

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: **0643201318**
Status: **Active**
Overview: cmc connectors
Description: .635mm (.025"), 1.50mm (.059"), CMC Receptacle, 48 Circuits, Left Wire Output, Gray Coding, Mat Sealed

Documents:

[3D Model](#) [Product Specification PS-64319-001 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Application Specification \(PDF\)](#)

General

Product Family	Crimp Housings
Series	<u>64320</u>
Comments	* Current tested on a 5 terminals loaded connector, current for temperature increase of 40°C . Current max = 6.0A for 0.635mm Terminal (0.75mm ² wire) and 12.0A for 1.5mm Terminal (2.0mm ² wire) *
More Detailed Tech Information	Sealed, high-density, modular connecting system for Power Train and Body Electronics applications in cars, trucks, busses
Overview	<u>cmc connectors</u>
Product Name	CMC

Physical

Circuits (maximum)	48
Circuits Detail	8 x 1.5mm & 40 x 0.635mm terminals
Color - Resin	Gray
Gender	Female
Glow-Wire Compliant	No
Keying to Mating Part	Yes
Lock to Mating Part	Yes
Material - Resin	Polyester
Number of Rows	4
Packaging Type	Carton
Panel Mount	No
Pitch - Mating Interface (in)	0.100 In, 0.146 In
Pitch - Mating Interface (mm)	2.54 mm, 3.70 mm
Polarized to Mating Part	Yes
Stackable	No
Temperature Range - Operating	-40°C to +125°C

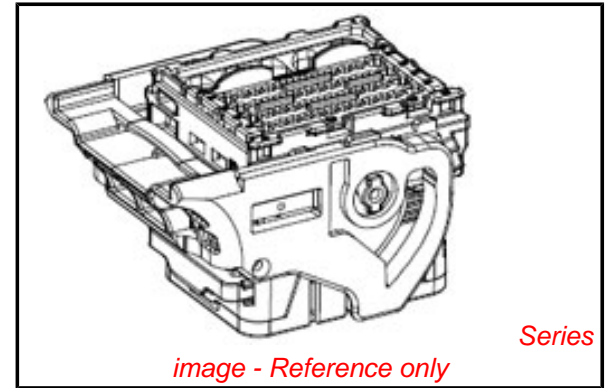
Electrical

Current - Maximum per Contact	12A, 6A
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Material Info

Reference - Drawing Numbers

Application Specification	AS-64319-001
Packaging Specification	PK-64320-001
Product Specification	PS-64319-001
Sales Drawing	SD-64320-001, SD-98993-008



EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
Halogen-Free Status

China RoHS



Not Reviewed

Need more information on product environmental compliance?

Email productcompliance@molex.com
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

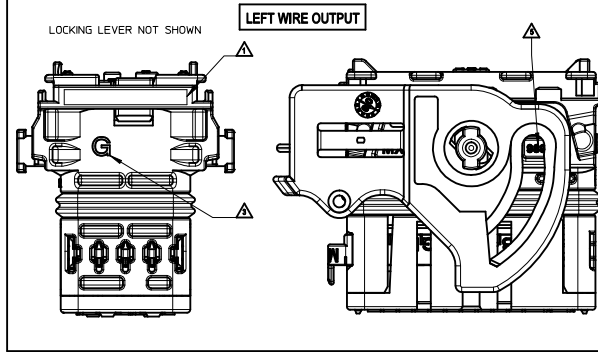
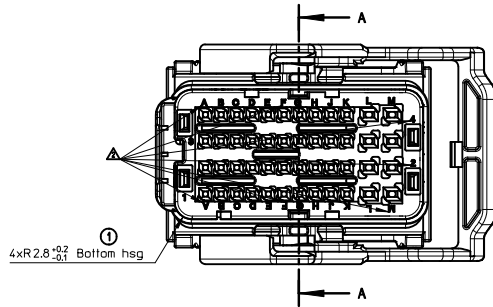
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

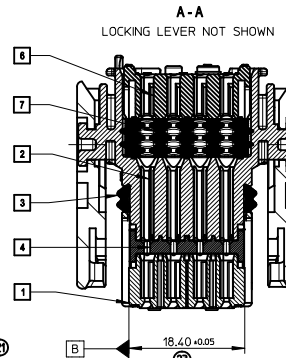
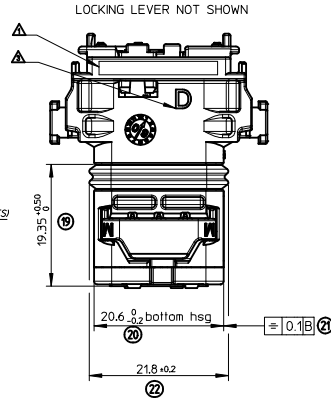
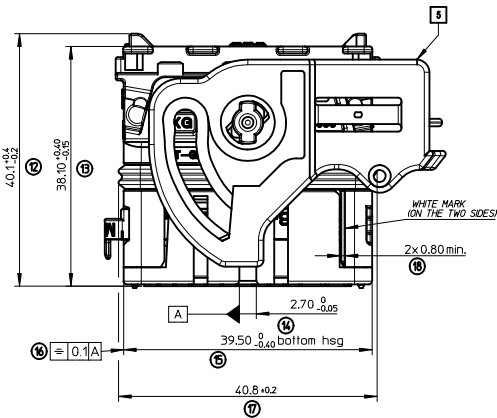
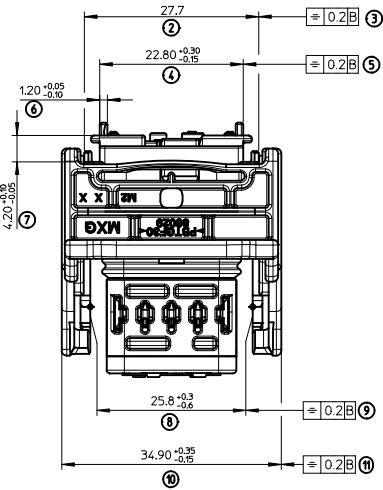
[64320Series](#)

Use With

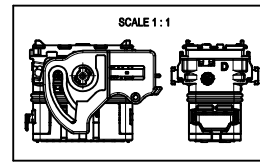
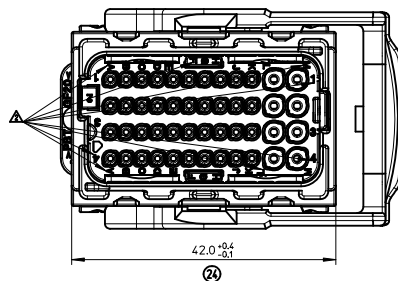
CMC CP Female Terminal [64322](#) , [64323](#).
 Circuit Way Plugs [643251010](#) , [643251023](#).
 CMC Wire Cap [643201301](#).



LEFT WIRE OUTPUT	
MATERIAL NUMBER	COLOR
0643201311	BLACK
0643201318	GREY
0643201319	BROWN
0643201315	GREEN



RIGHT WIRE OUTPUT	
MATERIAL NUMBER	COLOR
0643203311	BLACK
0643203318	GREY
0643203319	BROWN
0643203315	GREEN



NOTES:

