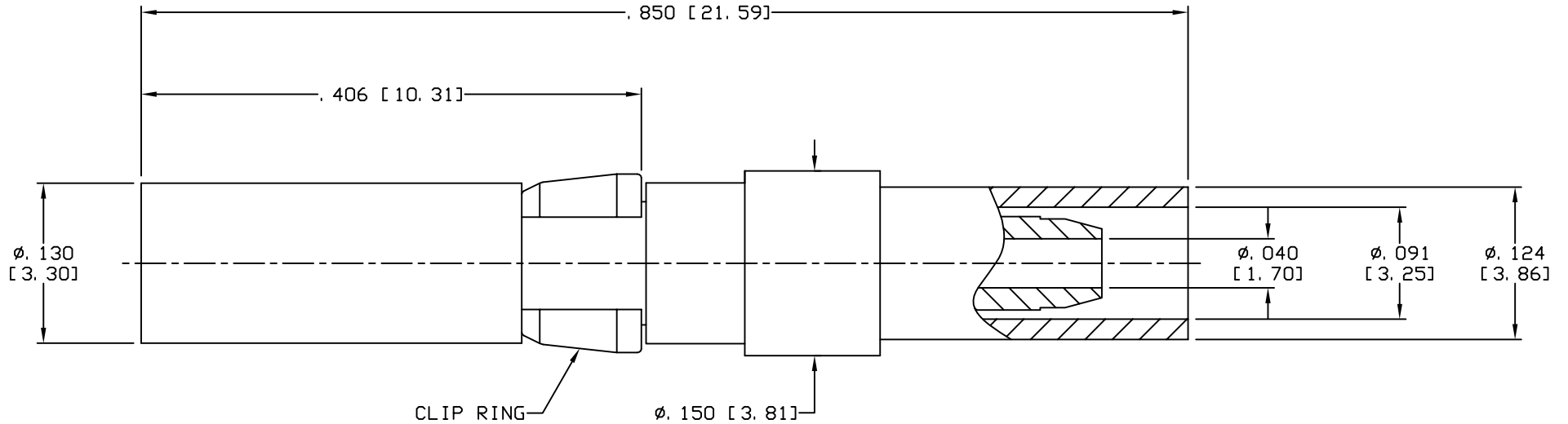


CAD DRAWING - NO MANUAL REVISIONS



NOTES:

1. DESIGN AND INTERFACE PER IDS-56A.
2. ACCOMMODATES RG-178 OR EQUIVALENT CABLES.
3. FOR USE IN BENDIX LRM OR SIZE 12 D-SUB HOUSINGS.
4. CRIMP USING .105 HEX DIE (M22520/5-03).
5. "J" PLATING TESTED TO 20 GAMMA MAX.
6. CONTACT SHIPPED LOOSE.

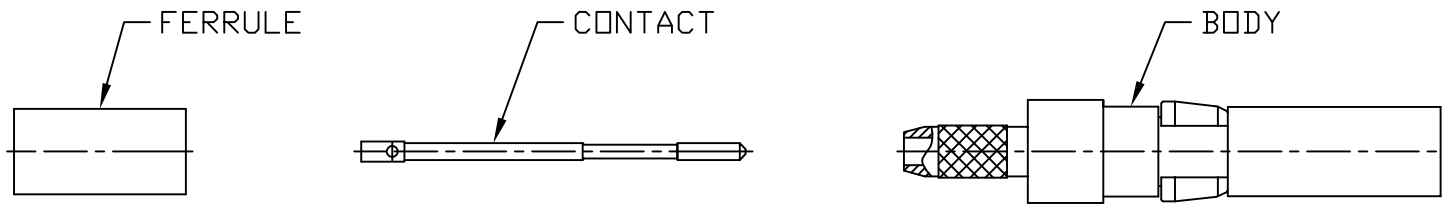
				<p><b>PALCO CONNECTOR</b></p> <p>22 GREAT HILL RD., NAUGATUCK, CT 06770</p> <p>UNLESS OTHERWISE SPECIFIED, PALCO WORKMANSHIP STANDARDS APPLY</p> <p>TOLERANCES ON: DECIMALS: XX ± .01 .XXX ± .005 ANGLES ±1/2° 32√</p> <p>DIMENSIONS IN INCHES OR (METRIC) DO NOT SCALE PRINTS</p> <p>CATALOG ITEM</p>	DRAWN JEM	CHECKED JEM	ENGINEER JEM	APPROVED JEM	FSCM 58167
C	PER ECN 11736	07/22/13	JEM		DESCRIPTION SIZE 12 PKZ RECEPTACLE, CRIMP TYPE	DATE	DRAWING NO.	PLATING OPT.	
B	PER ECN 11652	04/22/13	JEM			03/28/13	56-1902-0400	J	
A	PER ECN 11631	03/28/13	JEM						
REV.	DESCRIPTION	DATE	APPR.						

CABLE ASSEMBLY PROCEDURE	
P/N	56-1902-0400
PAGE 1 OF 1	DATE: 03/28/13
DRAWN: JEM	APPROVED: HN
FOR USE WITH RG-178 CABLE	

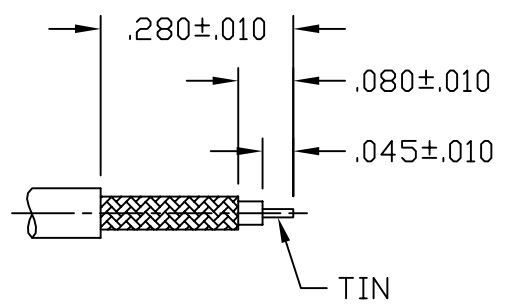
**PALCO**  
**CONNECTOR**

22 GREAT HILL ROAD, NAUGATUCK, CT. 06770  
PHONE: (203) 729-9090 FAX: (203) 723-1794

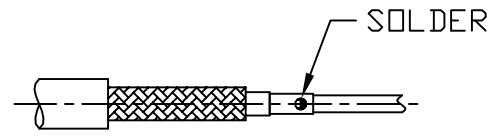
REV	DESCRIPTION	DATE	APPR
A	PER ECN 11631	03/28/13	JEM
B	PER ECN 11652	04/22/13	JEM
C	PER ECN 11736	07/22/13	JEM



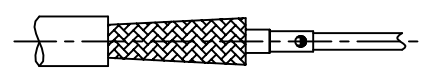
STEP 1  
TRIM CABLE TO DIMENSIONS SHOWN.  
TIN CENTER CONDUCTOR.



