

**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	<a href="#">64320</a>
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 <sup>2</sup> wire) and 12.0A for 1.5mm Terminal (2.0mm <sup>2</sup> wire) *
More Detailed Tech Information	Sealed, high-density, modular connecting system for Power Train and Body Electronics applications in cars, trucks, busses
Overview	<a href="#">cmc connectors</a>
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

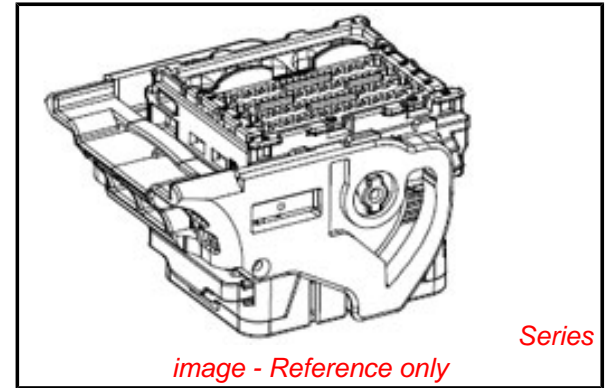
**Electrical**

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

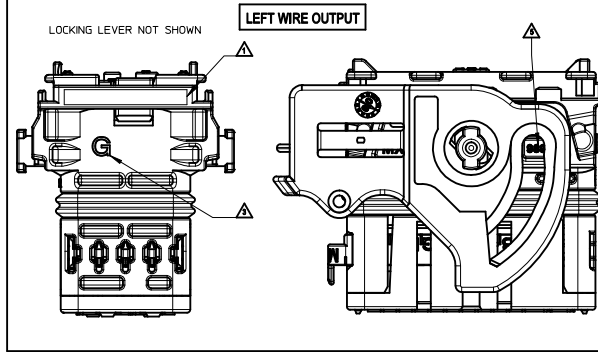
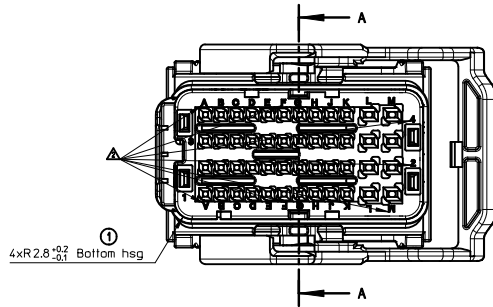
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

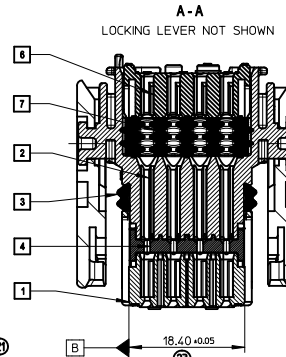
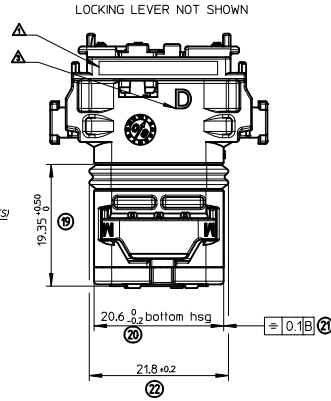
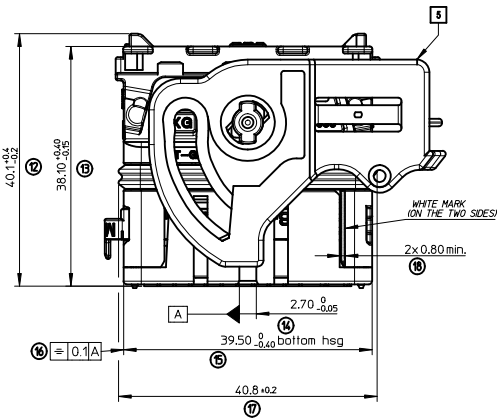
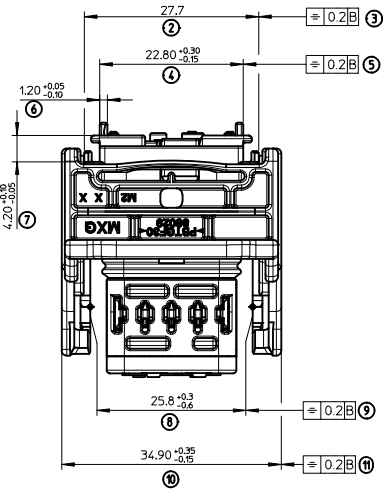
[64320Series](#)

**Use With**

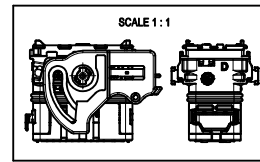
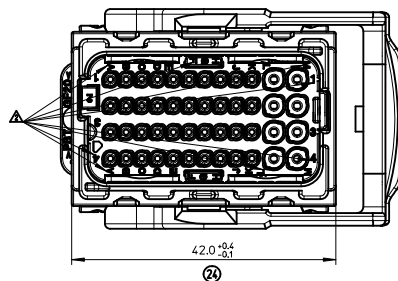
CMC CP Female Terminal [64322](#) , [64323](#).  
 Circuit Way Plugs [643251010](#) , [643251023](#).  
 CMC Wire Cap [643201301](#).



