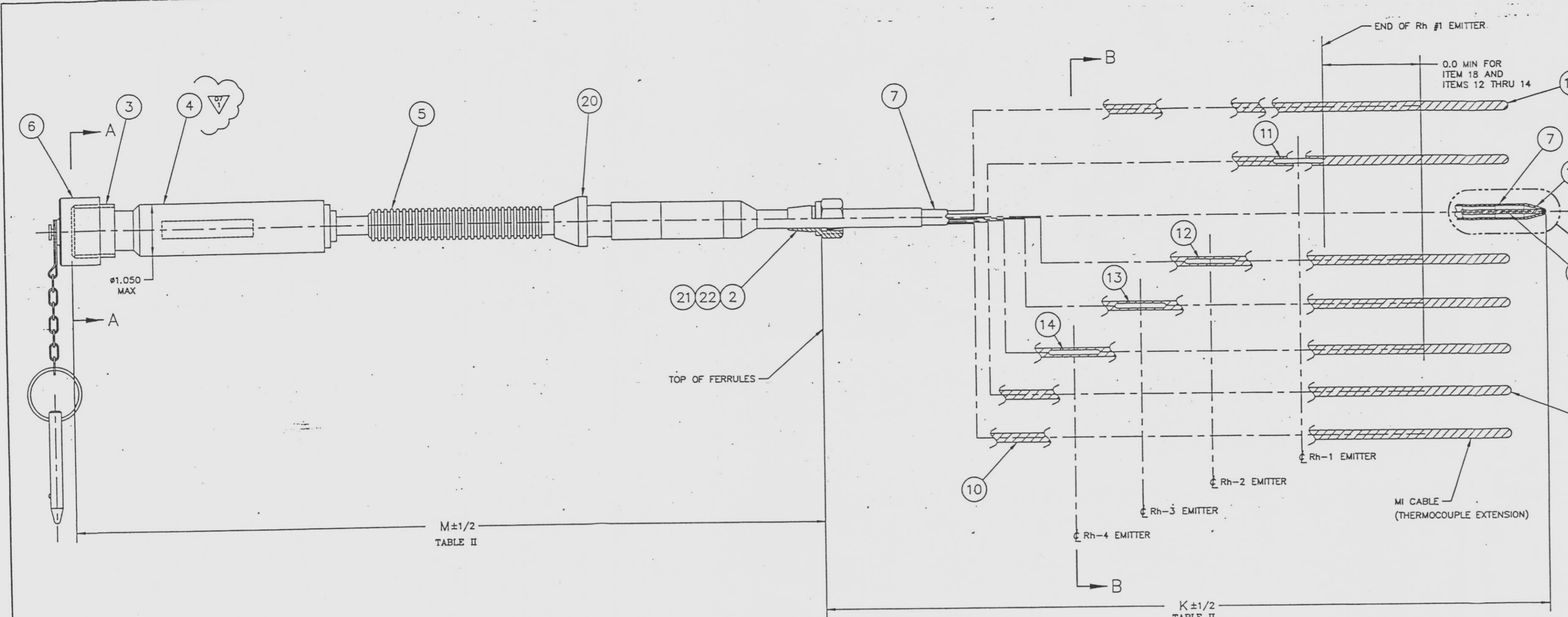


DRAWING NUMBER  
**2998-19729**  
 FLUOR DYNALUMINUM CORPORATION • IRVINE, CALIFORNIA  
 RECEIVED BY NAME AND DATE

BILL OF MATERIALS  
 QUANTITIES ARE FOR ONE ASSEMBLY

GROUP NO. & QUANTITY	ITEM NO.	NAME	PIECE NO.	MATERIAL	REMARKS
6	1	IN-CORE INSTRUMENT ASSY	E-13172-165-012-01		
5	2	INUT	C-DUOLOC-165-025-03		
4	3	RECEPTACLE BACKSHELL	E-13172-165-419-03		
3	4	RECEPTACLE BACKSHELL	E-13172-165-419-04		
2	5	FLEXIBLE HOUSING	E-13172-165-419-05		
1	6	DUST CAP	D-510-165-024-04		
	7	OUTER SHEATH TUBE	E-13172-165-419-07		
	8	TENSILE MEMBER ASSY	E-13172-165-419-08		
	9				
	10	OUTLET THERMOCOUPLE	E-13172-165-419-10		
	11	RHODIUM DETECTOR (Rh-1) ASSY	E-13172-165-419-11		
	12	RHODIUM DETECTOR (Rh-2) ASSY	E-13172-165-419-12		
	13	RHODIUM DETECTOR (Rh-3) ASSY	E-13172-165-419-13		
	14	RHODIUM DETECTOR (Rh-4) ASSY	E-13172-165-419-14		
	15	BULLET NOSE TIP	E-13172-165-419-15		
	16				
	17				
	18	BACKGROUND DETECTOR	E-13172-165-419-018		
	19	FILLER CABLE	E-13172-165-419-19		
	20	LIFT RING ASSY	E-13172-165-419-20		
	21	FRONT FERRULE	C-DUOLOC-165-025-05		
	22	BACK FERRULE	C-DUOLOC-165-025-04		



