PROPRIETARY NOTICE

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EAR CONTROLLED PRODUCT

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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	N/R	INITIAL RELEASE	06/02/11	CJP
	N/R1	ADDED INFO TO PART NUMBER STRUCTURE	02/01/12	CJP
	N/R2	UPDATED MATERIALS AND FINISHES GCJ	9/10/12	RF
	N/R3	CORRECT FINISH ON JAM NUT (NEVER Ni PLATED JAM NUTS) DWG UPDATE @ NR2 IN ERROR GCJ	4/1/16	MD
	A	SEE DCO–02459 ES	8/3/2020	GTM
	B	SEE DCO–02775 ES	11/9/2020	MD
	C	SEE DCO–03924 VQ	5/13/22	KK

NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL AND FINISH:
   GROMMET: RESILIENT FLUOROSILICONE/SILICONE BLEND
   INTERFACIAL SEAL (PIN INSERT ONLY): RESILIENT FLOUROSILICONE/ SILICONE BLEND
   RETAINING CLIPS: BeCu ALLOY
   JAM NUT: TITANIUM ALLOY
   SHELL: TITANIUM ALLOY, CONDUCTIVE NICKEL PLATE IN ACCORDANCE WITH AMS–QQ–N–290, CLASS 2. EXTERIOR PLATING SHALL BE .00006 MIN THICK WHEN MEASURED ON SMOOTH/FLAT PORTIONS OF THE CONNECTOR AND .00004 MIN THICK ON EXTERIOR CORNERS. .00004 MIN THICK WHEN MEASURED ON SMOOTH/FLAT PORTION OF INTERNAL SURFACES. INTERNAL CORNERS PLATING SHALL BE CONTINUOUS UNDER A MAXIMUM OF 10X MAGNIFICATION WITH NO MIN THICKNESS REQUIREMENT.
   NICKEL PLATING ON TITANIUM CONTENT: PHOSPHORUS OF UP TO 5% BY WEIGHT OF PLATING PER STANDARDLESS SCANNING ELECTRON MICROSCOPE/ENERGY DISPERSIVE X–RAY SPECTROSCOPY (SEM/EDS).
2. THE CONNECTOR DESCRIBED ON THIS DRAWING MEETS APPLICABLE MECHANICAL AND ELECTRICAL CHARACTERISTICS OF MIL–DTL–38999 SERIES III, MIL–DTL–38999/24 AND MIL–STD–1560.
3. THE FOLLOWING INFORMATION SHALL BE MARKED ON THE CONNECTOR IN ACCORDANCE WITH MIL–DTL–38999:
   A. HIRELCO'S PART NUMBER
   B. "HIRELCO" OR "HRC"
   C. HIRELCO'S CAGE NUMBER "34222"
   D. CUSTOMER PART NUMBER (AS REQUIRED)
   E. DATE CODE
4. CONNECTORS EXCEED SHELL–TO–SHELL CONTINUITY REQUIREMENTS IAW MIL–DTL–38999 SERIES III, SECTION 3.29 EXCEPT AS NOTED BELOW:
   VOLTAGE DROP: 2.5 MILLIVOLTS MAX.

EXPLANATION OF PART NUMBER

86010B–**–** * *–F08

- F08 = MODIFICATION DESIGNATOR FOR HIGH IMPACT, Ti SHELL, CONDUCTIVE NICKEL PLATE.
- POLARIZATION: PER MIL–DTL–38999, SERIES III ("N" REQUIRED FOR NORMAL POLARIZATION)
- CONTACT STYLE DESIGNATOR: P = PIN CONTACT INSERT; S = SOCKET CONTACT INSERT
- INSERT ARRANGEMENT PER MIL–STD–1560 (SIZE 9–2 NON MIL SPEC AVAILABLE) *OMIT LEADING ZEROES AS SHOWN IN MIL–STD–1560
- SHELL SIZE DESIGNATOR, SEE TABLE II (SHEET 2)
- CONNECTOR CLASS (NON MIL–STD CLASS)
- BASIC NUMBER

ENVELOPE

NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:
FRACTIONS ± ~ DECIMALS .XX ± ~ .XXX ± ~ ANGLES ± ~

MATERIAL (1)

FINISH (1)

