

TOWED ARRAY CONNECTORS

Sea Connections Systems Limited have been responsible for the design of many new electrical and electro optical inserts that are used in critical positions within the military towed array field.

These arrays are used on both submarines and surface ships but the fundamental criteria will always be to reduce the overall diameter and to increase the data transmission rates.

To achieve these targets we have called upon the expertise of our various divisions within the SEA CON® group to provide fibre optic and glass sealing technology with the ultimate result being a high specification and extremely reliable component.

The technology that has been developed in these towed array inserts for military applications can equally be utilized into areas such as geophysical towed arrays and also into our regular connector specifications. As all of our special towed array inserts have been designed around a customer specification we will always be able to provide an insert whether electrical, electro optic or pure optical for any application.

TOWED ARRAY OPTIONS AND CAPABILITIES

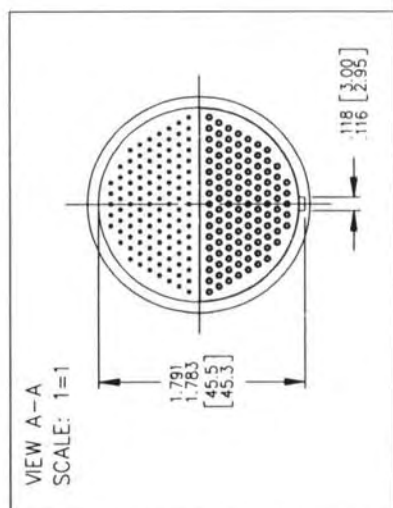
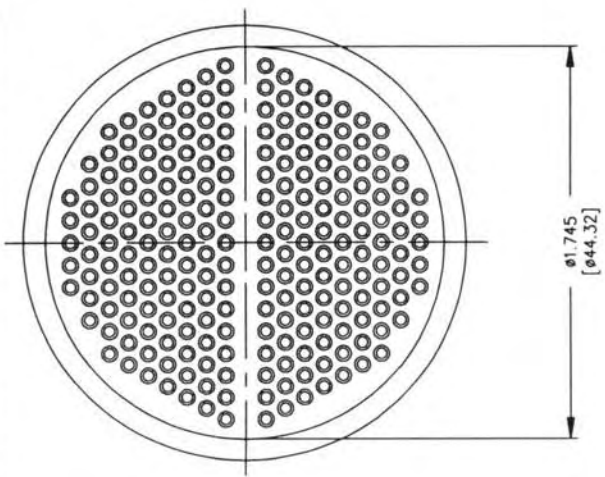
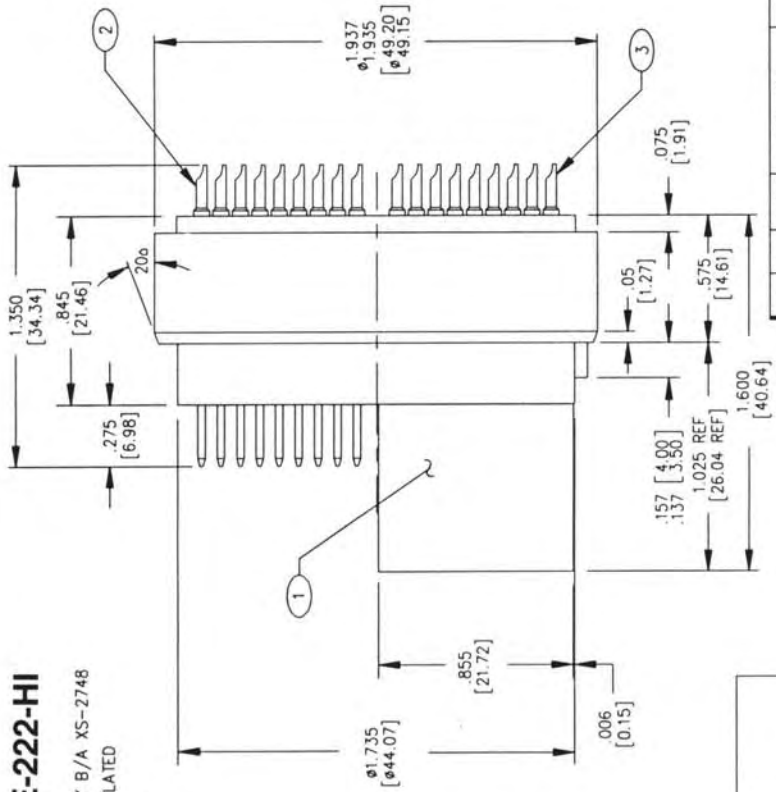
- Open face pressure rated
- Glass to metal sealed
- Electro optical
- Hermaphroditic style option
- Multimode or single mode fibres

