

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

**Part Number:** [0643181019](#)  
**Status:** **Active**  
**Overview:** [cmc connectors](#)  
**Description:** .635mm (.025"), 1.50mm (.059"), 2.80mm (.110"), Power CMC Connector, 28 Circuits, Left Wire Output, Brown Coding, Mat Sealed

**Documents:**

[3D Model](#) [Product Specification PS-64318-001 \(PDF\)](#)  
[Application Specification \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**General**

Product Family Crimp Housings  
 Series [64318](#)  
 Comments \* Current tested on a fully loaded connector, current for temperature increase of 40°C. Current max = 21.0A for 2.8mm Terminal (5.0mm<sup>2</sup> wire), 12.0A for 1.5mm Terminal (2.0mm<sup>2</sup> wire), 2.5A for 0.635mm Terminal(0.75mm<sup>2</sup> wire) \*  
 More Detailed Tech Information Sealed, high-density, power, modular connecting system for Power Train and Body Electronics applications in cars, trucks, busses  
 Overview [cmc connectors](#)  
 Product Name CMC

**Physical**

Circuits (maximum) 28  
 Circuits Detail 5x 2.8mm, 5 x 1.5mm, 18 x 0.635mm terminals  
 Color - Resin Brown  
 Gender Female  
 Glow-Wire Compliant No  
 Keying to Mating Part Yes  
 Lock to Mating Part Yes  
 Material - Resin Polyester  
 Number of Rows 3  
 Packaging Type Carton  
 Panel Mount No  
 Pitch - Mating Interface (in) 0.100 In, 0.138 In, 0.266 In  
 Pitch - Mating Interface (mm) 2.54 mm, 3.50 mm, 6.75 mm  
 Polarized to Mating Part Yes  
 Stackable No  
 Temperature Range - Operating -40°C to +125°C

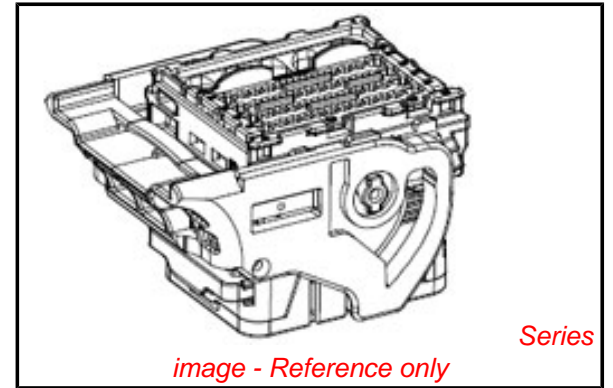
**Electrical**

Current - Maximum per Contact 12A, 2.5A, 21A

**Material Info**

**Reference - Drawing Numbers**

Application Specification AS-64318-001  
 Packaging Specification PK-98994-001  
 Product Specification PS-64318-001  
 Sales Drawing SD-64318-001, SD-98994-001



**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**

[64318Series](#)

