

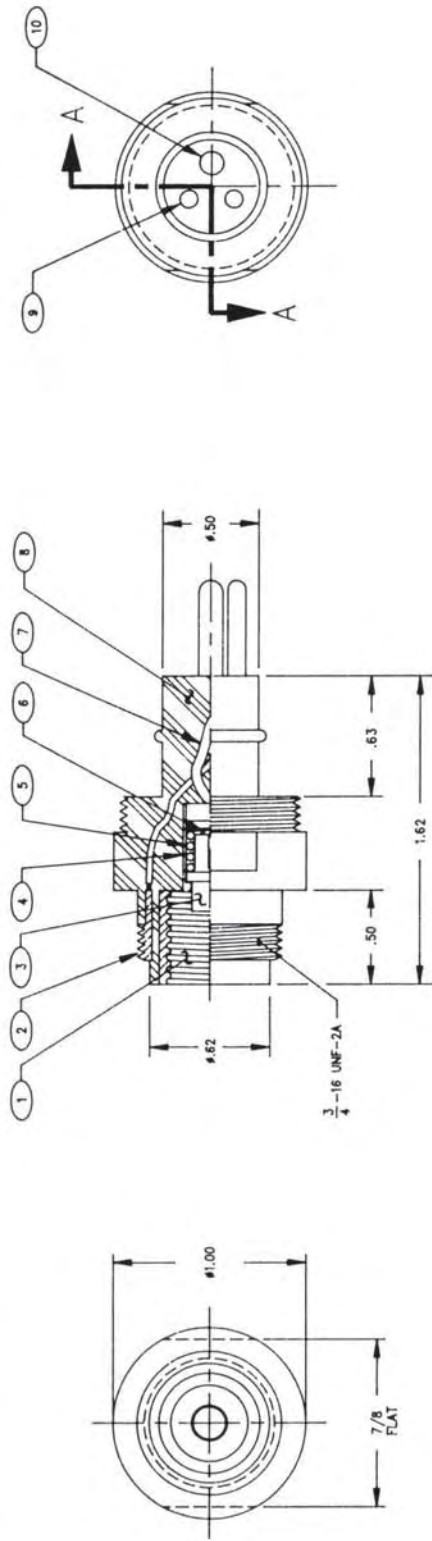
SEM SERIES LIGHT CONNECTORS

BODY MATERIAL:	GLASS REINFORCED EPOXY (GRE)
CONTACTS:	COPPER ALLOY, GOLD PLATED PER MIL-G-45204
O-RING:	#2 - 213, BUNA, 70 DUROMETER
THREAD SIZE:	3/4 - 16 UNF
THREAD LENGTH:	SEM2P - S - .50
	SEM3P - C - .50
	SEM2P - S4 - .37
	SEM3P - S4 - .37
	SEM2P-S-XT - .87
MOUNTING TORQUE:	85 INCH POUNDS
PRESSURE RATING:	20,000 PSI MATED

NOTES:

- 1 MATERIAL: GLASS REINFORCED EPOXY B/A XS-2748.
- 2 MATERIAL: COPPER ALLOY & GOLD PLATED PER MIL-C-45204
- 3 MATERIAL: COPPER ALLOY 360 PER QQ-B-837.
- 4 MATERIAL: COPPER ALLOY 752 OR 792
- 5 MATERIAL: 316 STAINLESS STEEL PER QQ-S-763
- 6 THIS DRAWING WAS PREVIOUSLY 6788-421. NUMBER WAS REVISED TO CONFORM TO OUR NUMBERING SCHEME.