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:**

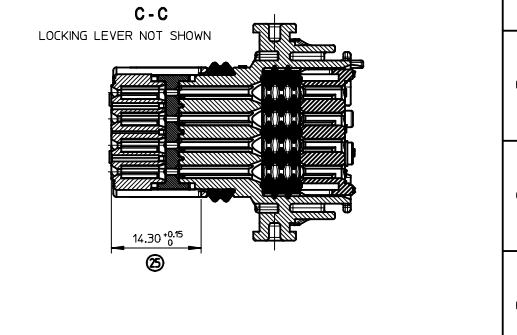
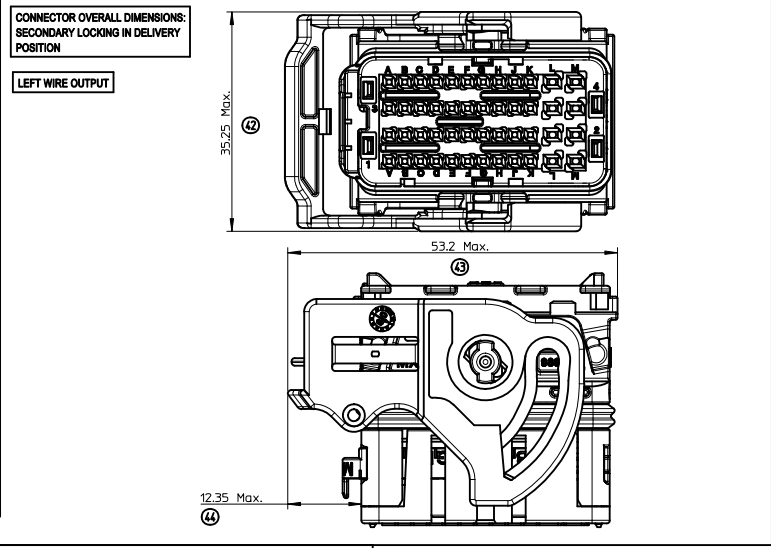
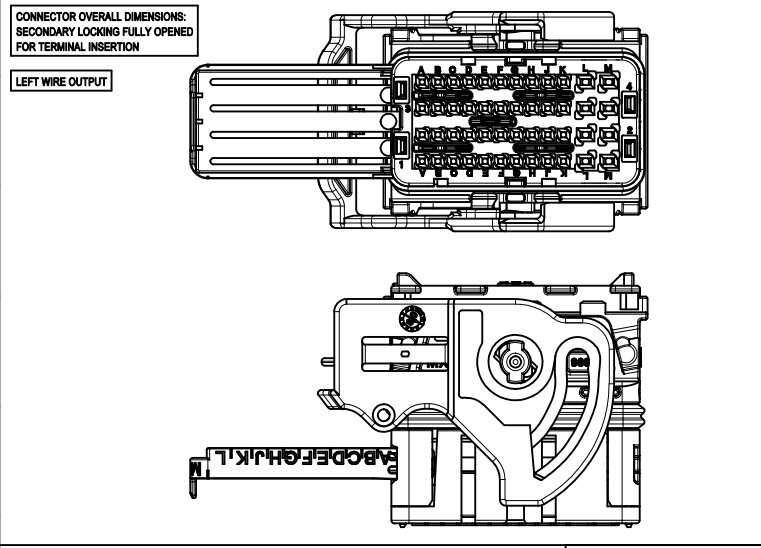
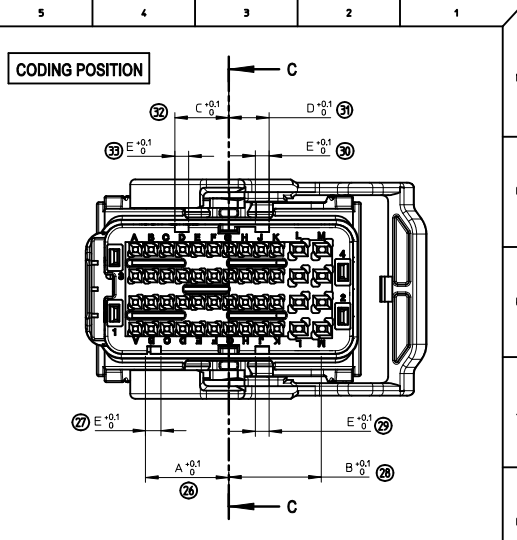
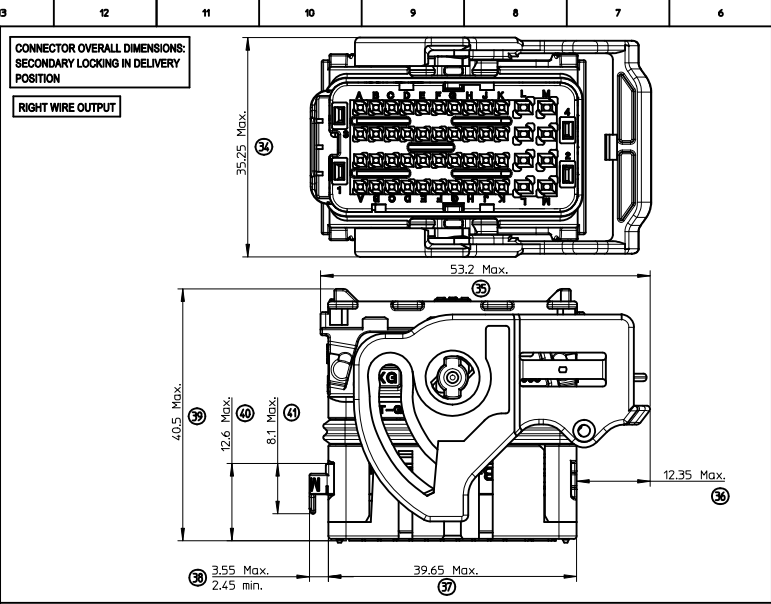
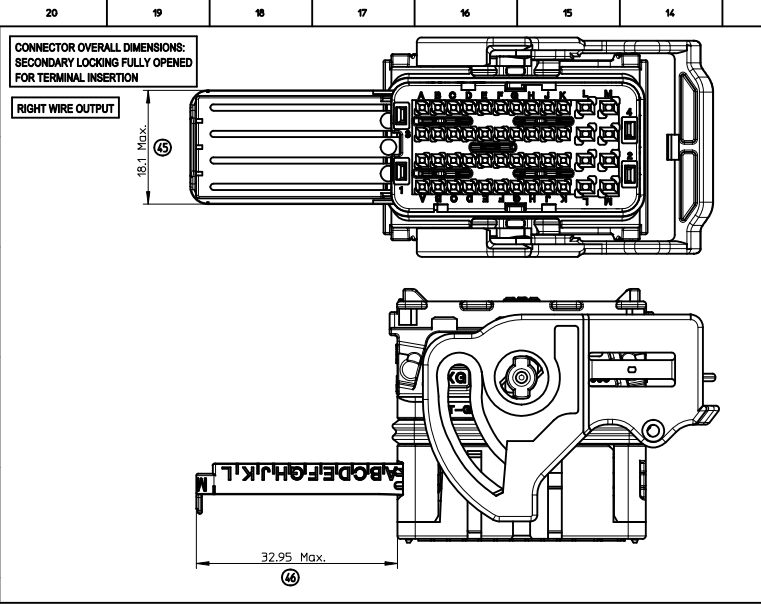
- FOR ILLUSTRATION PURPOSE THE FEMALE HOUSING SHOWN IS THE RIGHT WIRE OUTPUT VERSION CODING 1
- APPLICATION SPECIFICATION: AS-64319-001
- WIRES EXTERNAL DIAMETER USED:  
FOR CP06 TERMINAL: USE WIRES WITH AN EXTERNAL DIAMETER BETWEEN Ø1.25MM MIN AND Ø1.90MM MAX  
FOR CP15 TERMINAL: USE WIRES WITH AN EXTERNAL DIAMETER BETWEEN Ø1.40MM MIN AND Ø2.80MM 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