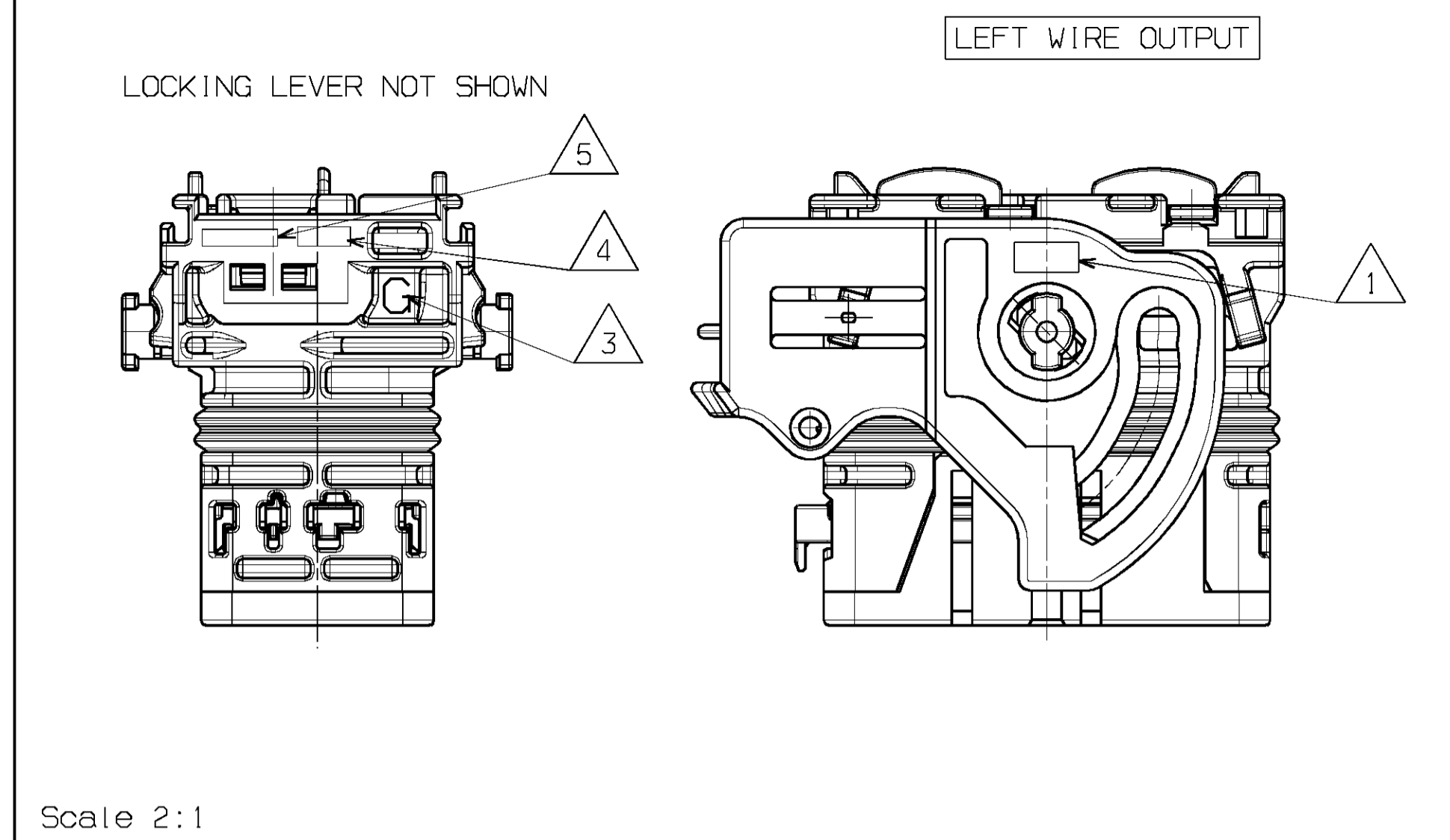