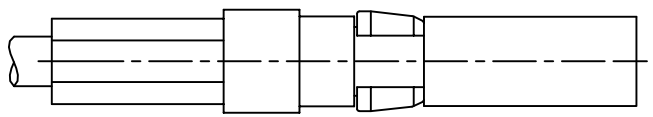
STEP 2  
SOLDER CONTACT ONTO CABLE  
AS SHOWN.



STEP 3  
SLIDE FERRULE OVER CABLE. FLARE  
CABLE BY ROTATING DIELECTRIC.



STEP 4  
INSERT CABLE INTO BODY UNTIL CABLE  
BOTTOMS. SLIDE FERRULE UP AGAINST  
BODY. CRIMP FERRULE USING .105 HEX  
DIE (M22520/5-03).



4

3

2

1

SPECIFICATIONS:

1.) MATERIALS:  
 INSERTS: VALOX, TYPE GPT-30F, PER MIL-M-24519.  
 SHELLS: COLD ROLLED STEEL, PER ASTM A568 AND ASTM A620.

2.) FINISHES AND COLOR:  
 INSERT: BLACK.  
 SHELLS: RoHS COMPLIANT, HIGH RESISTANCE CLEAR CHROMATE OVER ZINC, PER ASTM B633, CLASS FE/ZN12 (.000500 MIN.), SERVICE CONDITION SC3, TYPE III.

3.) ELECTRICAL PROPERTIES:  
 DIELECTRIC STRENGTH:  
 500 TO 1,000 VOLTS RMS AT SEA LEVEL;  
 200 TO 325 VOLTS RMS AT 70,000 FEET.  
 INSULATION RESISTANCE: 1 MEGOHM MINIMUM.

4.) MECHANICAL PROPERTIES:  
 OPERATING TEMPERATURE: -67° F TO +257° F ( -55° C TO +125° C ).  
 SHOCK RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.  
 VIBRATION RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.

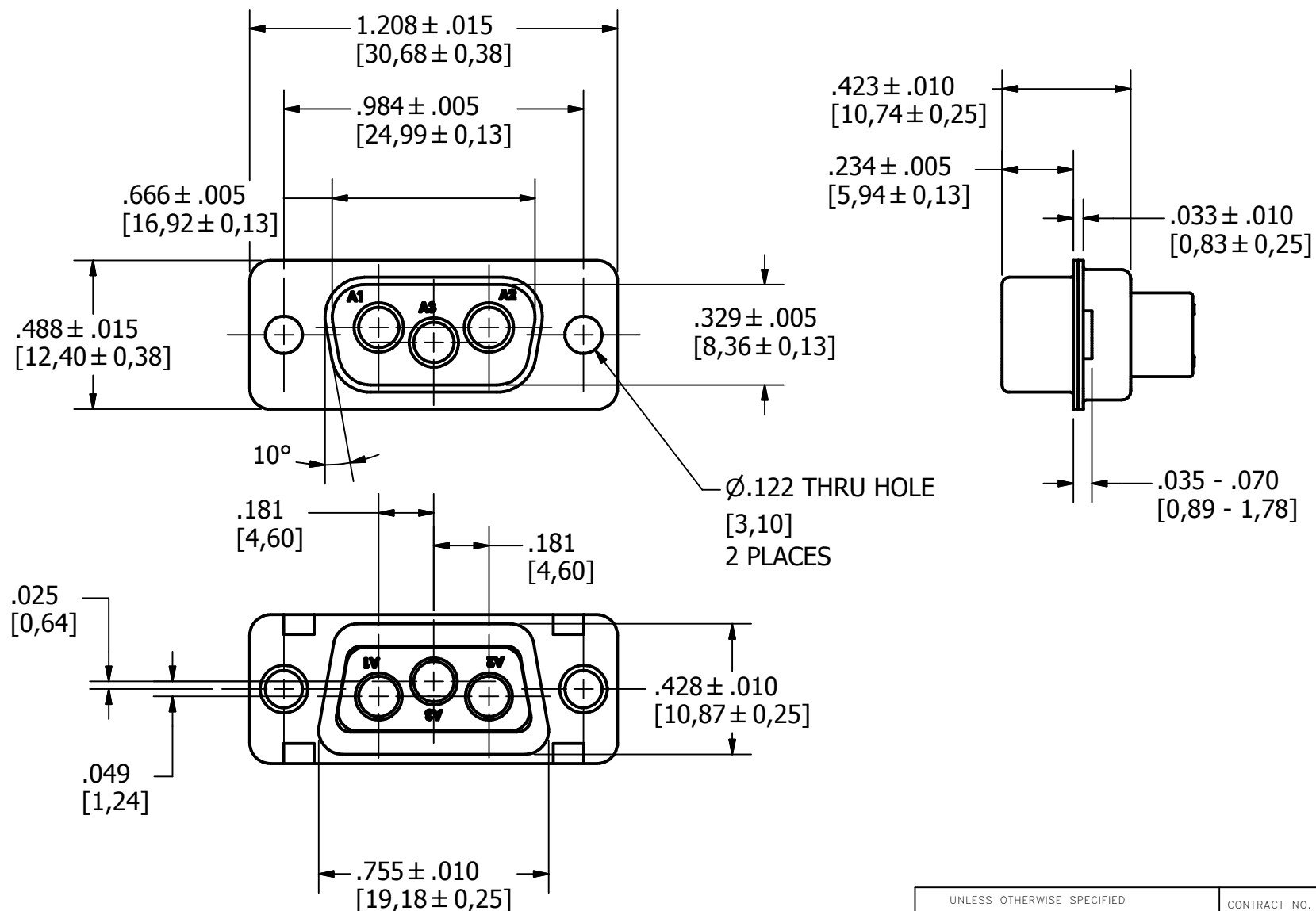
5.) DIMENSIONS ARE FOR REFERENCE ONLY, UNLESS OTHERWISE SPECIFIED.

6.) CONNECTOR MEETS REQUIREMENTS OF MIL-C-24308, LATEST REVISION.

7.) ABOVE REQUIREMENTS DO NOT INCLUDE PDM AND PKZ CONTACTS, PLEASE SEE INDIVIDUAL SPECIFICATION SHEETS.

8.) METRIC DIMENSIONS ARE SHOWN FOR REFERENCE, CONNECTORS ARE DESIGNED IN INCHES.

