

DESIGNED & DIMENSIONED  
IN MILLIMETERS[INCHES]

ACP-22-XX-X-XX.XX-X-XX-P-X

DO NOT  
SCALE FROM  
THIS PRINT

**Pb** THIS PRODUCT MANUFACTURED  
WITH LEAD-FREE PROCESSING

- LEAD STYLE
  - 01: 30 POS (1.0 TERM/SKT), 24 AWG
  - 02: 20 POS (1.0 TERM/SKT), 24 AWG
  - 03: 8 POS PWR (1.5 TERM/SKT), 16 AWG
  - 04: 6 POS (COAX PLUG/JACK), COAX (ONLY AVAILABLE WITH -H PLATING)
  - 05: 20 POS COMBO (4 X 1.5 TERM/SKT), 16 AWG (16 X 1.0 TERM/SKT), 24 AWG
  - 06: 16 POS COMBO (4 X COAX PLUG/JACK), COAX (12 X 1.0 TERM/SKT), 24 AWG
- SIZE
- KEYING FEATURE (SEE NOTE 4) (SEE SHEET 4)
  - 1: ORANGE
  - 2: GREEN
  - 3: BLUE
  - 4: YELLOW
- PLASTIC
- END 2
  - T: TERMINAL
  - S: SOCKET
  - BC: BLUNT CUT
- END 1
  - T: TERMINAL
  - S: SOCKET (NOT AVAILABLE WITH END 2 -T)
- PLATING (SEE NOTE 9)
  - G: LIGHT, 10µ" GOLD IN CONTACT AREA
  - H: HEAVY, 30µ" GOLD IN CONTACT AREA
- ASSEMBLED LENGTH XX.XX (IN METERS) (0.25 METER MIN TO 50.00 METER MAX)

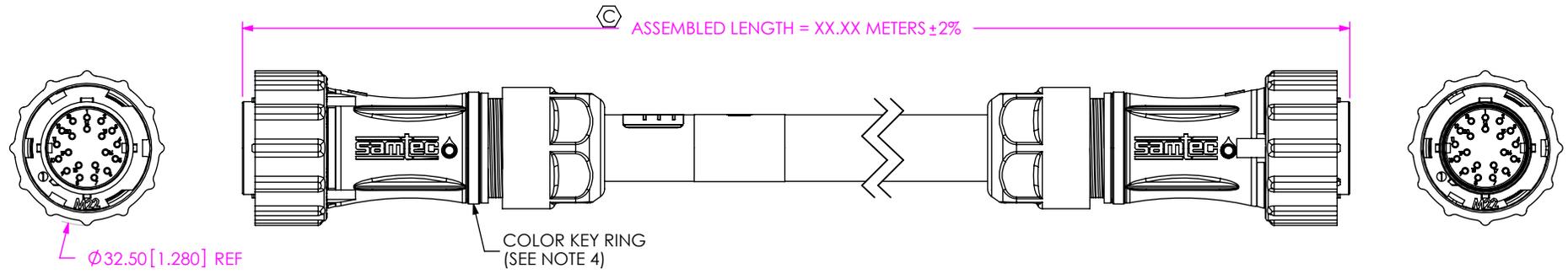
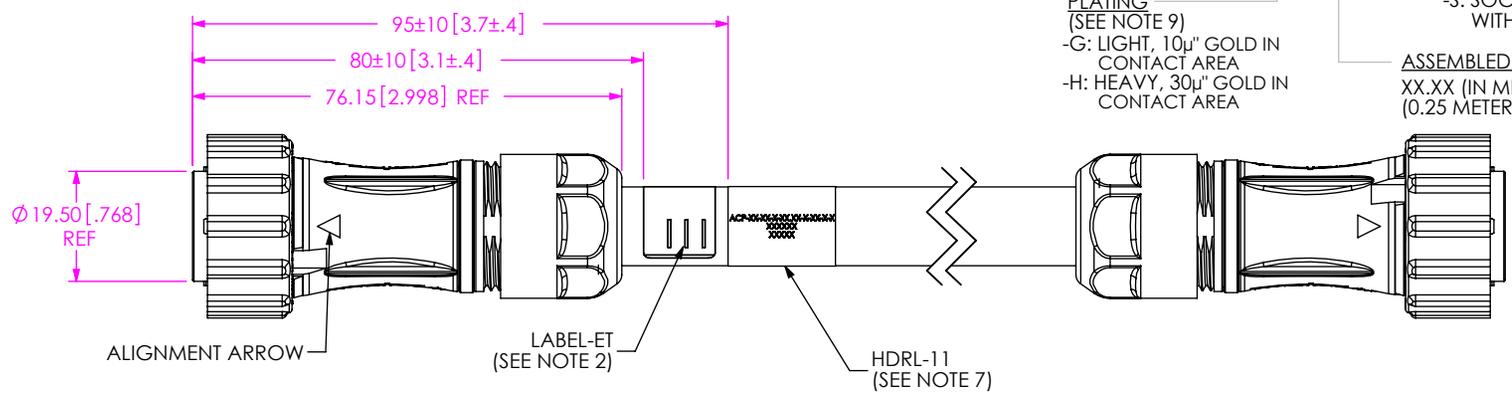


