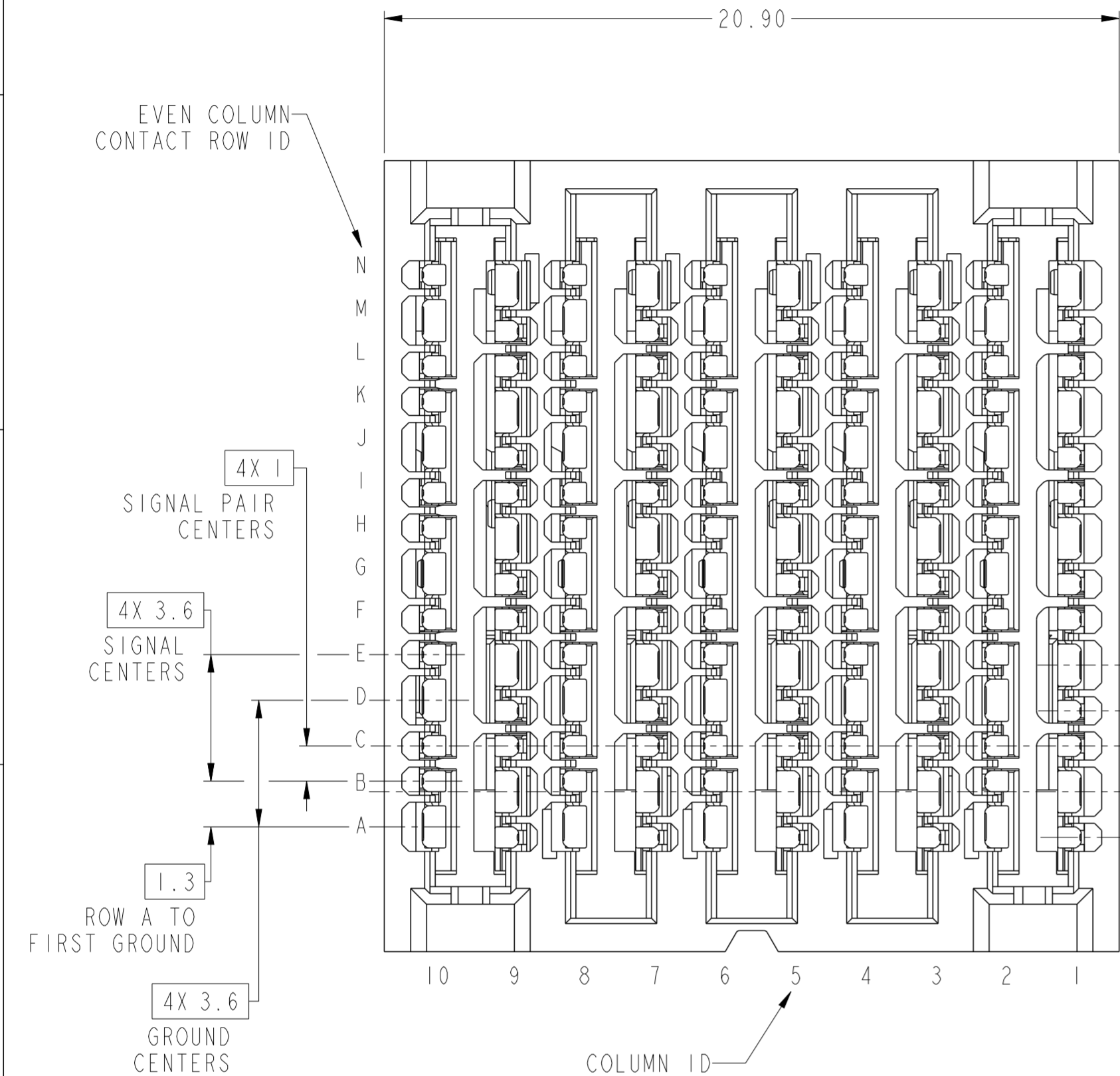
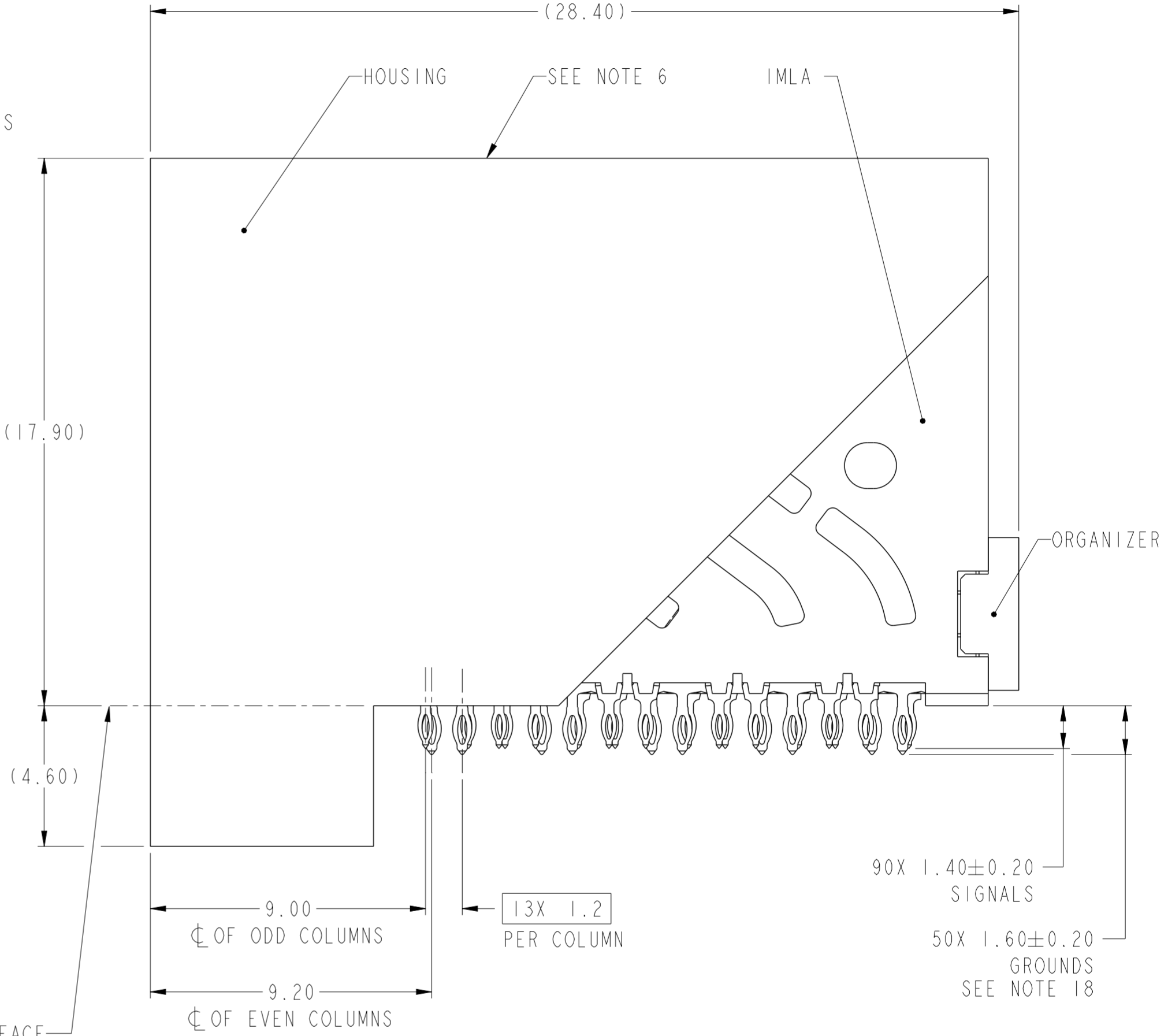
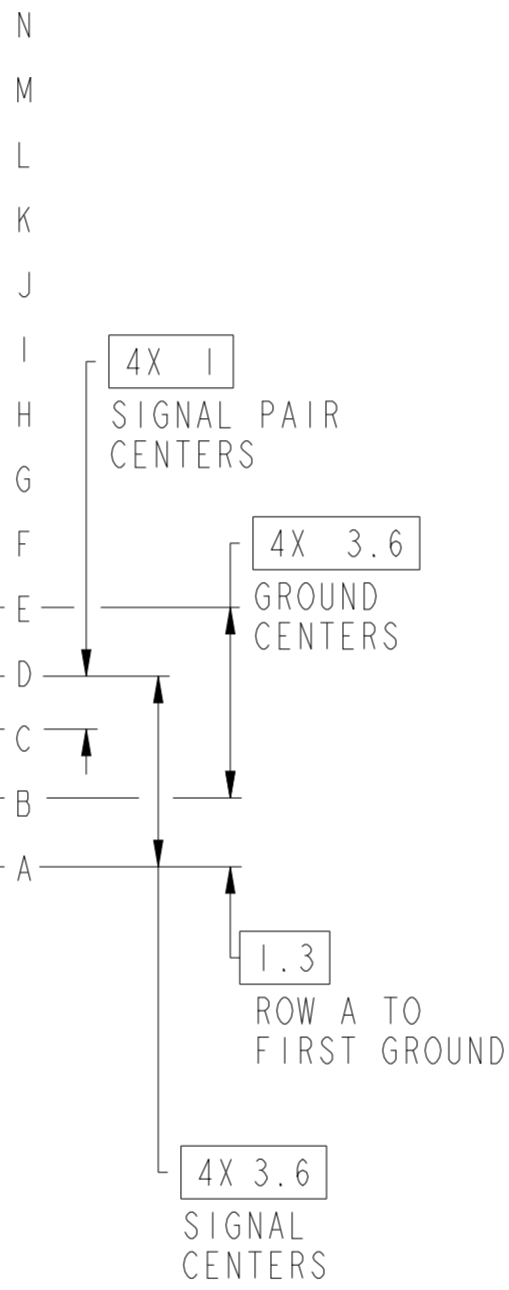


