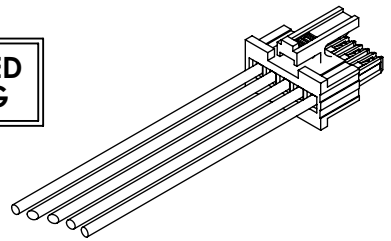


DESIGNED & DIMENSIONED
IN MILLIMETERS [INCHES]

DO NOT
SCALE FROM
THIS PRINT

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



ACR-12-XX-X-XX.XX-X-XX-P-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)

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)

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

STYLE
 -P: PLASTIC

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

END 1
 -T: TERMINAL
 -S: SOCKET

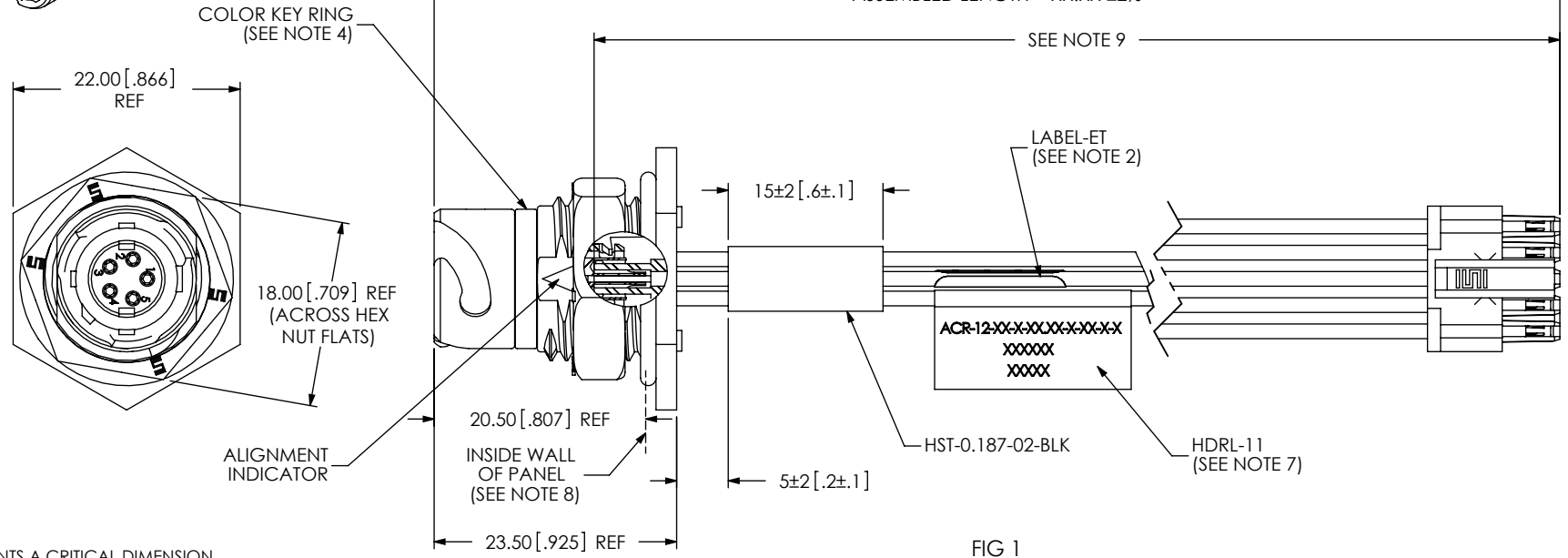
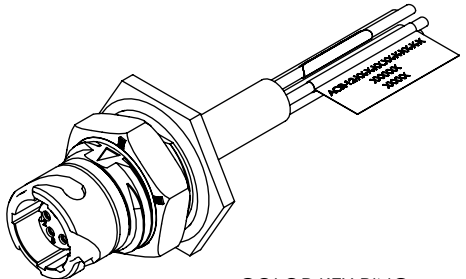



FIG 1
ACR-12-02-X-XX.XX-S-S1-P-1 SHOWN

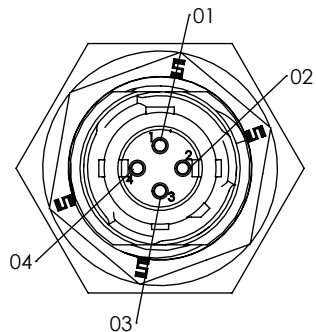
NOTES:

- ⊕ REPRESENTS A CRITICAL DIMENSION.
- ASSEMBLY TO BE 100% HI-POT TESTED AT 300V.
(1) LABEL-ET TO BE APPLIED AFTER FINAL ELECTRICAL TEST.
- ASSEMBLIES TO BE BULK PACKAGED.
- KEYING FEATURE DETERMINES COLOR OF KEY RING AND DUSTCAP LANYARD IF APPLICABLE.
- SIGNAL MAPPING IS 1 TO 1, 2 TO 2, 3 TO 3, ETC..
- REFER TO DCA-ACR-12-P-X PRINT FOR DUST CAP.
- PLACE HDRL-11 (LABEL) ON CABLE WHERE SHOWN. LABEL TO CONTAIN:
 LINE 1 - PART NUMBER "ACR-12-XX-X-XX.XX-X-XX-P-X"
 LINE 2 - SHOP ORDER NUMBER "XXXXXX"
 LINE 3 - DATE CODE "XXXXX"
- PANEL THICKNESS RANGE: 0.80[0.031] - 5.20[0.205]
- FOR END 2 CABLE LENGTH REFERENCE END 2 OPTIONS ON SHEET 3.
- END 2 CONNECTOR PLATING TO BE 10µ GOLD.
- PARTS TO BE BUILT AND INSPECTED TO IPC-A-620 CLASS 2.
- WHEN MOUNTING PRODUCT TO PANEL TORQUE ACPN-12-P TO 15IN-LBS.

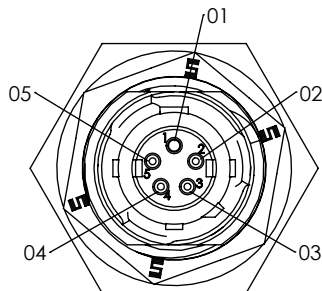
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES ARE: DECIMALS ANGLES X.X: ±0.3 [.01] 2° X.XX: ±0.13 [.005] X.XXX: ±0.051 [.0020]	PROPRIETARY NOTE THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO SAMTEC, INC. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF SAMTEC, INC.	 520 PARK EAST BLVD., NEW ALBANY, IN 47150 PHONE: 812-944-6733 FAX: 812-948-5047 e-Mail: info@SAMTEC.com code 53322
MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 2:1 SHELL: NYLON INSULATOR: PBT, COLOR: BLACK TERMINALS: BRASS CONTACTS: BRASS/BeCu	DESCRIPTION: M12 CABLE ASSEMBLY DWG. NO. ACR-12-XX-X-XX.XX-X-XX-P-X BY: D.SCHMELZ 09/20/2010 SHEET 1 OF 6	