REV	DESCRIPTION	DATE	APPROVAL
A	ECN#11740 RELEASED FOR PRODUCTION	7/26/2013	



UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 TOLERANCES ARE:  
 FRACTIONS DECIMALS ANGLES  
 $\pm 1/64$  .XX ± .01  $\pm 1/2^\circ$   
 .XXX ± .003

THE INFORMATION DISCLOSED IN  
 THIS DOCUMENT IS CONFIDENTIAL  
 AND PROPRIETARY TO PHOENIX CO.  
 INC. AND MAY NOT BE USED FOR  
 MANUFACTURE OR ANY OTHER  
 PURPOSE WITHOUT THE WRITTEN  
 CONSENT OF MIL-CON INC.

CONTRACT NO.	
APPROVALS	DATE
DRAWN R.M. Bradley	4/25/2013
CHECKED	
ISSUED	

The PHOENIX Company of Chicago™

**HD, D-SUB CONNECTOR, SIZE 12  
 PTRP3W35, PLUG, CLRCROM / ZINC**

SIZE B	FSCM NO. 60563	DWG. NO. PTRP3W35	REV. A
SCALE 2 X1		SHEET 1 OF 1	

4

3

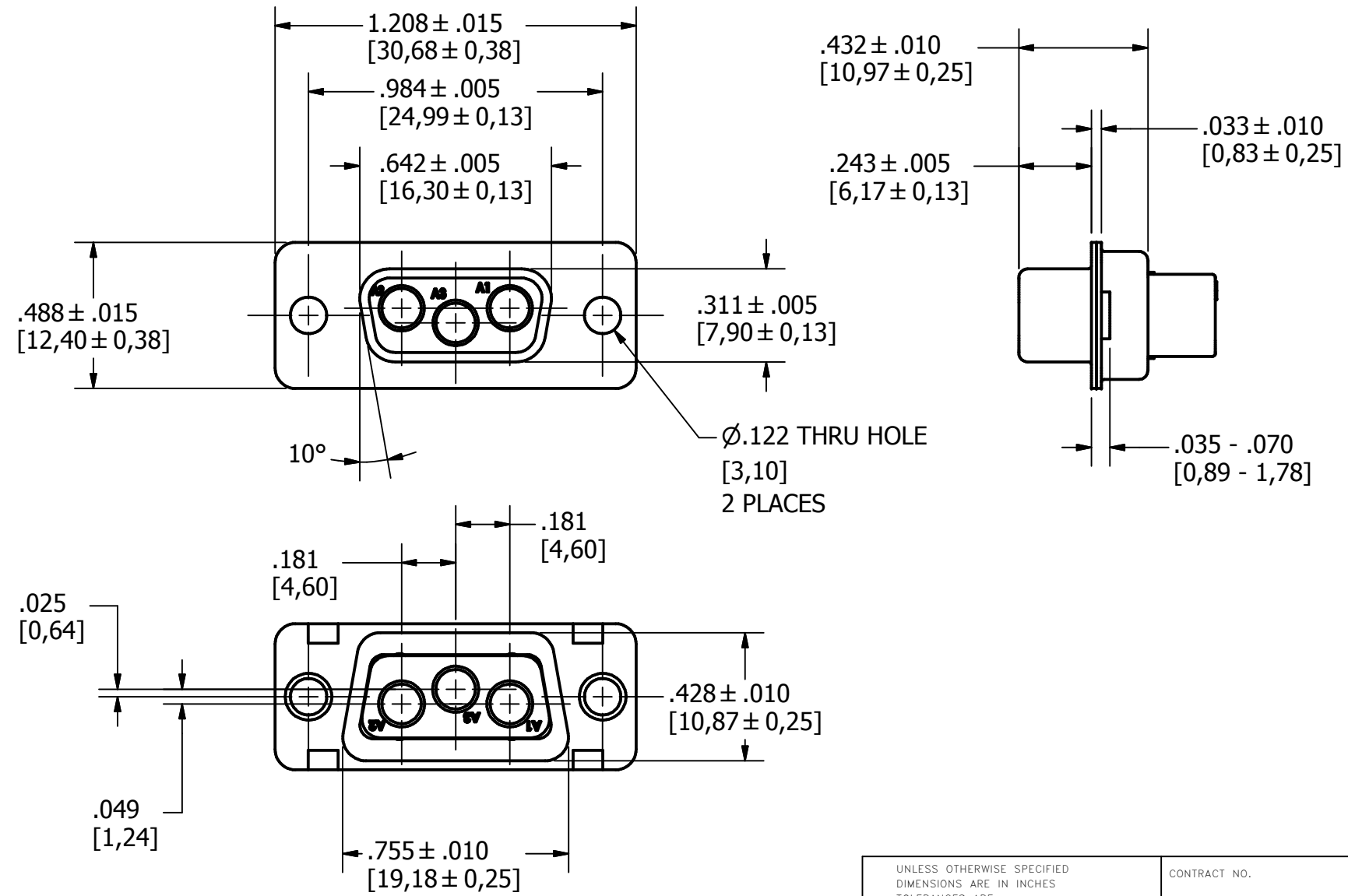
2

1

**SPECIFICATIONS:**  
**1.) MATERIALS:**  
 INSERTS: VALOX, TYPE GPT-30F, PER MIL-M-24519.  
 SHELLS: COLD ROLLED STEEL, PER ASTM A568 AND ASTM A620.  
**2.) FINISHES AND COLOR:**  
 INSERT: BLACK.  
 SHELLS: RoHS COMPLIANT, HIGH RESISTANCE CLEAR CHROMATE OVER ZINC, PER ASTM B633, CLASS FE/ZN12 (.000500 MIN.), SERVICE CONDITION SC3, TYPE III.  
**3.) ELECTRICAL PROPERTIES:**  
 DIELECTRIC STRENGTH:  
 500 TO 1,000 VOLTS RMS AT SEA LEVEL;  
 200 TO 325 VOLTS RMS AT 70,000 FEET.  
 INSULATION RESISTANCE: 1 MEGOHM MINIMUM.

