

PRODUCT NUMBER
SEE SHEET 16

ODD COLUMN, CONTACT ROW ID
ODD AND EVEN COLUMNS
ARE OFFSET

EVEN COLUMN,
CONTACT ROW ID

NOTE 6

HOUSING

4X 3.6
GROUND CENTERS

4X 1
SIGNAL PAIR
CENTERS

1.3
ROW A TO
FIRST GROUND

4X 3.6
SIGNAL CENTERS

AI CORNER CHAMFER

4X 3.6
GROUND CENTERS

4X 3.6
SIGNAL CENTERS

1.3
ROW A TO
FIRST SIGNAL

4X 1
SIGNAL PAIR
CENTERS

TOP SURFACE
OF DAUGHTER CARD

(22.50)

(6.70)

90X 1.40±0.15
SIGNALS

(11.65)

1.05
Ø OF ROW A
EVEN COLUMNS

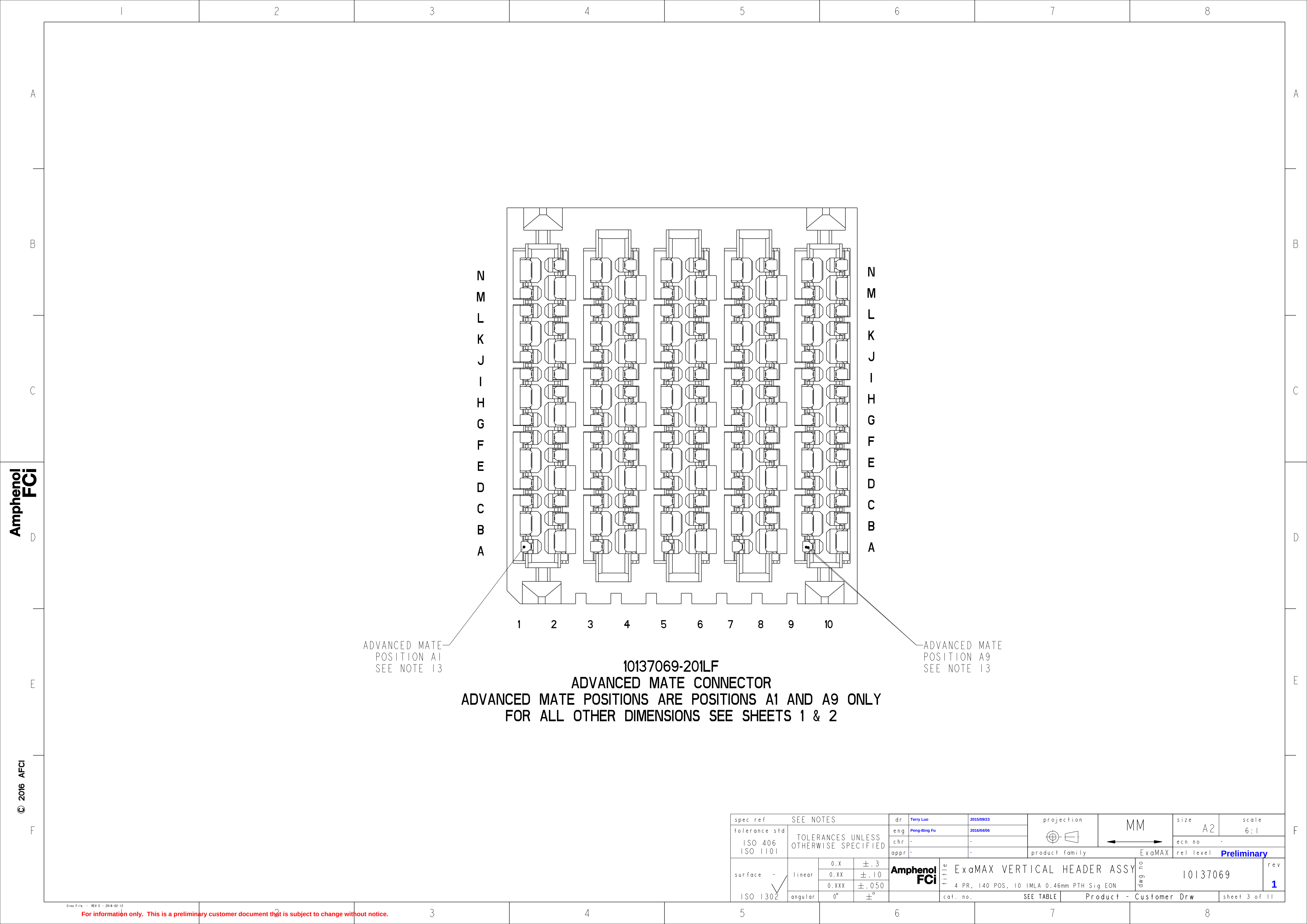
1.25
Ø OF ROW A
ODD COLUMNS

0.20
ODD TO EVEN
COLUMN OFFSET

50X 1.60±0.15
GROUNDS
SEE NOTE 18

10137069-Y01LF
(10137069-101LF STANDARD MATE CONNECTOR SHOWN)