PRODUCT NUMBER
SEE TABLE



ODD COLUMN CONTACT ROW ID
ODD & EVEN COLUMNS ARE OFFSET



**10137004-101YLF
STANDARD MATE RECEPTACLE**

Amphenol
FCi

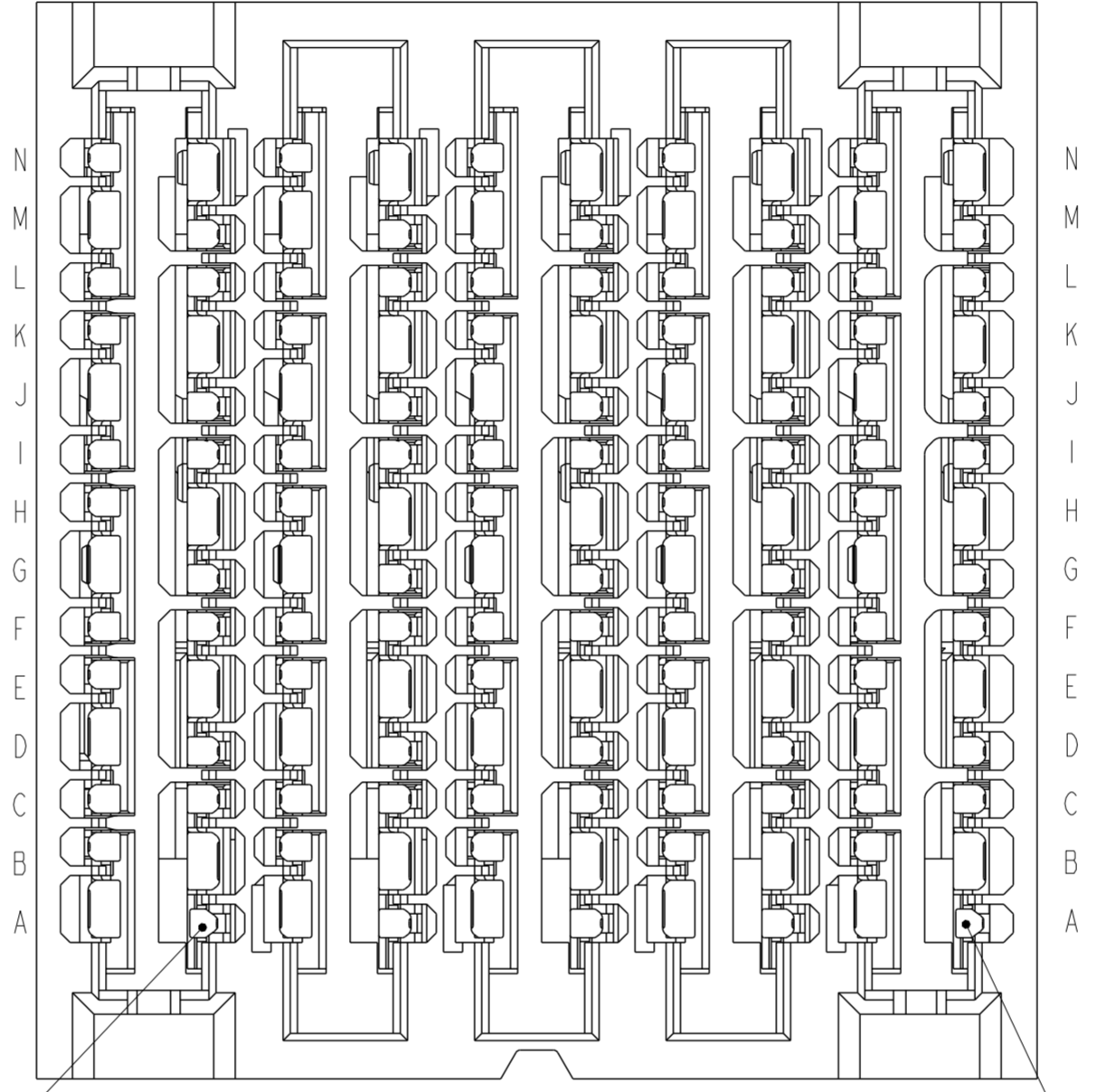
© 2016 AFci

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	7:1									
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1	rel level	Released									
ASME Y14.5M		chr	-	app							Heaven Cen	2020/04/22	product family	ExaMax					
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td>±.3</td> </tr> <tr> <td></td> <td>0.XX</td> <td>±.10</td> </tr> <tr> <td></td> <td>0.XXX</td> <td>±.050</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±°</td> </tr> </table>	linear	0.X	±.3		0.XX	±.10		0.XXX	±.050	angular	0°	±°			ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		dwg no 10137004	rev C
linear	0.X	±.3																	
	0.XX	±.10																	
	0.XXX	±.050																	
angular	0°	±°																	
		cat. no.		Product - Customer Drw			sheet 1 of 11												