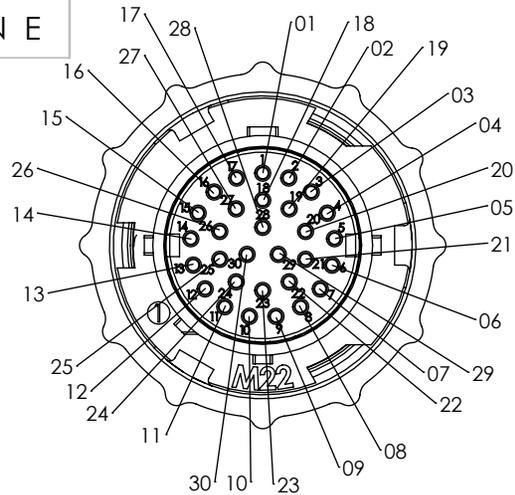
FIG 1  
ACP-22-02-X-XX.XX-T-T-P-1 SHOWN

NOTES:

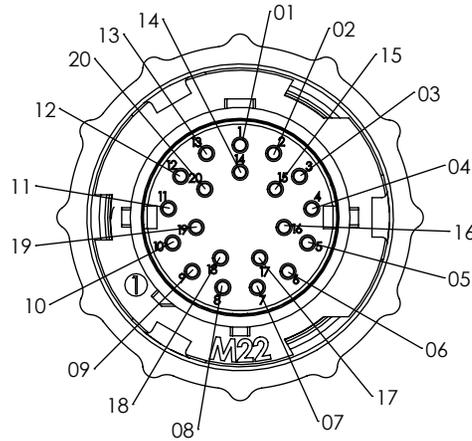
1. Ⓢ REPRESENTS A CRITICAL DIMENSION.
2. ASSEMBLY TO BE 100% TESTED FOR CONTINUITY, ISOLATION, & HI-POT AT 300V. (1) LABEL-ET TO BE APPLIED AFTER FINAL ELECTRICAL TEST.
3. ASSEMBLIES TO BE BULK PACKAGED.
4. KEYING FEATURE DETERMINES COLOR OF KEY RING AND DUSTCAP LANYARD IF APPLICABLE.
5. SIGNAL MAPPING IS 1 TO 1, 2 TO 2, 3 TO 3, etc..
6. REFER TO DCA-ACP-22-P-X PRINT FOR DUST CAP.
7. PLACE HDRL-11 (LABEL) ON CABLE WHERE SHOWN. LABEL TO CONTAIN:  
LINE 1 - PART NUMBER "ACP-22-XX-X-XX.XX-X-XX-P-X"  
LINE 2 - SHOP ORDER NUMBER "XXXXXX"  
LINE 3 - DATE CODE "XXXXX"
8. NOTE DELETED.
9. PLATING CALLOUTS APPLY TO TERMINALS/SOCKETS ONLY, COAX PLUGS/JACKS HAVE -H PLATING ON INNER TERMINALS/SOCKETS & -F PLATING ON OUTER SHELLS.
10. MINIMUM BEND RADIUS FOR INDIVIDUAL LINES OF COAX CABLE IS 25.4 [1.00].

F:\DWG\MISC\MKTG\ACP-22-XX-X-XX.XX-X-XX-P-X-MKT.SLDDRW

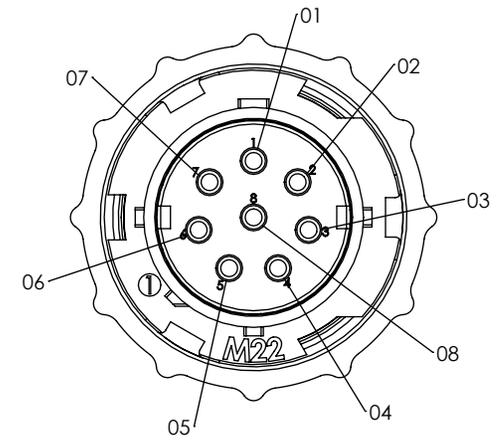
<p>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS.</p> <p>TOLERANCES ARE:</p> <table border="0"> <tr> <td>DECIMALS</td> <td>ANGLES</td> </tr> <tr> <td>X.X: ±0.3 [01]</td> <td>2°</td> </tr> <tr> <td>X.XX: ±0.13 [005]</td> <td></td> </tr> <tr> <td>X.XXX: ±0.051 [0020]</td> <td></td> </tr> </table>	DECIMALS	ANGLES	X.X: ±0.3 [01]	2°	X.XX: ±0.13 [005]		X.XXX: ±0.051 [0020]		<p><b>PROPRIETARY NOTE</b></p> <p>THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.</p>	<p>520 PARK EAST BLVD, NEW ALBANY, IN 47150 PHONE: 812-944-6733 FAX: 812-948-5047 e-Mail: info@SAMTEC.com code 53322</p>
	DECIMALS	ANGLES								
X.X: ±0.3 [01]	2°									
X.XX: ±0.13 [005]										
X.XXX: ±0.051 [0020]										
<p><b>MATERIAL:</b> DO NOT SCALE DRAWING SHEET SCALE: 1:1</p> <p>SHELL: NYLON, COLOR: BLACK INSULATOR: PBT, COLOR: BLACK TERMINALS: BRASS CONTACTS: BRASS/BeCu BAYONET COLLAR: NYLON, COLOR: BLACK CABLE NUT: NYLON, COLOR: BLACK GROMMET: NBR GROMMET CAGE: NYLON, COLOR: BLACK COLOR RING: SILICONE</p>	<p>DESCRIPTION: ACCLIMATE CIRC. CABLE ASSEMBLY</p> <p>DWG. NO. ACP-22-XX-X-XX.XX-X-XX-P-X</p> <p>BY: CLAY W 9/6/2010 SHEET 1 OF 7</p>									