**4.) MECHANICAL PROPERTIES:**  
 OPERATING TEMPERATURE: -67° F TO +257° F ( -55° C TO +125° C ).  
 SHOCK RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.  
 VIBRATION RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.  
**5.) DIMENSIONS ARE FOR REFERENCE ONLY, UNLESS OTHERWISE SPECIFIED.**  
**6.) CONNECTOR MEETS REQUIREMENTS OF MIL-C-24308, LATEST REVISION.**  
**7.) ABOVE REQUIREMENTS DO NOT INCLUDE PDM AND PKZ CONTACTS, PLEASE SEE INDIVIDUAL SPECIFICATION SHEETS.**  
**8.) METRIC DIMENSIONS ARE SHOWN FOR REFERENCE, CONNECTORS ARE DESIGNED IN INCHES.**

REV	DESCRIPTION	DATE	APPROVAL
A	ECN#11740 RELEASED FOR PRODUCTION	7/26/2013	



APPROVALS	DATE
R.M. Bradley	4/25/2013
CHECKED	
ISSUED	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES $\pm 1/64$ .XX ± .01 $\pm 1/2^\circ$ .XXX ± .003		CONTRACT NO.
THE INFORMATION DISCLOSED IN THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO PHOENIX CO. INC. AND MAY NOT BE USED FOR MANUFACTURE OR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF MIL-CON INC.		APPROVALS
NEXT ASSEMBLY		USED ON
APPLICATIONS		DO NOT SCALE DRAWING

<i>The PHOENIX Company of Chicago™</i>			
<b>HD, D-SUB CONNECTOR, SIZE 12 PTRR3W35, RECEPTACLE, CLRCROM / ZINC</b>			
SIZE	FSCM NO.	DWG. NO.	REV.
B	60563	PTRR3W35	A
SCALE	2 X 1		SHEET 1 OF 1

**SPECIFICATIONS:**

1.) MATERIALS:  
 INSERTS: VALOX, TYPE GPT-30F, PER MIL-M-24519.  
 SHELLS: COLD ROLLED STEEL, PER ASTM A568 AND ASTM A620.

2.) FINISHES AND COLOR:  
 INSERT: BLACK.  
 SHELLS: RoHS COMPLIANT, HIGH RESISTANCE CLEAR CHROMATE OVER ZINC, PER ASTM B633, CLASS FE/ZN12 (.000500 MIN.), SERVICE CONDITION SC3, TYPE III.

3.) ELECTRICAL PROPERTIES:  
 DIELECTRIC STRENGTH:  
 500 TO 1,000 VOLTS RMS AT SEA LEVEL;  
 200 TO 325 VOLTS RMS AT 70,000 FEET.  
 INSULATION RESISTANCE: 1 MEGOHM MINIMUM.

4.) MECHANICAL PROPERTIES:  
 OPERATING TEMPERATURE: -67° F TO +257° F (-55° C TO +125° C).  
 SHOCK RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.  
 VIBRATION RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.

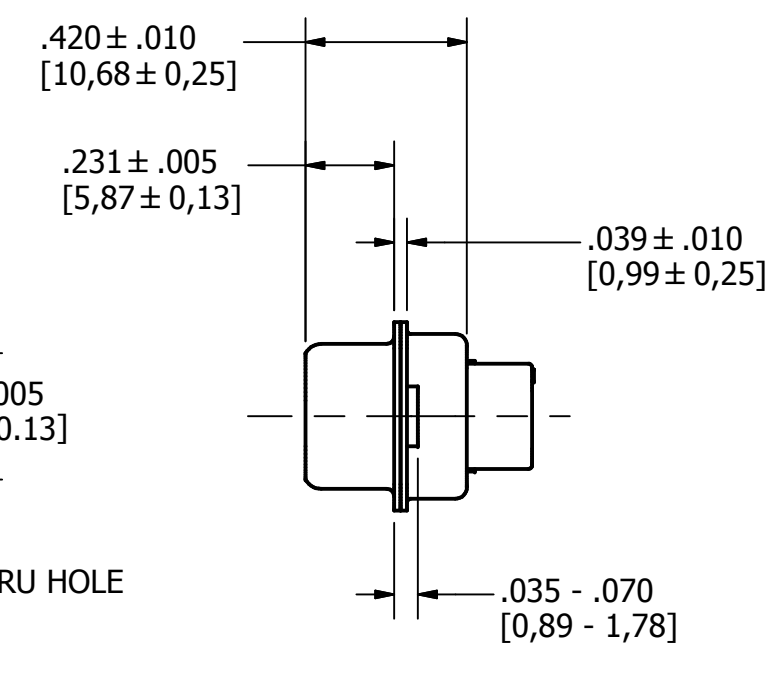
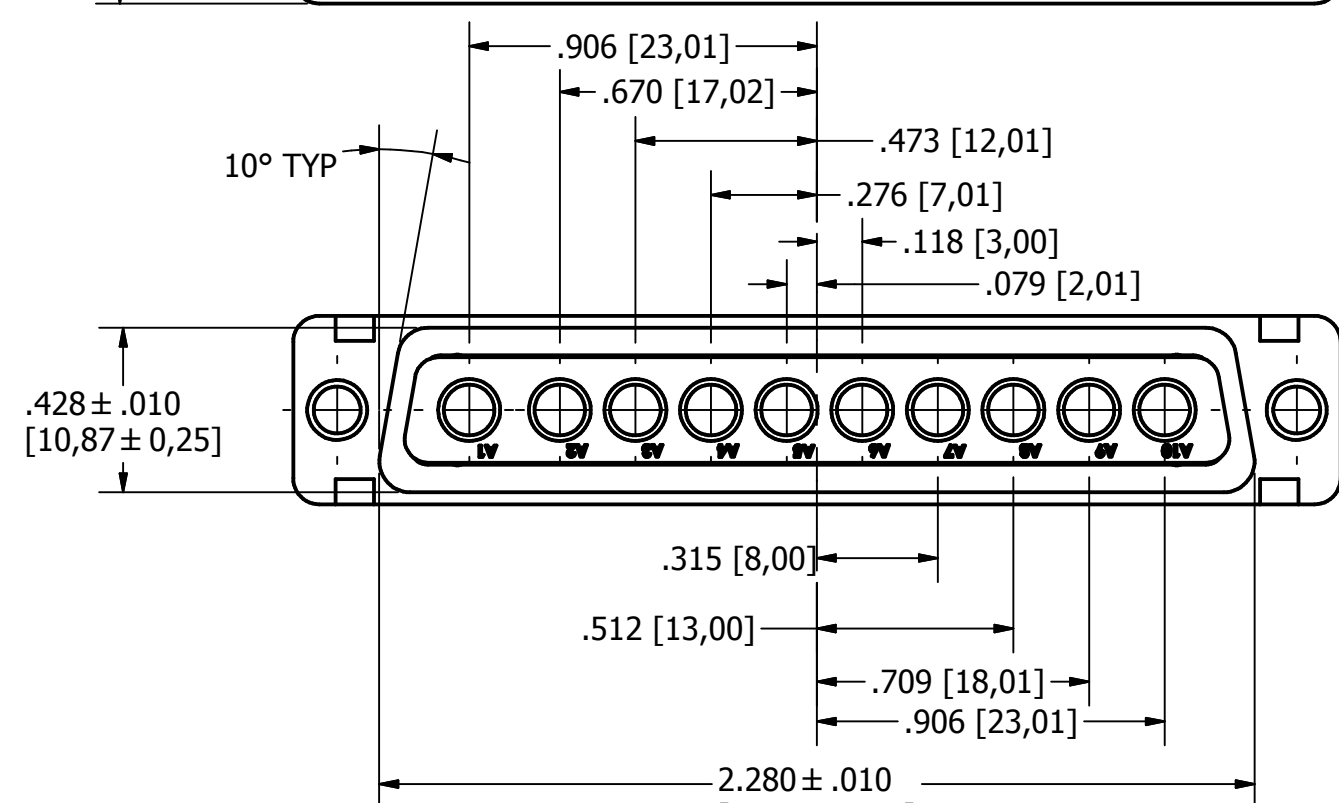
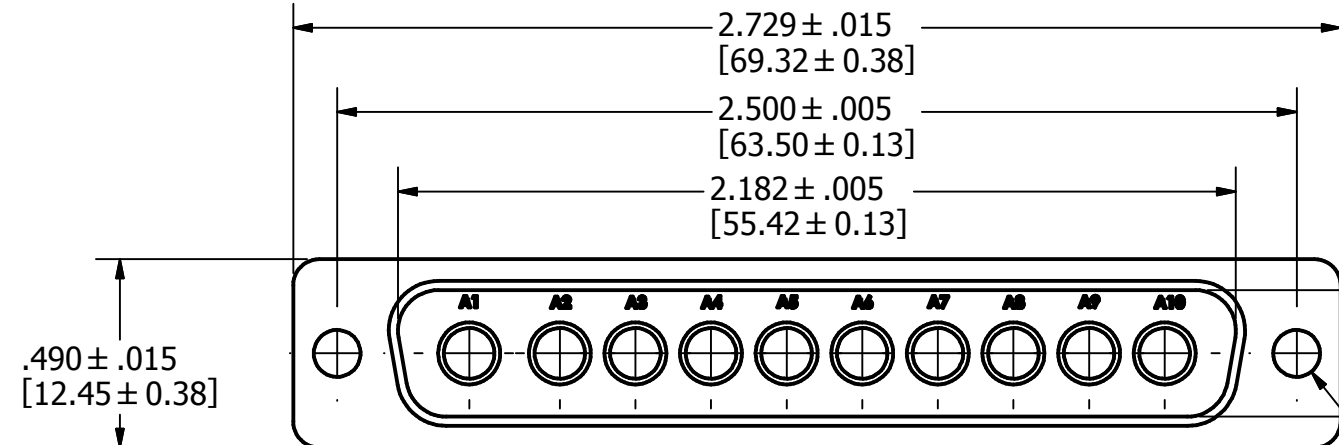
5.) DIMENSIONS ARE FOR REFERENCE ONLY, UNLESS OTHERWISE SPECIFIED.

