

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0643193216](#)  
**Status:** **Active**  
**Overview:** [cmc connectors](#)  
**Description:** .635mm (.025"), 1.50mm (.059") CMC Receptacle, 32 Circuits, Right Wire Output, Blue 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="#">64319</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)	32
Circuits Detail	8 x 1.5mm & 24 x 0.635mm terminals
Color - Resin	Blue
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

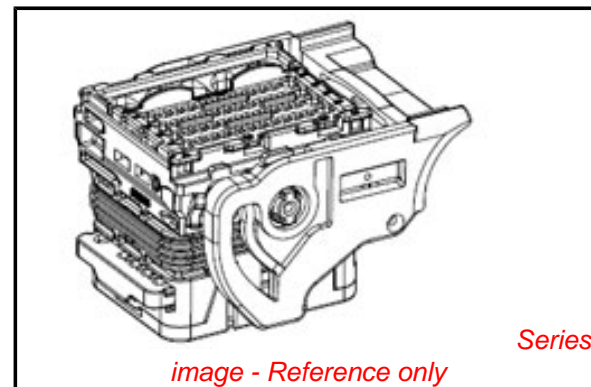
**Electrical**

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

**Reference - Drawing Numbers**

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



**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**

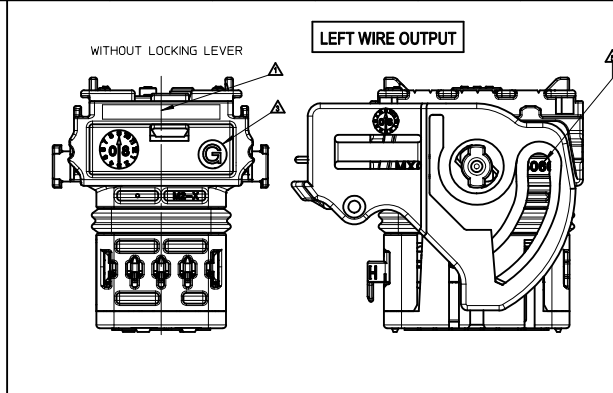
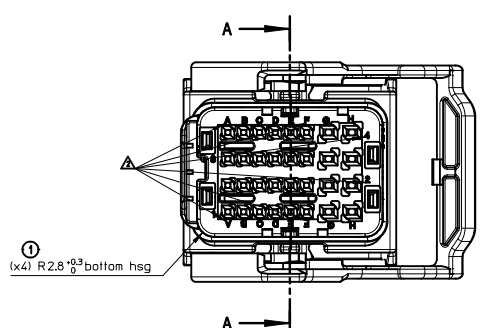
[64319Series](#)

**Mates With**

Single 32 Circuit CMC Header - Please Contact Molex

**Use With**

CMC CP Terminals [64322](#) , [64323](#). CMC Wire Cap [643191201](#). Sealing Plugs [643251010](#) , [643251023](#)

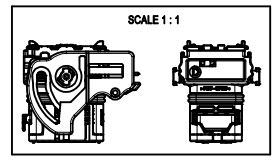
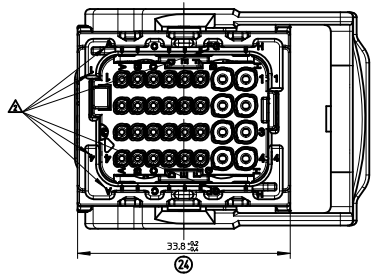
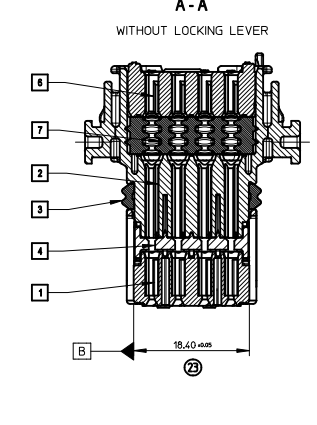
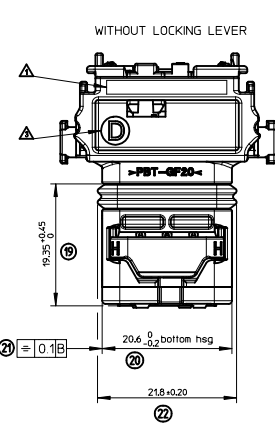
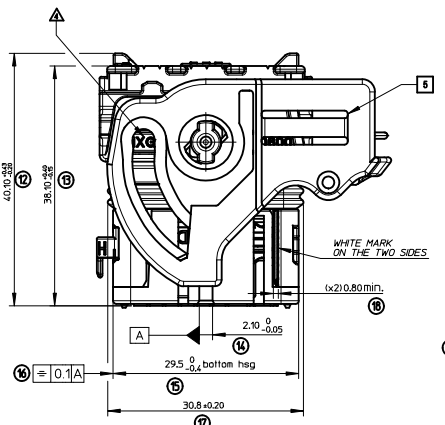
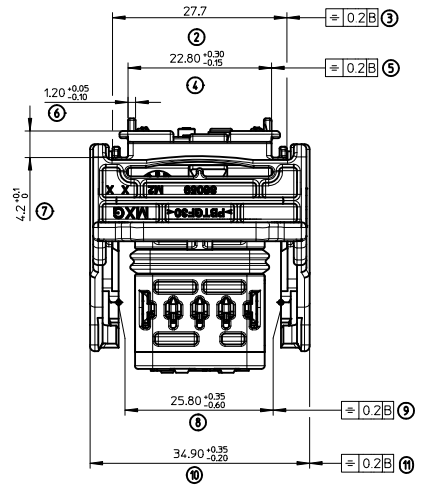


**LEFT WIRE OUTPUT**

MATERIAL NUMBER	COLOR
0643191211	BLACK
0643191218	GREY
0643191219	BROWN
0643191216	BLUE

**RIGHT WIRE OUTPUT**

MATERIAL NUMBER	COLOR
0643193211	BLACK
0643193218	GREY
0643193219	BROWN
0643193216	BLUE



**NOTES:**

- FOR ILLUSTRATION PURPOSE THE FEMALE HOUSING SHOWN IS THE RIGHT WIRE OUTPUT VERSION COUING 1
- APPLICATION SPECIFICATION: AS-64319-001
- WIRES EXTERNAL DIAMETER USED:  
FOR CP0.6 TERMINAL: USE WIRES WITH AN EXTERNAL DIAMETER BETWEEN Ø125MM MIN AND Ø190MM MAX  
FOR CP1.5 TERMINAL: USE WIRES WITH AN EXTERNAL DIAMETER BETWEEN Ø140MM MIN AND Ø280MM MAX
- THE CONNECTOR FITS WITH WIRE CAP (32 WAY) MOLEX P/N 0643191201
- BLIND PLUG FOR CP 0.6 AND 15 CAVITIES (MOLEX P/N 0643251010 AND 0643251023) MUST BE USED ON THIS PART.
- DELIVERED PRODUCT WEIGHT: 27.6 g

POS.	DESIGNATION	MATERIAL	COLOR
17	MAT SEAL	Silicon	GREEN
14	BACK GRID 32W	>PBT-GF20<	GREY
16	LOCKING LEVER 32W	>PBT-GF30<	BLACK
15	SECONDARY LOCK	>PBT-GF20<	GREEN
13	PERIPHERAL SEAL 32W	Silicon	BLUE
12	BACK PART	>PBT-GF20<	BLACK
11	FRONT PART	>PBT-GF20<	COLOR LINKED TO KEYING

