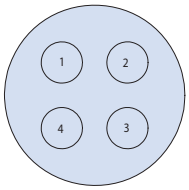
Size E
EF1
1 Fiber Terminus



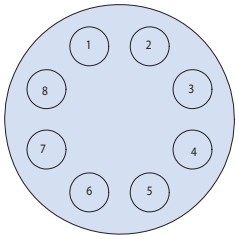
Size K
KF2
2 Fiber Termini



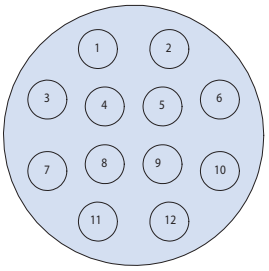
Size L
LF3
3 Fiber Termini



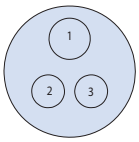
Size M
MF4
4 Fiber Termini



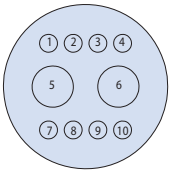
Size O
OF8
8 Fiber Termini



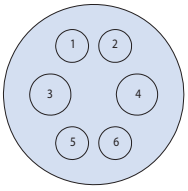
Size P
PF12
12 Fiber Termini



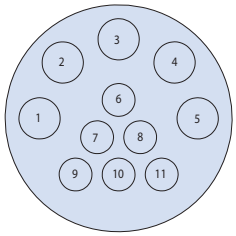
Size K
KH12
1 Fiber Terminus 2 #16 Contacts



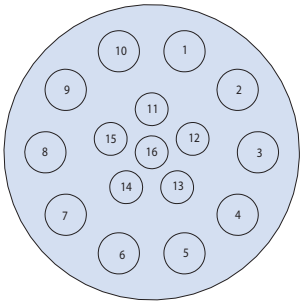
Size L
LH28
2 Fiber Termini 8 #22 Contacts



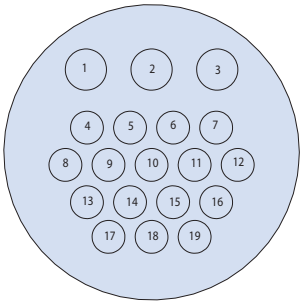
Size M
MH24
2 Fiber Termini 4 #16 Contacts



Size O
OH56
5 Fiber Termini 6 #16 Contacts



Size Q
QH106
10 Fiber Termini 6 #16 Contacts



Size Q
QH316
3 Fiber Termini 16 #16 Contacts

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SeaKing™ High-Pressure Subsea Connectors, Cables, and PBOF Assemblies

Contact arrangements and specifications

Consult factory for custom insert arrangements including a wide range of shielded RF microwave and high frequency contact configurations

All high-density signal and standard-density power contact arrangements are available across the complete range of connector styles (CCP, FCR, and BCR). High-speed Ethernet inserts as well as Pressure Balanced Oil Filled (PBOF) configurations and a purpose-designed family of pressure caps, accessories and backshells are also available, please consult the factory.

SeaKing™ bulkhead connector receptacles (BCR) and flange connector receptacles (FCR) are equipped with high-pressure glass-to-metal sealed inserts with solder contact wire termination and 10K PSI open-face rating. Cable connector plugs (CCP) utilize environmental O-ring sealed inserts and are rated to 10K PSI in the mated condition.

Contact Arrangement Table

Shell Size	Contact Size						
	#22	#20	#16	#12	#8	Fiber Optic	Hybrid
E	4		1			1	
G	10	8	3				1 Coax (only)
K	19	14	4			2	1 Coax • 6 #22 8 #22 • 2 #16 1 F/O • 2 #16
L			9			3	12 #22 • 2 #12 8 #22 • 2 #16 2 F/O • 8 #22
M	37	26	12	5		4	2 F/O • 4 #16
O	61	44	19			8	6 #16 • 9 #20 • 34 #22 5 F/O • 6 #16
P				15	4 (1kV)	12	4 #8 • 2 #16 • 10 #22
Q	109	69	30				10 F/O • 6 #16 3 F/O • 16 #16
R	131						

Current Rating (Amps)

Contact Size	GRE Molded Inserts	Glass-to-Metal Sealed Inserts
#22	5 Amps	3 Amps
#20	7.5 Amps	5 Amps
#16	13 Amps	10 Amps
#12	23 Amps	17 Amps
#8	50 Amps	35 Amps

All contact arrangements are rated for 600 VDC / 400 VAC unless otherwise specified.
Solder cups are sized to accept maximum wire gauge according to the contact size

SeaKing™ Performance Specifications

Pressure Rating	Plug: 10,000 PSI, mated condition Receptacles: 10,000 PSI mated and open face	per ISO 13628-6
Electrical	600 V typical 5 GOhm insulation resistance at 500 VDC	per MIL-STD-202, Method 301 per MIL-STD-202, Method 302
Materials	Salt Spray (corrosion) Humidity (steady state) Thermal Cycle	MIL-STD-202, Method 101 MIL-STD-202, Method 103 ISO 13628-6

SeaKing™ High-Pressure Underwater Connectors, Cables, and PBOF Assemblies

700 Series connectors CCP, FCR and BCR



700-001 CABLE CONNECTOR PLUG (CCP) WITH SOLDER CUP TERMINATION

SeaKing - How To Order						
Sample Part Number	**700**	**-001**	**-K19**	**-Z1**	**S**	**N**
Product Series	**700** = SeaKing™					
Shell Style	**001** = cable connector plug (CCP)					
Shell Size-Insert Arrangement	(See page 8 – 10)					
Shell Material	**Z1** = 316 stainless steel **TC** = titanium					
Contact Style	**S** = socket					
Polarization	**A**, **B**, **C**, **N** = normal (see sales drawing for details)					



700-006 GLASS-TO-METAL SEAL OR 700-026 GLASS REINFORCED EPOXY, FLANGE CONNECTOR RECEPTACLE (FCR) WITH SOLDER CUP TERMINATION

SeaKing - How To Order						
Sample Part Number	**700**	**-006**	**-O19**	**-Z1**	**P**	**N**
Product Series	**700** = SeaKing™					
Shell Style	**006** = GTMS flange connector receptacle (FCR) **026** = GRE flange connector receptacle (FCR)					
Shell Size-Insert Arrangement	(See page 8 – 10)					
Shell Material	**Z1** = 316 stainless steel **TC** = titanium					
Contact Style	**P** = Pin					
Polarization	**A**, **B**, **C**, **N** = normal (see sales drawing for details)					



700-007 GLASS-TO-METAL SEAL OR 700-027 GLASS REINFORCED EPOXY, BULKHEAD CONNECTOR RECEPTACLE (BCR) WITH SOLDER CUP TERMINATION

SeaKing - How To Order						
Sample Part Number	**700**	**-007**	**-K19**	**-Z1**	**P**	**N**
Product Series	**700** = SeaKing™					
Shell Style	**007** = GTMS bulkhead connector receptacle (BCR) **027** = GRE bulkhead connector receptacle (BCR)					
Shell Size-Insert Arrangement	(See page 8 – 10)					
Shell Material	**Z1** = 316 stainless steel **TC** = titanium					
Contact Style	**P** = pin					
Polarization	**A**, **B**, **C**, **N** = normal (see sales drawing for details)					

700-010 BULKHEAD CONNECTOR FEED-THRU (BCF), INCONEL INSERT, 10K PSI OPEN FACE RATED

SeaKing - How To Order								
Sample Part Number	**700-010**	**-M12**	**-Z1**	**P**	**N**	**P**	**N**	**-2**
Product Series	**700-010** = SeaKing™ bulkhead connector feed-thru (BCF)							
Shell Size-Insert Arrangement	(See page 8 – 10)							
Shell Material	**Z1** = 316 stainless steel **TC** = titanium							
Side A, Contact Type	**P** = pin **S** = socket							
Side A, Polarization	**A**, **B**, **C**, **N** = normal (see polarization table, pgs. 6-7)							
Side B, Contact Type	**P** = pin **S** = socket							
Side B, Polarization	**A**, **B**, **C**, **N** = normal (see sales drawing for details)							
Bulkhead Thickness	**1** = 1.00 - 1.50 **2** = 1.50 - 2.00 **3** = 2.00 - 2.500 **4** = 2.50 - 3.00 **5** = 3.00 - 3.50 **6** = 3.50 - 4.00							

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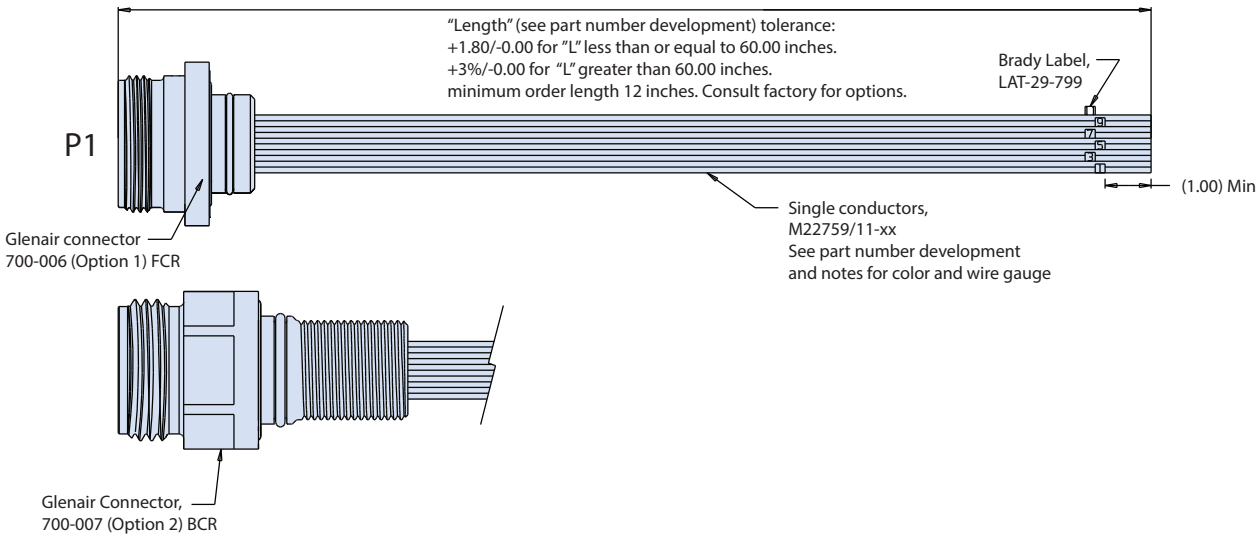
SeaKing™ High-Pressure Underwater Connectors, Cables, and PBOF Assemblies

Single-ended connector receptacle pigtail assembly

7071-0012 FLANGE OR BULKHEAD CONNECTOR RECEPTACLE PIGTAIL ASSEMBLY

SeaKing - How To Order							
Sample Part Number	**7071-0012**	**-1**	**M12**	**-Z1**	**-12**	**A**	**N**
Product Series	**7071-0012** = SeaKing™						
Receptacle Style	**1** = 700-006 (GTMS FCR) **2** = 700-007 (GTMS BCR) **3** = 700-026 (GRE FCR) **4** = 700-027 (GRE BCR)						
Insert Arrangement	(See page 8 – 10)						
Material/Finish	**Z1** = 316 stainless steel **TC** = titanium **K** = glass-reinforced PEEK						
Cable Length	In inches						
Wire Coloring	**A** = all white **B** = 10 color repeating; IAW MIL-STD-681						
Polarization	**A**, **B**, **C**, **N** = normal (see sales drawing for details)						



Alternate Key Positions		
	Key Rotation	
Key Position	A°	B°
Normal (**N**)	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°

NOTES

1. 100% electrically tested for shorts, dielectric withstanding voltage (500Vac 5 seconds max) and insulation resistance (conductor to conductor and conductor to shell at 500Vdc/200 megohms min. (IAW-STD-202, Method 302)
2. Quantity and gauge of conductors determined by insert arrangement. All cavities to be populated with largest gauge wire.
3. All solder cup cavities are isolated with M23053/8 heat shrink tubing.

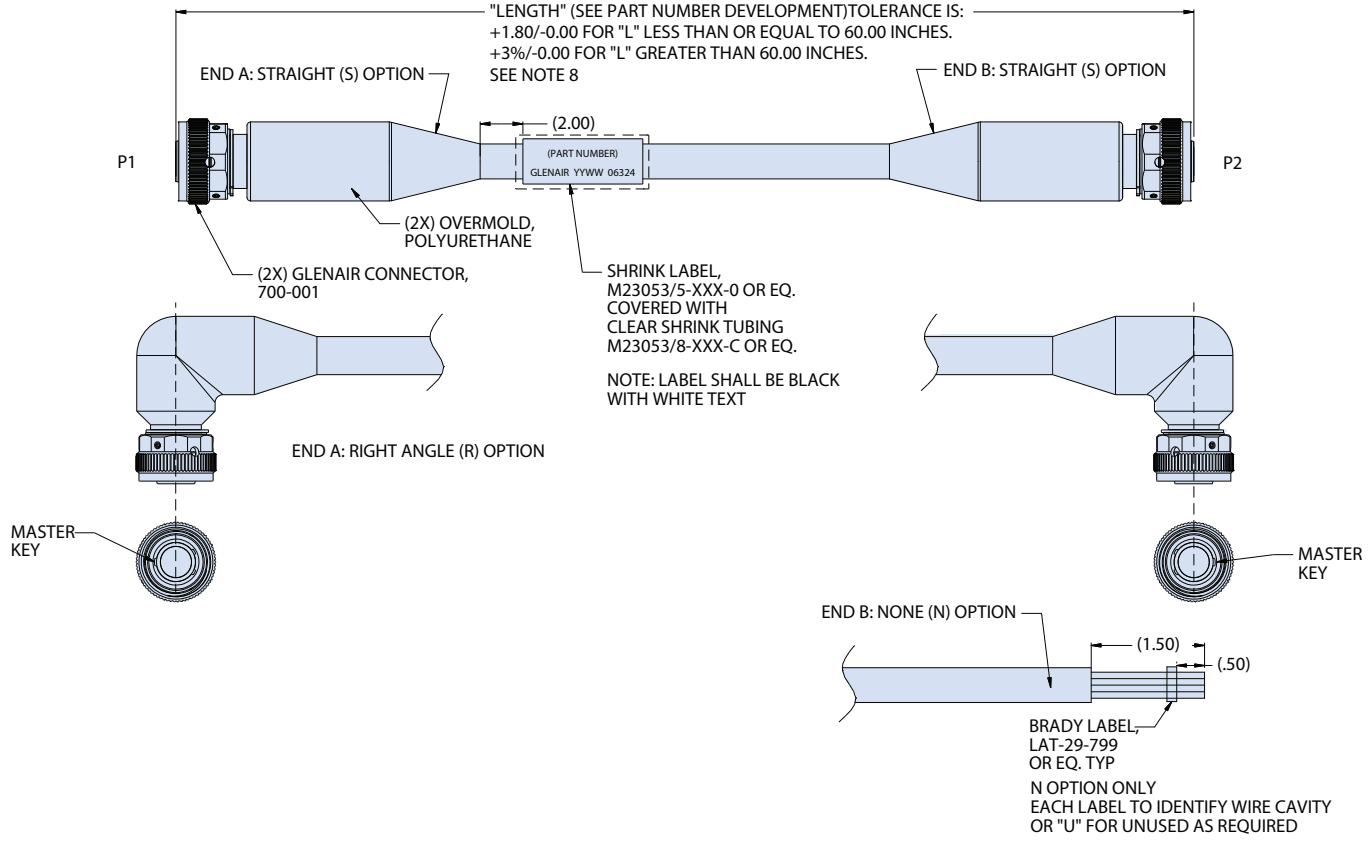
SeaKing™ High-Pressure Underwater Connectors, Cables, and PBOF Assemblies

Single ended or back-to-back, overmolded cable

SeaKing - How To Order								
Sample Part Number	**7071-0007**	**-S**	**R**	**Z1**	**-K19**	**N**	**-24**	**11**
Series	**7071-0007** = SeaKing™ cable connector plug (CCP) assembly							
P1	**R** = right angle **S** = straight							
P2	**R** = right angle **N**=none **S** = straight							
Shell Material/Finish	**Z1** = 316 stainless steel **TC** = titanium **K** = glass-reinforced PEEK							
Insert Arrangement	(See page 8 – 10)							
Polarization	**A**, **B**, **C**, **N** = normal (see sales drawing for details)							
Cable Length	In inches							
Cap Options	**10**, **11**, **20**, **21**; omit for none							

Alternate Key Positions		
	Key Rotation	
Key Position	A°	B°
Normal (**N**)	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°

Cap Options	
Sym	Description
10	Protective cap, no lanyard
11	Protective cap, with lanyard
20	Pressure cap, no lanyard
21	Pressure cap, with lanyard



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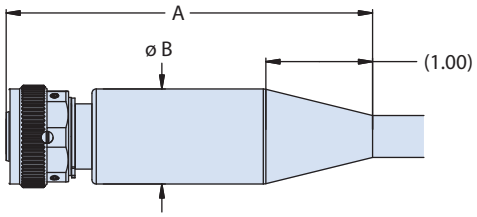
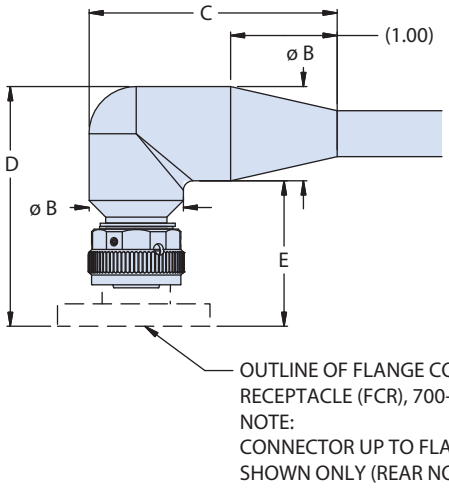
SeaKing™ High-Pressure Underwater Connectors, Cables, and PBOF Assemblies

Single ended or back-to-back, overmolded cable

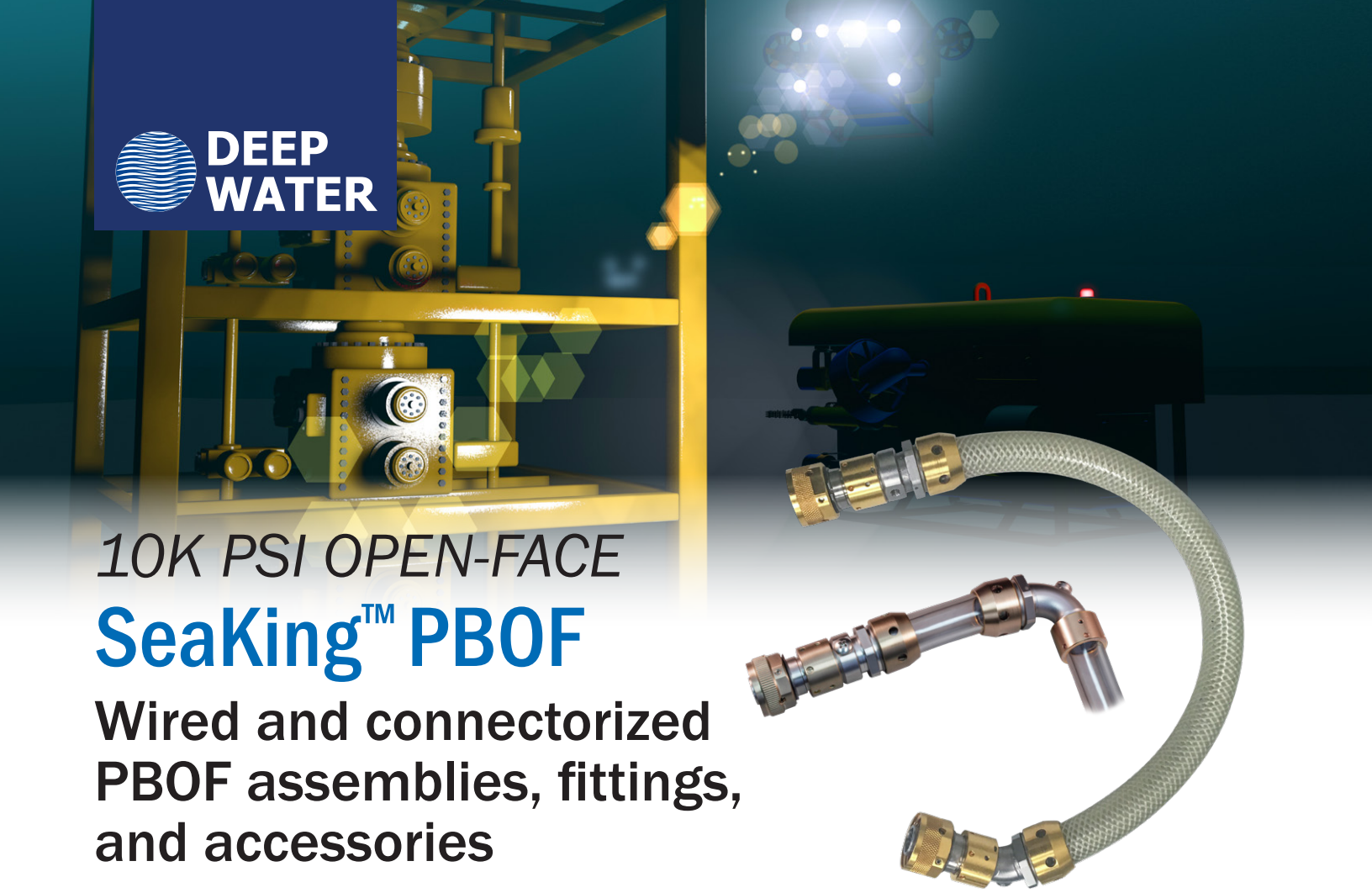
SIZE	A	B	C	D	E
E	4.55	0.765	2.88	2.93	2.165
G	4.55	0.875	2.94	3.11	2.235
K	4.55	1.00	3.00	3.16	2.105
L	4.55	1.125	3.00	3.29	2.165
M	5.05	1.250	3.38	3.43	2.18
O	5.05	1.500	3.5	3.55	2.05
P	5.05	1.625	3.68	3.75	2.125
Q	5.05	1.750	3.88	3.93	2.18
R	5.05	1.875	3.94	3.99	2.115





NOTES

1. 100% electrically tested for shorts, dielectric withstanding voltage (at 500Vac 5 seconds max) and insulation resistance (conductor to conductor and conductor to shell) at 500Vdc/200 megohms min. IAW MIL-STD-202, Method 302).
2. Unit pack: 1 ea. In poly bag, heat-sealed. Include dust cap. Tag and bag per illustration.
3. Max pressure rating 10000 PSI.
4. For connector dimensions, materials, finishes, refer to drawing 700-001.
5. For insert arrangements refer to drawing 709-099 contact manufacturer for builds with combo insert arrangements.
6. Double ended cordsets are wired one to one (ex. pin 1 to pin 1, 2 to 2 etc).
7. Quantity and gauge of conductos determined by insert arrangement. All cavities to be pupulated with largest gauge wire.
8. Marker label, M23053/5 or equivalent. Covered with clear tubing M@3053/18 or equivalent tubing shall be white with black text.
9. Single conductors shall be identified with cavity indentifier or "U" for unused marker label, M23053/ 5 or equivalent convered with clear tubing M23053/18 or equivalent tubing shall be white with text.
10. Minimum order length is 24.00 inches. Consult fatory for orders longer 1200 inches (100ft)
11. All configurations are wired one to one.
12. Pressure rated cable. Polyurethane jacket wire AWG shall be per contact size.



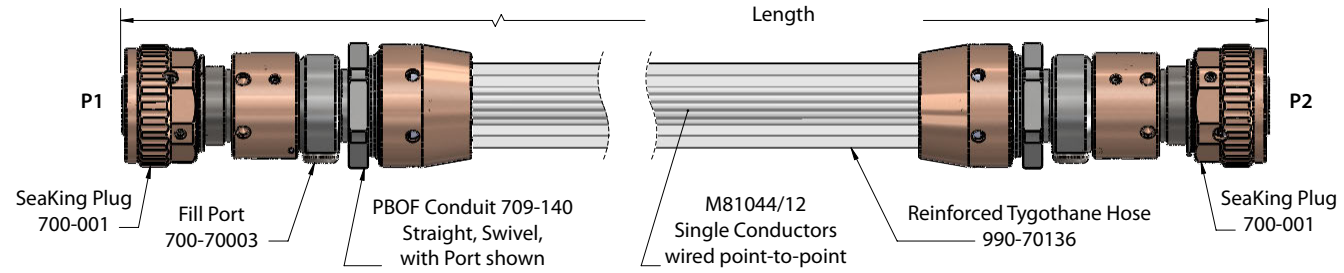
DEEP WATER

10K PSI OPEN-FACE

SeaKing™ PBOF

Wired and connectorized PBOF assemblies, fittings, and accessories

WIRED / CONNECTORIZED PBOF CONDUIT ASSEMBLIES



SeaKing PBOF Wired Assembly - How To Order						
Sample Part Number	**7071-0348**	**-K19**	**-L1S**	**-L1S**	**-N**	**-XXX**

Base Part Number	**7071-0348** = SeaKing™ PBOF wired assembly		
Insert Arrangement P1 and P2	**G10**, **G8**, **K19**, **K14**, **K4**, **KC6**, **L9**, **M37**, **M26**, **M12**, **O61**, **O44**, **O19**, **OX49**, **Q109**, **Q30**, **R131** (see catalog or dwg 709-099 for details)		
End Configuration P1	**Angle Option** **L** = Straight **M** = 45° **N** = 90°	**Fill Port** **1** = Yes **0** = No	**Swivel/Fixed** **S** = Swivel **F** = Fixed
End Configuration P2	**Angle Option** **L** = Straight **M** = 45° **N** = 90°	**Fill Port** **1** = Yes **0** = No	**Swivel/Fixed** **S** = Swivel **F** = Fixed

Key Orientation		
Key Position	**A°**	**B°**
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°

Cable Length	in Inches

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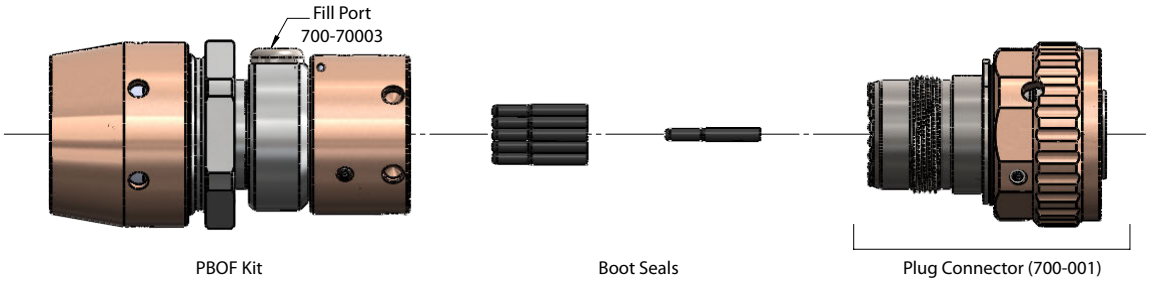
SeaKing™ High-Pressure Underwater PBOF Assemblies, Fittings, and Accessories

Boot seal assembly and unwired PBOF conduit

CONNECTOR / BACKSHELL / BOOT SEAL ASSEMBLY

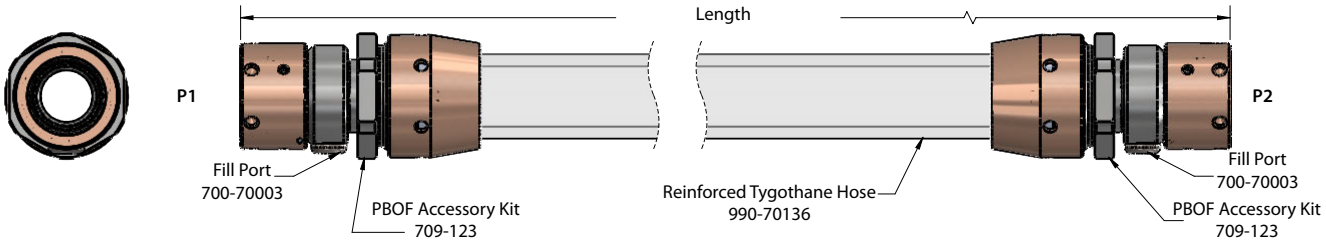


SeaKing PBOF Connector/Backshell/Boot Seal Assembly - How To Order

Sample Part Number	707-0320	-K19	Z1	S	N	L1S

Base Part Number	**707-0320** = SeaKing™ PBOF assembly		
Insert Arrangement	**G10, G8, K19, K14, K4, KC6, L9, M37, M26, M12, O61, O44, O19, OX49, Q109, Q30, R131** (see catalog or dwg 709-099 for details)		
Barrel Material	**Z1** = Stainless Steel **TC** = Titanium		
Contact Style	**S** = Socket		
Key Position	**Key Position**	**A°**	**B°**
	N	150°	210°
	A	75°	210°
	B	95°	230°
	C	140°	275°
Configuration Options	**Angle Option**	**Fill Port**	**Swivel/Fixed**
	L = Straight **M** = 45° **N** = 90°	**1** = Yes **0** = No	**S** = Swivel **F** = Fixed

UNWIRED PBOF CONDUIT ASSEMBLIES



SeaKing PBOF Conduit Assembly - How To Order

Sample Part Number	709-140	-K	-L1S	-L1S	-XX

Base Part Number	**709-140** = SeaKing™ PBOF conduit assembly		
Backshell and Tubing size	**E, G, K, L, M, O, P, Q, R**		
Backshell Configuration P1	**Angle Option**	**Fill Port**	**Swivel/Fixed**
	L = Straight **M** = 45° **N** = 90°	**1** = Yes **0** = No	**S** = Swivel **F** = Fixed
Backshell Configuration P2	**Angle Option**	**Fill Port**	**Swivel/Fixed**
	L = Straight **M** = 45° **N** = 90°	**1** = Yes **0** = No	**S** = Swivel **F** = Fixed
Cable Length	in Inches		

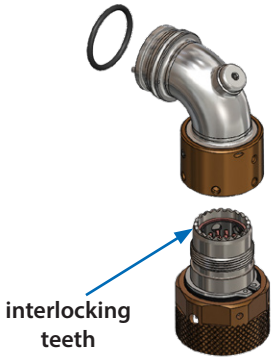
SeaKing™ High-Pressure Underwater PBOF Assemblies, Fittings, and Accessories

Assembly fittings and accessories

REVOLUTIONARY PBOF SWIVEL HOSE ATTACHMENT ACCESSORIES

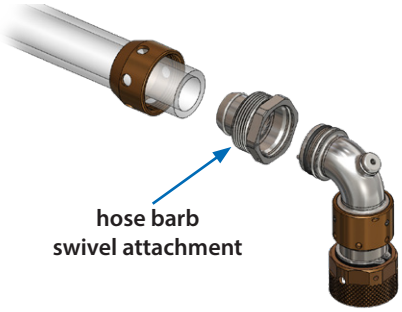
Hose barb fittings for PBOF assemblies are the perennial weak link in subsea oil & gas applications. Kinked and twisted hoses, leaky fittings, corroded hose clamps, and other performance problems characterize most existing solutions. The Glenair PBOF swivel hose attachment for SeaKing™ connectors solves these problems and more. Designed from the sea floor up to perform flawlessly and reliably, this revolutionary attachment puts an end to the long list of field maintenance problems associated with oil-filled cable applications.