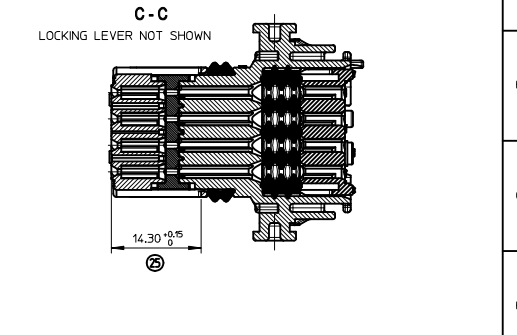
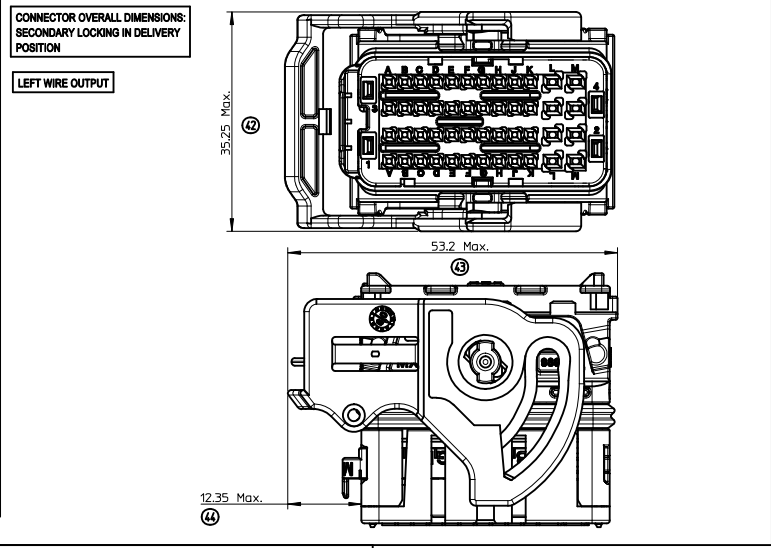
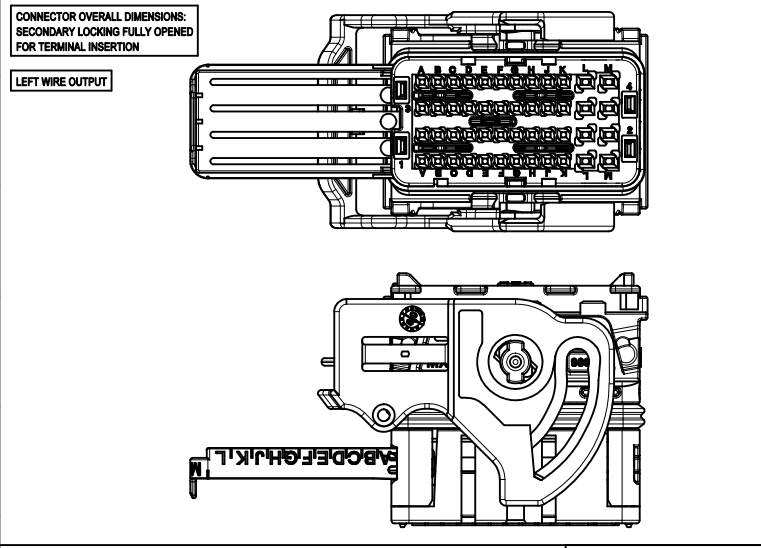
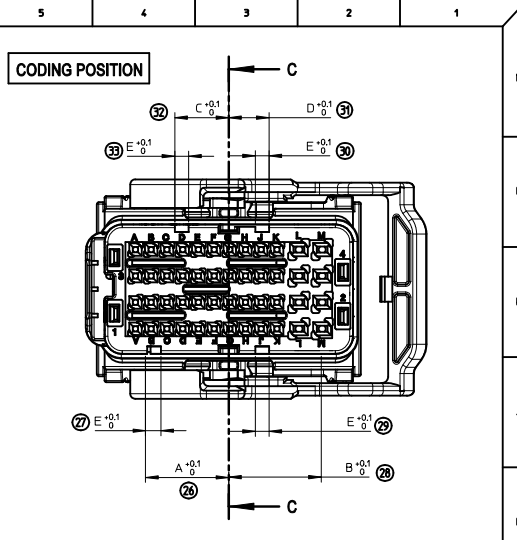
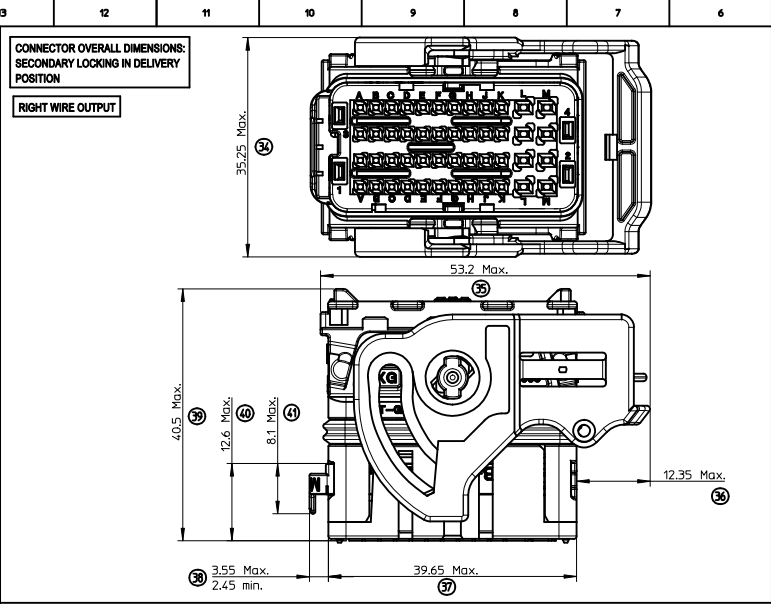
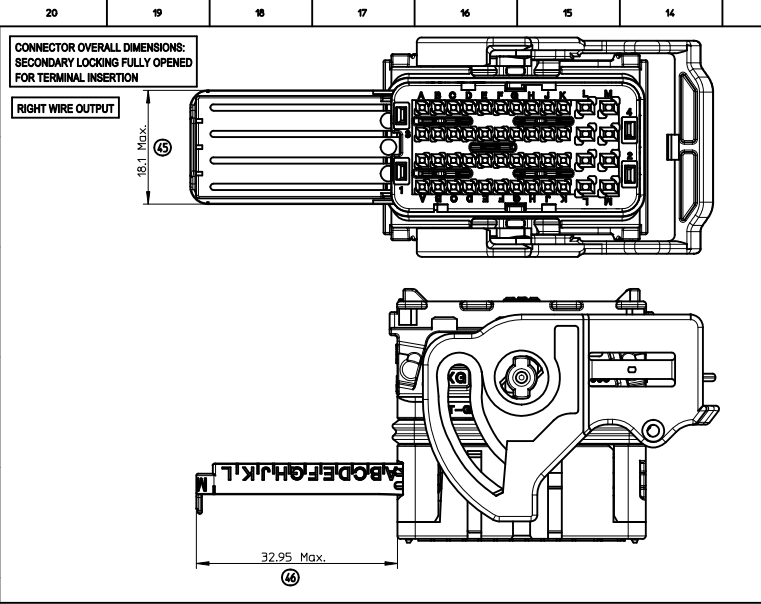
- FOR ILLUSTRATION PURPOSE THE FEMALE HOUSING SHOWN IS THE RIGHT WIRE OUTPUT VERSION CODING 1
- APPLICATION SPECIFICATION: AS-64319-001
- WIRES EXTERNAL DIAMETER USED:
FOR CP06 TERMINAL: USE WIRES WITH AN EXTERNAL DIAMETER BETWEEN $\phi 1.25\text{MM}$ MIN AND $\phi 1.90\text{MM}$ MAX
FOR CP15 TERMINAL: USE WIRES WITH AN EXTERNAL DIAMETER BETWEEN $\phi 1.40\text{MM}$ MIN AND $\phi 2.80\text{MM}$ MAX
- THE CONNECTOR FITS WITH WIRE CAP (48 WAY) MOLEX P/N 0643201301
- BLIND PLUG FOR 06 AND 15 CAVITIES (MOLEX P/N 0643251010 AND 0643251023) MUST BE USED ON THIS PART.
- DELIVERED PRODUCT WEIGHT: 33.8 g

7	MAT SEAL	Silicon	BLUE
8	BACK GRID 48W	>PBT-GF20<	GREY
9	LOCKING LEVER 48W	>PBT-GF30<	BLACK
4	SECONDARY LOCK	>PBT-GF20<	GREY
3	PERIPHERAL SEAL 48W	Silicon	RED
2	BACK PART	>PBT-GF20<	BLACK
1	FRONT PART	>PBT-GF20<	COLOR LINKED TO KEYING
REF.	DESIGNATION	MATERIAL	COLOR

MARKINGS:

- Assembled part traceability Day * Year
- Terminal cavities identification
- Lever position indicator: 'D' LETTER VISIBLE= part with "LEVER ON THE RIGHT" 'G' LETTER VISIBLE= part with "LEVER ON THE LEFT"
- Supplier identification
- Material identification

UPDATED DRAWING DEC NO: D DRAWING DESIGNEES: 2009/06/02 CHK'D: C. BOUCHAN APPR:	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2.5:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY T. BADAROUX	DATE 2007/07/16	TITLE CMC CONNECTOR 48 WAY MAT SEAL VERSION			
		2 PLACES ± 0.1 ± ---	1 PLACE ± 0.1 ± ---	CHECKED BY P. GRANDCLAUD	DATE 2007/07/16	MOLEX INCORPORATED			
		ANGULAR ± 2 °		APPROVED BY C. BOUCHAN	DATE 2007/07/16	MATERIAL NO. DOCUMENT NO.	SD-64320-001	SHEET NO. 1 OF 2	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 2		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



COLOR	CODING	A	B	C	D	E
BLACK	1	13	6.4	8.6	6.4	2.2
GREY	2	10.8	8.6	13	8.6	2.2
BROWN	3	8.6	10.8	13	13	2.2
GREEN	4	10.8	13	6.4	6.4	2.2

TERMINALS USED					
CAVITY N°	FEMALE TERMINALS (Section mm2)	PLATING	MOLEX PIN N°	min / MAX WIRE INSULATION DIAMETER (mm)	
A1 to K1 A2 to K2 A3 to K3 A4 to K4	CP 0.6 0.35mm2	Tin plated	0643221019	Ø1.25 min / Ø1.40 Max	
		Gold plated	0643221229	Ø1.40 min / Ø1.70 Max	
	CP 0.6 0.5mm2	Tin plated	0643221029	Ø1.60 min / Ø1.90 Max	
		Gold plated	0643221239	Ø1.60 min / Ø1.90 Max	
L1 to L4 M1 to M4	CP 1.5 0.5mm2 to 1mm2	Tin plated	0643231019	Ø1.40 min / Ø2.15 Max	
		Gold plated	0643231219	Ø1.40 min / Ø2.15 Max	
	CP 1.5 >1mm2 to 2mm2	Tin plated	0643231039	Ø2.10 min / Ø2.80 Max	
		Gold plated	0643231219	Ø2.10 min / Ø2.80 Max	

