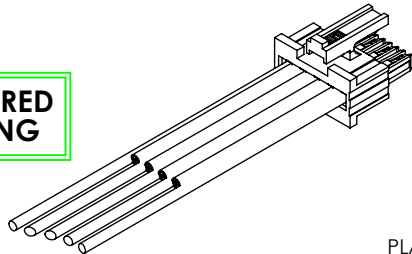


DO NOT SCALE FROM THIS PRINT

DESIGNED & DIMENSIONED IN MILLIMETERS [INCHES]

Pb THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

ACR-12-XX-X-XX.XX-X-XX-M-X



- LEAD STYLE**
- 01: 4 POS (1.0 TERM/SKT), 24 AWG
 - 02: 5 POS (1.0 TERM/SKT), 24 AWG
 - 03: 6 POS (0.5 TERM/SKT), 28 AWG
 - 04: 8 POS (0.5 TERM/SKT), 28 AWG
 - 05: 6 POS COMBO (2x1.0 TERM/SKT), 24 AWG (4x0.5 TERM/SKT), 28 AWG

- PLATING SPECIFICATION**
- G: 10µ" LIGHT GOLD IN CONTACT AREA
 - H: 30µ" HEAVY GOLD IN CONTACT AREA (SEE NOTE 10)

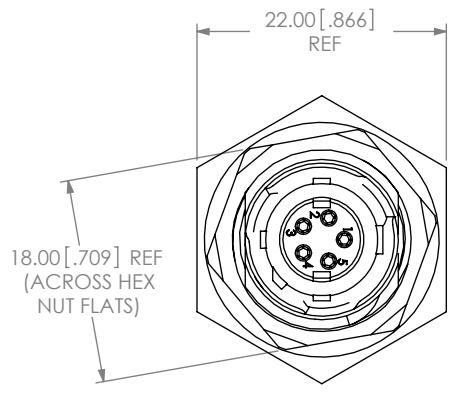
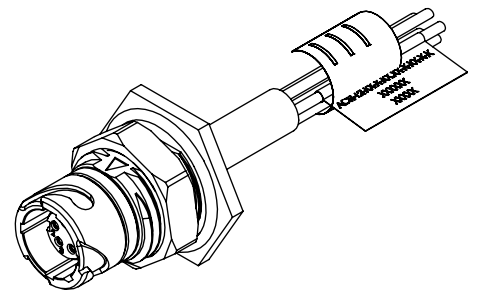
- KEYING FEATURE (SEE NOTE 4) (SEE SHT 5)**
- 1: ORANGE
 - 2: GREEN
 - 3: BLUE
 - 4: YELLOW

STYLE
-M: METAL

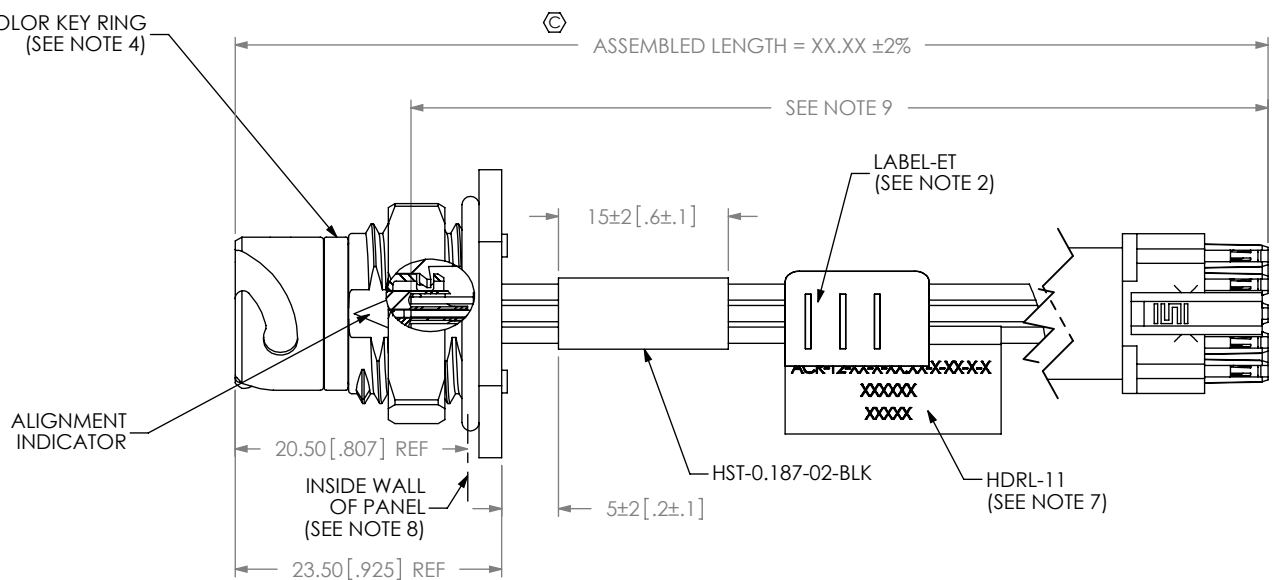
- END 2**
- BC: BLUNT CUT
 - S1: CONNECTOR (DETERMINED BY LEAD STYLE)