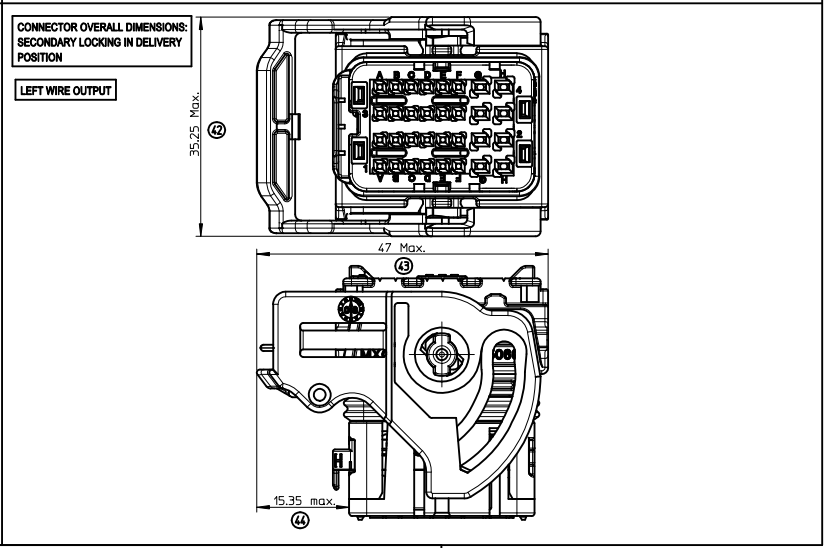
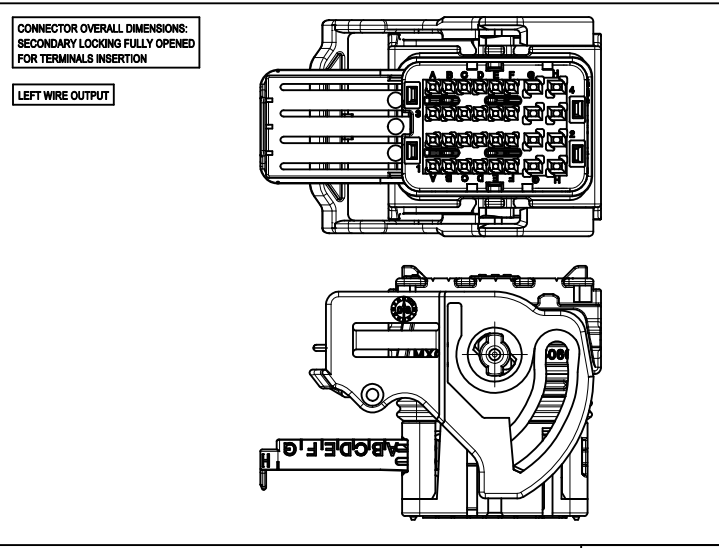
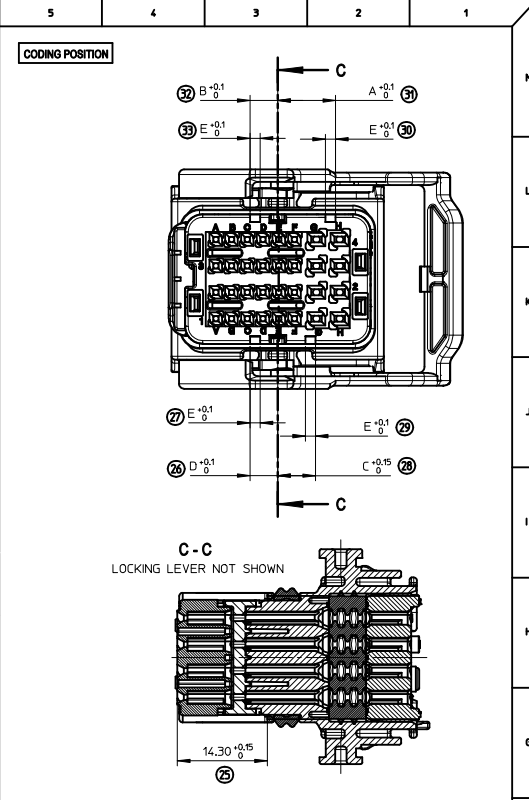
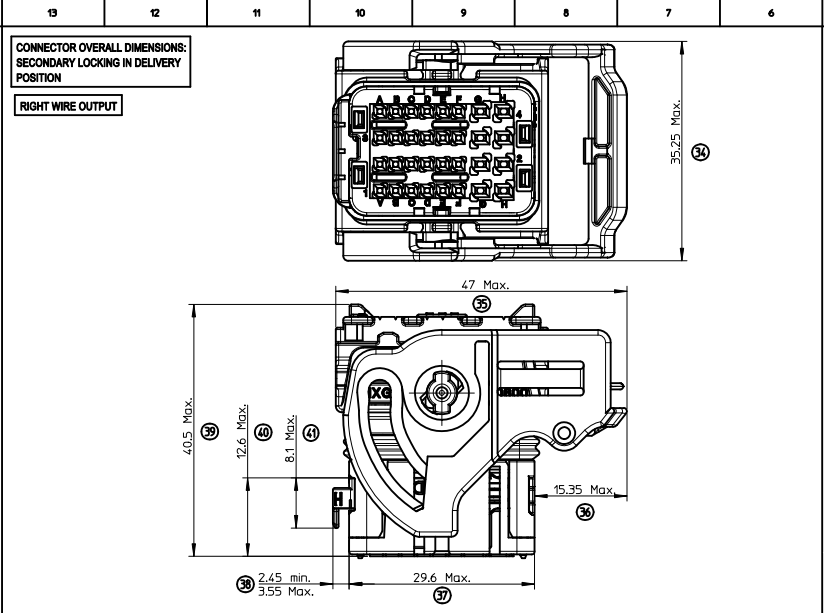
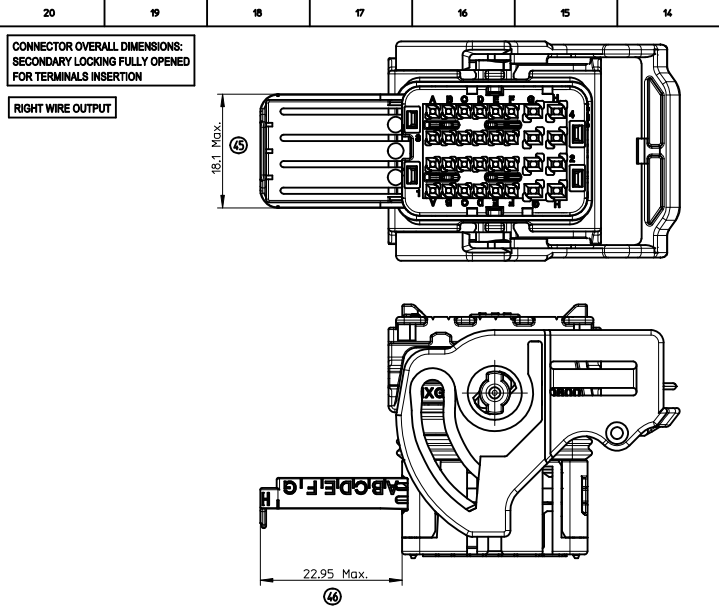
**MARKINGS :**

- Assembled part tracability:  
Day + Year
- Terminal cavities identification
- Lever position indicators:  
"D" LETTER VISIBLE = "LEVER ON THE RIGHT"  
"G" LETTER VISIBLE = "LEVER ON THE LEFT"
- Supplier identification
- Material identification

<b>UPDATED DRAWING</b> IEC NO: D DRWNGS/DESIGNER: 2009/06/03 CHKDC: BOUCHAN APPR:	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.1 ± --- 1 PLACE ± 0.1 ± --- ANGULAR ± 2 °	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>2.5:1</b>	DESIGN UNITS <b>METRIC</b>	FIRST ANGLE PROJECTION	
		DRAWN BY T. BADAROUX 2007/07/16	DATE 2007/07/16	TITLE <b>CMC CONNECTOR 32 WAY          MAT SEAL VERSION</b>			
		CHECKED BY P. GRANDCLAUD 2007/07/16	DATE 2007/07/16	MATERIAL NO. 0643191201			
		APPROVED BY C. BOUCHAN 2007/07/16	DATE 2007/07/16	SEE SHEET 2	DOCUMENT NO. <b>SD-64319-001</b>	SHEET NO. 1 OF 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



