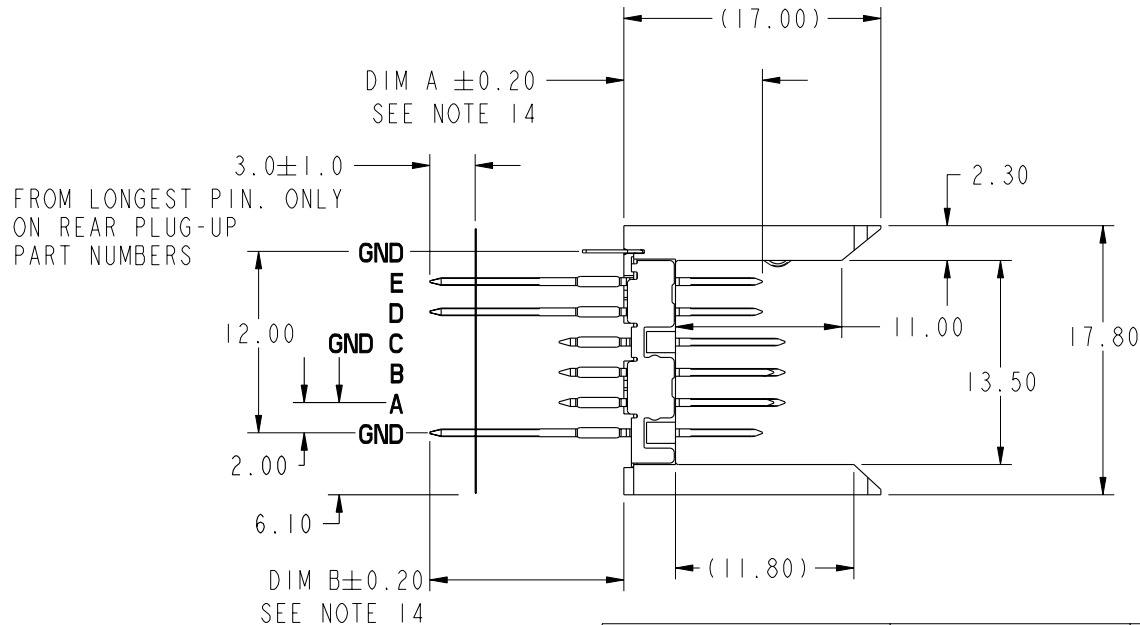




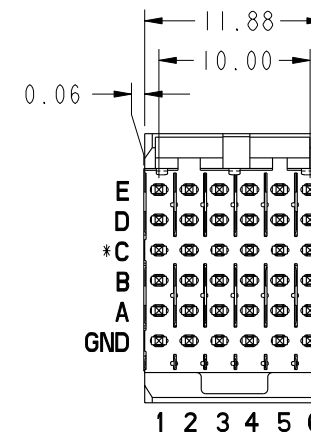
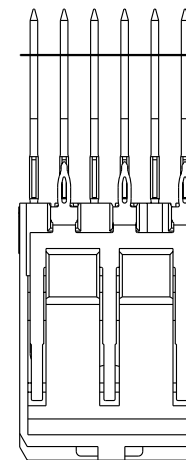
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REV E - 2008-04-18

| PRODUCT NUMBER | CONTACT PLATING PERFORMANCE LEVEL | PRESS-FIT TAIL PLATING |
|-----------------|---|---------------------------|
| 10043968-1YYY | TELCORDIA CO | STANDARD (SnPb) |
| 10043968-1YYLFF | TELCORDIA CO | LEAD FREE (Sn) |
| 10043968-5YYY | TELCORDIA UE | STANDARD (SnPb) |
| 10043968-5YYLFF | TELCORDIA UE | LEAD FREE (Sn) |



***ROW C INFORMATION**
ODD NUMBER COLUMNS WITHIN ROW C ARE COMMONED
TO GROUND INTERNALLY WITHIN THE HOUSING
WHEN A U-SHAPED STRIPLINE SHIELD IS PRESENT.