spec ref	SEE NOTES			dr	Terry Luo	2015/09/23		MM	size	A2	scale	8:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/06			ecn no	-			
ISO 406				chr	-	-							
ISO 1101				appr	-	-							
							product family	ExaMAX					
surface - 	linear	0.X	±.3	Amphenol FCi	title ExaMAX VERTICAL HEADER ASSY 4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON				dwg no	10137069		rev	1
		0.XX	±.10										
		0.XXX	±.050										
	angular	0°	±°										

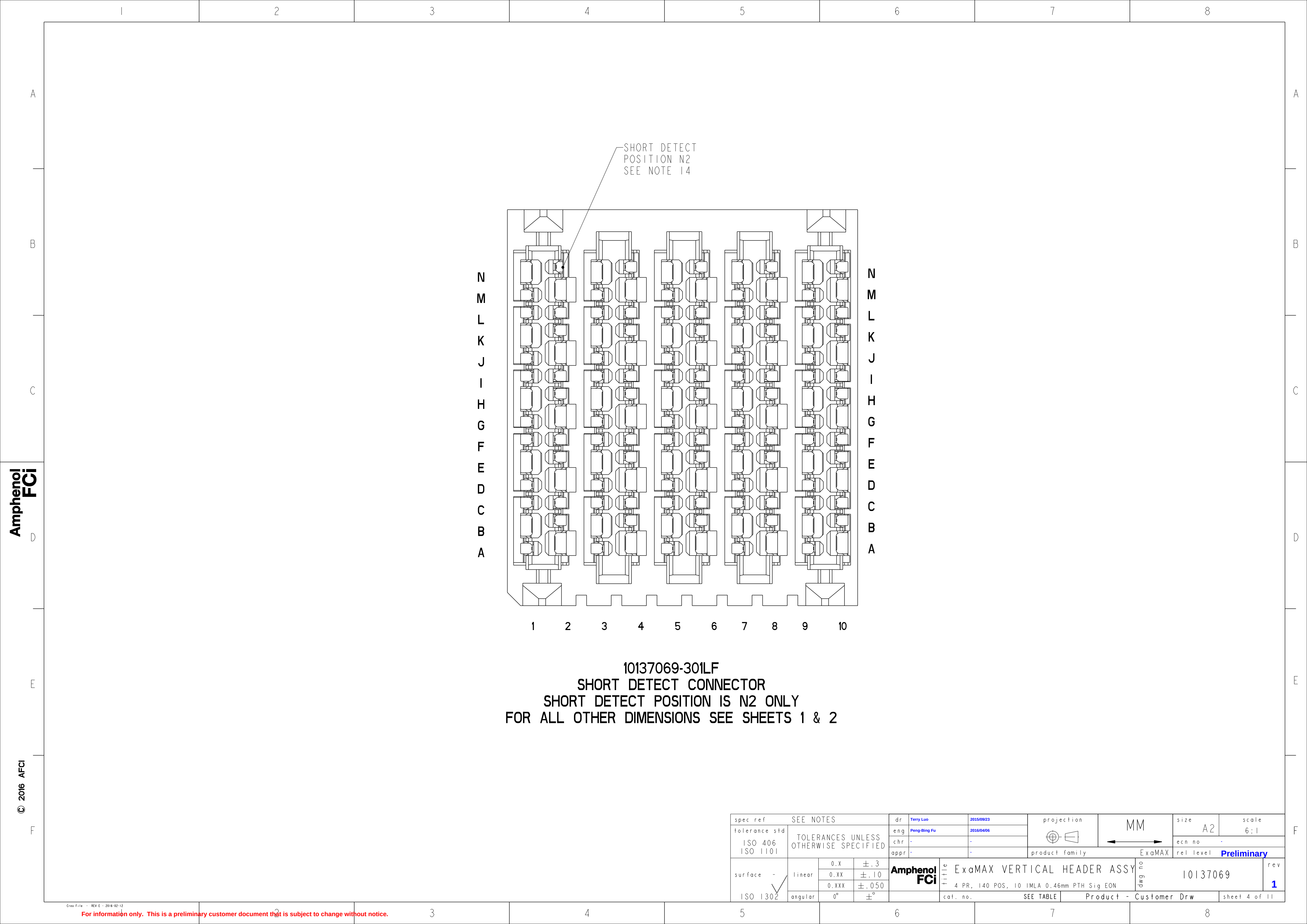


Amphenol
FCi

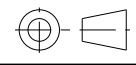
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10137069-201LF
ADVANCED MATE CONNECTOR
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY
FOR ALL OTHER DIMENSIONS SEE SHEETS 1 & 2