- END 1**
- T: TERMINAL
 - S: SOCKET

ASSEMBLED LENGTH
XX.XX (IN METERS)
(00.20 METER MIN TO 50.00 METER MAX)
(-01.00 IS CATALOG STANDARD LENGTH, FOR OTHER LENGTHS CONTACT SAMTEC)



COLOR KEY RING (SEE NOTE 4)



ALIGNMENT INDICATOR

FIG 1
ACR-12-02-X-XX.XX-S-S1-M-1 SHOWN

NOTES:

1. Ⓢ REPRESENTS A CRITICAL DIMENSION.
2. ASSEMBLY TO BE 100% HI-POT TESTED 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-ACR-12-M-X PRINT FOR DUST CAP.
7. PLACE HDRL-11 (LABEL) ON CABLE WHERE SHOWN. LABEL TO CONTAIN:
LINE 1 - PART NUMBER "ACR-12-XX-X-XX.XX-X-XX-M-X"
LINE 2 - SHOP ORDER NUMBER "XXXXXX"
LINE 3 - DATE CODE "XXXXX"
8. PANEL THICKNESS RANGE: 0.80[0.031] - 5.20[0.205]
9. FOR END 2 CABLE LENGTH REFERENCE END 2 OPTIONS ON SHEET 3.
10. END 2 CONNECTOR PLATING TO BE 10µ GOLD.
11. PARTS TO BE BUILT AND INSPECTED TO IPC-A-620 CLASS 2.
12. WHEN MOUNTING PRODUCT TO PANEL TORQUE ACPN-12-M TO 15IN-LBS.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS.
TOLERANCES ARE:
DECIMALS ANGLES
X.X: ±0.3 [.01] 2°
X.XX: ±0.13 [.005]
X.XXX: ±0.051 [.0020]

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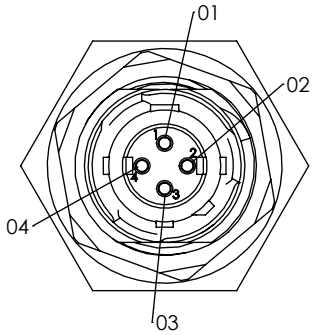
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail info@SAMTEC.com code 55322

MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 3:2
SHELL: ZINC ALLOY
INSULATOR: PBT, COLOR: BLACK
TERMINALS: BRASS
CONTACTS: BRASS/BeCu

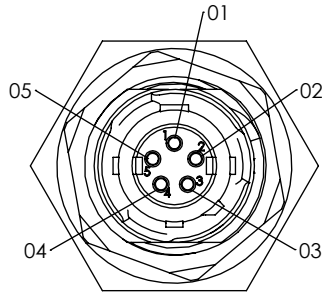
DESCRIPTION: M12 CABLE ASSEMBLY
DWG. NO. ACR-12-XX-X-XX.XX-X-XX-M-X
BY: D.SCHMELZ 09/17/2010 SHEET 1 OF 6