PDS: Rev :C

STATUS:Released

Printed: Apr 23, 2020



ADVANCED MATE POSITION A9
SEE NOTE 13

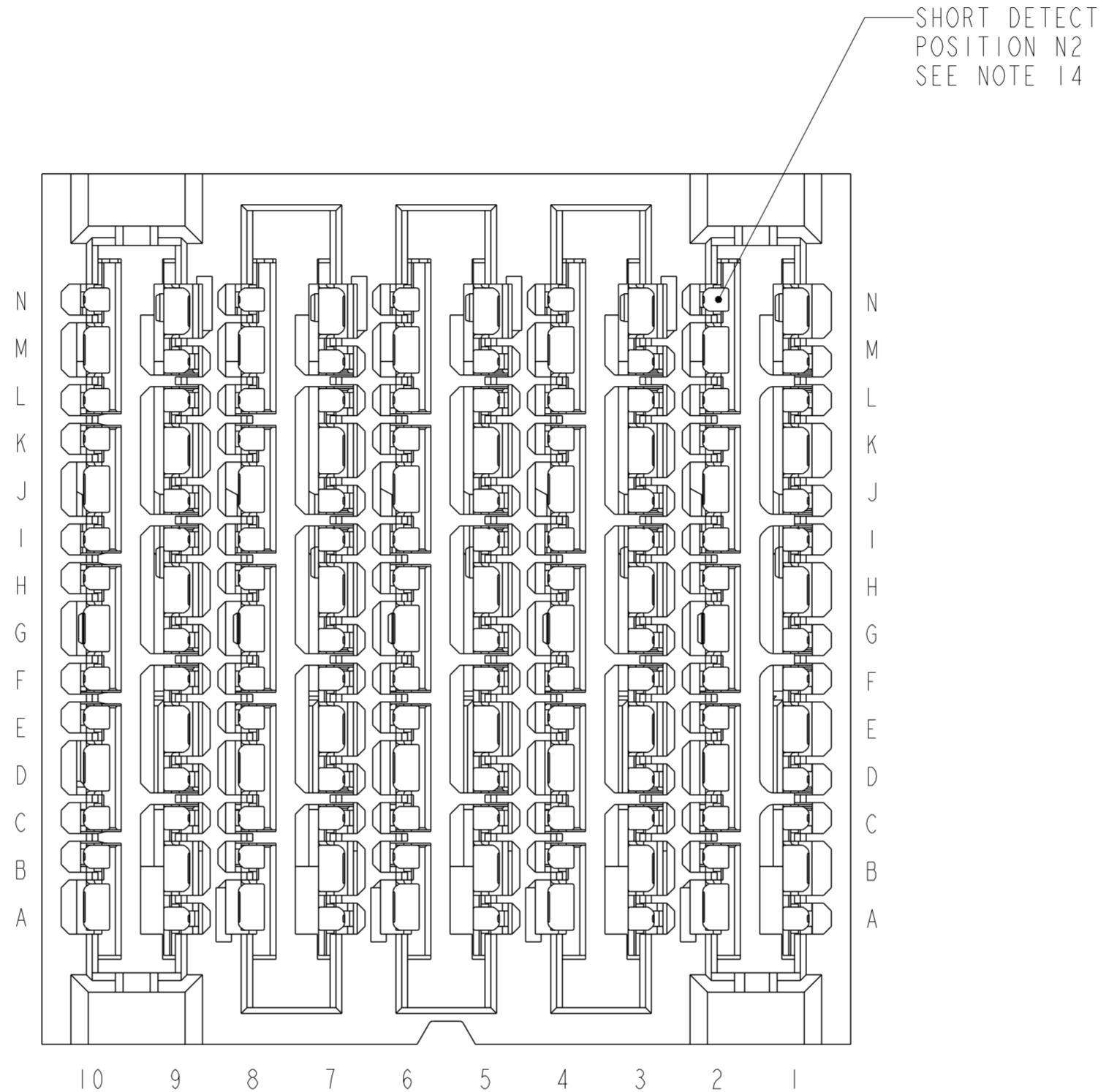
ADVANCED MATE POSITION A1
SEE NOTE 13

10137004-201YLF
ADVANCED MATE RECEPTACLE
 ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY
 FOR ALL DIMENSIONS SEE 10137004-101YLF ON SHEET 1

Amphenol
FCi

© 2016 AFCI

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	7:1
tolerance std	ASME Y14.5M	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-				rel level	Released		
surface	-	appr	Heaven Cen		2020/04/22	product family	ExaMax		rel level	Released
linear angular	0.X	±.3		title ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		dwg no 10137004	rev C			
	0.XX	±.10								
	0.XXX	±.050								
	0°	±°	cat. no.		Product - Customer Drw		sheet 2 of 11			

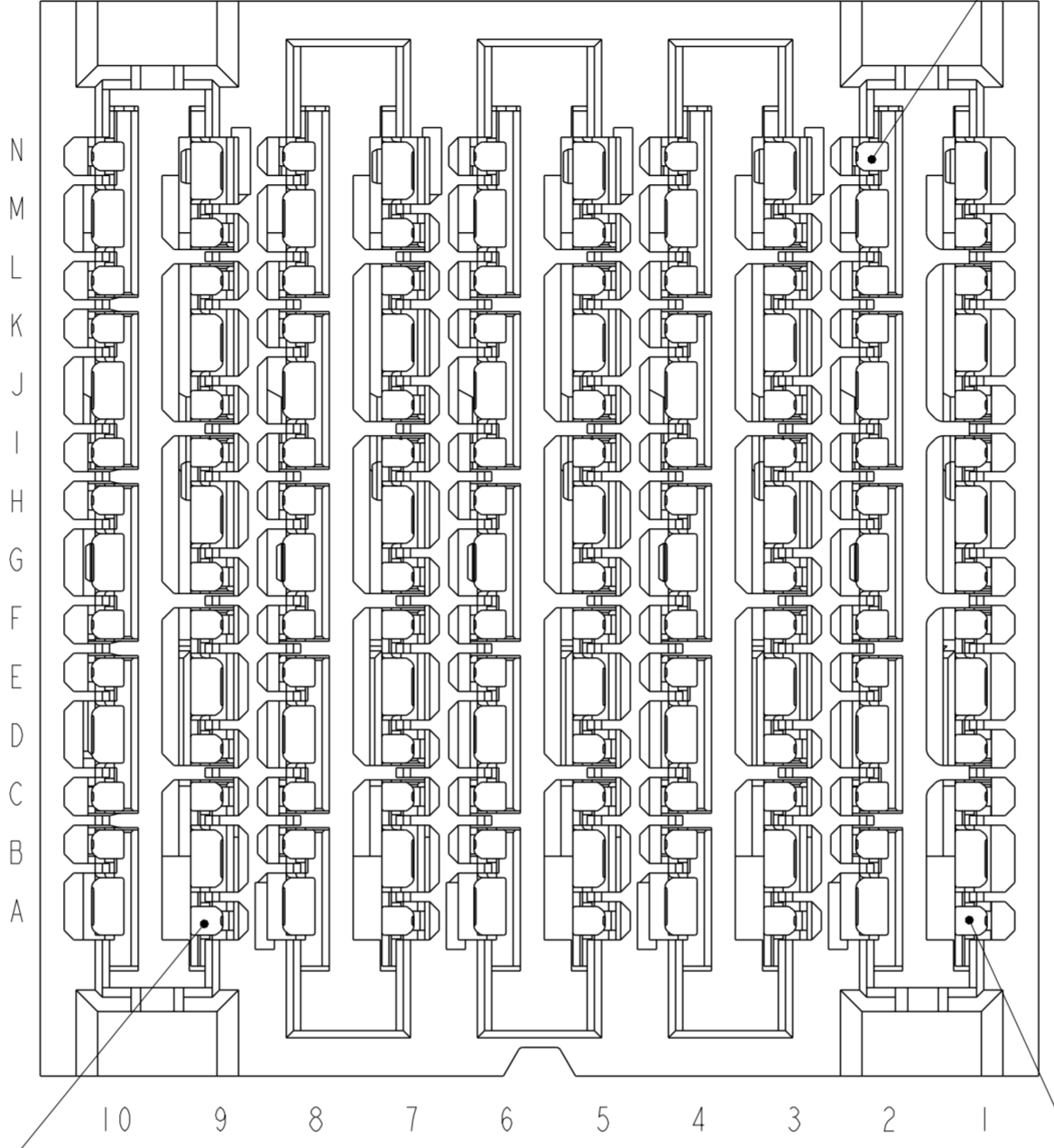


10137004-301YLF
 SHORT DETECT RECEPTACLE
 SHORT DETECT POSITION IS N2
 FOR ALL DIMENSIONS SEE 10137004-101YLF ON SHEET 1

Amphenol
FCi

© 2016 AFci

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	7:1
tolerance std	ASME Y14.5M	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	rel level			Released			
surface	-	appr	Heaven Cen	2020/04/22	product family	ExaMax	cat. no.	10137004		
	linear	0.X	±.3		title		ExaMAX R.A. RECEPTACLE		rev C	
		0.XX	±.10		ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall					
		0.XXX	±.050		Product - Customer Drw					
	angular	0°	±°	cat. no.		Product - Customer Drw		sheet 3 of 11		