UPDATED DRAWING
EC NO: D
DRAWING DESIGNED BY: 2009/06/02
CHKD: C. BOUCHAN
APPR: [REDACTED]

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± 0.1	± 0.004
3 PLACES	± 0.15	± 0.006
2 PLACES	± 0.2	± 0.008
1 PLACE	± 0.3	± 0.012

ANGULAR ± 2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
MM ONLY

SCALE
2.5:1

DESIGN UNITS
METRIC

FIRST ANGLE PROJECTION

DRAWN BY: T. BADAROUX
DATE: 2007/07/16

CHECKED BY: [REDACTED]
DATE: [REDACTED]

APPROVED BY: P. GRANDCLAUD
DATE: 2007/07/16

C. BOUCHAN
DATE: 2007/07/16

TITLE
CMC CONNECTOR 48 WAY
MAT SEAL VERSION

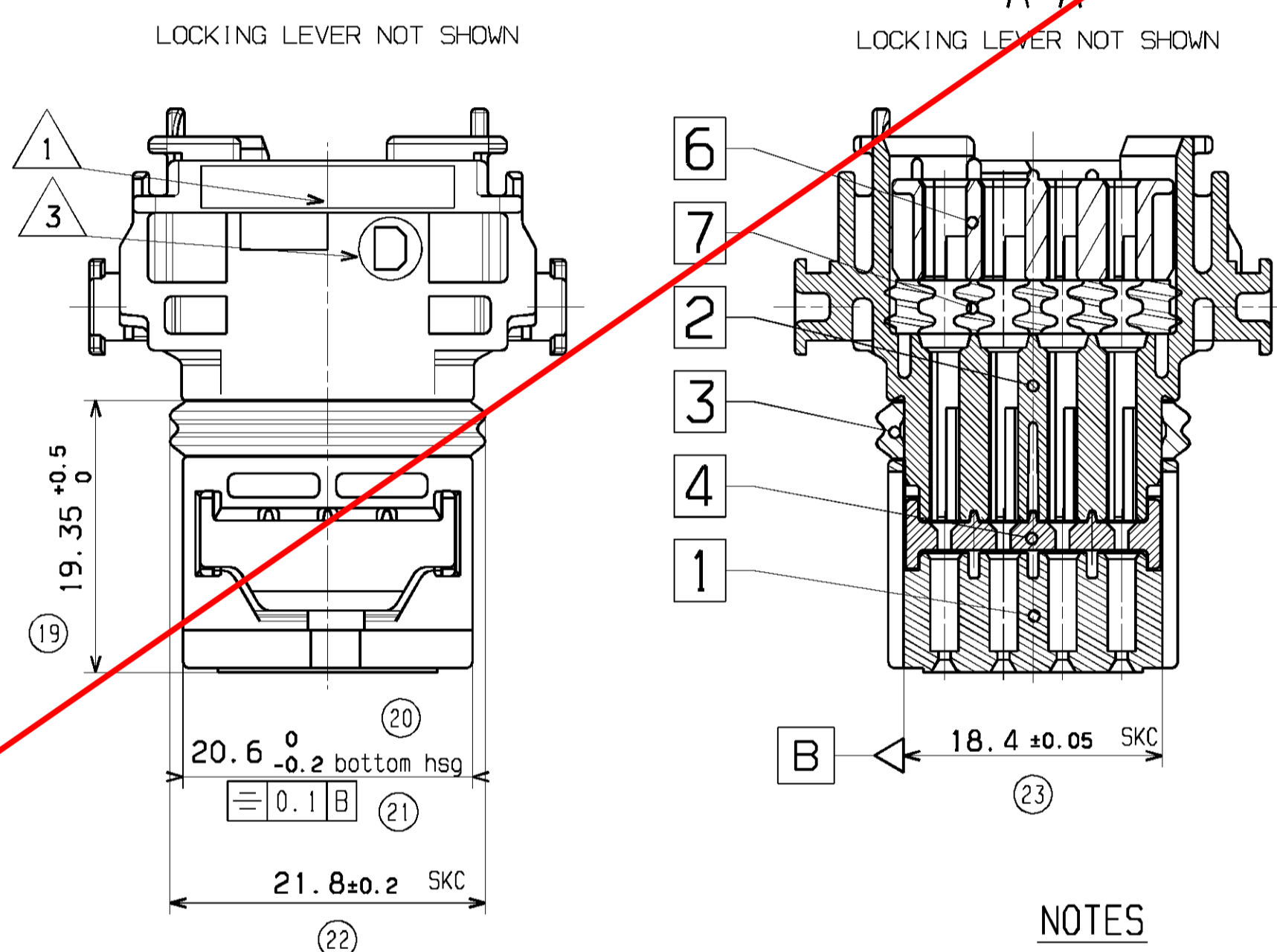
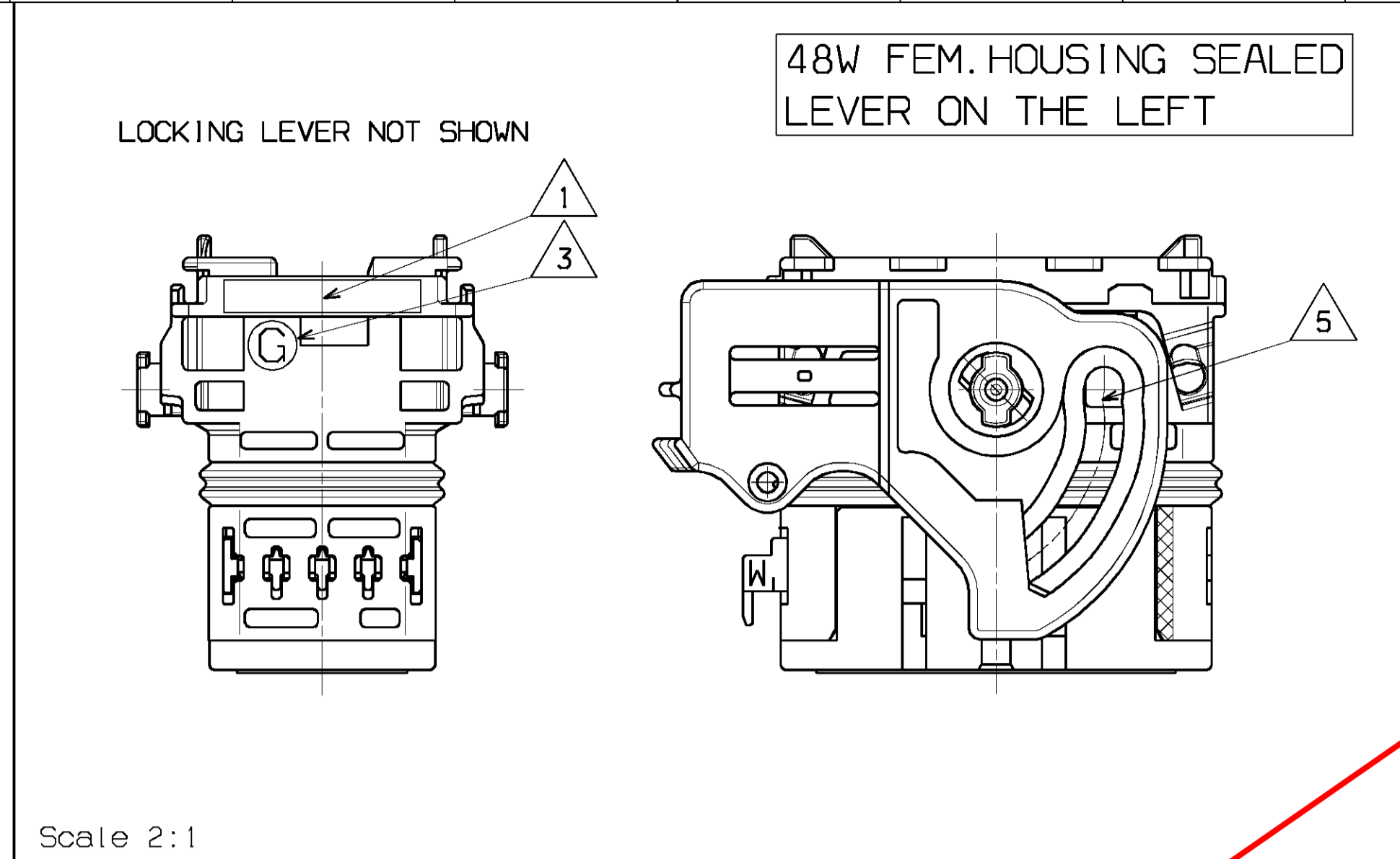
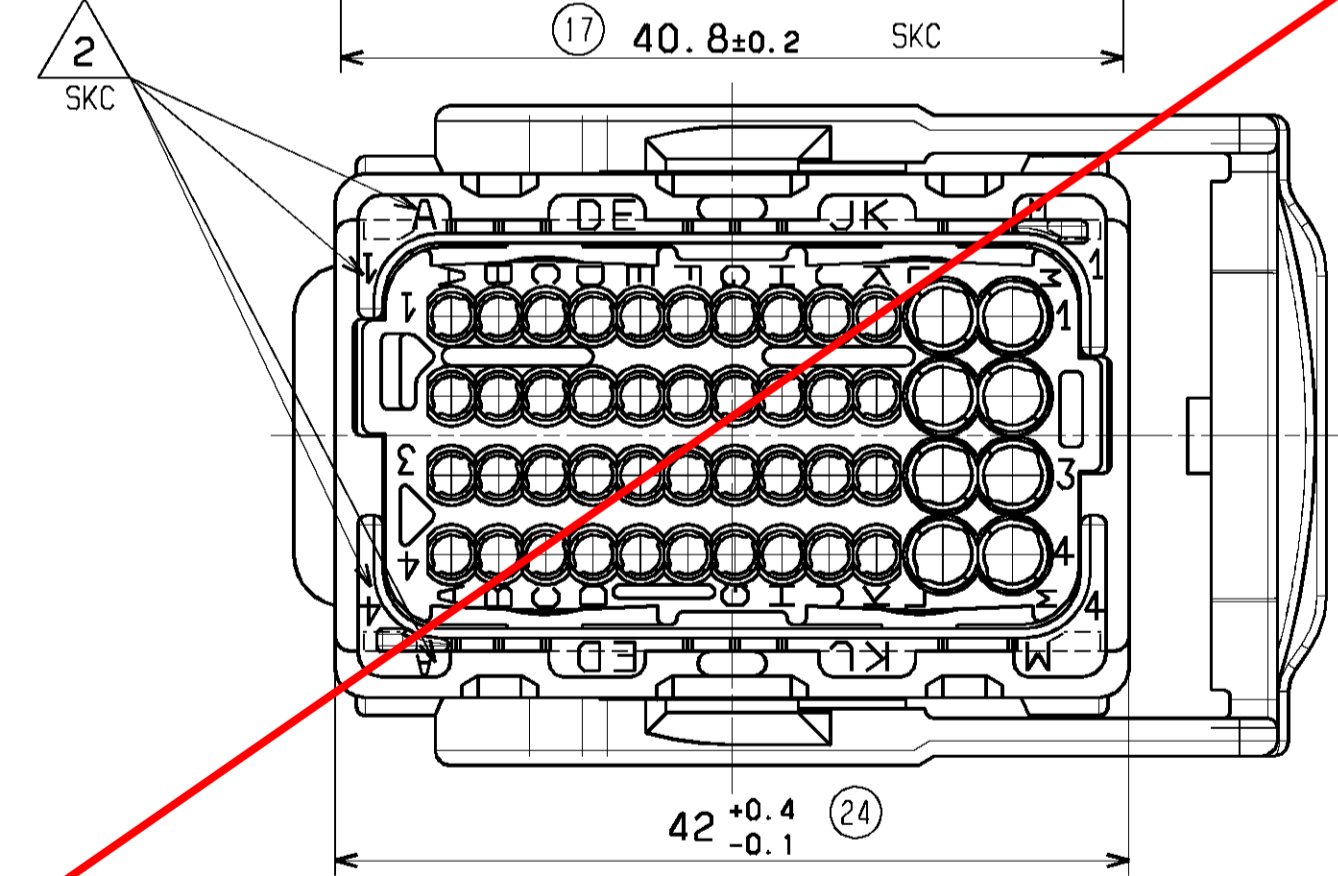
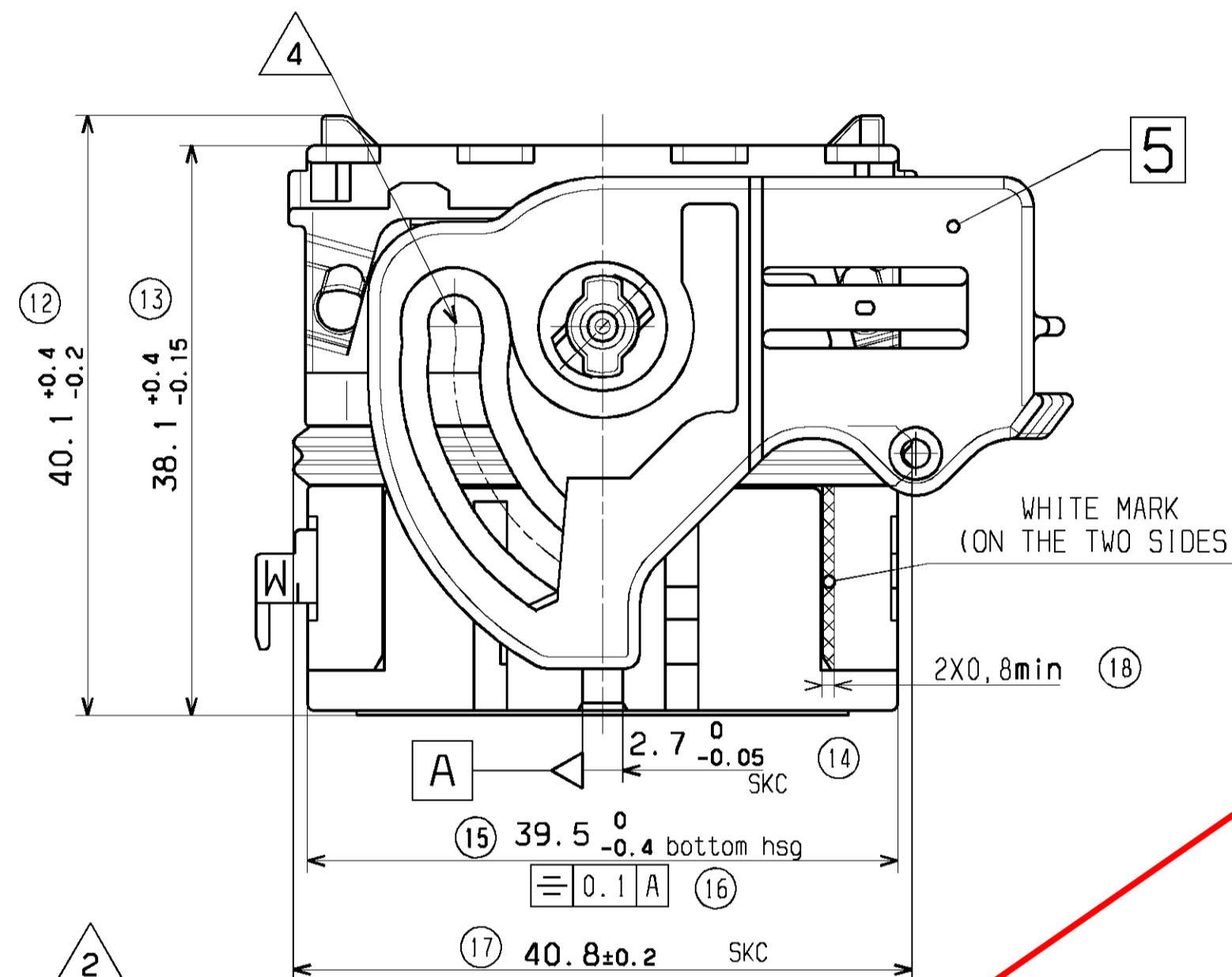
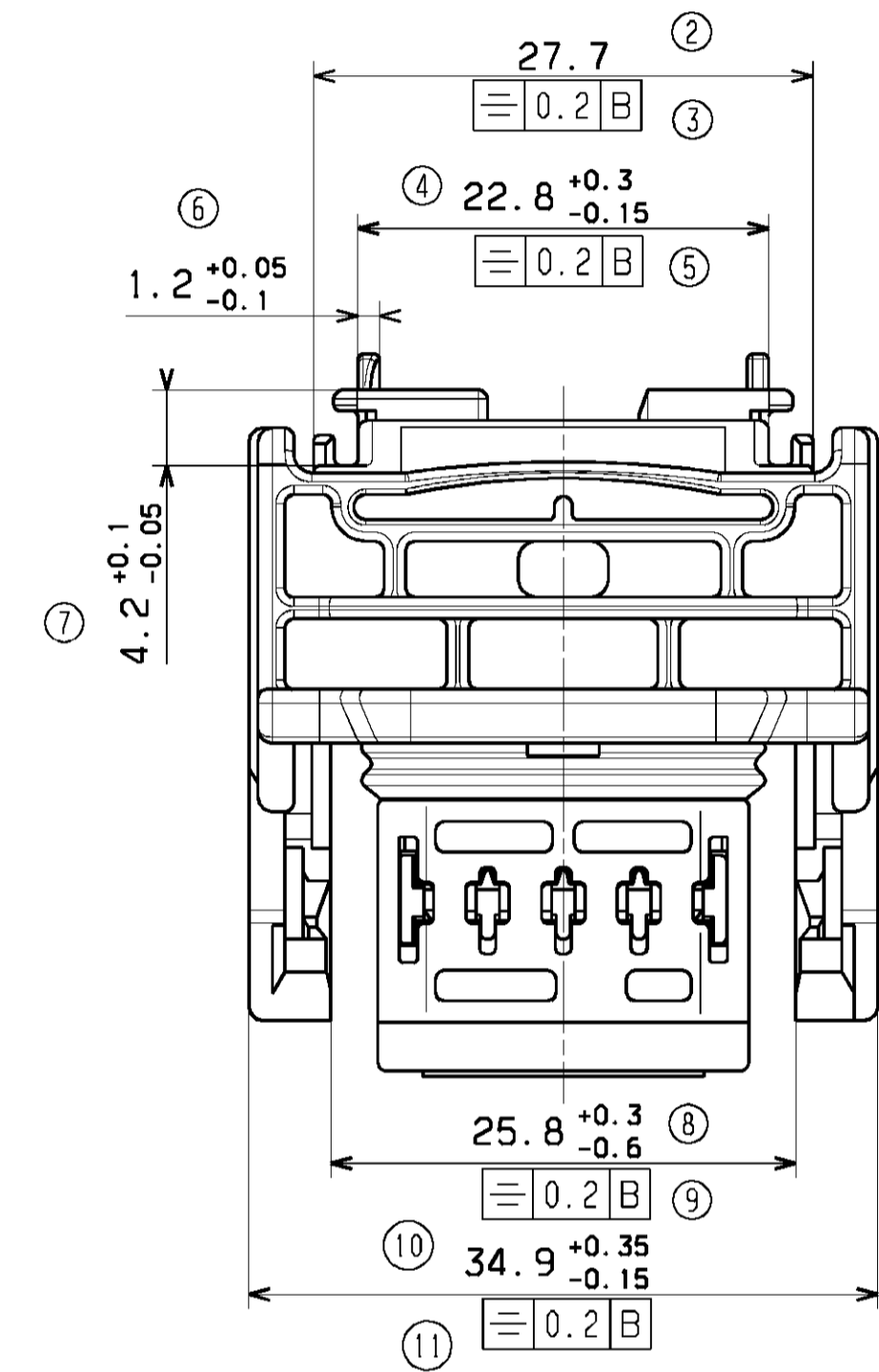
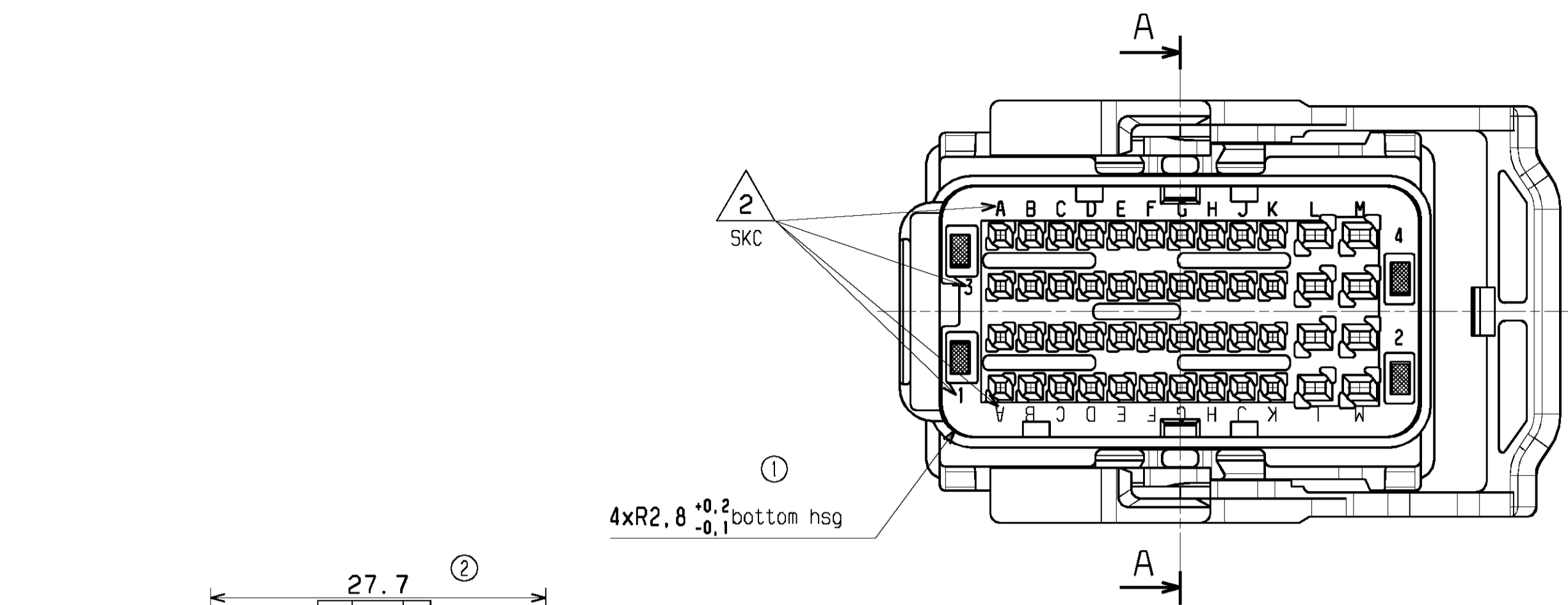
MATERIAL NO.
SD-64320-001

