

PRODUCT NUMBER - 74983-X02ZZZ(L)LF

X REFER PLATING PERFORMANCE SEE NOTE 7

L REFER LUBRICATED (OPTIONAL) SEE NOTE 7

FOR REAR PLUG-UP APPLICATIONS
USE SHROUD
74993-X02LF

X REFER PLATING PERFORMANCE SEE NOTE 7

EYE OF THE NEEDLE PRESS-FIT SECTION
BABY -H PRESS-FIT SECTION

REFER NOTE 16

DETAIL B
SCALE 4:1

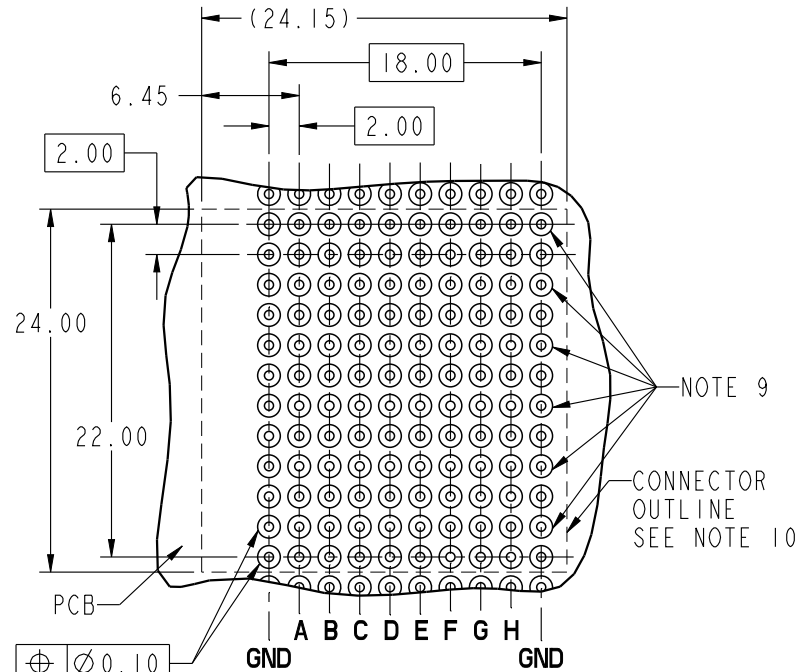
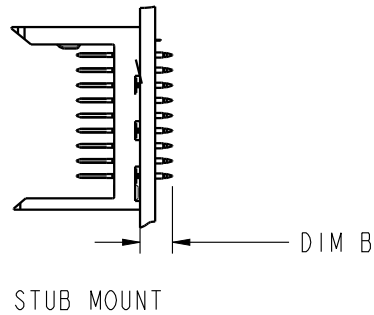
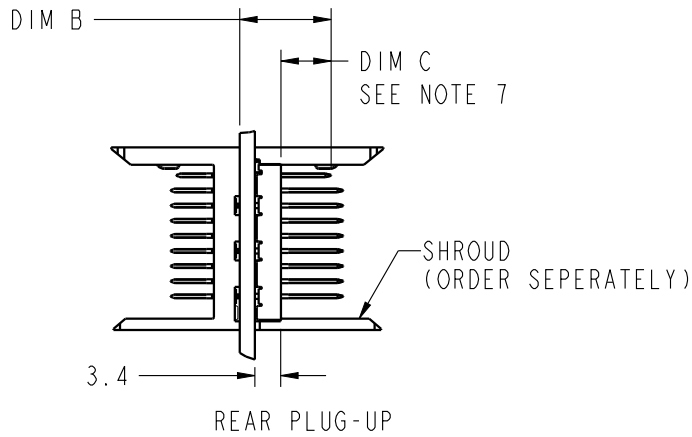
spec ref -		dr P-Mathew Nebu 2011/05/20		projection		size A4		scale 2:1															
tolerance std ISO 406 ISO 1101		eng Rahul Mohan-M 2021/08/13						ecn no ELX-I-41330-1															
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -						rel level Released															
surface 3.2		appr Kuriakose, San 2021/08/13		product family METRAL 1000		rev		74983															
ISO 1302		<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td>±0.3</td> </tr> <tr> <td></td> <td>0.XX</td> <td>±0.13</td> </tr> <tr> <td></td> <td>0.XXX</td> <td>±0.05</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±2°</td> </tr> </table>		linear	0.X	±0.3		0.XX	±0.13		0.XXX	±0.05	angular	0°	±2°	Amphenol FCI title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SPECIAL LOAD EXT.		dwg no 74983 rev AC		cat. no. -		Product - Customer Drw	
linear	0.X	±0.3																					
	0.XX	±0.13																					
	0.XXX	±0.05																					
angular	0°	±2°																					
						sheet 1 of 6																	