ADVANCED MATE
POSITION A9
SEE NOTE 15

SHORT DETECT
POSITION N2
SEE NOTE 15

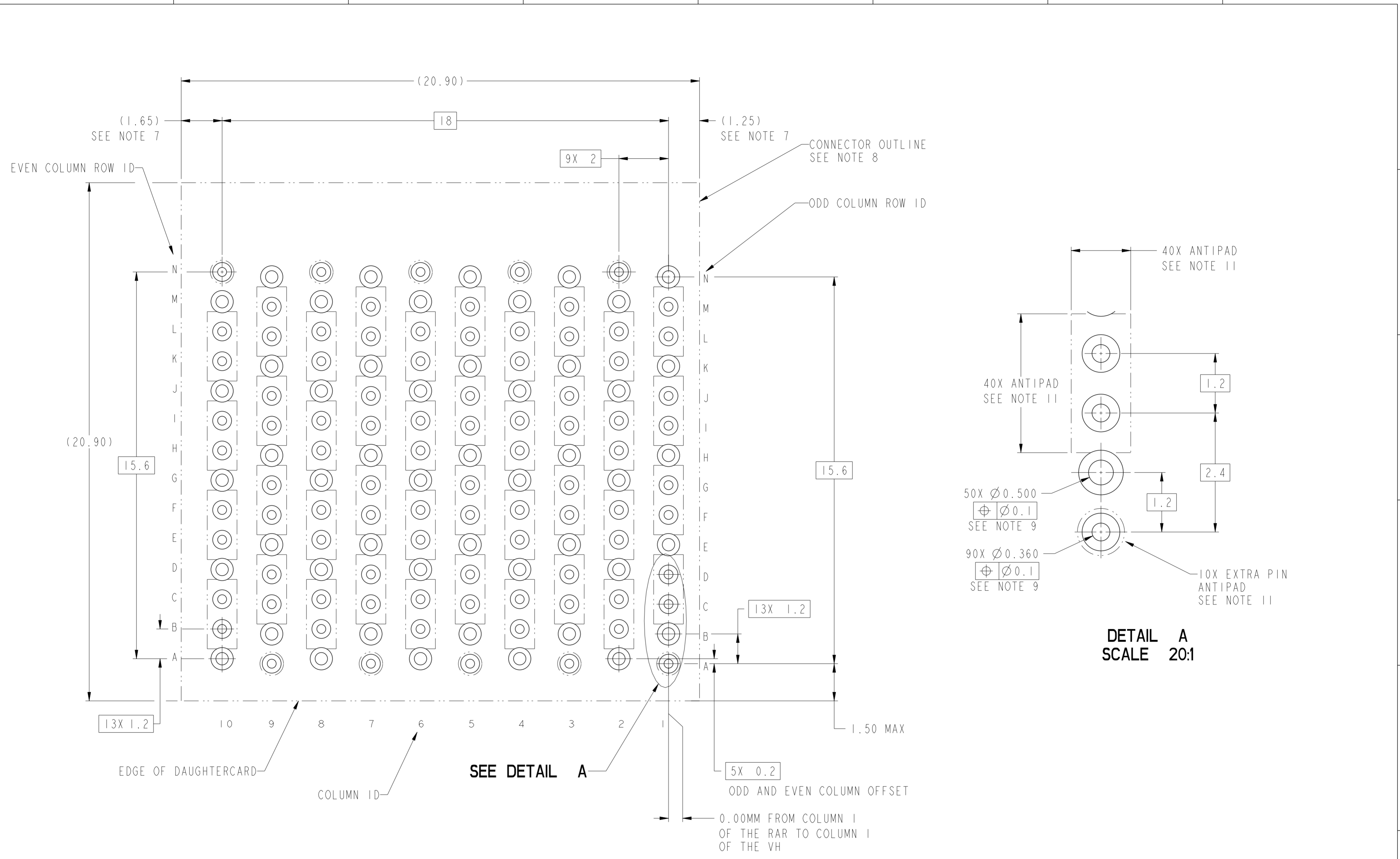
ADVANCED MATE
POSITION A1
SEE NOTE 15

10137004-401YLF
ADVANCED MATE/SHORT DETECT RECEPTACLE
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY
SHORT DETECT POSITION IS N2
FOR ALL DIMENSIONS SEE 10137004-101YLF ON SHEET 1

Amphenol
FCi

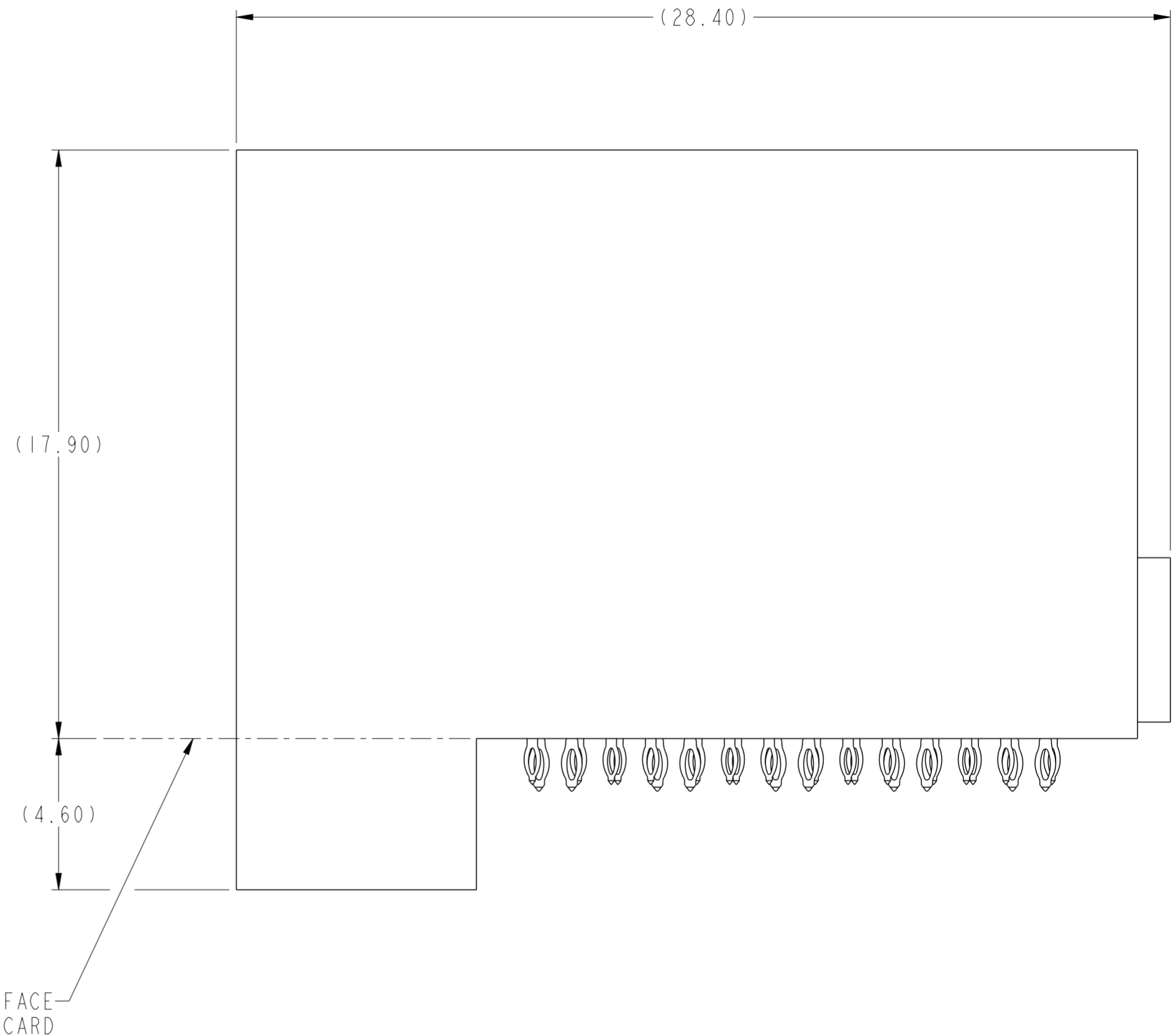
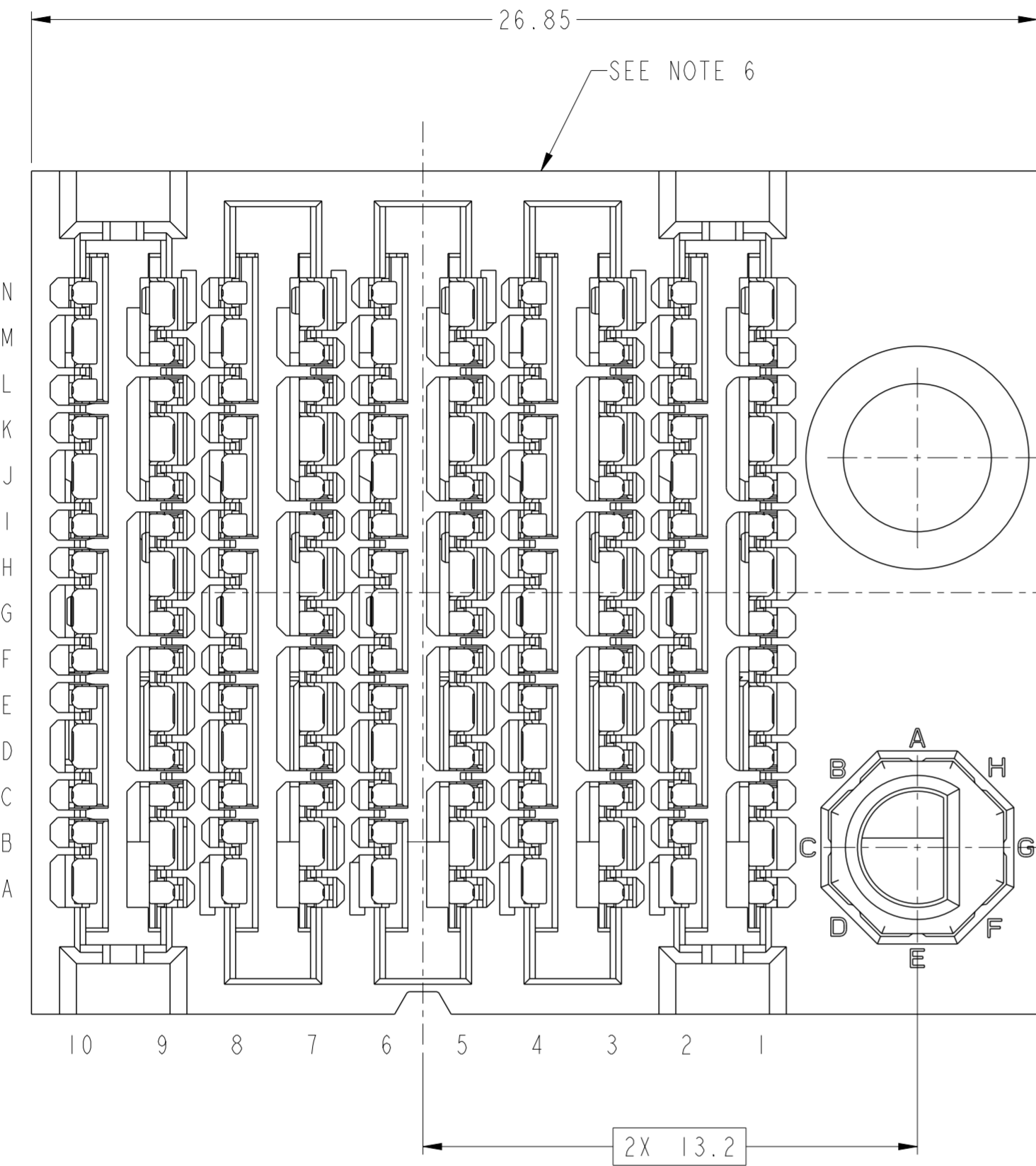
© 2016 AFci