COLOR	CODING	A	B	C	D	E
BLACK	1	9.2	4.4	6	4.4	1.6
GREY	2	7.6	6	9.2	6	1.6
BROWN	3	6	7.6	9.2	9.2	1.6
BLUE	5	4.4	7.6	6	6	1.6

TERMINALS USED

CAVITY #	FEMALE TERMINALS (Section mm2)	PLATING	MOLEX P/N	min / MAX WIRE INSULATION DIAMETER (mm)
A1 to F1 A2 to F2 A3 to F3 A4 to F4	CP 0.6 0.35mm2	Tin plated	0643221019	Ø125 min / Ø140 Max
		Gold plated	0643221229	
	CP 0.6 0.5mm2	Tin plated	0643221039	Ø140 min / Ø170 Max
		Gold plated	0643221239	
G1 to H4 G1 to H4	CP 0.6 0.75mm2	Tin plated	0643221029	Ø160 min / Ø190 Max
		Gold plated	0643221219	
	CP 15 0.5mm2 to 1mm2	Tin plated	0643231029	Ø140 min / Ø215 Max
		Gold plated	0643231319	
CP 15 >1mm2 to 2mm2	Tin plated	0643231039	Ø210 min / Ø280 Max	
	Gold plated	0643231219		

UPDATED DRAWING  
 IEC NO: D  
 DRAWING REVISIONS: 2009/06/03  
 CHKDC: 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