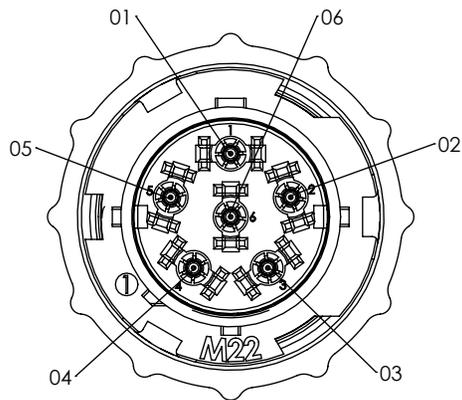
-01: 30 POS  
( $\varnothing$  1.0 TERMINALS)



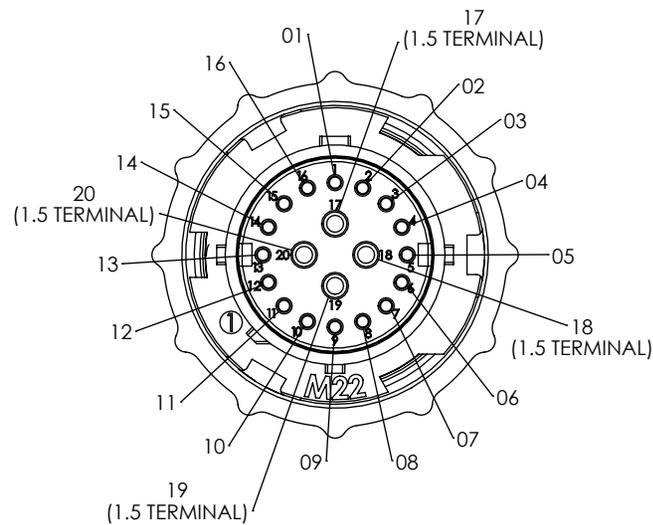
-02: 20 POS  
( $\varnothing$  1.0 TERMINALS)



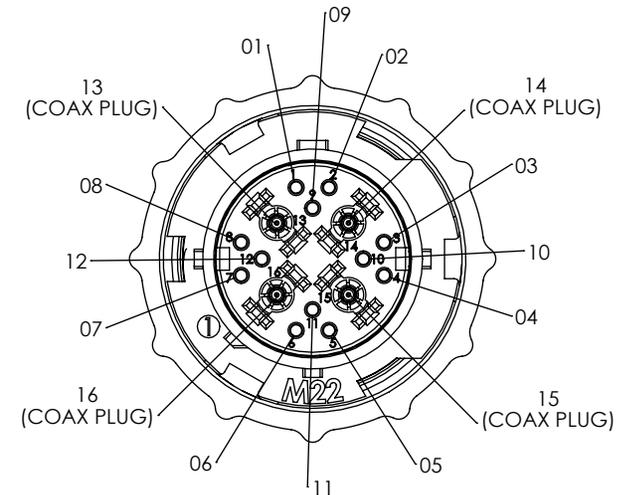
-03: 8 POS  
( $\varnothing$  1.5 TERMINALS)



-04: 6 POS  
(COAX PLUGS)



-05: 20 POS COMBO  
(4 X  $\varnothing$  1.5 TERMINALS)  
(16 X  $\varnothing$  1.0 TERMINALS)



-06: 16 POS COMBO  
(4 X COAX PLUGS)  
(12 X  $\varnothing$  1.0 TERMINALS)

-T END OPTIONS

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SHEET SCALE: 1.5:1

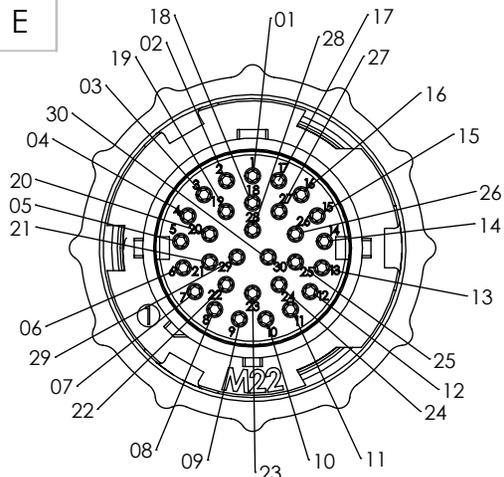


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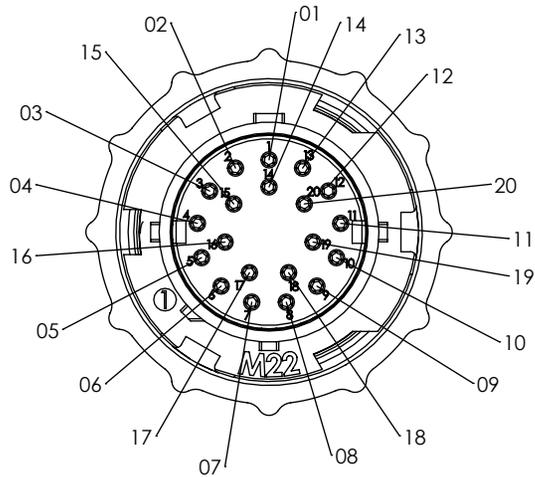
DESCRIPTION: ACCLIMATE CIRC. CABLE ASSEMBLY