6.) CONNECTOR MEETS REQUIREMENTS OF MIL-C-24308, LATEST REVISION.

7.) ABOVE REQUIREMENTS DO NOT INCLUDE PDM AND PKZ CONTACTS, PLEASE SEE INDIVIDUAL SPECIFICATION SHEETS.

8.) METRIC DIMENSIONS ARE SHOWN FOR REFERENCE, CONNECTORS ARE DESIGNED IN INCHES.

REV	DESCRIPTION	DATE	APPROVAL
A	ECN#11740 RELEASED FOR PRODUCTION	7/26/2013	



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 1/64 .XX ± .01 ± 1/2° .XXX ± .003		CONTRACT NO.		The <i>PHOENIX</i> Company of Chicago™	
THE INFORMATION DISCLOSED IN THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO PHOENIX CO. INC. AND MAY NOT BE USED FOR MANUFACTURE OR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF MIL-CON INC.		APPROVALS DRAWN <b>R.M.Bradley</b> CHECKED ISSUED	DATE 4/16/2013		
NEXT ASSEMBLY		USED ON		SIZE <b>B</b>	FSCM NO. <b>60563</b>
APPLICATIONS		DO NOT SCALE DRAWING		DWG. NO. <b>PTRP10W105</b>	REV. <b>A</b>
				SCALE <b>2 X 1</b>	SHEET <b>1</b> OF <b>1</b>

4

3

2

1

SPECIFICATIONS:

1.) MATERIALS:  
 INSERTS: VALOX, TYPE GPT-30F, PER MIL-M-24519.  
 SHELLS: COLD ROLLED STEEL, PER ASTM A568 AND ASTM A620.

2.) FINISHES AND COLOR:  
 INSERT: BLACK.  
 SHELLS: RoHS COMPLIANT, HIGH RESISTANCE CLEAR CHROMATE OVER ZINC, PER ASTM B633, CLASS FE/ZN12 (.000500 MIN.), SERVICE CONDITION SC3, TYPE III.

3.) ELECTRICAL PROPERTIES:  
 DIELECTRIC STRENGTH:  
 500 TO 1,000 VOLTS RMS AT SEA LEVEL;  
 200 TO 325 VOLTS RMS AT 70,000 FEET.  
 INSULATION RESISTANCE: 1 MEGOHM MINIMUM.

4.) MECHANICAL PROPERTIES:  
 OPERATING TEMPERATURE: -67° F TO +257° F ( -55° C TO +125° C ).  
 SHOCK RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.  
 VIBRATION RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.