DOCUMENT NO.
SD-64320-001

SHEET NO.
2 OF 2

MOLEX INCORPORATED

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48W FEM. HOUSING SEALED
LEVER ON THE LEFT

MATERIAL NUMBER	COLOR
0643201311	BLACK
0643201318	GREY
0643201319	BROWN
0643201315	GREEN
	BLUE
	YELLOW

LEVER ON THE RIGHT

MATERIAL NUMBER	COLOR
0643203311	BLACK
0643203318	GREY
0643203319	BROWN
0643203315	GREEN
	BLUE
	YELLOW

SKC: CS CHARACTERISTICS

- ☒ DENOTES S.P.C DIMENSIONS
- ⊙ DENOTES CRITICAL DIMENSIONS
- DENOTES FUNCTIONAL DIMENSIONS

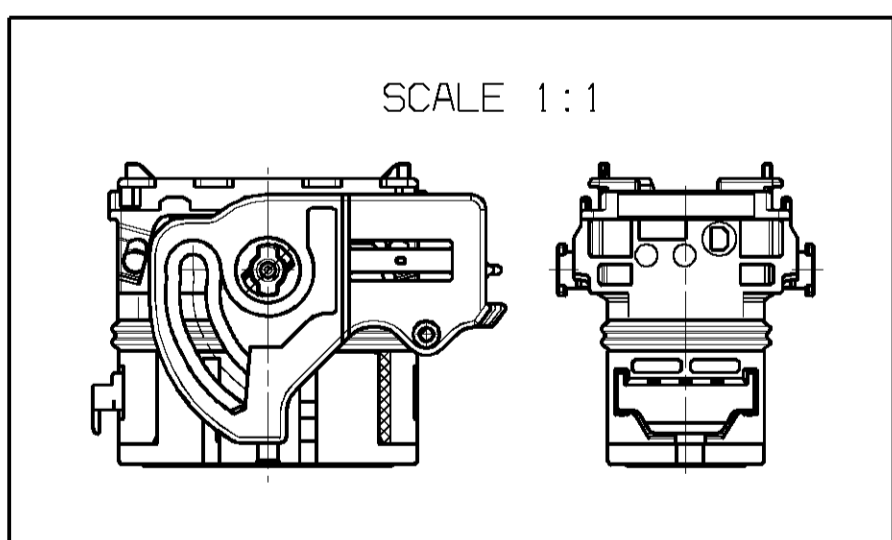
QUANTITY PER INDIVIDUAL SHEET

☒ 0 ⊙ 0 ● 0 SKC: 13

MATERIAL NUMBER	MARK	DESIGNATION	MATERIAL	COLOR
0989930396	7	MATT SEAL	SILICONE SKC	BLUE
0989930356	6	BACK GRID 48 WAY	PBT-GF20 SKC	BLUE
0989930341	5	LOCKING LEVER SIZE 3	PBT-GF30 SKC	BLACK
0989930338	4	SECONDARY LOCK	PBT-GF20 SKC	GREY
0986560002	3	PERIPHERAL SEAL SIZE 3	SILICONE SKC	RED
0989930311	2	BACK PART	PBT-GF20 SKC	BLACK
0989930321 0989930328 0989930325 0989930329	1	FRONT PART	PBT-GF20 SKC	COLOR ASSOCIATED TO KEYING