-T END OPTIONS

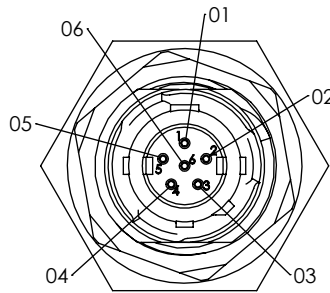
-01: 4 POS
Ø 1.0 TERMINALS



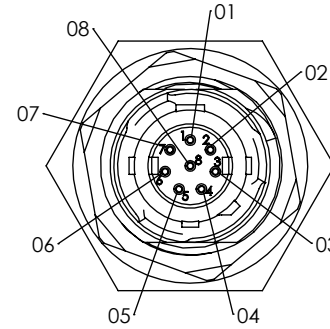
-02: 5 POS
Ø 1.0 TERMINALS



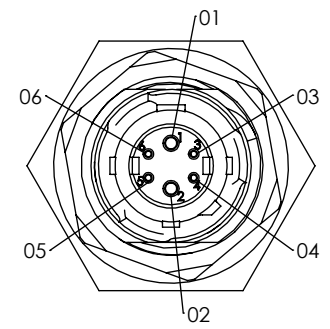
-03: 6 POS
Ø 0.5 TERMINALS



-04: 8 POS
Ø 0.5 TERMINALS

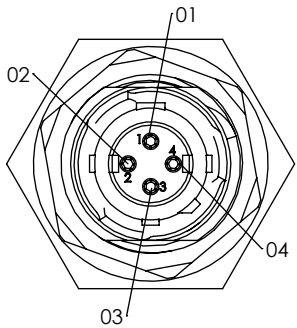


-05: 6 POS COMBO
2x Ø 1.0 TERMINALS
4x Ø 0.5 TERMINALS

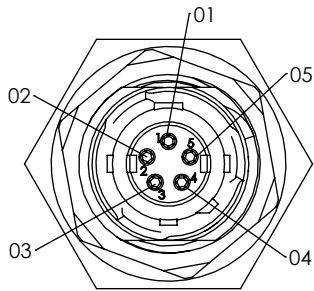


-S END OPTIONS

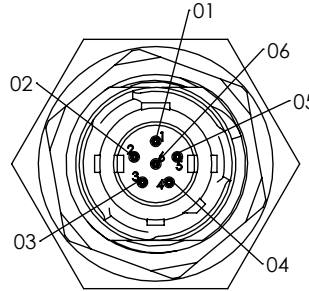
-01: 4 POS
Ø 1.0 SOCKETS



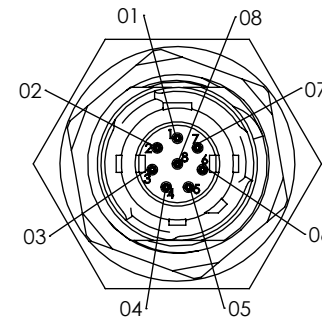
-02: 5 POS
Ø 1.0 SOCKETS



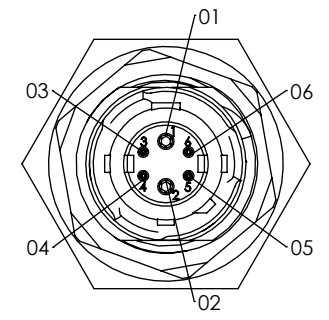
-03: 6 POS
Ø 0.5 SOCKETS



-04: 8 POS
Ø 0.5 SOCKETS



-05: 6 POS COMBO
2x Ø 1.0 SOCKETS
4x Ø 0.5 SOCKETS



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e-Mail info@SAMTEC.com code 55322