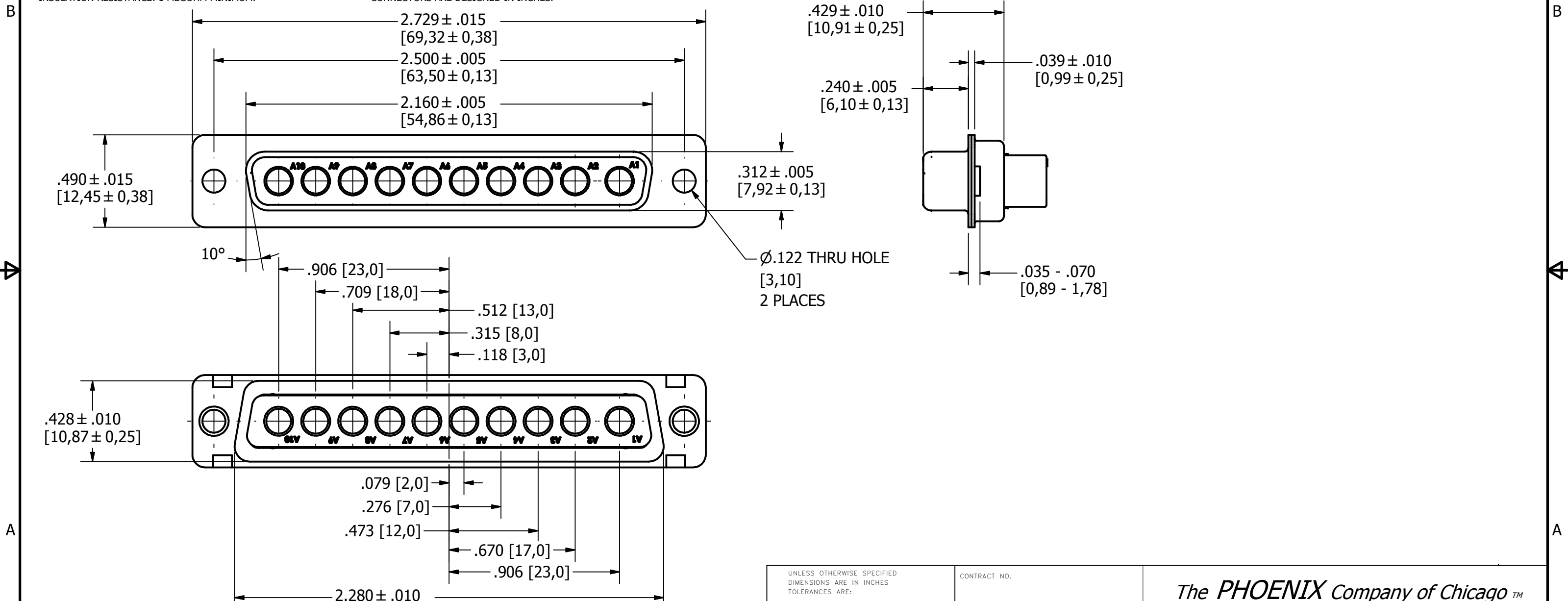
5.) DIMENSIONS ARE FOR REFERENCE ONLY, UNLESS OTHERWISE SPECIFIED.

6.) CONNECTOR MEETS REQUIREMENTS OF MIL-C-24308, LATEST REVISION.

7.) ABOVE REQUIREMENTS DO NOT INCLUDE PDM AND PKZ CONTACTS, PLEASE SEE INDIVIDUAL SPECIFICATION SHEETS.

8.) METRIC DIMENSIONS ARE SHOWN FOR REFERENCE, CONNECTORS ARE DESIGNED IN INCHES.

REV	DESCRIPTION	DATE	APPROVAL
A	ECN#11740 RELEASED FOR PRODUCTION	7/26/2013	



NEXT ASSEMBLY	USED ON

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 1/64 .XX ± .01 ± 1/2° .XXX ± .003	CONTRACT NO.	
	APPROVALS	DATE
THE INFORMATION DISCLOSED IN THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO PHOENIX CO. INC. AND MAY NOT BE USED FOR MANUFACTURE OR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF MIL-CON INC.	DRAWN	4/16/2013
	CHECKED	
	ISSUED	
APPLICATIONS	DO NOT SCALE DRAWING	

<i>The PHOENIX Company of Chicago™</i>			
<b>HD, D-SUB CONNECTOR, SIZE 12 PTRR10W105 RECEPTACLE, CLRCROM / ZINC</b>			
SIZE	FSCM NO.	DWG. NO.	REV.
B	60563	PTRR10W105	A
SCALE	2 X 1	SHEET 1 OF 1	

4

3

2

1

SPECIFICATIONS:  
 1.) MATERIALS:  
 INSERTS: VALOX, TYPE GPT-30F, PER MIL-M-24519.  
 SHELLS: COLD ROLLED STEEL, PER ASTM A568 AND ASTM A620.

2.) FINISHES AND COLOR:  
 INSERT: BLACK.  
 SHELLS: RoHS COMPLIANT, HIGH RESISTANCE CLEAR CHROMATE OVER ZINC, PER ASTM B633, CLASS FE/ZN12 (.000500 MIN.), SERVICE CONDITION SC3, TYPE III.

3.) ELECTRICAL PROPERTIES:  
 DIELECTRIC STRENGTH:  
 500 TO 1,000 VOLTS RMS AT SEA LEVEL;  
 200 TO 325 VOLTS RMS AT 70,000 FEET.  
 INSULATION RESISTANCE: 1 MEGOHM MINIMUM.

4.) MECHANICAL PROPERTIES:  
 OPERATING TEMPERATURE: -67° F TO +257° F ( -55° C TO +125° C ).  
 SHOCK RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.  
 VIBRATION RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.

