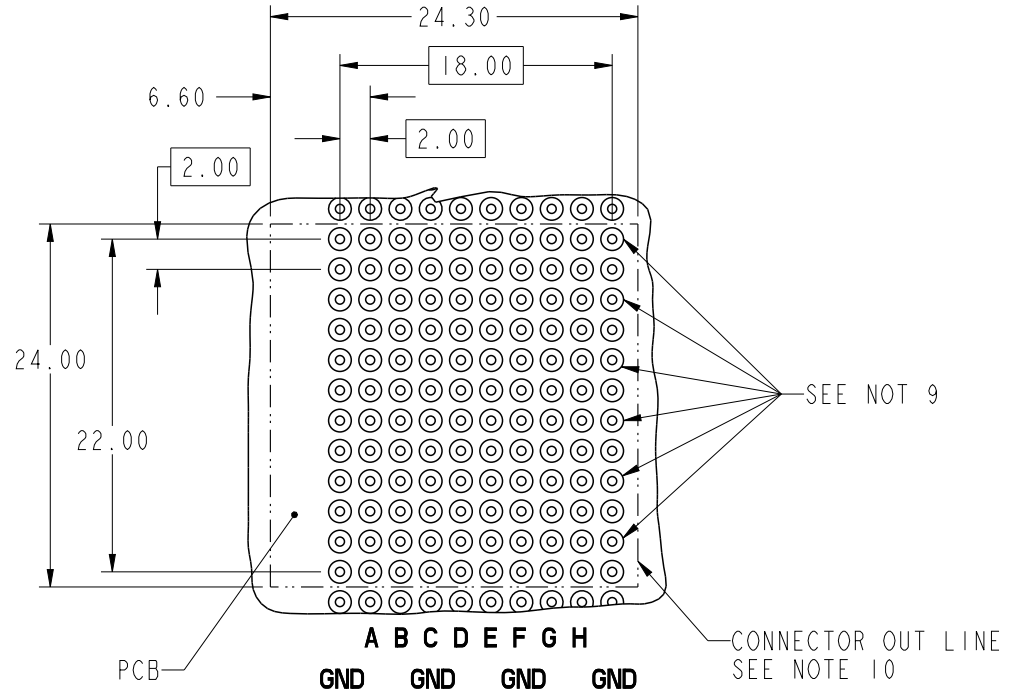
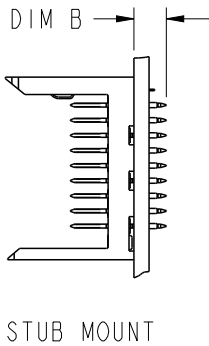
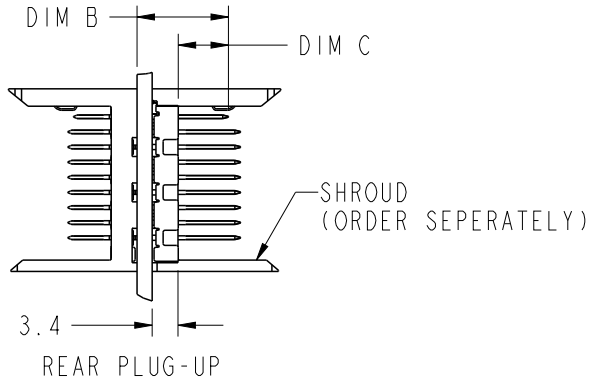


spec ref		dr P-Mathew Nebu 2011/05/20		projection 	MM ←→	size A4	scale 1:1
tolerance std ISO 406 ISO 1101		eng Rahul Mohan-M 2021/08/16				ecn no ELX-I-41694-1	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr -				rel level Released	
surface		appr Kuriakose, San 2021/08/16		product family METRAL 2000		rev	
ISO 1302	linear	0.X	±0.3	Amphenol FCI	title VERTICAL SIGNAL HDR 8 ROW		dwg no 63741
		0.XX	±0.13		P.F. 96 POS. SELECT LOAD EXT.		
	angular	0°	±2°	amphenol-icc.com	cat. no.	Product - Customer Drw	sheet 1 of 6