DESCRIPTION:
M12 CABLE ASSEMBLY

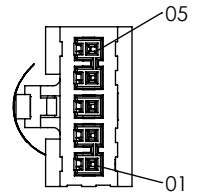
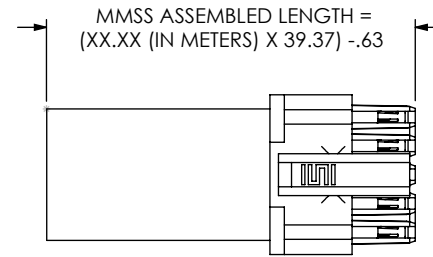
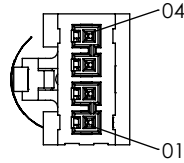
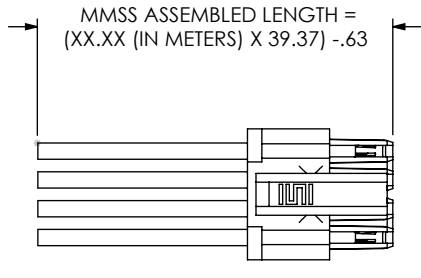
DWG. NO.
ACR-12-XX-X-XX.XX-X-XX-M-X

BY: D.SCHMELZ 09/17/2010 SHEET 2 OF 6

-01: 4 POS
MMSS-04-24-L-XX.XX-S-K

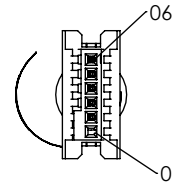
END 2 OPTIONS

-02: 5 POS
MMSS-05-24-L-XX.XX-S-K



-03: 6 POS
SFSS-06-28-G-XX.XX-SR

SFSS ASSEMBLED LENGTH =
(XX.XX (IN METERS) X 39.37) -.63

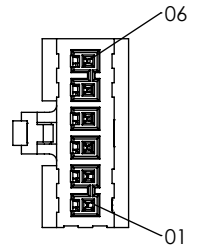
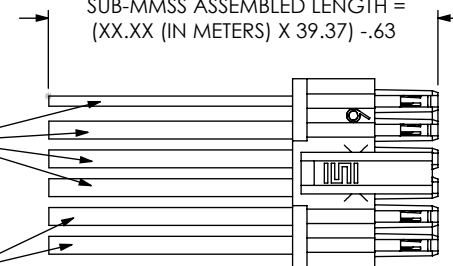


-05: 6 POS COMBO
SUB-MMSS-06-L-XX.XX-S-K

SUB-MMSS ASSEMBLED LENGTH =
(XX.XX (IN METERS) X 39.37) -.63

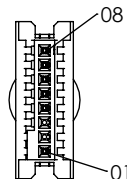
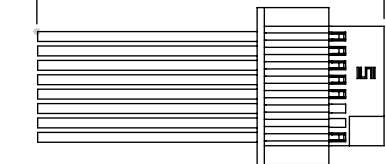
28 AWG
BLACK WIRES

24 AWG
RED WIRES
(POSITIONS 1 & 2)



-04: 8 POS
SFSS-08-28-G-XX.XX-SR

SFSS ASSEMBLED LENGTH =
(XX.XX (IN METERS) X 39.37) -.63



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DESCRIPTION:

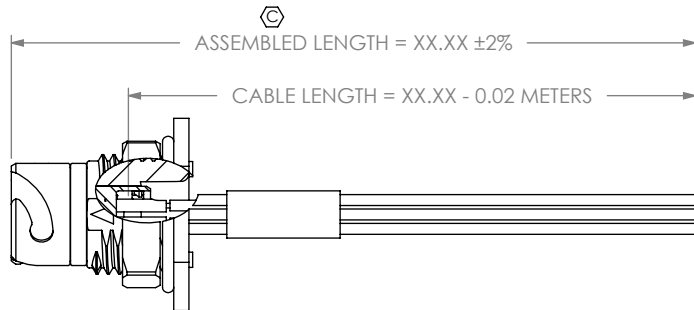
M12 CABLE ASSEMBLY

DWG. NO.