spec ref	SEE NOTES			dr	Terry Luo	2015/09/23	projection	MM ← →	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/06			ecn no	-		
ISO 406				chr	-	-			rel level	Preliminary		
ISO 1101				appr	-	-	product family		ExaMAX			
surface	linear	0.X	±.3	Amphenol FCi	title	ExaMAX VERTICAL HEADER ASSY					rev	
		0.XX	±.10			4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON						
		0.XXX	±.050									
		angular	0°			±°						
ISO 1302					cat. no.	SEE TABLE	Product - Customer Drw				sheet 3 of 11	
										</		

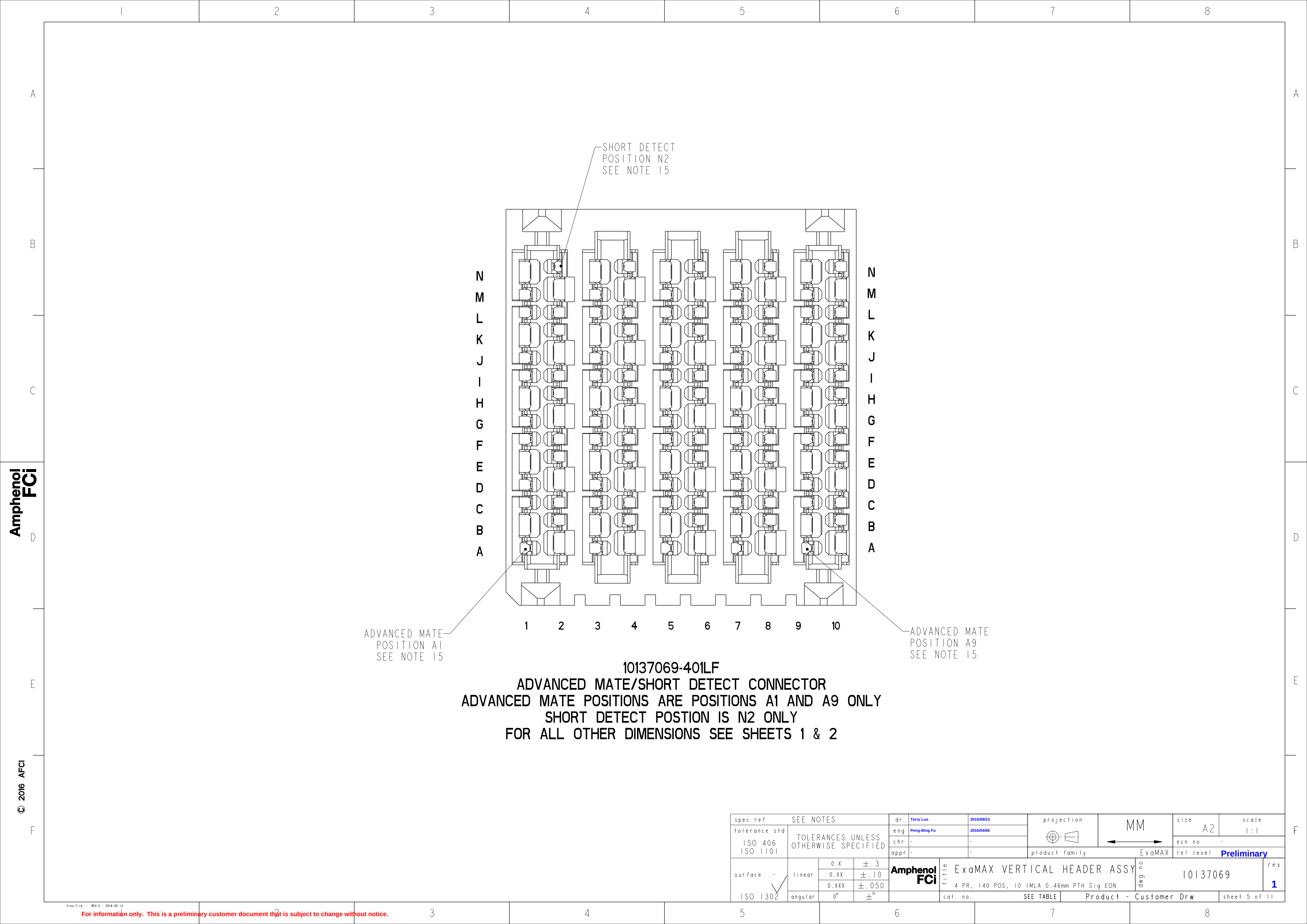


10137069-301LF
SHORT DETECT CONNECTOR
SHORT DETECT POSITION IS N2 ONLY
FOR ALL OTHER DIMENSIONS SEE SHEETS 1 & 2

spec ref		SEE NOTES			dr Terry Luo		2015/09/23		projection		MM		size A2		scale 6:1		
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED			eng Peng-Bing Fu		2016/04/06						ecn no - rel level Preliminary				
ISO 406					chr -		-										
ISO 1101					appr -		-										
									product family		ExaMAX						
surface -		linear		0.X ±.3		±.10		Amphenol FCI		title		ExaMAX VERTICAL HEADER ASSY		dwg no 10137069		rev 1	
		0.XX ±.10		±.050													
		0.XXX ±.050															
ISO 1302		angular 0° ±°								cat. no.		SEE TABLE		Product - Customer Drw		sheet 4 of 11	

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ADVANCED MATE
POSITION A1
SEE NOTE 15