Creo F:14;ELX-MC;AC;REV F;2020-12-21



**RECOMMENDED PCB HOLE PATTERN
(COMPONENT SIDE)
FOR PTH DETAILS REFER DRAWING 58351.**

spec ref		dr P-Mathew Nebu		2011/05/20		projection		size A4		scale 1:1							
tolerance std		eng Rahul Mohan-M		2021/08/16						ecn no ELX-I-41694-1							
ISO 406 ISO 1101		chr -		-						rel level Released							
TOLERANCES UNLESS OTHERWISE SPECIFIED		appr Kuriakose, San		2021/08/16		product family METRAL 2000											
surface		linear		0.X ±0.3		Amphenol FCi		title VERTICAL SIGNAL HDR 8 ROW P.F. 96 POS. SELECT LOAD EXT.		dwg no 63741		rev V					
ISO 1302				0.XX ±0.13								cat. no.		Product - Customer Drw		sheet 2 of 6	
				0.XXX ±0.050													
		angular		0° ±2°		amphenol-icc.com											

PIN CODE NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN'S TAIL LENGTH				
			WHEN MATING TO A 74981 SERIES METRAL 1000 RECEPTACLE		WHEN MATING TO A 52066 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C, D,E,F,G & H	GROUND ROW	ROWS:A,B,D,E,G & H	ROW C & F	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
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

* STUB PINS - NO REAR PLUG-UP

** THE GREATEST RANGE OCCURS WHEN THE B DIMENSION OF PIN 'GND' IS ONE SIZE SHORTER THEN THE OTHER PINS.

spec ref		dr	P-Mathew Nebu	2011/05/20	projection 	MM 	size	A4	scale	1:1	
tolerance std		eng	Rahul Mohan-M	2021/08/16			ecn no	ELX-I-41694-1			
ISO 406 ISO 1101		chr	-	-			rel level	Released			
TOLERANCES UNLESS OTHERWISE SPECIFIED		appr	Kuriakose, San	2021/08/16	product family		VERTICAL SIGNAL HDR 8 ROW		rev	V	
surface		linear		0.X	±0.3	Amphenol FCI		P.F. 96 POS. SELECT LOAD EXT.		dwg no	63741
ISO 1302		angular		0°	±2°	amphenol-icc.com		cat. no.		Product - Customer Drw	
										sheet 3 of 6	

PIN NO.	DIM A MATING LENGTH	DIM B TAIL LENGTH	PCB THICKNESS RANGE ACCOMMODATED BY PIN LENGTH				
			WHEN MATING TO A 74981 SERIES METRAL 1000 RECEPTACLE		WHEN MATING TO A 52066 SERIES METRAL 4000 RECEPTACLE		
			ROWS A,B,C, D,E,F,G & H	GROUND ROW	ROWS:A,B,D,E,G & H	ROW C & F	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

* STUB PINS - NO REAR PLUG-UP

** THE GREATEST RANGE OCCURS WHEN THE B DIMENSION OF PIN 'GND' IS ONE SIZE SHORTER THEN THE OTHER PINS.

spec ref		dr P-Mathew Nebu		2011/05/20		projection 	MM 	size	A4		scale	1:1	
tolerance std		eng Rahul Mohan-M		2021/08/16				ecn no		ELX-I-41694-1			
ISO 406 ISO 1101		chr -		-				rel level		Released			
surface		appr Kuriakose, San		2021/08/16		product family		rev		63741		V	
ISO 1302		linear		0.X ±0.3		Amphenol FCI		VERTICAL SIGNAL HDR 8 ROW		dwg no		rev	
				0.XX ±0.13		amphenol-icc.com		P.F. 96 POS. SELECT LOAD EXT.		cat. no.		Product - Customer Drw	
		angular		0° ±2°		sheet 4 of 6							