DWG. NO. SH REV.

REV.	REF. ECD. NO.	DESCRIPTION	DATE	APPROVED
A	6424	REVISED LENGTH	90-4-17	D.S.
B	7537	ADD KEY, NOTE 7 & 8, REV PRESS	930708	KMN
C	8623	REMOVED NUMBERS ON FACE PATTERN	950413	LP

LE-222-HI

- NOTES:**
- 1 MATERIAL: GLASS REINFORCED EPOXY B/A XS-2748
 - 2 MATERIAL: COPPER ALLOY & GOLD PLATED PER MIL-G-45204
 - 3 DIMENSIONS IN BRACES [], ARE FOR MILLIMETER REFERENCE ONLY
 - 4 VOLTAGE: 600 VDC
 - 5 CURRENT: 3 AMPS
 - 6 OPEN FACE PRESSURE: 2000 PSI [138 BAR]. WHEN INSERT IS INSTALLED IN A SEACON APPROVED SHELL DESIGN.
 - 7 TEST IR AT 1000 VDC IR TO BE > 1000 MΩ
 - 8 TEST DIELECTRIC AT 600 VAC



ITEM	QTY	FSCM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION
3	111	15789	6862-296	CONTACT SOCKET	2
2	111	15789	6862-295	CONTACT PIN	2
1	1	15789	6862-102	LE-222-HI BODY	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:

FRACTIONS	DECIMALS	ANGLES
± 1/16	± .005	± 1/2
	± .001	

BREAK ALL EDGES & CORNERS .015 RADIUS UNLESS OTHERWISE SPECIFIED

FINISH: 12/

DO NOT SCALE DRAWING

CONTRACT NO. _____

APPROVALS: _____ DATE: 89-12-07

DRAWN: K. RIDGELS

CHECKED: LAI PHAM

ISSUED: D. SELHAN

SCALE: 2/1

SHEET: OF

SEACON

BRANTNER & ASSOCIATES, INC.
MAIN PLANT 1240 VERNON WAY EL CAJON, CALIF. 92020

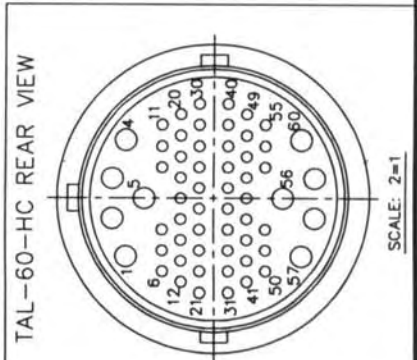
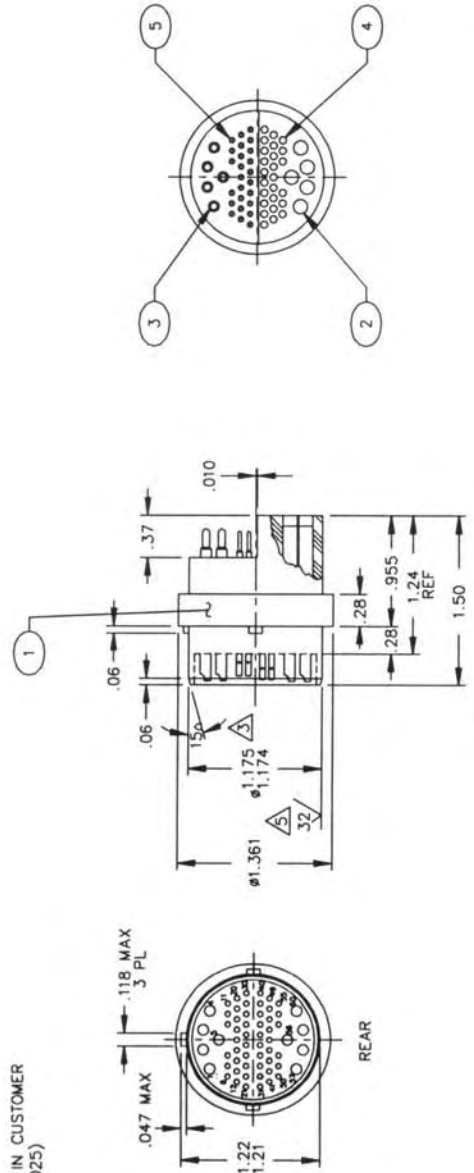
LE-222-HI