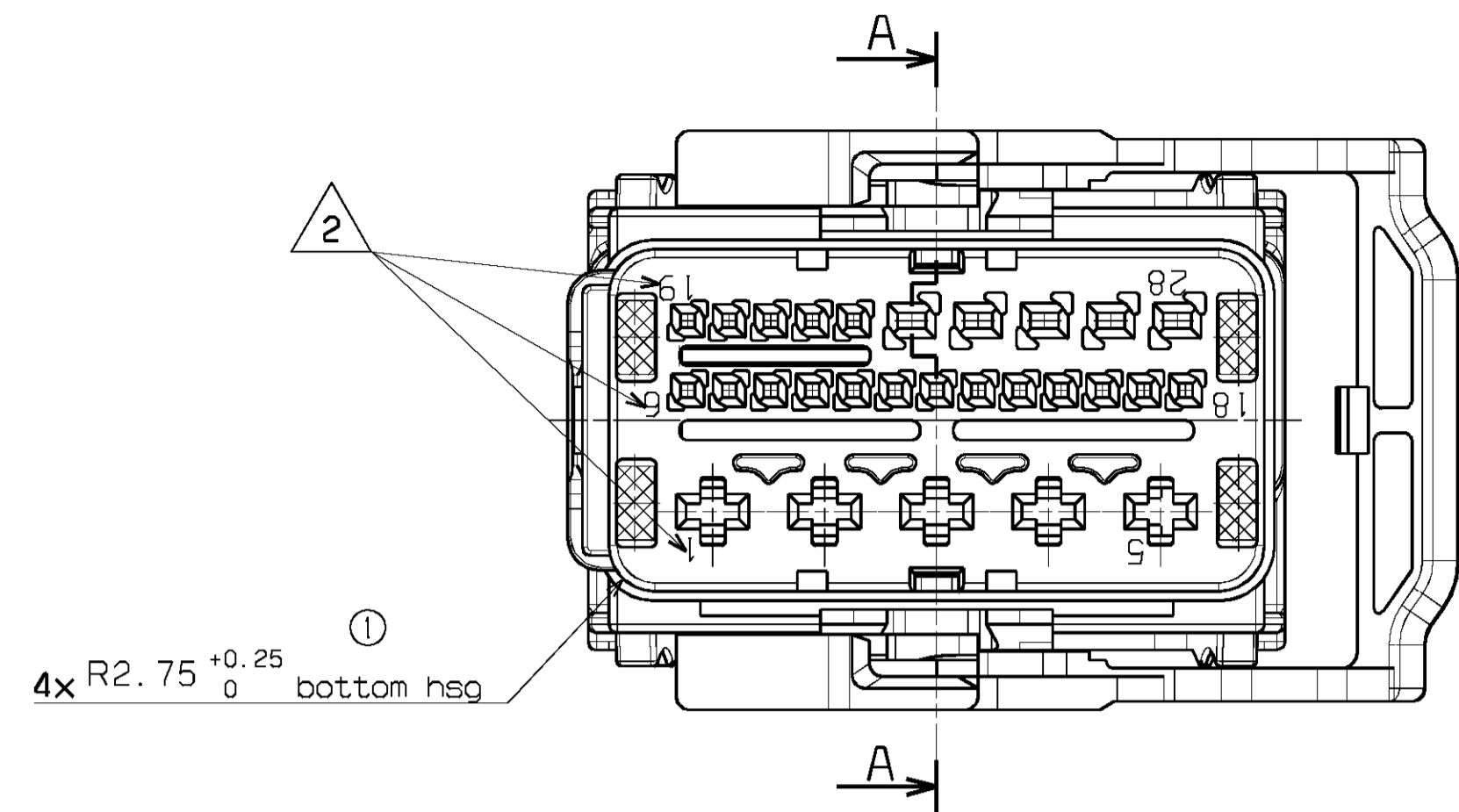
**Mates With**