SELECT LOAD PATTERNS

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X01LF STUB MOUNT	H	02	02	02	02	02	02	02	02	02	02	02	02
	G	02	02	02	02	02	02	02	02	02	02	02	02
	F	03	03	03	03	03	03	03	03	03	03	03	03
	E	02	02	02	02	02	02	02	02	02	02	02	02
	D	02	02	02	02	02	02	02	02	02	02	02	02
	C	03	03	03	03	03	03	03	03	03	03	03	03
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	01	02	02	02	02	02	02	02	02	02	02	02
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X04LF	H	02	02	02	02	02	02	02	02	02	02	02	02
	G	03	03	03	03	03	03	03	03	03	03	03	03
	F	04	04	04	04	04	04	04	04	04	04	04	04
	E	02	02	02	02	02	02	02	02	02	02	02	02
	D	03	03	03	03	03	03	03	03	03	03	03	03
	C	04	04	04	04	04	04	04	04	04	04	04	04
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	01	03	03	03	03	03	03	03	03	03	03	03
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X02LF *RPU	H	49	49	49	49	49	49	49	49	49	49	49	49
	G	49	49	49	49	49	49	49	49	49	49	49	49
	F	41	41	41	41	41	41	41	41	41	41	41	41
	E	49	49	49	49	49	49	49	49	49	49	49	49
	D	49	49	49	49	49	49	49	49	49	49	49	49
	C	41	41	41	41	41	41	41	41	41	41	41	41
	B	49	49	49	49	49	49	49	49	49	49	49	49
	A	48	49	49	49	49	49	49	49	49	49	49	49
	GND	49	49	49	49	49	49	49	49	49	49	49	49

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: 5.50 - 6.80

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X05LF *RPU	H	25	25	25	25	25	25	25	25	25	25	25	25
	G	24	24	24	24	24	24	24	24	24	24	24	24
	F	12	12	12	12	12	12	12	12	12	12	12	12
	E	25	25	25	25	25	25	25	25	25	25	25	25
	D	24	24	24	24	24	24	24	24	24	24	24	24
	C	12	12	12	12	12	12	12	12	12	12	12	12
	B	49	25	25	25	25	25	25	25	25	25	25	25
	A	48	24	24	24	24	24	24	24	24	24	24	24
	GND	49	49	49	49	49	49	49	49	49	49	49	49

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: 5.70 - 7.20 FOR METRAL 1000 APPLICATIONS (RECEPTACLE) ADD 6.00 - 7.20 FOR METRAL 4000 APPLICATIONS.

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X03LF	H	02	02	02	02	02	02	02	02	02	02	02	01
	G	03	03	03	03	03	03	03	03	03	03	03	03
	F	04	04	04	04	04	04	04	04	04	04	04	04
	E	02	02	02	02	02	02	02	02	02	02	02	02
	D	03	03	03	03	03	03	03	03	03	03	03	03
	C	04	04	04	04	04	04	04	04	04	04	04	04
	B	02	02	02	02	02	02	02	02	02	02	02	02
	A	03	03	03	03	03	03	03	03	03	03	03	03
	GND	02	02	02	02	02	02	02	02	02	02	02	02

METRAL P/N	ROW	CONTACT CODE											
		1	2	3	4	5	6	7	8	9	10	11	12
63741-X06LF *RPU	H	49	49	49	49	49	49	49	49	49	49	49	49
	G	49	49	49	49	49	49	49	49	49	49	49	49
	F	41	41	41	41	41	41	41	41	41	41	41	41
	E	49	49	49	49	49	49	49	49	49	49	49	49
	D	49	49	49	49	49	49	49	49	49	49	49	49
	C	41	41	41	41	41	41	41	41	41	41	41	41
	B	49	49	49	49	49	49	49	49	49	49	49	49
	A	35	49	49	49	49	49	49	49	49	49	49	49
	GND	36	36	36	36	36	36	36	36	36	36	36	36

PCB THICKNESS RANGE FOR REAR PLUG UP APPLICATIONS: 4.75 - 6.45 FOR METRAL 1000 APPLICATIONS (RECEPTACLE) ADD 4.80 - 6.45 FOR METRAL 4000 APPLICATIONS.