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH	
			WHEN MATING TO A 84854 SERIES METRAL 1000 RECEPTACLES	
			ROWS A,B,C, D,E,F,G & H	GROUND ROW
01*	5.00	4.30	1.60 MIN	1.60 MIN
22		12.20	2.95 - 3.80	2.95 - 4.20
30		12.95	2.95 - 4.55	3.25 - 4.95
05		13.70	2.95 - 5.30	4.00 - 5.70
35		14.45	3.05 - 6.05	4.75 - 6.45
48		15.20	3.80 - 6.80	5.50 - 7.20
40		15.70	4.30 - 7.30	6.00 - 7.70
65		16.40	5.00 - 8.00	6.70 - 8.40
09		17.10	5.70 - 8.70	7.40 - 9.10
02*		5.75	4.30	1.60 MIN
44	12.20		2.95 - 3.80	2.95 - 4.20
31	12.95		2.95 - 4.55	3.25 - 4.95
06	13.70		2.95 - 5.30	4.00 - 5.70
36	14.45		3.05 - 6.05	4.75 - 6.45
49	15.20		3.80 - 6.80	5.50 - 7.20
25	15.70		4.30 - 7.30	6.00 - 7.70
66	16.40		5.00 - 8.00	6.70 - 8.40
10	17.10		5.70 - 8.70	7.40 - 9.10
03*	6.50		4.30	1.60 MIN
45		12.20	2.95 - 3.80	2.95 - 4.20
32		12.95	2.95 - 4.55	3.25 - 4.95
07		13.70	2.95 - 5.30	4.00 - 5.70
37		14.45	3.05 - 6.05	4.75 - 6.45
50		15.20	3.80 - 6.80	5.50 - 7.20
41		15.70	4.30 - 7.30	6.00 - 7.70
24		16.40	5.00 - 8.00	6.70 - 8.40
11		17.10	5.70 - 8.70	7.40 - 9.10

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH	
			WHEN MATING TO A 84854 SERIES METRAL 1000 RECEPTACLE	
			ROWS A,B,C,D, E, F, G, & H	GROUND ROW
04*	7.25	4.30	1.60 MIN	1.60 MIN
46		12.20	2.95 - 3.80	2.95 - 4.20
33		12.95	2.95 - 4.55	3.25 - 4.95
08		13.70	2.95 - 5.30	4.00 - 5.70
38		14.45	3.05 - 6.05	4.75 - 6.45
51		15.20	3.80 - 6.80	5.50 - 7.20
42		15.70	4.30 - 7.30	6.00 - 7.70
67		16.40	5.00 - 8.00	6.70 - 8.40
12		17.10	5.70 - 8.70	7.40 - 9.10
19*		8.00	4.30	1.60 MIN
47	12.20		2.95 - 3.80	2.95 - 4.20
34	12.95		2.95 - 4.55	3.25 - 4.95
20	13.70		2.95 - 5.30	4.00 - 5.70
39	14.45		3.05 - 6.05	4.75 - 6.45
52	15.20		3.80 - 6.80	5.50 - 7.20
43	15.70		4.30 - 7.30	6.00 - 7.70
68	16.40		5.00 - 8.00	6.70 - 8.40
21	17.10		5.70 - 8.70	7.40 - 9.10

spec ref -		dr P-Mathew Nebu	2011/05/20			size A4	scale 2:1
tolerance std ISO 406 ISO 1101		eng Rahul Mohan-M	2021/08/13			ecn no ELX-I-41330-1	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -	-			rel level Released	
surface 3.2	linear angular	0.X	±0.3	product family METRAL 1000	title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SPECIAL LOAD EXT.	dwg no 74983	rev AC
ISO 1302		0.XX	±0.13				
		0.XXX	±0.05				
	0°	±2°	cat. no. -	Product - Customer Drw	sheet 2 of 6		