- **Straight, 45°, and 90° "full radius" angle and profile hose routing**
- **Hose angle adjustment feature eliminates risk of oil leakage**
- **Corrosion-resistant materials used throughout**
- **Threaded couplers with safety set-screws for fail-safe leak and decoupling protection—no special tools required for assembly**
- **Compact PBOF compression fitting with 340° swivel action hose for an extra degree freedom of routing in compact situations**
- **Support for the broad range of hose diameters and wall thicknesses**

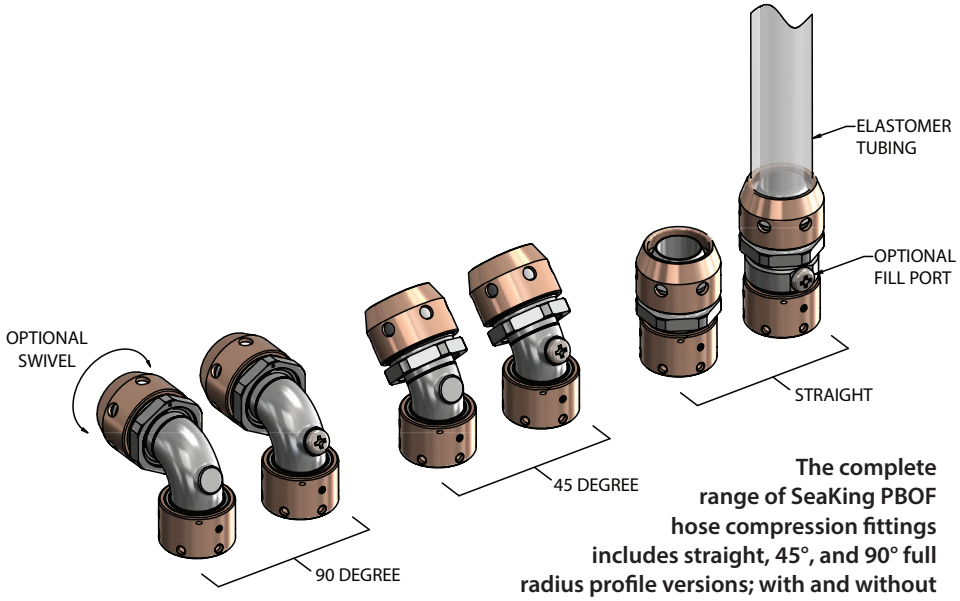


Interlocking teeth on SeaKing™ plug connectors interface with corresponding teeth on the PBOF swivel hose attachment to facilitate easy indexing and routing of hose assemblies

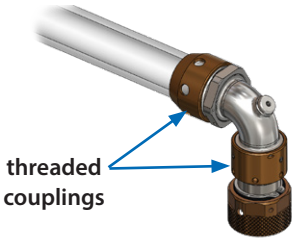
SeaKing PBOF Attachment Accessory Kits - How To Order					
Sample Part Number	**709-003**	**K**	**-L**	**1**	**S**
Product Series	**709-003** = SeaKing™ PBOF accessory				
Shell Size	**E, G, K, L, M, O, P, Q, R**				
Angular Function	**L** = Straight **M** = 45° **N** = 90°				
Fill Port Option	**0** = No fill port **1** = With fill port				
Swivel/Fixed Option	**S** = Swivel **F** = Fixed				



Revolutionary swivel hose barb compression attachment eliminates twisting and damage in PBOF assemblies



The complete range of SeaKing PBOF hose compression fittings includes straight, 45°, and 90° full radius profile versions; with and without integrated oil fill ports



Threaded PBOF compression nut and connector coupling nut (with additional safety set screw) provide for fast and easy assembly and prevent leaks and assembly decoupling

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DEEP WATER



COMPOSITE THERMOPLASTIC

SeaKing™ PEEK

Glenair SeaKing Series 700 with 30% glass-filled PEEK composite thermoplastic shells for use in anti-cathodic delamination applications

Discrete connectors, overmolded cables, and PBOF assemblies available

SeaKing 700 is an innovative 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. The series is available in stainless steel, titanium, and PEEK composite plastic shell materials designed for galvanic compatibility in mixed material applications, and superior corrosion resistance durability and immunity from cathodic delamination. The SeaKing PEEK series shares all the same insert arrangements, wire support, cabling, and PBOF capabilities as metal versions.



- **Superior corrosion resistance, durability, and immunity from cathodic delamination**
- **Same high-pressure performance as stainless steel**
- **Lighter weight with lower deployment costs**
- **Zero magnetic signature**
- **Galvanically compatible with all metal materials**

SeaKing™ PEEK Composite Thermoplastic 10K PSI Connectors

700 Series with non-metallic PEEK shells

700-201 CABLE CONNECTOR PLUG (CCP), PEEK



SeaKing PEEK - How To Order						
Sample Part Number	**700**	**-201**	**-M12**	**-K**	**S**	**N**
Product Series	**700** = SeaKing™					
Shell Style	**201** = non-metallic PEEK cable connector plug (CCP)					
Shell Size-Insert Arrangement	(See page 8 – 10)					
Shell Material	**K** = glass-reinforced PEEK					
Contact Style	**S** = socket					
Polarization	**A**, **B**, **C**, **N** = normal (see sales drawing for details)					

10K PSI available in smaller shell sizes. Contact factory for details.

700-206 GLASS REINFORCED EPOXY OR GLASS HERMETIC SEAL INSERT, FLANGE CONNECTOR RECEPTACLES (FCR), PEEK



SeaKing PEEK - How To Order						
Sample Part Number	**700**	**-206**	**-E4**	**-K**	**P**	**N**
Product Series	**700** = SeaKing™					
Shell Style	**206** = non-metallic PEEK FCR, Glass Hermetic Seal Insert (GTMS) **226** = non-metallic PEEK FCR, Glass Reinforced Epoxy Insert (GRE)					
Shell Size-Insert Arrangement	(See page 8 – 10)					
Shell Material	**K** = glass-reinforced PEEK					
Contact Style	**P** = pin					
Polarization	**A**, **B**, **C**, **N** = normal (see sales drawing for details)					

10K PSI available in smaller shell sizes. Contact factory for details.

700-207 GLASS REINFORCED EPOXY OR GLASS-TO-METAL SEAL INSERT, BULKHEAD CONNECTOR RECEPTACLE (BCR), PEEK



SeaKing PEEK - How To Order						
Sample Part Number	**700**	**-207**	**-E4**	**-K**	**P**	**N**
Product Series	**700** = SeaKing™					
Shell Style	**207** = non-metallic PEEK BCR, Glass Hermetic Seal Insert (GTMS) **227** = non-metallic PEEK BCR, Glass Reinforced Epoxy Insert (GRE)					
Shell Size-Insert Arrangement	(See page 8 – 10)					
Shell Material	**K** = glass-reinforced PEEK					
Contact Style	**P** = pin					
Polarization	**A**, **B**, **C**, **N** = normal (see sales drawing for details)					

10K PSI available in smaller shell sizes. Contact factory for details.

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DEEP WATER



SERIES 701

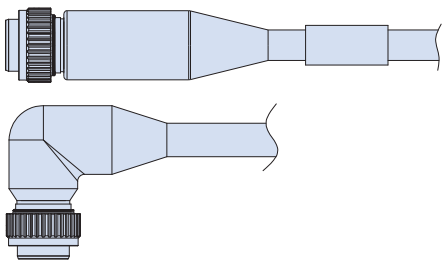
SeaKing™ Junior

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

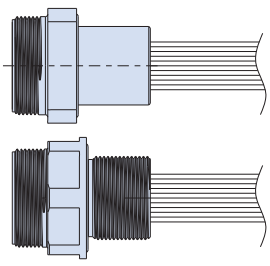
High-density Series 701 SeaKing Junior connectors are the perfect choice for harsh-environment oil & gas industry equipment. All designs are equipped with single piston seal nitrile O-rings to withstand exposure to corrosive chemicals and high-pressure environments. These 5000 PSI pressure rated (mated condition, shell size dependent) connectors feature high-density crimp-contact or solder cup inserts, and are significantly smaller than our larger form-factor heavy-duty series 700 SeaKing interconnects. Gold-plated crimp contacts accept #12–30 gage wire. SeaKing Junior connectors are backfilled with epoxy potting compound, ready 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.

- **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**
- **Ultraminiature high-density pin configurations: #22D, #20, #20HD, #16, #12, #8 signal, power, fiber optic and high-speed datalink shielded contacts**

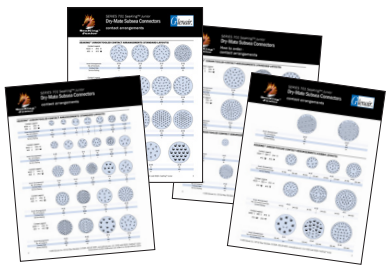
SEAKING™ JUNIOR OVERMOLDED CABLES AND PIGTAIL ASSEMBLIES



Harsh-environment polyurethane overmolded point-to-point cables with straight or right-angle ends, one-to-one wiring



Pigtail receptacle assemblies, variable cable length, single-conductor M22759/11 wire, environmental back-end potting



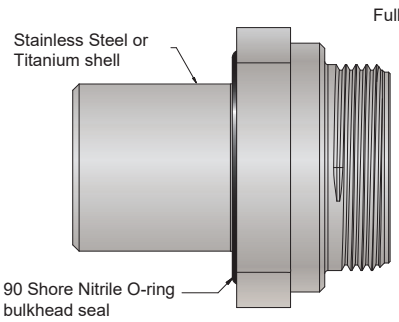
All featured insert arrangements tooled and available now including high-density and combo layouts for Coax, Twinax, and El Ochito® octaxial contacts

SERIES 701 SeaKing™ Junior

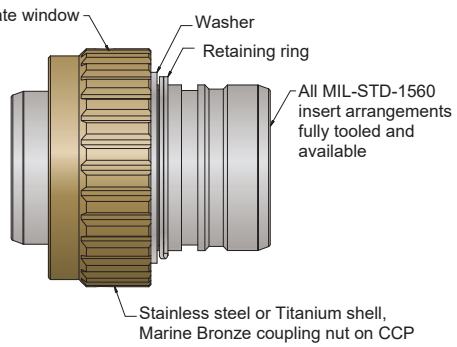
High-Density Dry-Mate Connectors

5000 PSI piston-sealed connectors and cables

SERIES 701 SEAKING™ JUNIOR MECHANICAL FEATURES AND CONFIGURATIONS



Flange Connector Receptacle



Cable Connector Plug

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

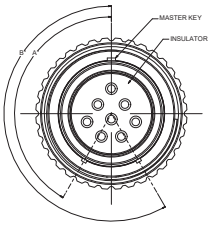
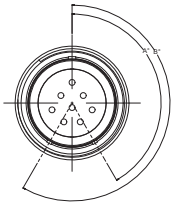
SEAKING™ JUNIOR CONTACT SPECIFICATIONS, MATERIALS AND FINISHES, AND CRIMP TOOLS

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

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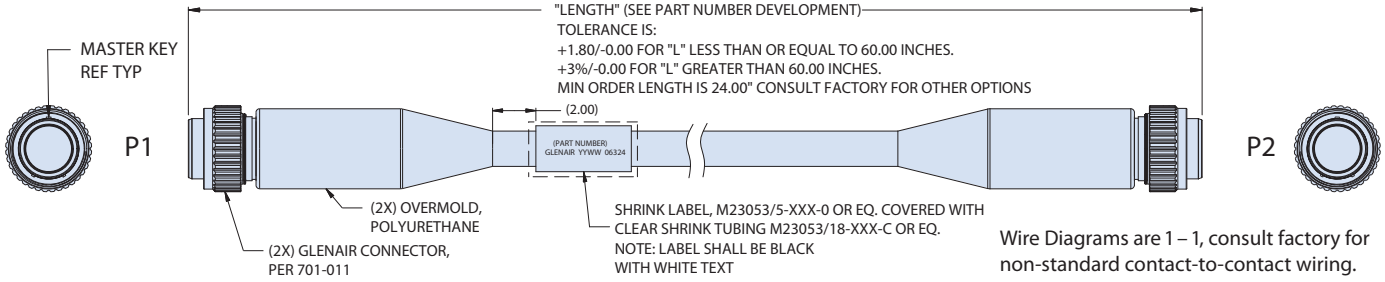
Rev 04.13.23

SEAKING™ JUNIOR POINT-TO-POINT PLUG-TO-PLUG OVERMOLDED CABLE

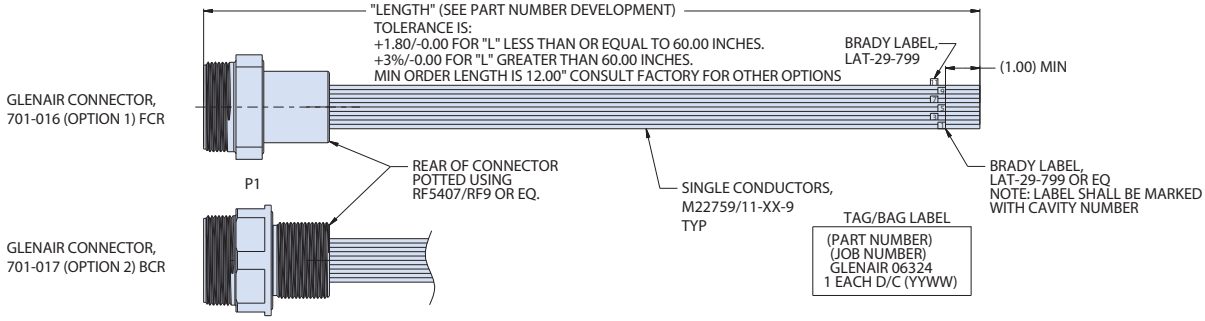
SeaKing Junior - How To Order CCP Cable Assemblies							
Sample Part Number		**7071-0067**	**9-35**	**Z1**	**S**	**N**	**36**
Series	**7071-0067** = SeaKing Junior Cable Assembly						
Insert Arrangement	See insert arrangement tables pages 23–28						
Material / Finish	**Z1** = Stainless Steel Body and Marine Bronze Coupling Nut **TC** = Titanium						
Contact Style	**S** = Socket						
Polarization	**N** = Normal, **A**, **B**, **C** (see Polarization Table, page 22)						
Cable Length	**Length** = in inches; ie 36 = 36 inches						



Wire Diagrams are 1 – 1, consult factory for non-standard contact-to-contact wiring.

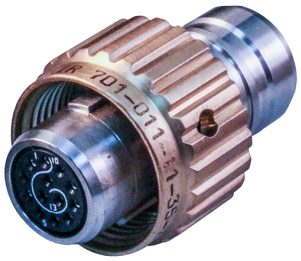
SEAKING™ JUNIOR SINGLE-ENDED RECEPTACLE ASSEMBLY

SeaKing Junior - How To Order FCR and BCR Receptacle Assemblies								
Sample Part Number		**7071-0068**	**1**	**9-35**	**Z1**	**P**	**N**	**36**
Series	**7071-0068** = SeaKing Junior Cable Assembly							
Receptacle Style	**1** = Flange Connector Receptacle (701-016) **2** = Bulkhead Connector Receptacle (701-017)							
Insert Arrangement	See insert arrangement tables pages 23–28							
Material / Finish	**Z1** = Stainless Steel Body and Marine Bronze Coupling Nut **TC** = Titanium							
Contact Style	**P** = Pin							
Polarization	**N** = Normal, **A**, **B**, **C** (see Polarization Table, page 22)							
Cable Length	**Length** = in inches; ie 36 = 36 inches							



Dry-Mate Subsea Connectors

701-011 Plug, High Density with crimp removable contacts



HOW TO ORDER					
Sample Part Number	**701-011**	**-13-08**	**-Z1**	**S**	**N**
Product Series	**701-011** = SeaKing Junior				
Shell Size-Contact Arrangement	See Contact Arrangements table				
Barrel Material	**Z1** = 316 Stainless Steel* (Marine Bronze Coupling Nut) **TC** = Titanium **XO** = PEEK**				
Contact Style	**A** = Pin Insert (No Contacts Included) **B** = Socket Insert (No Contacts Included) **P** = Pin **S** = Socket				
Key Position	**A**, **B**, **C**, **D**, **E** (See table)				

* 316 Stainless steel for sizes 09 through 19 2507 Super duplex for sizes 21 through 25
** Consult factory for pressure rating

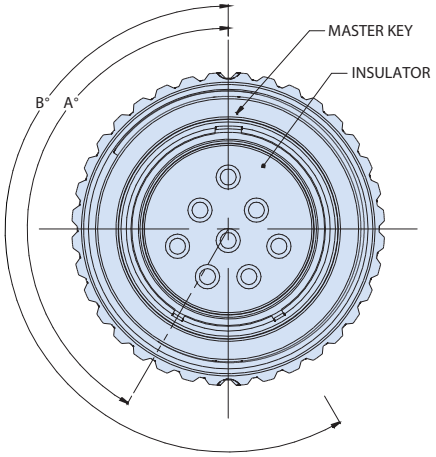
NOTES

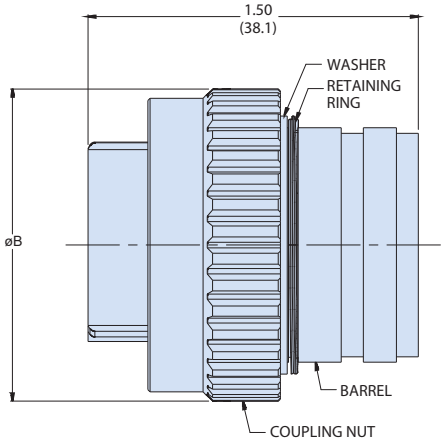
Pressure rating: Mated condition - 5,000 PSI
Materials tested to:
- Salt spray, per MIL-STD-202 method 101
- Humidity, per MIL-STD-202 method 101
- Thermal cycle, per EIA-455-71

Single O-ring sealing.

MATERIAL/FINISH

Plug barrel: See part number development
Coupling nut: Marine bronze for Z1 connectors
Titanium for TC connectors
Contacts: Copper alloy, gold plated
Insulator: High grade rigid dielectric
Retaining ring: 316 stainless steel
Interfacial seal (pin inserts only): Fluorosilicone





DIMENSIONS			
Shell Size	Thread A	Ø B Max	
		In.	mm
09	0.7500-20 UNEF-2B	0.935	23.7
11	0.8750-20 UNEF-2B	1.060	26.9
13	1.0000-20 UNEF-2B	1.185	30.1
15	1.1250-20 UN-2B	1.310	33.3
17	1.2500-20 UN-2B	1.435	36.4
19	1.3750-20 UN-2B	1.560	39.6
21	1.5000-20 UN-2B	1.685	42.8
23	1.6250-20 UN-2B	1.810	46.0
25	1.7500-20 UN-2B	1.935	49.1

ALTERNATE KEY POSITIONS		
Position	A°	B°
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°
D	75°	275°
E	95°	210°

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SERIES 701 SeaKing™ Junior

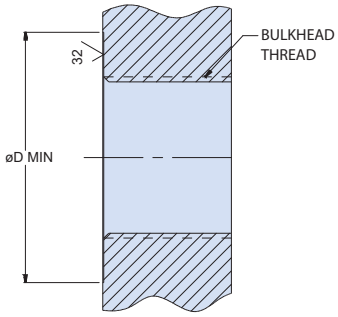
Dry-Mate Subsea Connectors

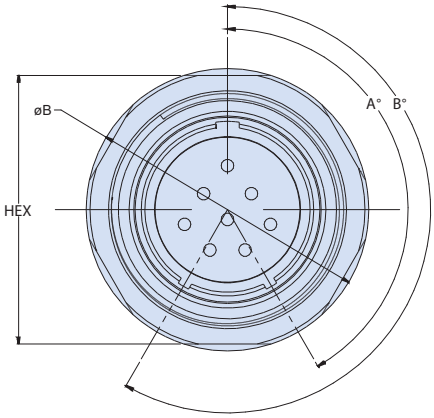
701-017 Bulkhead Connector Receptacle, high density with crimp removable contacts

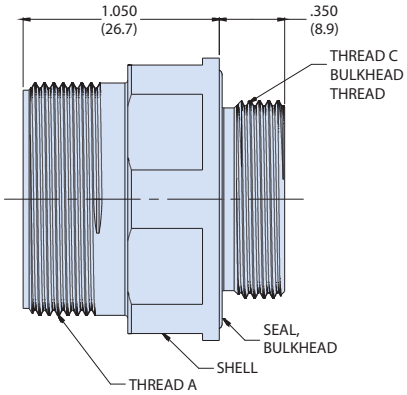


HOW TO ORDER					
Sample Part Number	**701-017**	**-17-08**	**-Z1**	**P**	**N**
Product Series	**701-017** = SeaKing Junior				
Shell Size-Contact Arrangement	See Contact Arrangements table				
Barrel Material	**Z1** = 316 Stainless Steel* **TC** = Titanium **XO** = PEEK**				
Contact Style	**A** = Pin Insert (No Contacts Included) **B** = Socket Insert (No Contacts Included) **P** = Pin **S** = Socket				
Key Position	**A**, **B**, **C**, **D**, **E** (See table)				

* 316 Stainless steel for sizes 09 through 15 2507 Super duplex for sizes 11 through 25
** Consult factory for pressure rating







DIMENSIONS										
Shell Size	Thread A	B MAX		Hex		Thread C	D Min		Bulkhead Seal	Bore Seal
		inch	mm	inch	mm		inch	mm		
09	0.7500-20 UNEF-2A	1.025	26.0	15/16	23.8	0.5625-20 UN-2A	1.030	26.2	2-018	2-014
11	0.8750-20 UNEF-2A	1.150	29.2	1 1/16	27.0	0.6875-20 UN-2A	1.160	29.5	2-020	2-016
13	1.0000-20 UNEF-2A	1.275	32.4	1 3/16	30.2	0.8125-20 UNEF-2A	1.310	33.3	2-022	2-018
15	1.1250-20 UN-2A	1.410	35.8	1 5/16	33.3	0.9375-20 UNEF-2A	1.430	36.3	2-024	2-020
17	1.2500-20 UN-2A	1.525	38.7	1 7/16	36.5	1.0625-20 UN-2A	1.560	39.6	2-026	2-022
19	1.3750-20 UN-2A	1.650	41.9	1 9/16	39.7	1.1875-20 UN-2A	1.680	42.7	2-028	2-024
21	1.5000-20 UN-2A	1.775	45.1	1 11/16	42.9	1.3125-20 UN-2A	1.810	46.0	2-029	2-026
23	1.6250-20 UN-2A	1.900	48.3	1 13/16	46.0	1.4375-20 UN-2A	1.950	49.5	2-030	2-028
25	1.7500-20 UN-2A	2.025	51.4	1 15/16	49.2	1.5625-20 UN-2A	2.070	52.6	2-031	2-029

NOTES

Pressure rating: Mated condition - 5,000 PSI
Materials tested to:
- Salt spray, per MIL-STD-202 method 101
- Humidity, per MIL-STD-202 method 101
- Thermal cycle, per EIA-455-71

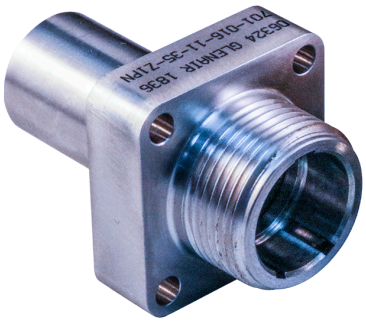
Single O-ring sealing.

MATERIAL/FINISH

Receptacle shell: See part number development
Contacts: Copper alloy, gold plated
Insulator: High grade rigid dielectric
Interfacial seal (pin inserts only) & grommet: Fluorosilicone
Seals: Nitrile

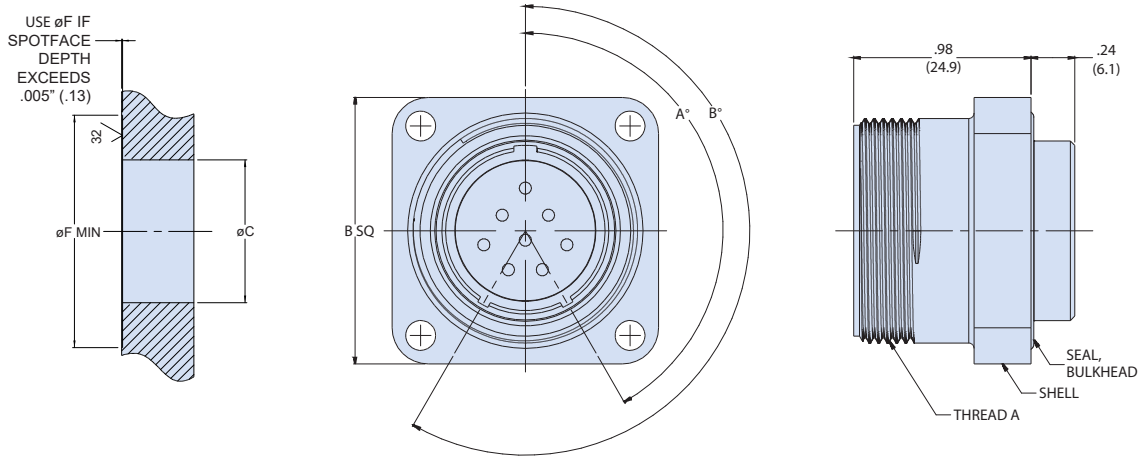
ALTERNATE KEY POSITIONS		
Position	A°	B°
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°
D	75°	275°
E	95°	210°

701-016 Flange Connector Receptacle, high density with crimp removable contacts



HOW TO ORDER					
Sample Part Number	**701-016**	**-17-08**	**-Z1**	**P**	**N**
Product Series	**701-016** = SeaKing Junior				
Shell Size-Contact Arrangement	See Contact Arrangements table				
Barrel Material	**Z1** = 316 Stainless Steel* **TC** = Titanium **XO** = PEEK**				
Contact Style	**A** = Pin Insert (No Contacts Included) **B** = Socket Insert (No Contacts Included) **P** = Pin **S** = Socket				
Key Position	**A**, **B**, **C**, **D**, **E** (See table)				

* 316 Stainless steel for sizes 09 2507 Super duplex for sizes 11 through 25
** Consult factory for pressure rating



DIMENSIONS														
Shell Size	Thread A	B MAX		C*		D*		E* Flange Screw Size	F Min, .005		F' Min, >.005		Bulkhead Seal	Bore Seal
		inch	mm	inch	mm	inch	mm		inch	mm	inch	mm		
09	0.7500-20 UNEF-2A	1.085	27.6	0.530	13.5	0.770	19.6	#4-40	0.885	22.5	1.460	37.1	2-017	2-014
11	0.8750-20 UNEF-2A	1.175	29.8	0.655	16.6	0.860	21.8	#4-40	1.015	25.8	1.600	40.6	2-019	2-016
13	1.0000-20 UNEF-2A	1.265	32.1	0.760	19.3	0.950	24.1	#4-40	1.120	28.4	1.690	42.9	2-021	2-018
15	1.1250-20 UN-2A	1.405	35.7	0.895	22.7	1.070	27.2	#6-32	1.250	31.8	1.955	49.7	2-023	2-020
17	1.2500-20 UN-2A	1.495	38.0	1.020	25.9	1.160	29.5	#6-32	1.375	34.9	2.065	52.5	2-025	2-022
19	1.3750-20 UN-2A	1.710	43.4	1.125	28.6	1.250	31.8	#8-32	1.480	37.6	2.320	58.9	2-026	2-024
21	1.5000-20 UN-2A	1.850	47.0	1.250	31.8	1.390	35.3	#8-32	1.610	40.9	2.485	63.1	2-028	2-026
23	1.6250-20 UN-2A	1.940	49.3	1.350	34.3	1.480	37.6	#8-32	1.705	43.3	2.520	64.0	2-029	2-028
25	1.7500-20 UN-2A	2.030	54.6	1.500	38.1	1.570	39.9	#8-32	1.855	47.1	2.745	69.7	2-030	2-029

*For dimension see next page.

NOTES

Pressure rating: Mated condition - 5,000 PSI
Materials tested to:
- Salt spray, per MIL-STD-202 method 101
- Humidity, per MIL-STD-202 method 101
- Thermal cycle, per EIA-455-71

Single O-ring sealing.