-T END OPTIONS

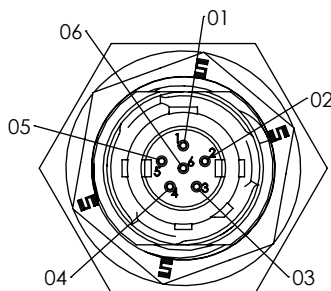
-01: 4 POS
Ø 1.0 TERMINALS



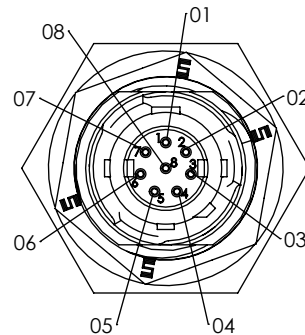
-02: 5 POS
Ø 1.0 TERMINALS



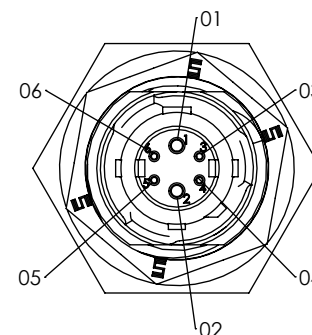
-03: 6 POS
Ø 0.5 TERMINALS



-04: 8 POS
Ø 0.5 TERMINALS

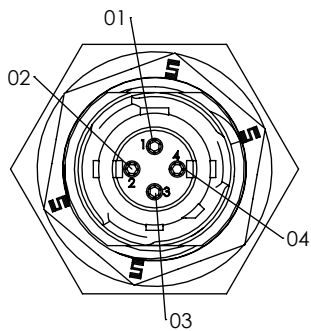


-05: 6 POS COMBO
2x Ø 1.0 TERMINALS
4x Ø 0.5 TERMINALS

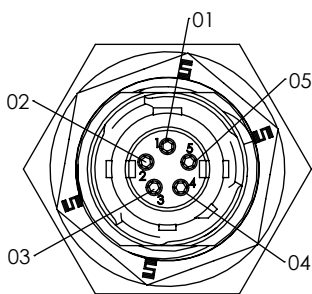


-S END OPTIONS

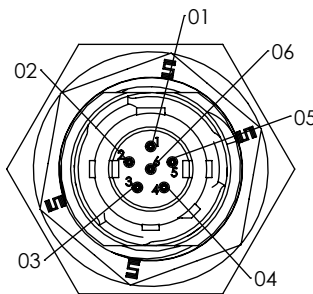
-01: 4 POS
Ø 1.0 SOCKETS



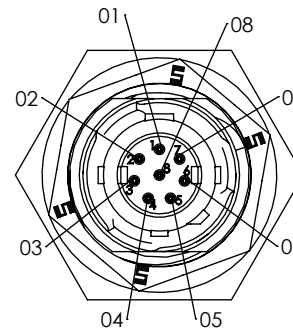
-02: 5 POS
Ø 1.0 SOCKETS



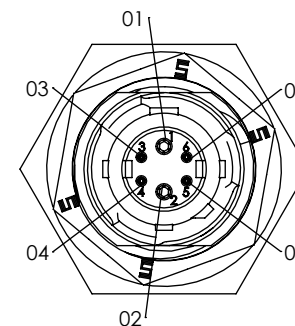
-03: 6 POS
Ø 0.5 SOCKETS



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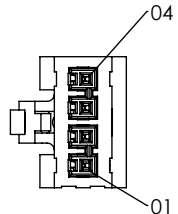
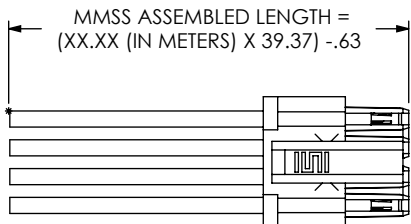
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DWG. NO. ACR-12-XX-X-XX.XX-X-XX-P-X

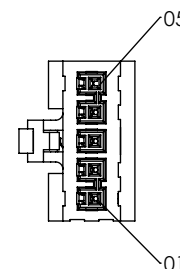
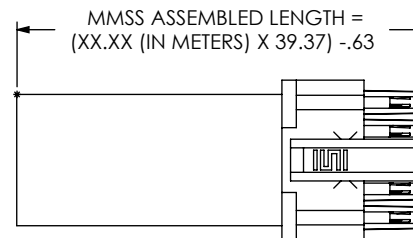
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END 2 OPTIONS

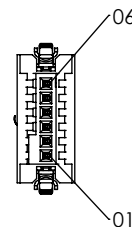
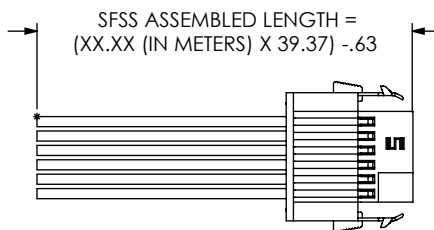
-01: 4 POS
MMSS-04-24-L-XX.XX-S-K



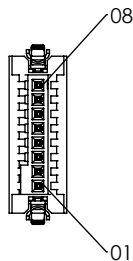
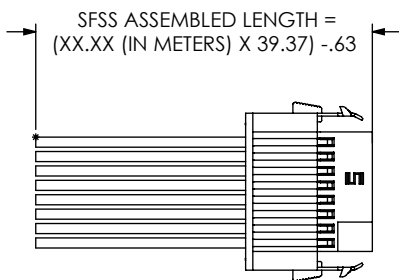
-02: 5 POS
MMSS-05-24-L-XX.XX-S-K



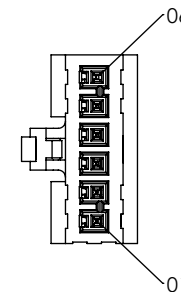
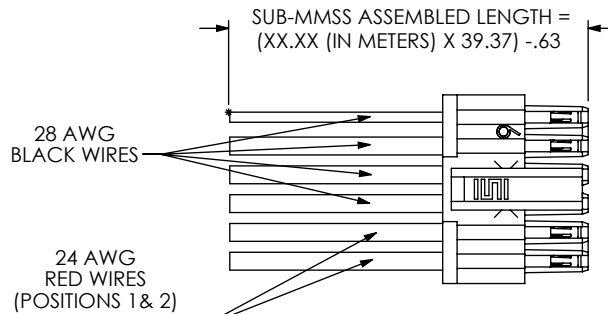
-03: 6 POS
SFSS-06-28-G-XX.XX-SR