DWG. NO. ACP-22-XX-X-XX-XX-X-XX-P-X

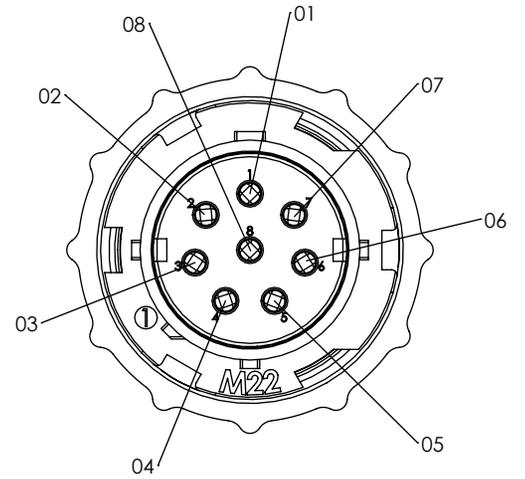
BY: CLAY W 9/6/2010 SHEET 2 OF 7



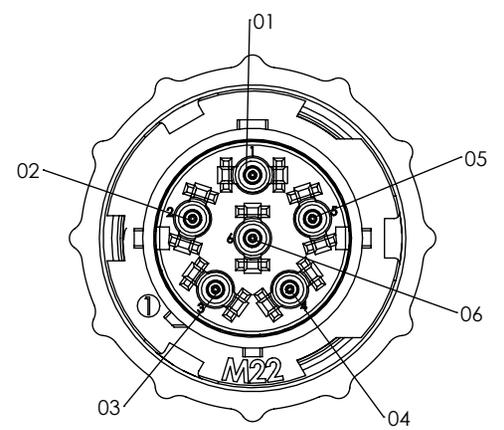
-01: 30 POS  
( $\varnothing$  1.0 SOCKETS)



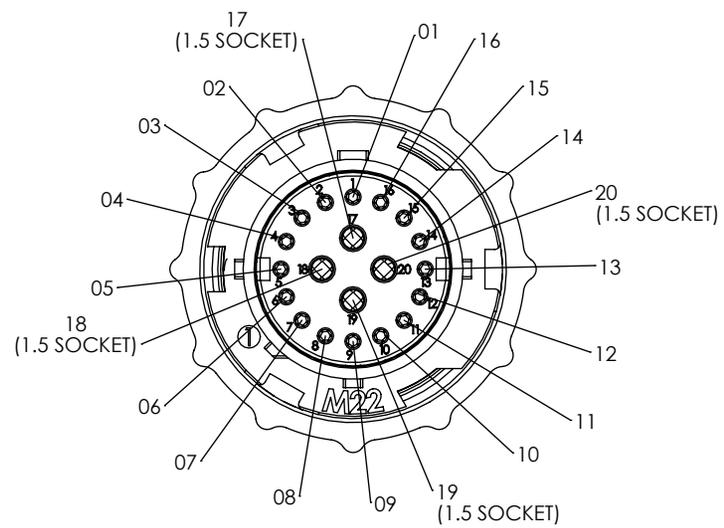
-02: 20 POS  
( $\varnothing$  1.0 SOCKETS)



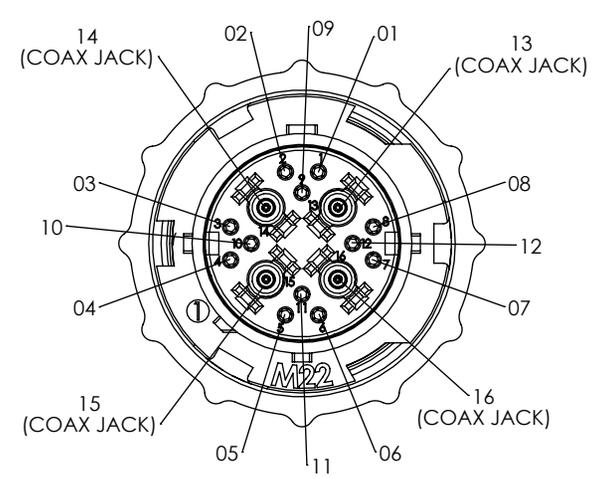
-03: 8 POS  
( $\varnothing$  1.5 SOCKETS)



-04: 6 POS  
(COAX JACKS)



-05: 20 POS COMBO  
(4 X  $\varnothing$  1.5 SOCKETS)  
(16 X  $\varnothing$  1.0 SOCKETS)



-06: 16 POS COMBO  
(4 X COAX JACKS)  
(12 X  $\varnothing$  1.0 SOCKETS)

-S END OPTIONS

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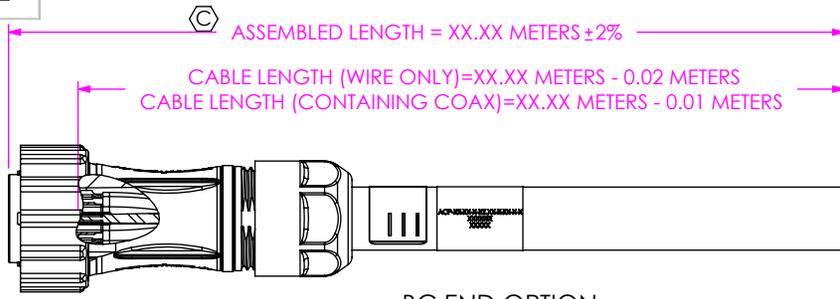


520 PARK EAST BLVD, NEW ALBANY, IN 47150  
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e-Mail: info@SAMTEC.com code 55322