MATERIAL/FINISH

Receptacle shell: See part number development
Contacts: Copper alloy, gold plated
Insulator: High grade rigid dielectric
Interfacial seal (pin inserts only) & grommet: Fluorosilicone
Seals: Nitrile

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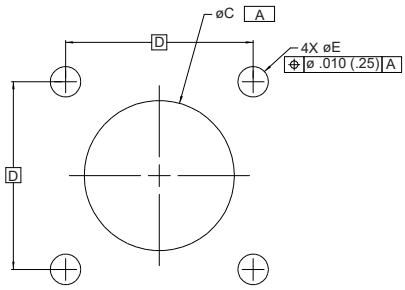
701-016 Flange Connector Receptacle, high density with crimp removable contacts

ALTERNATE KEY POSITIONS		
Position	A°	B°
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°
D	75°	275°
E	95°	210°



701-038 PEEK Cable Connector Plug with crimp-removable contacts

HOW TO ORDER					
Sample Part Number	**701-038**	**-17-08**	**-K**	**S**	**N**

Product Series	**701-038** = SeaKing Junior
Shell Size-Contact Arrangement	See Contact Arrangements table
Barrel Material	**K** = 30% Reinforced PEEK
Contact Style	**A** = Pin Insert (No Contacts Included) **B** = Socket Insert (No Contacts Included) **P** = Pin **S** = Socket
Key Position	**A**, **B**, **C**, **D**, **E** (See table)

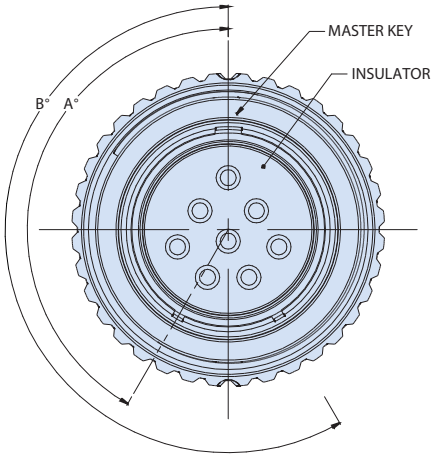
NOTES

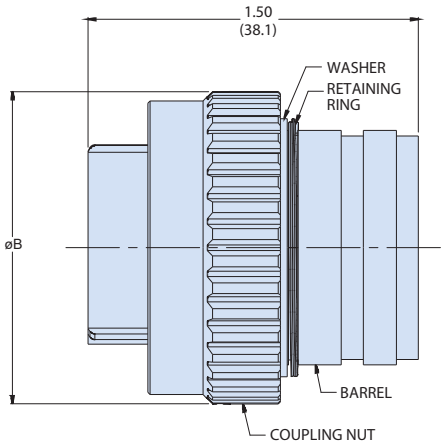
Pressure rating: Mated condition - 5,000 PSI, tested per ISO 13628-6.
Materials tested to:
- Salt spray, per MIL-STD-202 method 101
- Humidity, per MIL-STD-202 method 101
- Thermal cycle, per EIA-455-71

Single O-ring sealing.

MATERIAL/FINISH

Plug barrel: 30% reinforced PEEK
Coupling nut: 30% reinforced PEEK
Contacts: Copper alloy, gold plated
Insulator: High grade rigid dielectric
Retaining ring: 316 stainless steel
Interfacial seal (pin inserts only): Fluorosilicone





DIMENSIONS			
Shell Size	Thread A	Ø B	
		In.	mm
09	0.7500-20 UNEF-2B	0.935	23.7
11	0.8750-20 UNEF-2B	1.060	26.9
13	1.0000-20 UNEF-2B	1.185	30.1
15	1.1250-20 UN-2B	1.310	33.3
17	1.2500-20 UN-2B	1.435	36.4
19	1.3750-20 UN-2B	1.560	39.6
21	1.5000-20 UN-2B	1.685	42.8
23	1.6250-20 UN-2B	1.810	46.0
25	1.7500-20 UN-2B	1.935	49.1

ALTERNATE KEY POSITIONS		
Position	A°	B°
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°
D	75°	275°
E	95°	210°

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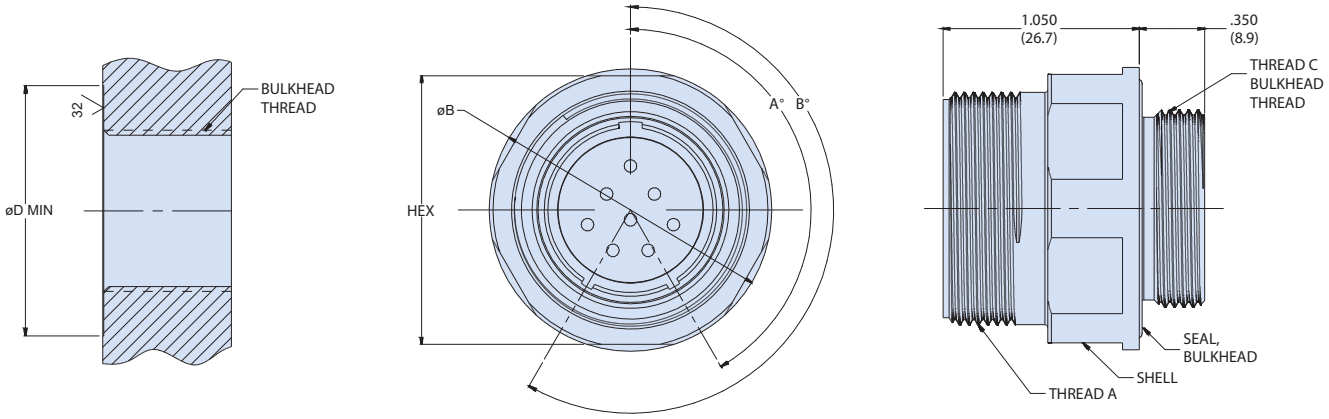
SERIES 701 SeaKing™ Junior

High-Density PEEK Subsea Connectors

701-040 PEEK Bulkhead Connector Receptacle with crimp removable contacts

SeaKing Plug - How To Order							
Sample Part Number	**701-040**	**-17-08**	**K**	**P**	**1**	**N**	
Product Series	**701-040** = SeaKing Junior						
Shell Size-Contact Arrangement	See Contact Arrangements table						
Barrel Material	**K** = 30% Reinforced PEEK						
Contact Style	**A** = Pin Insert (No Contacts Included) **B** = Socket Insert (No Contacts Included) **P** = Pin **S** = Socket						
O-Ring Material	**1** = 90 Shore Nitrile **2** = 90 Shore Vitron						
Key Position	**A**, **B**, **C**, **D**, **E** (See table)						



DIMENSIONS										
Shell Size	Thread A	B MAX		Hex		Thread C	D Min		Bulkhead Seal	Bore Seal
		inch	mm	inch	mm		inch	mm		
09	0.7500-20 UNEF-2A	1.025	26.0	15/16	23.8	0.5625-20 UN-2A	1.030	26.2	2-018	2-014
11	0.8750-20 UNEF-2A	1.150	29.2	1 1/16	27.0	0.6875-20 UN-2A	1.160	29.5	2-020	2-016
13	1.0000-20 UNEF-2A	1.275	32.4	1 3/16	30.2	0.8125-20 UNEF-2A	1.310	33.3	2-022	2-018
15	1.1250-20 UN-2A	1.410	35.8	1 5/16	33.3	0.9375-20 UNEF-2A	1.430	36.3	2-024	2-020
17	1.2500-20 UN-2A	1.525	38.7	1 7/16	36.5	1.0625-20 UN-2A	1.560	39.6	2-026	2-022
19	1.3750-20 UN-2A	1.650	41.9	1 9/16	39.7	1.1875-20 UN-2A	1.680	42.7	2-028	2-024
21	1.5000-20 UN-2A	1.775	45.1	1 11/16	42.9	1.3125-20 UN-2A	1.810	46.0	2-029	2-026
23	1.6250-20 UN-2A	1.900	48.3	1 13/16	46.0	1.4375-20 UN-2A	1.950	49.5	2-030	2-028
25	1.7500-20 UN-2A	2.025	51.4	1 15/16	49.2	1.5625-20 UN-2A	2.070	52.6	2-031	2-029

NOTES

Pressure rating: mated condition - 5,000 PSI, tested per ISO 13628-6.
Materials tested to:
- Salt spray, per MIL-STD-202 method 101
- Humidity, per MIL-STD-202 method 101
- Thermal cycle, per EIA-455-71

Single O-ring sealing.

MATERIAL/FINISH

Receptacle shell: 30% reinforced PEEK
Contacts: Copper alloy, gold plated
Insulator: High grade rigid dielectric
Interfacial seal (pin inserts only) & grommet: Fluorosilicone

ALTERNATE KEY POSITIONS		
Position	A°	B°
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°
D	75°	275°
E	95°	210°

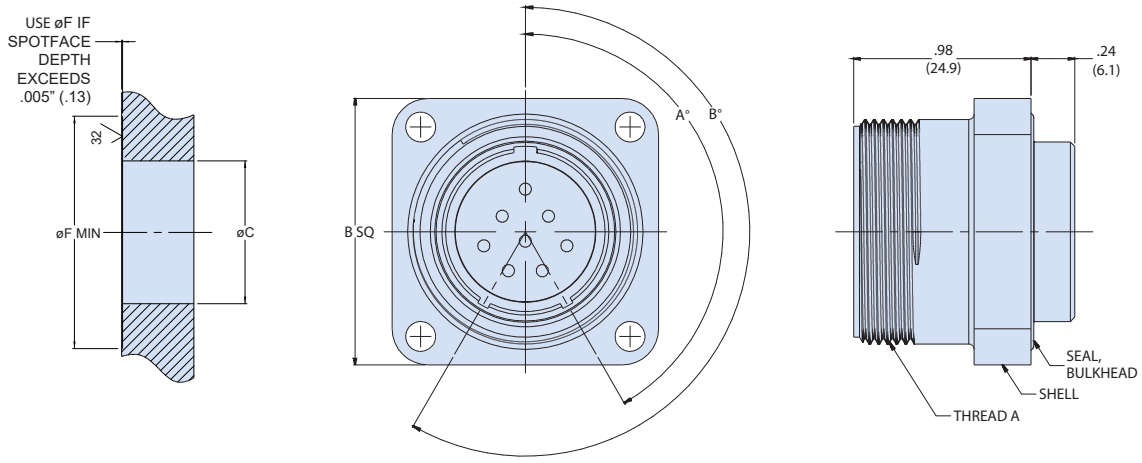
SERIES 701 SeaKing™ Junior

High-Density PEEK Subsea Connectors

701-039 PEEK Flange Connector Receptacle with crimp removable contacts

HOW TO ORDER						
Sample Part Number	**701-039**	**-17-08**	**-K**	**P**	**1**	**N**

Product Series	**701-039** = SeaKing Junior
Shell Size-Contact Arrangement	See Contact Arrangements table
Barrel Material	**K** = 30% Reinforced PEEK
Contact Style	**A** = Pin Insert (No Contacts Included) **B** = Socket Insert (No Contacts Included) **P** = Pin **S** = Socket
O-Ring Material	**1** = 90 Shore Nitrile **2** = 90 Shore Vitron
Key Position	**A**, **B**, **C**, **D**, **E** (See table)



DIMENSIONS														
Shell Size	Thread A	B MAX		C*		D*		E* Flange Screw Size	F Min, .005		F Min, >.005		Bulkhead Seal	Bore Seal
		inch	mm	inch	mm	inch	mm		inch	mm	inch	mm		
09	0.7500-20 UNEF-2A	1.085	27.6	0.530	13.5	0.770	19.6	#4-40	0.885	22.5	1.460	37.1	2-017	2-014
11	0.8750-20 UNEF-2A	1.175	29.8	0.655	16.6	0.860	21.8	#4-40	1.015	25.8	1.600	40.6	2-019	2-016
13	1.0000-20 UNEF-2A	1.265	32.1	0.760	19.3	0.950	24.1	#4-40	1.120	28.4	1.690	42.9	2-021	2-018
15	1.1250-20 UN-2A	1.405	35.7	0.895	22.7	1.070	27.2	#6-32	1.250	31.8	1.955	49.7	2-023	2-020
17	1.2500-20 UN-2A	1.495	38.0	1.020	25.9	1.160	29.5	#6-32	1.375	34.9	2.065	52.5	2-025	2-022
19	1.3750-20 UN-2A	1.710	43.4	1.125	28.6	1.250	31.8	#8-32	1.480	37.6	2.320	58.9	2-026	2-024
21	1.5000-20 UN-2A	1.850	47.0	1.250	31.8	1.390	35.3	#8-32	1.610	40.9	2.485	63.1	2-028	2-026
23	1.6250-20 UN-2A	1.940	49.3	1.350	34.3	1.480	37.6	#8-32	1.705	43.3	2.520	64.0	2-029	2-028
25	1.7500-20 UN-2A	2.030	54.6	1.500	38.1	1.570	39.9	#8-32	1.855	47.1	2.745	69.7	2-030	2-029

*For dimension see next page.

NOTES

Pressure rating: Mated condition - 5,000 PSI, tested per ISO 13628-6.

Materials tested to:

- Salt spray, per MIL-STD-202 method 101
- Humidity, per MIL-STD-202 method 101
- Thermal cycle, per EIA-455-71

Single O-ring sealing.

MATERIAL/FINISH

Receptacle shell: 30% reinforced PEEK

Contacts: Copper alloy, gold plated

Insulator: High grade rigid dielectric

Interfacial seal (pin inserts only) & grommet: Fluorosilicone

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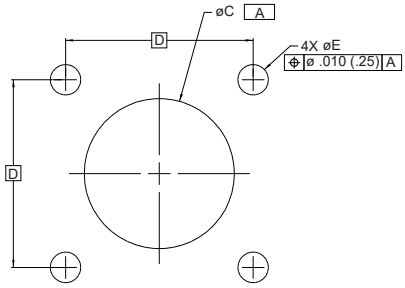
Rev 04.13.23

701-039 PEEK Flange Connector Receptacle with crimp removable contacts

ALTERNATE KEY POSITIONS		
Position	A°	B°
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°
D	75°	275°
E	95°	210°



SEAKING™ JUNIOR TOOLED INSERT ARRANGEMENTS (STANDARD LAYOUTS)

Contact Legend
#22D • #16 ⊕
#20 ⊖ #12 ◒

Insert Arrangement	9-35	9-98	11-2	11-4	11-5	11-35	11-98
No. of Contacts	6	3	2	4	5	13	6
Contact Size	#22D	#20	#16	#20	#20	#22D	#20
Service Rating	M	I	I	I	I	M	I

Contact Legend
#22D • #16 ⊕
#20 ⊖ #12 ◒

Insert Arrangement	11-99	13-4	13-8	13-98	13-35	15-5
No. of Contacts	7	4	8	10	22	5
Contact Size	#20	#16	#20	#20	#22D	#16
Service Rating	I	I	I	I	M	II

Contact Legend
#22D • #16 ⊕
#20 ⊖ #12 ◒

Insert Arrangement	15-18	15-19	15-35	17-6	17-8
No. of Contacts	18	19	37	6	8
Contact Size	#20	#20	#22D	#12	#16
Service Rating	I	I	M	I	II

Contact Legend
#22D • #16 ⊕
#20 ⊖ #12 ◒

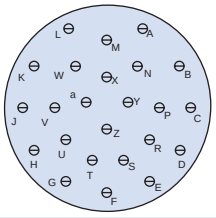
Insert Arrangement	17-26	17-35	19-11	19-32
No. of Contacts	26	55	11	32
Contact Size	#20	#22D	#16	#20
Service Rating	I	M	II	I

Contact Legend
#22D • #16 ⊕
#20 ⊖ #12 ◒

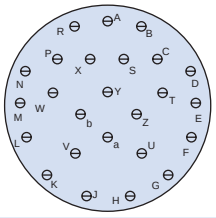
Insert Arrangement	19-35	19-45	21-11	21-16
No. of Contacts	66	67	11	16
Contact Size	#22D	#22D	#12	#16
Service Rating	M	M	I	II

SEAKING™ JUNIOR TOOLED INSERT ARRANGEMENTS (STANDARD LAYOUTS)

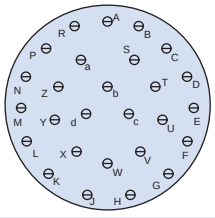
Contact Legend
#22D ● #16 ⊕
#20 ⊖ #12 ◒



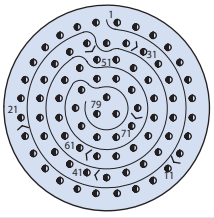
Insert Arrangement	21-24
No. of Contacts	24
Contact Size	#20
Service Rating	I



Insert Arrangement	21-25
No. of Contacts	25
Contact Size	#20
Service Rating	I

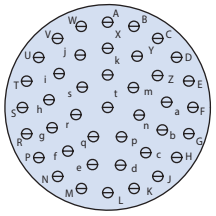


Insert Arrangement	21-27
No. of Contacts	27
Contact Size	#20
Service Rating	I

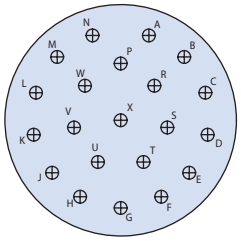


Insert Arrangement	21-35
No. of Contacts	79
Contact Size	#22D
Service Rating	M

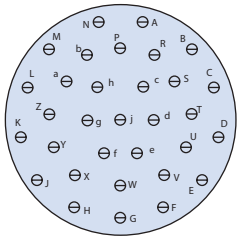
Contact Legend
#22D ● #16 ⊕
#20 ⊖ #12 ◒



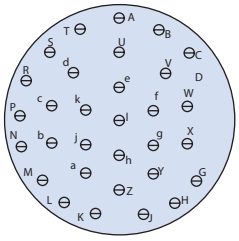
Insert Arrangement	21-41
No. of Contacts	41
Contact Size	#20
Service Rating	I



Insert Arrangement	23-21
No. of Contacts	21
Contact Size	#16
Service Rating	II

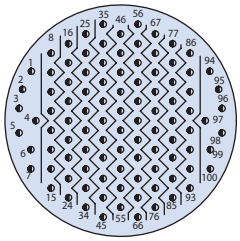


Insert Arrangement	23-32
No. of Contacts	32
Contact Size	#20
Service Rating	I

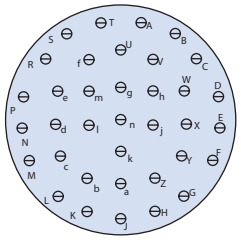


Insert Arrangement	23-34
No. of Contacts	34
Contact Size	#20
Service Rating	I

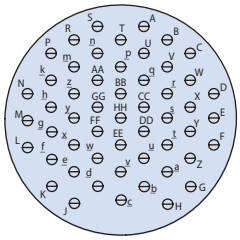
Contact Legend
#22D ● #16 ⊕
#20 ⊖ #12 ◒



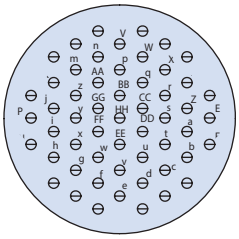
Insert Arrangement	23-35
No. of Contacts	100
Contact Size	#22D
Service Rating	M



Insert Arrangement	23-36
No. of Contacts	36
Contact Size	#20
Service Rating	I

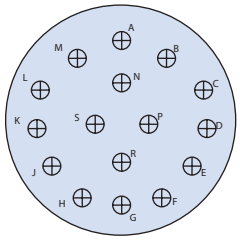


Insert Arrangement	23-53
No. of Contacts	53
Contact Size	#20
Service Rating	I

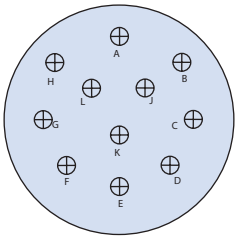


Insert Arrangement	23-55
No. of Contacts	55
Contact Size	#20
Service Rating	I

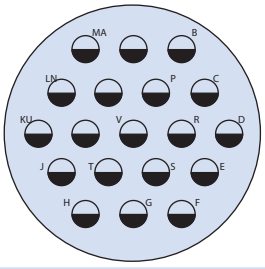
Contact Legend
#22D ● #16 ⊕
#20 ⊖ #12 ◒



Insert Arrangement	23-97
No. of Contacts	16
Contact Size	#16
Service Rating	I



Insert Arrangement	23-99
No. of Contacts	11
Contact Size	#16
Service Rating	II



Insert Arrangement	25-19
No. of Contacts	19
Contact Size	#12
Service Rating	I

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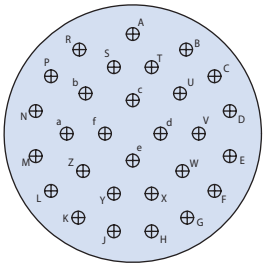
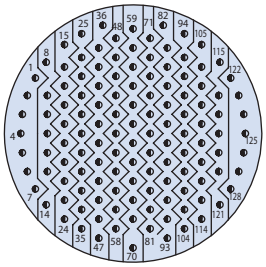
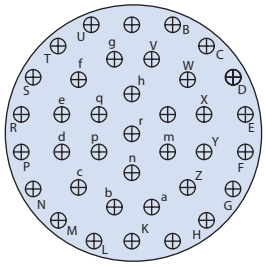
SEAKING™ JUNIOR TOOLED INSERT ARRANGEMENTS (STANDARD LAYOUTS)

Contact Legend
#22D ⊙ #16 ⊕
#20 ⊖ #12 ◒

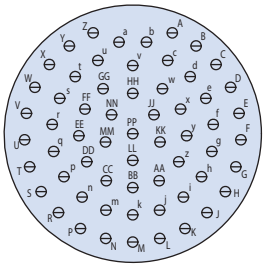






Insert Arrangement	25-29	25-35	25-37
No. of Contacts	29	128	37
Contact Size	#16	#22D	#16
Service Rating	I	M	II

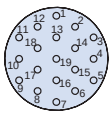
Contact Legend
#22D ⊙ #16 ⊕
#20 ⊖ #12 ◒

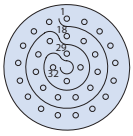


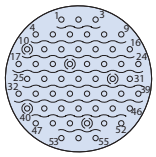
Insert Arrangement	25-61
No. of Contacts	61
Contact Size	#20
Service Rating	I

SEAKING™ JUNIOR TOOLED INSERT ARRANGEMENTS (HIGH-DENSITY LAYOUTS)

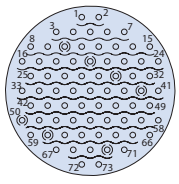


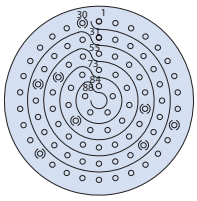


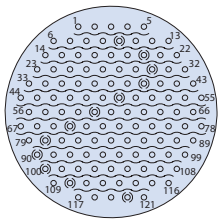




Insert Arrangement	9-23	11-23	13-23	15-23
No. of Contacts	9	19	32	55
Contact Size	#23	#23	#23	#23
Service Rating	N	N	N	N

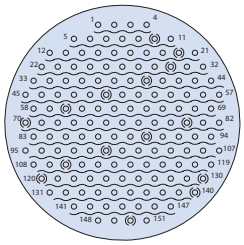


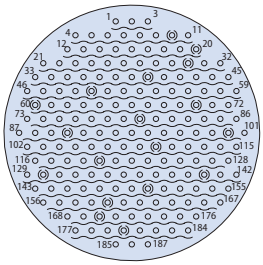




Insert Arrangement	17-23	19-23	21-23
No. of Contacts	73	88	121
Contact Size	#23	#23	#23
Service Rating	N	N	N

SEAKING™ JUNIOR TOOLED INSERT ARRANGEMENTS (HIGH-DENSITY LAYOUTS)

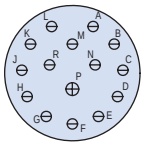


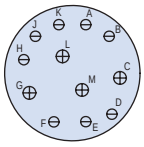


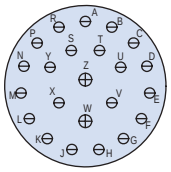
Insert Arrangement	23-23	25-23
No. of Contacts	151	187
Contact Size	#23	#23
Service Rating	N	N

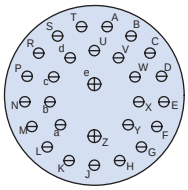
SEAKING™ JUNIOR TOOLED INSERT ARRANGEMENTS (COMBO LAYOUTS)

Contact Legend
#22D • #20 ⊖ #16 ⊕
#12 ◒ #10 ◉



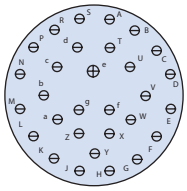


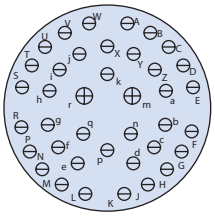


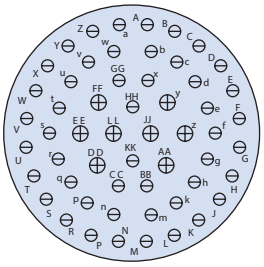


Insert Arrangement	15-15		15-97		17-99		19-28	
No. of Contacts and Size	1X #16	14X #20	4X #16	8X #20	2X #16	21X #20	2X #16	26X #20
Service Rating	I		I		I		I	

Contact Legend
#22D • #20 ⊖ #16 ⊕
#12 ◒ #10 ◉

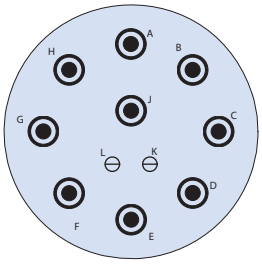


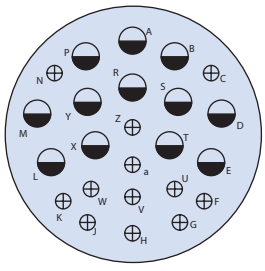


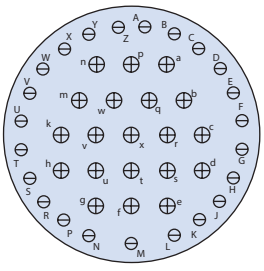


Insert Arrangement	19-30		21-39		25-4	
No. of Contacts and Size	1X #16	29X #20	2X #16	37X #20	8X #16	48X #20
Service Rating	I		I		I	

Contact Legend
#22D • #20 ⊖ #16 ⊕
#12 ◒ #10 ◉







Insert Arrangement	25-11		25-24		25-43	
No. of Contacts and Size	9X #10	2x #20	12X #12	12X #16	20X #16	23X #20
Service Rating	N		I		I	

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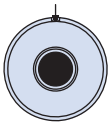
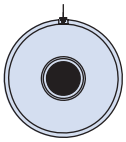
SEAKING™ JUNIOR TOOLED INSERT ARRANGEMENTS (SPECIAL SHIELDED LAYOUTS)

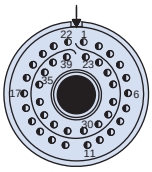
Contact Legend
#22D ◐ #16 ⊕
#20 ⊖ #12 ◒
#8 ●



Shell Size - Insert Arrangement	9-1
No. of Contacts	1x #8

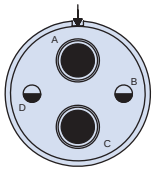


Shell Size - Insert Arrangement	11-1*
No. of Contacts	1x #8

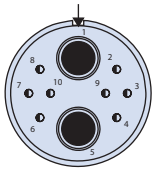


Shell Size - Insert Arrangement	17-2	
No. of Contacts	1x #8	38x #22D

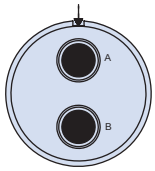
Contact Legend
#22D ◐ #16 ⊕
#20 ⊖ #12 ◒
#8 ●



Shell Size - Insert Arrangement	17-22	
No. of Contacts	2x #8	2x #12

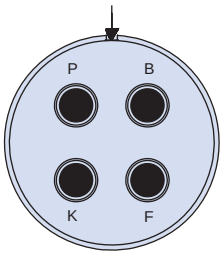


Shell Size - Insert Arrangement	17-60	
No. of Contacts	2x #8	8x #22

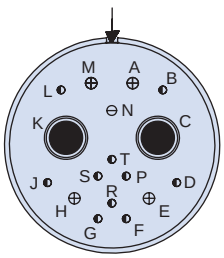


Shell Size - Insert Arrangement	17-75
No. of Contacts	2x #8

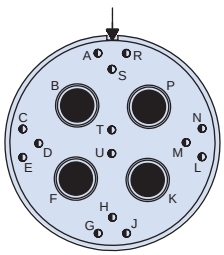
Contact Legend
#22D ◐ #16 ⊕
#20 ⊖ #12 ◒
#8 ●



Shell Size - Insert Arrangement	19-4
No. of Contacts	4x #8

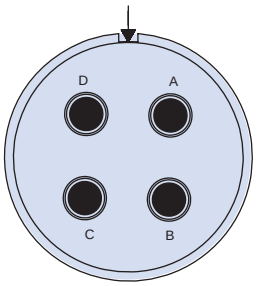


Shell Size - Insert Arrangement	19-17			
No. of Contacts	2x #8	4x #16	1x #20	10x #22D

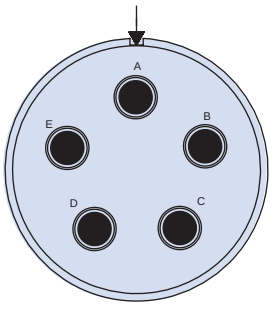


Shell Size - Insert Arrangement	19-18	
No. of Contacts	4x #8	14x #22D

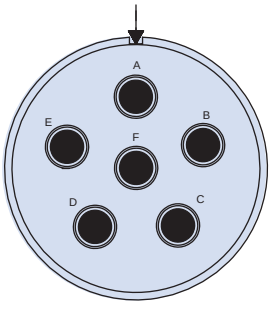
Contact Legend
#22D ◐ #16 ⊕
#20 ⊖ #12 ◒
#8 ●



Shell Size - Insert Arrangement	21-75
No. of Contacts and Size	4x #8



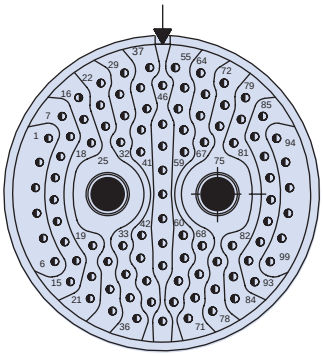
Shell Size - Insert Arrangement	23-5
No. of Contacts and Size	5x #8

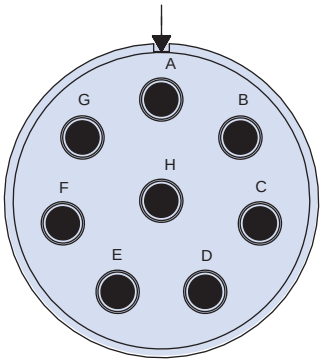


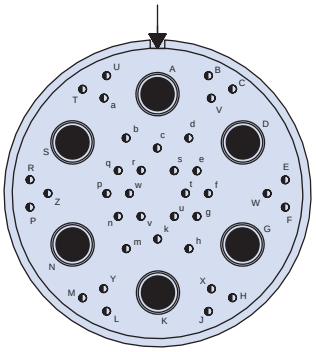
Shell Size - Insert Arrangement	23-6
No. of Contacts and Size	6x #8