**1 IN-CORE INSTRUMENT ASSY**  
 SCALE: 1/1

TABLE II

INDIVIDUAL IDENTITY NO. INCORE INSTRUMENT ASSY	CORE COORDINATE LOCATION	FLANGE NUMBER	LENGTH K (IN)	LENGTH M
E-13172-165-012-1	R-18	1	385	19 3/4
E-13172-165-012-2	L-20	1	369 1/16	26 1/2
E-13172-165-012-3	L-18	1	376 15/16	26 1/2
E-13172-165-012-4	R-16	1	396	19 3/4
E-13172-165-012-5	G-20	1	385 1/2	26 1/2
E-13172-165-012-6	L-16	2	392 7/16	19 3/4
E-13172-165-012-7	G-18	2	373 9/16	26 1/2
E-13172-165-012-8	E-20	2	364 13/16	19 3/4
E-13172-165-012-9	E-18	2	367 11/16	26 1/2
E-13172-165-012-10	G-16	2	382 3/8	19 3/4
E-13172-165-012-11	L-13	2	403 15/16	26 1/2
E-13172-165-012-12	G-13	3	392 5/16	19 3/4
E-13172-165-012-13	E-16	3	373 5/16	26 1/2
E-13172-165-012-14	C-18	3	364 7/16	19 3/4
E-13172-165-012-15	C-16	3	367 5/8	26 1/2
E-13172-165-012-16	E-13	3	382 3/16	19 3/4
E-13172-165-012-17	G-9	3	403 5/8	26 1/2
E-13172-165-012-18	E-8	4	384 9/16	19 3/4
E-13172-165-012-19	C-13	4	368 5/16	26 1/2
E-13172-165-012-20	C-9	4	376 1/2	26 1/2
E-13172-165-012-21	E-6	4	395 7/8	19 3/4
E-13172-165-012-22	A-14	4	363 7/16	26 1/2
E-13172-165-012-23	C-4	5	364 3/8	19 3/4
E-13172-165-012-24	A-8	5	380 1/2	26 1/2
E-13172-165-012-25	C-6	5	372 5/16	19 3/4
E-13172-165-012-26	G-2	5	377 3/16	26 1/2
E-13172-165-012-27	E-2	5	367 13/16	19 3/4
E-13172-165-012-28	E-4	5	367 7/16	26 1/2
E-13172-165-012-29	G-4	6	384 3/4	19 3/4
E-13172-165-012-30	L-2	6	368 15/16	26 1/2
E-13172-165-012-31	L-4	6	377 1/16	26 1/2
E-13172-165-012-32	G-8	6	396 1/4	19 3/4
E-13172-165-012-33	R-2	6	365 5/16	26 1/2
E-13172-165-012-34	L-5	7	392 5/16	19 3/4
E-13172-165-012-35	R-4	7	373 3/4	26 1/2
E-13172-165-012-36	T-2	7	364 3/4	19 3/4
E-13172-165-012-37	T-4	7	387 15/16	26 1/2
E-13172-165-012-38	R-6	7	382 5/16	19 3/4
E-13172-165-012-39	L-9	7	401 9/16	26 1/2
E-13172-165-012-40	R-9	8	391 15/16	19 3/4
E-13172-165-012-41	T-6	8	373 3/8	26 1/2
E-13172-165-012-42	W-4	8	364 7/16	19 3/4
E-13172-165-012-43	W-6	8	367 5/8	26 1/2
E-13172-165-012-44	T-9	8	382 1/4	19 3/4
E-13172-165-012-45	R-13	8	404 1/8	26 1/2
E-13172-165-012-46	T-13	9	384 9/16	19 3/4
E-13172-165-012-47	W-9	9	368 9/16	26 1/2
E-13172-165-012-48	W-13	9	376 7/16	26 1/2
E-13172-165-012-49	T-16	9	399 1/8	19 3/4
E-13172-165-012-50	Y-8	9	363 3/8	26 1/2
E-13172-165-012-51	W-18	10	364 1/4	19 3/4
E-13172-165-012-52	Y-14	10	380 1/4	26 1/2
E-13172-165-012-53	W-16	10	371 3/4	19 3/4
E-13172-165-012-54	R-20	10	377 5/16	26 1/2
E-13172-165-012-55	T-20	10	367 15/16	19 3/4
E-13172-165-012-56	T-18	10	367 3/8	26 1/2