Creo F110:ELX-MC:AC,REV F,2020-12-21



RECOMMENDED PCB HOLE PATTERN
(COMPONENT SIDE)
FOR OTHER OPTIONS SEE DRAWING
58351

spec ref		-		dr	P-Mathew Nebu	2011/05/20	projection 	MM ←→	size	A4	scale	2:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Rahul Mohan-M	2021/08/13			ecn no	ELX-I-41330-1			
ISO 406 ISO 1101				chr	-	-			rel level	Released			
surface		linear	0.X	±0.3	Amphenol FCi	title	product family		74983	rev	AC		
ISO 1302			0.XX	±0.13			VERTICAL SIGNAL HDR 8 ROW				cat. no.	Product - Customer Drw	
		0.XXX	±0.05	P.F. 96 POS. SPECIAL LOAD EXT.			STATUS:Released						
		angular	0°	±2°			Printed: Aug 17, 2021						

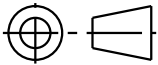

SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
74983-X02001LF	H	01
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	
74983-X02004LF *RPU	H	05
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	
74983-X02011LF	H	02
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	
74983-X02013LF *RPU	H	06
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	
74983-X02050LF	H	02
	G	04
	F	03
	E	04
	D	03
	C	04
	B	03
	A	03
	GND	02

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
4.00 - 5.30

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
3.25 - 5.30

SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
74983-X02051LF	H	03
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	
74983-X02052LF	H	02
	G	02
	F	04
	E	02
	D	04
	C	04
	B	02
	A	02
	GND	02
74983-X02053LF *RPU	H	06
	G	08
	F	06
	E	06
	D	08
	C	08
	B	06
	A	06
	GND	06
74983-X02054LF	H	02
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
4.00 - 5.30

dr	P-Mathew Nebu	2011/05/20	projection 	MM 	size	A4	scale	2:1
eng	Rahul Mohan-M	2021/08/13			ecn no	ELX-I-41330-1		
chr	-	-			rel level	Released		
appr	Kuriakose, San	2021/08/13	product family		rev	74983		
Amphenol FCi			title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SPECIAL LOAD EXT.		dwg no 74983	rev AC		
cat. no.			Product - Customer Drw			sheet 4 of 6		

SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
74983-X02056LF *RPU	H	22
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	
74983-X02057LF	H	02
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	
74983-X02058LF *RPU	H	06
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	
74983-X02059LF **	H	03
	G	19
	F	04
	E	19
	D	04
	C	04
	B	02
	A	
	GND	
74983-X02060LF	H	03
	G	11
	F	41
	E	24
	D	41
	C	24
	B	41
	A	24
	GND	49

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
2.95 - 3.80

PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
4.00 - 5.30

PCB THK
RANGE FOR
REAR PLUG UP
APPLICATIONS:
*2.30 - 6.70



SPECIAL LOAD PATTERNS		
PRODUCT #	ROW	PIN CODES
74983-X02061 *RPU	H	35
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	
74983-X02061LF *RPU SEE NOTE 15	H	05
	G	
	F	
	E	
	D	
	C	
	B	
	A	
	GND	


PCB THICKNESS
RANGE FOR REAR
PLUG UP
APPLICATIONS:
4.05 - 5.70

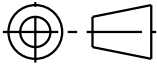

* REAR PLUG-UP PART NUMBERS
** CANNOT BE MATED TO A
METRAL 4000 RECEPTACLE

dr	P-Mathew Nebu	2011/05/20	projection 	size A4 scale 2:1
eng	Rahul Mohan-M	2021/08/13		
chr	-	-		
appr	Kuriakose, San	2021/08/13	product family	ecn no ELX-I-41330-1
Amphenol FCI title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SPECIAL LOAD EXT.			dwg no 74983	rel level Released
cat. no.		Product - Customer Drw		rev AC
				sheet 5 of 6