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



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



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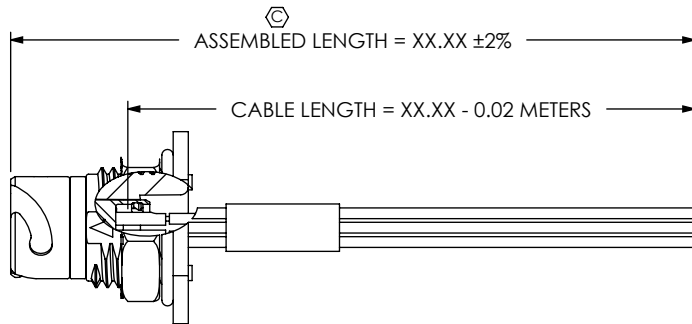
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e-Mail info@SAMTEC.com code 55322

DESCRIPTION:
M12 CABLE ASSEMBLY

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

BY: D.SCHMELZ 09/20/2010 SHEET 3 OF 6

-BC END 2 OPTION
 (SEE TABLE 2 FOR DWC CALLOUTS / SIGNAL MAPPING)
 (BUILD DOUBLE-ENDED INITIALLY FOR E-TEST)
 (SEE IN-PROCESS 6)



RECOMMENDED PANEL OPENING
 (SEE NOTE 8)

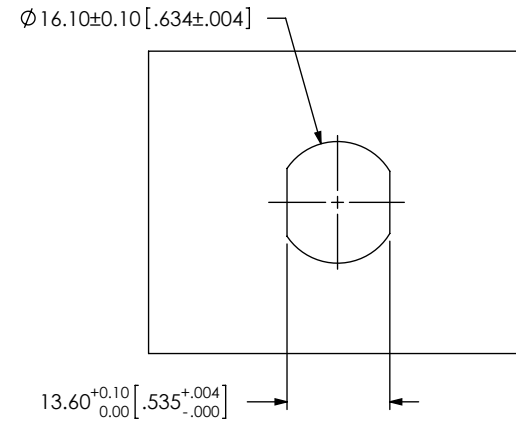


TABLE 2

-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		VIOLET		DWC-28H-07-300	NA
08			GRAY				DWC-28H-08-300			

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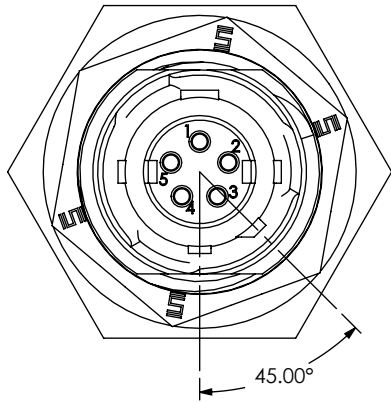
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 M12 CABLE ASSEMBLY

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

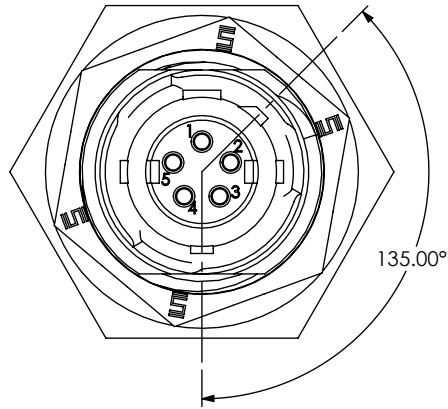
BY: D.SCHMELZ 09/20/2010 SHEET 4 OF 6

KEYING FEATURE
(SEE NOTE 4)