DESCRIPTION: ACCLIMATE CIRC. CABLE ASSEMBLY

DWG. NO. ACP-22-XX-X-XX.XX-X-XX-P-X

BY: CLAY W 9/6/2010 SHEET 3 OF 7



-BC END OPTION  
ACP-22-02-X-XX.XX-T-BC-P-1

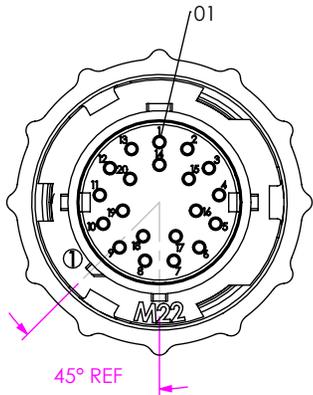
$\text{CABLE LENGTH (WIRE ONLY)} = (XX.XX \text{ METERS} - 0.03 \text{ METERS}) \pm 2\%$   
 $\text{CABLE LENGTH (CONTAINING COAX)} = (XX.XX \text{ METERS}) \pm 2\%$   
 $\text{-BC CABLE LENGTH (WIRE ONLY)} = ((XX.XX \text{ METERS} \times 2) + 0.02 \text{ METERS}) \pm 2\%$   
 $\text{-BC CABLE LENGTH (CONTAINING COAX)} = ((XX.XX \text{ METERS} \times 2) + 0.05 \text{ METERS}) \pm 2\%$

SBWC-22-XX-O  
(SEE TABLE 1)

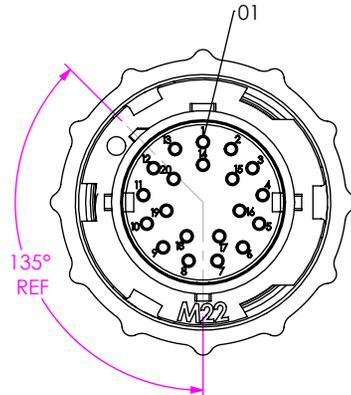
IN-PROCESS 1  
CUT SBWC CABLE TO LENGTH

LEAD STYLES	SBWC PART #
-01	SBWC-22-01-O
-02	SBWC-22-02-O
-03	SBWC-22-03-O
-04	SBWC-22-04-O
-05	SBWC-22-05-O
-06	SBWC-22-06-O

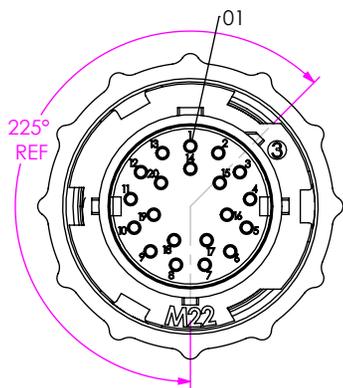
KEYING FEATURE	ACCFS-22-P-X	ACCR-22-X
-1	ACCFS-22-P-1	ACCR-22-1
-2	ACCFS-22-P-2	ACCR-22-2
-3	ACCFS-22-P-3	ACCR-22-3
-4	ACCFS-22-P-4	ACCR-22-4



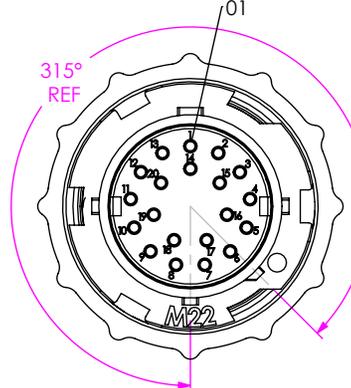
-1  
(ORANGE KEY RING)



-2  
(GREEN KEY RING)

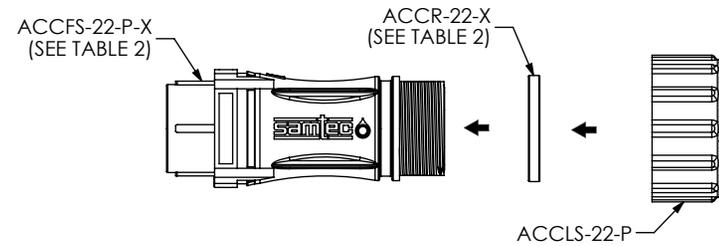


-3  
(BLUE KEY RING)



-4  
(YELLOW KEY RING)

KEYING FEATURE  
(SEE NOTE 4)



IN-PROCESS 2  
STRETCH ACCR-22-X OVER ACCFS-22-P-X UNTIL IT SEATS IN GROOVE. PRESS ACCG-22-1 INTO SEAL FINGERS OF ACCGC-22 UNTIL IT SEATS AGAINST INTERNAL LEDGE. PUSH ACCLS-22-P ONTO ACCFS-22-P-X UNTIL IT SNAPS INTO PLACE AGAINST FLANGE.

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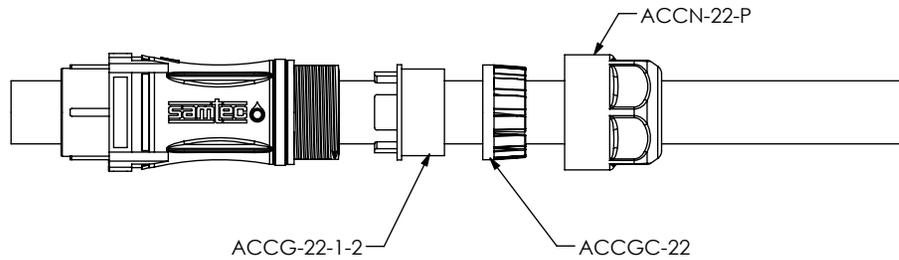


520 PARK EAST BLVD, NEW ALBANY, IN 47150  
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DESCRIPTION:  
ACCLIMATE CIRC. CABLE ASSEMBLY