APPROVED BY: C. BOUCHAN  
DATE: 2007/07/16

TITLE  
CMC CONNECTOR 32 WAY  
MAT SEAL VERSION

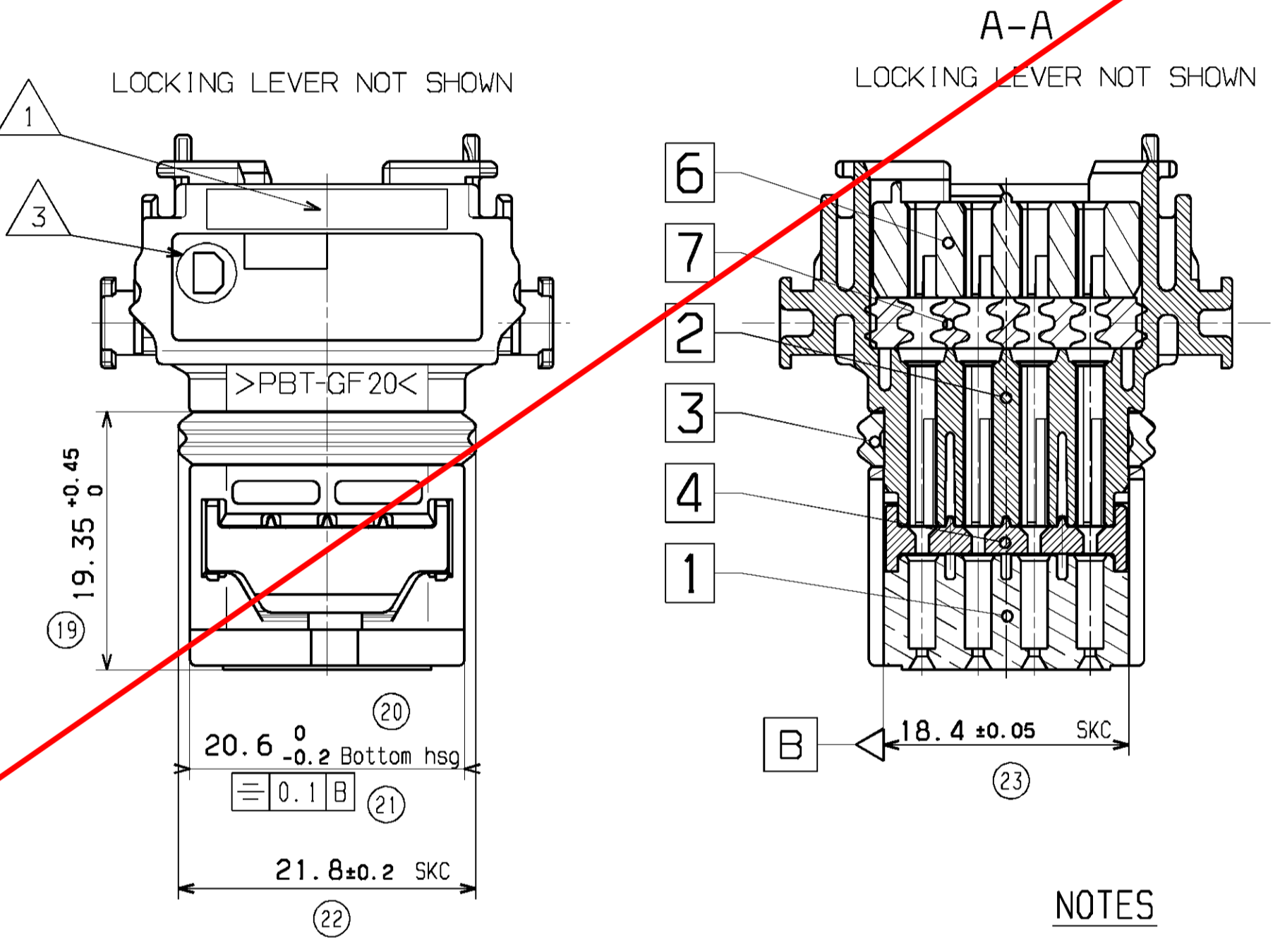
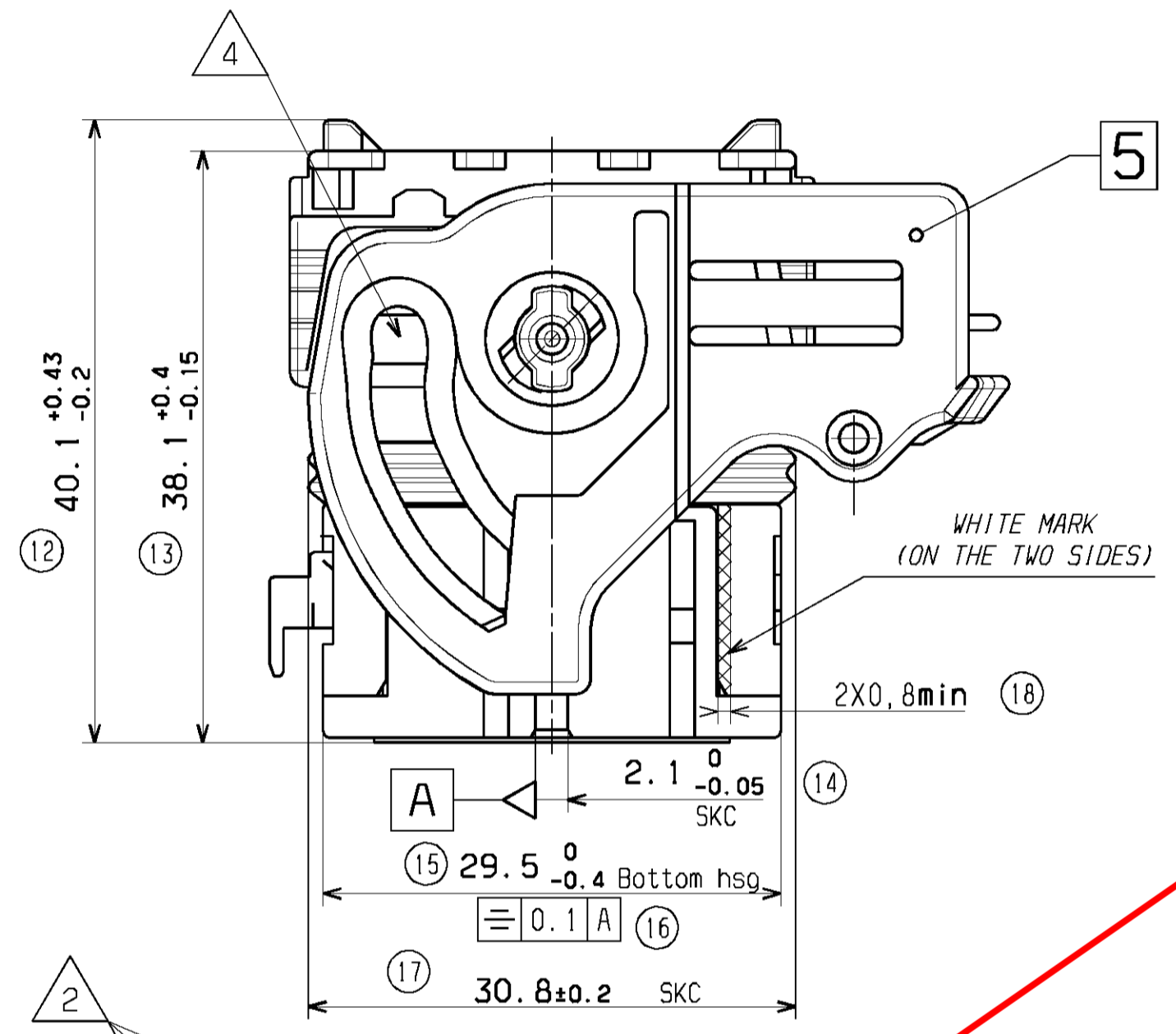