SHORT DETECT
POSITION N2
SEE NOTE 15

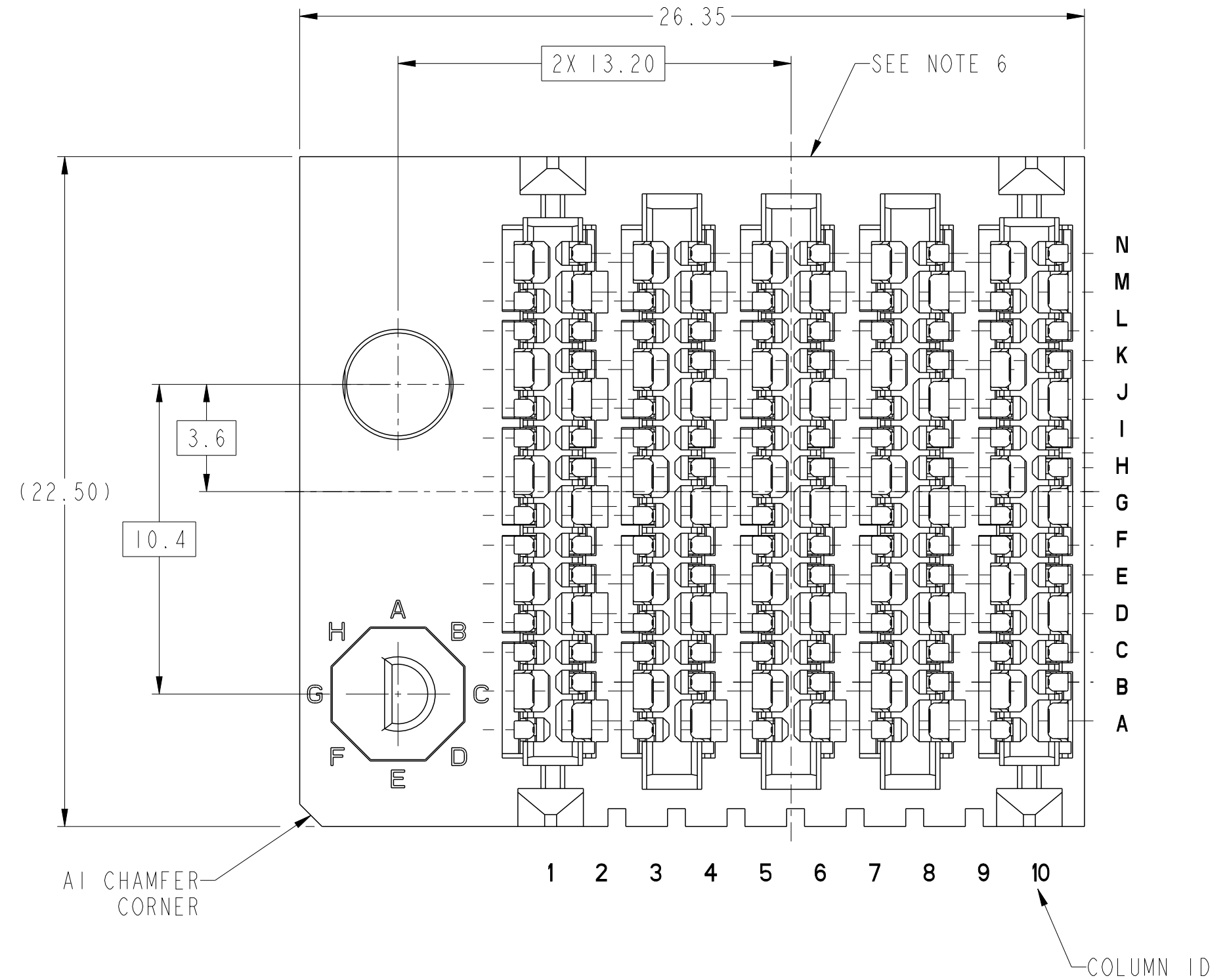
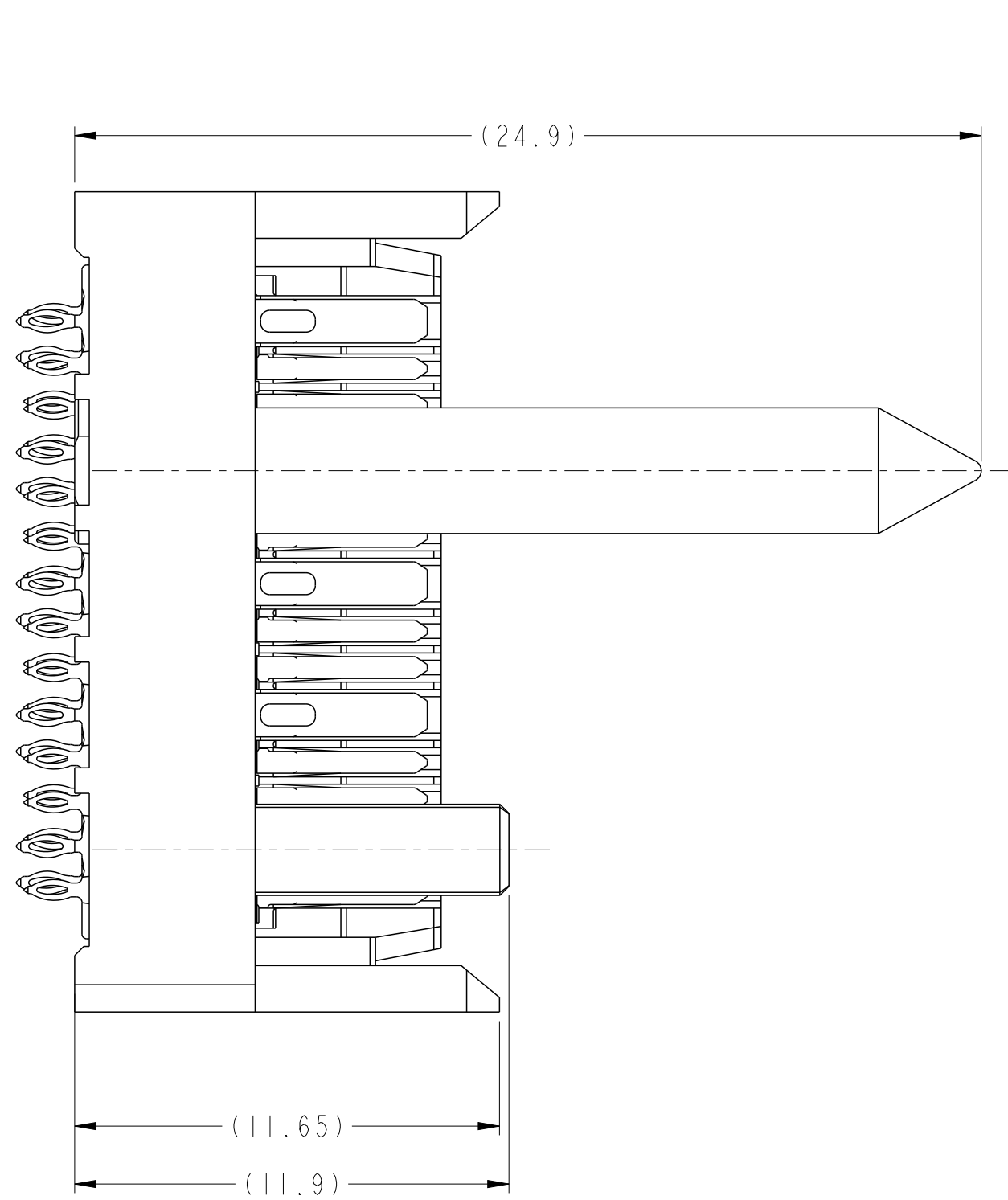
ADVANCED MATE
POSITION A9
SEE NOTE 15

10137069-401LF
ADVANCED MATE/SHORT DETECT CONNECTOR
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY
SHORT DETECT POSTION IS N2 ONLY
FOR ALL OTHER DIMENSIONS SEE SHEETS 1 & 2

spec ref		SEE NOTES		dr Terry Luo		2015/09/23		projection		MM		size A2		scale 1:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng Peng-Bing Fu		2016/04/06						ecn no		-	
ISO 406				chr -		-									
ISO 1101				appr -		-									
				product family		ExaMAX		rel level		Preliminary					
surface -		linear		0.X ±.3		Amphenol FCI		title ExaMAX VERTICAL HEADER ASSY		dwg no 10137069		rev 1			
		0.XX ±.10													
		0.XXX ±.050													
ISO 1302		angular 0° ±°		cat. no.		SEE TABLE		Product - Customer Drw		sheet 5 of 11					