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



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

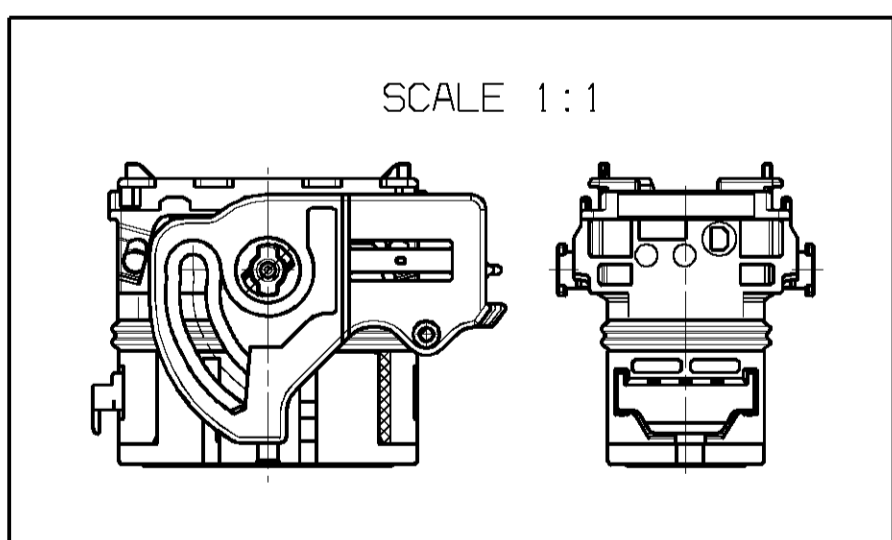