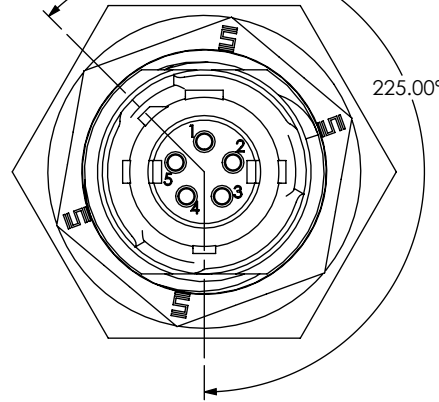
-1
ORANGE KEY RING



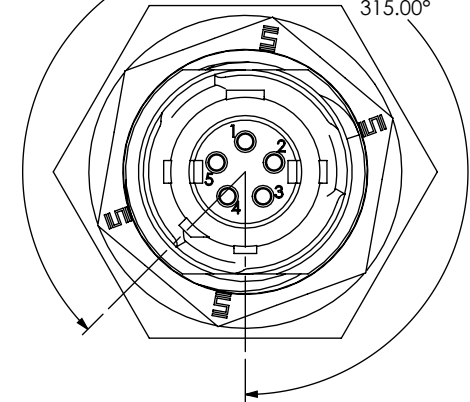
-2
GREEN KEY RING



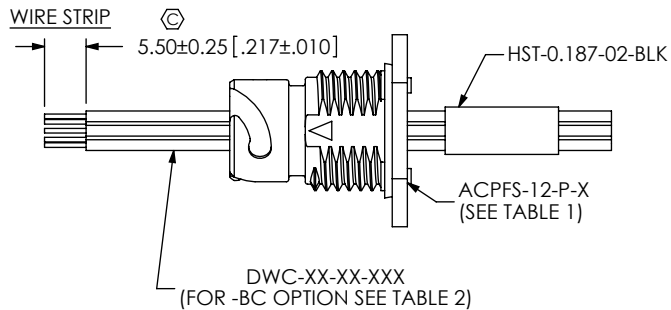
-3
BLUE KEY RING



-4
YELLOW KEY RING



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



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

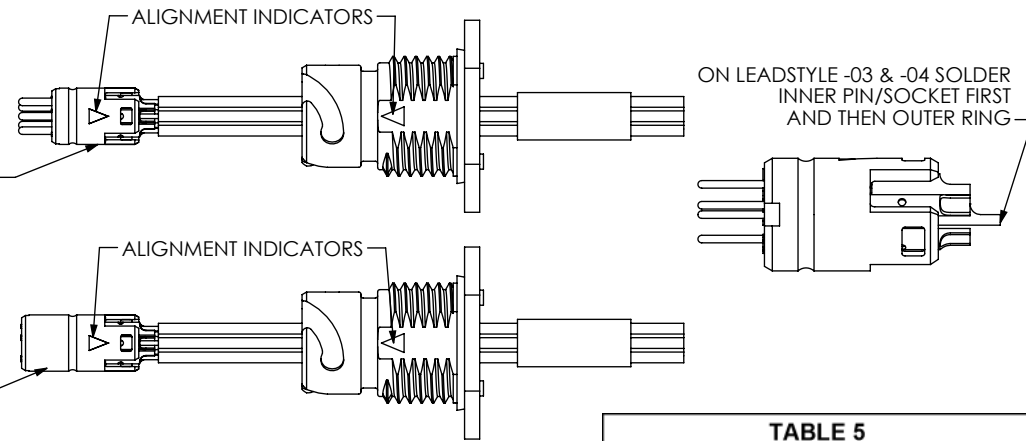
IN-PROCESS 2
TERMINATE WIRES TO TERMINALS/SOCKETS

SOLDER TERMINATION TO TERMINALS

SUB-ACXHB-12-X-XX
(SEE TABLE 3 & 5)

SOLDER TERMINATION TO SOCKETS

SUB-ACSHB-12-X-XX
(SEE TABLE 3 & 5)



LEAD STYLE	END1/END 2	SUB-ACXHB-12-X-XX
-01	-T	SUB-ACXHB-12-X-01
-02	-T	SUB-ACXHB-12-X-02
-03	-T	SUB-ACXHB-12-X-03
-04	-T	SUB-ACXHB-12-X-04
-05	-T	SUB-ACXHB-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-P-X-MKT.SLDDRW

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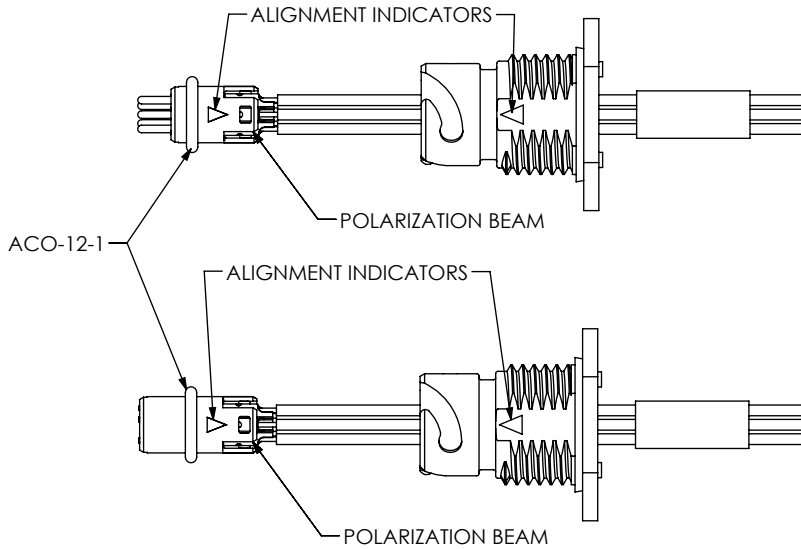
520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail info@SAMTEC.com code 55322