SIZE: FSCM NO. B 15789 DWG NO. 6862-102 REV C

TAL-60-HC INSERT

NOTES:

- 1 MATERIAL: GLASS REINFORCED EPOXY B/A XS-2748.
- 2 MATERIAL: COPPER ALLOY & GOLD PLATED PER MIL-C-45204.
- 3 300 BAR (4,350 PSI) FROM THE SOLDER CUP SIDE, INSERT MUST BE MATED TO ANOTHER MATE AND HAVE EQUAL PRESSURE ON BOTH SOLDER CUP ENDS.
- 4. VOLTAGE RATING:
 - a) #22 AWG @ 600VDC
 - b) #16 AWG @ 2200VDC
- 5 DIAMETER IS FOR O-RING SEAL IN CUSTOMER HOUSING. (REF 2-025 AND 8-025)



REV	REF. NO.	DESCRIPTION	DATE	APPROVED
A	6529	REVISE DIM/CONTACT PATTERN	900923	LP
B	6555	REVISE DWG & DIM	900925	LP
C	6561	REVISE DIM. FROM .995 TO .955	901003	LP
D	8158	REV. PART NO. FROM ITEM 5	940609	LP

ITEM	QTY	FSCM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION
5	25	15789	3560	#22 AWG CONTACT PIN	
4	25	15789	2454	#22 AWG CONTACT SOCKET	
3	5	15789	3032	#16 AWG CONTACT PIN	
2	5	15789	2014-2	#16 AWG CONTACT SOCKET	
1	1	15789	6872-105	TA-HC INSERT	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ARE:

FRACTIONS	DECIMALS	ANGLES
± 1/16	± .005	± 1/2°
	± .001	

BREAK ALL EDGES & CORNERS .015 RAD. ALL DIA. TO BE CONCENTRIC WITH .004 TH

FINISH 12/

CONTRACT NO. _____

APPROVALS

DRAWN	M. JUAREZ	DATE	900312
CHECKED	LAI PHAM	DATE	900923
ISSUED	D. SEILHAN	DATE	900316

SEALED (CON)