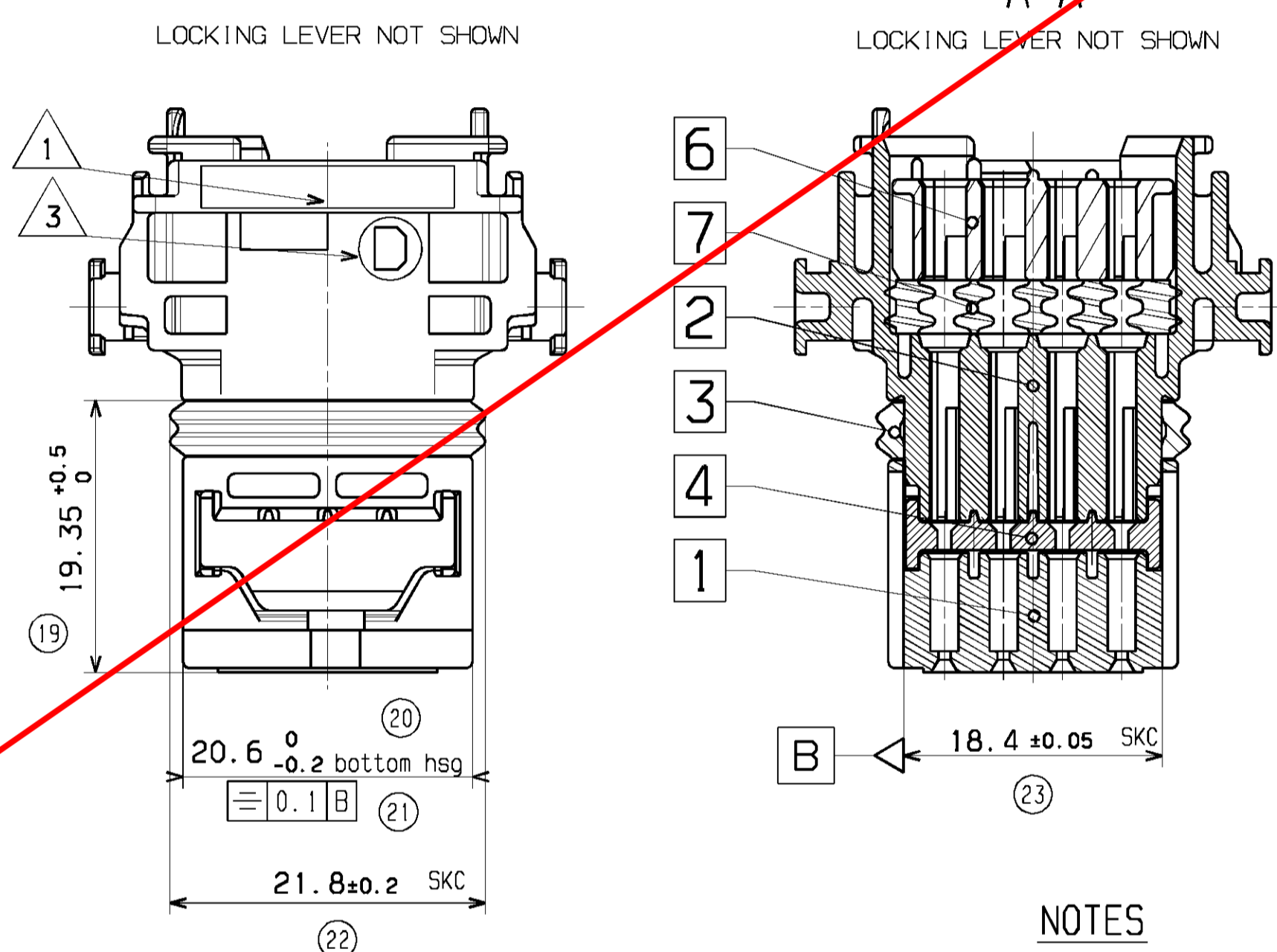
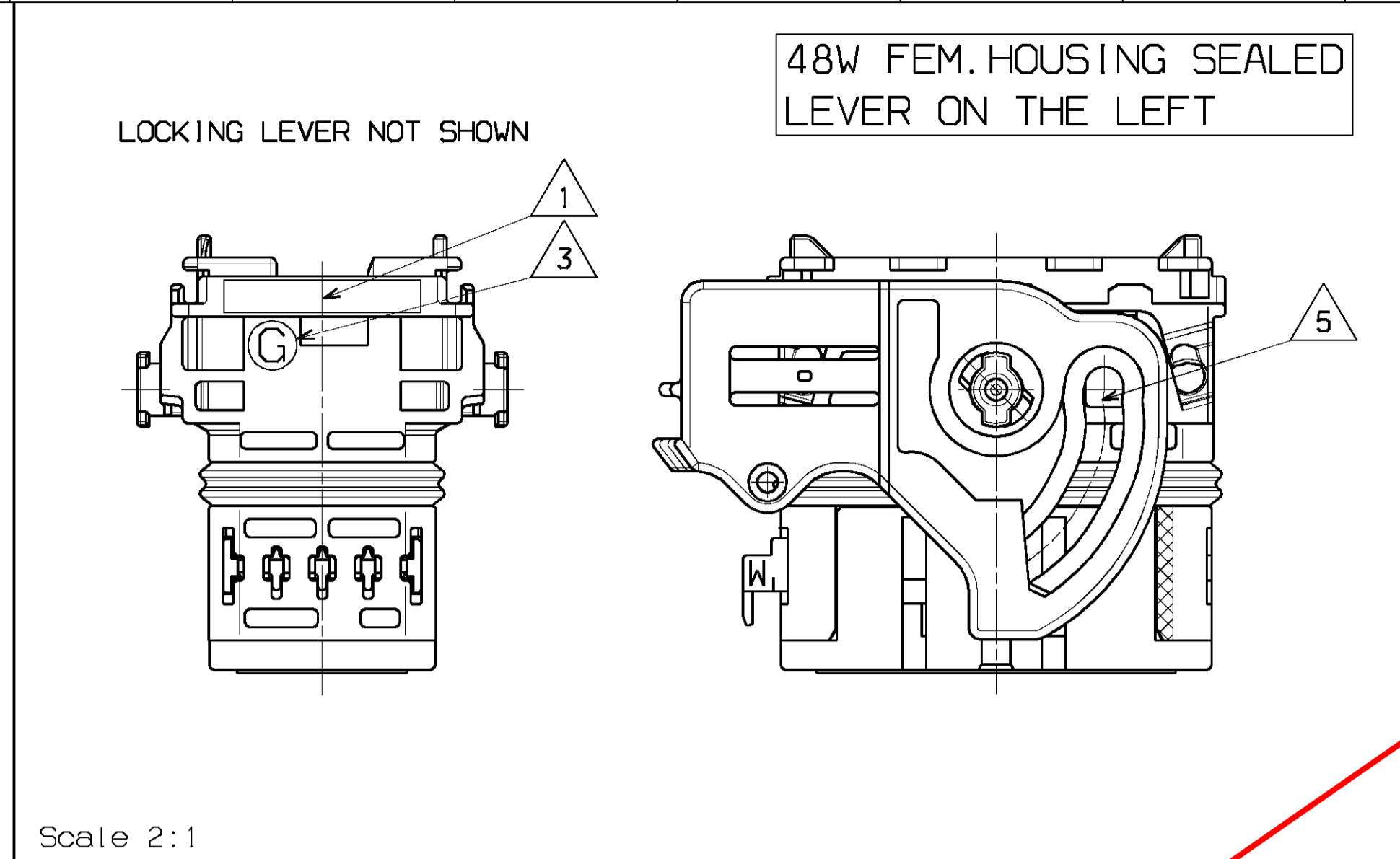
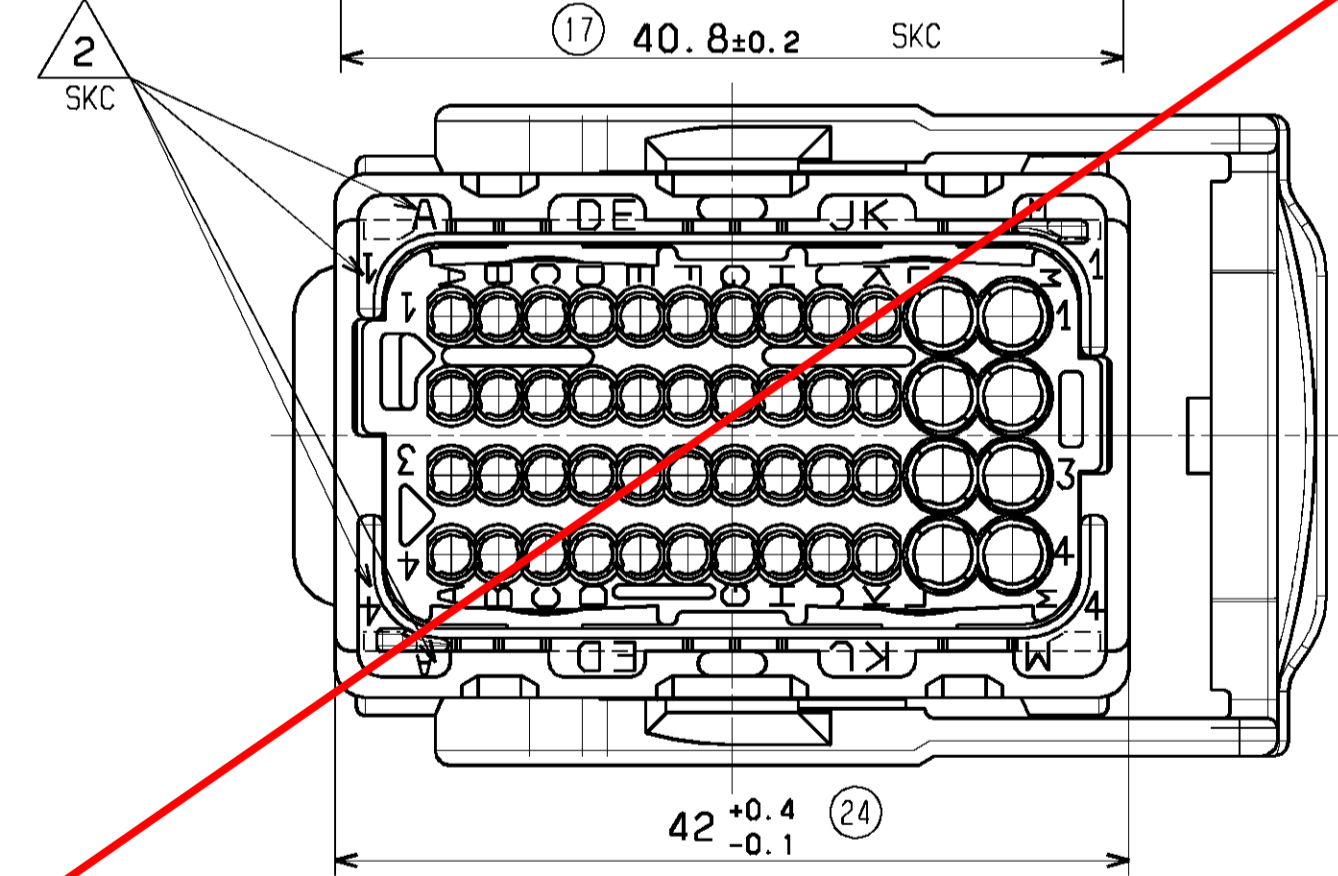