28 Circuit CMC Header Coming Soon - Please Contact Molex for Details

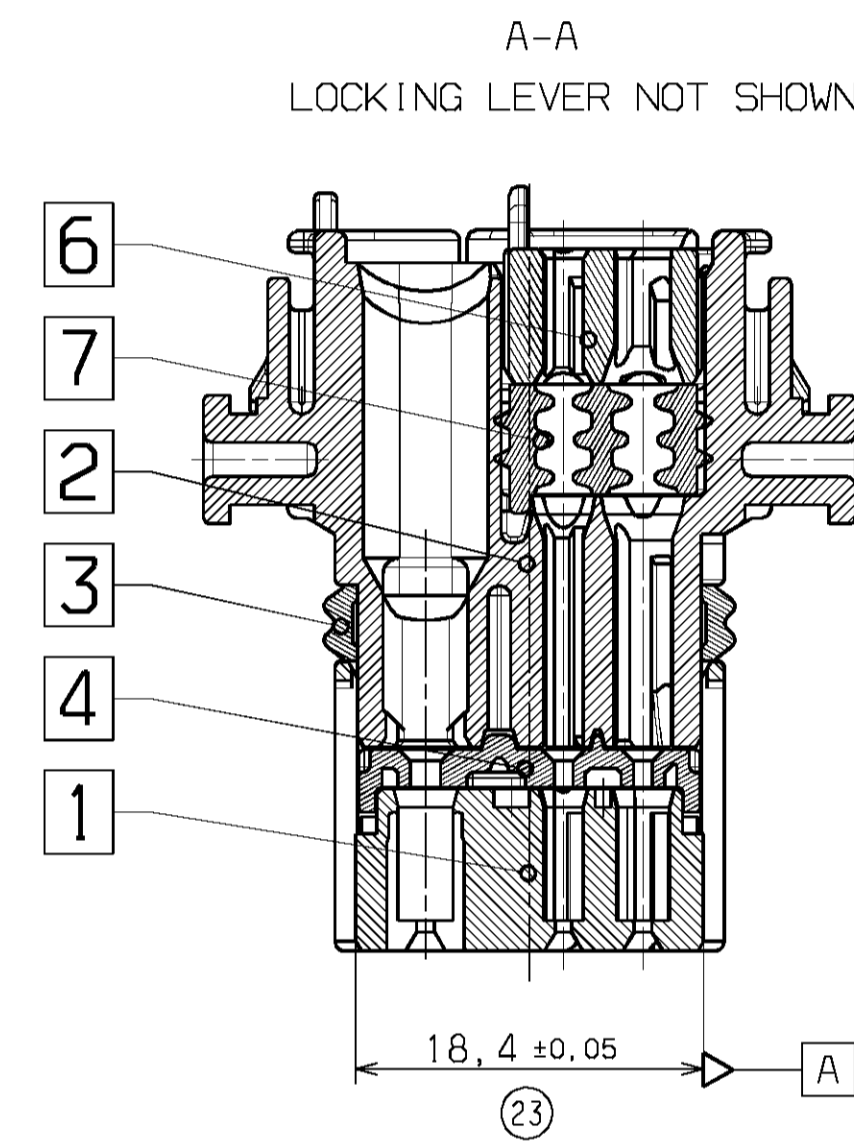
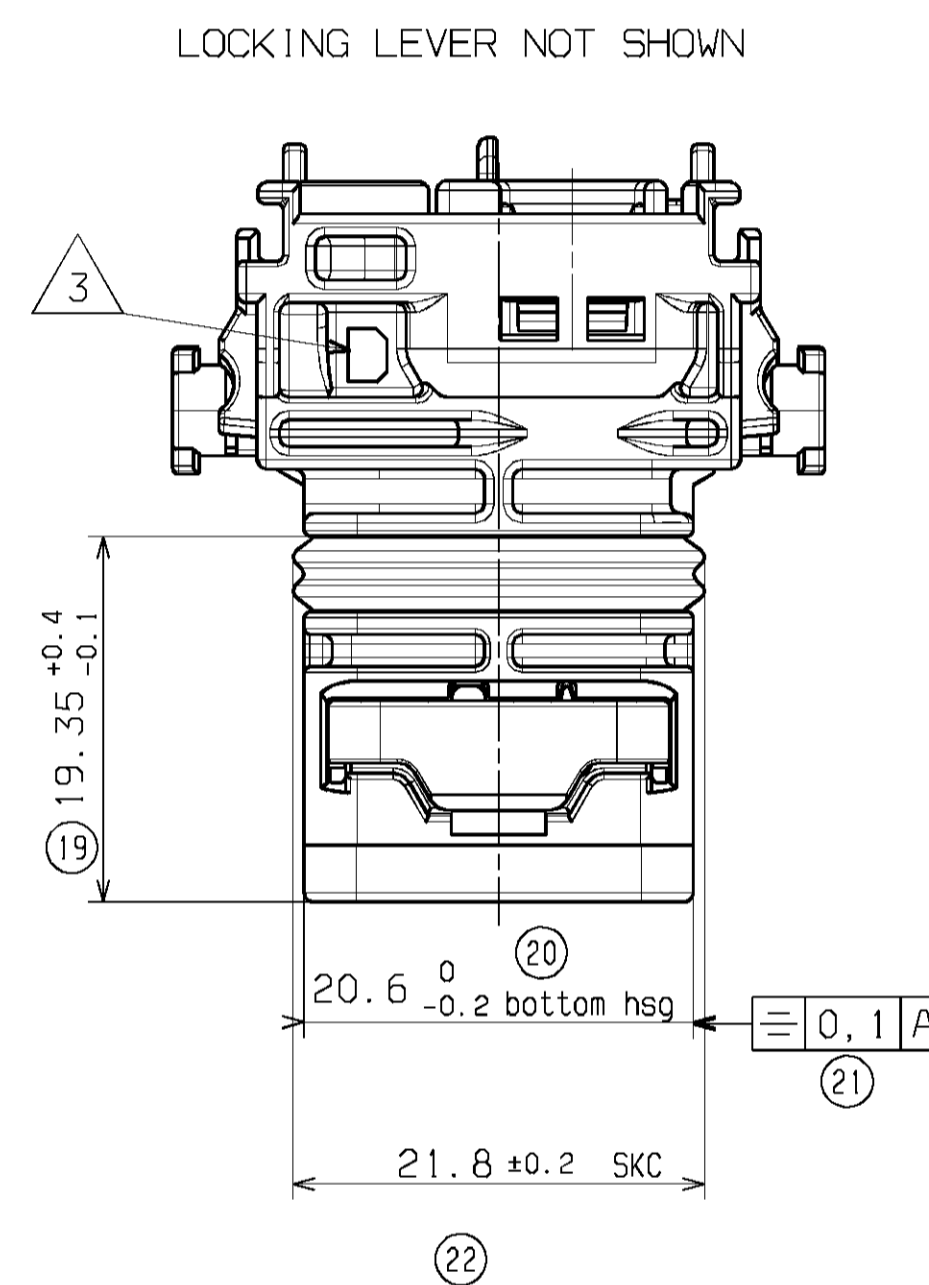