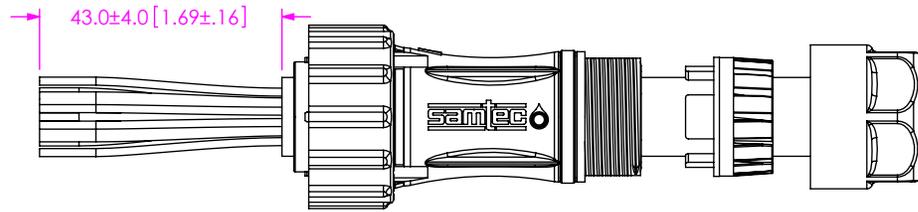
DWG. NO.  
ACP-22-XX-X-XX.XX-X-XX-P-X

BY: CLAY W 9/6/2010 SHEET 4 OF 7

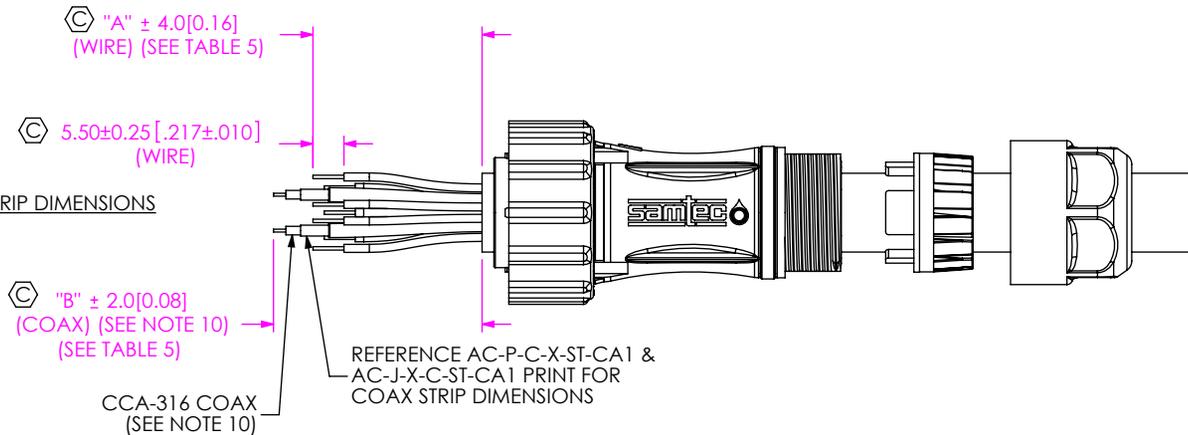


**IN-PROCESS 3**  
 FEED SBWC-22-XX-O BUNDLED CABLE THROUGH  
 ACCN-22-P, ACCGC-22, ACCG-22-1-2, & ACCFS-22-P-X

INITIAL WIRE & COAX STRIP DIMENSIONS  
 (ONLY APPLIES TO -04 & -06 LEAD STYLES)



FINAL WIRE & COAX STRIP DIMENSIONS



**IN-PROCESS 4**  
 STRIP OUTER JACKET & INNER WIRES/COAX TO DIMENSIONS  
 SHOWN, & PUSH ACCGC-22 ONTO ACCG-22-1-2 UNTIL IT SEATS AGAINST FLANGE OF ACCG-22-1-2.

**TABLE 5**

LEAD STYLES	"A"	"B"
-01	30.00 [1.181]	NA
-02	30.00 [1.181]	NA
-03	30.00 [1.181]	NA
-04	NA	43.00 [1.693]
-05	30.00 [1.181]	NA
-06	34.00 [1.339]	37.00 [1.457]