| mat'l code SEE NOTE 5 | | | | tolerances unless otherwise specified | | CUSTOMER | | FCI www.fciconnect.com | | | |
|--------------------------|-------------------|-----|------------|--|------------------------|--------------------|------------------------------------|---|--|----------|--|
| ltr | ecn no. | dr | date | linear | 0.X ± 0.3 | projection | COPY | title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD. | | | |
| A | V04-0815 | TAB | 2004-08-12 | | 0.XX ± 0.10 | | | | | | |
| B | V04-0879 | TAB | 2004-11-02 | | 0.XXX ± 0.050 | | | | | | |
| C | V05-0535 | DAI | 2005-06-02 | angles | 0° $\pm 2^\circ$ | MM scale 1:1 | product family METRAL 1000/4000 | code | | 213 | |
| D | V06-0573 | DCH | 2006-06-15 | dr | T. BRUNGARD 2004-08-12 | | | size | | dwg no | |
| E | V06-0868 | DCH | 2006-08-29 | engr | J. VOLSTORF 2004-08-12 | | | A | | 10043968 | |
| F | V07-0541 | DCH | 2007-08-14 | chr | J. VOLSTORF 2004-08-12 | sheet 1 of 7 | cage code | 22526 | | 4 | |
| G | V08-0118 | HTB | 2008-03-10 | appd | J. VOLSTORF 2004-08-12 | | | | | | |
| sheet index | revision sheet | G | G | G | G | G | G | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | | | | |

Pro/E

PDM: Rev:G

STATUS: Released Printed: May 13, 2011

A

B

REV E - 2006-04-18

1

| | |
|--|--|
| | |
|--|--|

A

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B

```

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

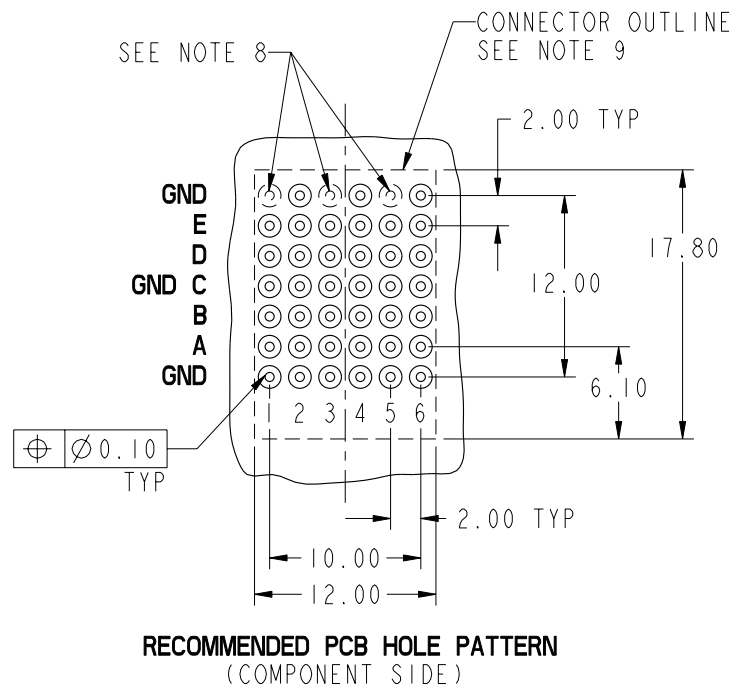
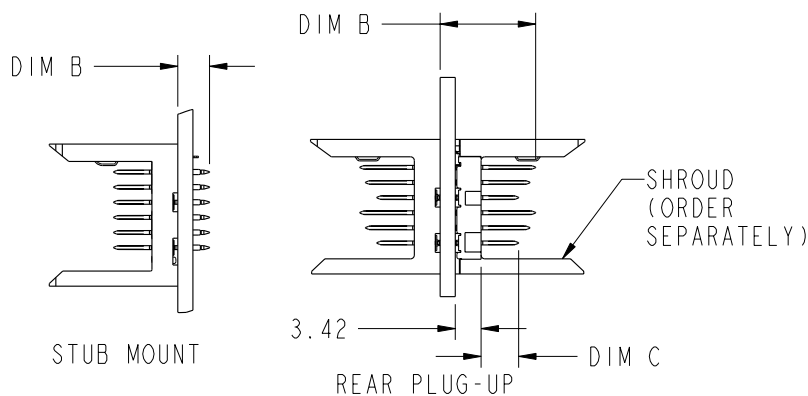
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[illegible]



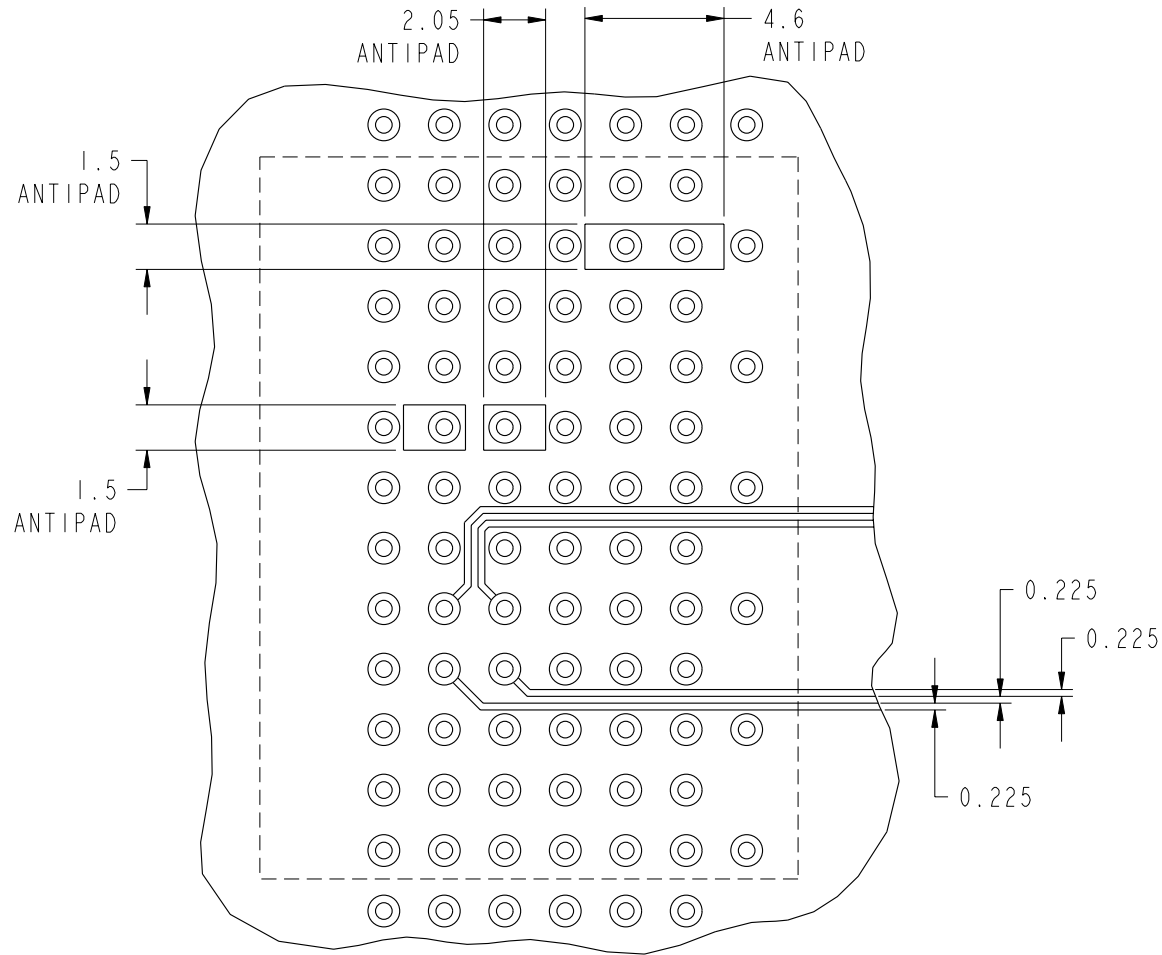
PRODUCT NUMBER
SEE SHEET 1

| PRESS-FIT HOLES | TYPE 1 | TYPE 2 |
|--------------------------------|---------------------------|---------------------------|
| HOLE DIAMETER AFTER PLATING | 0.65-0.80 | 0.45-0.55 |
| DRILLED HOLE | 0.81-0.86 (0.85 DRILL) | 0.58-0.62 (0.60 DRILL) |
| COPPER PLATING | 0.025 MIN | 0.025 MIN-0.050 MAX |
| SnPb PLATING | 0.005-0.015 | 0.005-0.015 |



| | | | | | | | | | |
|--------------------------|-------------------|----|------|--|------------------------|--------------------|------|---|------------------------------------|
| mat'l code SEE NOTE 5 | | | | tolerances unless otherwise specified | | CUSTOMER | | FCI www.fciconnect.com | |
| ltr | ecr no. | dr | date | linear | 0.X ±0.3 | projection | COPY | title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD. | product family METRAL 1000/4000 |
| G | | | | | 0.XX ±0.10 | | | | |
| | | | | | 0.XXX ±0.050 | | | | |
| | | | | angles | 0° ±2° | MM scale 1:1 | A | size 10043968 | code 213 sheet 4 |
| | | | | dr | T. BRUNGARD 2004-08-12 | | | | |
| | | | | enr | J. VOLSTORF 2004-08-12 | | | | |
| | | | | chr | J. VOLSTORF 2004-08-12 | scale 1:1 | A | size 10043968 | code 213 sheet 4 |
| | | | | appd | J. VOLSTORF 2004-08-12 | | | | |
| sheet index | revision sheet | | | | | | | | |

PRODUCT NUMBER
SEE SHEET 1



RECOMMENDED TRACK AND ANTIPAD DIMENSIONS FOR 4000 PINS
SCALE 4:1

| | | | | | | | | | | | |
|--------------------------|----------------|----|------|--|------------------------|--------------------|------|---|--|--|--|
| mat'l code SEE NOTE 5 | | | | tolerances unless otherwise specified | | CUSTOMER | | FCi www.fciconnect.com | | | |
| ltr | ecn no. | dr | date | linear | 0.X ± 0.3 | projection | COPY | title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD. | | | |
| G | | | | | 0.XX ± 0.10 | | | | | | |
| | | | | | 0.XXX ± 0.050 | | | | | | |
| | | | | angles | 0° ± 2° | MM scale 1:1 | A | product family METRAL 1000/4000 | | | |
| | | | | dr | T. BRUNGARD 2004-08-12 | | | code 213 | | | |
| | | | | enr | J. VOLSTORF 2004-08-12 | | | size | | | |
| | | | | chr | J. VOLSTORF 2004-08-12 | | | dwg no 10043968 | | | |
| | | | | appd | J. VOLSTORF 2004-08-12 | | | sheet 5 | | | |
| sheet index | revision sheet | | | | | | | | | | |

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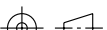