NOTES:

1. SEE APPLICATION SPECIFICATION GS-20-010 FOR INFORMATION ON AVAILABLE TOOLING, CURCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS.
2. SEE PRODUCT SPECIFICATION: GS-12-110
3. SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
4. SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
5. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5M, 1994
6. HOUSING MATERIAL: LCP, UL 94-V0.
PIN MATERIAL: COPPER ALLOY
GROUND SPRING MATERIAL: COPPER ALLOY
7. PLATING INFORMATION: DRAWING # 10159408
8. DIMENSIONAL RESTRICTIONS OF PINS IN HEADERS.
FOR MATING WITH METRAL 1000 RECEPTACLES
DIM A : 5.00mm MIN, 8.00mm MAX FOR ROWS A-H
DIM A : 5.00mm MIN, 5.75mm MAX FOR ROW GND NEXT TO ROW A
DIM C : 5.00mm MIN, 8.00mm MAX FOR ROWS A-H
DIM C : 4.60mm MIN, 6.30mm MAX FOR ROW GND NEXT TO ROW A
FOR MATING WITH METRAL 4000 RECEPTACLES
DIM A : 5.00mm MIN, 6.50mm MAX FOR ROWS A, B, D, E, G & H
DIM A : 5.00mm MIN, 8.00mm MAX FOR ROW C & F
DIM A : 5.00mm MIN, 5.75mm MAX FOR ROW GND NEXT TO ROW A
DIM C : 5.00mm MIN, 7.00mm MAX FOR ROWS A, B, D, E, G & H
DIM C : 5.00mm MIN, 8.00mm MAX FOR ROW C & F
DIM C : 4.60mm MIN, 6.30mm MAX FOR ROW GND NEXT TO ROW A
9. THE MIN PCB THICKNESS FOR REAR PLUG-UP APPLICATIONS IS 2.9mm SINCE THE COMPLIANT SECTIONS OF THE GROUND SPRING IN THE HEADER DIRECTLY OPPOSE THE GROUND SPRING OF THE SHROUD. THE MIN PCB THICKNESS FROM FRONT PLUG-UP ONLY APPLICATIONS IS 1.6mm.
10. THESE HOLES ARE NEEDED FOR REAR PLUG-UP DESIGNS USING A SHROUD AND MAY BE OMITTED FOR FRONT PLUG-UP ONLY DESIGNS.
11. THE 'CONNECTOR OUTLINE' IS THE MIN OUTLINE REQUIRED. TO DETERMINE THE OUTLINE NECESSARY TO PERMIT THE VARIOUS TYPES OF REPAIR OPERATIONS, SEE APPLICATION SPECIFICATION GS-20-010.
12. CURRENT RATING : 1 AMP PER PIN
13. TEMPERATURE RANGE : -55°C TO +105°C
14. AFTER INSERTION INTO CIRCUIT BOARD WITH QUALIFIED TOOL.
15. THE PRODUCTS MEET EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004.

ALL PRODUCTS WILL WITHSTAND EXPOSURE TO 240°C FOR 60 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN.
16. PIN TYPE IS AT THE MANUFACTURERS OPTION AND CAN BE EITHER BABY-H OR EYE OF THE NEEDLE STYLE
17. A  SYMBOL WILL BE NEXT TO ANY DIMENSIONS, VIEW OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION

spec ref		-		dr	P-Mathew Nebu	2011/05/20	projection 	MM 	size	A4	scale	2:1
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Rahul Mohan-M	2021/08/13			ecn no	ELX-I-41330-1		
ISO 406 ISO 1101				chr	-	-			rel level	Released		
surface		linear	0.X	±0.3	appr	Kuriakose, San	2021/08/13	product family		rev		
ISO 1302			0.XX	±0.13		Amphenol FCI	title		VERTICAL SIGNAL HDR 8 ROW		dwg no	74983
		0.XXX	±0.05	P.F. 96 POS. SPECIAL LOAD EXT.			cat. no.		Product - Customer Drw			
		angular	0°	±2°					sheet 6 of 6			