*REAR PLUG-UP PART NUMBER

spec ref	dr	P-Mathew Nebu	2011/05/20	projection 	size A4	scale 1:1				
tolerance std	eng	Rahul Mohan-M	2021/08/16							
ISO 406 ISO 1101	chr	-	-							
surface ISO 1302	TOLERANCES UNLESS OTHERWISE SPECIFIED	appr	Kuriakose, San	2021/08/16	ecn no	ELX-I-41694-1				
		linear	0.X	±0.3	product family	rel level	Released			
angular	0.XX	±0.13	Amphenol FCI	title				VERTICAL SIGNAL HDR 8 ROW	dwg no	63741
	0.XXX	±0.050								
0°	±2°	rev	V							

NOTES:

1. SEE APPLICATION SPECIFICATION GS-20-010 FOR INFORMATION ON AVAILABLE TOOLING, CIRCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS.
2. SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
3. SEE FCI PUBLICATION 950511-028 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
4. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5M, 1994
5. MATERIAL : BODY : THERMOPLASTIC UL94-V0.
: CONTACT : COPPER ALLOY.
6. FOR PLATING PERFORMANCE REFER DRAWING # 10159408.
7. 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 ROWS 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 ROWS C & F
DIM C : 4.60mm MIN, 6.30mm MAX FOR ROW GND NEXT TO ROW A
8. THE MIN PCB THICKNESS FOR REAR PLUG-UP APPLICATIONS IS 2.9mm SINCE THE COMPLAINT SECTIONS OF THE GROUND 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.
9. THESE HOLES ARE NEEDED FOR REAR PLUG-UP DESIGNS USING A SHROUD AND MAY BE OMITTED FOR FRONT PLUG-UP ONLY DESIGNS.
10. 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.
11. FOR FRONT PLUG-UP APPLICATIONS, THE EVEN NUMBERED PINS IN ROW 'C' & 'F' CAN BE USED FOR POWER AS WELL AS FOR GROUND. IF THE SURROUNDING PINS ARE NOT USED FOR POWER, THEN EACH PIN CAN CARRY 3 AMPS. IF THE SURROUNDING PINS ARE USED FOR POWER, THEN EACH PIN CAN CARRY 1 AMP. WHEN THE SURROUNDING PINS ARE USED ONLY FOR LOW SPEED SIGNALS, THEN THE EVEN NUMBERED 'C' AND 'F' ROW PINS CAN ALSO BE USED FOR LOW SPEED SIGNALS. THIS IS NOT TRUE FOR REAR PLUG-UP APPLICATIONS USING METRAL 2000 SHROUD AS IN THIS CASE ALL 'C' AND 'F' ROW PINS ARE COMMON TO GROUND.
12. THE PRODUCTS MEET EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004.
13. ALL PRODUCTS WILL WITHSTAND EXPOSURE TO 260°C FOR 60 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN.
14. A \triangle SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

Amphenol FCI

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spec ref		dr	P-Mathew Nebu	2011/05/20	projection 	MM 	size	A4	scale	1:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Rahul Mohan-M	2021/08/16			ecn no	ELX-I-41694-1		
		chr	-	-				rel level	Released	
surface	linear	appr	Kuriakose, San	2021/08/16	product family		rev			
		0.X		±0.3	Amphenol FCI	VERTICAL SIGNAL HDR 8 ROW		dwg no	63741	
		0.XX		±0.13						
0.XXX		±0.050								
ISO 1302	angular	0°	±2°	amphenol-icc.com	cat. no.	Product - Customer Drw		sheet 6 of 6		

Creo F119:ELX-FCI:AC:REV F:2020-12-21