DESCRIPTION:
M12 CABLE ASSEMBLY

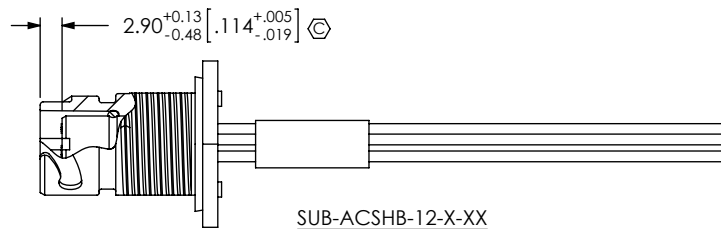
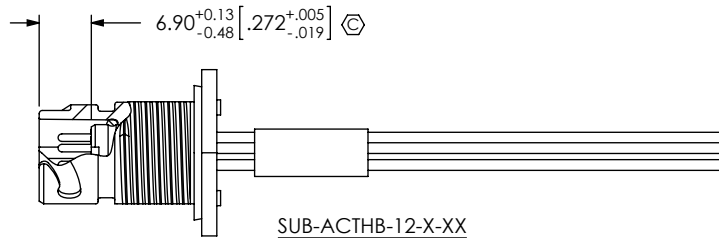
DWG. NO.
ACR-12-XX-X-XX.XX-X-XX-P-X

BY: D.SCHMELZ 09/20/2010 SHEET 5 OF 6

IN-PROCESS 3
PUSH ACO-12-1 O-RING ONTO SUB-ACXHB-12-X-XX.



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.



IN-PROCESS 5

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

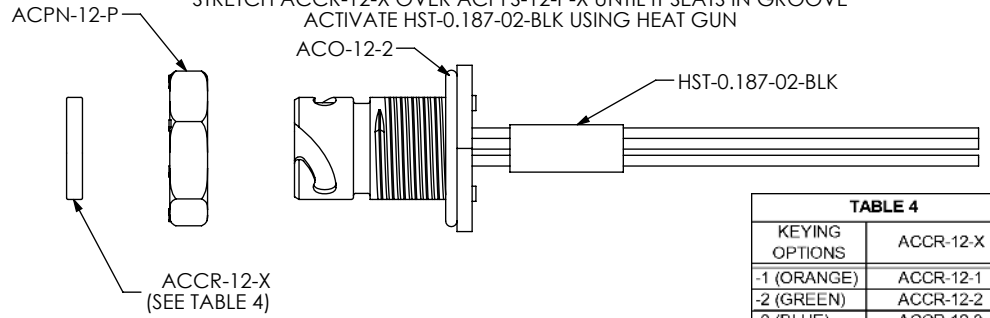
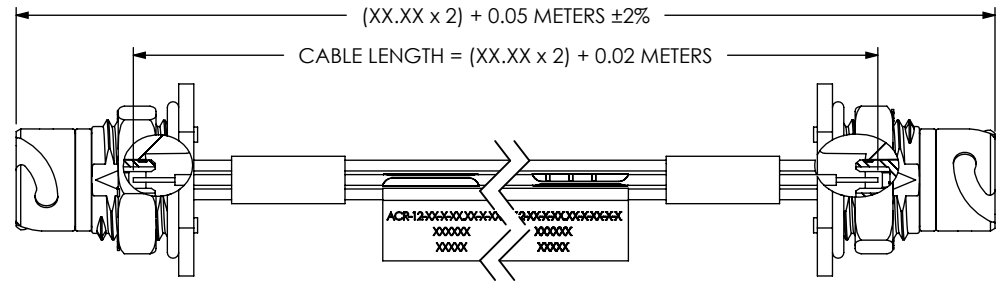


TABLE 4	
KEYING OPTIONS	ACCR-12-X
-1 (ORANGE)	ACCR-12-1
-2 (GREEN)	ACCR-12-2
-3 (BLUE)	ACCR-12-3
-4 (YELLOW)	ACCR-12-4

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



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

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