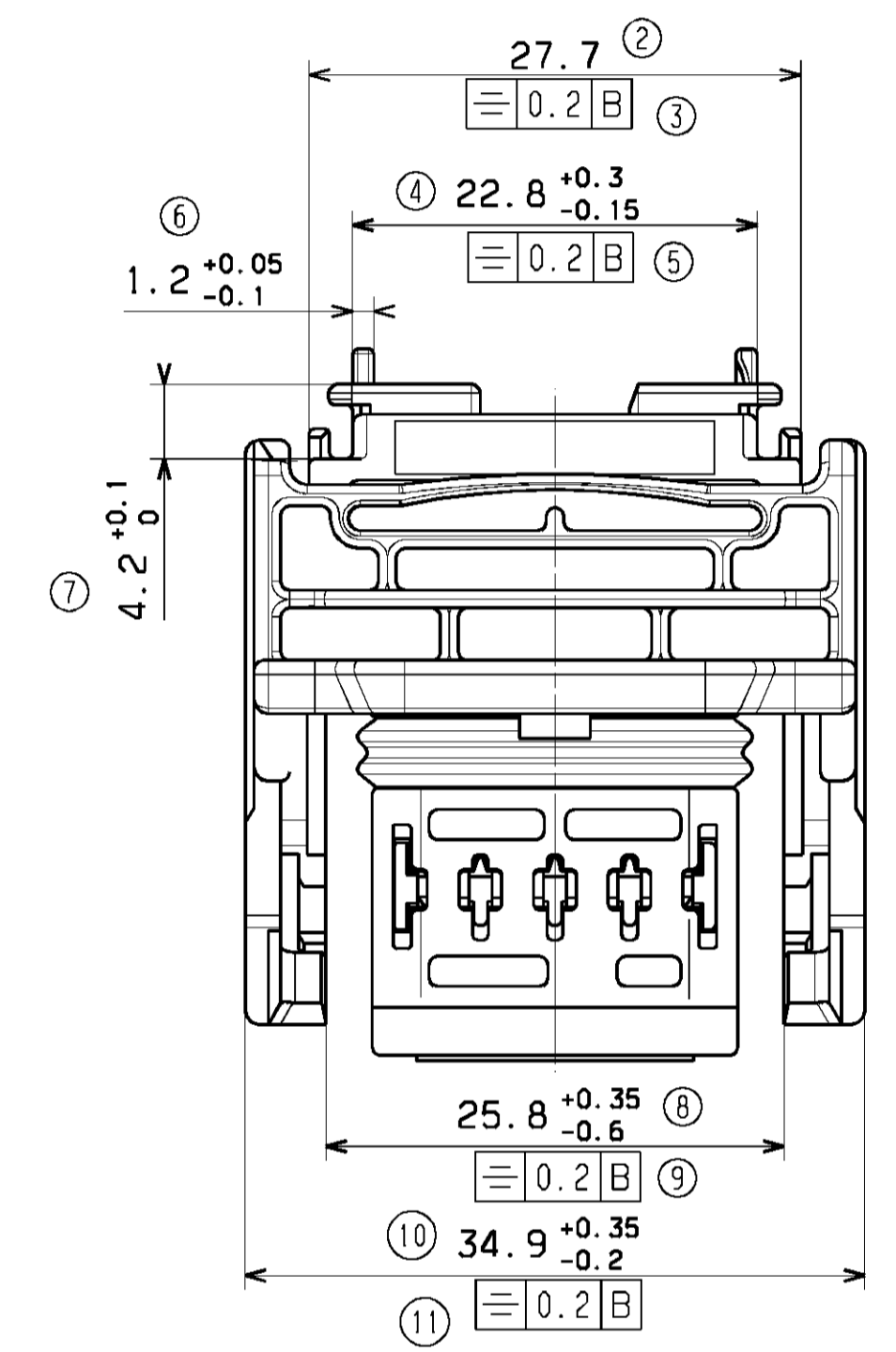
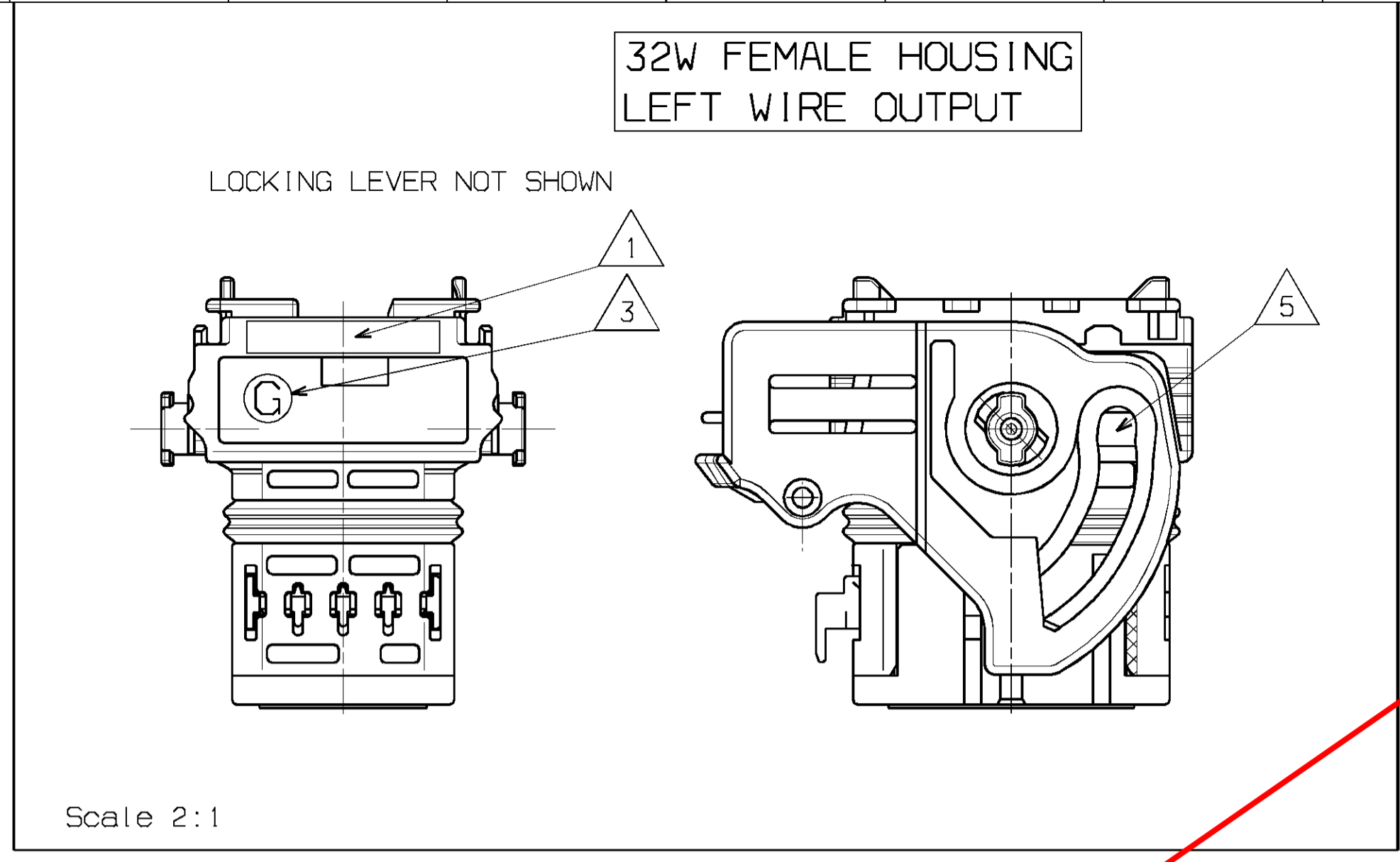
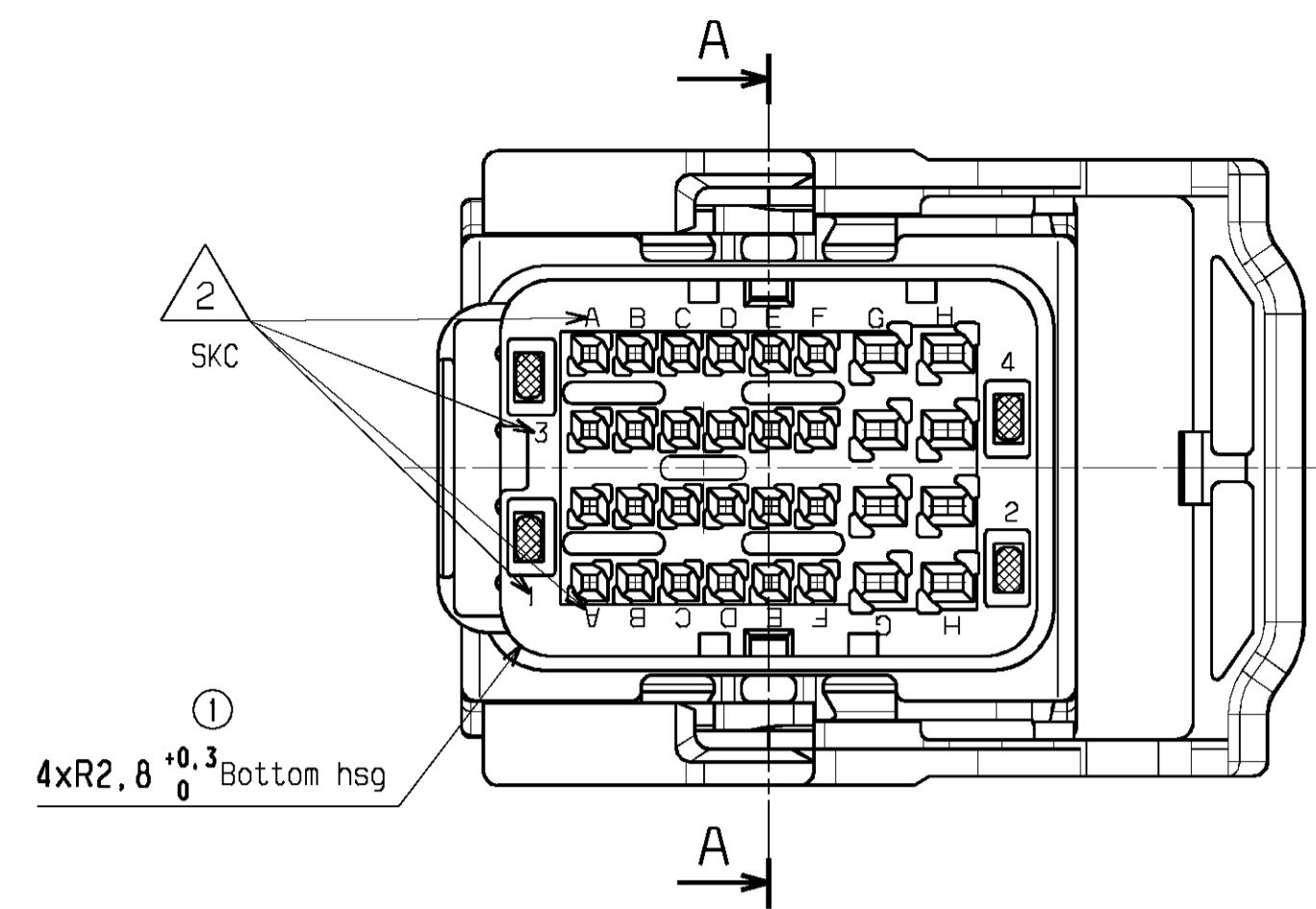
MATERIAL NO.  
SD-64319-001