MARKINGS

- 1 Assembled part tracability day + year
- 2 Terminal cavities identification
- 3 Lever position indicator:
"D" LETTER VISIBLE= part with "LEVER ON THE RIGHT"
"G" LETTER VISIBLE= part with "LEVER ON THE LEFT"
- 4 Supplier identification
- 5 Material identification



VOID AND SUPERSEDED BY SD-64320-001 rev C

NOTES

- FOR ILLUSTRATION PURPOSE THE FEMALE HOUSING SHOWN IS THE RIGHT WIRE OUTPUT VERSION CODING 1
- INTERFACE DEFINITION, OVERALL DIMENSION AND LOCATION ON HEADER AS PER RSD-98644-005
- QUALITIES TERMINALS REGION AS PER
- WIRE'S EXTERNAL DIAMETER USED.
FOR CP0,6 TERMINAL: USE WIRES WITH AN EXTERNAL DIAMETER BETWEEN Ø1,25MM MIN AND Ø1,90MM MAX
FOR CP1,5 TERMINAL: USE WIRES WITH AN EXTERNAL DIAMETER BETWEEN Ø1,80MM MIN AND Ø2,80MM MAX
- THE CONNECTOR FITS WITH WIRE CAP T3 (48WAY) MOLEX P/N 0643201301
- BLIND PLUG FOR 0,6 AND 1,5 CAVITIES (MOLEX P/N 0643251010 AND 0643251023) MUST BE USED ON THIS PART
- DELIVERED PRODUCT WEIGHT: 33,8 g

GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
PLACES	TOLERANCE	MM	INCH	MM ONLY	METRIC	
4 PLACES	±					
3 PLACES	±					
2 PLACES	± 0.1					
1 PLACE	± 0.1					
ANGULAR ± 2°						

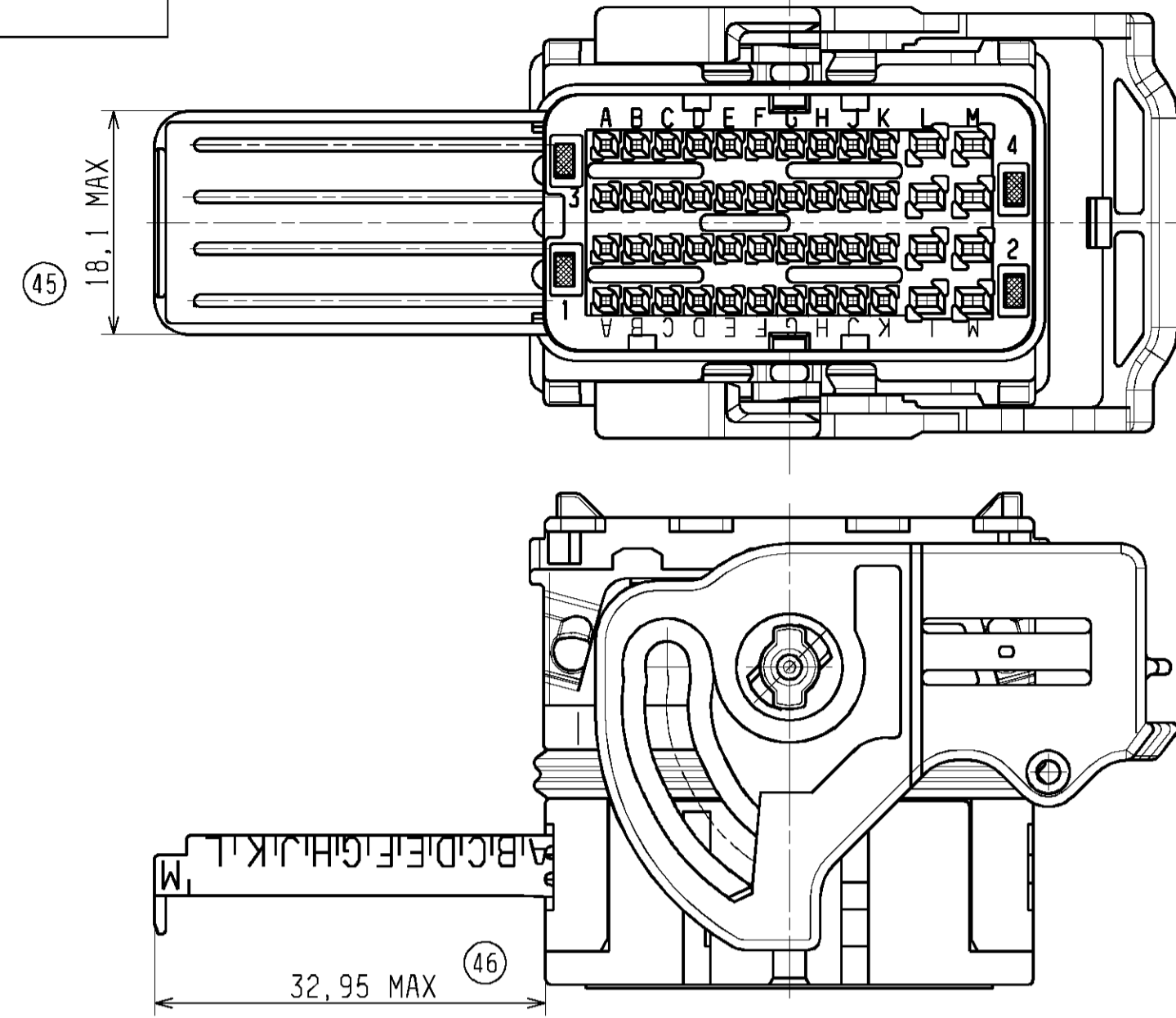
UPDATED DRAWING EC NO:G2008-0367 DRAWN:TBADAROUX 2008/04/21 CHK'D:PORANDCLAUDE 2008/04/21 APPR:CBDOUCHAN 2008/04/21	DESCRIPTION	DRAWN BY TBADAROUX	DATE 2007/07/16	TITLE CMC CONNECTOR 48 WAY MATT SEAL VERSION
		CHECKED BY PGRANDCLAUDE	DATE 2007/07/16	
		APPROVED BY CBDOUCHAN	DATE 2007/07/16	
		MATERIAL NO. SEE CHART	DOCUMENT NO. SD-98993-008	SHEET NO. 1 OF 2

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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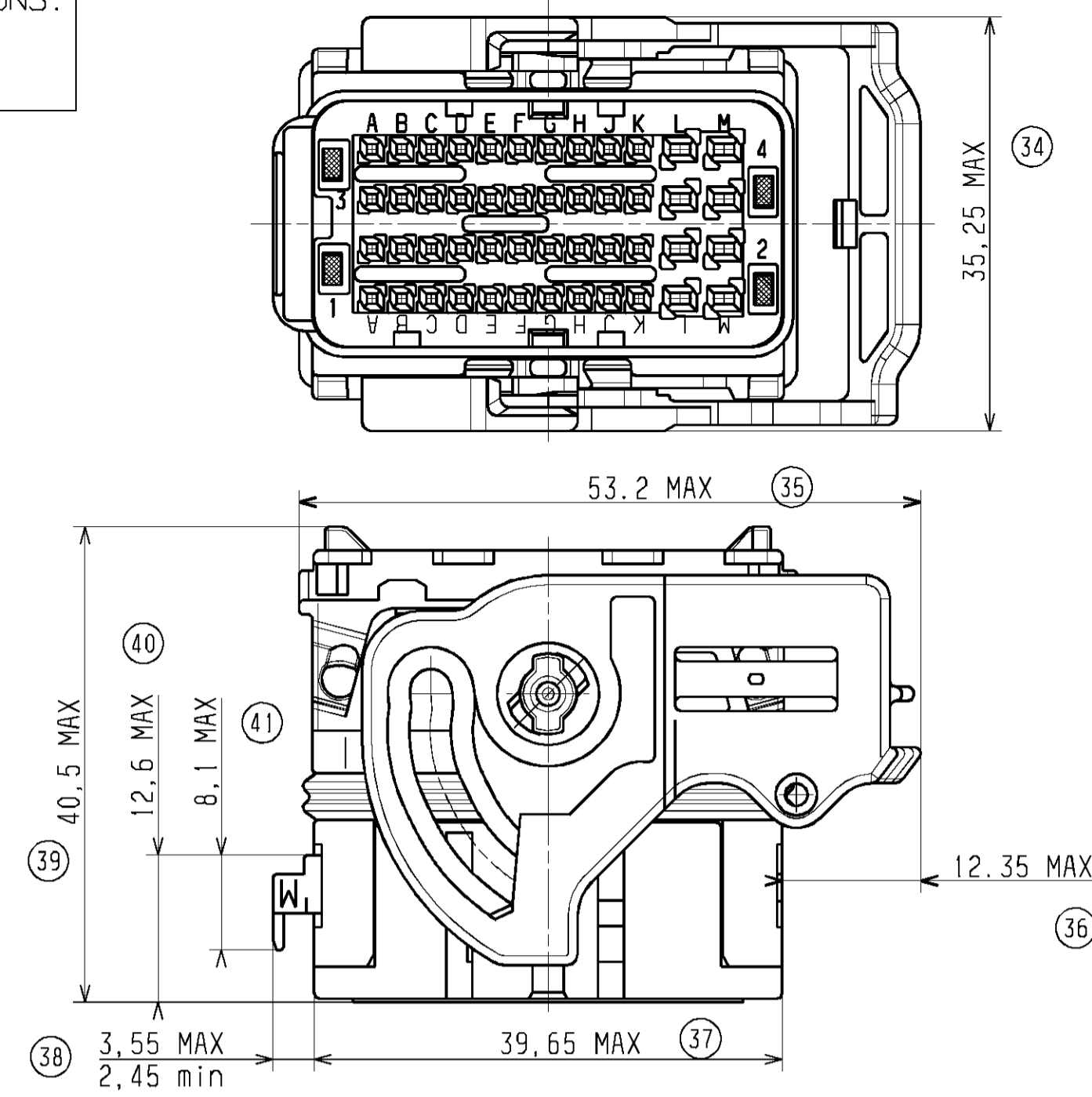
CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING FULLY OPENED
FOR TERMINAL INSERTION