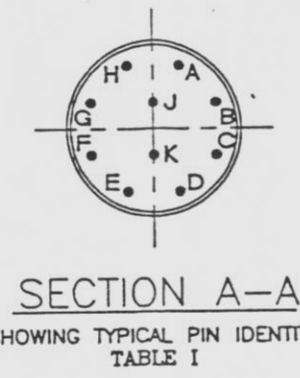
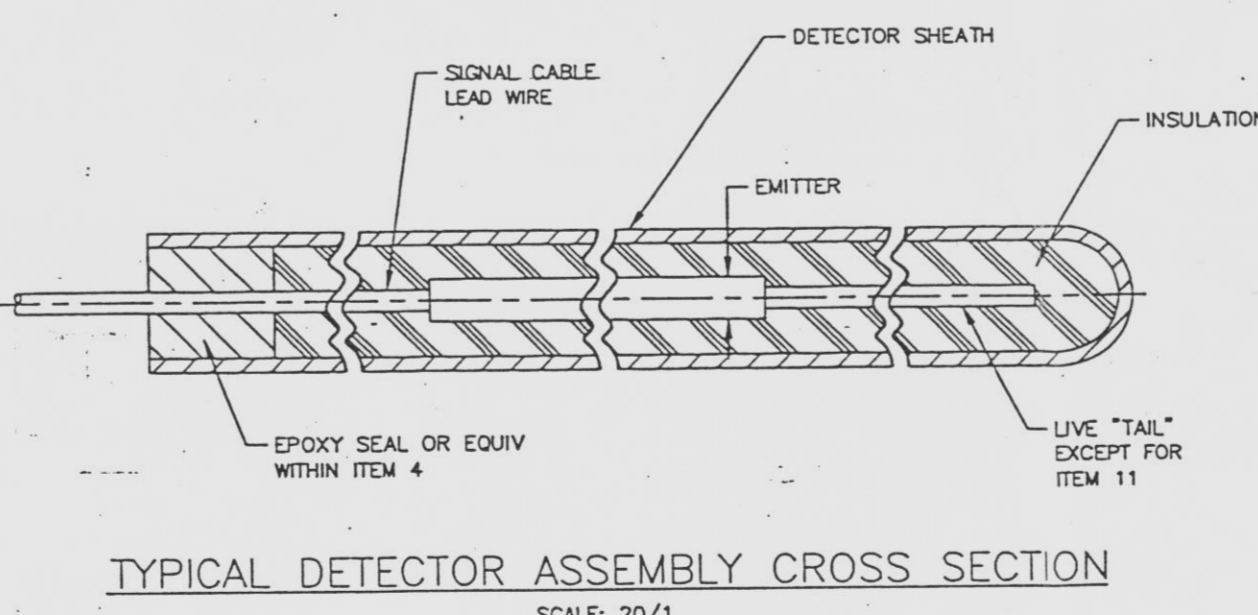
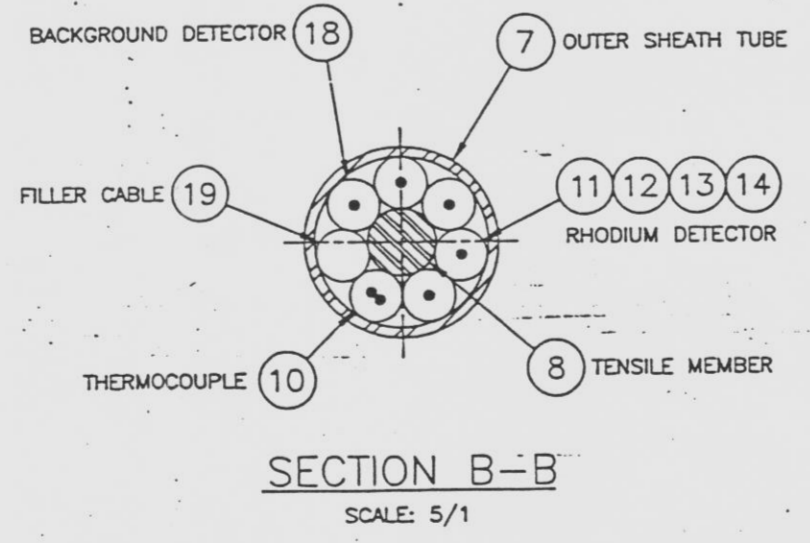
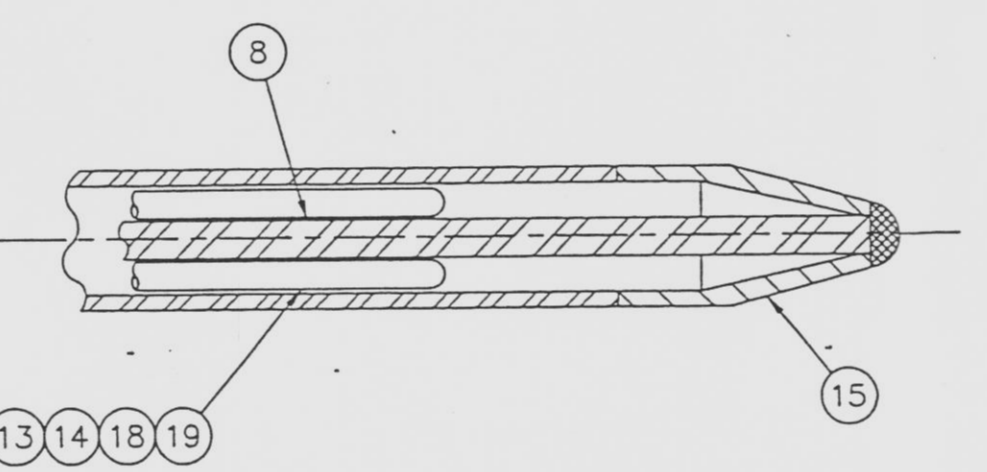


