PRODUCT NO.	FOR REAR PLUG-UP APPLICATIONS USE SHROUD
73983-XZZZ(L)LF	84818-X01LF

X REFER PLATING PERFORMANCE △
SEE NOTE 7

L REFER LUBRICATED (OPTIONAL) △
SEE NOTE 7

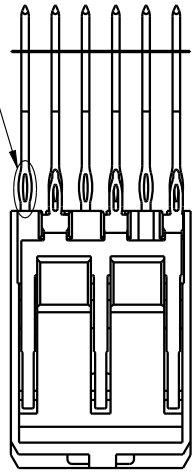
X REFER PLATING PERFORMANCE △
SEE NOTE 7

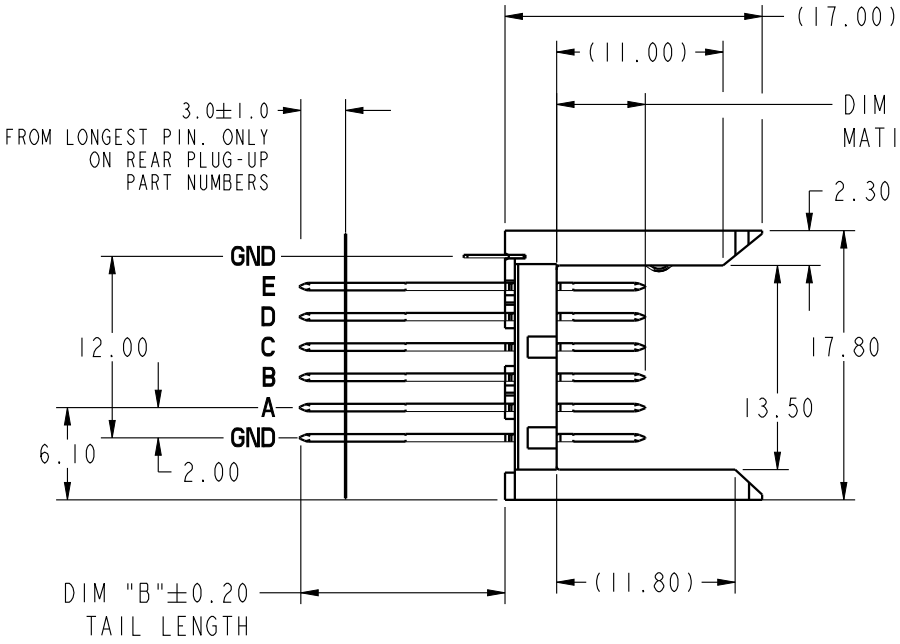
EYE OF NEEDLE
PRESS FIT SECTION

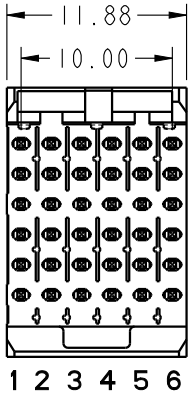
BABY-H
PRESS FIT SECTION

DETAIL A
SCALE 4:1
SEE NOTE 15

SEE DETAIL A







spec ref	-			dr	Shibin Soman	2020/10/16	projection
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Rahul Mohan-M	2021/08/13	MM
				chr	-	-	size A4 / scale 2:1
				appr	Kuriakose, San	2021/08/13	ecn no ELX-I-41325-1
surface ISO 1302	linear	0.X	±0.3	product family	METRAL 1000		rel level Released
		0.XX	±0.15				
		0.XXX	±0.05				
	angular	0°	±2°				