BRANTNER & ASSOCIATES, INC.
MAIN PLANT 1240 VERNON WAY EL CAJON, CALIF. 92020

TAL-60-HC INSERT

SIZE FSCM NO. DWG NO. REV

B 15789 6872-105 D

SCALE 1/1 SHEET OF

APPLICATION	PART NO.
PARBAK	8-025
O-RING	2-025
ASSY HARDWARE	

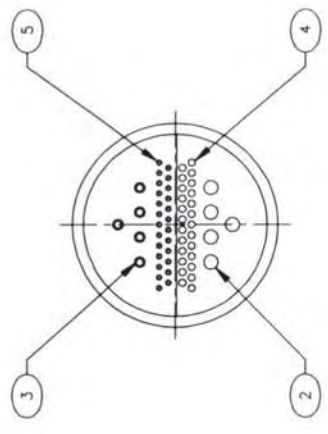
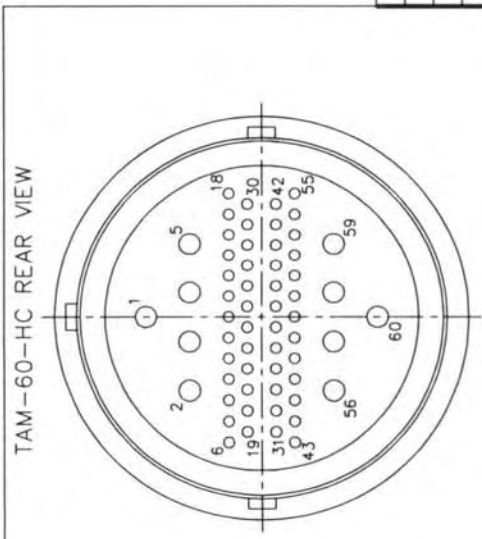
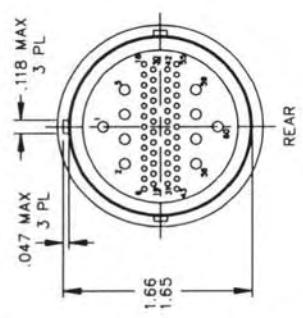
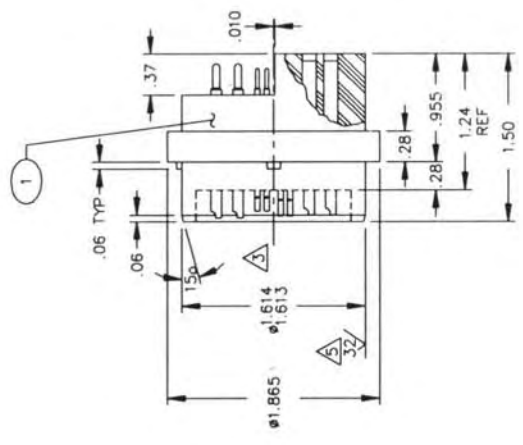
SCALE: 2=1

DWG. NO.	SH	REV.
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TAM-60-HC INSERT

- NOTES:**
- 1 MATERIAL: GLASS REINFORCED EPOXY B/A XS-2748.
 - 2 MATERIAL: COPPER ALLOY & GOLD PLATED PER MIL-G-45204.
 - 3 500 BAR (7,250 PSI) FROM THE SOLDER CUP SIDE, INSERT MUST BE MATED TO ANOTHER MATE AND HAVE EQUAL PRESSURE ON BOTH SOLDER CUP ENDS.
 - 4. VOLTAGE RATING:
 - a) #22 AWG @ 600VDC
 - b) #16 AWG @ 2200VDC
 - 5 DIAMETER IS FOR O-RING SEAL IN CUSTOMER HOUSING. (REF 2-030 AND 8-030)

REV.	REF. EQL. NO.	DESCRIPTION	DATE	APPROVED
A	6528	REVISE DIM/CONTACT PATTERN	900823	LP
B	6554	REVISE DWG & DIM	900925	LP
C	6562	REVISE DIM. FROM .995 TO .955	901003	LP
D	6567	REVISE DIM AND CONTACT NO.	901005	LP



ITEM	QTY	FSCM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION
5	25	15789	3560	#22 AWG CONTACT PIN	
4	25	15789	2454	#22 AWG CONTACT SOCKET	
3	5	15789	3032	#16 AWG CONTACT PIN	
2	5	15789	2014-2	#16 AWG CONTACT SOCKET	
1	1	15789	6872-103	TA-HC INSERT	

CONTRACT NO.		DATE	
SEAL CON		900312	
APPROVALS		DRAWN M. JUAREZ	
CHECKED LAI PHAM		ISSUED D. SEILHAN	
FINISH		SCALE 1/1	

APPLICATION	PART NO.
PARBAK	8-030
O-RING	2-030
ASST HARDWARE	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:	
FRACTIONS	± 1/32
DECIMALS	± .005
ANGLES	± 1/2°
BREAK ALL EDGES & CORNERS .015	
PAG. ALL DIA. TO BE CONCORD. WITHIN .004 TIR	