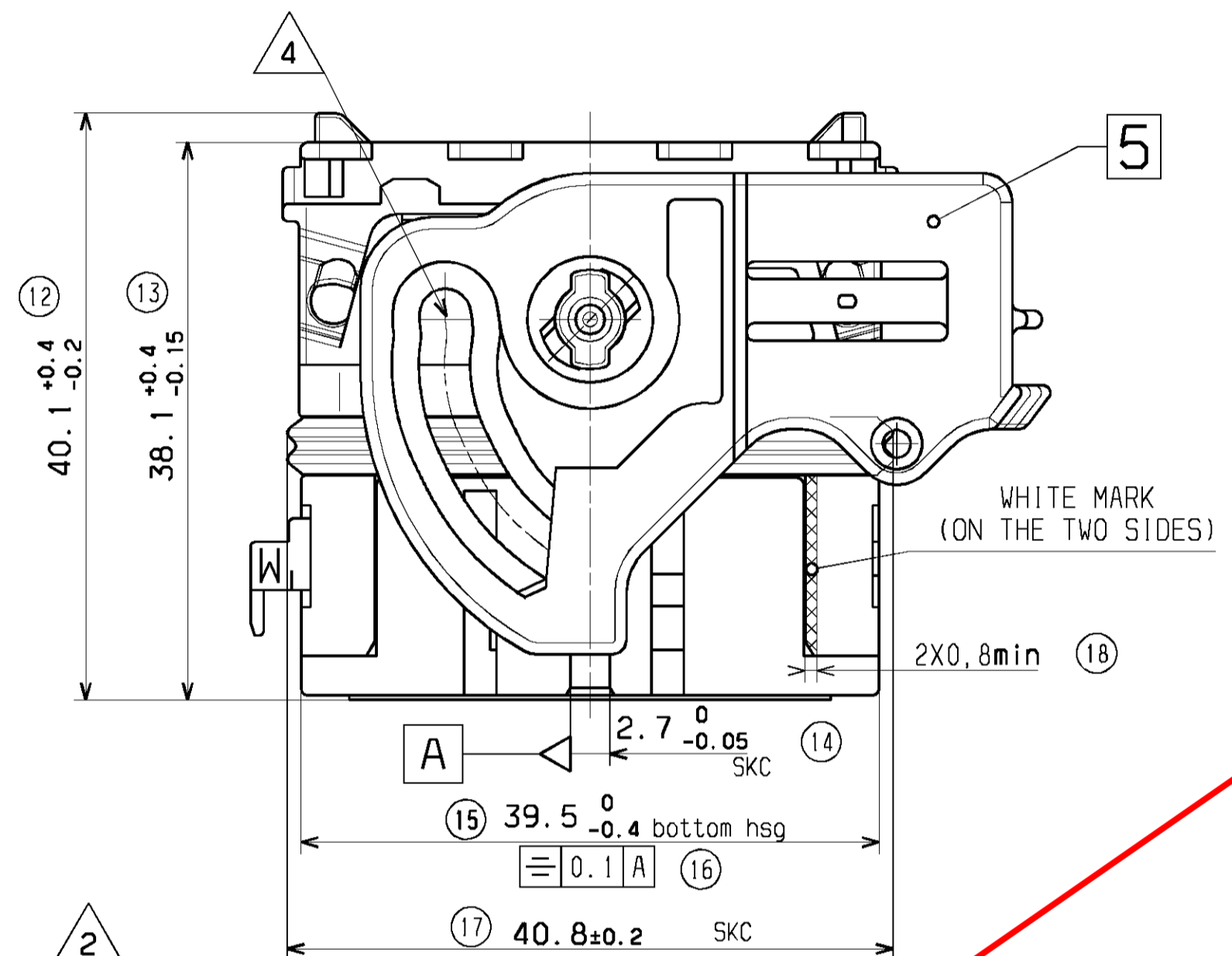
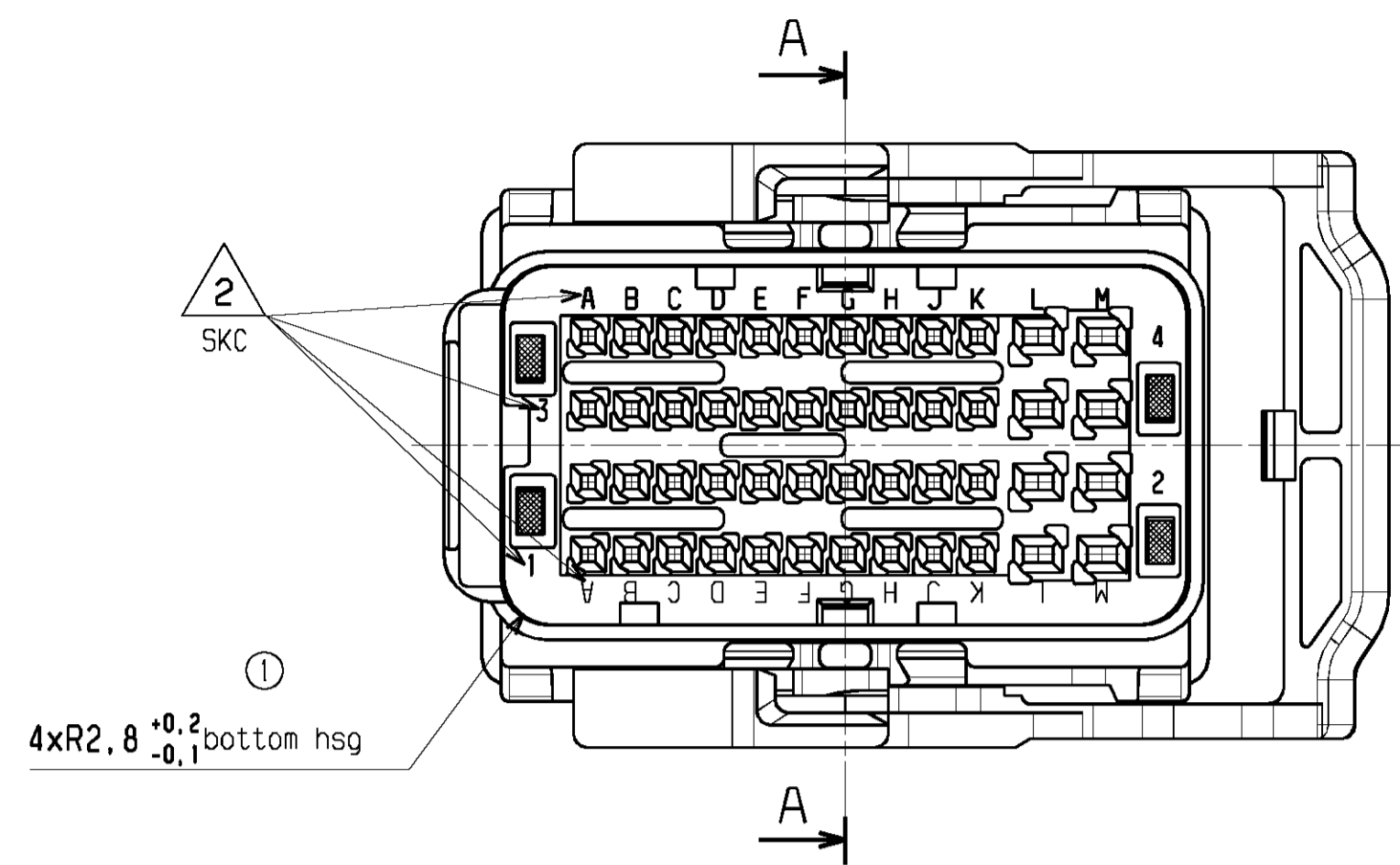
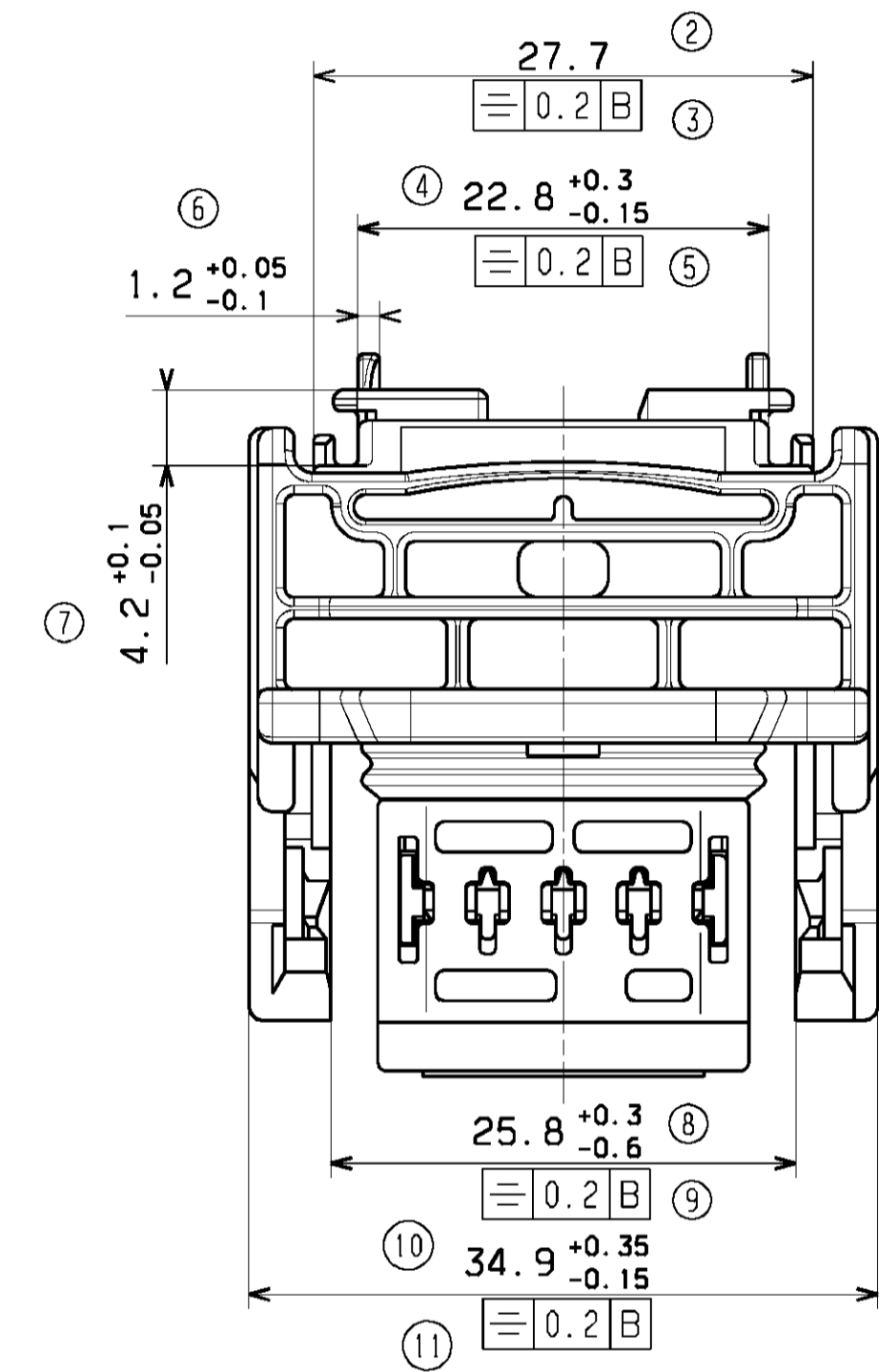
MATERIAL NO.  
SD-64320-001