Amphenol FCi

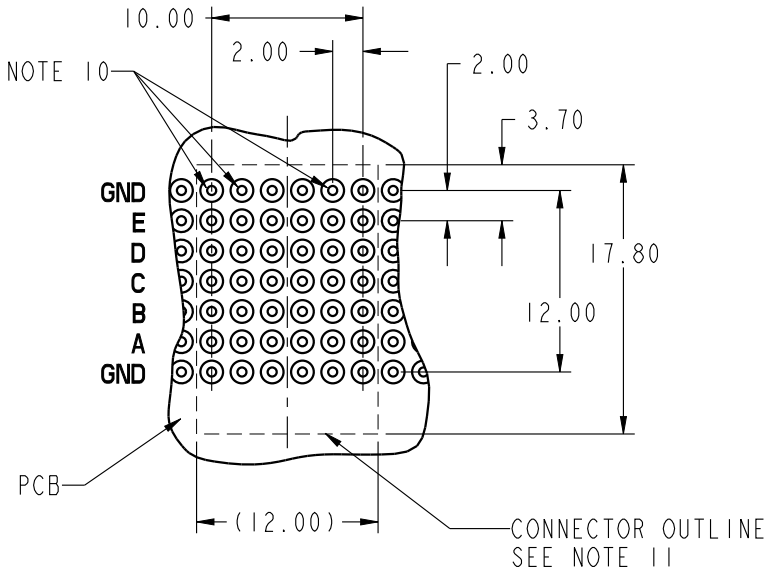
title: VERTICAL SIGNAL HDR 5 ROW
P.F. 30 POS. SPECIAL LOAD STD.

dwg no: 73983

rev: AA

amphenol-icc.com | cat. no. | Product - Customer Drw | sheet 1 of 6

Creo File:ELX-MC-A4C,REV F,2020-12-21



RECOMMENDED PCB HOLE PATTERN
(COMPONENT SIDE
REFER 58351 FOR PTH DETAILS

NOTES:
1. SEE APPLICATION SPECIFICATION GS-20-010 FOR INFORMATION ON AVAILABLE TOOLING, CIRCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS.
2. PRODUCT SPECIFICATION : GS-12-110
3. SEE FCI PUBLICATION 95051I-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
4. SEE FCI PUBLICATION 95051I-029 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
5. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5, 1994
6. HOUSING MATERIAL: LCP -UL94-V0.
   PIN MATERIAL: COPPER ALLOY
   GROUND SPRING MATERIAL: COPPER ALLOY
7. PLATING INFORMATION: DWG # 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-E
   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-E
   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
   DIM A : 5.00mm MIN, 8.00mm MAX FOR ROW C
   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
   DIM C : 5.00mm MIN, 8.00mm MAX FOR ROW C
   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 COMPLAINT SECTIONS OF THE GROUNG SPRING OF THE HEADER DIRECTLY OPPOSE THE GROUND SPRING OF THE SHROUD. THE MIN PCB THICKNESS FOR 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. THE PRODUCTS MEET EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004
    ALL PRODUCTS WILL WITHSTAND EXPOSURE TO 260°C FOR 60 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN.
15. PIN TYPE IS AT THE MANUFACTURERS OPTION AND CAN BE EITHER BABY-H OR EYE OF THE NEEDLE STYLE
16. A △ SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

spec ref	-			dr	Shibin Soman	2020/10/16	projection
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Rahul Mohan-M	2021/08/13	MM
ISO 406 ISO 1101				chr	-	-	size A4 / scale 2:1
				appr	Kuriakose, San	2021/08/13	ecn no ELX-I-41325-1
surface	linear	0.X	±0.3				product family / rel level Released
		0.XX	±0.15				
ISO 1302		0.XXX	±0.05				
	angular	0°	±2°				

Amphenol FCi

title: VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SPECIAL LOAD STD.