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1		
ASME Y14.5M		chr	-	appr			Heaven Cen	2020/04/22	product family	ExaMax
surface	-	linear	0.X	±.3		title ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	dwg no 10137004	rev C		
			0.XX	±.10						
			0.XXX	±.050						
		angular	0°	±°		cat. no.	Product - Customer Drw		sheet 4 of 11	



10137004-X01YLF RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, & 11
SCALE 10:1

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1		
ASME Y14.5M		chr	-	appr			Heaven Cen	2020/04/22	rel level	Released
surface	linear	Amphenol FCI			product family			-	title	ExaMAX R.A. RECEPTACLE
	angular	ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall			cat. no.			-	dwg no	10137004
		Product - Customer Drw			rev			C		



10137004-X1AYLF THRU 10137004-X1JYLF
 RIGHT GUIDANCE (SEE NOTE 17)
 FOR ALL OTHER DIMENSIONS SEE 10137004-101YLF ON SHEET 1

Amphenol
 FCI

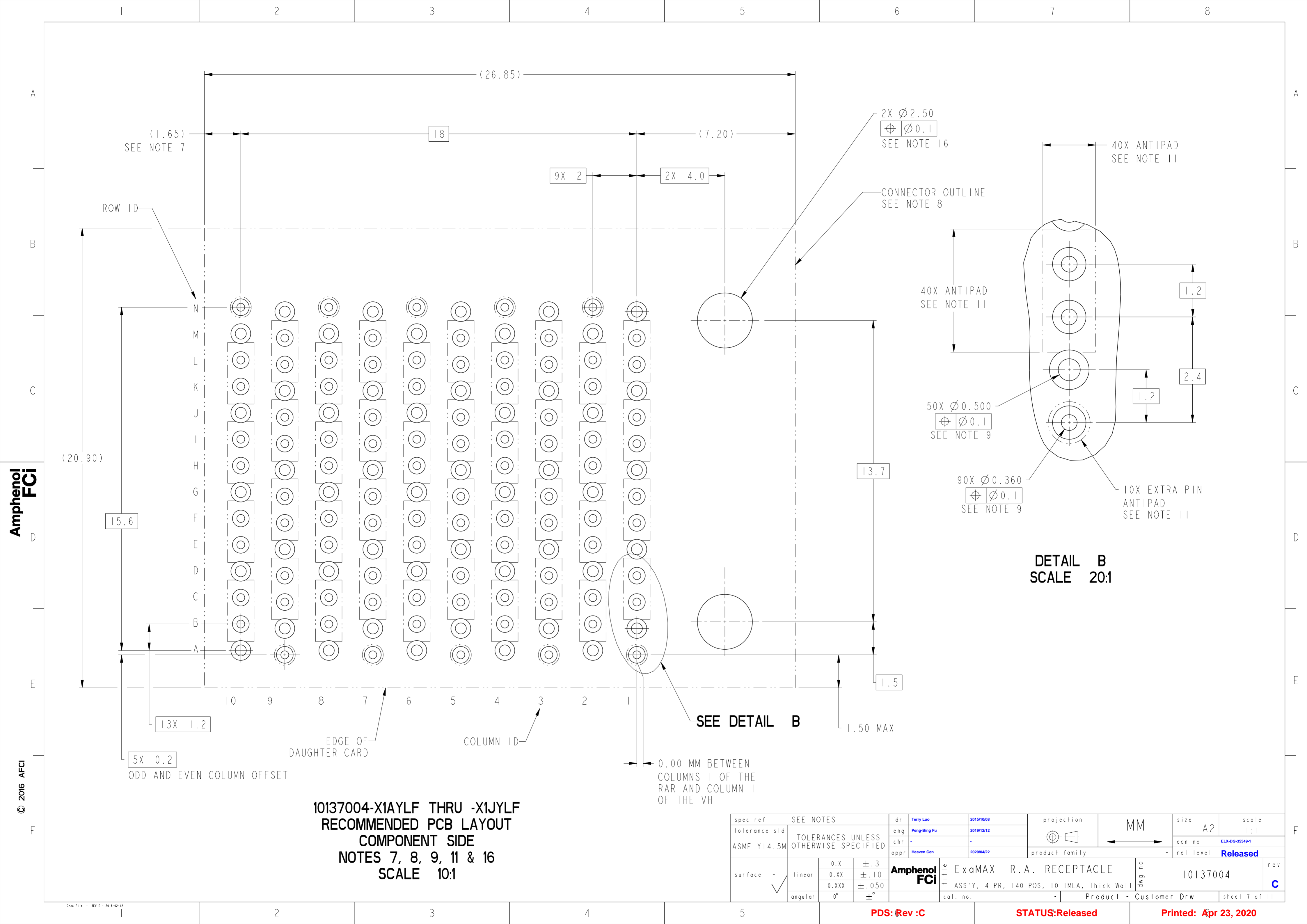
© 2016 APCI

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	7:1												
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1														
ASME Y14.5M		chr	-	appr			Heaven Cen	2020/04/22	product family	ExaMax	rel level	Released										
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td>±.3</td> </tr> <tr> <td></td> <td>0.XX</td> <td>±.10</td> </tr> <tr> <td></td> <td>0.XXX</td> <td>±.050</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±°</td> </tr> </table>	linear	0.X	±.3		0.XX	±.10		0.XXX	±.050	angular	0°	±°			title ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		dwg no 10137004	rev C			
linear	0.X	±.3																				
	0.XX	±.10																				
	0.XXX	±.050																				
angular	0°	±°																				
		cat. no.		Product - Customer Drw			sheet 6 of 11															

PDS: Rev :C

STATUS:Released

Printed: Apr 23, 2020



Amphenol FCI

© 2016 AFCI

10137004-X1AYLF THRU -X1JYLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, 11 & 16
SCALE 10:1

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	1:1										
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1	rel level Released	rev C										
ASME Y14.5M		chr	-	appr			Heaven Cen	2020/04/22			product family	-								
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td>±.3</td> </tr> <tr> <td></td> <td>0.XX</td> <td>±.10</td> </tr> <tr> <td></td> <td>0.XXX</td> <td>±.050</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±°</td> </tr> </table>	linear	0.X	±.3		0.XX	±.10		0.XXX	±.050	angular	0°	±°	Amphenol FCI		title ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		cat. no. -	Product - Customer Drw	sheet 7 of 11
linear	0.X	±.3																		
	0.XX	±.10																		
	0.XXX	±.050																		
angular	0°	±°																		

PDS: Rev :C

STATUS:Released

Printed: Apr 23, 2020

(20.90)

ROW ID

(1.65)
SEE NOTE 7

18

(7.20)