| PRODUCT NUMBER | ROW | SELECT LOAD PATTERN | | | | | |
|--|-----|---------------------|-----|-----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| 10043968-X001 *** SEE NOTE 16 LEAD FREE OPTION | GND | GND | GND | GND | GND | GND | GND |
| | E | 02 | 02 | 02 | 02 | 55 | 55 |
| | D | 02 | 02 | 02 | 02 | 55 | 55 |
| | C | 02 | 02 | 02 | 02 | 55 | 55 |
| | B | 02 | 02 | 02 | 02 | 55 | 55 |
| | A | 02 | 02 | 02 | 02 | 55 | 55 |
| | GND | 02 | 02 | 02 | 02 | 55 | 55 |
| STRIPLINE SHIELD | | YES | NO | YES | NO | NO | NO |

| PRODUCT NUMBER | ROW | SELECT LOAD PATTERN | | | | | |
|--|-----|---------------------|-----|-----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| 10043968-X002 *** SEE NOTE 16 LEAD FREE OPTION | GND | GND | GND | GND | GND | GND | GND |
| | E | 55 | 55 | 02 | 02 | 02 | 02 |
| | D | 55 | 55 | 02 | 02 | 02 | 02 |
| | C | 55 | 55 | 02 | 02 | 02 | 02 |
| | B | 55 | 55 | 02 | 02 | 02 | 02 |
| | A | 55 | 55 | 02 | 02 | 02 | 02 |
| | GND | 55 | 55 | 02 | 02 | 02 | 02 |
| STRIPLINE SHIELD | | NO | NO | YES | NO | YES | NO |

| PRODUCT NUMBER | ROW | SELECT LOAD PATTERN | | | | | |
|--|-----|---------------------|-----|-----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| 10043968-X003 *** SEE NOTE 16 LEAD FREE OPTION | GND | GND | GND | GND | GND | GND | GND |
| | E | 55 | 02 | 02 | 02 | 02 | 55 |
| | D | 55 | 02 | 02 | 02 | 02 | 55 |
| | C | 55 | 02 | 02 | 02 | 02 | 55 |
| | B | 55 | 02 | 02 | 02 | 02 | 55 |
| | A | 55 | 02 | 02 | 02 | 02 | 55 |
| | GND | 55 | 02 | 02 | 02 | 02 | 55 |
| STRIPLINE SHIELD | | YES | NO | YES | NO | YES | NO |

*** REAR PLUG-UP PART NUMBERS
WITHOUT PIN ALIGNER.

| | | | | | | | | | | | |
|-----------------------|----------------|------|-------------|---------------------------------------|---|------------|---------------------------------|--|--|--------|-----|
| mat'l code SEE NOTE 5 | | | | tolerances unless otherwise specified | | CUSTOMER | |  www.fciconnect.com | | | |
| ltr | ecn no. | dr | date | linear | 0.X ±0.3 | COPY | |  | | | |
| G | | | | | 0.XX ±0.10 | projection | | | | | |
| | | | | | 0.XXX ±.050 | | | | | | |
| | | | | angles | 0° ±2° | | | | | | |
| | | dr | T. BRUNGARD | 2004-08-12 |  | | product family METRAL 1000/4000 | | | code | |
| | | enrg | J. VOLSTORF | 2004-08-12 | | | size | | | dwg no | 213 |
| | | chr | J. VOLSTORF | 2004-08-12 | | | 10043968 | | | sheet | |
| | | appd | J. VOLSTORF | 2004-08-12 | | | A | | | 6 | |
| sheet index | revision sheet | | | | | | | | | | |

| PIN CODE | PIN TYPE | VIA HOLE TYPE REQUIRED SEE SHEET 4 |
|----------|------------------|--|
| 02 | METRAL 4000 | TYPE 2 |
| 55 | METRAL 1000/2000 | TYPE 1 |
| GND | N/A | TYPE 2 |



www.fciconnect.com

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

product family METRAL 1000/4000 code 213
size dwg no 10043968 sheet 6