ACR-12-XX-X-XX.XX-X-XX-M-X

BY: D.SCHMELZ 09/17/2010 SHEET 3 OF 6

-BC END 2 OPTION
(BUILD DOUBLE-ENDED INITIALLY FOR E-TEST)
(SEE IN-PROCESS 6)



RECOMMENDED PANEL OPENING
(SEE NOTE 8)

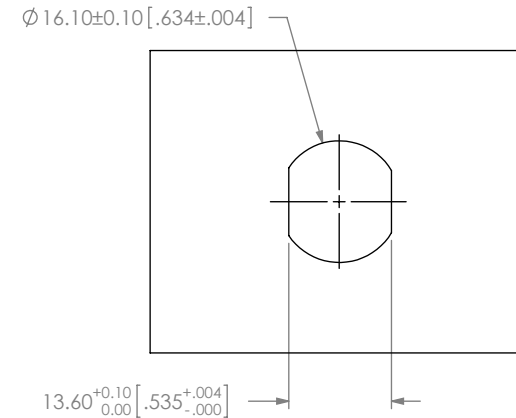


TABLE 2

-BC LEAD STYLES ONLY

POSITION	-01		-02		-03		-04		-05			
	COLOR	DWC-XX-XX-XXX	COLOR	DWC-XX-XX-XXX	COLOR	DWC-XX-XX-XXX	COLOR	DWC-XX-XX-XXX	COLOR	DWC-XX-XX-XXX		
01	BROWN	DWC-24-01-300	BROWN	DWC-24-01-300	BROWN	DWC-28H-01-300	BROWN	DWC-28H-01-300	BROWN	DWC-24-01-300		
02	RED	DWC-24-02-300	RED	DWC-24-02-300	RED	DWC-28H-02-300	RED	DWC-28H-02-300	RED	DWC-24-02-300		
03	ORANGE	DWC-24-03-300	ORANGE	DWC-24-03-300	ORANGE	DWC-28H-03-300	ORANGE	DWC-28H-03-300	ORANGE	DWC-28H-03-300		
04	YELLOW	DWC-24-04-300	YELLOW	DWC-24-04-300	YELLOW	DWC-28H-04-300	YELLOW	DWC-28H-04-300	YELLOW	DWC-28H-04-300		
05	NA		GREEN	DWC-24-05-300	GREEN	DWC-28H-05-300	GREEN	DWC-28H-05-300	GREEN	DWC-28H-05-300		
06			NA		DARK BLUE	DWC-28H-06-300	DARK BLUE	DWC-28H-06-300	DARK BLUE	DWC-28H-06-300		
07					NA		NA		VIOLET	DWC-28H-07-300	NA	
08							NA		GRAY	DWC-28H-08-300	NA	

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e-Mail info@SAMTEC.com code 55322

DESCRIPTION:

M12 CABLE ASSEMBLY

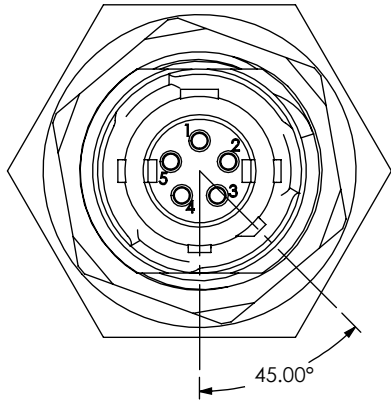
DWG. NO.

ACR-12-XX-X-XX.XX-X-XX-M-X

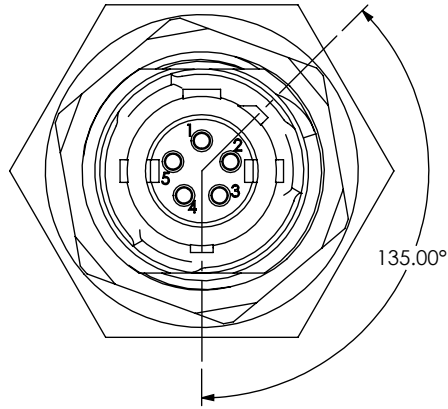
BY: D.SCHMELZ 09/17/2010 SHEET 4 OF 6

KEYING FEATURE
(SEE NOTE 4)