SEAKING™ JUNIOR TOOLED INSERT ARRANGEMENTS (SPECIAL SHIELDED LAYOUTS)

Contact Legend
#22D ⊕ #16 ⊕
#20 ⊖ #12 ◒
#8 ●

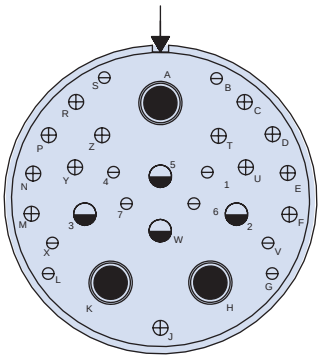


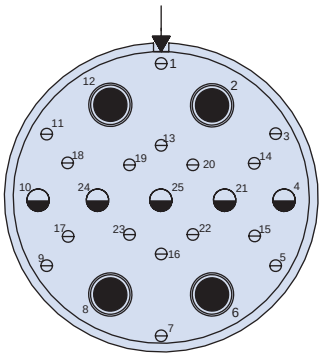




Shell Size - Insert Arrangement	25-7		25-8	25-17	
No. of Contacts and Size	2x #8	97x #22	8x #8	6x #8	36x #22

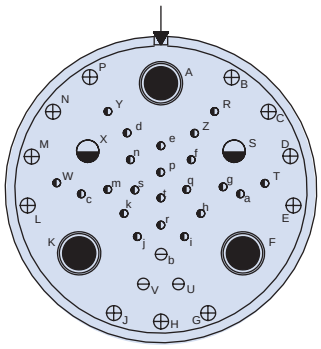
Contact Legend
#22D ⊕ #16 ⊕
#20 ⊖ #12 ◒
#8 ●

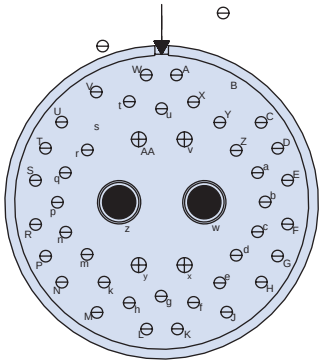




Shell Size - Insert Arrangement	25-20				25-26		
No. of Contacts and Size	3x #8	4x #12	13x #16	10x #20	4x #8	5x #12	16x #20

Contact Legend
#22D ⊕ #16 ⊕
#20 ⊖ #12 ◒
#8 ●





Shell Size - Insert Arrangement	25-41					25-46		
No. of Contacts and Size	3x #8	2x #12	11x #16	3x #20	22x #22D	2x #8	4x #16	40x #20

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DEEP WATER

SeaKing™ Fiber Optic

10K PSI open-face pressure rated fiber optic connectors, cables and jumpers—singlemode and multimode with low dB data loss

SeaKing™ Fiber

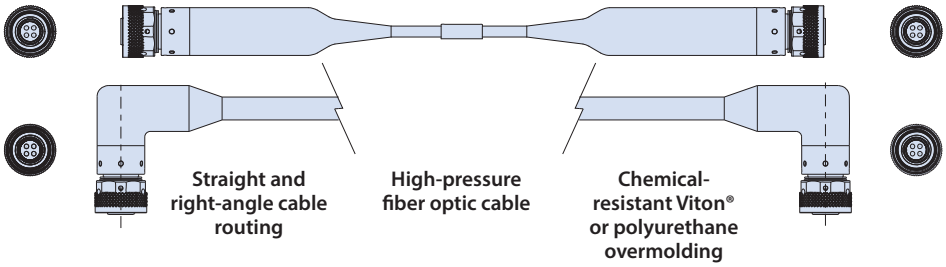
Data-intensive applications such as towed array sonar systems, well logging and monitoring equipment, digital seismic streamers, as well as magnetic flux leakage and ultrasonic inspection sensors used in intelligent pipeline inspection are ideally suited for ruggedized high-pressure fiber optics. Fiber optic interconnect systems deliver ultra high data bandwidth, immunity from RFI and other forms of electromagnetic interference, as well as reduced size and weight compared to high-speed copper. Glenair SeaKing™ Fiber Optic solutions include harsh-environment overmolded cable assemblies, multibranch inside-the-box jumpers, as well as Glenair signature high-temp, high-vibration transceivers and optical-to-electrical media converters. Pressure-balanced oil-filled (PBOF) cable assemblies are also available for deep subsea applications.



- **Overmolded and PBOF butt-joint assemblies**
- **Full hydrostatic qualification test report available**
- **Wide range of fiber and hybrid fiber/electric layouts**
- **Singlemode and multimode**
- **<1.0db data loss for singlemode**

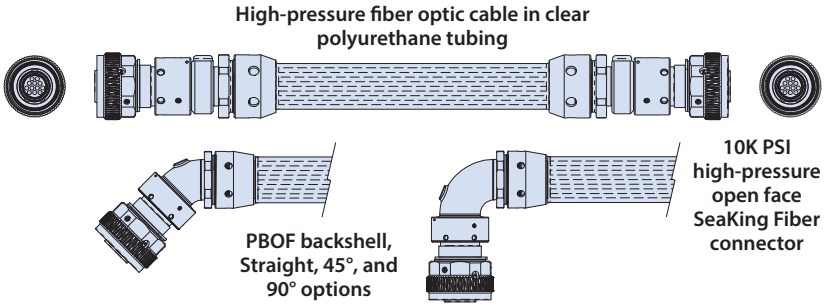
ENVIRONMENTAL OVERMOLDED FIBER OPTIC JUMPERS





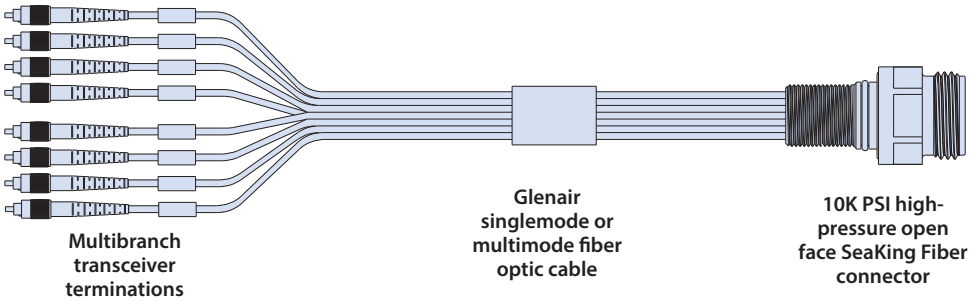
PRESSURE-BALANCED OIL-FILLED (PBOF) HIGH-PRESSURE FIBER OPTIC ASSEMBLIES





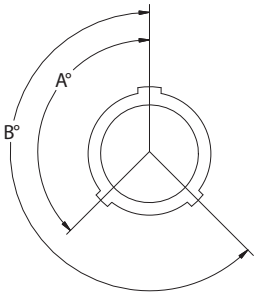
SEAKING™ BCR OR FCR TO COMMERCIAL FIBER OPTIC PIGTAIL ASSEMBLY FOR I/O-TO-BOARD MODULE APPLICATIONS



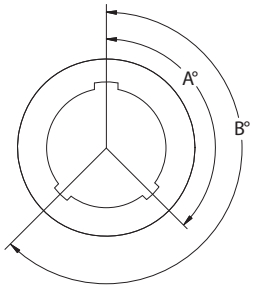


KEY AND KEYWAY POSITONS

Alternate Keyway Positions		
	Key Rotation	
Key Position	A°	B°
Normal (N)	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°



Plug (Key)



Receptacle (Keyway)

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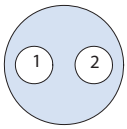
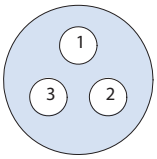
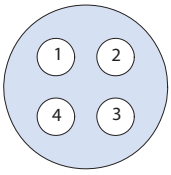
Fiber Only

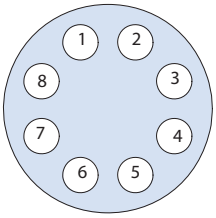


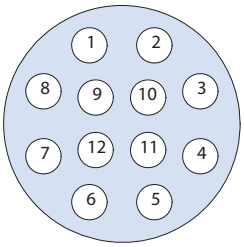




Shell Size	K	L	M
Insert Arrangement	KF2	LF3	MF4
No. of Contacts	2 FO	3 FO	4 FO

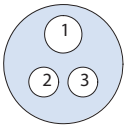
Fiber Only

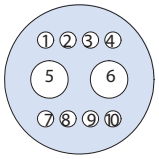


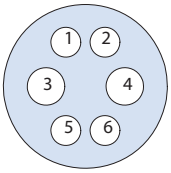


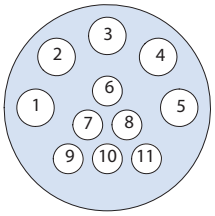
Shell Size	O	P
Insert Arrangement	OF8	PF12
No. of Contacts	8 FO	12 FO

Copper/Fiber



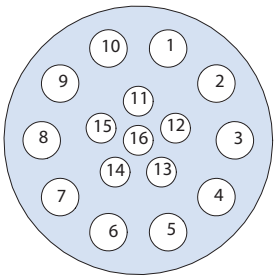


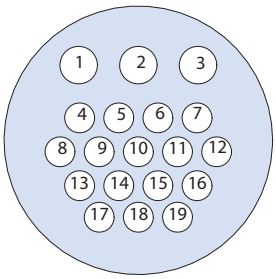




Shell Size	K	L	M	O
Insert Arrangement	KH12	LH28	MH24	OH56
No. of Fiber Contacts	1 FO	2 FO	2 FO	5 FO
No. of Copper Contacts	2 #16	8 #22	4 #16	6 #16

Copper/Fiber





Shell Size	Q	Q
Insert Arrangement	QH106	QH316
No. of Fiber Contacts	10 FO	3 FO
No. of Copper Contacts	6 #16	16 #16

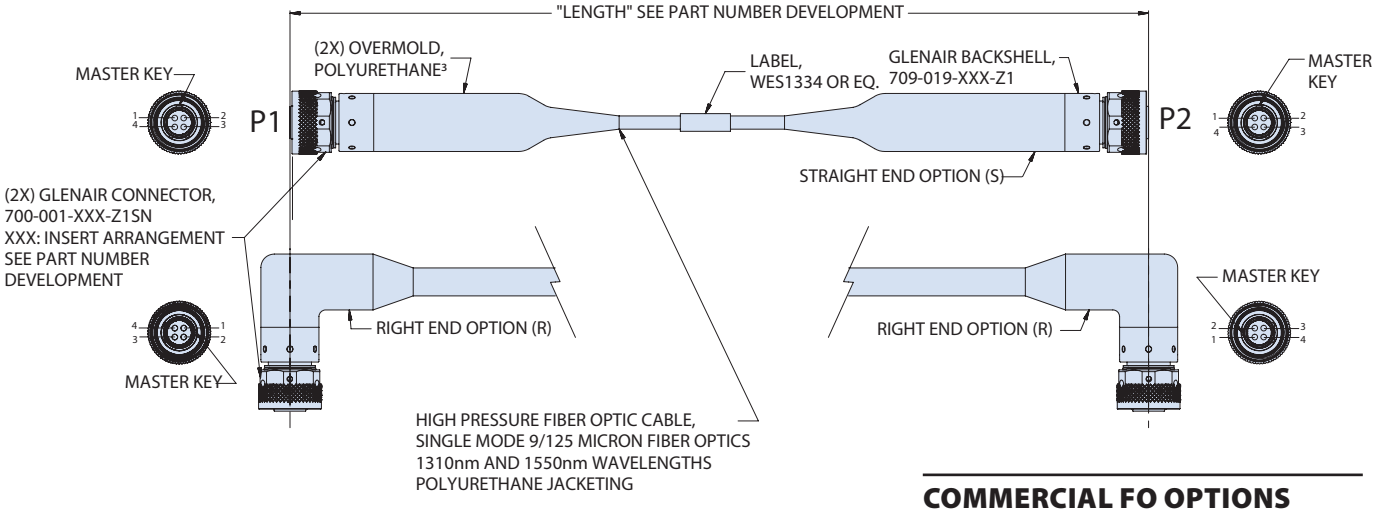
Contact Specifications		
Contact Size	#22	#16
Amps	3	10
Wire Gage Accommodation	22	16

All contact arrangements are rated for 600 volts.

Contact arrangements are shown as face view of receptacle insert. Contact arrangements of plug inserts are reverse.

Overmolded assemblies with SeaKing™ connectors or SeaKing™ to commercial fiber optic connectors

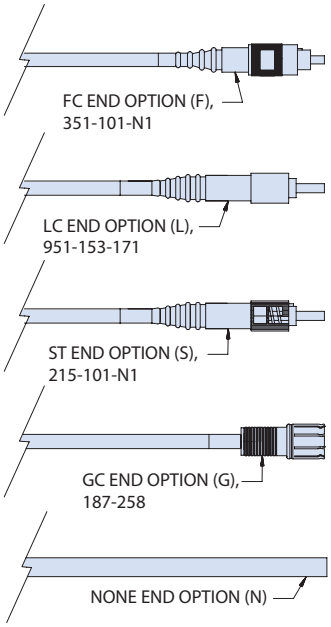
SeaKing Fiber - How To Order								
Sample Part Number	**7071-0037**	**-C**	**C**	**Z1**	**-0F8**	**N**	**-24**	**C**
Basic Number	**7071-0037**							
End 1 Option	**C** = CCP **R** = right angle CCP							
End 2 Option	**C** = CCP **R** = right angle CCP **N** = none **F** = FC leads **L** = LC leads **S** = ST leads **G** = GC Leads							
Shell Material	**TC** = titanium **Z1** = 316 stainless steel							
Insert Arrangement	See page 31; insert body material 316 SST							
Polarization	**N** = normal, A, B, C; see page 32							
Length	In inches							
Pressure Cap Option	**C** = pressure cap, same size and material will be provided (709-001); omit for none							



NOTES

1. Optical performance:
   Insertion loss shall be <1.0dB when measured @ 1310nm wavelength.
2. Molding process for high pressure applications shall be used for polyurethane overmolds.
3. Insert arrangement shown is for reference only. See page 24 for SeaKing fiber optic insert arrangements.
4. See drawing 700-001 for connector dimensions, materials, and finishes. See PBOF assembly fittings, part number 709-003 for more information.
5. Wiring for each arrangement is one to one. Fiber cavities can be populated with fiber termini and/or conductors. Electrical cavities shall be populated with largest gauge wire and contacts.
6. Cables over 240" (20ft) shall be shipped on a reel.
7. Kit GBS1000-00033 shall be used for inspection/cleaning.
8. Recommended SeaKing terminus cleaning tool: GCLT-H160.
9. Fiber optic terminus: 1.58 mm ferrule id, single O-ring.
10. 10KPSI open-face and mated

COMMERCIAL FO OPTIONS



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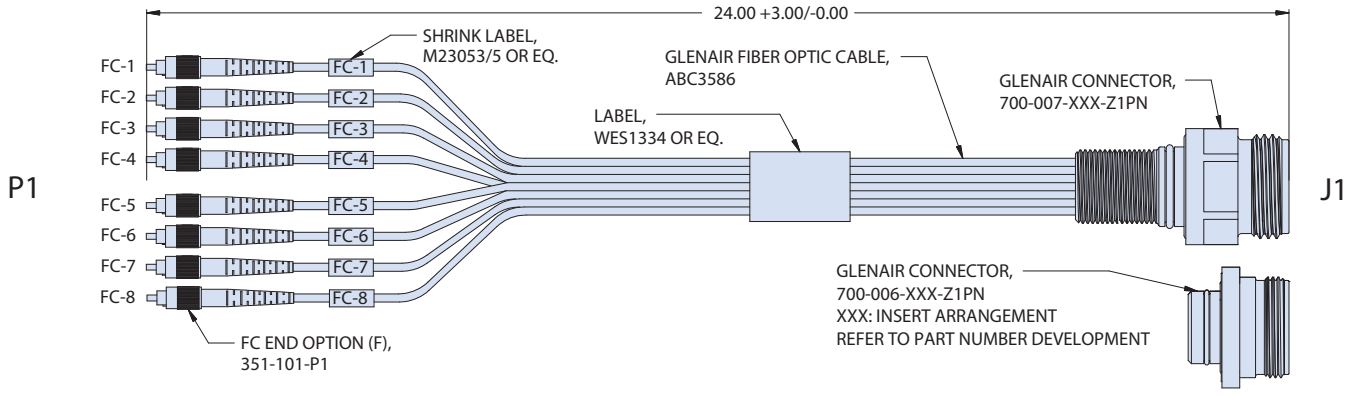
SeaKing™ BCR or FCR to commercial fiber optic pigtail assembly for I/O-to-board module applications

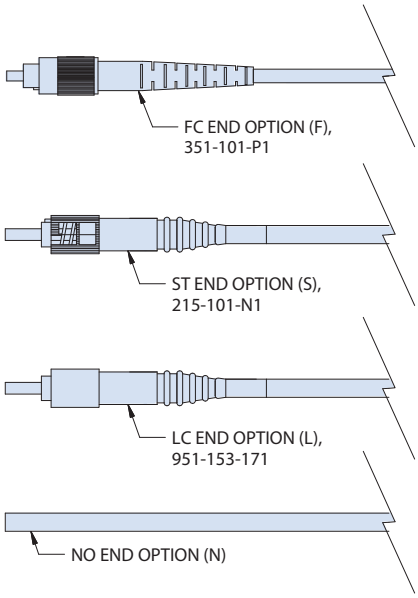
SeaKing Fiber - How To Order								
Sample Part Number	**7071-0038**	**-B**	**F**	**Z1**	**-0F8**	**N**	**-24**	**C**
Basic Number	**7071-0038**							
End 1 Option	**B** = BCR **F** = FCR							
End 2 Option	**F** = FC leads **S** = ST leads **L** = LC leads **N** = none							
Shell Material	**TC** = titanium **Z1** = 316 stainless steel							
Insert Arrangement	See page 32; insert body material 316 SST							
Polarization	**N** = normal, **A**, **B**, **C**; see page 33							
Length	In inches							
Pressure Cap Option	**C** = pressure cap, same size and material will be provided (709-002); omit for none							



NOTES

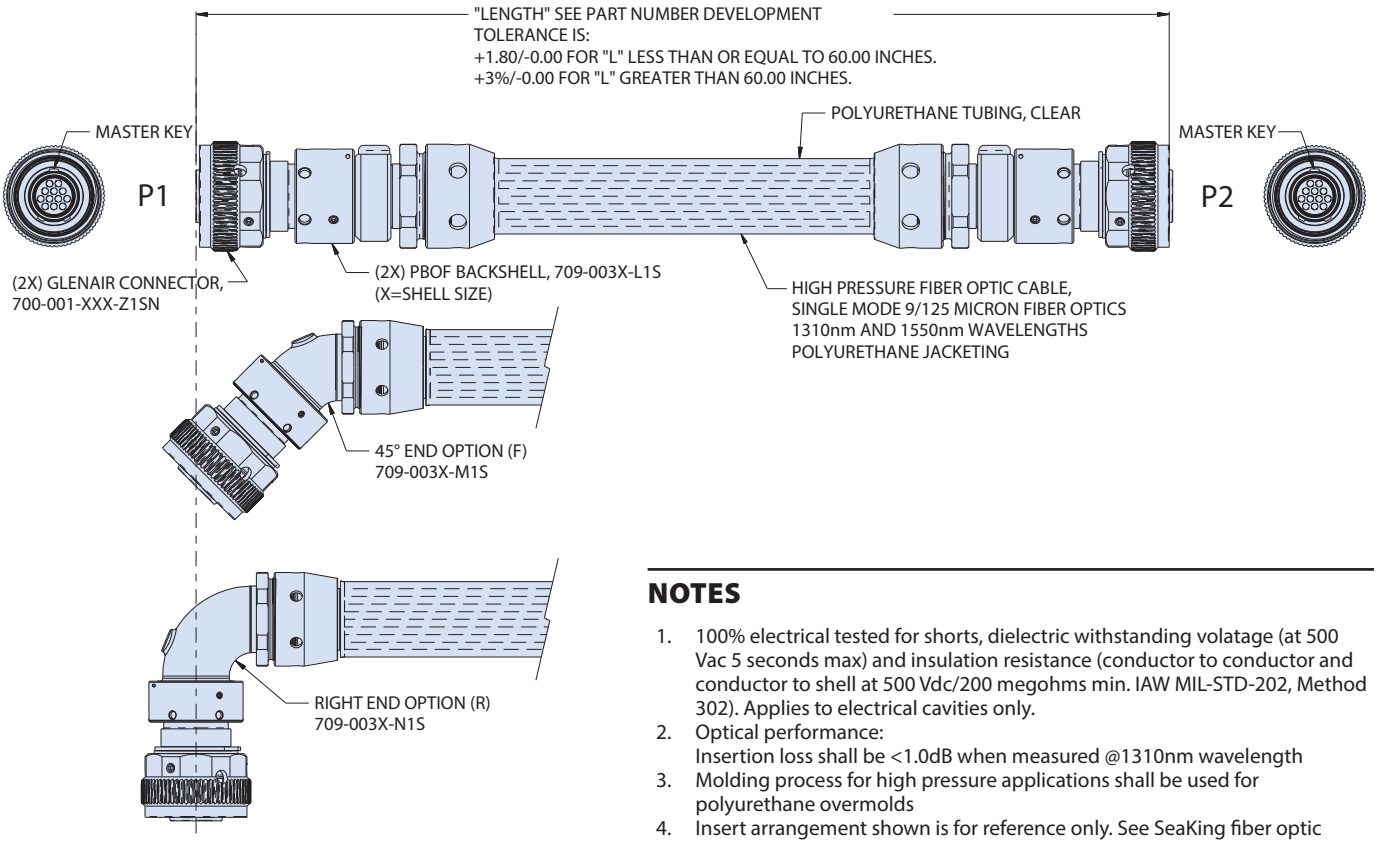
1. Optical performance: insertion loss shall be <1.0dB when measured @ 1310nm wavelength. (See note 4)
2. Insert arrangement shown is for reference only. See SeaKing fiber optic insert arrangements on page 24.
3. See drawing 700-001 for connector dimensions, materials, and finishes. See PBOF assembly fittings, 709-003, for more information.
4. Wiring for each arrangement is one to one. Fiber cavities can be populated with fiber termini and/or conductors. Electrical cavities shall be populated with largest gauge wire and contacts.
5. Kit GBS1000-00033 shall be used for inspection/cleaning.
6. Recommended seaking cleaning tool: GCLT-H160.
7. Fiber optic terminus: 1.58 mm ferrule id, single O-ring.

COMMERCIAL FO OPTIONS



PBOF back-to-back SeaKing fiber optic assembly with straight, 45°, or 90° connectors

SeaKing Fiber - How To Order						
Sample Part Number	**7071-0049**	**-S**	**S**	**MF4**	**-36**	**N**
Basic Number	**7071-0049**					
Backshell End Option (P1)	**S** = straight **R** = right **F** = 45°					
Backshell End Option (P1)	**S** = straight **R** = right **F** = 45°					
Insert Arrangement	See page 33; Insert body material 316 SST					
Cable Length	In inches					
Polarization	**N** = normal; see page 32					



NOTES

1. 100% electrical tested for shorts, dielectric withstanding volatage (at 500 Vac 5 seconds max) and insulation resistance (conductor to conductor and conductor to shell at 500 Vdc/200 megohms min. IAW MIL-STD-202, Method 302). Applies to electrical cavities only.
2. Optical performance:
   Insertion loss shall be <1.0dB when measured @1310nm wavelength
3. Molding process for high pressure applications shall be used for polyurethane overmolds
4. Insert arrangement shown is for reference only. See SeaKing fiber optic insert arrangements on page 24.
5. Wiring shall be one-to-one for all insert arrangements
6. Cables over 240" (20ft) shall be shipped on a reel.
7. Kit GBS1000-00033 shall be used for inspection/cleaning.
8. Recommended SeaKing cleaning tool: GCLT-H160.
9. All solder cup cavities are isolated with M23053/8 heat shrink tubing.
10. See drawing 700-001 for connector dimensions, materials, and finishes. See PBOF assembly fittings (709-003) for more information.
11. Wiring for each arrangement is one to one. Fiber cavities can be populated with fiber termini and/or conductors. Electrical cavities shall be populated with largest gauge wire and contacts.
12. Fiber optic terminus: 1.58 mm ferrule id, single o-ring.

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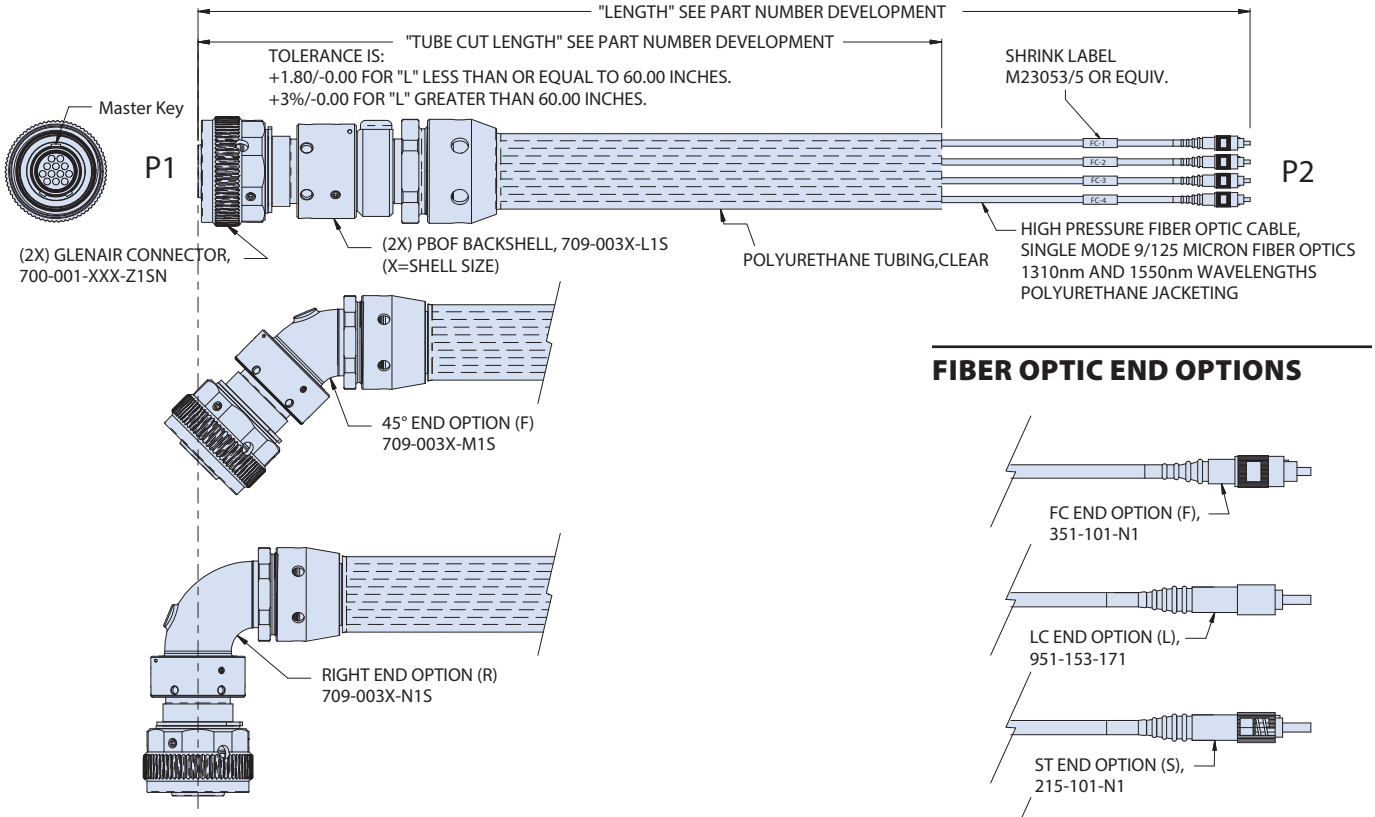
PBOF single-ended fiber optic pigtail cable assembly with straight, 45°, and 90° routing

SeaKing Fiber - How To Order							
Sample Part Number	**7071-0050**	**-S**	**F**	**MF4**	**-XX**	**-XX**	**N**
Basic Number	**7071-0050**						
Backshell End Option (P1)	**S** = Straight **R** = Right **F** = 45°						
Fiber End Option	**F, L, S, G, N**						
Insert Arrangement	See page 33; Insert body material 316 SST						
Cable Length	In inches						
Tube Cut Length	In inches						
Polarization	**N** = Normal; see page 32						



FIBER OPTIC END OPTIONS

NOTES

1. Optical performance:
   Insertion loss shall be <1.0dB when measured @ 1310nm wavelength. (See note 4)
2. Insert arrangement shown is for reference only. See SeaKing fiber optic insert arrangements on page 24.
3. See drawing 700-001 for connector dimensions, materials, and finishes. See PBOF assembly fittings, 709-003, for more information.
4. Wiring for each arrangement is one to one. Fiber cavities can be populated with fiber termini and/or conductors. Electrical cavities shall be populated with largest gauge wire and contacts.
5. Kit GBS1000-00033 shall be used for inspection/cleaning.
6. Recommended SeaKing cleaning tool: GCLT-H160.
7. Fiber optic terminus: 1.58 mm ferrule id, single O-ring.