SEM-3P-S4-RB



SECTION A-A

ITEM	QTY	UNIT	DESCRIPTION	REVISIONS
10	1		#10 AWG CONTACT PIN	2
9	2		#14 AWG CONTACT PIN	1
8	1		SEM-S4-RB BODY	1
7	3		#18 AWG TEFLON WIRE	1
6	1		"T" CENTER CONTACT	4
5	AR		LC-035C-1	3
4	1		"T" LEE COMPRESSION SPRING	5
3	1		"T" SLEEVE	5
2	1		"T" CENTER SOCKET	3
1	1		LAMP SOCKET, GROUNDING THREAD RING HEX BODY	3
1	1		LAMP SOCKET, BALLAST RING	3
1	1		LAMP SOCKET, BALLAST RING	3

ZONE	REV	REF E.C.D. NO.	DESCRIPTION	DATE	APPROVED
	A	9637	REVISE TITLE & PARTS LIST		

CONTRACT NO.	DATE
SEA 15789	950608

APPROVALS	DATE
DESIGNED BY: LAI PHAM	950626
CHECKED BY: LAI PHAM	950626

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8	1		"T" CENTER SOCKET
9	1		LAMP SOCKET, GROUNDING THREAD RING HEX BODY
10	1		LAMP SOCKET, BALLAST RING

SEASON	DESCRIPTION
1	BRANTNER & ASSOCIATES, INC.
2	MAIN PLANT 1240 VERNON WAY EL CAJON, CALIF. 92020

CONTRACT NO.	DATE
SEA 15789	950608

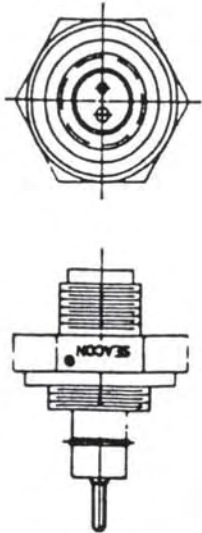
APPROVALS	DATE
DESIGNED BY: LAI PHAM	950626
CHECKED BY: LAI PHAM	950626

SIZE	FSCM NO.	DWG NO.	REV
C	15789	6788-105	A

SCALE	SHEET	OF
2/1	1	1

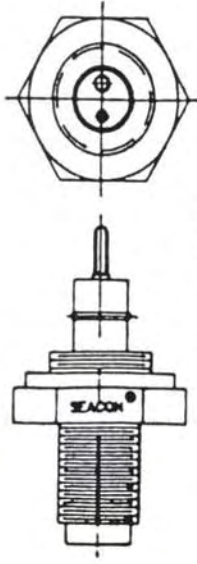
SEM SERIES LIGHT CONNECTORS

SEM2P-S



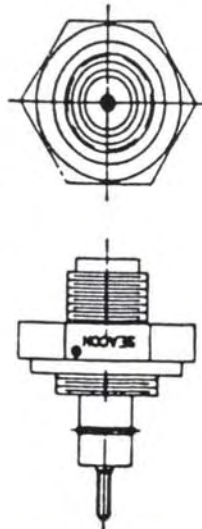
Description: 2-Pin Glass Reinforced Epoxy Bulkhead Light Connector with sockets on the low pressure side. Utilizes a MR-16 lamp.
Mating Connector: RMG-2-FS
Cable: 12, 14 or 16 AWG

SEM2P-S-XT



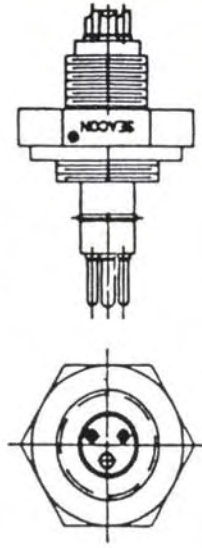
Description: Same as SEM2P-S above except longer thread.