REV	REV
B	6872-103
D	

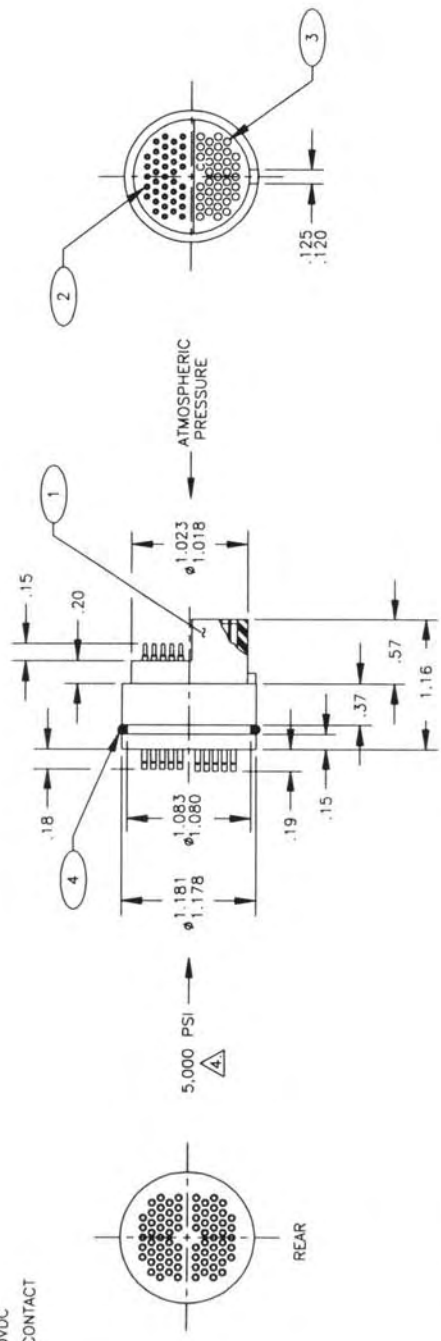
DWG. NO. SH REV.

REVISIONS		
REV.	EST. NO.	DESCRIPTION
A	6971	ADD DIMS. REF ECO

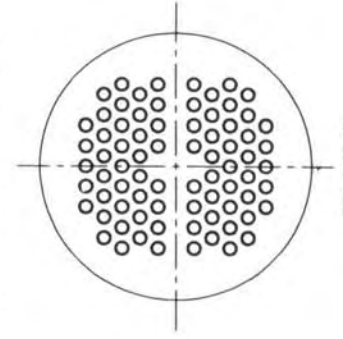
TA-76-HC-DRA

NOTES:

- △ MATERIAL: GLASS REINFORCED EPOXY B/A XS-2748
- △ MATERIAL: COPPER ALLOY & GOLD PLATED PER MIL-G-45204.
- △ MATERIAL: VITON
- △ 5,000 PSI FROM SOLDER CUP SIDE.
- 5. SPECIFICATIONS:
 - a) #22 AWG @ 600VDC
 - b) 2.5 AMPS PER CONTACT



TA-76-HC REAR VIEW



SCALE: 2=1

ITEM	QTY	FSCM NO.	RECORD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION
4	1	2-023			O-RING	△
3	38	15789		2454	#22 AWG CONTACT SOCKET	△
2	38	15789		3526	#22 AWG CONTACT PIN	△
1	1	15789		6959-102	TA-HC INSERT	△

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ARE:

FRACTIONS	DECIMALS	ANGLES
± 1/32	± .015	± 1/2°
	± .004	

BREAK ALL EDGES & CORNERS .015
FILL .004 DIA. TO BE CONCENTRIC WITHIN .004 TR

CONTRACT NO. _____

APPROVALS DATE

DRAWN K. RIDGELS 92-01-06

CHECKED K. NORTHLUP 92-01-08

ISSUED _____

SEACON
BRANTNER & ASSOCIATES, INC.
MAIN PLANT 1240 VERNON WAY EL CAJON, CALIF. 92020

TA-76-HC-DRA

SIZE FSCM NO. DWG NO. REV
B 15789 6959-102 A

SCALE 1/1 SHEET OF

DO NOT SCALE DRAWING

ASSY HARDWARE PART NO.

APPLICATION