9X 2

2X 4.0

2X Ø2.50

⊕ Ø0.1

SEE NOTE 16

CONNECTOR OUTLINE
SEE NOTE 8

40X ANTIPAD
SEE NOTE 11

40X ANTIPAD
SEE NOTE 11

50X Ø0.500

⊕ Ø0.1

SEE NOTE 9

90X Ø0.360

⊕ Ø0.1

SEE NOTE 9

10X EXTRA PIN
ANTIPAD
SEE NOTE 11

DETAIL B
SCALE 20:1

SEE DETAIL B

1.50 MAX

13.7

1.5

0.00 MM BETWEEN
COLUMNS I OF THE
RAR AND COLUMN I
OF THE VH

EDGE OF
DAUGHTER CARD

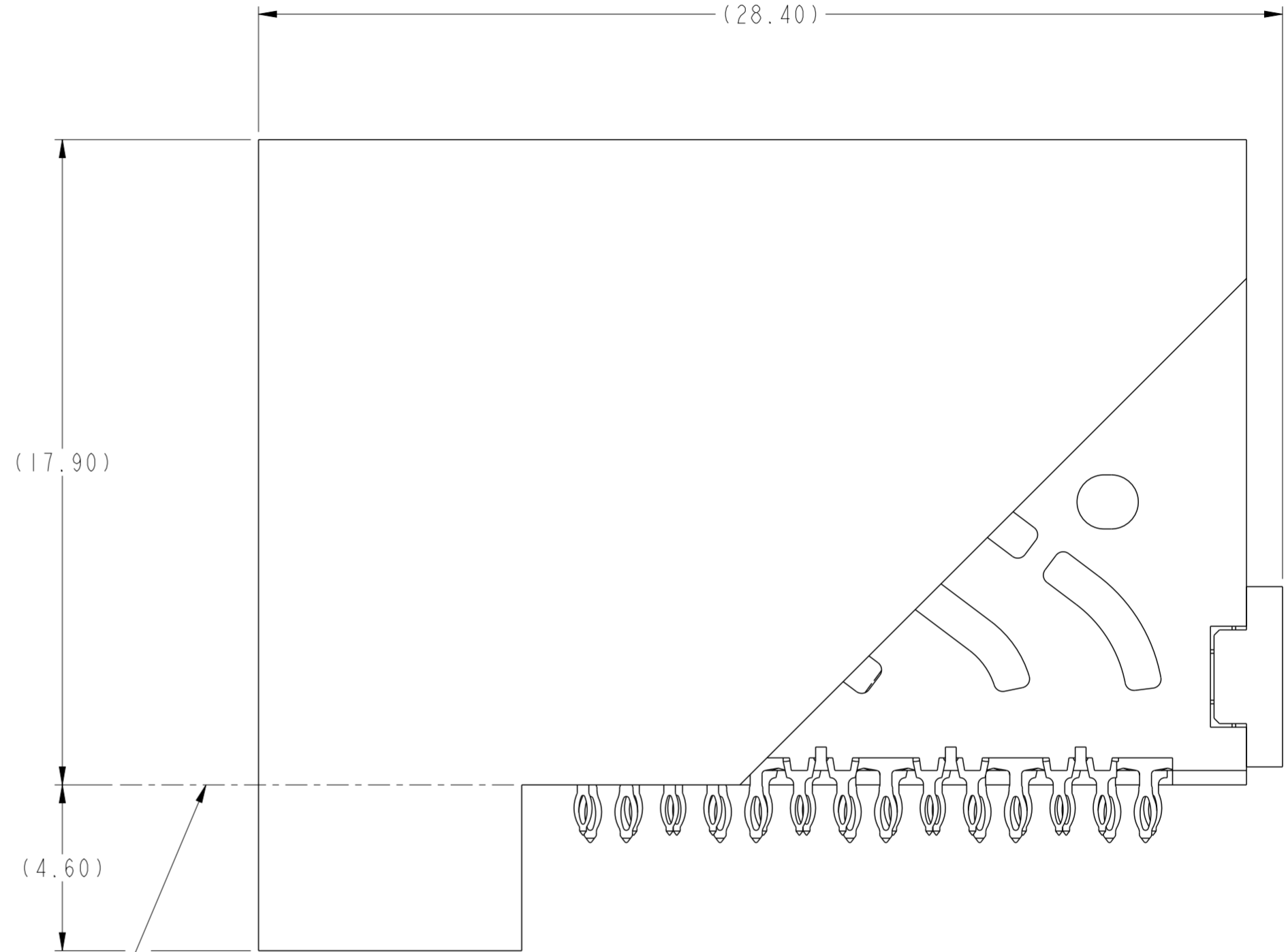
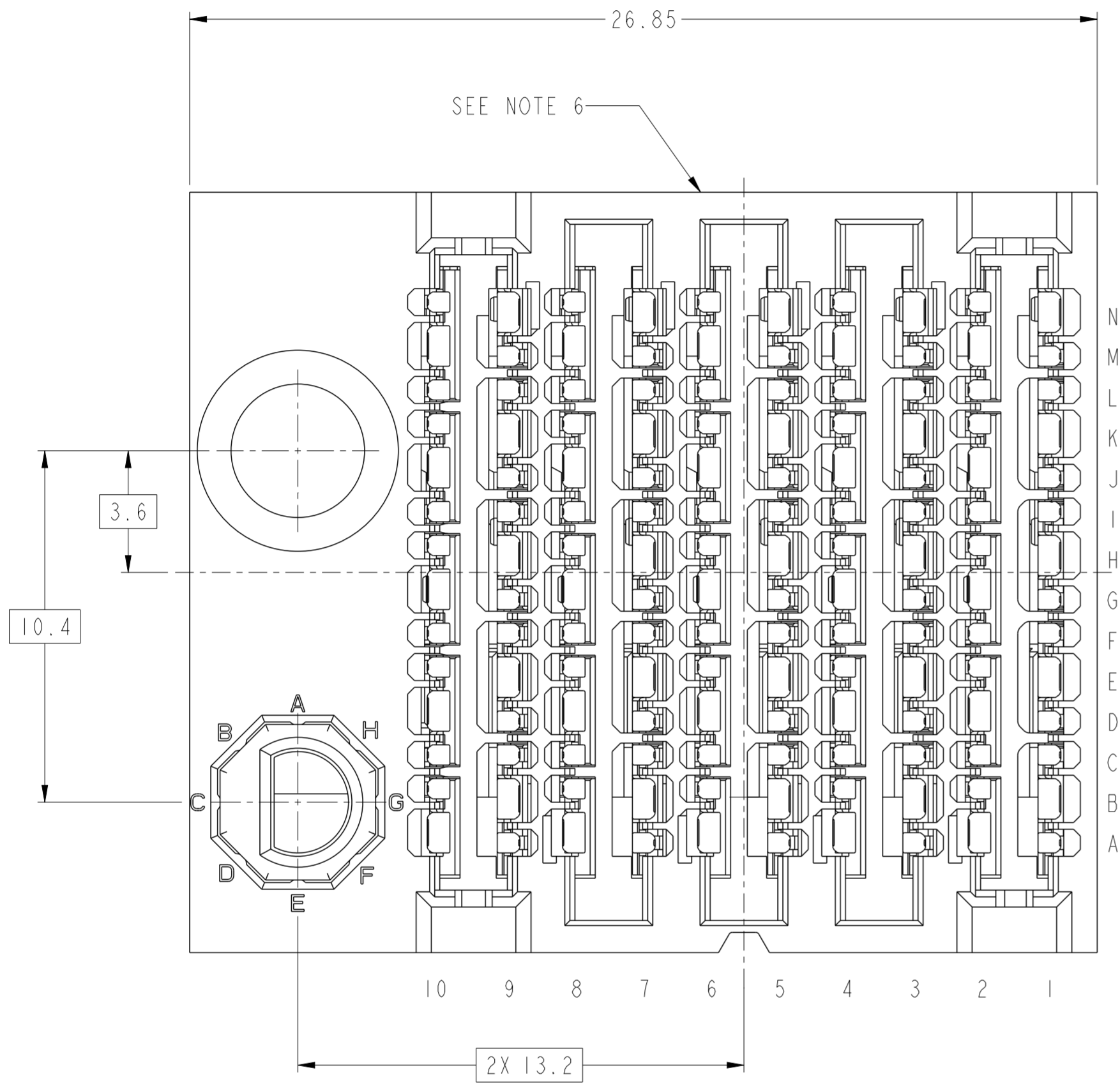
COLUMN ID

5X 0.2

ODD AND EVEN COLUMN OFFSET

13X 1.2

15.6



TOP SURFACE OF DAUGHTER CARD

10137004-X2AYLF THRU 10137004-X2JYLF
 LEFT GUIDANCE (SEE NOTE 17)
 FOR ALL OTHER DIMENSIONS SEE 10137004-101YLF ON SHEET 1