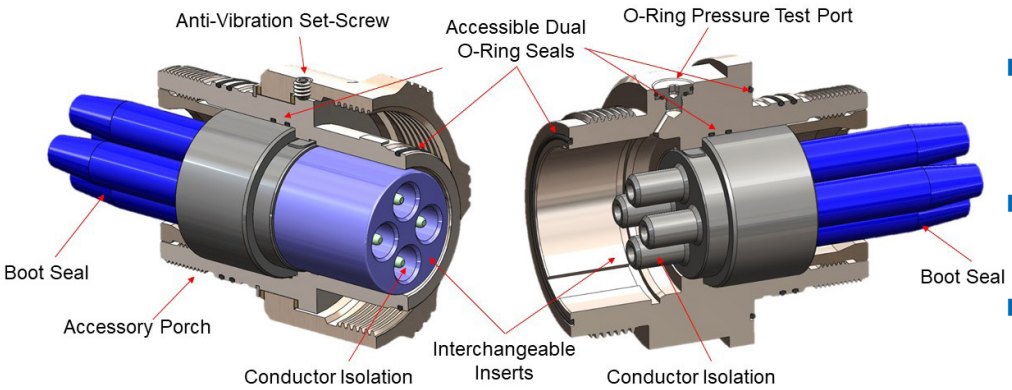
DEEP WATER



SeaKing™ Power

1–6.6kV connectors for deep sea oil & gas primary power junctions

Glenair's SeaKing Power connector family is rated to 10K PSI in open-face or mated condition. These high-voltage (1–6.6kV) and high-amperage (up to 350 Amps) solder cup contact connectors are ready for immediate deployment in overmolded or PBOF configurations for primary power junction applications. Test reports available upon request. A range of shell sizes and contact inserts are available.



- **API 16D and 17E-compliant test ports**
- **Fully redundant dual O-ring sealing**
- **Indexable flange or threaded bulkhead designs**
- **O-ring pressure inspection ports available on all BCR and FCR designs**
- **Factory acceptance testing in both mated and open-face conditions**
- **Keyed mating interface for mismate prevention**

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HIGH VOLTAGE SUBSEA

SeaKing™ Power connectors for underwater primary power junctions

Available configurations and applications

CABLE CONNECTOR PLUG (CCP)



SeaKing™ Power
API 16D and 17E-Compliant
Cable Connector Plug (CCP)

- PBOF and overmold compatible cable connector plug
- Super duplex stainless steel or titanium construction with glass-reinforced thermoplastic insulator
- Accepts various backshell accessories
- Aggressive coupling nut knurling for easy field mating
- Inspection ports, spanner wrench holes, and coupling nut lock set screws ensure reliable foolproof performance
- Mates with SeaKing Power receptacle assemblies with similar contact arrangement
- Conductor sealing boots protect solder cup wire-to-contact terminations in the event of a flooded hose

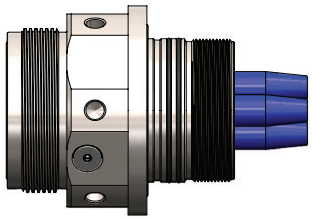
FLANGE CONNECTOR RECEPTACLE (FCR)



SeaKing™ Power
API 16D and 17E-Compliant
Flange Connector Receptacle (FCR)

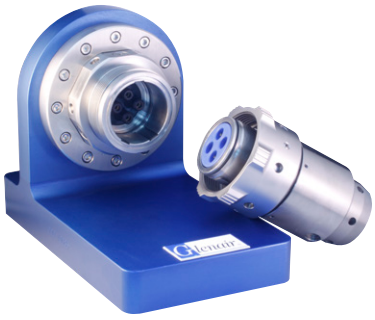
- FCR delivers 10K PSI sealing in both mated and open-face condition
- Indexable flange allows receptacle shell rotation for 360° routing flexibility of right-angle-mating cable plugs
- Available API O-ring pressure test ports ensure reliability prior to deployment to ocean floor
- Super duplex stainless steel or titanium shells for complete compatibility with mating CCP
- Wire sealing boots ensure reliable environmental protection of cable-to-connector interface

BULKHEAD CONNECTOR RECEPTACLE (BCR)



SeaKing™ Power
API 16D and 17E-Compliant
Bulkhead Connector Receptacle (BCR)

- BCR is designed for direct threaded bulkhead mounting
- Supplied washer, mounting nut, and bulkhead-mate O-ring seals ensure secure sealing and grounding to equipment housing
- BCR shell equipped with both wrench flats and spanner wrench holes for convenient installation regardless of tool choice
- Available API O-ring pressure test ports ensure reliability prior to deployment
- Mates with SeaKing Power CCP with similar contact arrangement



SeaKing™ Power Performance Specifications		
Pressure Rating	Plug: 10,000 PSI, mated condition Receptacles: 10,000 PSI mated and open face	per ISO 13628-6
Electrical	1–6.6kV, 350 Amps max per contact	per MIL-STD-202, Method 301
Materials	Salt Spray (corrosion) Humidity (steady state) Thermal Cycle	MIL-STD-202, Method 101 MIL-STD-202, Method 103 ISO 13628-6
Power Ratings	3kV, 50 Amp / contact 1kV, 50 Amp / contact 1kV, 150 Amp / contact 1kV, 350 Amp / contact	P/N 700-101-48, 700-106-48 P/N 707-0065, 707-0066 P/N 707-0088, 707-0089 P/N 707-0142

SeaKing™ Power connectors for underwater primary power junctions

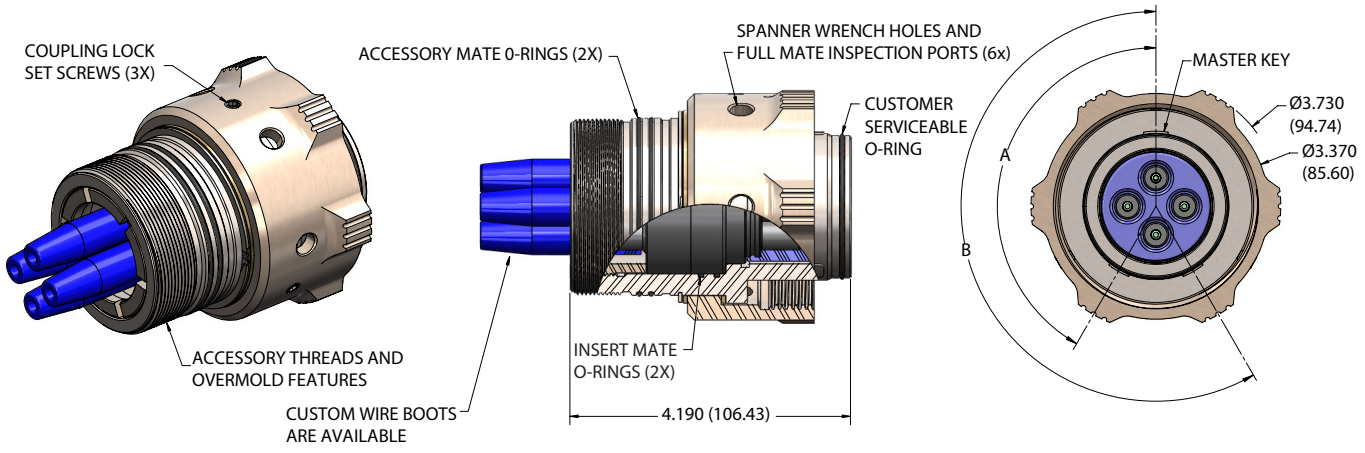
Size 48, 4-way #8 HV contacts, 3kV, 50 amps/contact

700-101-48 SEAKING POWER, CABLE CONNECTOR PLUG (CCP), SIZE 48, 4-WAY #8 HV CONTACTS*

How to Order						
Sample Part Number		**700-101**	**-48HV4**	**Z1**	**S**	**N**
Series	**700-101** = cable connector plug					
Shell Size / Insert Arrangement	**-48HV4** = shell size 48 / layout HV4					
Shell Material	**Z1** = SS super duplex	**TC** = titanium				
Contact Style	**P** = pins	**S** = sockets				
Polarization	**N** = normal, **A**, **B**, **C**; see key positions table at right					

*Mates only with 700-106 BCR or FCR

Key Positions		
Position	**A**	**B**
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°



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SeaKing™ Power connectors for underwater primary power junctions

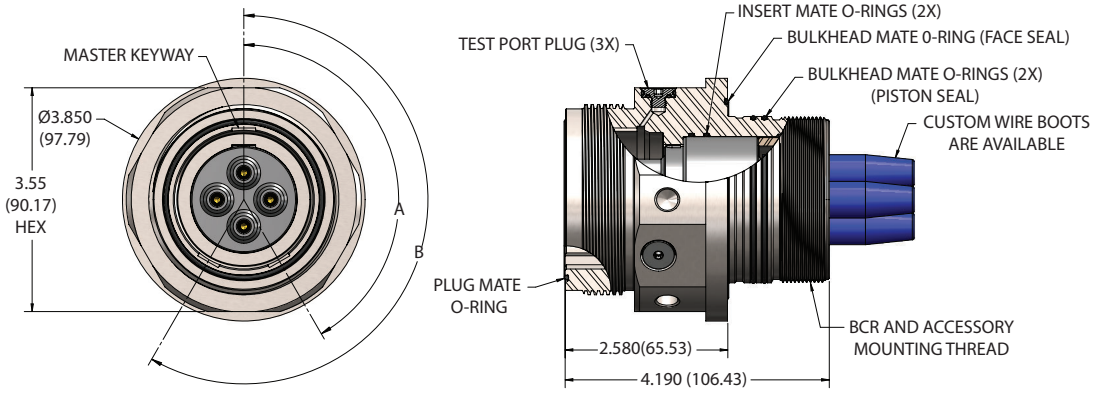
Size 48, 4-way #8 HV contacts, 3kV, 50 amps/contact

700-106-48 SEAKING POWER, FLANGE OR BULKHEAD CONNECTOR RECEPTACLE (FCR OR BCR), SIZE 48, 4-WAY #8 HV CONTACTS*

How to Order							
Sample Part Number	**700-106**	**-48HV4**	**Z1**	**S**	**N**	**B**	
Series	**700-106** = bulkhead or flange connector receptacle (BCR OR FCR)						
Shell Size / Insert Arrangement	**-48HV4** = shell size 48 / layout HV4						
Shell Material	**Z1** = SS super duplex	**TC** = titanium					
Contact Style	**P** = pins	**S** = sockets					
Polarization	**N** = normal, **A**, **B**, **C**; see key positions table at right						
Mounting Option*	**B** = BCR option includes bulkhead nut and washer **F** = FCR option and includes indexable mounting flange (fastener not included) **N** = None, receptacle is mountable to a threaded bulkhead						
Shell Option*	**API** = test ports; omit for none						

*Mates only with 700-101 Cable Connector Plug

Key Positions		
Position	A	B
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°



SeaKing™ Power connectors for underwater primary power junctions

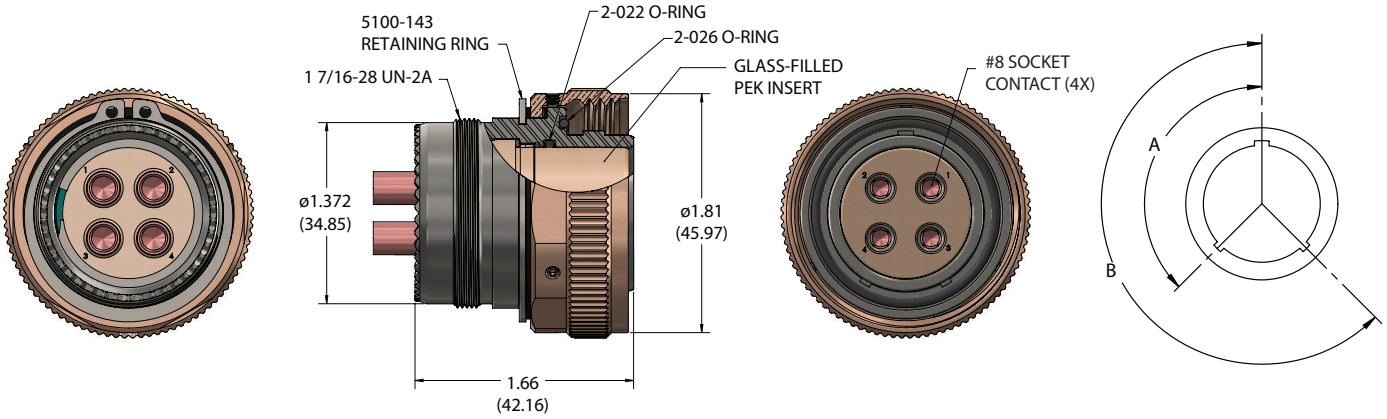
Size P, 4-way #8 HV contacts, 1kV, 50 amps/contact

707-0065-P4 SEAKING POWER, CABLE CONNECTOR PLUG (CCP)*

How to Order					
Sample Part Number	**707-0065**	**-P4**	**-Z1**	**S**	**N**
Series	**707-0065** = cable connector plug (CCP)				
Shell Size / Insert Arrangement	**P4**				
Shell Material	**Z1** = stainless steel **TC** = titanium				
Contact Style	**P** = pin (707-0066 only) **S** = socket (707-0065 only)				
Polarization	**N** = Normal, **A**, **B**, **C**; see key positions table at right				

*Mates only with 707-0066 BCR

Key Positions		
Position	**A**	**B**
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°

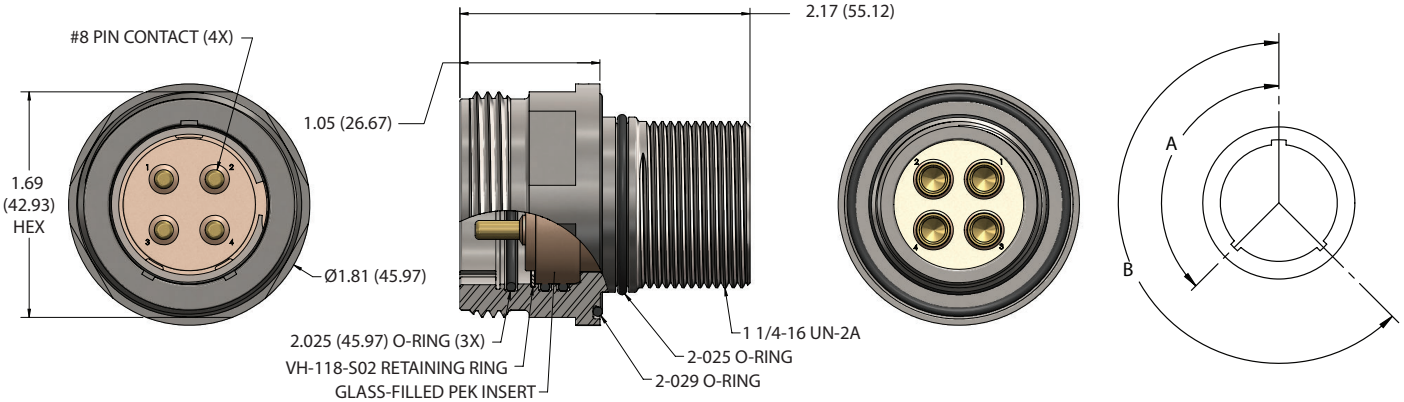


707-0066-P4 SEAKING POWER, BULKHEAD CONNECTOR RECEPTACLE (BCR)*

How to Order					
Sample Part Number	**707-0066**	**-P4**	**-Z1**	**S**	**N**
Series	**707-0066** = bulk head receptacle (BCR)				
Shell Size / Insert Arrangement	**P4**				
Shell Material	**Z1** = stainless steel **TC** = titanium				
Contact Style	**P** = pin (707-0066 only) **S** = socket (707-0065 only)				
Polarization	**N** = Normal, **A**, **B**, **C**; see key positions table				

*Mates only with 707-0065 CCP

Key Positions		
Position	**A**	**B**
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°



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SeaKing™ Power connectors for underwater primary power junctions

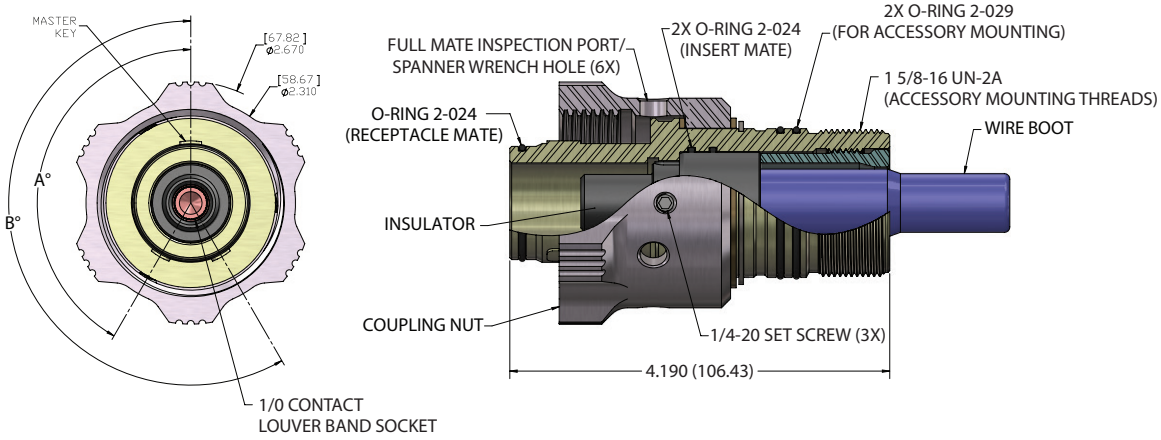
Size 32, 1-way #1/0 HV contact, 1kV, 150 amps/contact

707-0088 SEAKING POWER, CABLE CONNECTOR PLUG (CCP), SIZE 32, 1-WAY #1/0 HV CONTACTS*

How to Order				
Sample Part Number	**707-0088**	**Z1**	**P**	**N**
Series	**707-0088** =cable connector plug			
Shell Material	**Z1** = stainless steel **TC** = titanium			
Contact Style	**P** = pin **S** = socket			
Polarization	**N** = normal, **A**, **B**, **C**; see key positions table at right			

Key Positions		
Position	A	B
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°

*Mates only with 707-0089 FCR or BCR

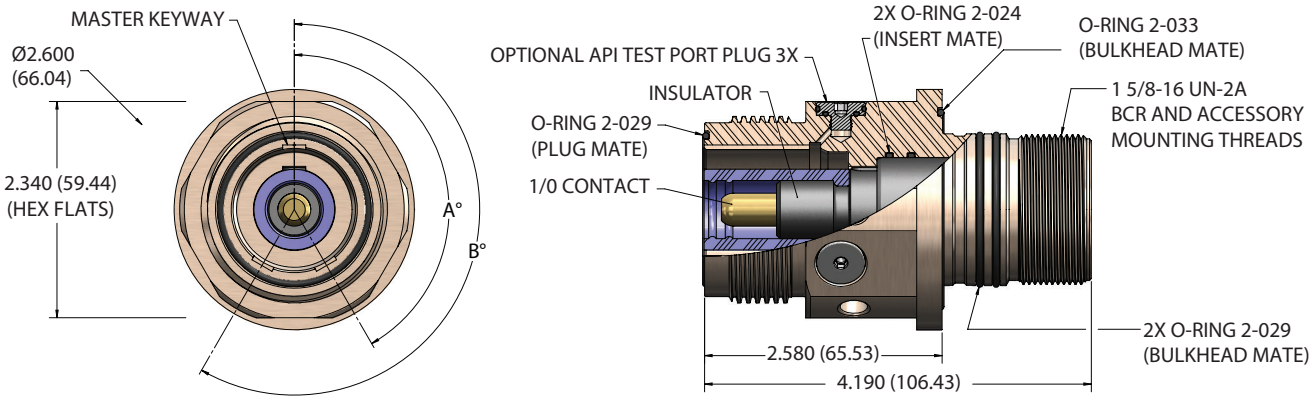


707-0089 SEAKING POWER, FCR / BCR, SIZE 32, 1-WAY #1/0 CONTACTS*

How to Order						
Sample Part Number	**707-0089**	**Z1**	**P**	**N**	**-N**	**-API**
Series	**707-0089** = flange connector receptacle or bulkhead connector receptacle					
Shell Material	**Z1** = stainless steel **TC** = titanium					
Contact Style	**P** = pin **S** = socket					
Polarization	**N** = normal, **A**, **B**, **C**; see key positions table at right					
Mounting Option*	**B** = BCR option and includes bulkhead nut and washer **F** = FCR option and includes indexable mounting flange **N** = none, receptacle is mountable to a threaded bulkhead					
Shell Option*	**API** = test ports; omit for none					

Key Positions		
Position	A	B
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°

*Mates only with 707-0088 CCP



HIGH VOLTAGE SUBSEA

SeaKing™ Power connectors for underwater primary power junctions

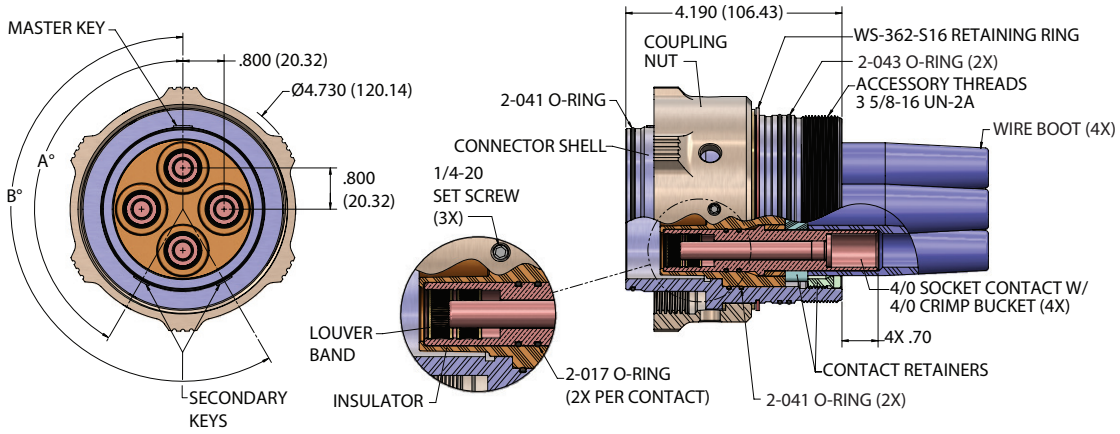
Size 64, 4-way #4/0 HV contact, 1kV, 350 amps/contact

How to Order			
Sample Part Number	**707-0142**	**1**	**N**
Series	**707-0142** = SeaKing Power		
Connector Style	**-1** = cable connector plug (CCP) **-6** = flange connector receptacle (FCR) **-7** = bulkhead connector receptacle (BCR)		
Key Position	**N** = normal, **A**, **B**, **C;** see key positions table		

Key Positions		
Position	**A**	**B**
N	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°

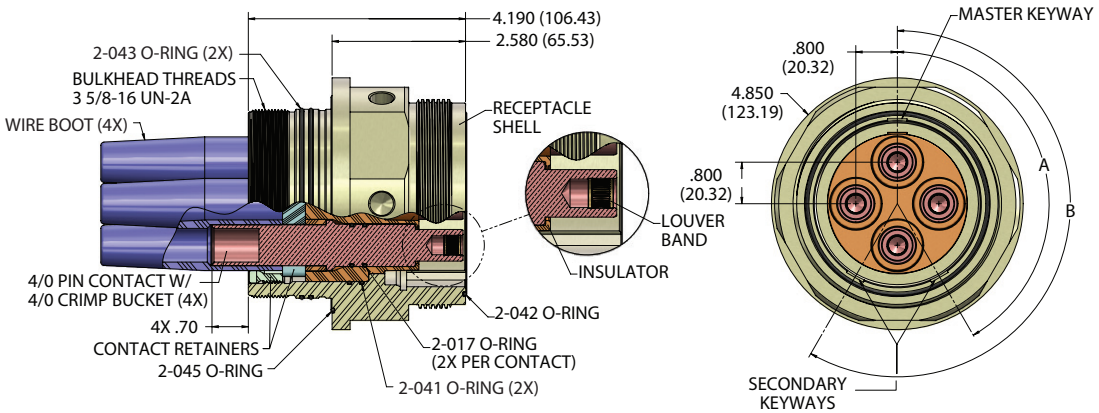
707-0142-1 SEAKING POWER, CABLE CONNECTOR PLUG (CCP), SIZE 64, 4-WAY #4/0 HV CONTACTS*

*Mates only with 707-0142-6 FCR or 707-0142-7 BCR



707-0142-7 SEAKING POWER, BULKHEAD CONNECTOR RECEPTACLE (BCR), SIZE 64, 4-WAY #4/0 HV CONTACTS*

*Mates only with 707-0142-1 CCP



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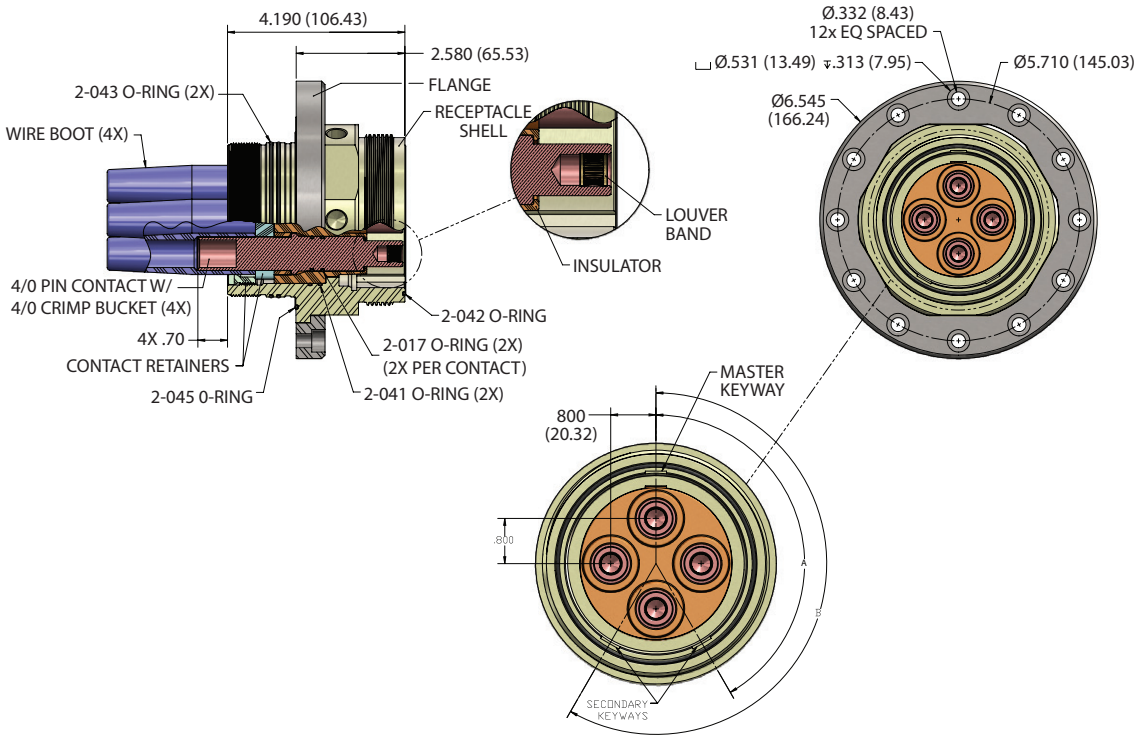
707-0142-6 SEAKING POWER, FLANGE CONNECTOR RECEPTACLE (FCR), SIZE 64, 4-WAY #4/0 HV CONTACTS*

*Mates only with 707-0142-1 CCP



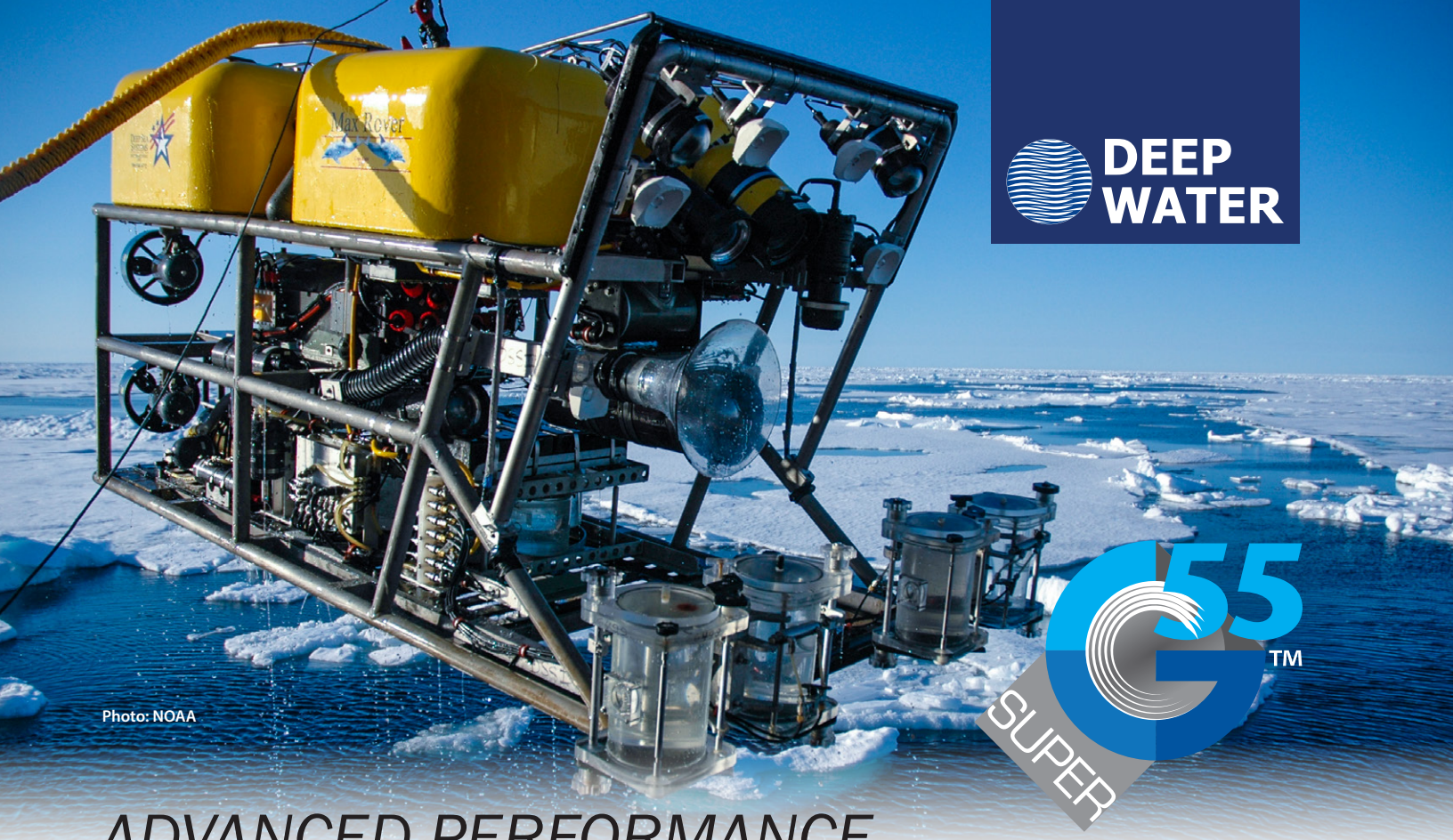


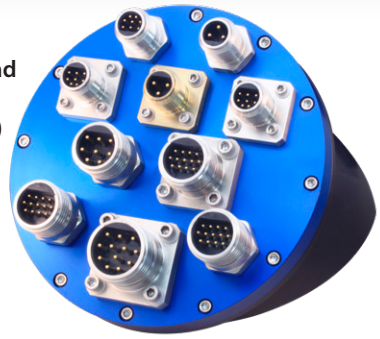
Photo: NOAA

DEEP WATER

SUPER G55™

ADVANCED PERFORMANCE SERIES 55 TYPE 10K PSI

SuperG55™



High-pressure open face bulkhead (BCR) and flange receptacles (FCR)

The SuperG55™ family of dry-mate underwater deep-sea high-pressure connectors are a revolutionary new design of the popular industry-standard used in countless ROV, underwater camera, diver communications, lights, pan and tilts, and other deep subsea applications.