DOCUMENT NO.  
SD-64319-001

SHEET NO.  
2 OF 2

SIZE  
A1

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FEMALE HOUSING 32 WAY LEFT WIRE OUTPUT	
MATERIAL NUMBER	COLOR
0643191211	BLACK
0643191218	GREY
0643191219	BROWN
	GREEN
0643191216	BLUE
	YELLOW

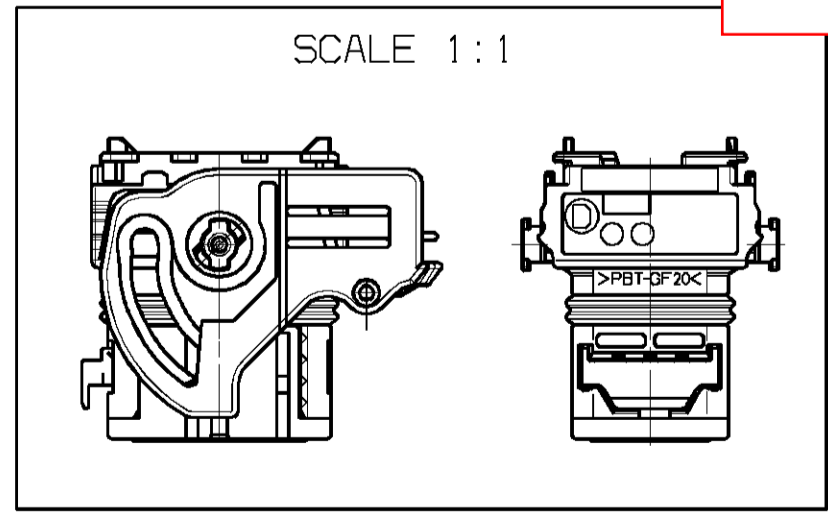
FEMALE HOUSING 32 WAY RIGHT WIRE OUTPUT	
MATERIAL NUMBER	COLOR
0643193211	BLACK
0643193218	GREY
0643193219	BROWN
	GREEN
0643193216	BLUE
	YELLOW

**NOTES**

- 1-FOR ILLUSTRATION PURPOSE THE FEMALE HOUSING SHOWN IS THE RIGHT WIRE OUTPUT VERSION CODING 1
- 2-INTERFACE DEFINITION, OVERALL DIMENSION AND LOCATION ON HEADER AS PER RSD-98644-005

**VOID AND SUPERSEDED BY  
SD-64319-001 rev C**

- 6-WIRES 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
- 7-THE CONNECTOR FITS WITH WIRE CAP T2 (32WAY) MOLEX P/N 0643191201
- 8-BLIND PLUG FOR 0,6 AND 1,5 CAVITIES (MOLEX P/N 0643251010 AND 0643251023) MUST BE USED ON THIS PART
- 9-DELIVERED PRODUCT WEIGHT: 27,6 g



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
0989930295	7	MATT SEAL	SILICONE SKC	GREEN
0989930256	6	BACK GRID 32 WAYS	PBT-GF20 SKC	BLUE
0989930241	5	LOCKING LEVER SIZE 2	PBT-GF30 SKC	BLACK
0989930235	4	SECONDARY LOCK	PBT-GF20 SKC	GREEN
0986560001	3	PERIPHERAL SEAL SIZE 2	SILICONE SKC	BLUE
0989930211	2	BACK PART	PBT-GF20 SKC	BLACK
0989930221 0989930228 0989930226 0989930229	1	FRONT PART	PBT-GF20 SKC	COLOR ASSOCIATED TO KEYING