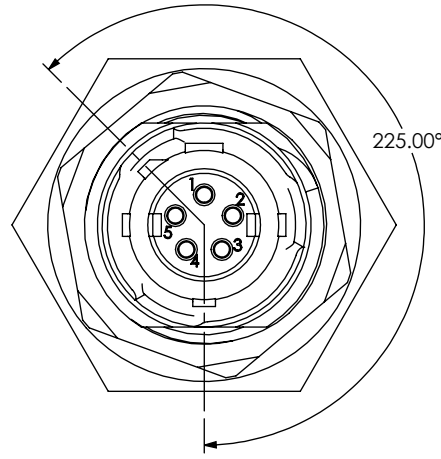
-1
ORANGE KEY RING



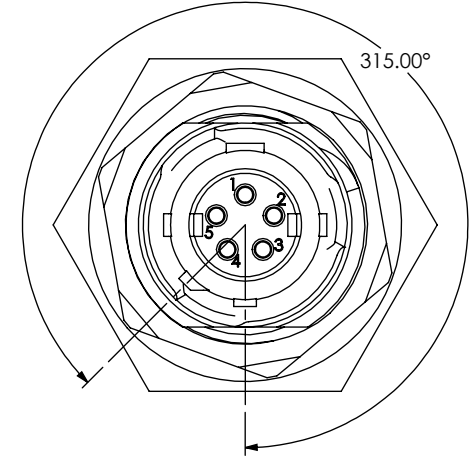
-2
GREEN KEY RING



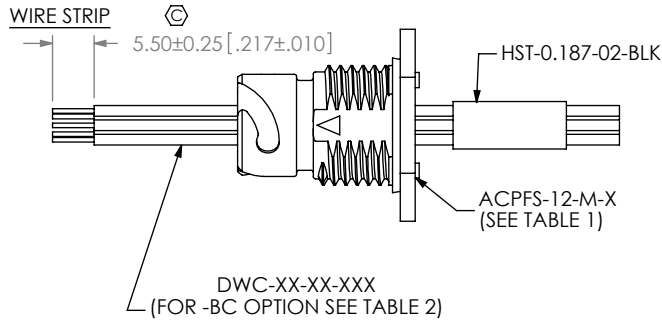
-3
BLUE KEY RING



-4
YELLOW KEY RING

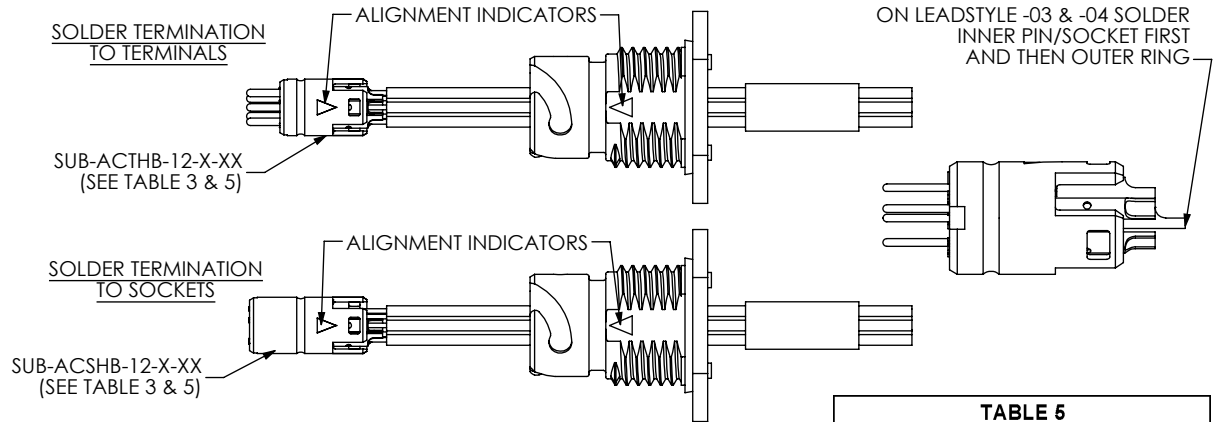


IN-PROCESS 1
FEED CABLES THROUGH HST-0.187-02-BLK & ACPFS-12-M-X
& STRIP CABLES TO DIMENSIONS SHOWN & TIN INNER CONDUCTORS