Available in multiple shell sizes , the SuperG55™ is manufactured from 316L Stainless Steel with insert molded contact assemblies designed for pressure-sealed applications up to 10K PSI mated and unmated. Intermateable and intermountable with other "55" series connectors, the Glenair solution introduces a long list of product innovations designed to improve performance and durability. Our PBOF versions, for example, utilize easy-to-assemble threaded fittings which deliver both superior sealing performance while reducing installation time. Other innovations include full-mate inspection ports, improved solder cup contact design and more. Cable plugs and receptacles available in attachable (user-terminatable) versions as well as factory overmolded single-ended whips.



Bulkhead Connector Receptacle (BCR)



Factory-terminated overmolded Cable Connector Plug (CCP)



Flange Connector Receptacle (FCR)

- **10,000 PSI mated/ unmated (approx. 22,500ft/7,000m)**
- **Recessed socket contacts in plugs for electrical safety**
- **Intermateable and intermountable with other "55" series connectors**
- **4 shell sizes — 15, 20, 24 and 32 with 3 to 39 contacts**
- **PBOF versions available**
- **600 VDC, 5 to 18 Amps (dependent on conductor and cable size and make-up)**

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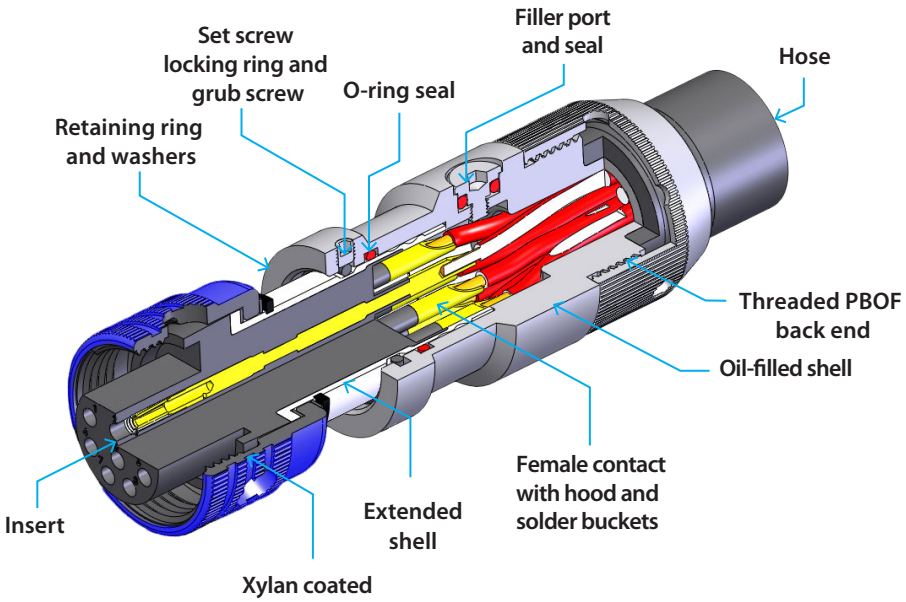
10K PSI / 700 BAR / 7000M

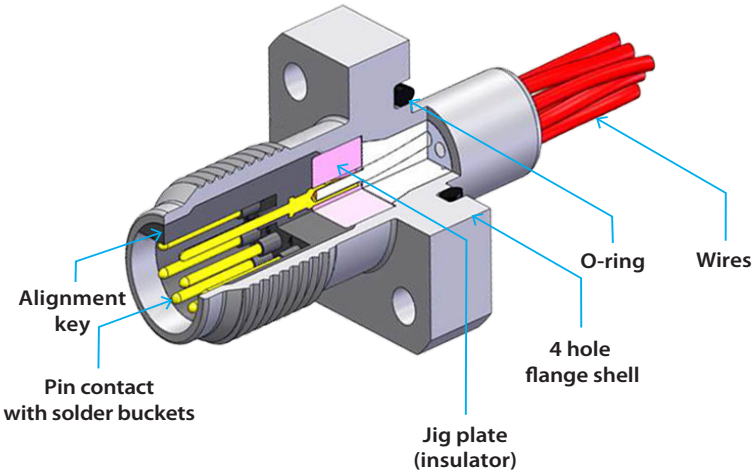
Advanced-Performance Series 55 Type SuperG55 10K PSI

Key mechanical and environmental features

SUPERG55™ PRESSURE-BALANCED OIL-FILLED CABLE CONNECTOR PLUG (CCP)



SUPERG55™ FLANGE CONNECTOR RECEPTACLE (FCR)



Material Finish Codes			
Code	Material/Finish	Code	Material/Finish
	Anodized Aluminum	PK	Composite Thermoplastic (PEEK)
NAB2	Aluminum Bronze	B	Brass
T	Titanium	Alternative materials available, contact factory	

SuperG55™ Performance Specifications	
Mating Cycles	500
Pressure	689 Bar (10,000 PSI) Mated and Un-mated
Operating Temperature	-20°C to +90°C
Voltage Rating	600 VDC / 440 Vac
Current (max.)	5 to 18 Amps (dependant on contact and cable conductor sizes)

SuperG55™ Material/Finish	
Shells	316L Stainless Steel/ Passivated
Insulator	PEEK/NA
Insert	Neoprene/NA
Contacts	Copper Alloy/Gold Plated
O-rings	Nitrile/NA
Overmold and Cable	Polyurethane or Neoprene/NA
Coupling Nut	316L Stainless Steel/ Protective Coating Blue
Bulkhead Receptacle Tails	PTFE Insulated 16 AWG Wire/NA
Cable	Polyurethane or Neoprene Jacketed/NA

NON-STANDARD MATERIALS: Other material options are available as part of our non-catalog offerings including anodized aluminum, titanium, and aluminum bronze. Glenair is also able to supply SuperG55™ interconnects in composite thermoplastic (PEEK) to meet application requirements for reduced cathodic corrosion as well as weight reduction without affecting connector performance.

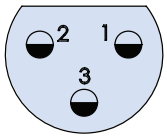
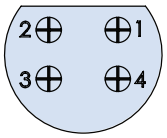
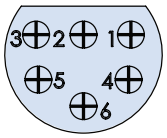
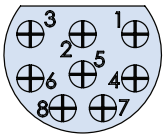
HIGH-SPEED ETHERNET: The SuperG55™ Ethernet option is available in the 1508, 2013 and 2022 contact configurations and provides both high speed (Up to 1GB) and power (600 Volts) in a full subsea environment (10,000 PSI). Gigabit speed data transfer up to a distance of 75mtrs.

10K PSI / 700 BAR / 7000M

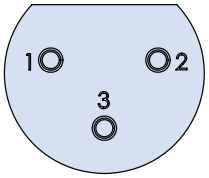
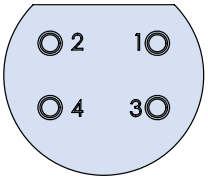
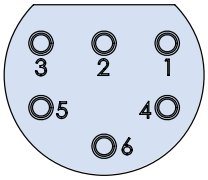
Advanced-Performance Series 55 Type SuperG55 10K PSI

Insert arrangements

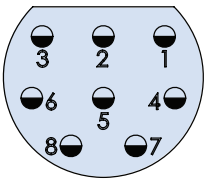
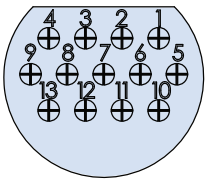
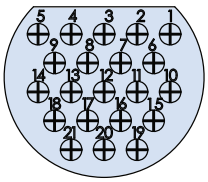
SUPERG55™ INSERT ARRANGEMENTS Mating face view of pin insert (socket insert IDs are reversed)

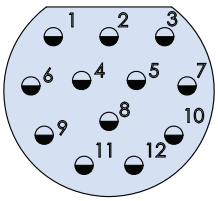
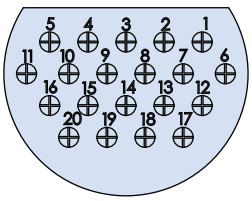
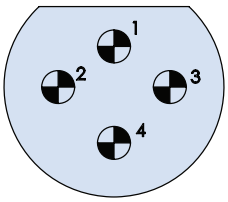
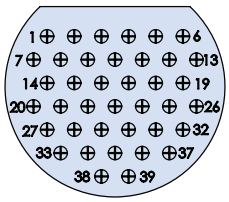
Shell Size 15			
1503	**1504**	**1506**	**1508***
3 Size #12 AWG Contacts	4 Size #16 AWG Contacts	6 size #16 AWG Contacts	8 size #16 AWG Contacts

Shell Size 20		
2003	**2004**	**2006**
3 Size #10 AWG Contacts	4 Size #10 AWG Contacts	6 Size #10 AWG Contacts

Shell Size 20		
2008*	**2013***	**2022***
8 Size #12 AWG Contacts	13 Size #16 AWG Contacts	21 Size #16 AWG Contacts

Shell Size 24		Shell Size 32	
2412	**2420**	**3204*****	**3239****
12 Size #12 AWG Contacts	20 Size #16 AWG Contacts	4 Size #6 AWG Contacts	39 Size #16 AWG Contacts

Bulkhead Mounting Torque (Values are for dry non-lubricated threads)	Size 15 - 14.12NM (125LB. INS.) Size 20 - 18.64NM (165LB.INS.) Size 24 - 25.42NM (225LB.INS.) Size 32 - TBD

*Compatible with high-speed Ethernet
**3239 is not intermateable with any other brand of connector. Contact factory for details
*** Contact factory for availability
Custom insert arrangements available, contact factory.

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G55 A1 ATTACHABLE CABLE CONNECTOR PLUG (CCP)



SuperG55™ - How To Order						
Sample Part Number		**G55A1**	**-1508**	**-0000**		
Series	**SuperG55™** = underwater dry-mate, long version (CCP), attachable					
Shell Shell Size/Insert Arrangement Size	See shell size / insert arrangements (page 48)					
Overall Length	In feet (**0000** = no cable, **0001** = one foot, etc.)					
Potting Boot	**PB** = potting boot; omit for none. Not required if used for OFR1					
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47				

G55 01 STRAIGHT OVERMOLDED, CABLE PLUG (CCP)



SuperG55™ - How To Order						
Sample Part Number		**G5501**	**-1508**	**-0004**		
Series	**SuperG55™** = underwater dry-mate, straight overmolded CCP					
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)					
Cable Length	In feet (**0001** = one foot, **0002** = two feet etc.)					
Inch Increments	**3**, **6** or **9** inches; omit for whole feet lengths					
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47				
Back-to-Back	**B2B** = back-to-back; omit if not required					

G55 R1 RIGHT ANGLE OVERMOLDED, CABLE CONNECTOR PLUG (CCP)



SuperG55™ - How To Order						
Sample Part Number		**G55R1**	**-1508**	**-0004**		
Series	**SuperG55™** = underwater dry-mate, right angle overmolded CCP					
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)					
Cable Length	In feet (**0001** = one foot, **0002** = two feet etc.)					
Inch Increments	**3**, **6** or **9** inches; omit for whole feet lengths					
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47				
Back-to-Back	**B2B** = back-to-back; omit if not required					

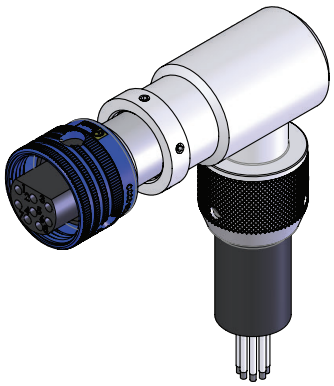
G55 OF1 STRAIGHT OIL-FILLED CABLE CONNECTOR PLUG (CCP)



SuperG55™ - How To Order				
Sample Part Number		**G55OF1**	**-1508**	**-0010**
Series	**SuperG55™** = Underwater dry-mate, straight oil-filled CCP			
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)			
Overall Length	In feet (**0000** = no cable, no hose **0001** = one foot, etc.)			
Back-to-Back*	**B2B** = back-to-back (min. 7ft hose length); omit if not required			

*Consult factory for additional back-to-back options

G55 OFR1 RIGHT ANGLE OIL-FILLED CABLE CONNECTOR PLUG (CCP)



SuperG55™ - How To Order				
Sample Part Number		**G55OFR1**	**-1508**	**-0010**
Series	**SuperG55™** = Underwater dry-mate, right angle oil-filled CCP			
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)			
Overall Length	In feet (**0000** = no cable, no hose **0001** = one foot, etc.)			
Back-to-Back*	**B2B** = back-to-back (min. 7ft hose length); omit if not required			

*Consult factory for additional back-to-back options

G55 06 FLANGE CONNECTOR RECEPTACLE (FCR)



SuperG55™ - How To Order				
Sample Part Number		**G5506**	**-2013**	**-0004**
Series	**SuperG55™** = underwater dry-mate, flange connector receptacle (FCR)			
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)			
Cable Length	In feet (**0001** = 1 foot, **0004** = 4 feet, standard length)			
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel		**PK** = peek coupling nut and barrel See material options on page 47	

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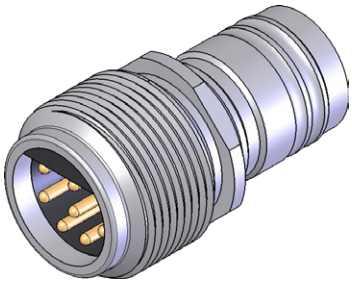
G55 07 BULKHEAD CONNECTOR RECEPTACLE (BCR)



SuperG55™ - How To Order				
Sample Part Number	**G5507**	**-1508**	**-0004**	
Series	**SuperG55™** = underwater dry-mate, bulkhead connector receptacle (BCR)			
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)			
Cable Length	In feet (**0001** = 1 foot, **0004** = 4 feet, standard length)			
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47		

G55 A2 ATTACHABLE CABLE CONNECTOR RECEPTACLE (CCR)



SuperG55™ - How To Order				
Sample Part Number	**G55A2**	**-1508**	**-0000**	
Series	**SuperG55™** = underwater dry-mate, attachable cable connector receptacle (CCR)			
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)			
Cable Length	In feet (**0000** = no cable, **0001** = one foot, etc.)			
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47		

*Currently only 1504, 1506, 1508, 2013, 2022 & 2420 insert arrangements are available.

G55 02 STRAIGHT OVERMOLDED CABLE CONNECTOR RECEPTACLE (CCR)



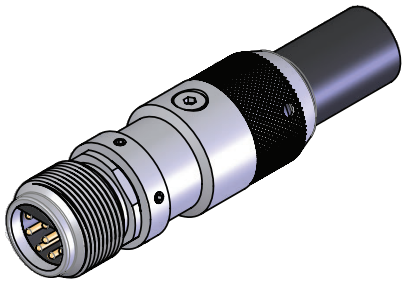
SuperG55™ - How To Order						
Sample Part Number	**G5502**	**-1508**	**-0004**			
Series	**SuperG55™** = underwater dry-mate, straight overmolded CCR					
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)					
Cable Length	In feet (**0001** = one foot, **0002** = two feet etc.)					
Inch Increments	**3**, **6** or **9** inches; omit for whole feet lengths					
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47				
Back-to-Back	**B2B** = back-to-back; omit if not required					

G55 R2 RIGHT ANGLE OVERMOLDED CABLE CONNECTOR RECEPTACLE (CCR)



SuperG55™ - How To Order						
Sample Part Number	**G55R2**	**-1508**	**-0004**			
Series	**SuperG55™** = underwater dry-mate, right angle overmolded CCR					
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)					
Cable Length	In feet (**0001** = one foot, **0002** = two feet etc.)					
Inch Increments	**3**, **6** or **9** inches; omit for whole feet lengths					
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel			**PK** = peek coupling nut and barrel See material options on page 47		
Back-to-Back	**B2B** = back-to-back; omit if not required					

G55 OF2 STRAIGHT OIL-FILLED CABLE CONNECTOR RECEPTACLE (CCR)



SuperG55™ - How To Order				
Sample Part Number	**G55OF2**	**-1508**	**-0010**	
Series	**SuperG55™** = Underwater dry-mate, straight oil-filled CCR			
Shell Size/Insert Arrangement*	See shell size / insert arrangements (page 48)			
Overall Length	In feet (**0000** = no cable, no hose, **0001** = one foot, etc.)			
Back-to-Back**	**B2B** = back-to-back (min. 7ft hose length); omit if not required			

*Currently only 1504, 1506, 1508, 2013, 2022, and 2420 insert arrangements are available
**Consult factory for additional back-to-back options

G55 OFR2 RIGHT ANGLE OIL-FILLED CABLE CONNECTOR RECEPTACLE (CCR)



SuperG55™ - How To Order				
Sample Part Number	**G55OFR2**	**-1508**	**-0010**	
Series	**SuperG55™** = Underwater dry-mate, right angle oil-filled CCR			
Shell Size/Insert Arrangement*	See shell size / insert arrangements (page 48)			
Overall Length	In feet (**0000** = no cable, no hose, **0001** = one foot, etc.)			
Back-to-Back*	**B2B** = back-to-back (min. 7ft hose length); omit if not required			

*Currently only 1504, 1506, 1508, 2013, 2022, and 2420 insert arrangements are available
**Consult factory for additional back-to-back options

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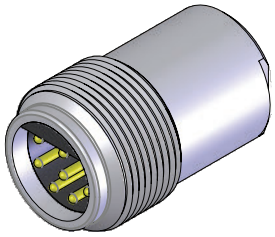
G55 D1 DUMMY SEALING PLUG (DSP)



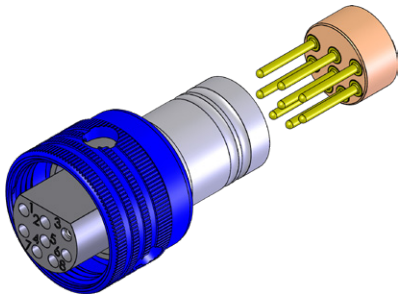
SuperG55™ - How To Order				
Sample Part Number		**G55D1**	**-1508**	**-0000**
Series	**SuperG55™** = dummy sealing plug (DSP)			
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)			
Cable Length	**0000** = no cable			
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47		

G55 D2 DUMMY SEALING RECEPTACLE (DSR)



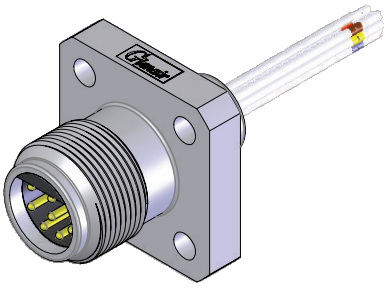
SuperG55™ - How To Order				
Sample Part Number		**G55D2**	**-1508**	**-0000**
Series	**SuperG55™** = dummy sealing receptacle (DSR)			
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)			
Cable Length	**0000** = no cable			
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47		

G55 M1 SOCKET TO SOCKET (CCP)



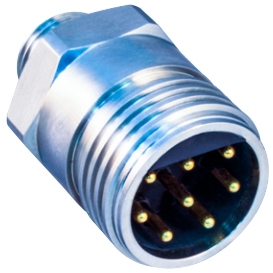
SuperG55™ - How To Order				
Sample Part Number		**G55M1**	**-1508**	**-0001**
Series	**SuperG55™** = underwater dry-mate, back-to-back socket CCP			
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)			
Cable Length	In feet (**0000** = no cable, **0001** = one foot, etc.)			
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47		

G55 06 FLANGE CONNECTOR RECEPTACLE (FCR) WITH EARTH LEAD



SuperG55™ - How To Order					
Sample Part Number		**G5506**	**-1508**	**-0004**	**-EL**
Series	**SuperG55™** = underwater dry-mate, FCR with earth lead				
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)				
Cable Length	In feet (**0001** = 1 foot, **0004** = 4 feet, standard length)				
Earth Lead	**EL** = earth lead (ground)				
Material Option	**T** = titanium; omit for stainless steel				

G55 07 BULKHEAD CONNECTOR RECEPTACLE (BCR) WITH EARTH LEAD



SuperG55™ - How To Order					
Sample Part Number		**G5507**	**-1508**	**-0004**	**-EL**
Series	**SuperG55™** = underwater dry-mate, BCR with earth lead				
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)				
Cable Length	In feet (**0001** = 1 foot, **0004** = 4 feet, standard length)				
Earthing Lead	**EL** = earth lead (ground)				
Material Option	**T** = titanium; omit for stainless steel				

G55 06IF FLANGE CONNECTOR RECEPTACLE (FCR) WITH INDEXABLE FLANGE



SuperG55™ - How To Order				
Sample Part Number		**G5506IF**	**-1508**	**-0004**
Series	**SuperG55™** = underwater dry-mate, flange connector receptacle (FCR) with indexable flange			
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)			
Cable Length	In feet (**0001** = 1 foot, **0004** = 4 feet, standard length)			
Material Option	Omit for stainless steel **B** = brass coupling nut and barrel	**PK** = peek coupling nut and barrel See material options on page 47		

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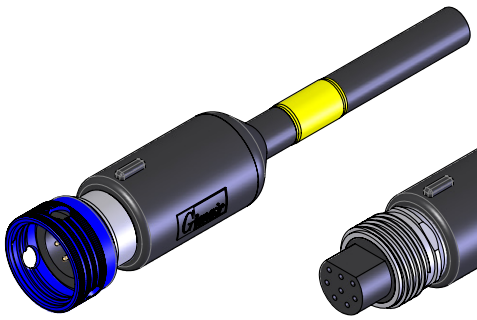
10K PSI / 700 BAR / 7000M

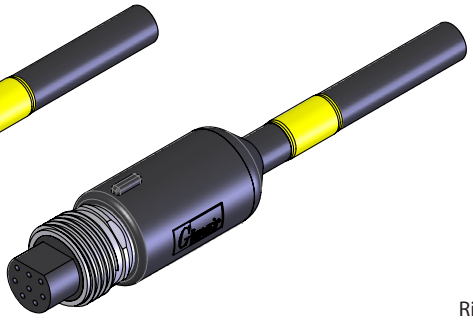
Advanced-Performance Series 66 Type SuperG66 10K PSI

SuperG66 reverse-gender connectors

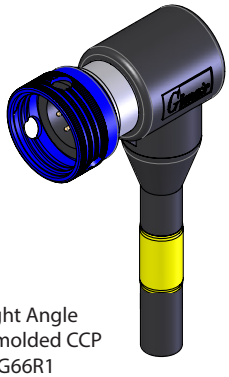
G66 OVERMOLDED CABLE CONNECTOR PLUGS AND RECEPTACLES



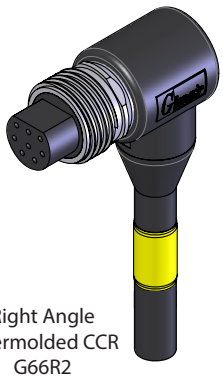
Overmolded CCP
G6601



Overmolded CCR
G6602



Right Angle
Overmolded CCP
G66R1



Right Angle
Overmolded CCR
G66R2

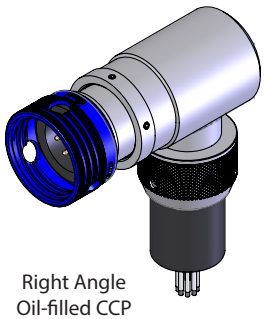
G66 OIL-FILLED CABLE CONNECTOR PLUGS AND RECEPTACLES



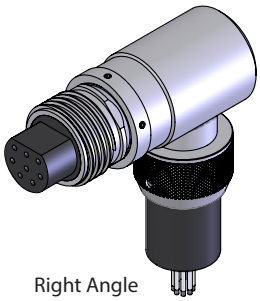
Oil-filled CCP
G66OF1



Oil-filled CCR
G660F2

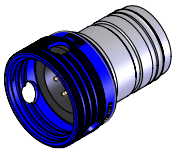


Right Angle
Oil-filled CCP
G66OFR1

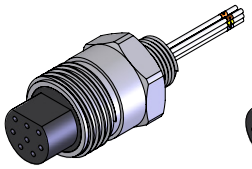


Right Angle
Oil-filled CCR
G66OFR2

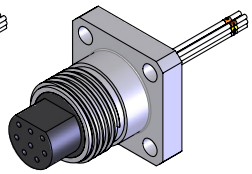
G66 CABLE CONNECTOR PLUGS AND BULKHEAD, FLANGE AND CABLE CONNECTOR RECEPTACLES



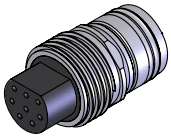
Cable Connector
Plug
G66A1



Bulkhead Connector
Receptacle
G6607

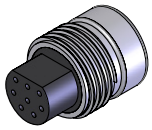


Flange Connector
Receptacle
G6606

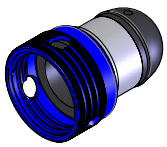


Cable Connector
Receptacle
G66A2

DUMMY SEALING PLUG AND RECEPTACLE

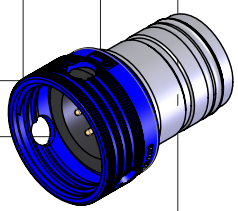


Dummy Sealing
Receptacle
G66D2

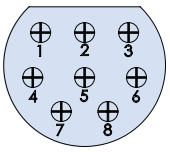


Dummy Sealing
Plug
G66D1

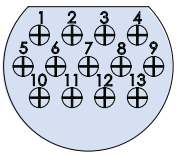
COMING SOON: SuperG66™ - Consult factory for availability					
Sample Part Number	**G66A1**	**-2008**	**-0000**		
Series	**SuperG66™** = underwater dry-mate, cable connector plug (CCP)				
Shell Size/Insert Arrangement	See shell size / insert arrangements (page 48)				
Cable Length	**0000** = no cable; also available in specified lengths for test purposes				
Material Option	Omit for stainless steel **PK** = peek coupling nut and barrel **B** = brass coupling nut and barrel Reference material options on page 47				
Potting Boot	**PB** = potting boot; omit if not required. Not required if changed to OFR1				



INSERT ARRANGEMENTS



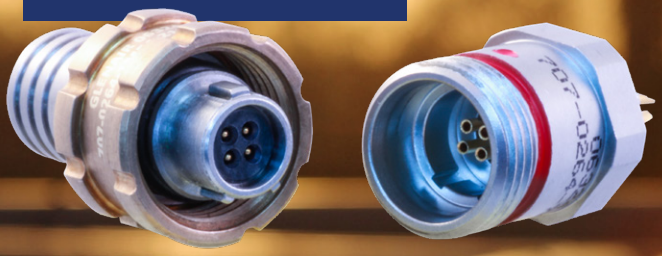
2008
8 x #16



2013
13 x #16

Additional insert arrangements can be engineered, contact factory

DEEP WATER



Series 707 Micro-PSI affords PIG designers the opportunity to design out legacy large form-factor connectors with a dramatically smaller high-speed interconnect solution.

10K PSI SOLUTION

Micro-PSI

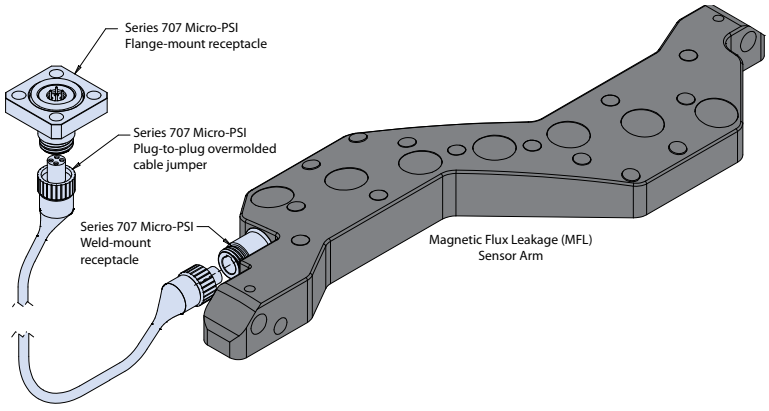
Microminiature high-speed, high-pressure connectors



Actual size!

The Series 707 Micro-PSI is a micro miniature10K PSI high-pressure, high-temperature interconnect designed specifically for pipeline inspection applications in Magnetic Flux Leakage and ultrasonic pipeline inspection PIGs. The Micro-PSI insert arrangements feature high-density micro TwistPin layouts for sensor applications and high-speed Gigabit Ethernet, and a Coax contact layout for 3 GHz performance. Micro-PSI connectors are supplied as discrete plugs, or overmolded plug cordsets with rugged Viton or Polyurethane jacketing. Bulkhead and flange mount receptacles are 10K PSI open-face pressure sealed, and incorporate fused vitreous glass inserts for <1X10^{-7} scc He/sec hermetic performance. Serviceable O-rings on plugs and face O-rings on receptacles provide high-reliability sealing.