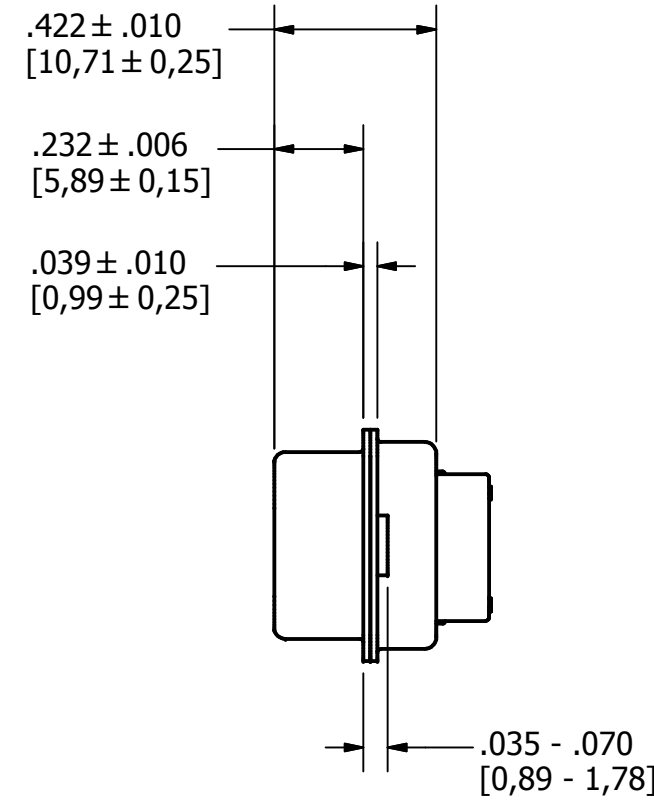
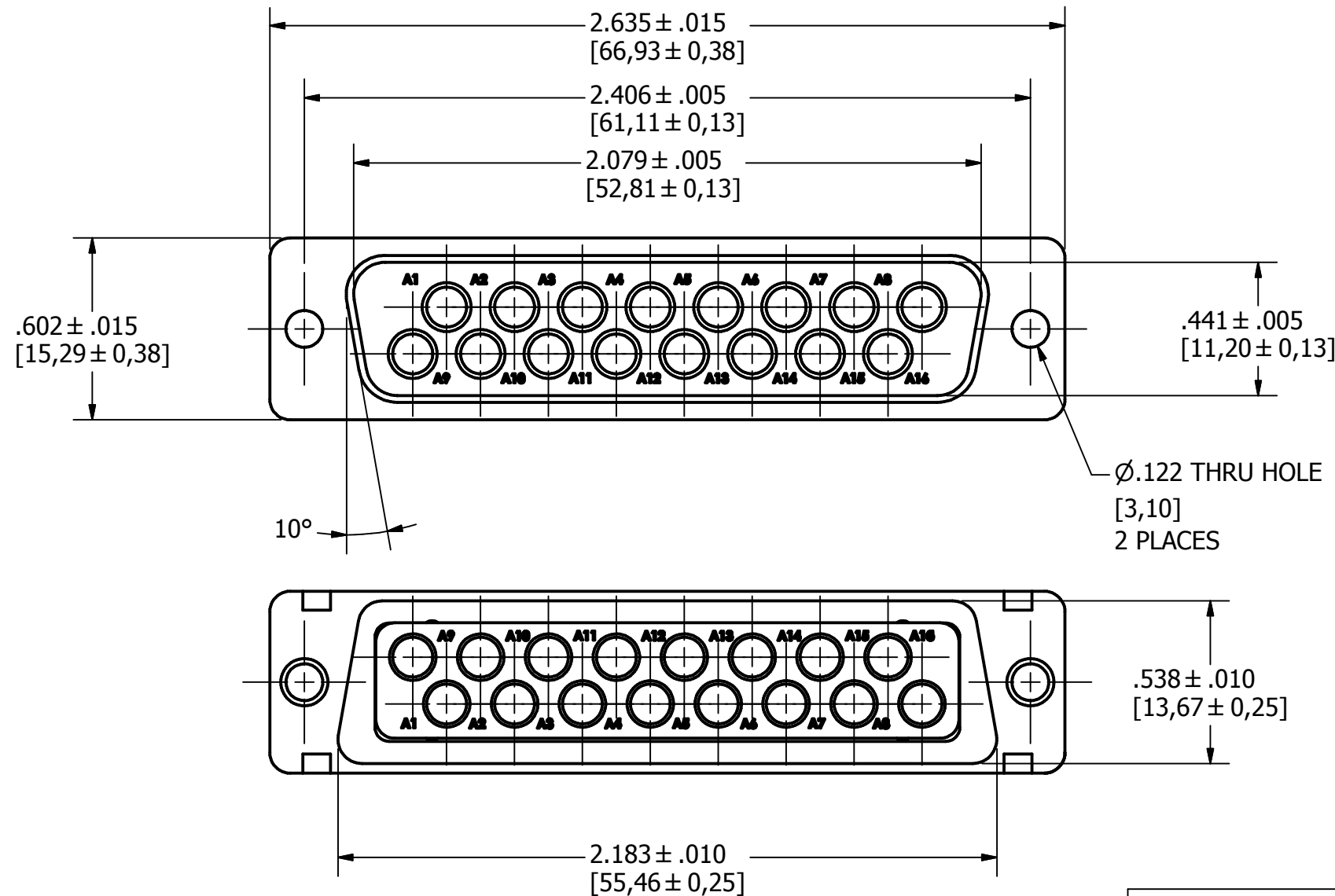
5.) DIMENSIONS ARE FOR REFERENCE ONLY, UNLESS OTHERWISE SPECIFIED.

6.) CONNECTOR MEETS REQUIREMENTS OF MIL-C-24308, LATEST REVISION.

7.) ABOVE REQUIREMENTS DO NOT INCLUDE PDM AND PKZ CONTACTS, PLEASE SEE INDIVIDUAL SPECIFICATION SHEETS.

8.) METRIC DIMENSIONS ARE SHOWN FOR REFERENCE, CONNECTORS ARE DESIGNED IN INCHES.

REV	DESCRIPTION	DATE	APPROVAL
A	ECN#11740 RELEASED FOR PRODUCTION	7/26/2013	



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 1/64 .XX ± .01 ± 1/2° .XXX ± .003		CONTRACT NO.		The <i>PHOENIX</i> Company of Chicago™	
THE INFORMATION DISCLOSED IN THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO PHOENIX CO. INC. AND MAY NOT BE USED FOR MANUFACTURE OR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF MIL-CON INC.		APPROVALS	DATE		
APPROVALS	DATE	APPROVALS	DATE	<b>HD, D-SUB CONNECTOR, SIZE 12</b> <b>PTRP16W165, PLUG, CLRCROM / ZINC</b>	
DRAWN <b>R.M. Bradley</b> CHECKED ISSUED	4/19/2013				
NEXT ASSEMBLY USED ON APPLICATIONS	DO NOT SCALE DRAWING	DWG. NO. <b>PTRP16W165</b>	REV. <b>A</b>	SCALE <b>2 X 1</b>	SHEET <b>1</b> OF <b>1</b>

4

3

2

1

SPECIFICATIONS:

1.) MATERIALS:  
 INSERTS: VALOX, TYPE GPT-30F, PER MIL-M-24519.  
 SHELLS: COLD ROLLED STEEL, PER ASTM A568 AND ASTM A620.