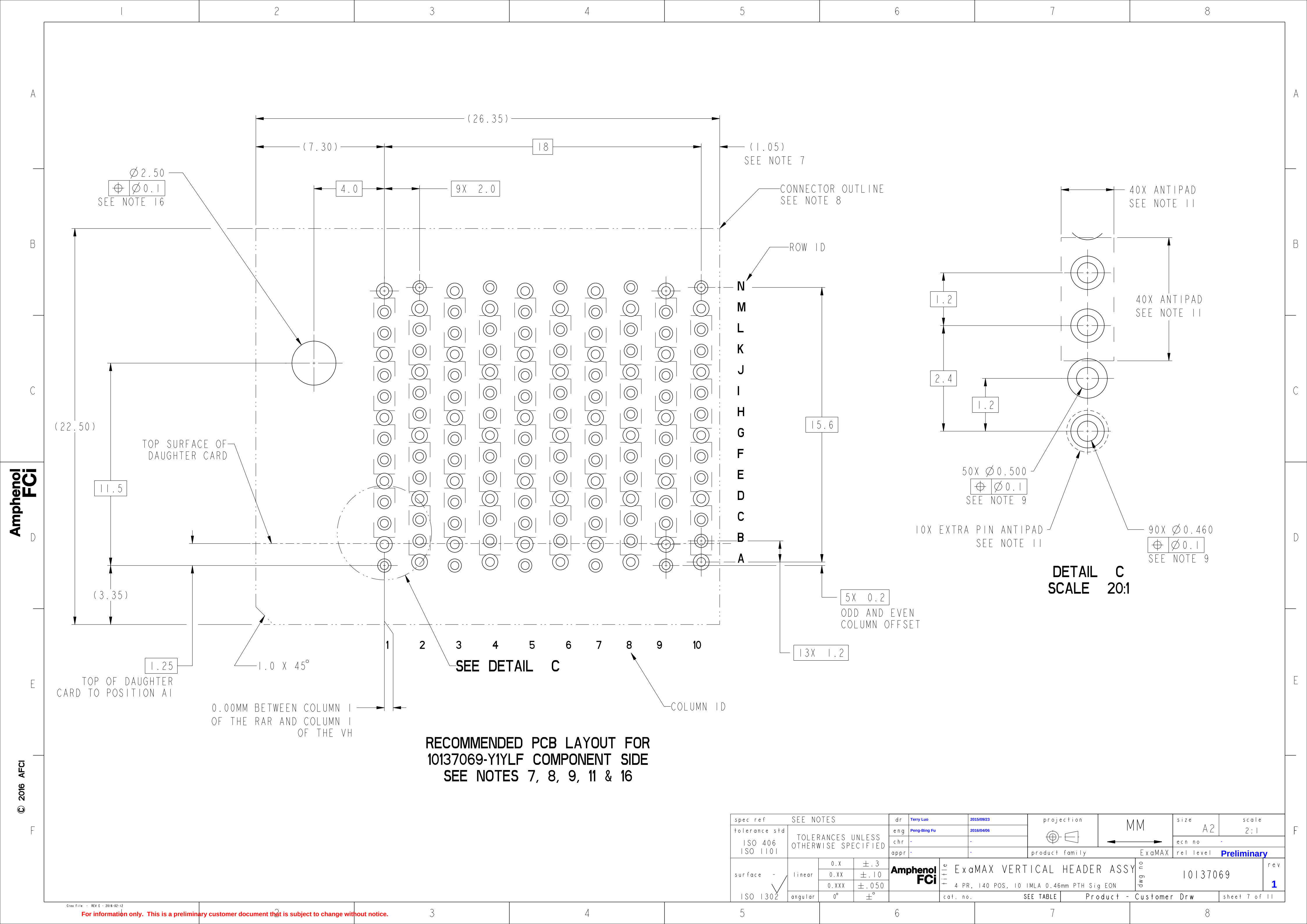
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10137069-Y1ALF THRU -Y1JLF
RIGHT GUIDANCE CONNECTOR (SEE NOTE 17)
FOR ALL OTHER DIMENSIONS SEE SHEET 1

spec ref		SEE NOTES			dr Terry Luo		2015/09/23		projection		MM		size A2		scale 6:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED			eng Peng-Bing Fu		2016/04/06						ecn no -		rel level Preliminary	
ISO 406					chr -		-									
ISO 1101					appr -		-		product family		ExaMAX					
surface -		linear		Amphenol FCI		title ExaMAX VERTICAL HEADER ASSY						dwg no 10137069		rev 1		
		0.X ±.3										4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON				
		0.XX ±.10														
ISO 1302		0.XXX ±.050														
		angular 0° ±°														
						cat. no.		SEE TABLE		Product - Customer Drw				sheet 6 of 11		