- **10,000 PSI pressure rated**
- **3 GHz Coax**
- **Less than 1 x 10^{-7} scc He/ sec @ 1 ATM pressure differential**
- **Special-purpose high density (.056" contact spacing) intelligent inspection (PIG) connector series**
- **2 Amp high-speed Gigabit Ethernet-ready**
- **-20° to +150°C temperature range**
- **High-density, small form-factor**



Application example shows the 707 Micro-PSI used to interconnect an MFL sensor to on-board PIG data storage.

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10K PSI SOLUTION

Micro-PSI High-Speed, High Pressure ILI Connector

Specifications and insert arrangements

MICRO PSI HOW TO ORDER, SPECIFICATIONS, MATERIALS AND FINISHES

MIcro-PSI - How To Order							
Sample Part Number		**707-0264**	**-7**	**ME4**	**Z1**	**S**	**N**
Series / Basic P/N	**707-0264** = Series and Basic Part Number						
Connector Style	**1** = CCP (Cable Connector Plug) **5** = CCR (Cable Connector Receptacle) **6** = FCR (Flange Mount Receptacle) **7** = BCR (Bulkhead Mount Receptacle)						
Shell Size / Layout	**ME1**, **ME4**, **ME6**, **MG10**, **MK19** (See Insert Arrangements diagram)						
Shell Material	**Z1** = Stainless Steel						
Contact Type and Termination Style	**Plugs** **P** = Pin / Solder Cups **C** = Pin / PCB Terminals	**Receptacles** **S** = Socket / Solder Cups **D** = Socket / PCB Terminals					
Clocking Position	**N** = Normal, **A**, **B**, **C** (See Key and Keyway Positions table below)						

Performance Ratings

Connector Pressure Ratings:
10,000 PSI (Open face receptacle)
10,000 PSI (Mated CCP)

Pressure Tested To:
10,000 PSI per ISO 13628-6

Electrical Performance:
Insulation Resistance: 1000 Meghohms at 500 VDC per EIA-364-21
Coax Performance: DC to 3 GHz
Temperature Range: -20°C to +150°C

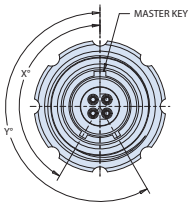
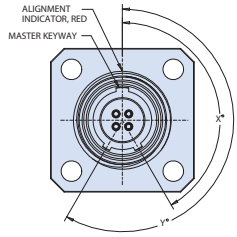
Hermeticity:
<1 x 10^{-7} scc He / sec @ 1 ATM pressure differential; receptacles only

Connector Material / Finish

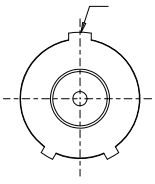
Connector Shell: 316L SST / passivated
Coupling Ring: nickel bronze / None
O-rings: Viton 90 durometer / none
Contacts: nickel-iron alloy / gold over nickel
Hermetic Seal: vitreous glass / none

NOTES

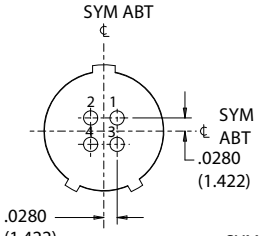
- Plug connectors typically supplied as prewired factory cable assemblies with Viton® overmolding for caustic chemical resistance
- Receptacle connectors commonly supplied as prewired pigtails or flex jumpers for direct connection to printed circuit boards and / or data drives
- High-speed Ethernet up to 1Gbps

MicroPSI Key and Keyway Positions				
	Key Rotation			
Key Position	X°	Y°	Plug	Receptacle
Normal (N)	150°	210°		
A	75°	210°		
B	95°	230°		
C	140°	275°		

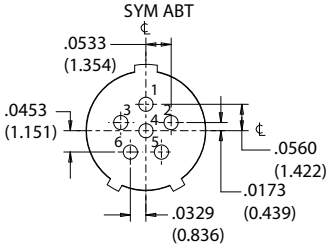
INSERT ARRANGEMENTS



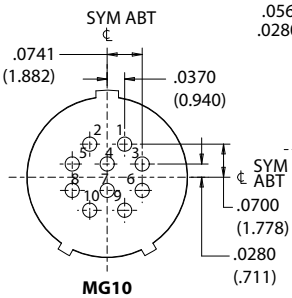
ME1
ONE #12 AWG
50 OHM COAX



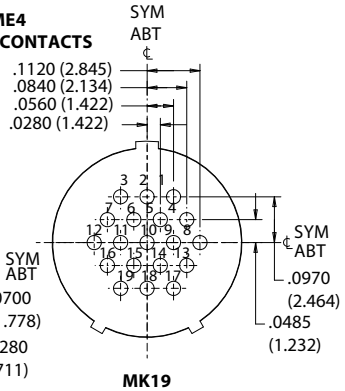
ME4
4 MICRO CONTACTS



ME6
6 MICRO CONTACTS



MG10
10 MICRO CONTACTS



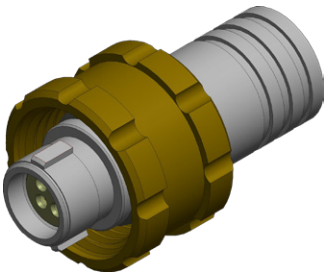
MK19
19 MICRO CONTACTS

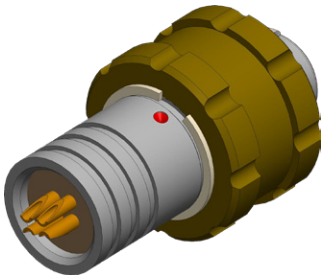
Micro-PSI High-Speed, High Pressure ILI Connector

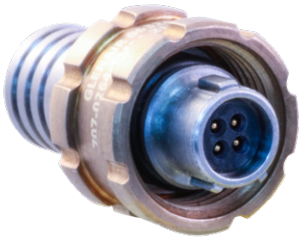
Cable plugs and receptacles

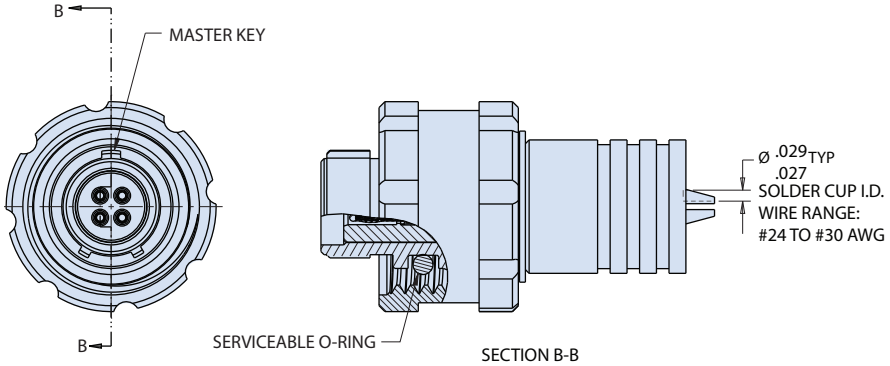
707-0264-1 MICRO-PSI CABLE CONNECTOR PLUG

- 10K PSI rated, mated condition
- Red alignment indicator for accurate mating
- Serviceable O-ring for reliable sealing and easy maintenance
- Ultra small form-factor
- Mates with 707-0264-5 CCR, 707-0264-6 FCR and 707-0264-7 BCR



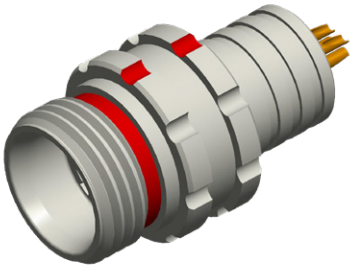


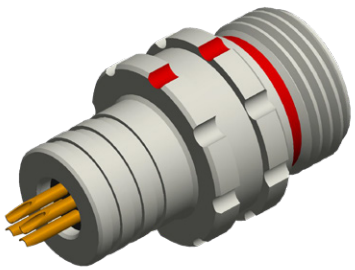


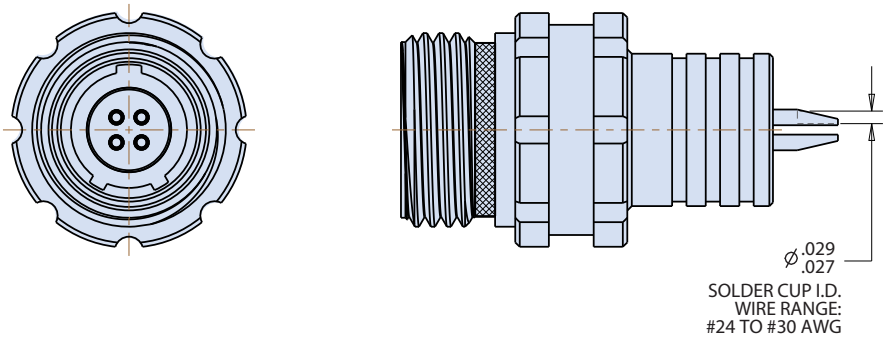


707-0264-5 MICRO-PSI CABLE CONNECTOR RECEPTACLE

- 10K PSI open-face rated
- Glass-to-metal sealed, <1X10^{-7} scc He/sec hermeticity
- Operating temperature -20° to +150° C
- Alignment and full-mate indicators
- Ultra small form-factor
- Flying lead option available
- Mates with 707-0264-1 CCP Plugs







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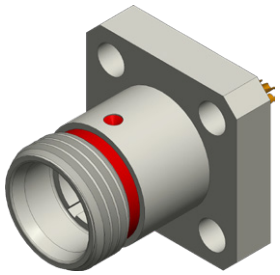
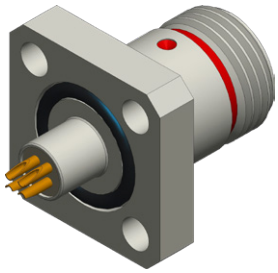
Micro-PSI High-Speed, High Pressure ILI Connector

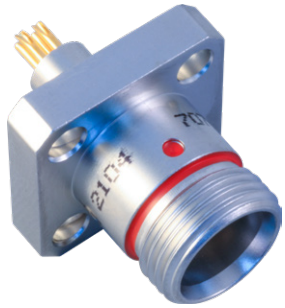
Receptacles

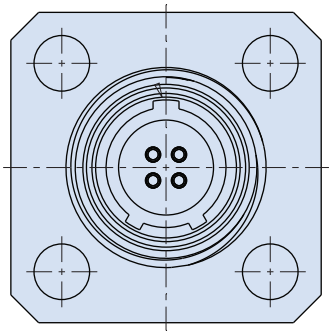
707-0264-6 MICRO-PSI FLANGE MOUNT RECEPTACLE

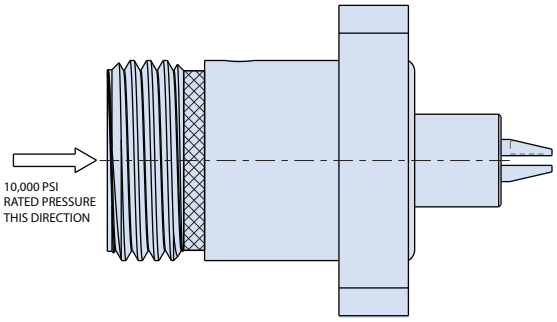
- 10K PSI open-face rated
- Glass-to-metal sealed, <1X10^{-7} scc He/sec hermeticity
- Operating temperature -20° to +150° C
- Alignment and full-mate indicators
- Ultra small form-factor
- Flying lead option available
- Mates with 707-0264-1 CCP Plugs





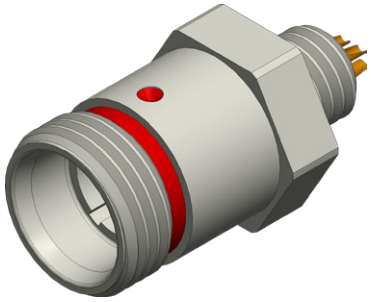


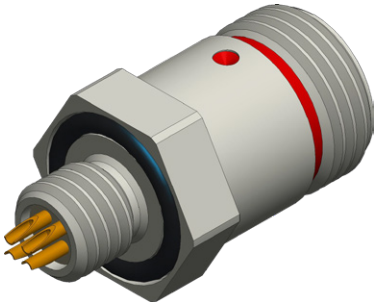


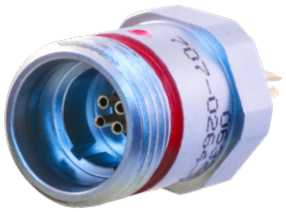


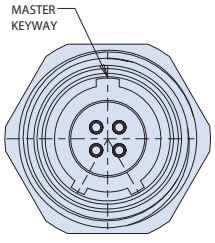
707-0264-7 MICRO-PSI BULKHEAD MOUNT RECEPTACLE

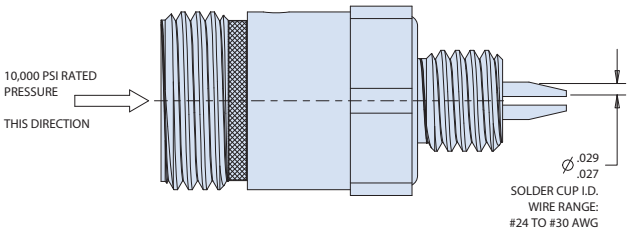
- 10K PSI open-face rated
- Glass-to-metal sealed, <1X10^{-7} scc He/sec hermeticity
- Operating temperature -20° to +150°C
- Alignment and full-mate indicators
- Flying lead option available
- Mates with 707-0264-1 CCP Plugs











Micro-PSI High-Speed, High Pressure ILI Connector

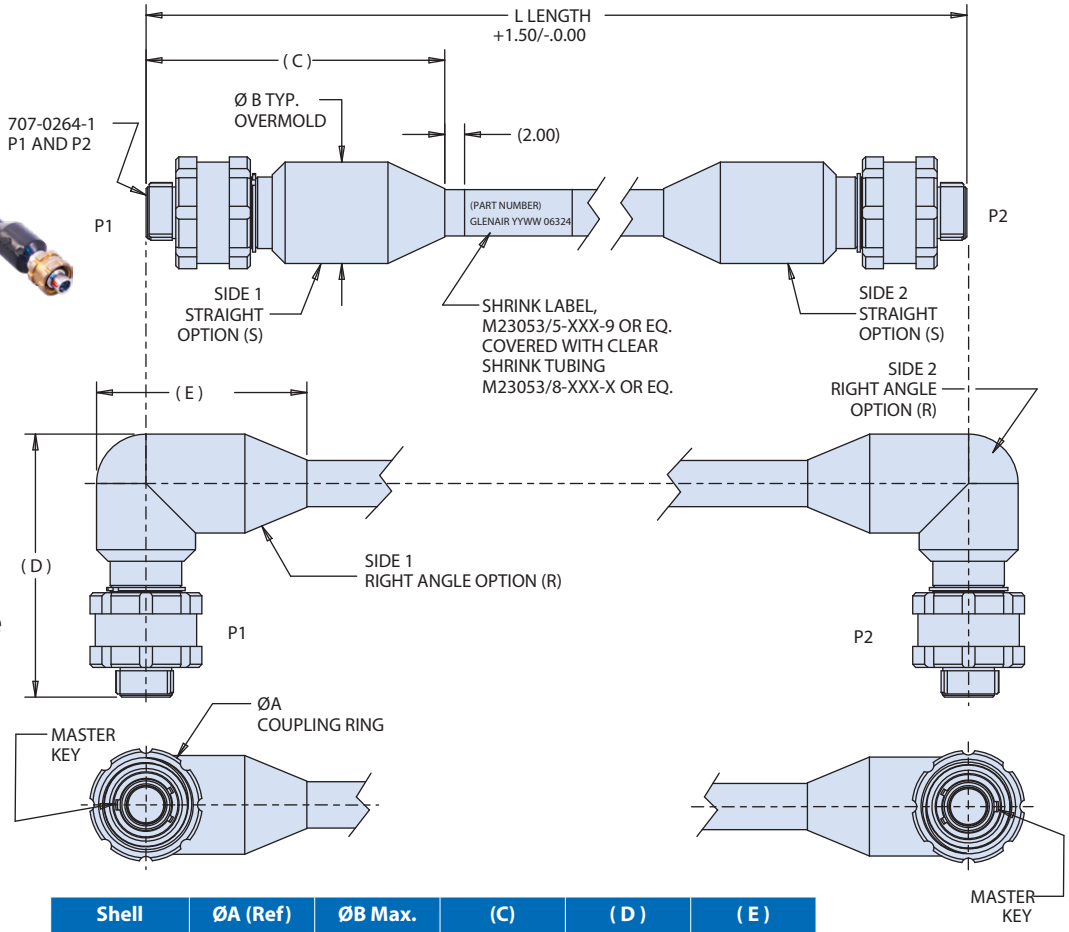
Overmolded and pigtail cable assemblies

7071-0069 MICRO-PSI OVERMOLDED PLUG-TO-PLUG / PIGTAIL CABLE ASSEMBLY

MIcro-PSI - How To Order								
Sample Part Number	**7071-0069**	**-S**	**R**	**-ME4**	**-Z1**	**U**	**N**	**-4**
Series / Basic P/N	**7071-0069** = Back-to-Back or Pigtail Plug Cable Assembly							
Overmold Style (P1)	**R** = Right Angle **S** = Straight							
Overmold Style (P2)	**R** = Right Angle **S** = Straight **N** = None (pigtail assembly)							
Shell Size / Contact Layout	**ME1**, **ME4**, **ME6**, **MG10**, **MK19** (See Insert Arrangements diagram pg. 57)							
Plug Shell Material	**Z1** = Stainless Steel							
Overmold and Jacket Mtrl	**V** = Viton **U** = Polyurethane							
Clocking Position	**N** = Normal, **A**, **B**, **C** (See page 59)							
Length (inches)	**Length** in inches, i.e. 4 equals 4 inches							



- **Connectors and overmold assembly pressure-rated to 10K PSI**
- **100% electrical test for shorts, DWV at 750 VAC and insulation resistance IAW MIL-STD-202**



Shell Size	ØA (Ref) Cplg Ring	ØB Max. Overmold	(C) Overmold	(D) Overmold	(E) 90° Length
ME1 (Coax)	.550	.545	1.50	1.50	1.00
ME4 and ME6			2.25	1.50	1.60
MG	.675	.675	2.25	1.50	1.60
MK	.750	.750	2.25	1.65	1.80

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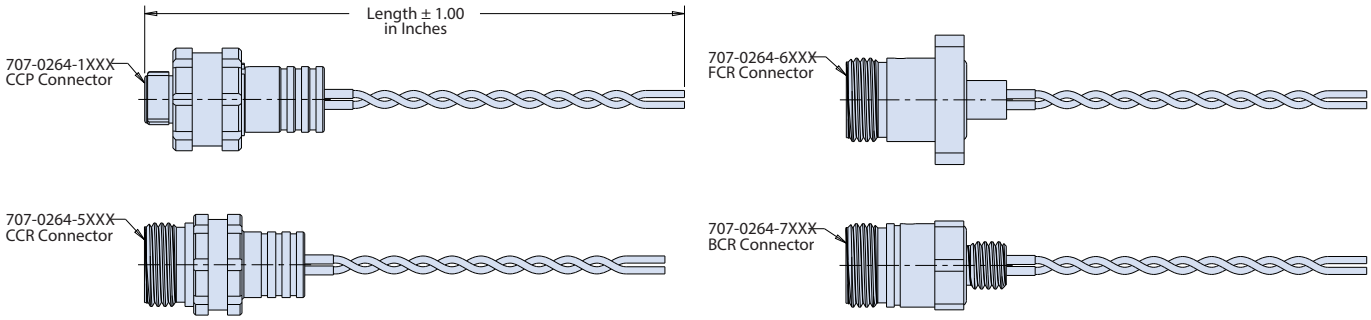
10K PSI SOLUTION

Micro-PSI High-Speed, High Pressure ILI Connector

Flying-lead pigtail assemblies/protective covers

7071-0572 MICRO-PSI FLYING-LEAD PIGTAIL ASSEMBLY

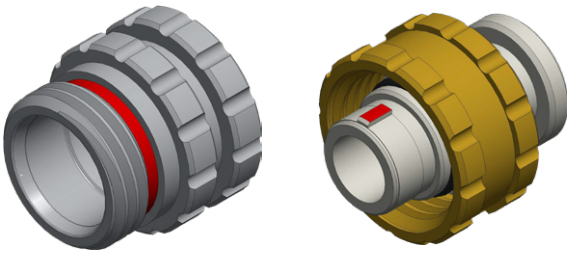
MIcro-PSI - How To Order							
Sample Part Number	**7071-0572**	**7**	**-ME4**	**-Z1**	**S**	**N**	**-16**
Series / Basic P/N	**7071-0572** = Flying-Lead Pigtail Cable Assembly						
Connector Style	**1** = CCP **5** = CCR **6** = FCR **7** = BCR						
Shell Size / Contact Layout	**ME1**, **ME4**, **ME6**, **MG10**, **MK19** (See Insert Arrangements diagram pg. 57)						
Plug Shell Material	**Z1** = Stainless Steel						
Contact and Termination Style	**S** = Socket Contacts (for receptacles) **P** = Pin Contacts (for plug)						
Clocking Position	**N** = Normal						
Flying Lead Length (inches)	**Length** in inches (tolerance ±1.00 inches. Minimum 4 inches.)						

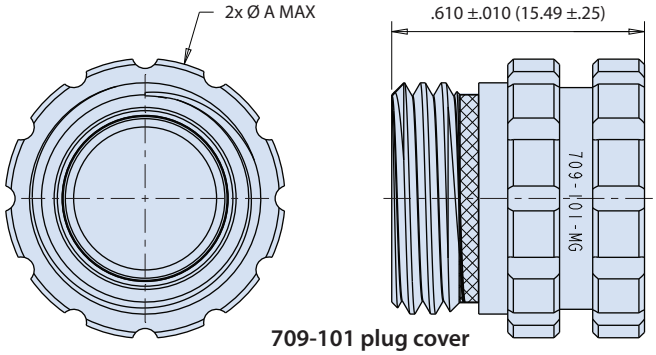


- **Plugs rated 10K PSI mated condition**
- **Receptacles rated 10K PSI open-face and mated**
- **100% electrical test for shorts, DWV at 750 VAC and insulation resistance IAW MIL-STD-202**

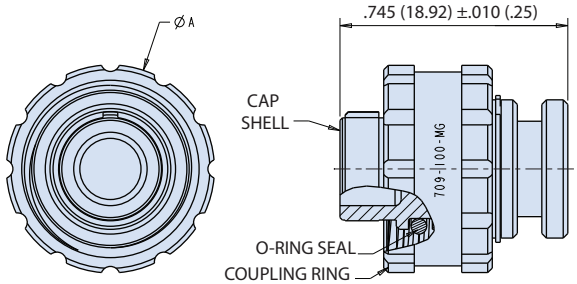
709-100 MICRO-PSI PRESSURE-RATED PROTECTIVE COVERS: 709-101 PLUG / 709-100 RECEPTACLE

- **10K PSI rated, mated condition**
- **Red alignment indicator on receptacle cover for accurate mating, full-mate indicator on plug cover**
- **Serviceable O-ring on receptacle cover for reliable sealing and easy maintenance**





709-101 plug cover



709-100 receptacle cover

SHALLOW WATER



Photo: SASOL

HIGH-DENSITY

AquaMouse

Small form-factor 3500 PSI

Originally developed for petroleum pipeline inspection equipment, Series 802 connectors are available in ten sizes from 1 to 130 contacts and equipped with Viton® O-rings to withstand exposure to corrosive chemicals and high temperature environments. These connectors feature high density crimp Mighty Mouse inserts, 316 stainless steel or marine bronze shells and a piston O–ring for hydrostatic sealing. Series 802 insulated wire, panel mount receptacles can be ordered as square flange, in–line or jam–nut versions. Choose integral shield termination platform or accessory thread for use with a variety of strain relief options. Crimp style gold–plated crimp contacts accept #12–30 wire. Connectors are backfilled with epoxy potting compound. Hermetic glass–sealed connectors come with solder cup contacts (non-removable) or PC tails. 100% tested to meet 1 x 10-7 cc/sec helium leakage. Open face pressure rating 3500 PSI.

- **3500 PSI pressure rated**
- **High-temperature and corrosive chemical-resistant Viton® or Nitrile O-rings**
- **Ultraminiature #23 contacts**
- **Size #20, #20HD, #16, #12, #8 signal, power, fiber optic and shielded contacts**
- **Discrete connectors and turnkey cable assemblies**

AQUAMOUSE CONNECTOR CONFIGURATIONS AND CLASSES



Series 802 Plugs



Series 802 Jam Nut Mount



Series 802 Square Flange Receptacle



Series 802 Hermetic



Series 802 Hermetic Bulkhead Feed-Thru

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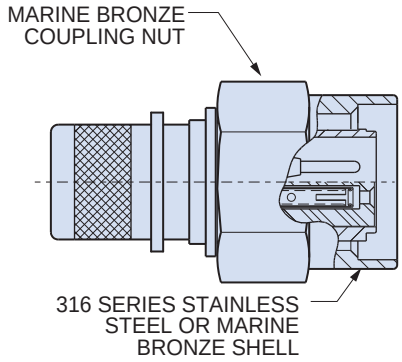
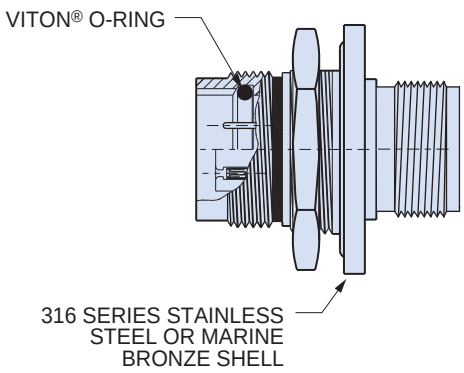
Glenair Series 802 AquaMouse™ Delivers High-Pressure Sealing and Rugged Design in a Miniature Package



Series 802 Plug



Series 802 Receptacle

Stainless Steel or Marine Bronze

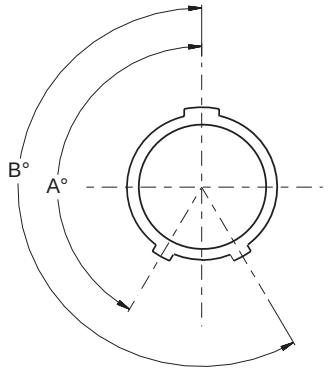
Available in ten sizes from 1 to 130 contacts, Series 802 connectors feature 316 stainless steel or marine bronze shells. Viton® o-rings resist high temperature and corrosive chemicals.

3500 PSI

These connectors withstand up to 3500 PSI hydrostatic pressure in a mated condition. Hermetic versions withstand 1000 PSI open face pressure.

AQUAMOUSE SPECIFICATIONS AND PLUG KEY POSITIONS

Series 802 Plug Key Positions



Key Position	Key Rotation	
	A°	B°
Normal (A)	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	9°	210°

Performance Specifications	
Current Rating	#23–5 A, #20–7.5 A, #16–13 A, #12–23 A
Dielectric Withstanding Voltage	#23–750 VAC, #20HD–1000VAC, #16 and #12–1800 VAC
Insulation Resistance	5000 megohms minimum
Operating Temperature	-65° C. to +175° C.
Hydrostatic Pressure	3500 PSI mated, 1000 PSI open face (hermetic)
Shock	300 g.
Vibration	37 g.
Durability	2000 mating cycles

Material and Finish	
Shells, Jam Nuts	316 stainless steel or marine bronze
Coupling Nuts	Marine bronze, unplated
Contacts	Copper alloy, 50 µInch gold plated. Socket hood: stainless steel, passivated. Hermetic pin contacts: Nickel-Iron alloy per ASTM-F-30, 50 µInch gold plated.
Insulators	Liquid crystal polymer (LCP) , 30% glass-filled
Contact Retention Clip	Beryllium copper alloy
Interfacial Seal, O-rings	Viton Rubber
Interfacial seal, rear grommet	Fluorosilicone rubber, blue
O-rings	Viton®



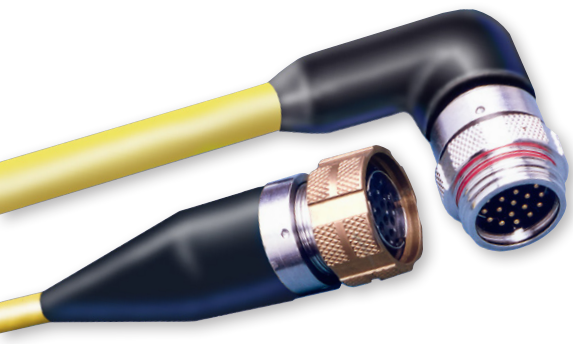
SHALLOW WATER

5000 PSI PRESSURE-RATED

Geo-Marine®

High-pressure harsh-environment connectors and overmolded cables for inline inspection pigs and shallow subsea applications

Designed for use in oceanographic, geophysical and other severe industrial environments, Glenair Series 22 Geo-Marine® Connectors and Cables are the ultimate harsh-environment power and signal connector solution. Built to withstand hydrostatic pressures up to 5,000 PSI and exposure to extreme temperatures and corrosives, the Series 22 Geo-Marine® is ideally suited for applications such as intelligent pipeline inspection, towed array sonar systems, submersibles and ROVs, offshore oil drilling equipment, seabed exploration, well monitoring equipment, and digital seismic streamers.



Geo-Marine® plugs are equipped with arctic coupling nuts—made from marine-grade naval bronze—with easy-to-grip castellated knurling and a powerful ratcheted anti-decoupling mechanism which guarantees reliable mating and demating performance in even the harshest environments. Supplied as discrete connectors—or more typically in build-to-print overmolded cable assemblies.