DOCUMENT NO.  
SD-64320-001

SHEET NO.  
2 OF 2

MOLEX INCORPORATED

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INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION



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

**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

**VOID AND SUPERSEDED BY SD-64320-001 rev C**

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
MATERIAL NUMBER	MARK	DESIGNATION	MATERIAL	COLOR

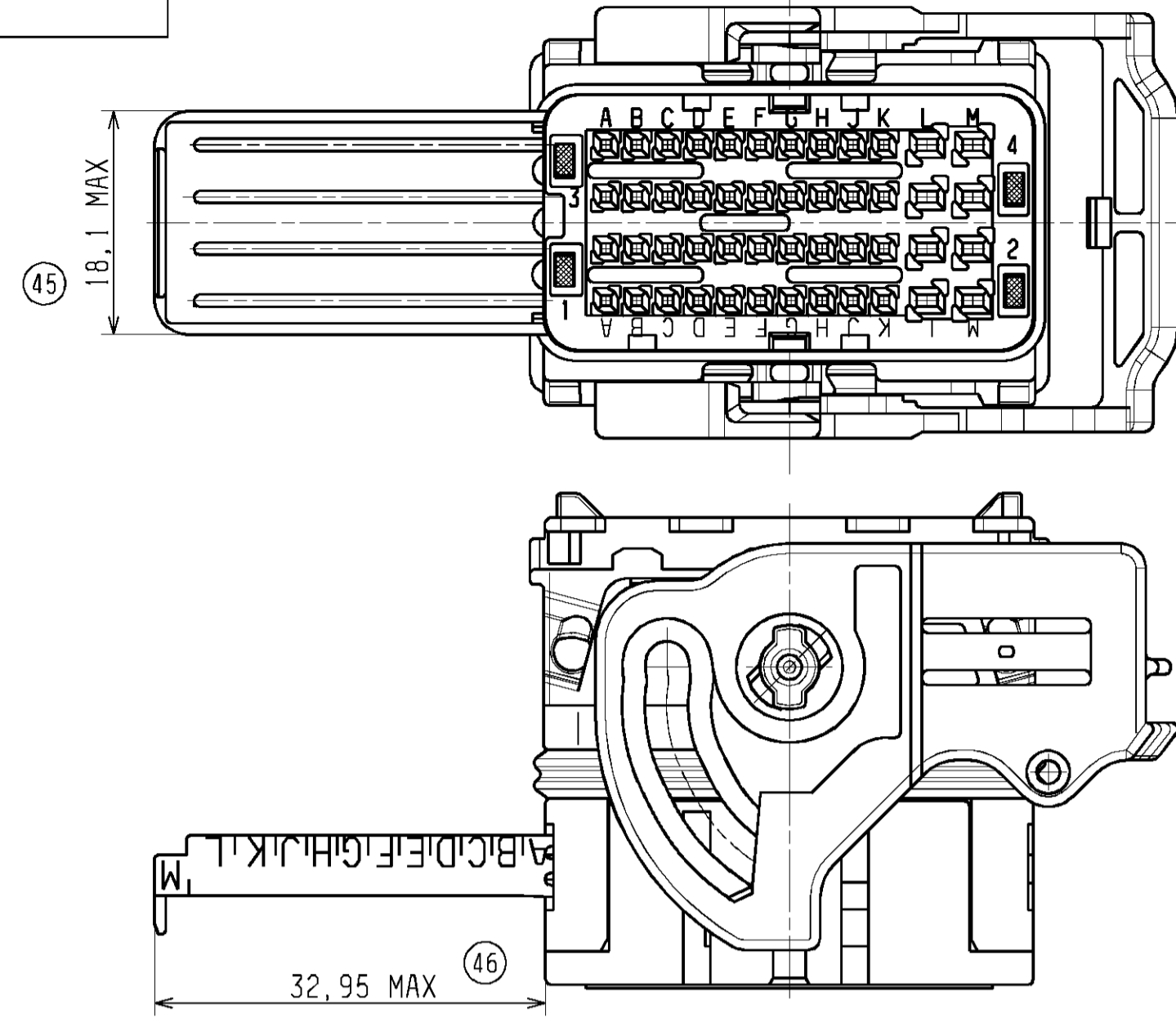
**MARKINGS**

- Assembled part tracability 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 EC NO:G2008-0367 DRAWN:TBADAROUX 2008/04/21 CHK'D:PORANDCLAUDE 2008/04/21 APPR:CBDOUCHAN 2008/04/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
	mm	INCH	MM ONLY	2.5:1	METRIC	
REV C	4 PLACES ±	±	DRAWN BY	DATE	TITLE	CMC CONNECTOR 48 WAY MATT SEAL VERSION
	3 PLACES ±	±	TBADAROUX	2007/07/16		
	2 PLACES ± 0.1	±	CHECKED BY	DATE		
	1 PLACE ± 0.1	±	PGRANDCLAUDE	2007/07/16		
	ANGULAR ± 2°		APPROVED BY	DATE		
			CBDOUCHAN	2007/07/16		
			MATERIAL NO.	DOCUMENT NO.		
			SEE CHART	SD-98993-008		
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
			A1			SHEET NO. 1 OF 2

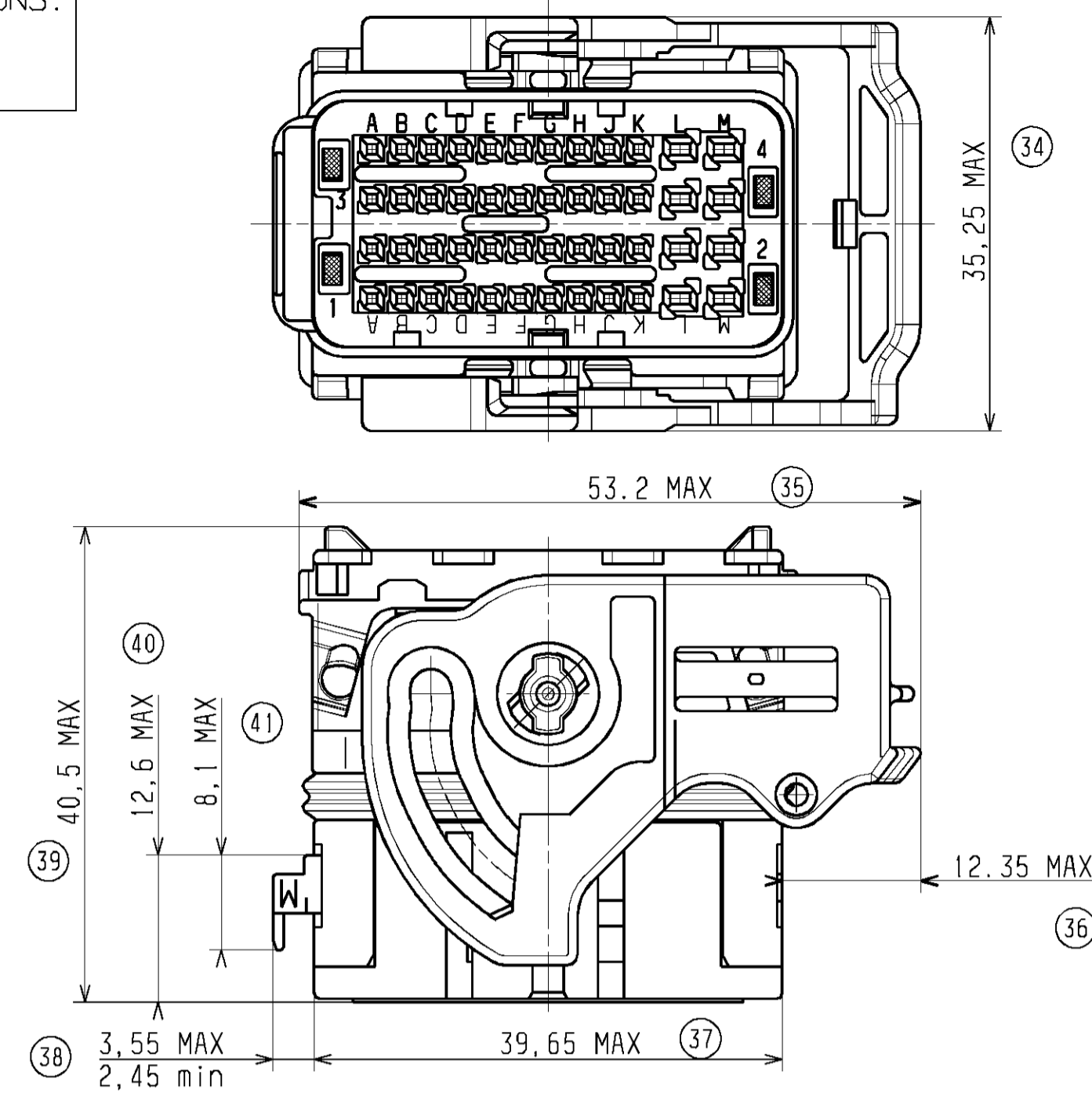
CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING FULLY OPENED  
FOR TERMINAL INSERTION