KEYING FEATURE	SHELL PART #
-1	ACPFS-12-M-1
-2	ACPFS-12-M-2
-3	ACPFS-12-M-3
-4	ACPFS-12-M-4

IN-PROCESS 2
TERMINATE WIRES TO TERMINALS/SOCKETS



LEAD STYLE	END1/END 2	SUB-ACXHB-12-X-XX
-01	-T	SUB-ACTHB-12-X-01
-02	-T	SUB-ACTHB-12-X-02
-03	-T	SUB-ACTHB-12-X-03
-04	-T	SUB-ACTHB-12-X-04
-05	-T	SUB-ACTHB-12-X-05
-01	-S	SUB-ACSHB-12-X-01
-02	-S	SUB-ACSHB-12-X-02
-03	-S	SUB-ACSHB-12-X-03
-04	-S	SUB-ACSHB-12-X-04
-05	-S	SUB-ACSHB-12-X-05

PLATING	SUB-ACXHB-12-X-XX
-G	SUB-ACXHB-12-G-XX
-H	SUB-ACXHB-12-H-XX

F:\DWG\MISC\MKTG\ACR-12-XX-X-XX.XX-X-XX-M-X-MKT.SLDDRW

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e-Mail: info@SAMTEC.com code 55322

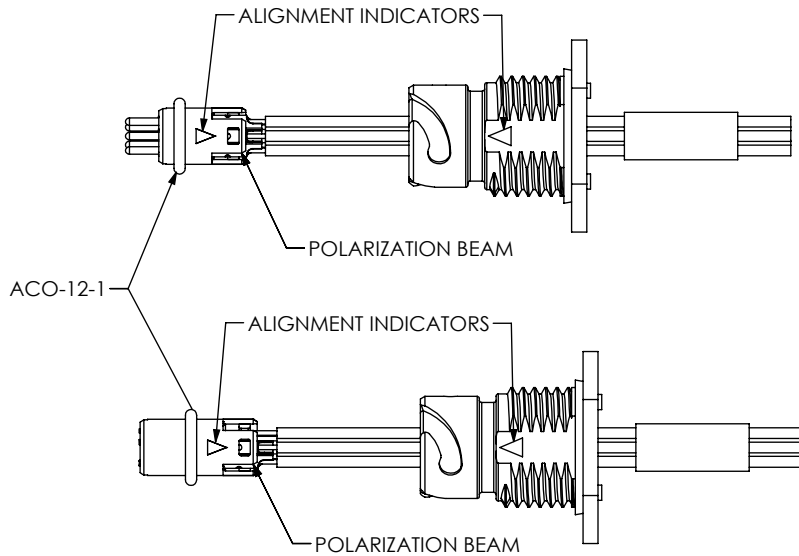
DESCRIPTION:
M12 CABLE ASSEMBLY

DWG. NO.
ACR-12-XX-X-XX.XX-X-XX-M-X

BY: D.SCHMELZ 09/17/2010 SHEET 5 OF 6

IN-PROCESS 3

PUSH ACO-12-1 O-RING ONTO SUB-ACXHB-12-X-XX.



IN-PROCESS 5

PRESS ACO-12-2 O-RING AROUND FLANGE OF ACPFS-12-M-X
 THREAD ACPN-12-M ONTO ACPFS-12-M-X
 STRETCH ACCR-12-X OVER ACPFS-12-M-X UNTIL IT SEATS IN GROOVE
 ACTIVATE HST-0.187-02-BLK USING HEAT GUN