Amphenol
FCi

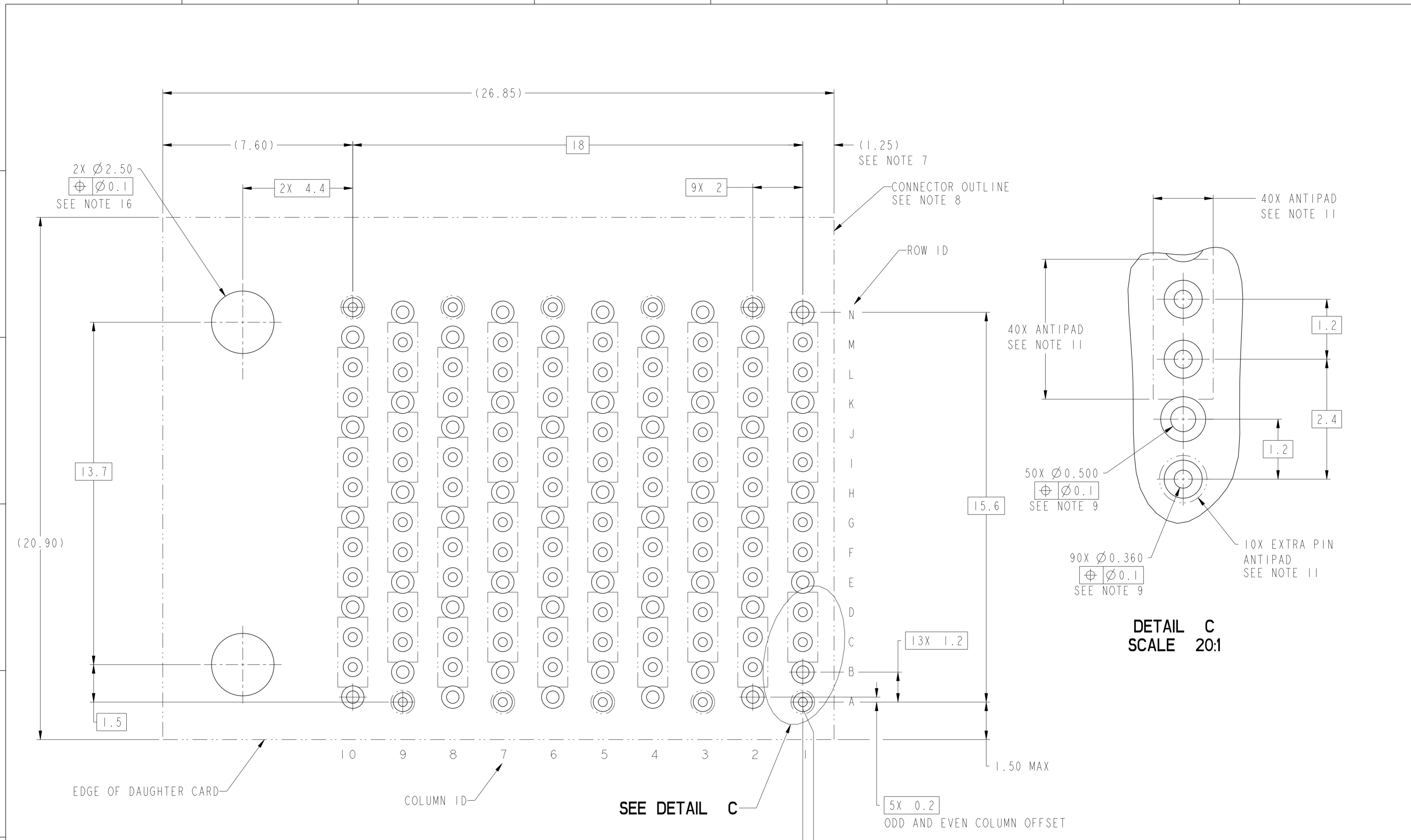
© 2016 AFci

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	7:1							
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1									
ASME Y14.5M		chr	-	appr			Heaven Cen	2020/04/22	product family	ExaMax	rel level	Released					
surface	<table border="1"> <tr> <td rowspan="3">- ✓</td> <td rowspan="3">linear</td> <td>0.X</td> <td>±.3</td> </tr> <tr> <td>0.XX</td> <td>±.10</td> </tr> <tr> <td>0.XXX</td> <td>±.050</td> </tr> <tr> <td></td> <td>angular</td> <td>0°</td> <td>±°</td> </tr> </table>	- ✓	linear	0.X	±.3	0.XX	±.10	0.XXX	±.050		angular	0°	±°		title ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	dwg no 10137004	rev C
- ✓	linear			0.X	±.3												
				0.XX	±.10												
		0.XXX	±.050														
	angular	0°	±°														
		cat. no.	Product - Customer Drw			sheet 8 of 11											

PDS: Rev :C

STATUS:Released

Printed: Apr 23, 2020



10137004-X2AYLF THRU -X2JYLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, 11 & 16
SCALE 10:1

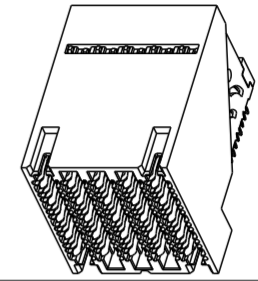
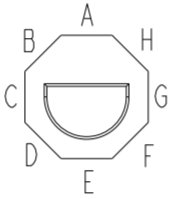
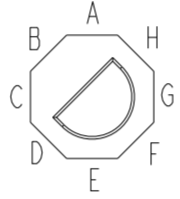
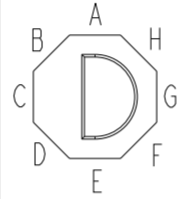
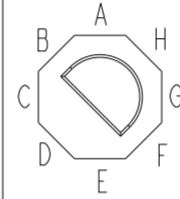
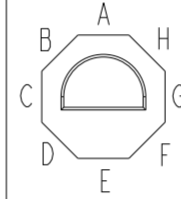
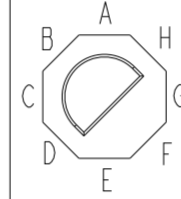
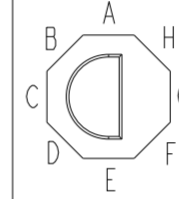
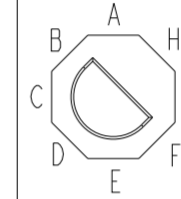
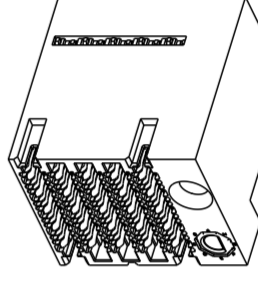
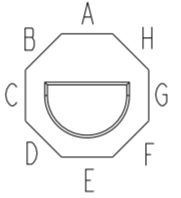

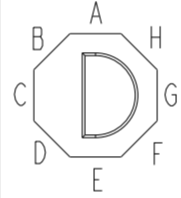
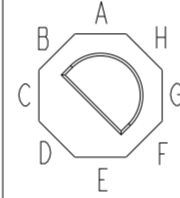
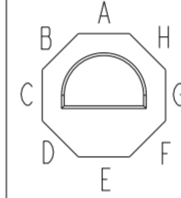
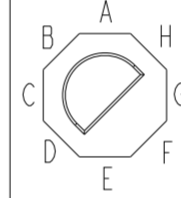
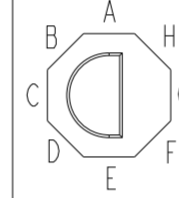
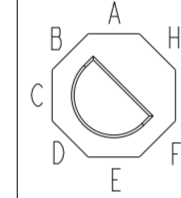
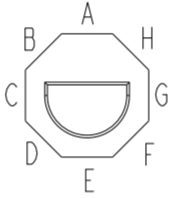

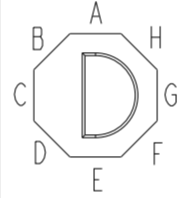
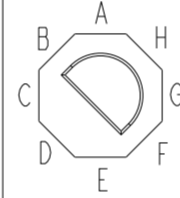
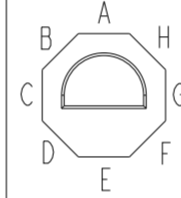
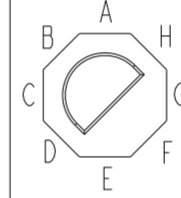
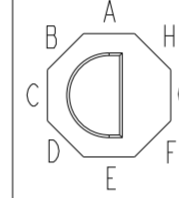
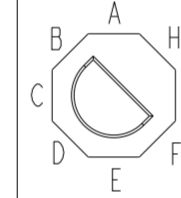
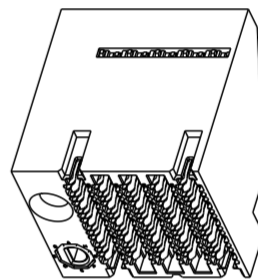
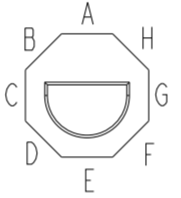