RIGHT WIRE OUTPUT

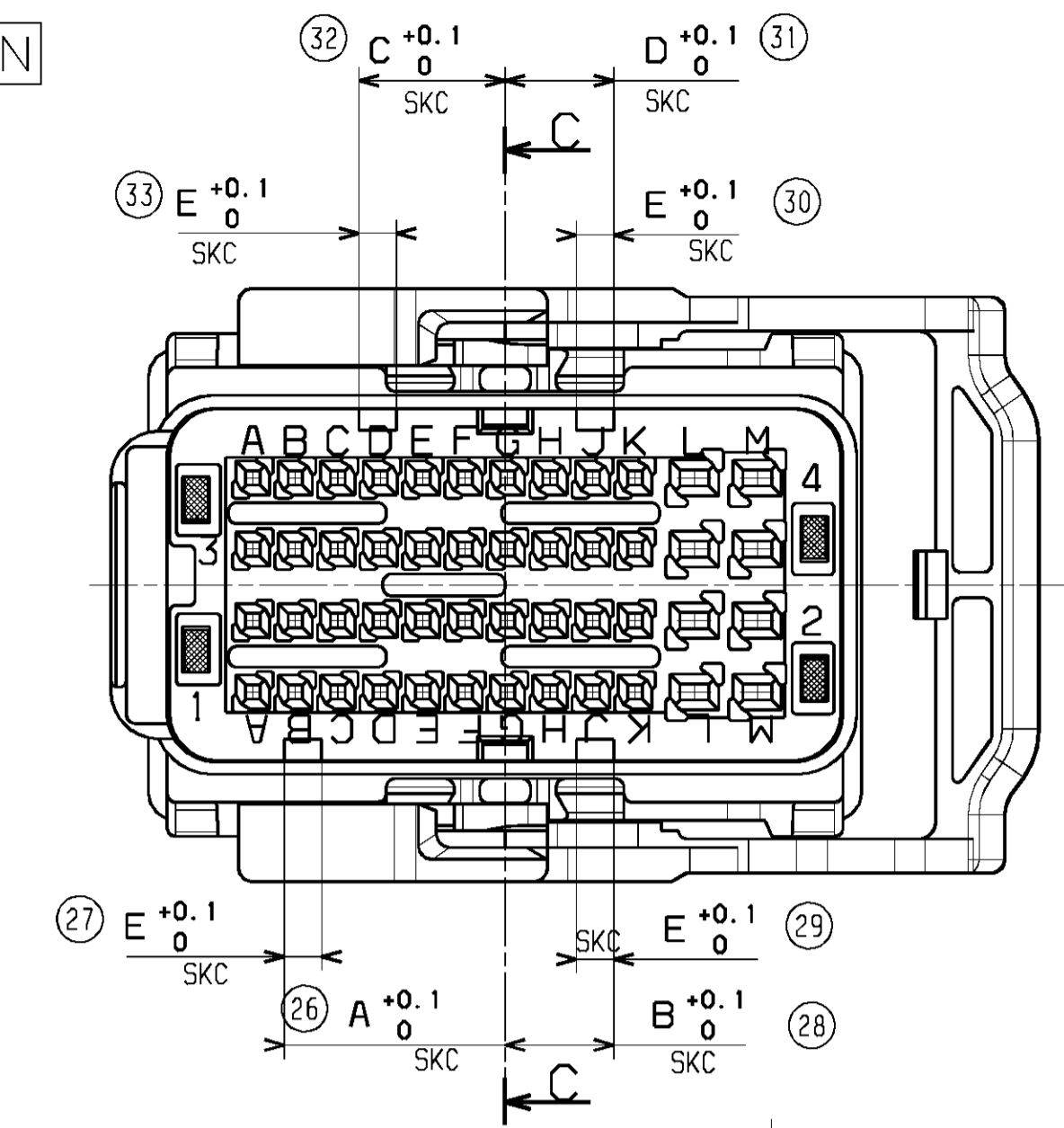


CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING IN  
DELIVERY POSITION

RIGHT WIRE OUTPUT

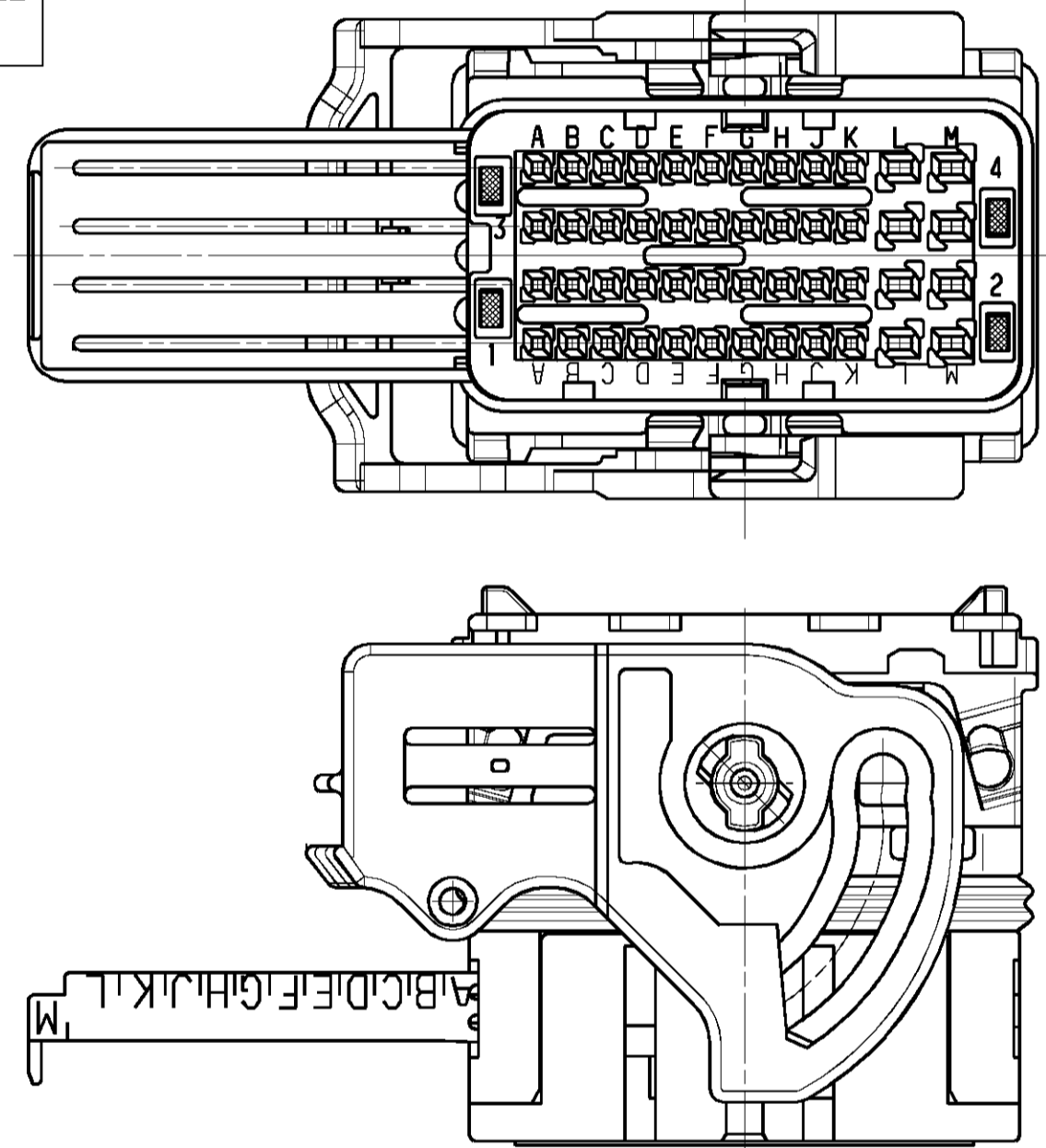


CODING POSITION



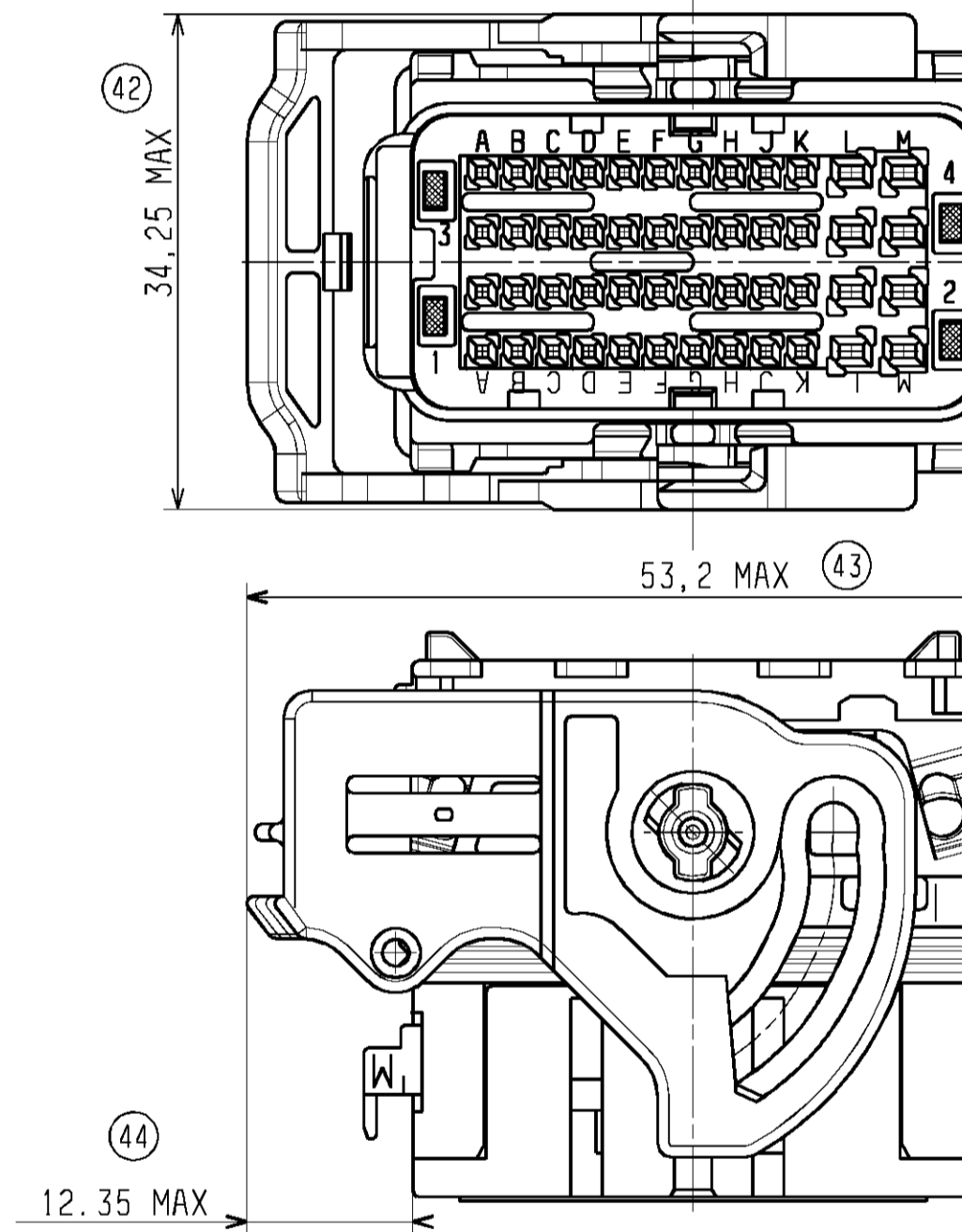
CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING FULLY OPENED  
FOR TERMINAL INSERTION

LEFT WIRE OUTPUT

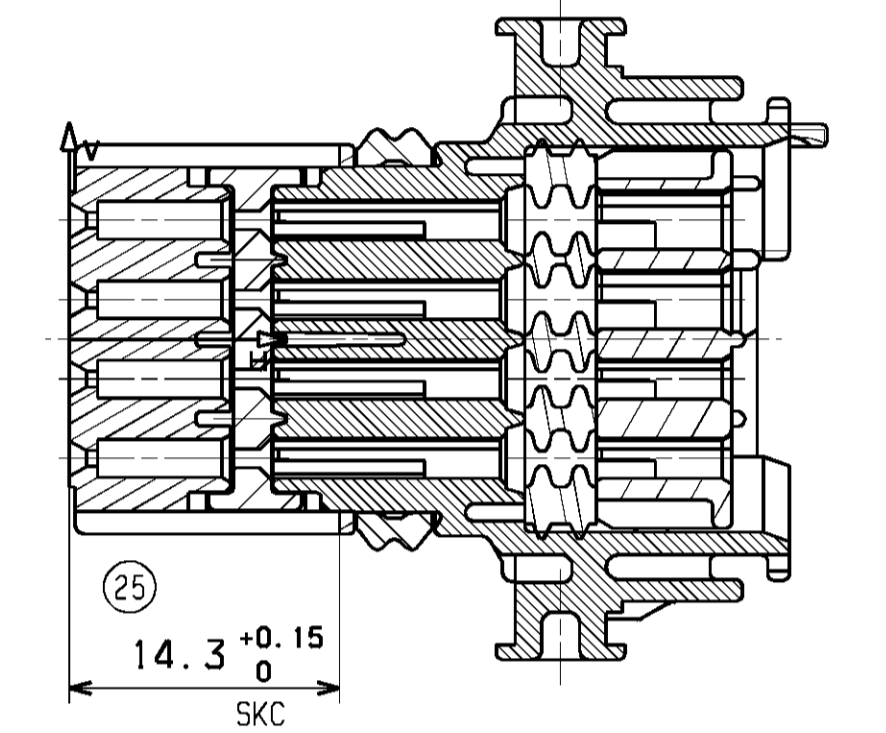


CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING IN  
DELIVERY POSITION

LEFT WIRE OUTPUT



C-C  
LOCKING LEVER NOT SHOWN



COLOR	KEYING	A <sup>+0.1</sup> <sub>0</sub>	B <sup>+0.1</sup> <sub>0</sub>	C <sup>+0.1</sup> <sub>0</sub>	D <sup>+0.1</sup> <sub>0</sub>	E <sup>+0.1</sup> <sub>0</sub>
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 <sup>2</sup> ) 0643221019	(0,5 mm <sup>2</sup> ) 0643221039	(0,35 to 0,44 mm <sup>2</sup> ) 0643221229	(0,5 mm <sup>2</sup> ) 0643221239