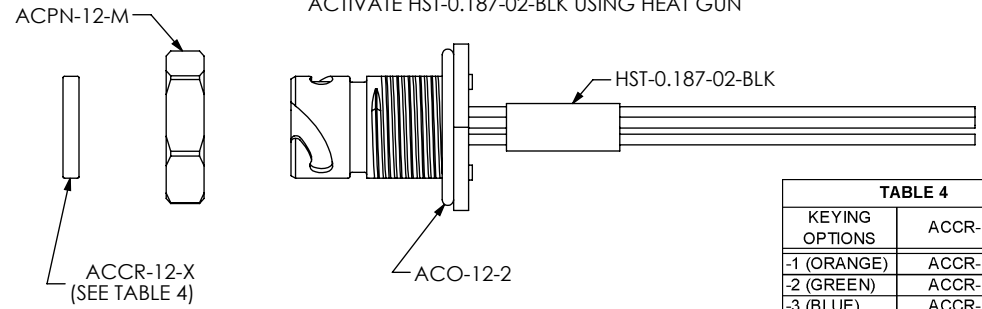
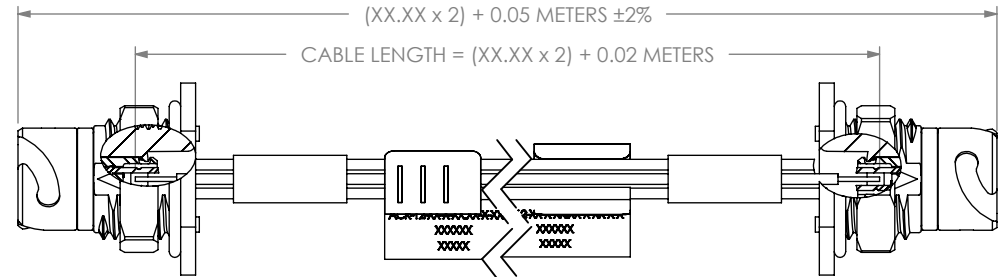


TABLE 4	
KEYING OPTIONS	ACCR-12-X
-1 (ORANGE)	ACCR-12-1
-2 (GREEN)	ACCR-12-2
-3 (BLUE)	ACCR-12-3
-4 (YELLOW)	ACCR-12-4

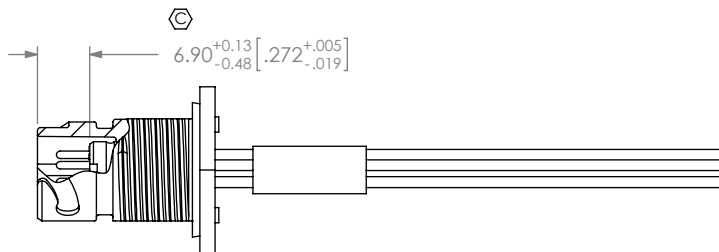
IN-PROCESS 6

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

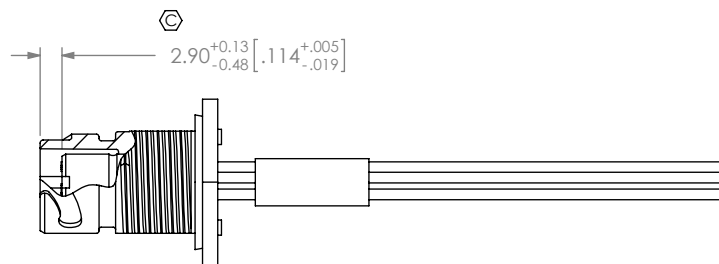


IN-PROCESS 4

WHILE MAKING SURE THE ALIGNMENT ARROWS LINE UP TO AID POLARIZATION BEAM ENGAGEMENT, INSERT SUB-ACXHB-12-X-XX UNTIL SNAP LOCKS ENGAGE.



SUB-ACTHB-12-X-XX



SUB-ACSHB-12-X-XX

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SHEET SCALE: 1:1



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 e-Mail info@SAMTEC.com code 55322

DESCRIPTION: M12 CABLE ASSEMBLY

DWG. NO. ACR-12-XX-X-XX.XX-X-XX-M-X

BY: D.SCHMELZ 09/17/2010 SHEET 6 OF 6