TABLE I

PIN	CONNECT TO
A	ITEM 18
B	ITEM 11
C	ITEM 12
D	ITEM 13
E	ITEM 14
F	ITEM 10 CHROMEL
G	ITEM 10 ALUMEL
H	SHELL COMMON
J	SPPARE
K	SPPARE



1. PRODUCT TO BE IN ACCORDANCE WITH ABB CENO SPECIFICATION  
 00000-FA-6106  
**E-13172-165-012 07**

**INFORMATION ONLY**  
 VERIFY WITH A CONTROLLED COPY BEFORE USE.  
 APPROVED REFERENCE DESIGN

REV.	DESCRIPTION	DATE	BY	CHKD.
006	1 - REDRAWN & REDESIGNED PER REV REQ NO. 96-079			
007	1-ZONE HB: REVISED ITEM 4 2-BM: REVISED ITEM 4 PER REV REQ 96-251			

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1982  
 DIMENSIONS APPLY AT 68°F (20°C)  
 ALL DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 ONE PLACE DECIMAL ±.1  
 TWO PLACE DECIMAL ±.02  
 THREE PLACE DECIMAL ±.005  
 BREAK CORNERS .015 APPROX. R OR CHAM + FILLET. .015 TO .030 R  
 MACHINED FINISH AXES MICRO IN.  
 ANGLES ± 0° 30' DIAM ± 5'  
 DO NOT SCALE DRAWING

**COMBUSTION ENGINEERING**  
 THIS ORGANIZATION IS A MEMBER OF THE POWER GENERATION SOCIETY  
 NUCLEAR DIVISION  
 1000 EAST CALIFORNIA AVENUE  
 SANTA ANA, CALIFORNIA 92701  
 PHONE (714) 261-1000  
 TELETYPE (714) 261-1000  
 TELEX 982482  
 FAX (714) 261-1000

CUSTOMER: FLORIDA POWER & LIGHT CO.  
 ST. LUCIE PLANT  
 UNIT NO. 2-1978 890 MW EXTENSION  
 TITLE: IN-CORE INSTRUMENT ASSEMBLY  
 PROJECT NO. 2004537  
 TASK NO. 405707  
 SCALE: 1/1  
 SHEET: 1 OF 1  
 AUTOCAD FILE: 1317216510120107

INITIAL ISSUE FOR PCM 88163  
 DESCRIPTION  
 REV. DATE BY APPR.  
 O 1/25/91 JML/MS

**2998-19729**  
 P.G. **CE 917**  
 FLORIDA POWER & LIGHT COMPANY  
 ST. LUCIE PLANT UNIT 2

VERIFICATION STATUS: COMPLETE  
 THE SCHEMATIC INFORMATION CONTAINED IN THIS DOCUMENT HAS BEEN REVIEWED TO BE CORRECT BY MEANS OF THE FOLLOWING:  
 DESIGNER: W. SWARD  
 CHECKER: J. LANGRISH  
 APPROVALS: M. LINDBERGH  
 E. M. MOSEL  
 J. M. BAKER

NO FURTHER REVISIONS REQUIRED  
 REVISIONS REQUIRED:   
 REVISIONS REQUIRED:   
 REVISIONS REQUIRED:   
 DO NOT PROCEED WITH FABRICATION UNLESS REVISIONS ARE RECEIVED

IN-CORE INSTRUMENT ASSEMBLY

REVISED BY: [Signature]  
 DATE: 1/26/91

9412040015-06 **E**