			(0,75 mm <sup>2</sup> ) 0643221029		(0,75 mm <sup>2</sup> ) 0643221219
	FEMALE TERMINAL 1,50	(1 mm <sup>2</sup> ) 0643231029	(>1 to 2 mm <sup>2</sup> ) 0643231039	(1 mm <sup>2</sup> ) 0643231319	(>1 to 2 mm <sup>2</sup> ) 0643231219
	G1 to G4 H1 to H4				

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 DRAWN: TBADAROUX 2008/04/21 CH:KO: PGRANDCLAUDE 2008/04/21 APPR: CBOUCHAN 2008/04/21	DESCRIPTION [REDACTED]	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
		mm	INCH	MM ONLY	2:1	METRIC	
		4 PLACES ±	±	DRAWN BY	DATE	TITLE	
		3 PLACES ±	±	TBADAROUX	2007/07/16	CMC CONNECTOR 48 WAY MATT SEAL VERSION	
2 PLACES ±	±	CHECKED BY	DATE	MOLEX INCORPORATED MATERIAL NO. SEE SHEET 1 DOCUMENT NO. SD-98993-008			
1 PLACE ±	±	PGRANDCLAUDE	2007/07/16		SHEET NO. 2 OF 2		
ANGULAR ± 2°		APPROVED BY	DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		CBOUCHAN	2007/07/16				