Geo-Marine®

- **5000 PSI pressure rated**
- **Marine Grade 316 stainless steel machined shells and Naval Bronze coupling rings**
- **High-pressure environmental and hermetically sealed receptacles for field applications**
- **Power and signal insert arrangements from 2 to 128 contacts**
- **Anti-vibration ratcheted coupling nuts with castellated knurling**
- **Available Viton® overmolded cable assemblies**

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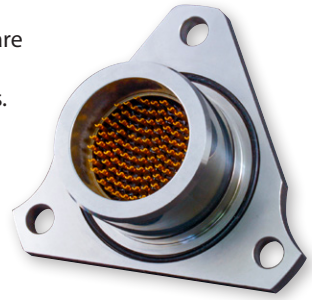
5000 PSI PRESSURE-RATED

Geo-Marine® Connectors

High-pressure fused-glass underwater / harsh-environmental connectors



Range of Offerings



Series 22 Geo-Marine® connectors are supplied with either fused-glass or high grade thermoplastic insulators. Both classes of connectors are supplied with rugged, corrosion-resistant materials. Low-profile and scoop-proof cable plugs and receptacles, as well as bulkhead feed-thrus are available. Specially-designed cable sealing backshells as well as EMI/RFI shield termination backshells and environmentally-sealed protective covers complete the range of discrete product offerings. 35 insert arrangements (contact sizes #12, #16, #20 and #22) are tooled and fully available. Special in-line single-pin HTHP glass fused contacts also available.

WIDE RANGE OF PLUG CONFIGURATIONS WITH ANTI-GALLING ARCTIC COUPLING NUTS



Cable plug with accessory threads



Cable plug with overmold adapter



Panel-mounted plug



Factory overmolded plug

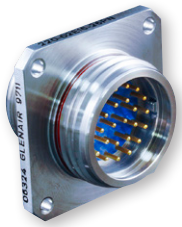
HIGH-PRESSURE ENVIRONMENTAL AND FUSED-GLASS RECEPTACLE CONFIGURATIONS



Jam Nut



In-Line



Square Flange



Solder-Mount



Bulkhead Feed-Thru



Single-pin HTHP

RUGGEDIZED STAINLESS STEEL BACKSHELLS AND OTHER CONNECTOR ACCESSORIES



Environmental strain relief backshell



Overmolding adapter



Right-angle strain relief backshell



Environmentally sealed protective covers

Performance Specifications	
Hydrostatic Pressure Rating:	5,000 PSI (fully mated)
Operating Temperature:	-65°C to +125°C
Durability:	500 Cycles of mate/demate
Insulation Resistance:	1000 Megohms minimum at 500 VDC
Class H Hermetic Receptacles	
Open-Face Pressure Rating	1,000 to 5,000 PSI
Hermeticity	Less than 1 X 10^{-6} sccHe/second @ 1 atmosphere

Current Rating

Current Rating	Environmental	Hermetic
Size 22 Contact	500 VDC, 5 amps	500 VDC, 3 amps
Size 20 Contact	500 VDC, 7.5 amps	500 VDC, 5 amps
Size 16 Contact	750 VDC, 13 amps	750 VDC, 10 amps
Size 12 Contact	750 VDC, 23 amps	750 VDC, 17 amps

Service Rating

Contact Size	Suggested Operational Voltage (Sea Level)		Test Voltage (Sea Level)
	AC(RMS)	DC	
22 GA	400	550	1300 VDC
20 GA	600	850	1800 VDC
16 GA	900	1250	2300 VDC
12 GA	300	450	2300 VDC

Depth/Pressure Conversion

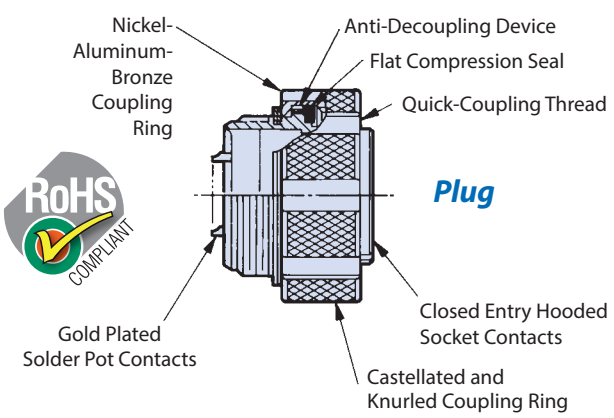
Feet	Meters	P.S.I.	Bar	Feet	Meters	P.S.I.	Bar
1	.3	.4	.0296	1,000	304.8	433.0	29.8543
10	3.1	4.3	.2965	1,500	457.2	649.5	44.7814
50	15.2	21.7	1.4962	2,500	762.0	1082.5	74.6357
100	30.5	43.3	2.9854	5,000	1524.0	2165.0	149.2715
250	76.2	108.3	7.4670	10,000	3048.0	4330.0	298.5430
500	152.4	216.5	14.9271	11,547	3519.35	5000.0	344.7379

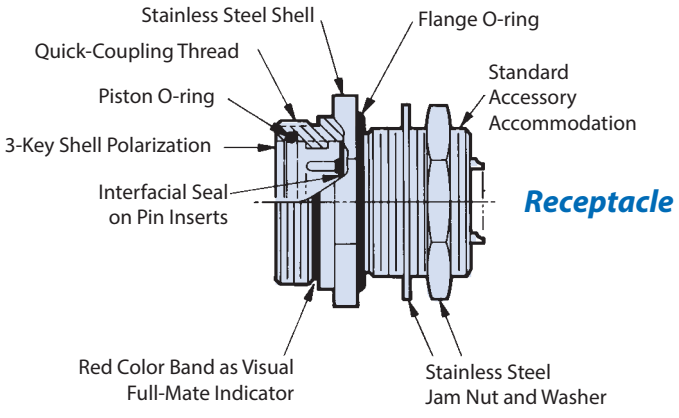
Cable/Wire D.C. Resistance

Copper Conductors at Room Temperature

AWG	Ohms per 1000 feet	AWG	Ohms per 1000 feet
28	66.2 Max	20	10.4 Max
26	41.6 Max	18	6.5 Max
24	26.2 Max	16	4.1 Max
22	16.5 Max	14	2.6 Max
		12	1.6 Max

Geo-Marine® Connector Anatomy





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Geo-Marine® Connectors

High-pressure fused-glass underwater / harsh-environmental connectors





Connector Materials and Potting		
Item	**Material**	**Potting**
Connector Shells	CRS 316 SAE-AMS-QQ-S-763	Stycast 2651/Catalyst 9
Protective Covers	CRS 316 SAE-AMS-QQ-S-763	
Solder Mount Receptacle	CRS 316 SAE-AMS-QQ-S-763	
Plug Coupling Nut	Marine Bronze SAE AMS-4640	
Molding Adapters and Backshells	See individual product pages	
Insulators, Class "E"	Epiall 1908, Diallyl Phthalate or Hysol CP2-4289	
Insulators, Class "H"	Fused Vitreous Glass	
Contacts, Pin - Class "E"	Leaded Nickel Copper, CA 7021	
Contacts, Pin - Class "H"	Nickel-Iron Alloy 52 - MIL-I-23011, Class 2	
Contacts, Socket	Copper Alloy, CA7021	
Contacts, Socket Hood	CRS, SAE-AMS-QQ-S-763 AISI 305	
O-Rings	Nitrile (Buna-N) Rubber MIL-G-21569	
Interfacial and Peripheral Seals	Flourosilicone Rubber MIL-DTL-25988	

Glenair can design and fabricate overmolded **Geo-Marine®** *cable assemblies featuring Viton® chemical resistant materials—terminated and tested to deliver advanced levels of sealing and durability.*







Caution
Electrical safety limits must be established by the user. Peak voltages, switching surges, transients, etc., should be used to determine the safety of application.

APPLICATION NOTES

- All parts will be identified with manufacturer's name and part number, space permitting.
- Glenair 600 series backshell assembly tools are recommended for assembly and installation.
- Electrical ratings are based on connectors only, not terminated to a cable or conductors, with proper cleaning and drying after hydrostatic testing.
- On all length callouts, tolerance is ± .060 unless otherwise specified.
- Metric dimensions appear in parentheses in diagrams and tables, based on 1 inch = 25.4 mm, for reference only. Unless otherwise specified, the following other dimensional tolerances apply:

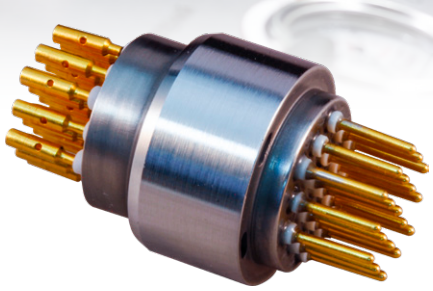
  .xx = ± .03 (0.8)
  .xxx = ± .015 (0.4)
  Lengths = ± .060 (1.52)
  Angles = ± 5°

DOWN HOLE



HIGH TEMPERATURE HIGH PRESSURE (HTHP)

Glass Sealed Penetrators and Feedthroughs



Glass sealed penetrators and feedthroughs provide sealed interconnect solutions for downhole applications such as logging while drilling (LWD) and measurement while drilling (MWD) applying methods such as near-balanced, underbalanced and overbalanced drilling. In these environments, conditions can reach temperatures approaching 300°C while experiencing elevated shock and vibration, downhole fluids / pressures, and limited working room. Glenair HTHP penetrators are typically used where a waterproof seal is needed but connectorized separation from equipment is not. Standard plugs are rated to 10K PSI, mated condition. Standard receptacles are rated to 10K PSI both mated and open-face.

- **Available in 7 shell sizes and 17 insert arrangements**
- **Standard penetrators with hermeticity of <1 X 10^{-7} sccHe/sec @ 1 atmosphere differential and rated to 10,000 PSI**
- **High-pressure / high-temperature penetrators rated to 25,000 PSI and hermeticity of <1 X 10^{-8} sccHe/sec @ 1 atmosphere differential**

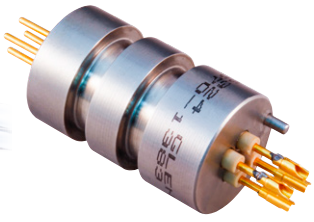
MULTI-PIN AND SINGLE-PIN PENETRATORS, RECEPTACLES, AND FEED-THRUS



707-0015



707-0030



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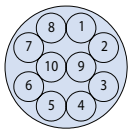
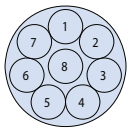
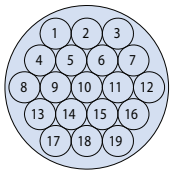
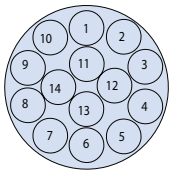
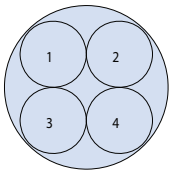
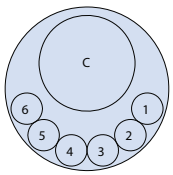
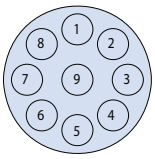
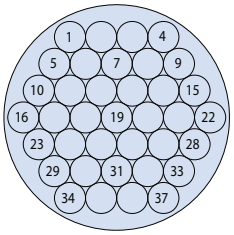
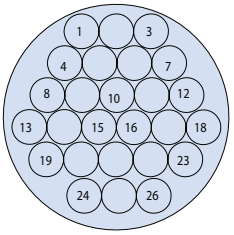
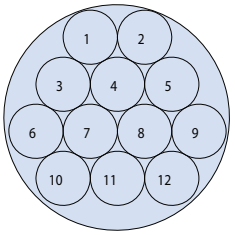
High Pressure/High Temperature Penetrators

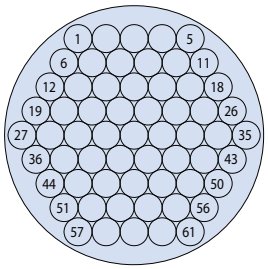
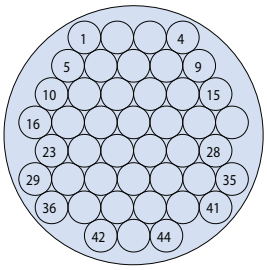
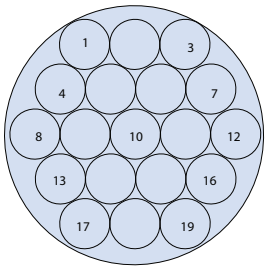
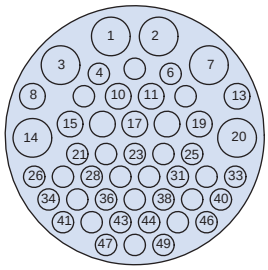
Glass sealed insert contact arrangements - Mating face view of pin insert (socket insert IDs are reversed)

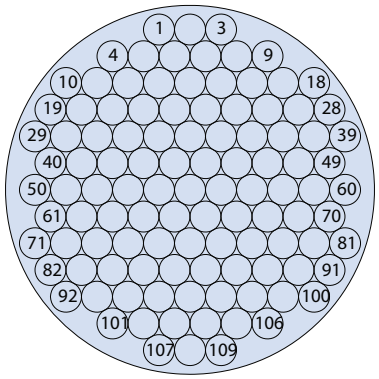
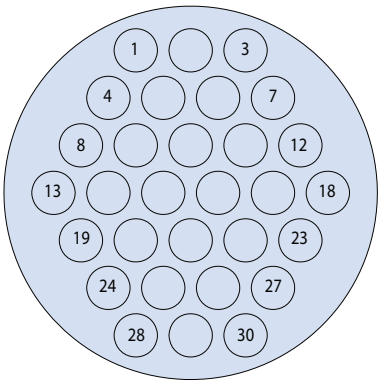
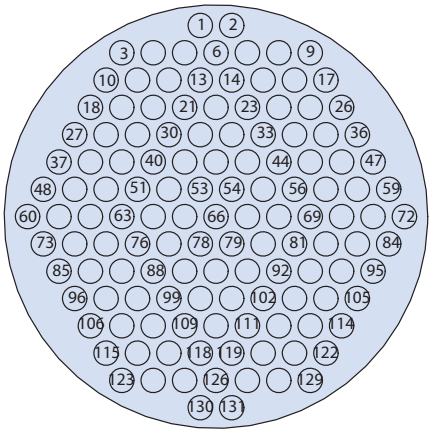
Size G		Size K			
G10	**G8**	**K19**	**K14**	**K4**	**KC6**
10 Size #22 Contacts	8 Size #20 Contacts	19 Size #22 Contacts	14 Size #20 Contacts	4 Size #16 Contacts	One 75 Ohm Coax, 6 #22

Size L	Size M		
L9	**M37**	**M26**	**M12**
9 Size #16 Contacts	37 Size #22 Contacts	26 Size #20 Contacts	12 Size #16 Contacts

Size O			
O61	**O44**	**O19**	**OX49**
61 Size #22 Contacts	44 Size #20 Contacts	19 Size #16 Contacts	49 Contacts 6 #16 • 9 #20 • 34 #22

Size Q		Size R
Q109	**Q30**	**Q131**
109 Size #22 Contacts	30 Size #16 Contacts	129 Size #22 Contacts



DOWN HOLE

HIGH-TEMPERATURE

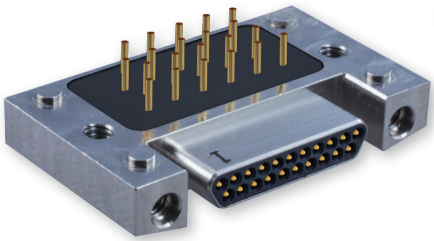
Well-Master® 260°

The Micro-D connector for serious, high-temperature applications

Standard Micro-D connectors are rated for +125°C. Glenair's MWDM Micro-D can withstand +150°C continuous operating temperature and can be upgraded to +200°C if assembled with special high temperature epoxies. But oil, gas and geothermal wells can subject electronic instruments to temperatures as high as +260°C. The GHTM Series Micro-D meets the need for a high density, high performance connector capable of handling this temperature. The GHTM features contacts made from a special alloy that resists softening when exposed to temperatures up to +260°C (500° F). Rugged passivated stainless steel shells and hardware, high temperature liquid crystal polymer (LCP) insulators allow these connectors to survive the most demanding environments. Unique angled mounting ears allow the Well-Master™ 260° to fit in confined spaces.

- **+260°C operating temperature**
- **Angled mounting ears to fit in small diameter instruments**
- **High reliability twistpin contact system with special high temperature alloy**
- **.050" Pitch contact spacing for reduced size**
- **Solder cup, pre-wired or PCB**

Well-Master 260®



+260°C PCB Header



+260°C Cable Connector

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SERIES GHTM WELL-MASTER 260°

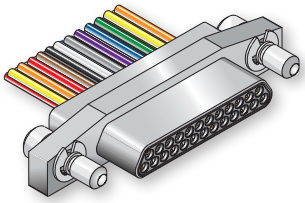
Downhole Micro-D Connector

Reference information / insert arrangements

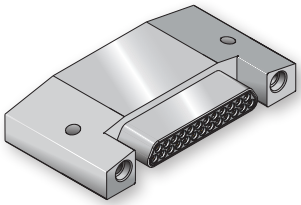
In addition to extreme high temperature tolerance, and demating resistance to vibration and shock, the Glenair Well-Master™ 260° Micro-D connector features unique shell packaging designed to conform with the cylindrical shape of instrument housings. Special angled mounting ears facilitate incorporation of the connector into available space, and the Micro-D's overall reduced size compared to other rectangular connector solutions allows for more efficient utilization.

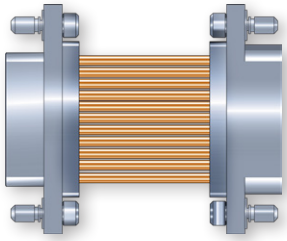


High Temperature Micro-D with insulated Wire Pigtails



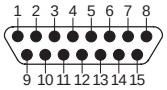
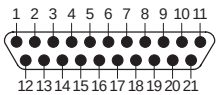
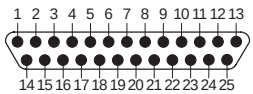
High Temperature PCB Header

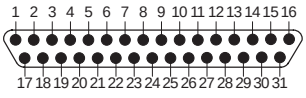
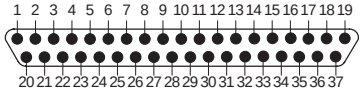
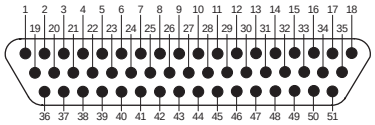




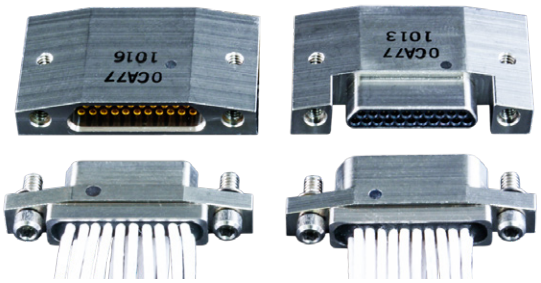
High Temperature Back-to-Back Micro-D

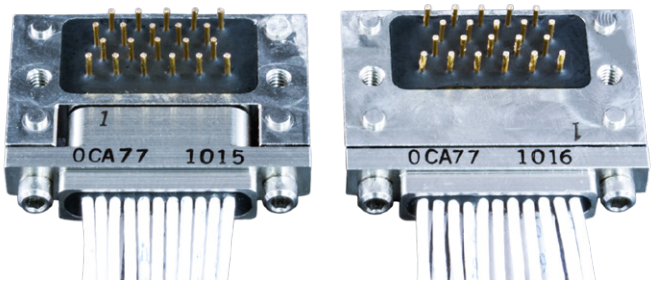
GHTM High Temperature Insert Arrangements (Pin Face View)

9	15	21	25
			

31	37	51
		

Mating face of pin connector. Socket connector contact numbers are reversed.

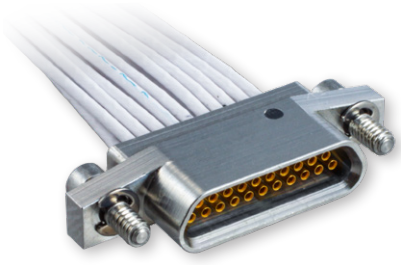




Downhole Micro-D Connector

Insulated wire connector with pin or socket contacts

GHTM PRE-WIRED CONNECTORS WITH +260°C MIL SPEC PTFE/POLYIMIDE WIRE

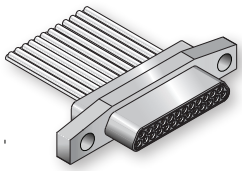
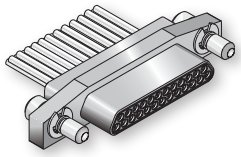
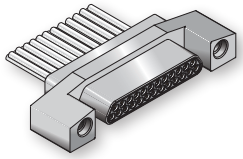
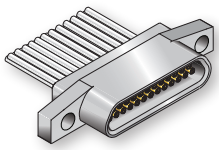
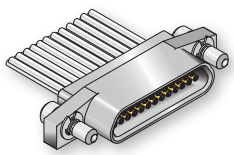
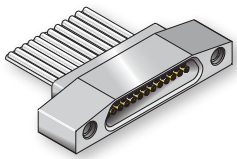


GHTM Well-Master™ 260° pre-wired Micro-D connectors withstand +260°C continuous operating temperature. These .050" pitch Micro-D connectors are terminated to #24 AWG insulated wire. Nickel-coated copper wire conforms to M22759/87, PTFE/polyimide insulation. Pin contacts are gold-plated high performance twistpin type and are recessed into insulator to prevent damage. Special nickel alloy contact material resists softening in high heat. Machined passivated stainless steel shell. Glass-filled high temperature LCP thermoplastic insulators. 100% hi-pot tested. Meets performance requirements of MIL-DTL-83513. Available with 9 to 51 contacts. 3 A., 600 Vac, -55°C to +260°C.

How To Order

Sample Part Number	GHTM	-31	S	-4	T	1	-18	B
Series	**GHTM** Glenair High Temperature Micro							
Shell Size	**9**, **15**, **21**, **25**, **31**, **37**, **51**							
Contact Type	**P** - Pin/Plug **S** - Socket/Receptacle							
Wire Gage (AWG)	**4** – #24							
Wire Type	**T** – PTFE/Polyimide Insulated Nickel Coated Copper							
Wire Color	**1** – White							
Wire Length (Inches)	**18** – Wire Length In Inches. "18" Specifies 18 Inches.							
Mounting Hardware	**B** - Std. Thru-Hole (Ø.089/.095) **M** - Hex Head Jackscrew **S** - Slot Head Jackscrew **P** - Integral Jackpost See Mounting Hardware Table							

GHTM Mounting Hardware

B **Std. Thru-Hole Mounting** **.096/.088 (2.43/2.23) Dia.**	**M and S** **#2-56 Jackscrews** **Slot head (S), Hex Head (M)**	**P** **Integral Jackpost** **#2-56**
		
Pin	Pin	Pin
		
Socket	Socket	Socket

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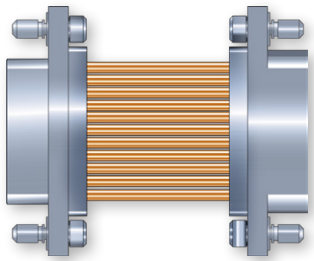
SERIES GHTM WELL-MASTER 260°

Downhole Micro-D Connector

Back-to-back cable assemblies and right-angle PCB headers

GHTM BACK-TO-BACK CONNECTORS WITH +260°C MIL SPEC PTFE/POLYIMIDE WIRE



GHTM Well-Master® 260° back-to-back Micro-D cable assemblies withstand +260°C continuous operating temperature. These .050" pitch Micro-D connectors are terminated to #24 AWG insulated wire. Nickel-coated copper wire conforms to M22759/87, PTFE/polyimide insulation. Pin contacts are gold-plated high performance twistpin type and are recessed into insulator to prevent damage. Special nickel alloy contact material resists softening in high heat. Machined passivated stainless steel shell. Glass-filled high temperature LCP thermoplastic insulators. Meets performance requirements of MIL-DTL-83513. Available with 9 to 51 contacts. 3 A., 600 Vac, -55°C to +260°C.

How To Order

Sample Part Number	GHTM	-31	GS	-6	T	1	-18	B

Series	**GHTM** Glenair High Temperature Micro-D
Shell Size	**9**, **15**, **21**, **25**, **31**, **37**, **51**
Contact Type	**GP** - Pin Connector Both Ends **GS** - Socket Connector Both Ends **CS** - Pin Connector to Socket Connector
Wire Gage (AWG)	**4** - #24
Wire Type	**T** - PTFE/Polyimide Insulated Nickel Coated Copper
Wire Color	**1** - White
Wire Length (Inches)	**18** - Wire length in Inches (2" minimum for 2 rows, 3" minimum for 3 rows)
Mounting Hardware	**B** - Std. Thru-Hole **M** - Hex Head Jackscrew **S** - Slot Head Jackscrew **P** - Integral Jackpost (See Mounting Hardware Table, opposite page)

GHTM RIGHT ANGLE PRINTED CIRCUIT BOARD HEADERS



GHTM Well-Master® 260° right angle PCB Micro-D connectors withstand +260°C continuous operating temperature. These .050" pitch Micro-D connectors have .020 inch diameter (0.51mm)gold-plated PC terminals. Terminal spacing is .100 inch by .075 inch (2.54 by 1.91mm). Pin contacts are gold-plated high performance twistpin type and are recessed into insulator to prevent damage. Special nickel alloy contact material resists softening in high heat. Machined passivated stainless steel shell with integral jackpost. Glass-filled high temperature LCP thermoplastic insulators to withstand soldering heat. Meets performance requirements of MIL-DTL-83513. Available with 9 to 51 contacts. 3 A., 600 Vac, -55°C to +260°C.

How To Order

Sample Part Number	GHTM	-25	P	RA	P	-110

Series	**GHTM** Glenair High Temperature Micro-D
Shell Size	**9**, **15**, **21**, **25**, **31**, **37**, **51**
Gender	**P** = Pin/Plug **S** = Socket/Receptacle
Termination Type	**RA** = Right Angle Board Mount
Mounting Hardware	**P** - Integral Jackpost; See Mounting Hardware Table opposite page
Terminal Length	All lengths ±.015 (.38) **.080**, **.110**, **.125**, **.140**, **.150**, **.175**, **.190**, **.205**

Hydrostatic Test Lab

GLENDALE, CALIFORNIA

Special behind-the-scenes tour of Glenair's hydrostatic test lab for high-pressure electrical and fiber optic interconnects

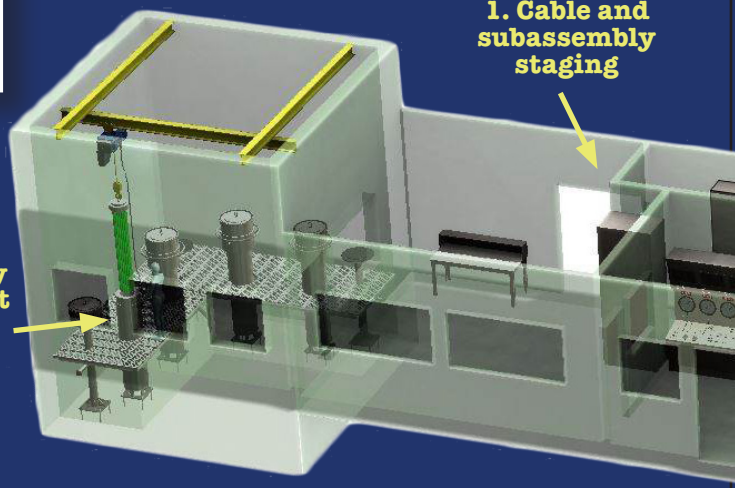
GLENAIR • GLENDALE FACTORY TOUR



DISCRETE CONNECTOR TESTING: All Glenair high-pressure interconnects are subjected to 100% inspection and test



LARGE PRESSURE VESSELS: Built to accommodate complete cable assemblies, mated connectors, and customer-supplied subassemblies





TECHNICAL STAFF: Knowledgable and trained subsea specialists perform both in-house product qualification testing, as well as customer subassemblies

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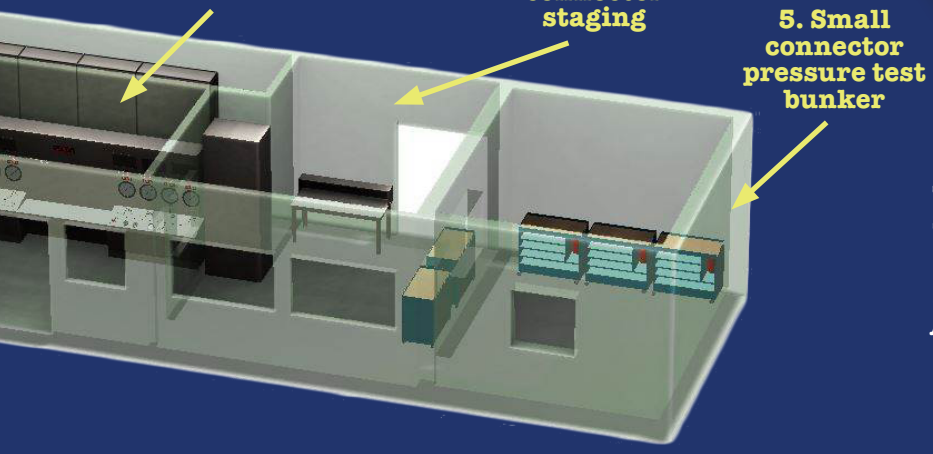
CONTROL ROOM: The modular consoles in the control room provide for up to 8 pressure circuits, operating in Manual mode or Automated. Each circuit is capable of a maximum of 16.5K psi. Monitors display: Automated Test Profiles, Data Acquisition, remote viewing of Test rooms and more. System is network connected for access to Profiles and distribution of test reports.









SeaKing™ and SuperG55™ QUALIFICATION TESTING: Both Glenair Series 70 SeaKing and SuperG55 rugged dry-mate subsea connectors have been tested and qualified to their 10K psi pressure rating—open-face and mated—in Glenair's state-of-the-art hydrostatic test lab. Additional testing included mating cycles, salt spray, and electrical continuity.



Glenair Hydrostatic Test Lab Technical Specifications and Pressure Test Standards	
Pressure test profiles	Automated or manual
Maximum test pressure	16.5K psi
Data acquisition types	Pressure, time, temperature, and electrical performance
Performance monitoring under pressure	I/R, continuity, insertion loss, and backreflection (optical)
Industry profiles	All major oil & gas standards
Custom profiles	Yes, including customer-supplied subassemblies
Capacity (large pressure vessels)	Working volume = 12" diameter x 72" depth; Test specimen weight up to 1500 lbs.

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MISSION-CRITICAL

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CAT-207 • July 2022