RECOMMENDED PCB LAYOUT FOR
10137069-Y2YLF COMPONENT SIDE
SEE NOTES 7, 8, 9, 11 & 16

spec ref		SEE NOTES			dr Terry Luo		2015/09/23		projection		MM		size A2		scale 2:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED			eng Peng-Bing Fu		2016/04/06								ecn no -	
ISO 406					chr -		-		rel level Preliminary							
ISO 1101					appr -		-									
surface - ISO 1302		linear		0.X ±.3 0.XX ±.10 0.XXX ±.050		Amphenol FCI		title ExaMAX VERTICAL HEADER ASSY				dwg no 10137069		rev 1		
		angular		0° ±°												cat. no.

A
B
C
D
E
F

10137069 - Y Y Y L F

ASSEMBLY PART NUMBER	DESCRIPTION
10137069-1YYLF	STANDARD MATE
10137069-2YYLF	ADVANCED MATE
10137069-3YYLF	SHORT DETECT
10137069-4YYLF	ADVANCED MATE & SHORT DETECT

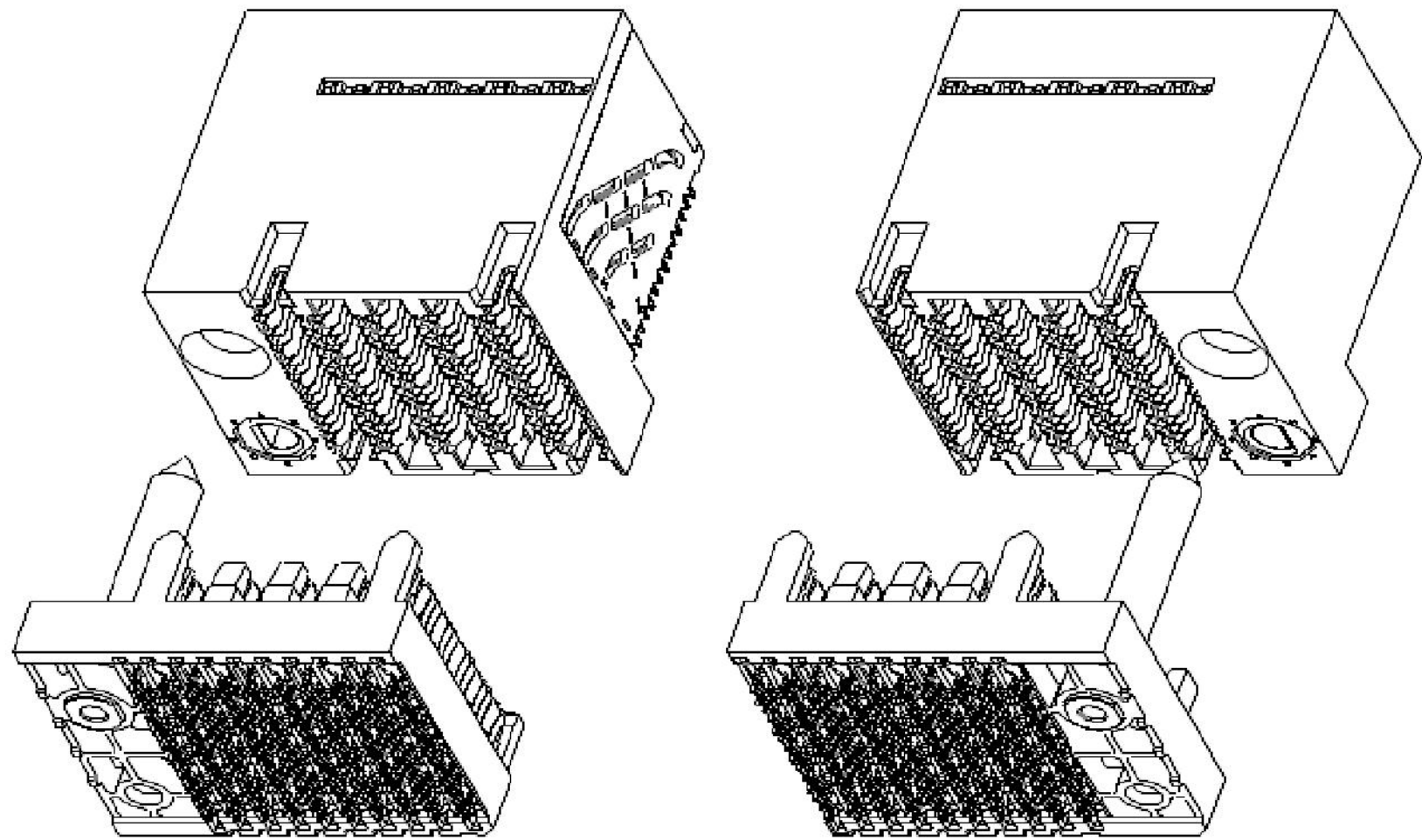
MODULE DESCRIPTION	DESIGNATION REPRESENTED IN DASH NUMBER									BASE MODULE
STANDARD NO GUIDANCE (SEE SHEET 1)	01									
RIGHT GUIDANCE MODULE (SEE SHEET 6)	1A	1B	1C	1D	1E	1F	1G	1H	1J (NO KEY)	
LEFT GUIDANCE MODULE (SEE SHEET 8)	2A	2B	2C	2D	2E	2F	2G	2H	2J (NO KEY)	