dwg no: 73983

rev: AA

amphenol-icc.com | cat. no. | Product - Customer Drw | sheet 2 of 6

Creo File:ELX-MC-A4C,REV F,2020-12-21

PDS: Rev :AA STATUS:Released Printed: Aug 13, 2021

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH				
			WHEN MATING TO A 73981 OR 84688 SERIES RECEPTACLE		WHEN MATING TO A 52057 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C,D,&E	GROUND ROW	ROWS:A,B,D&E	ROW C	GROUND ROW
01*	5.00	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
22		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
30		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
05		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
35		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
48		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
40		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
65		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
09		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10
02*	5.75	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
44		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
31		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
06		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
36		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
49		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
25		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
66		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
10		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10
03*	6.50	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
45		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
32		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
07		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
37		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
50		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
41		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
24		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
11		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10

spec ref	-			dr	Shibin Soman	2020/10/16	projection
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Rahul Mohan-M	2021/08/13	MM
ISO 406 ISO 1101				chr	-	-	size A4 / scale 2:1
				appr	Kuriakose, San	2021/08/13	ecn no ELX-I-41325-1
surface	linear	0.X	±0.3				product family / rel level Released
		0.XX	±0.15				
ISO 1302		0.XXX	±0.05				
	angular	0°	±2°				

Amphenol FCi

title: VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SPECIAL LOAD STD.

dwg no: 73983

rev: AA

amphenol-icc.com | cat. no. | Product - Customer Drw | sheet 3 of 6

Creo File:ELX-MC-A4C,REV F,2020-12-21

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 73981 OR 84688 SERIES RECEPTACLE		WHEN MATING TO A 52057 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C,D,&E	GROUND ROW	ROWS:A,B,D&E	ROW C	GROUND ROW
04*	7.25	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
46		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
33		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
08		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
38		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
51		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
42		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
67		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
12		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10
19*	8.00	4.30	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN	1.60 MIN
47		12.20	2.95 - 3.80	2.95 - 4.20	2.95 - 3.80	2.95 - 3.80	2.95 - 4.20
34		12.95	2.95 - 4.55	3.25 - 4.95	2.95 - 4.55	2.95 - 4.55	3.25 - 4.95
20		13.70	2.95 - 5.30	4.00 - 5.70	3.30 - 5.30	2.95 - 5.30	4.00 - 5.70
39		14.45	3.05 - 6.05	4.75 - 6.45	4.05 - 6.05	3.05 - 6.05	4.75 - 6.45
52		15.20	3.80 - 6.80	5.50 - 7.20	4.80 - 6.80	3.80 - 6.80	5.50 - 7.20
43		15.70	4.30 - 7.30	6.00 - 7.70	5.30 - 7.30	4.30 - 7.30	6.00 - 7.70
68		16.40	5.00 - 8.00	6.70 - 8.40	6.00 - 8.00	5.00 - 8.00	6.70 - 8.40
21		17.10	5.70 - 8.70	7.40 - 9.10	6.70 - 8.70	5.70 - 8.70	7.40 - 9.10

Amphenol FCi

spec ref	-			dr	Shibin Soman	2020/10/16	projection
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Rahul Mohan-M	2021/08/13	MM
ISO 406 ISO 1101				chr	-	-	size A4 / scale 2:1
				appr	Kuriakose, San	2021/08/13	ecn no ELX-I-41325-1
surface	linear	0.X	±0.3				product family / rel level Released
ISO 1302		0.XX	±0.15				
		0.XXX	±0.05				
	angular	0°	±2°				

Amphenol FCi

title: VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SPECIAL LOAD STD.

dwg no: 73983

rev: AA

amphenol-icc.com | cat. no. | Product - Customer Drw | sheet 4 of 6

Creo File:ELX-MC-A4C,REV F,2020-12-21

SPECIAL LOAD PATTERNS

PRODUCT #	ROW	PIN CODES	
73983-X001LF	E	01	
	D		
	C		
	B		
	A		
	GND		
73983-X002LF *RPU	E	22	PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS 2.95 TO 3.80mm
	D		
	C		
	B		
	A		
	GND		
73983-X003LF *RPU	E	30	PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS 3.25 TO 4.55mm
	D		
	C		
	B		
	A		
	GND		
73983-X004LF *RPU	E	05	PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS 4.00 TO 5.30mm
	E		
	C		
	B		
	A		
	GND		