SEM2P-S4



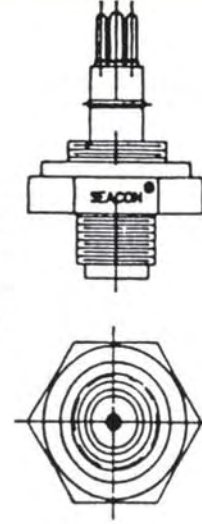
Description: 2-Pin Glass Reinforced Epoxy Bulkhead Light Connector. Inboard side utilizes a S4 socket to accept a Mini-Can base lamp.
Mating Connector: RMG-2-FS
Cable: 12, 14 or 16 AWG

SEM3P-C



Description: 3-Pin Glass Reinforced Epoxy Bulkhead Light Connector. Utilizes solder cups on the low pressure side.
Mating Connector: P/N RMG-3-FS
Cable: 12, 14 or 16 AWG

SEM3P-S4



Description: 3-Pin Glass Reinforced Epoxy Bulkhead Light Connector. Inboard side utilizes a S4 socket to accept a Mini-Can base lamp.
Mating Connector: RMG-3-FS
Cable: 12, 14 or 16 AWG

AUV/UUV CONNECTOR

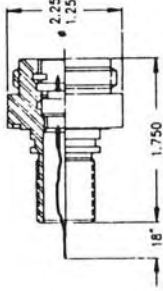
DESIGN CONSIDERATIONS/RECOMMENDATIONS

BULKHEAD RECEPTACLE

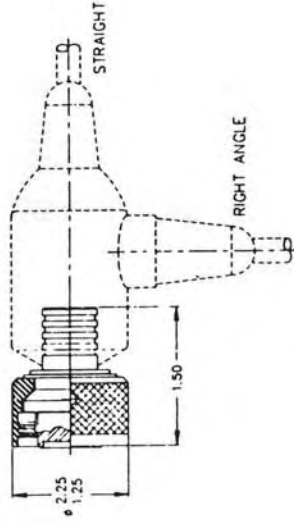
1. **Material:** Two general categories to be considered are metals and engineering plastics. Titanium is the recommended metal. Glass Reinforced Epoxy per SEA CON® XS-2748 is the recommended plastic. Other materials may be recommended by customer.
2. **Mounting:** Three common mounting configurations are shown. Double O-Ring seals are utilized where appropriate. Other mounting requirements may be specified by customer.

CABLE PLUG

1. **Material:** Two general categories to be considered are metals and engineering plastics. Titanium or Glass Reinforced Epoxy per SEA CON® XS-2748 are the recommended materials within their respective categories. The metallic engaging nut should be Titanium.
2. **Cable Terminations:** Cables may be encapsulated with an elastomeric compound or a PBOF system may be implemented.
3. **Cathodic Delamination:** If the mission profile of the AUV/UUV requires long term deployment then cathodic delamination must be addressed. Glass Reinforced Epoxy should be used to prevent this phenomenon in the encapsulated system. If the PBOF system is utilized, either Titanium or Glass Reinforced Epoxy should be used.

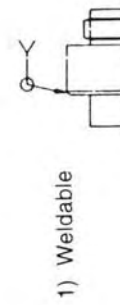


Bulkhead Receptacle

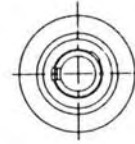


Cable Plug

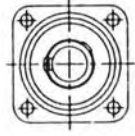
Optional Mounting Configurations



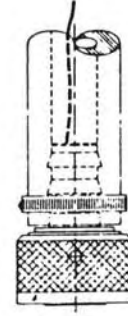
1) Weldable



2) Flange



Optional Cable Terminations



GENERAL

1. **Diameter:** Connectors range in diameter from 1.25 to 2.25 inches (or larger).
2. **Contact Configurations:**
 - A) Signal: Maximum contact density up to 131 No. 22 AWG.
 - B) Power: Contact sizes up to No. 10 AWG with working voltages ranging from 600 VRMS to 3000 VRMS.
3. **Contact Material:** Copper alloy and gold plated per MIL-G-45204.
4. **Underwater Mateable:** Underwater mateability can be implemented into these connectors or other types of connectors.
5. **Fiber Optic:** Multi-Mode Fiber Optics can be implemented into these connectors or other types of connectors. Hybrid connectors are also a viable option.