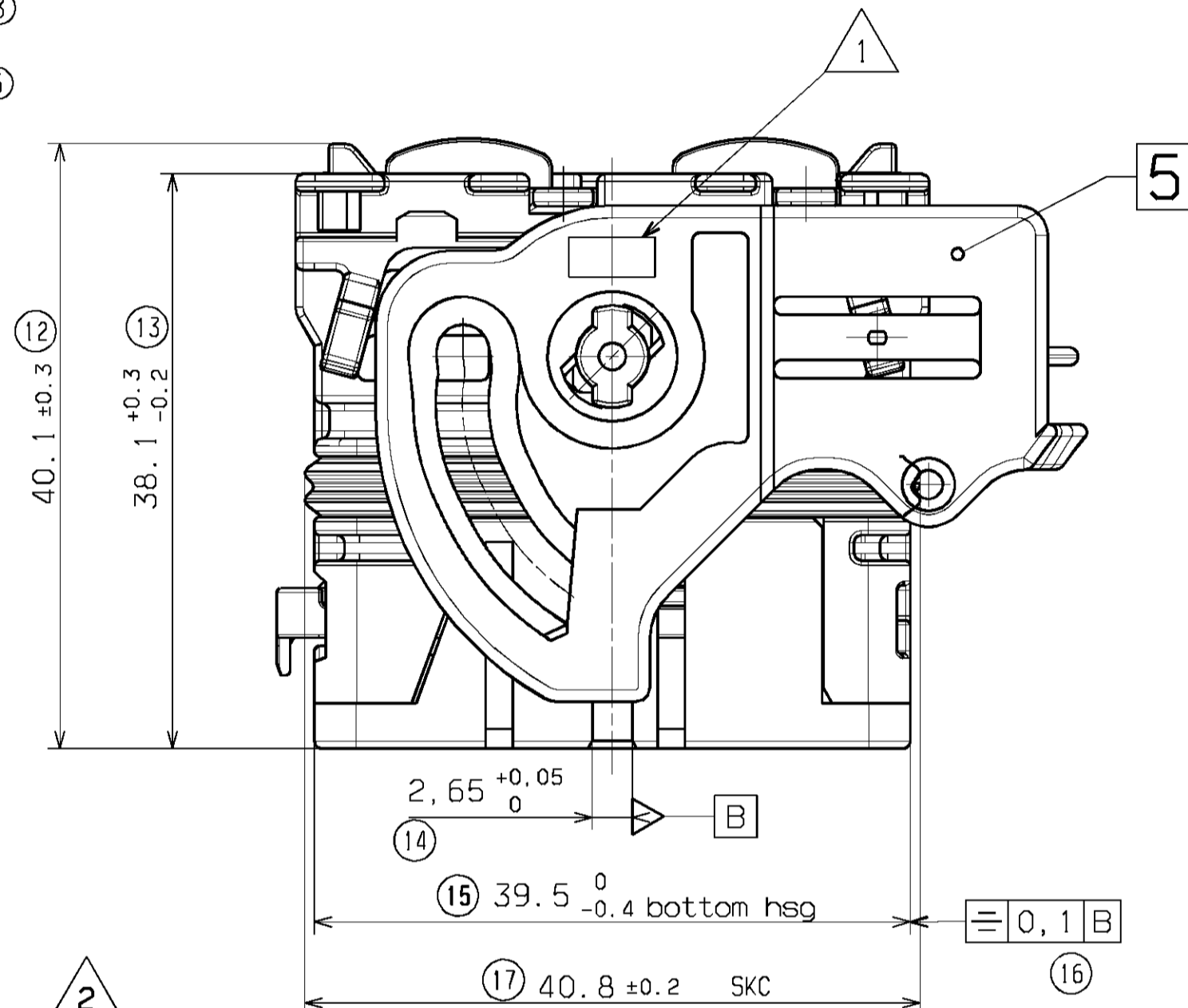
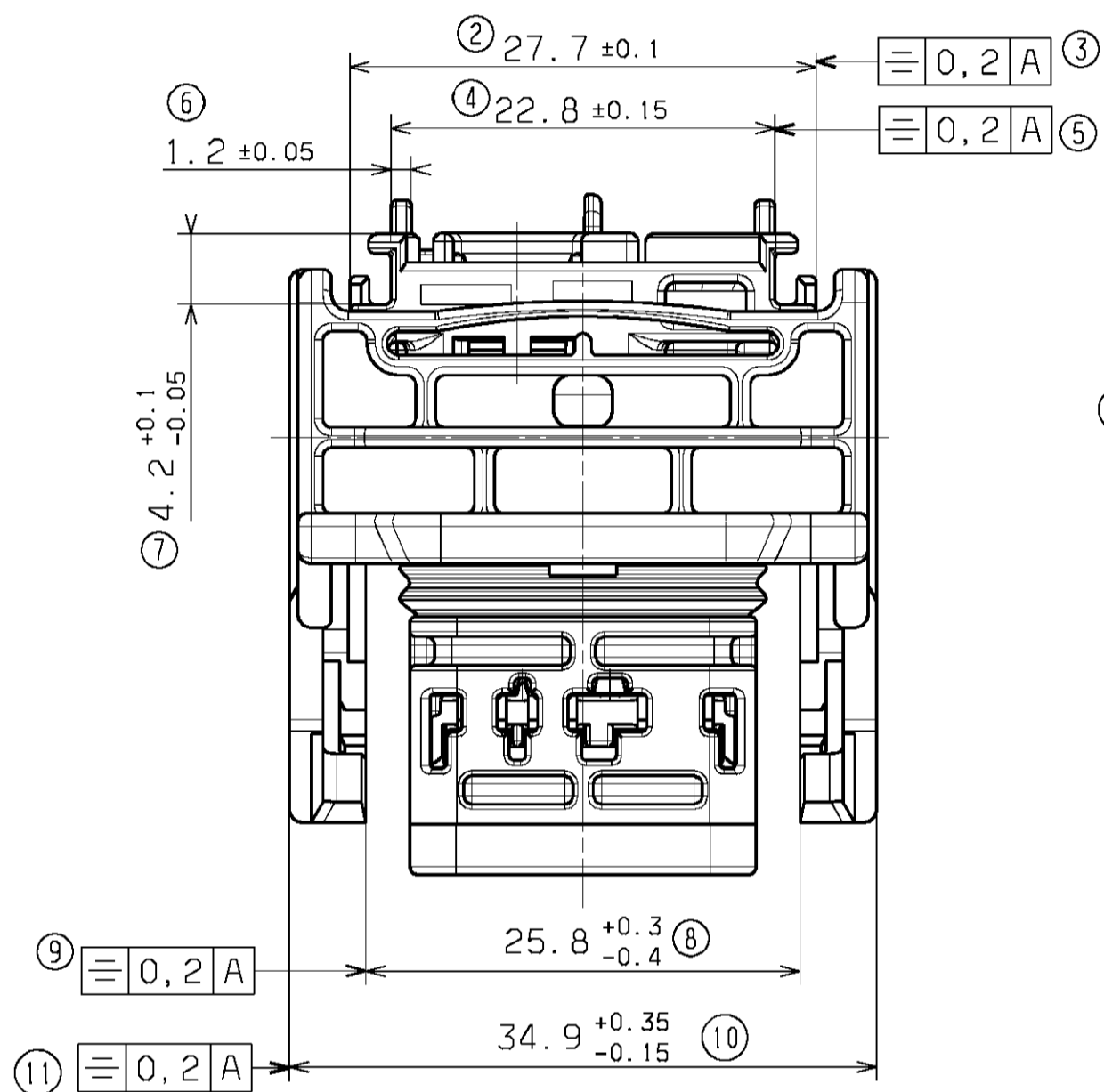
**Use With**