spec ref		SEE NOTES				dr Terry Luo		2015/09/23		projection		MM		size A2		scale 1:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED				eng Peng-Bing Fu		2016/04/06						ecn no -			
ISO 406						chr -		-						product family ExaMAX rel level Preliminary			
ISO 1101						appr -		-									
surface - 						linear		Amphenol FCI						title ExaMAX VERTICAL HEADER ASSY		4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON	
		0.X ±.3															
		0.XX ±.10															
		0.XXX ±.050															
ISO 1302		angular 0° ±°		cat. no.		SEE TABLE		Product - Customer Drw				sheet 10 of 11					

A
B
C
D
E
F

NOTES

- ①- CONNECTOR MATERIALS:
HOUSING: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
IMLA PLASTIC: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
CONTACT: COPPER ALLOY
GUIDE PIN: ZINC ALLOY
POLARIZING PIN: ZINC ALLOY
- 2 - CONTACT PLATING:
SEPARABLE INTERFACE:
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
- 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, (PART NUMBER & LOT CODE), ON THIS SURFACE.
- ⑦- THE MINIMUM VIA SPACING BETWEEN STACKED CONNECTOR WILL BE 2.0mm OR 3.0mm
AS DEFINED BY NOTE 7 ON THE MATING RECEPTACLE CUSTOMER DRAWING.
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 THE APPLICATION SPECIFICATION FOR TRACE ROUTING
EXAMPLES THAT INCLUDE DIMENSIONS FOR ANTIPADS, TRACE WIDTHS,
TRACE SPACING, ETC.
- 12- THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C FOR 10-30 SECONDS
IN A CONVECTION, INFRA-RED, OR VAPOR PHASE REFLOW OVEN.
- ⑬- THE ADVANCED MATE HEADER, 10137069-2YYLF, WHEN MATED
WITH AN ADVANCED MATE RECEPTACLE, WILL PROVIDE 2 PAIRS OF MATING
CONTACTS THAT MATE 0.75MM BEFORE THE REMAINDER OF THE SIGNAL
AND GROUND CONTACTS.
- ⑭- THE SHORT DETECT HEADER, 10137069-3YYLF, WHEN MATED
WITH A STANDARD MATE RECEPTACLE, 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 HEADER, 10137069-4YYLF, WHEN MATED
WITH AN ADVANCED MATE RECEPTACLE, 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, ONE PHILLIPS PAN HEAD M2 HOLD DOWN
SCREW MUST BE USED TO SECURE GUIDE PIN/CONNECTOR TO THE PCB. THE SCREW LENGTH SHALL BE
2.0 - 6.0mm PLUS THE THICKNESS OF THE BOARD. SCREW IS 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 WITHIN A COLUMN ARE COMMONED.



LEFT GUIDE RIGHT GUIDE

ExaMAX INTEGRATED GUIDE ORIENTATION
SEE NOTE 17

spec ref		SEE NOTES		dr Terry Luo		2015/09/23		projection		MM		size A2		scale 2:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng Peng-Bing Fu		2016/04/06						ecn no -		rel level Preliminary	
ISO 406				chr -		-									
ISO 1101				appr -		-									
								product family		ExaMAX					
surface -		linear		0.X ±.3		Amphenol FCI		title		ExaMAX VERTICAL HEADER ASSY		dwg no 10137069		rev 1	
		0.XX ±.10													
		0.XXX ±.050													
ISO 1302		angular 0° ±°				cat. no.		SEE TABLE		Product - Customer Drw		sheet 11 of 11			