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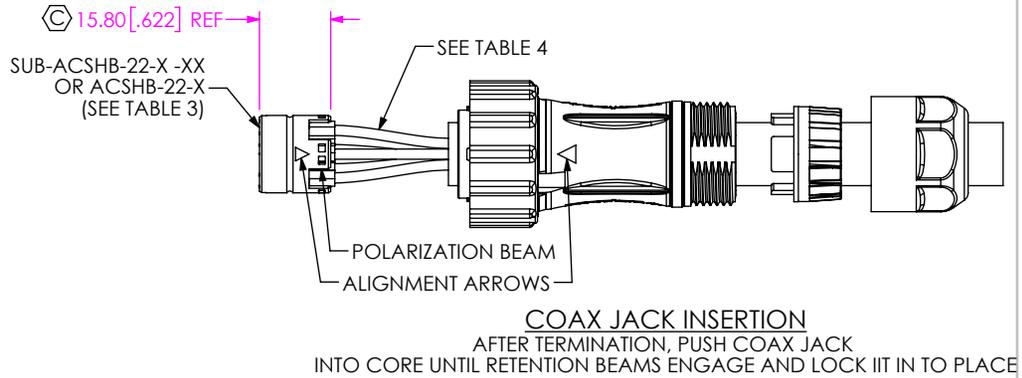
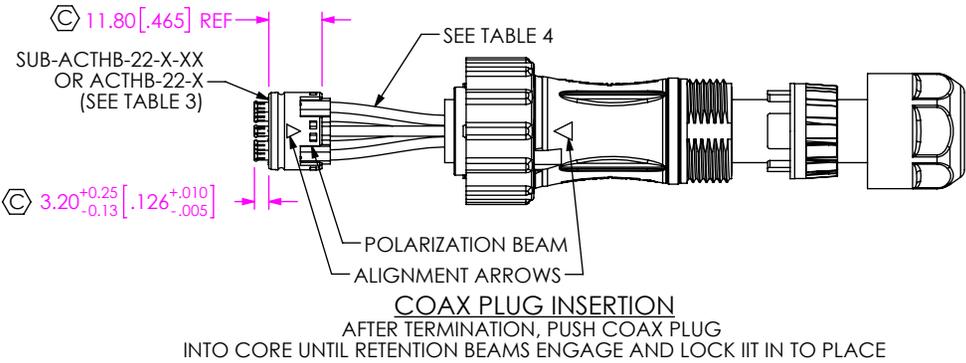
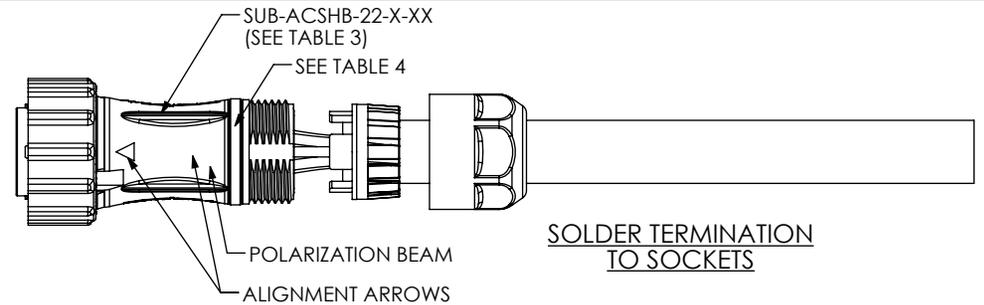
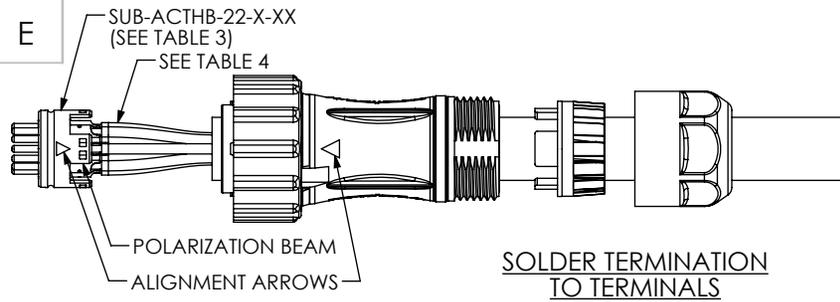
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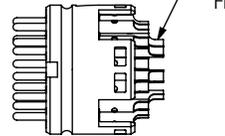
DWG. NO.  
 ACP-22-XX-X-XX.XX-X-XX-P-X

BY: CLAY W 9/6/2010 SHEET 5 OF 7

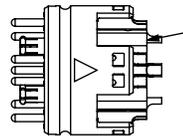
REVISION E



ON LEADSTYLES -01, -02, -03 & -05 SOLDER INNER RING OF TERMINALS/SOCKETS FIRST AND THEN OUTER RING



ON LEADSTYLE -06 TERMINATE & INSERT COAX PLUGS/JACKS BEFORE SOLDERING REMAINING WIRES



**IN-PROCESS 5**  
TERMINATE WIRE/COAX TO TERMINALS/SOCKETS (SEE AC-P-C-X-ST-CA1 & AC-J-C-X-ST-CA1 PRINTS FOR COAX TERMINATION) (SEE NOTE 5)

TABLE 4						
WIRE COLOR						
POSITION	LEAD STYLE					
	-01	-02	-03	-04	-05	-06
01	BROWN	BROWN	BROWN	COAX	BROWN	BROWN
02	RED	RED	RED	COAX	RED	RED
03	ORANGE	ORANGE	ORANGE	COAX	ORANGE	ORANGE
04	YELLOW	YELLOW	YELLOW	COAX	YELLOW	YELLOW
05	GREEN	GREEN	GREEN	COAX	GREEN	GREEN
06	DARK BLUE	DARK BLUE	DARK BLUE	COAX	DARK BLUE	DARK BLUE
07	VIOLET	VIOLET	VIOLET		VIOLET	VIOLET
08	GRAY	GRAY	GRAY		GRAY	GRAY
09	WHITE	WHITE			WHITE	WHITE
10	BLACK	BLACK			BLACK	BLACK
11	GREEN / BLACK	GREEN / BLACK			GREEN / BLACK	GREEN / BLACK
12	TAN	TAN			TAN	TAN
13	DARK BLUE / YELLOW	DARK BLUE / YELLOW			DARK BLUE / YELLOW	COAX
14	PINK	PINK			PINK	COAX
15	BROWN / WHITE	BROWN / WHITE			BROWN / WHITE	COAX
16	RED / WHITE	RED / WHITE			RED / WHITE	COAX
17	ORANGE / WHITE	ORANGE / WHITE			ORANGE / WHITE	
18	YELLOW / WHITE	YELLOW / WHITE			YELLOW / WHITE	
19	GREEN / WHITE	GREEN / WHITE			GREEN / WHITE	
20	DARK BLUE / WHITE	DARK BLUE / WHITE	NA	NA	DARK BLUE / WHITE	
21	VIOLET / WHITE					
22	GRAY / WHITE					
23	WHITE / BLACK					
24	BLACK / WHITE					NA
25	GREEN / YELLOW					
26	TAN / WHITE	NA			NA	
27	DARK BLUE / PINK					
28	PINK / WHITE					
29	BROWN / BLACK					
30	RED / BLACK					