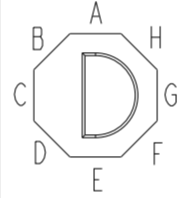
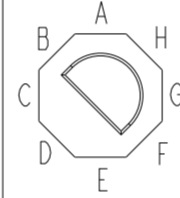
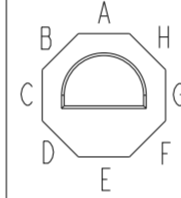
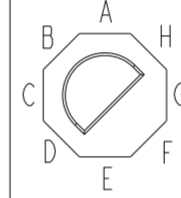
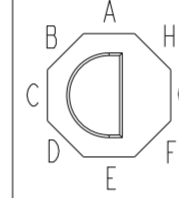
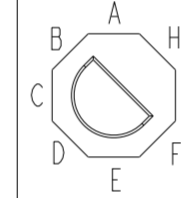
DETAIL C
SCALE 20:1

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	7:1		
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1	rel level	Released		
ASME Y14.5M		chr	-	apppr							Heaven Cen	2020/04/22
surface	linear	0.X	±.3	0.XX							±.10	0.XXX
					product family ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		title 10137004	rev C	cat. no. Product - Customer Drw sheet 9 of 11			

10137004 - Y Y Y Y L F

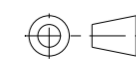
PLATING
SEE NOTE 2

ASSEMBLY PART NUMBER	DESCRIPTION
10137004-1YYYYLF	STANDARD MATE
10137004-2YYYYLF	ADVANCED MATE
10137004-3YYYYLF	SHORT DETECT
10137004-4YYYYLF	ADVANCED MATE & SHORT DETECT

MODULE DESCRIPTION	DESIGNATION REPRESENTED IN DASH NUMBER										BASE MODULE
	1A	1B	1C	1D	1E	1F	1G	1H	1J (NO KEY)		
WITHOUT END GUIDES MODULE (SEE SHEET 1)	01										
RIGHT GUIDANCE MODULE (SEE SHEET 6)									1J (NO KEY)		
									2J (NO KEY)		
LEFT GUIDANCE MODULE (SEE SHEET 8)									2J (NO KEY)		
									2J (NO KEY)		

Amphenol FCI

© 2016 AFCI

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	1:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2019/12/12		←→	ecn no	ELX-DG-35549-1	rel level	Released	
ASME Y14.5M		chr	-	-							
surface		appr	Heaven Cen	2020/04/22							product family
linear	0.X ±.3	Amphenol FCI		title		ExaMAX R.A. RECEPTACLE		dwg no	10137004		
	0.XX ±.10	ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		cat. no.		-		Product - Customer Drw	sheet 10 of 11		
	0.XXX ±.050									rev	C
angular	0° ±°										

PDS: Rev :C

STATUS:Released

Printed: Apr 23, 2020

NOTES:

- ① - CONNECTOR MATERIALS:
HOUSING: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
IMLA PLASTIC: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
CONTACT: COPPER ALLOY
ORGANIZER: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
- 2 - CONTACT PLATING:
SEPARABLE INTERFACE:
-YYYYLF: PERFORMANCE-BASED PLATING, QUALIFIED TO MEET THE REQUIREMENTS OF FCI PRODUCT SPECIFICATION GS-12-1096 INCLUDING TELCORDIA GR-1217-CORE (NOVEMBER 1995) CENTRAL OFFICE TEST SEQUENCE
-YYY2LF: GXT+ OVER NICKEL
-YYY9LF: GXT OVER NICKEL
PRESS-FIT TAILS: TIN OVER NICKEL (LEAD FREE)
- 3 - PRODUCT SPECIFICATION: GS-12-1096
- 4 - APPLICATION SPECIFICATION GS-20-0361.
- 5 - PACKAGING MEETS GS-14-920 LEAD FREE LABELING SPECIFICATION.
- ⑥ - PRODUCT MARKING, (PROTOTYPE, PART NUMBER & LOT CODE), ON THIS SURFACE.
- ⑦ - THE MINIMUM VIA SPACING BETWEEN STACKED CONNECTORS IS 3.0 MM FOR THIS RAR AND THE MATING HEADER. REFER TO THE APPLICATION SPECIFICATION FOR DETAILS.
- ⑧ - CONNECTOR OUTLINE MAY BE SCREEN PRINTED ONTO CUSTOMER PCB TO BE USED AS A GUIDE FOR MANUAL CONNECTOR PLACEMENT.
- ⑨ - REFER TO CUSTOMER DRAWING 10119933 FOR INFORMATION ON PCB HOLE DIAMETERS AND PLATING OPTIONS
- 10 - THIS PRODUCT MEETS THE EUROPEAN UNION DIRECTIVES & OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004.
- ⑪ - REFER TO ROUTING GUIDE GS-20-0511 FOR RECOMMENDATIONS ON OPTIMIZATION OF FOOTPRINT AND TRACE ROUTING LAYOUT.
- 12 - THE HOUSING WILL WITHSTAND EXPOSURE TO 260° C PEAK TEMPERATURE FOR 10-30 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN.
- ⑬ - THE ADVANCED MATE RECEPTACLE, 10137004-2YYYYLF, WHEN MATED WITH AN ADVANCED MATE VERTICAL HEADER OR AN ADVANCED MATE RIGHT-ANGLE HEADER WILL PROVIDE 2 PAIRS OF MATING CONTACTS THAT MATE 0.75MM BEFORE THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.
- ⑭ - THE SHORT DETECT RECEPTACLE, 10137004-3YYYYLF, WHEN MATED WITH A STANDARD MATE VERTICAL HEADER OR A STANDARD MATE RIGHT-ANGLE HEADER WILL PROVIDE 1 PAIR OF MATING CONTACTS THAT MATE 1.00MM AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.
- ⑮ - THE ADVANCED MATE/SHORT DETECT RECEPTACLE, 10137004-4YYYYLF, WHEN MATED WITH AN ADVANCED MATE VERTICAL HEADER OR AN ADVANCED MATE RIGHT-ANGLE HEADER WILL PROVIDE 2 PAIRS OF MATING CONTACTS THAT MATE 0.75MM BEFORE THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS AND 1 PAIR OF MATING CONTACTS THAT MATE 1.00MM AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.
- ⑯ - FOR CONNECTORS WITH EITHER A RIGHT OR LEFT GUIDE MODULE, TWO PHILLIPS PAN HEAD M2 HOLD DOWN SCREWS MUST BE USED TO SECURE THE CONNECTOR TO THE PCB. THE SCREW LENGTH SHALL BE 2.0-6.0mm PLUS THE THICKNESS OF THE BOARD. SCREWS ARE NOT PROVIDED WITH CONNECTOR.
- ⑰ - LEFT / RIGHT INTEGRATED GUIDE ORIENTATION IS DETERMINED BY THE LOCATION OF THE GUIDE FEATURES WHEN LOOKING AT THE MATING FACE OF THE RIGHT ANGLE RECEPTACLE. THE LEFT / RIGHT DESIGNATION OF THE MATING HEADER IS DEFINED BY THE RIGHT ANGLE RECEPTACLE THAT IT MATES WITH (i.e. A RIGHT GUIDE VERTICAL HEADER MATES WITH A RIGHT GUIDE RIGHT ANGLE RECEPTACLE.)
- ⑱ - ALL GROUND CONTACTS ARE COMMONED WITHIN A COLUMN.

spec ref	SEE NOTES	dr	Terry Luo	2015/10/08	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2019/12/12		← →	ecn no	ELX-DG-35549-1		
ASME Y14.5M		chr	-	rel level			Released			
surface	linear	appr	Heaven Cen	2020/04/22	product family	ExaMax	div no	10137004		
	0.X ±.3	Amphenol FCI		title	ExaMAX R.A. RECEPTACLE			rev	C	
	0.XX ±.10			ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall						
	0.XXX ±.050			cat. no.	Product - Customer Drw			sheet 11 of 11		
	angular									
	0° ±°									

Amphenol FCI

© 2016 AFCI