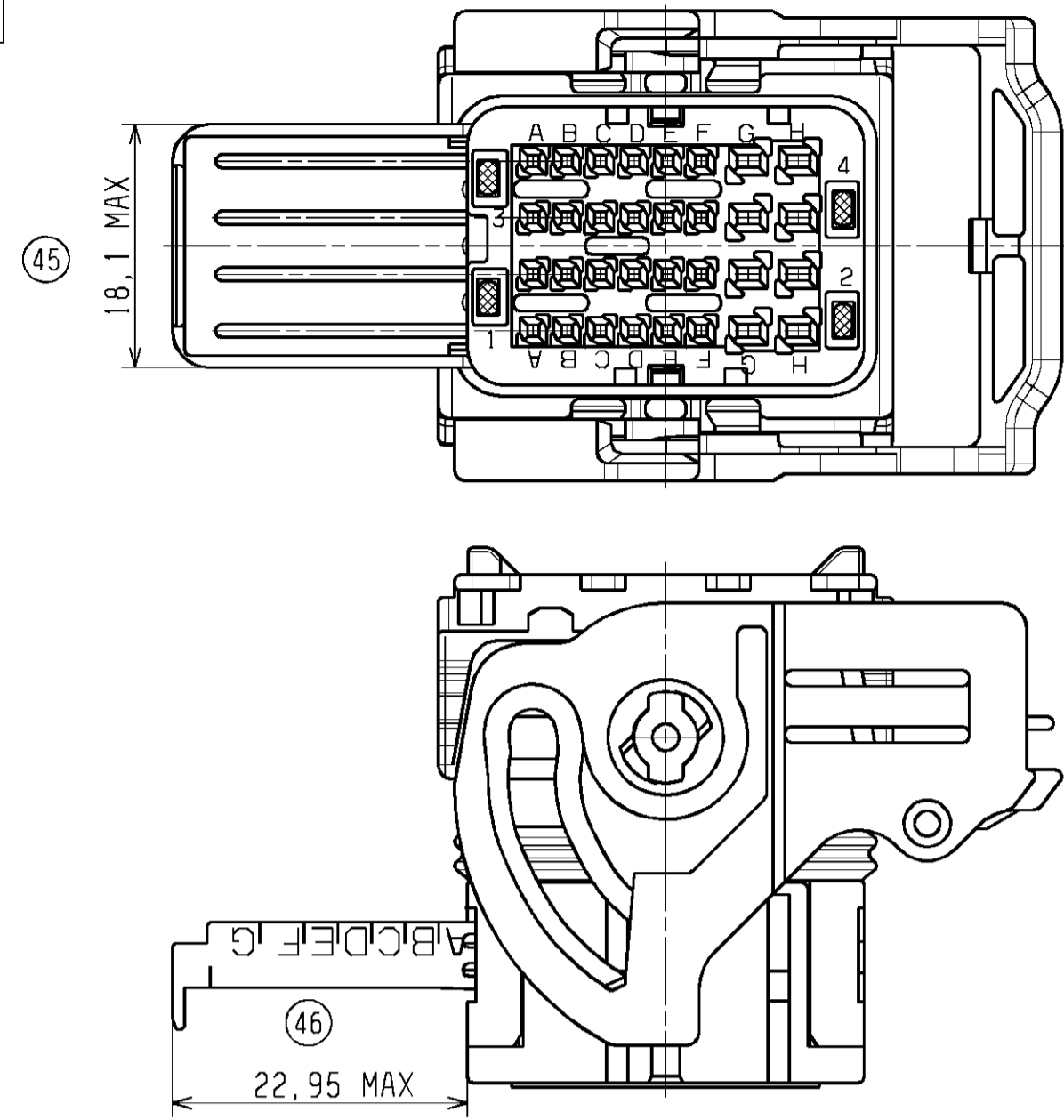
MARKINGS	
1	Assembled part tracability day + year
2	Terminal cavities identification
3	Lever position indicator: "D" LETTER VISIBLE= part with "LEVER ON THE RIGHT" "G" LETTER VISIBLE= part with "LEVER ON THE LEFT"
4	Supplier identification
5	Material identification

UPDATED DRAWING EC NO: G2008-0367 DRAWN: TBADAROUX 2008/04/21 CHK'D: PGRANDCLAUDE 2008/04/21 APPR: CBOUCHAN 2008/04/21	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2.5:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
		mm	INCH	DRAWN BY TBADAROUX	DATE 2007/07/16	TITLE CMC CONNECTOR T2 32 WAY MATT SEAL VERSION		
C	REV	4 PLACES ±	±	CHECKED BY PGRANDCLAUDE	DATE 2007/07/16	APPROVED BY CBOUCHAN	DATE 2007/07/16	MATERIAL NO. SEE CHART
		3 PLACES ±	±	APPROVED BY CBOUCHAN	DATE 2007/07/16		DOCUMENT NO. SD-98993-001	
		2 PLACES ±	± 0.1	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-98993-001		SHEET NO. 1 OF 2
		1 PLACE ±	± 0.1	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
		ANGULAR ± 2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				



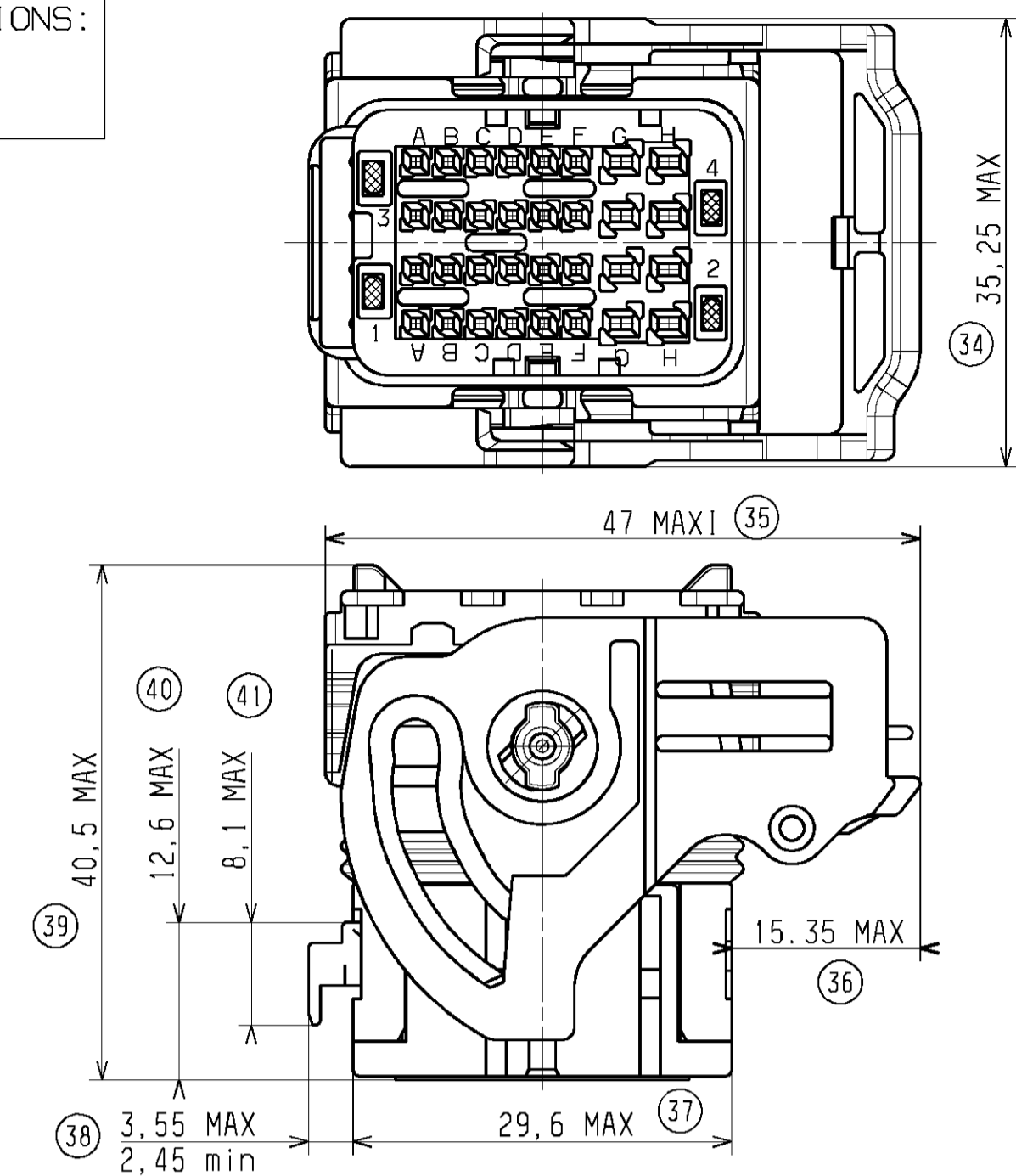
CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING FULLY OPENED  
FOR TERMINAL INSERTION