RIGHT WIRE OUTPUT

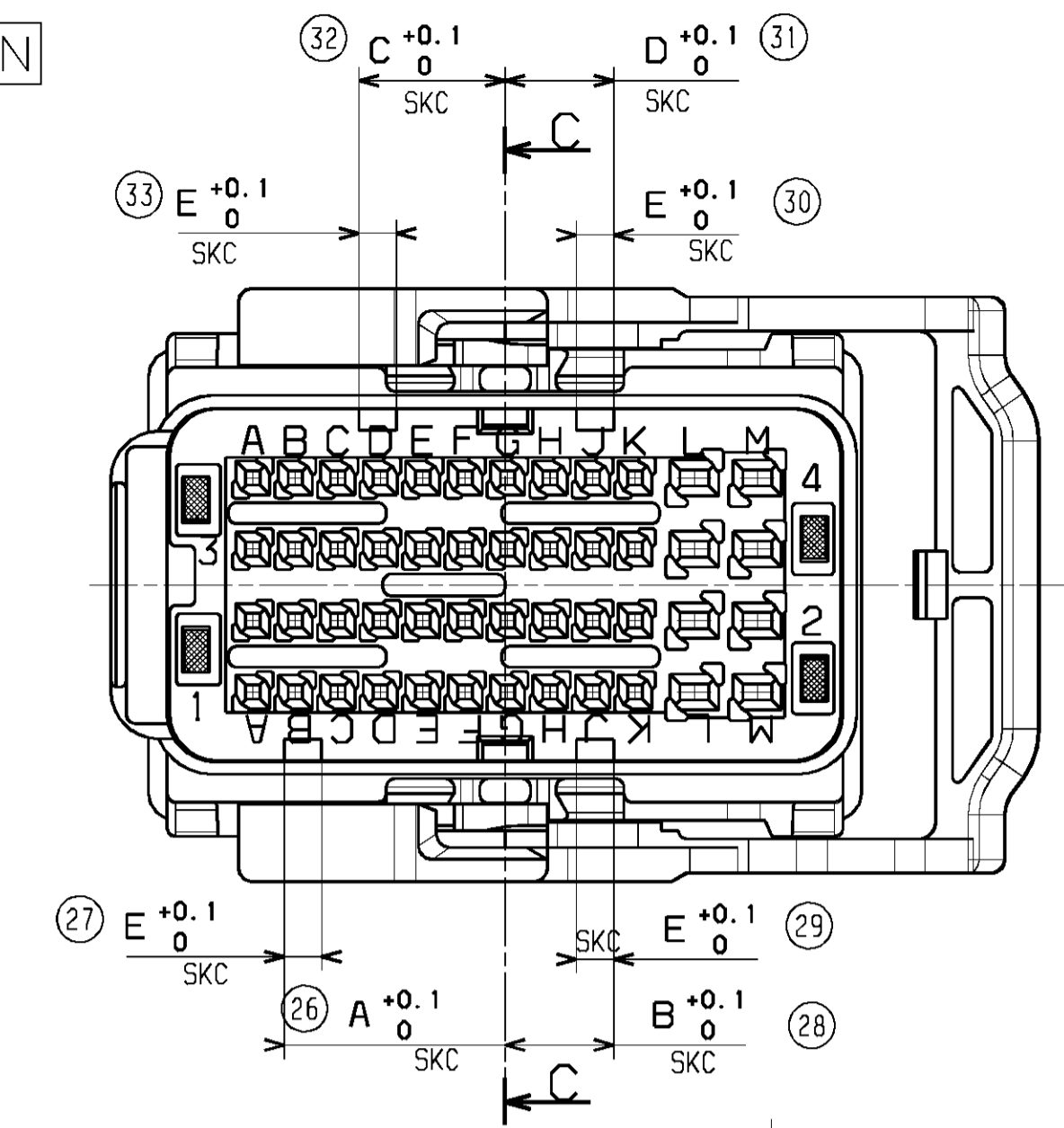


CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING IN
DELIVERY POSITION

RIGHT WIRE OUTPUT

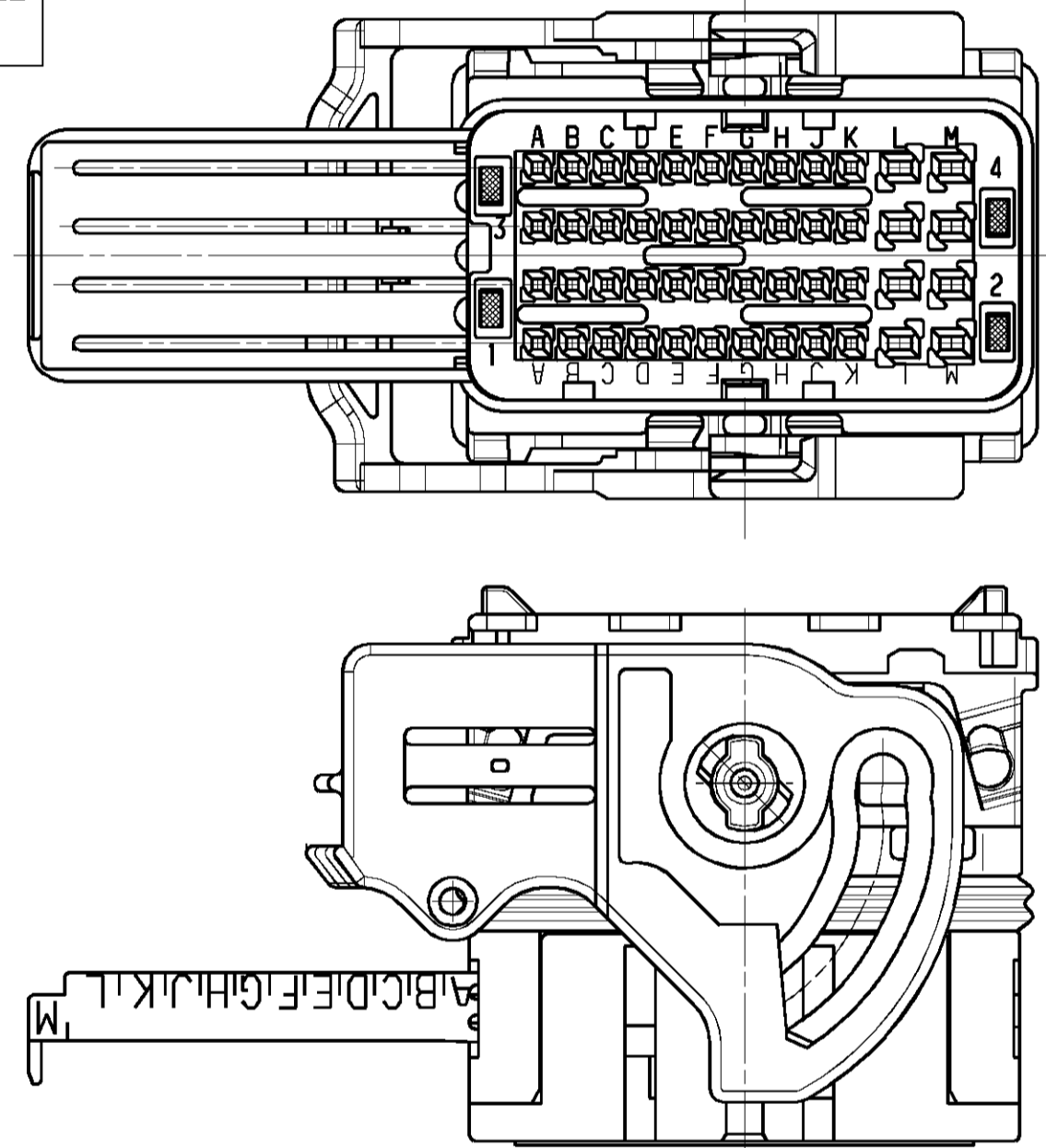


CODING POSITION



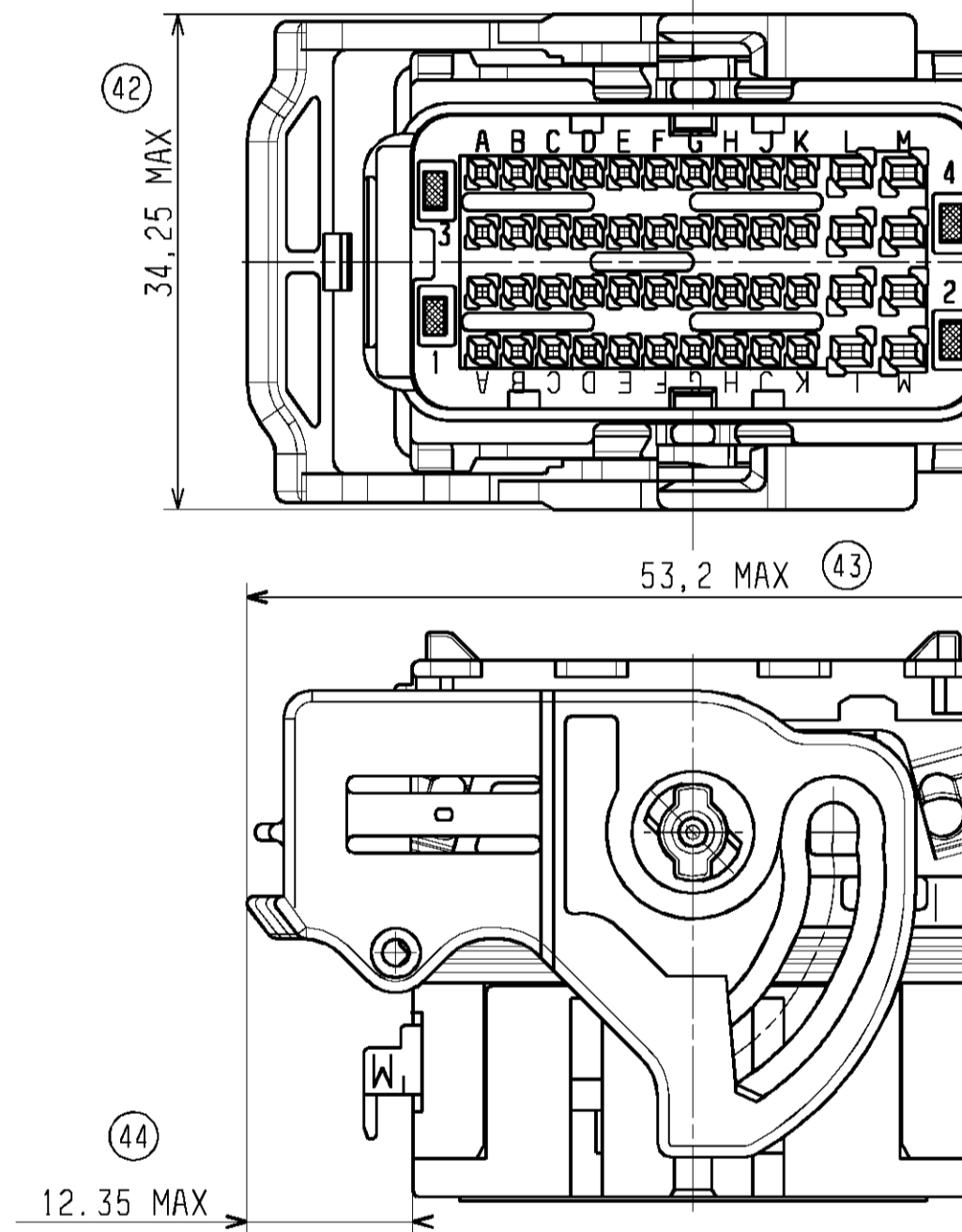
CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING FULLY OPENED
FOR TERMINAL INSERTION

LEFT WIRE OUTPUT

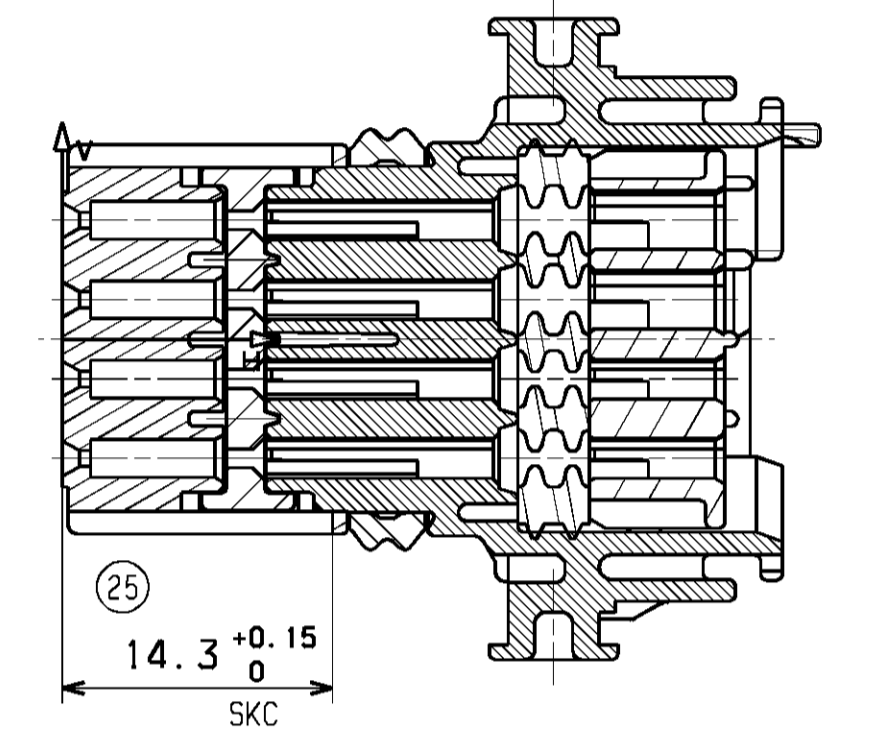


CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING IN
DELIVERY POSITION

LEFT WIRE OUTPUT



C-C
LOCKING LEVER NOT SHOWN



COLOR	KEYING	A ^{+0.1} ₀	B ^{+0.1} ₀	C ^{+0.1} ₀	D ^{+0.1} ₀	E ^{+0.1} ₀
BLACK	1	13	6,4	8,6	6,4	2,2
GREY	2	10,8	8,6	13	8,6	2,2
BROWN	3	8,6	10,8	13	13	2,2
GREEN	4	10,8	13	6,4	6,4	2,2
BLUE	5	6,4	10,8	8,6	8,6	2,2
YELLOW	6	13	10,8	6,4	10,8	2,2

TERMINALS USED	MOLEX PART NUMBER				
		TIN PLATED TERMINAL		GOLD PLATED TERMINAL 1.27µm min	
CAVITIES IDENTIFICATION	FEMALE TERMINAL 0,635 A1 to F1 A2 to F2 A3 to F3 A4 to F4	(0,35 to 0,44 mm ²) 0643221019	(0,5 mm ²) 0643221039	(0,35 to 0,44 mm ²) 0643221229	(0,5 mm ²) 0643221239