TABLE 3					
LEAD STYLES	END1/END 2	PLATING		COAX PLUG/JACK PART #	
		-G	-H	AC-X-C-H-ST-CA1	QTY
-01	-T	SUB-ACTHB-22-G-01	SUB-ACTHB-22-H-01	NA	
-02	-T	SUB-ACTHB-22-G-02	SUB-ACTHB-22-H-02	NA	
-03	-T	SUB-ACTHB-22-G-03	SUB-ACTHB-22-H-03	NA	
-04	-T	ACTHB-22-6	ACTHB-22-6	AC-P-C-H-ST-CA1	6
-05	-T	SUB-ACTHB-22-G-05	SUB-ACTHB-22-H-05	NA	
-06	-T	SUB-ACTHB-22-G-06	SUB-ACTHB-22-H-06	AC-P-C-H-ST-CA1	4
-01	-S	SUB-ACSHB-22-G-01	SUB-ACSHB-22-H-01	NA	
-02	-S	SUB-ACSHB-22-G-02	SUB-ACSHB-22-H-02	NA	
-03	-S	SUB-ACSHB-22-G-03	SUB-ACSHB-22-H-03	NA	
-04	-S	ACSHB-22-6	ACSHB-22-6	AC-J-C-H-ST-CA1	6
-05	-S	SUB-ACSHB-22-G-05	SUB-ACSHB-22-H-05	NA	
-06	-S	SUB-ACSHB-22-G-06	SUB-ACSHB-22-H-06	AC-J-C-H-ST-CA1	4

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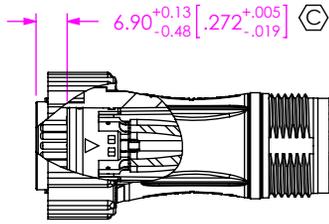
SHEET SCALE: 1:1

DESCRIPTION: ACCLIMATE CIRC. CABLE ASSEMBLY

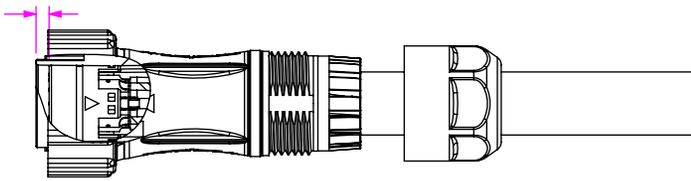
DWG. NO. ACP-22-XX-X-XX.XX-X-XX-P-X

BY: CLAY W 9/6/2010 SHEET 6 OF 7

SUB-ACXHB-22-X  
(TERMINAL)

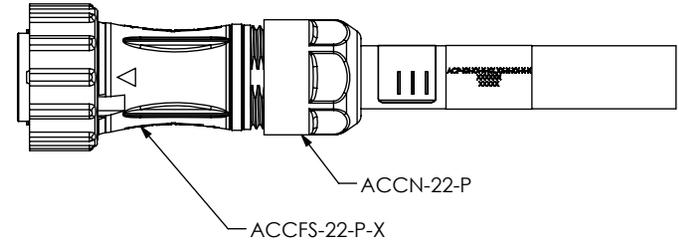


SUB-ACSHB-22-X  
(SOCKET)



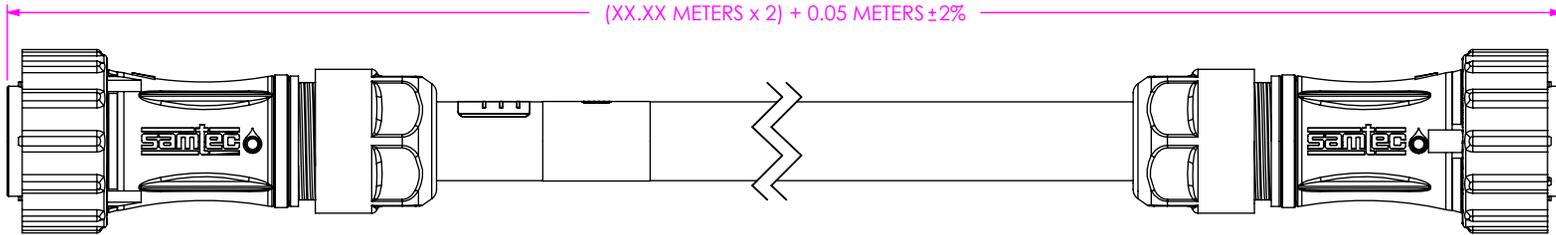
**IN-PROCESS 6**

WHILE MAKING SURE ALIGNMENT ARROWS LINE UP TO AID POLARIZATION BEAM ENGAGEMENT, INSERT SUB-ACXHB-22-X SUB-ASSEMBLY INTO ACCFS-22-P-X UNTIL SNAP LOCKS ENGAGE. PUSH ACCGC-22 & ACCG-22-1-2 UP AGAINST BACK OF ACCFS-22-P-X.



**IN-PROCESS 7**

THREAD ACCN-22-P ONTO ACCFS-22-P-X TO 10.00 IN LBS



**IN-PROCESS 8**

(-BC END OPTION ONLY)  
BUILD DOUBLE-ENDED INITIALLY FOR E-TEST, APPLY LABEL-ET & HDRL-11 TO BOTH ENDS, AND CUT CABLE IN HALF

**PROPRIETARY NOTE**

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SHEET SCALE: 1:1



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DESCRIPTION:  
ACCLIMATE CIRC. CABLE ASSEMBLY

DWG. NO.  
ACP-22-XX-X-XX.XX-X-XX-P-X

BY: CLAY W 9/6/2010 SHEET 7 OF 7