RIGHT WIRE OUTPUT

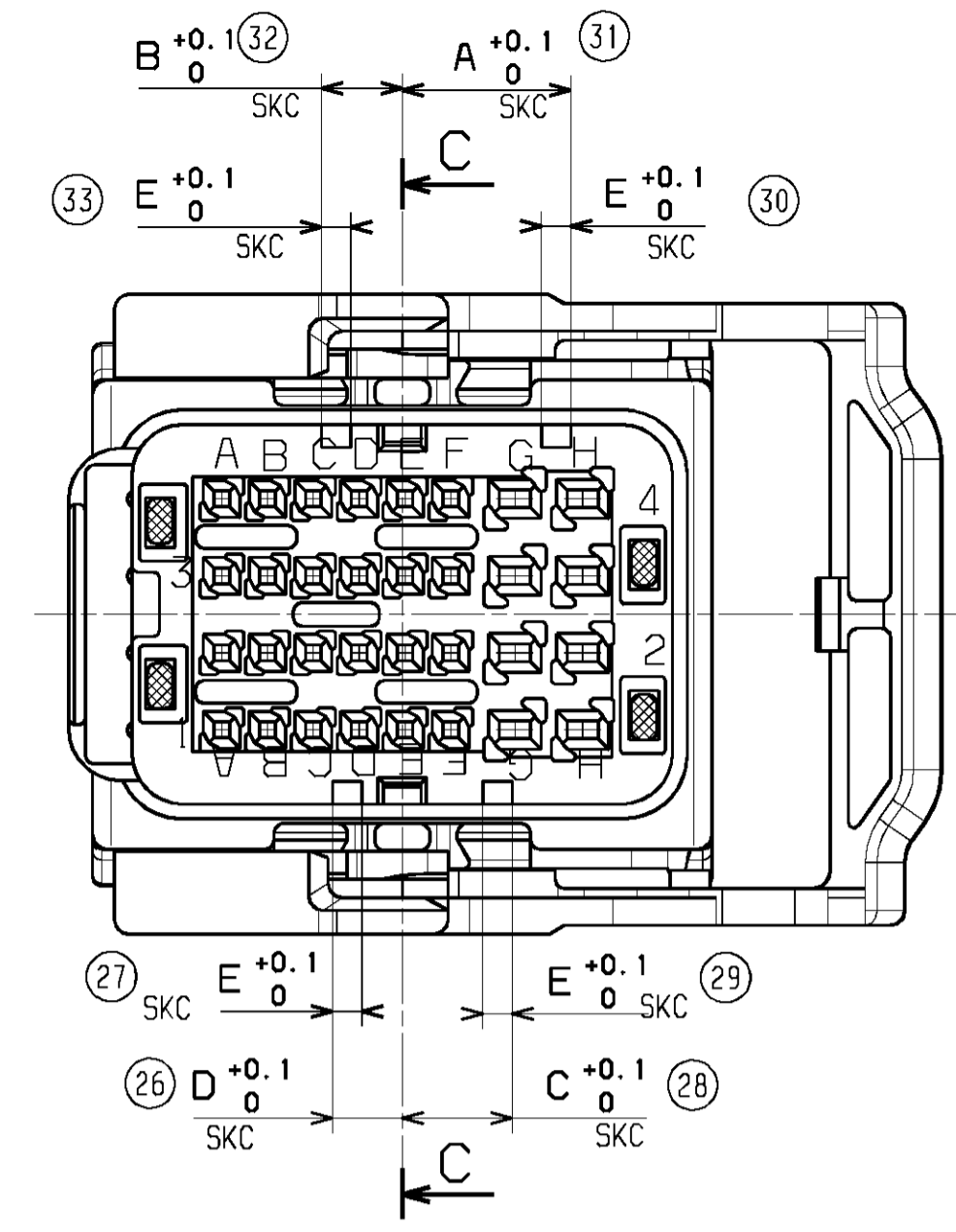


CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING IN  
DELIVERY POSITION

RIGHT WIRE OUTPUT

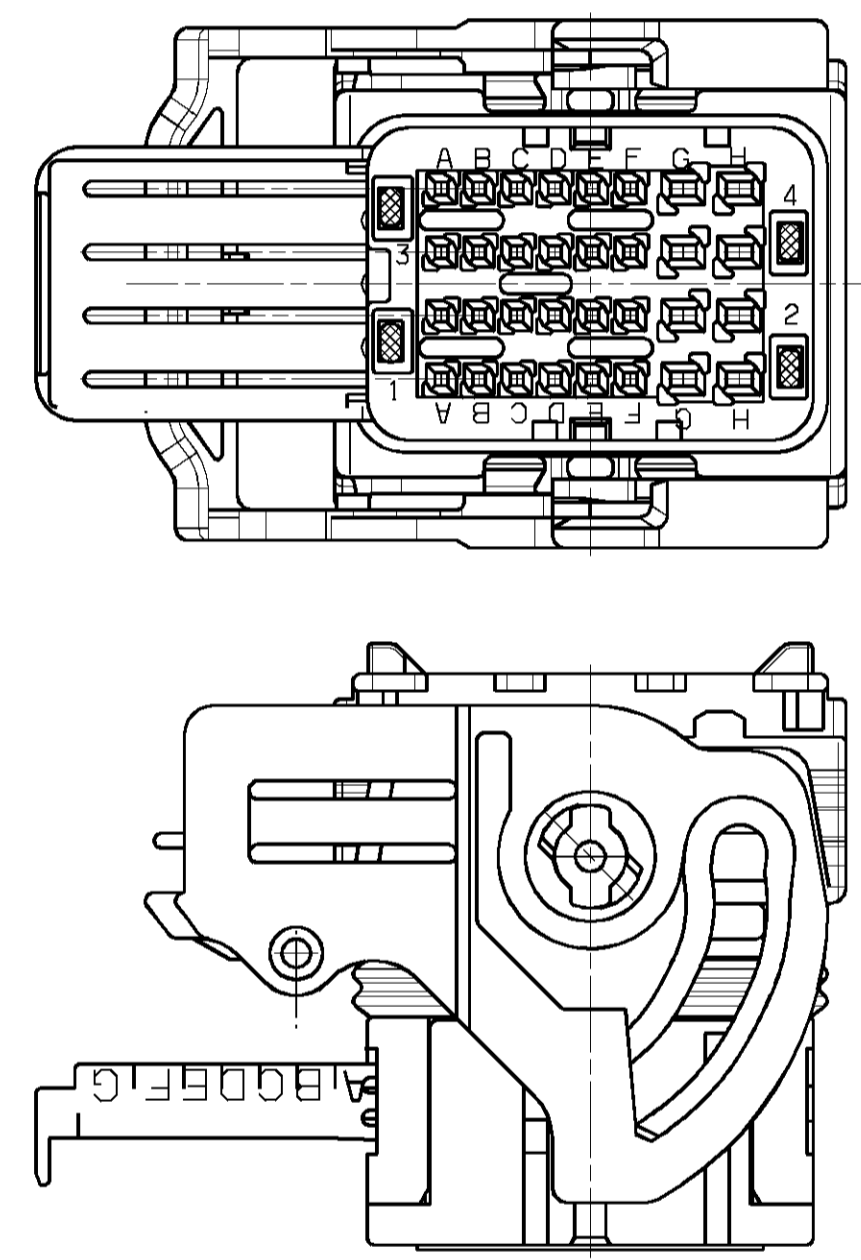


CODING POSITION



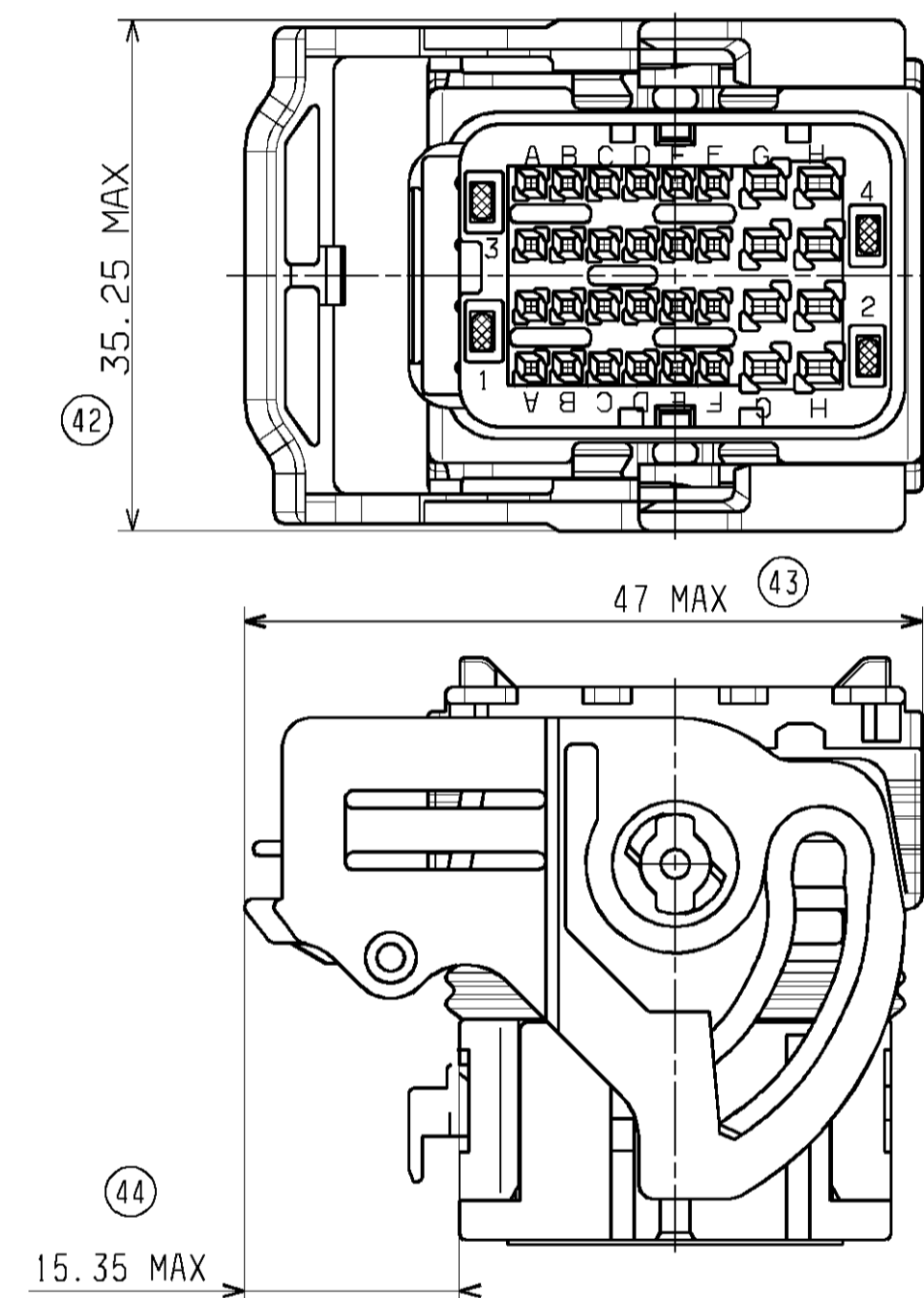
CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING FULLY OPENED  
FOR TERMINAL INSERTION

LEFT WIRE OUTPUT

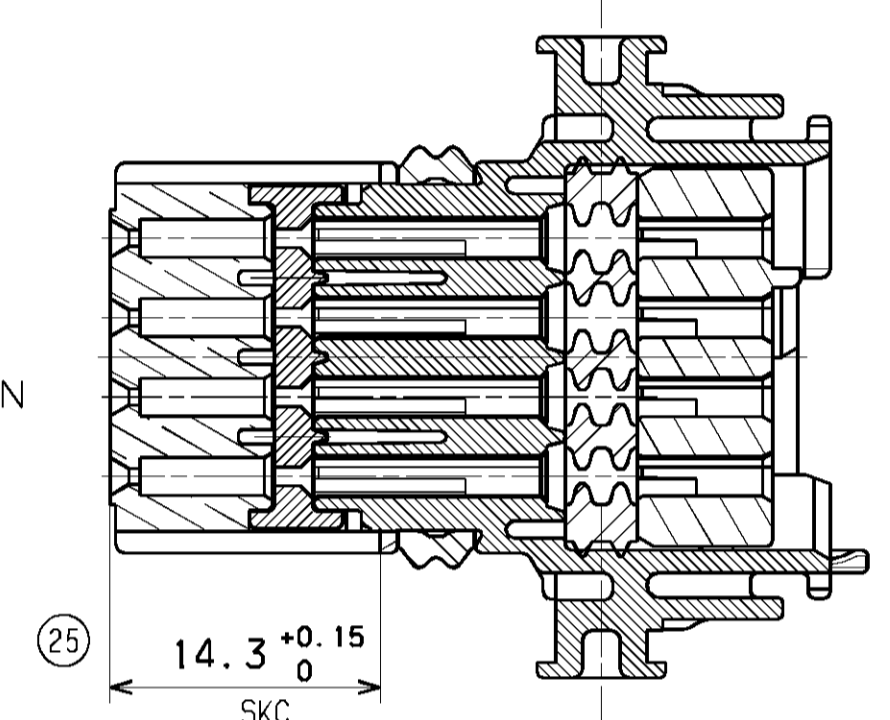


CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING IN  
DELIVERY POSITION

LEFT WIRE OUTPUT



C-C  
LEVER NOT SHOWN



COLOR	KEYING	A $\frac{+0.1}{0}$	B $\frac{+0.1}{0}$	C $\frac{+0.1}{0}$	D $\frac{+0.1}{0}$	E $\frac{+0.1}{0}$
BLACK	1	9,2	4,4	6	4,4	1,6
GREY	2	7,6	6	9,2	6	1,6
BROWN	3	6	7,6	9,2	9,2	1,6
GREEN	4	7,6	9,2	4,4	4,4	1,6
BLUE	5	4,4	7,6	6	6	1,6
YELLOW	6	9,2	7,6	4,4	7,6	1,6

TERMINALS USED	MOLEX PART NUMBER				
		TIN PLATED TERMINAL	GOLD PLATED TERMINAL 1.27µm min		
CAVITIES IDENTIFICATION	FEMALE TERMINAL 0.635	(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
	A1 to F1		(0,75 mm <sup>2</sup> ) 0643221029		(0,75 mm <sup>2</sup> ) 0643221219
	A2 to F2				
	A3 to F3				
	A4 to F4				
	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	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
		4 PLACES ±    mm    INCH	DRAWN BY TBADAROUX	DATE 2007/07/16	TITLE CMC CONNECTOR T2 32 WAY MATT SEAL VERSION			
		3 PLACES ±    mm    INCH	CHECKED BY PGRANDCLAUDE	DATE 2007/07/16	MOLEX INCORPORATED			
		2 PLACES ± 0.1    mm    INCH	APPROVED BY CBOUCHAN	DATE 2007/07/16	MATERIAL NO. SEE SHEET 1	DOCUMENT NO. SD-98993-001	SHEET NO. 2 OF 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						