2.) FINISHES AND COLOR:  
 INSERT: BLACK.  
 SHELLS: RoHS COMPLIANT, HIGH RESISTANCE CLEAR CHROMATE OVER ZINC, PER ASTM B633, CLASS FE/ZN12 (.000500 MIN.), SERVICE CONDITION SC3, TYPE III.

3.) ELECTRICAL PROPERTIES:  
 DIELECTRIC STRENGTH:  
 500 TO 1,000 VOLTS RMS AT SEA LEVEL;  
 200 TO 325 VOLTS RMS AT 70,000 FEET.  
 INSULATION RESISTANCE: 1 MEGOHM MINIMUM.

4.) MECHANICAL PROPERTIES:  
 OPERATING TEMPERATURE: -67° F TO +257° F ( -55° C TO +125° C ).  
 SHOCK RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.  
 VIBRATION RESISTANCE: NO INTERRUPTION OF ELECTRICAL CONTINUITY LONGER THAN 1 MICROSECOND.

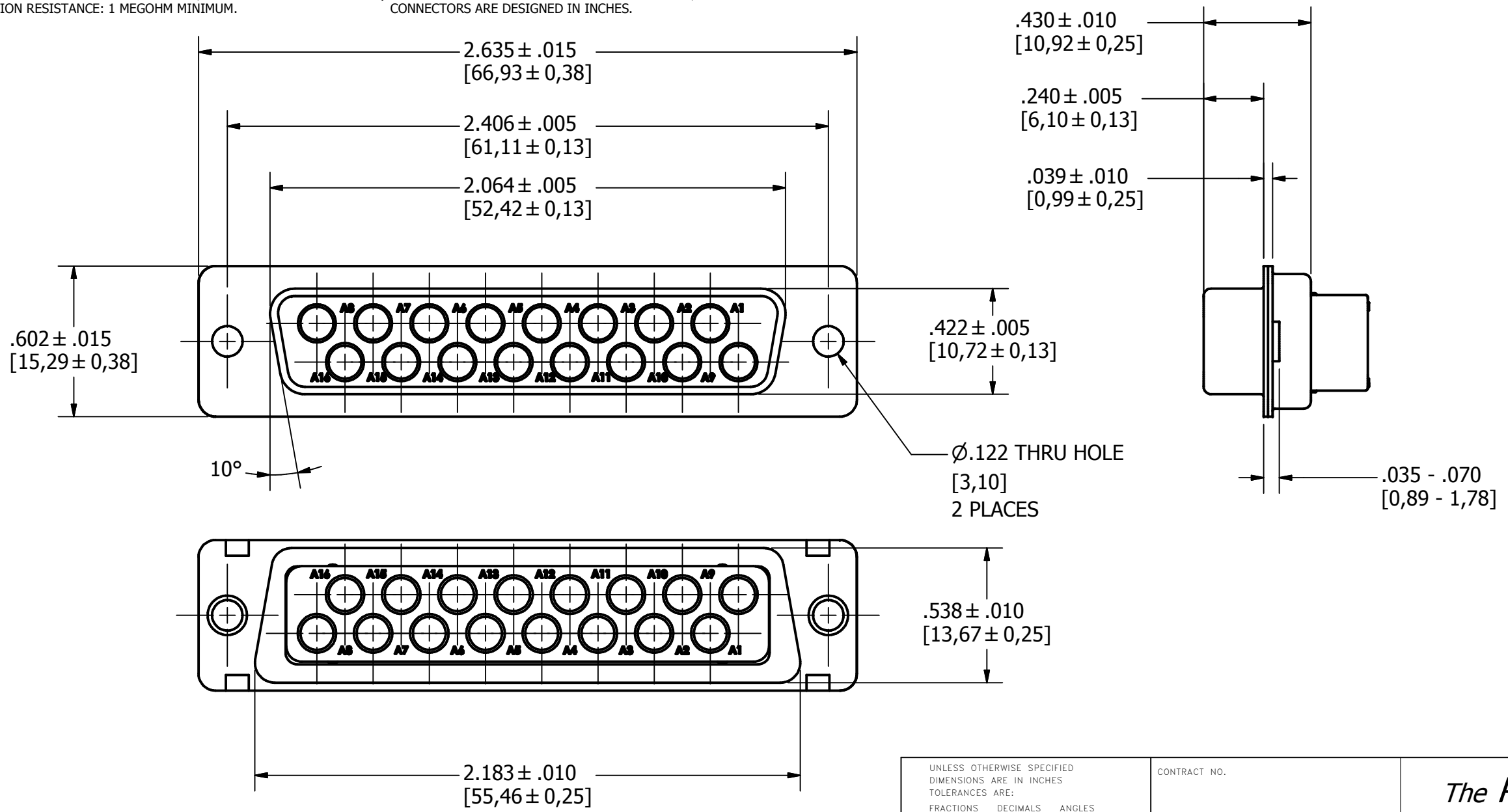
5.) DIMENSIONS ARE FOR REFERENCE ONLY, UNLESS OTHERWISE SPECIFIED.

6.) CONNECTOR MEETS REQUIREMENTS OF MIL-C-24308, LATEST REVISION.

7.) ABOVE REQUIREMENTS DO NOT INCLUDE PDM AND PKZ CONTACTS, PLEASE SEE INDIVIDUAL SPECIFICATION SHEETS.

8.) METRIC DIMENSIONS ARE SHOWN FOR REFERENCE, CONNECTORS ARE DESIGNED IN INCHES.

REV	DESCRIPTION	DATE	APPROVAL
A	ECN#11740 RELEASED FOR PRODUCTION	7/26/2013	



NEXT ASSEMBLY	USED ON
APPLICATIONS	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 1/64 .XX ± .01 ± 1/2° .XXX ± .003		CONTRACT NO.
THE INFORMATION DISCLOSED IN THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO PHOENIX CO. INC. AND MAY NOT BE USED FOR MANUFACTURE OR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF MIL-CON INC.		APPROVALS R.M. Bradley
DO NOT SCALE DRAWING		DATE 4/19/2013

<i>The PHOENIX Company of Chicago™</i>			
<b>HD, D-SUB CONNECTOR, SIZE 12 PTRR16W165, RECEPTACLE, CLRCROM / ZINC</b>			
SIZE B	FSCM NO. 60563	DWG. NO. PTRR16W165	REV. A
SCALE 2 X 1		SHEET 1 OF 1	

4

3

2

1