SPECIAL LOAD PATTERNS

PRODUCT #	ROW	PIN CODES	
73983-X005LF *RPU	E	35	PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS 4.75 TO 6.05mm
	D		
	C		
	B		
	A		
	GND		
73983-X008LF *RPU	E	09	PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS 7.40 TO 8.70mm
	D		
	C		
	B		
	A		
	GND		
73983-X011LF	E	02	
	D		
	C		
	B		
	A		
	GND	01	
73983-X012LF *RPU	E	44	PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS 2.95 TO 3.80mm
	D		
	C		
	B		
	A		
	GND	22	

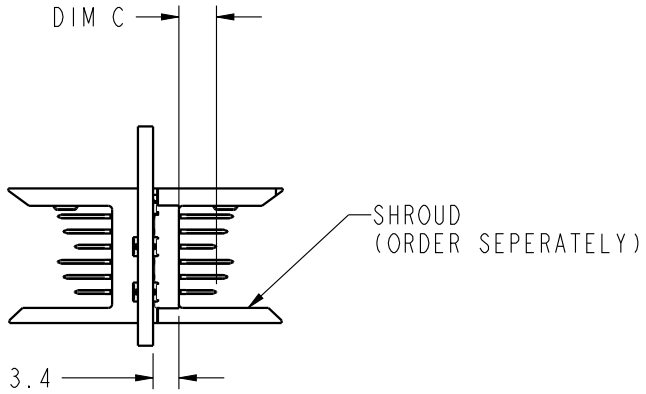
* REAR PLUG UP PART NUMBER

spec ref	-	dr	Shibin Soman	2020/10/16	projection	MM	size A4 / scale 2:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Rahul Mohan-M	2021/08/13			ecn no ELX-I-41325-1
		chr	-	-			
		appr	Kuriakose, San	2021/08/13	product family		rel level Released
surface ISO 1302	linear 0.X ±0.3 / 0.XX ±0.15 / 0.XXX ±0.05 / angular 0° ±2°	Amphenol FCi	title: VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SPECIAL LOAD STD.		dwg no 73983		rev AA
		amphenol-icc.com	cat. no.		Product - Customer Drw		sheet 5 of 6

Creo File:ELX-MC-A4C,REV F,2020-12-21

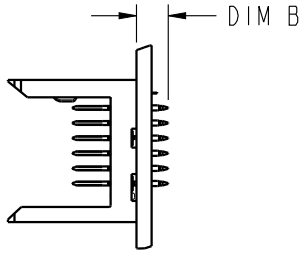
SPECIAL LOAD PATTERNS

PRODUCT #	ROW	PIN CODES
73983-X021LF	E	01
	D	
	C	03
	B	01
	A	
	GND	
73983-X031LF	E	03
	D	
	C	
	B	
	A	
	GND	01
73983-X032LF **	E	19
	D	
	C	
	B	
	A	
	GND	01



REAR PLUG-UP

** CANNOT BE MATED TO A METRAL 4000 RECEPTACLE



PRODUCT #	ROW	COLUMN					
		1	2	3	4	5	6
73983-X033LF	E	02	02	02	02	02	02
	D	02	02	02	02	02	02
	C	02	02	02	02	01	02
	B	02	02	02	02	02	02
	A	02	02	02	02	02	02
	GND	02	02	02	02	02	02

spec ref	-	dr	Shibin Soman	2020/10/16	projection
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Rahul Mohan-M	2021/08/13	MM
		chr	-	-	size A4 / scale 2:1
		appr	Kuriakose, San	2021/08/13	ecn no ELX-I-41325-1
					product family / rel level Released
surface ISO 1302	linear 0.X ±0.3	Amphenol FCi	title	VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SPECIAL LOAD STD.	dwg no 73983 / rev AA
	linear 0.XX ±0.15				
	linear 0.XXX ±0.05				
	angular 0° ±2°	amphenol-icc.com	cat. no.	Product - Customer Drw	sheet 6 of 6

Amphenol FCi

Creo File:ELX-MC-A4C,REV F,2020-12-21

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

FCI / Amphenol:

73983-1001