cage code 22526

Pro/E

PDM: Rev:G

STATUS: Released Printed: May 13, 2011

PRODUCT NUMBER

SEE SHEET 1

NOTES:

1. SEE APPLICATION SPECIFICATIONS GS-20-010 AND GS-20-014 FOR INFORMATION ON AVAILABLE TOOLING, CIRCUIT BOARD DESIGN CONSIDERATIONS, REPAIR PROCEDURES AND PRODUCT OFFERINGS. SEE PRODUCT SPECIFICATION: GS-12-110
GS-12-184
2. SEE FCI PUBLICATION 95011-028 FOR "ELECTRICAL PERFORMANCE DATA FOR DIFFERENTIAL APPLICATIONS."
3. SEE FCI PUBLICATION 95011-029 FOR "ELECTRICAL PERFORMANCE DATA FOR SINGLE-ENDED APPLICATION."
4. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5, 1994
5. HOUSING MATERIAL: LIQUID CRYSTAL POLYMER, 30% GLASS FILLED, FLAME RETARDANT PER UL 94-V0.
PIN MATERIAL: PHOSPHER BRONZE
GROUND SPRING MATERIAL: PHOSPHER BRONZE
6. 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
7. THE MIN PCB THICKNESS FOR REAR PLUG-UP APPLICATIONS IS 2.9mm SINCE THE COMPLIANT 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.

8. THESE HOLES ARE NEEDED FOR REAR PLUG-UP DESIGNS USING A SHROUD AND MAY BE OMITTED FOR FRONT PLUG-UP ONLY DESIGNS.
9. 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.

10. CURRENT RATING: 1 AMP PER PIN

11. TEMPERATURE RANGE: -55°C TO +105°C

12. P/N 10043968-XXXXLF



13. WE CURRENTLY HAVE NO INSPECTION METHOD TO CHECK TP OF CONTACT PIN TIP ON BOTTOM SIDE OF HEADER.

14. AFTER INSERTION INTO CIRCUIT BOARD WITH QUALIFIED TOOL.

15. PRODUCTS WHERE THE PART NUMBER ENDS IN LF MEET EUROPEAN DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.

ALL PRODUCTS WILL WITHSTAND EXPOSURE TO 260°C FOR 60 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN.

16. FOR LEAD FREE PART NUMBERS, ADD AN "LF" SUFFIX. EXAMPLE: 10043968-X001LF

17. EQUIVALENT PRECIOUS METAL PLATINGS MAY BE SUBSTITUTED.

| | | | | | | | | | | | |
|-----------------------|---------|----------------|------|---------------------------------------|------------------------|----------|------------|---|--|-------------------------|--|
| mat'l code SEE NOTE 5 | | | | tolerances unless otherwise specified | | CUSTOMER | | FCI www.fciconnect.com | | | |
| ltr | ecn no. | dr | date | linear | 0.X ± 0.3 | | projection | title VERTICAL SIGNAL HDR 5 ROW P.F. 30 POS. SELECT LOAD STD. | | | |
| G | | | | | 0.XX ± 0.10 | | | | | | |
| | | | | | 0.XXX ± 0.050 | | | | | | |
| | | | | angles | 0° ± 2° | | MM | product family METRAL 1000/4000 code 213 | | | |
| | | | | dr | T. BRUNGARD 2004-08-12 | | | | | | |
| | | | | enrg | J. VOLSTORF 2004-08-12 | | | | | | |
| | | | | chr | J. VOLSTORF 2004-08-12 | | scale 1:1 | size A | | dwg no 10043968 sheet 7 | |
| | | | | appd | J. VOLSTORF 2004-08-12 | | | | | | |
| sheet index | | revision sheet | | | | | | | | | |

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FCI:

[10043968-5002LF](#) [10043968-5001LF](#)