			(0,75 mm ²) 0643221029		(0,75 mm ²) 0643221219
	FEMALE TERMINAL 1,50 G1 to G4 H1 to H4	(1 mm ²) 0643231029	(>1 to 2 mm ²) 0643231039	(1 mm ²) 0643231319	(>1 to 2 mm ²) 0643231219

SKC: CS CHARACTERISTICS

- ⊠ DENOTES S.P.C DIMENSIONS
- ⊗ DENOTES CRITICAL DIMENSIONS
- DENOTES FUNCTIONAL DIMENSIONS

QUANTITY PER INDIVIDUAL SHEET

⊠ 0 ⊗ 0 ● 0 SKC: 9

UPDATED DRAWING EC NO.:G2008-0367 DRWN: TBADAROUX 2008/04/21 CH:KO: PGRANDCLAUDE 2008/04/21 APPR: CBOUCHAN 2008/04/21	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
		mm	INCH	MM ONLY	2:1	METRIC	
DRAWN BY TBADAROUX		DATE 2007/07/16		TITLE CMC CONNECTOR 48 WAY MATT SEAL VERSION		MATERIAL NO. SEE SHEET 1	
CHECKED BY PGRANDCLAUDE		DATE 2007/07/16		APPROVED BY CBOUCHAN		DATE 2007/07/16	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± 2°		DOCUMENT NO. SD-98993-008		SHEET NO. 2 OF 2	
SIZE A1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					