DO NOT SCALE DRAWING

APPROVALS	DATE
DRAWN C. PHILLIPS	06/2/11
CHECKED R. FIGUEROA	06/2/11
DESIGN C. PHILLIPS	06/13/11

HIREL CONNECTORS INC
760 W WHARTON DRIVE
CLAREMONT CA 91711

CONNECTOR, RCPT, JAM NUT ENVIRONMENTAL

SIZE	CODE IDENT NO.	DRAWING NO.
B	34222	86010B–**–****–F08

SCALE	~	29171	SHEET 1 OF 2

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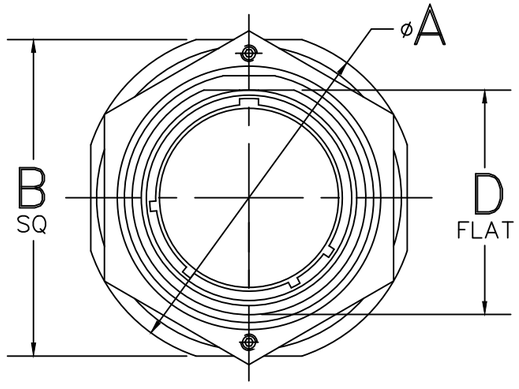
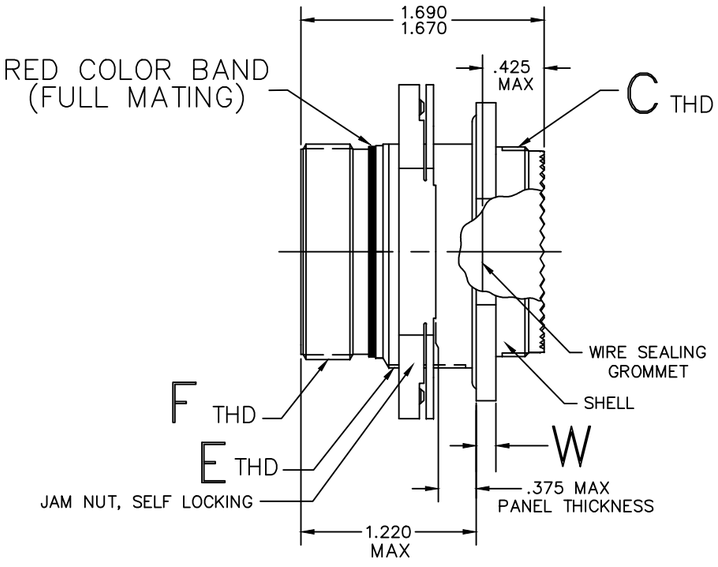
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED

SEE SHT 1 FOR REVISION

SHELL SIZE	SHELL CODE	øA ±.012	B ±.016	C THREAD	D ±.005 THD FLAT	E THREAD	F THD TRIPLE START CLASS 2A	W ±.016	O-RING MS9068
9	A	1.188	1.062	M12x1.0-6g 0.100R	.650	M17x1.0-6g 0.100R	.625-.1P-.3L-TS	.105	-019
11	B	1.374	1.251	M15x1.0-6g 0.100R	.750	M20x1.0-6g 0.100R	.750-.1P-.3L-TS		-022
13	C	1.500	1.374	M18x1.0-6g 0.100R	.937	M25x1.0-6g 0.100R	.875-.1P-.3L-TS		-024
15	D	1.625	1.500	M22x1.0-6g 0.100R	1.062	M28x1.0-6g 0.100R	1.000-.1P-.3L-TS		-026
17	E	1.751	1.625	M25x1.0-6g 0.100R	1.187	M32x1.0-6g 0.100R	1.188-.1P-.3L-TS		-028
19	F	1.937	1.811	M28x1.0-6g 0.100R	1.311	M35x1.0-6g 0.100R	1.250-.1P-.3L-TS	.137	-128
21	G	2.062	1.937	M31x1.0-6g 0.100R	1.437	M38x1.0-6g 0.100R	1.375-.1P-.3L-TS		-130
23	H	2.188	2.062	M34x1.0-6g 0.100R	1.561	M41x1.0-6g 0.100R	1.500-.1P-.3L-TS		-132
25	J	2.310	2.190	M37x1.0-6g 0.100R	1.686	M44x1.0-6g 0.100R	1.625-.1P-.3L-TS		-134





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ENVELOPE

SEE SHT 1 OF 2 FOR NOTES

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MATERIAL (1)

FINISH (1)

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HiRel CONNECTORS INC
760 W WHARTON DRIVE
CLAREMONT CA 91711

CONNECTOR, RCPT, JAM NUT ENVIRONMENTAL

SIZE	CODE IDENT NO.	DRAWING NO.
B	34222	86010B-**-****-F08

SCALE ~	29172	SHEET 2 OF 2

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