Female Terminals [64322](#) CP 0.635 (.025"), [64323](#) CP 1.5 (.059") Link: [64324](#) CP 2.8 (.110") . Circuit Way Plugs [643251010](#) , [643251023](#) , [643251091](#). CMC Wire Cap [643201301](#)

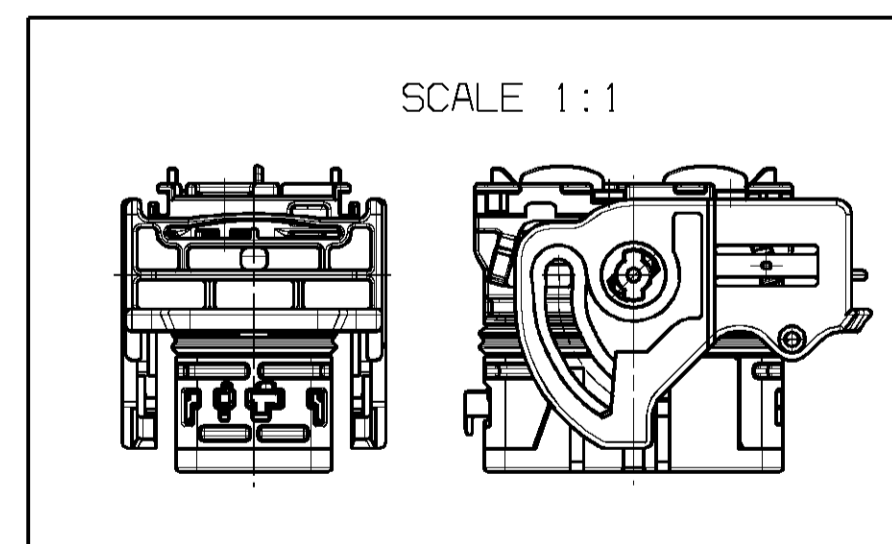
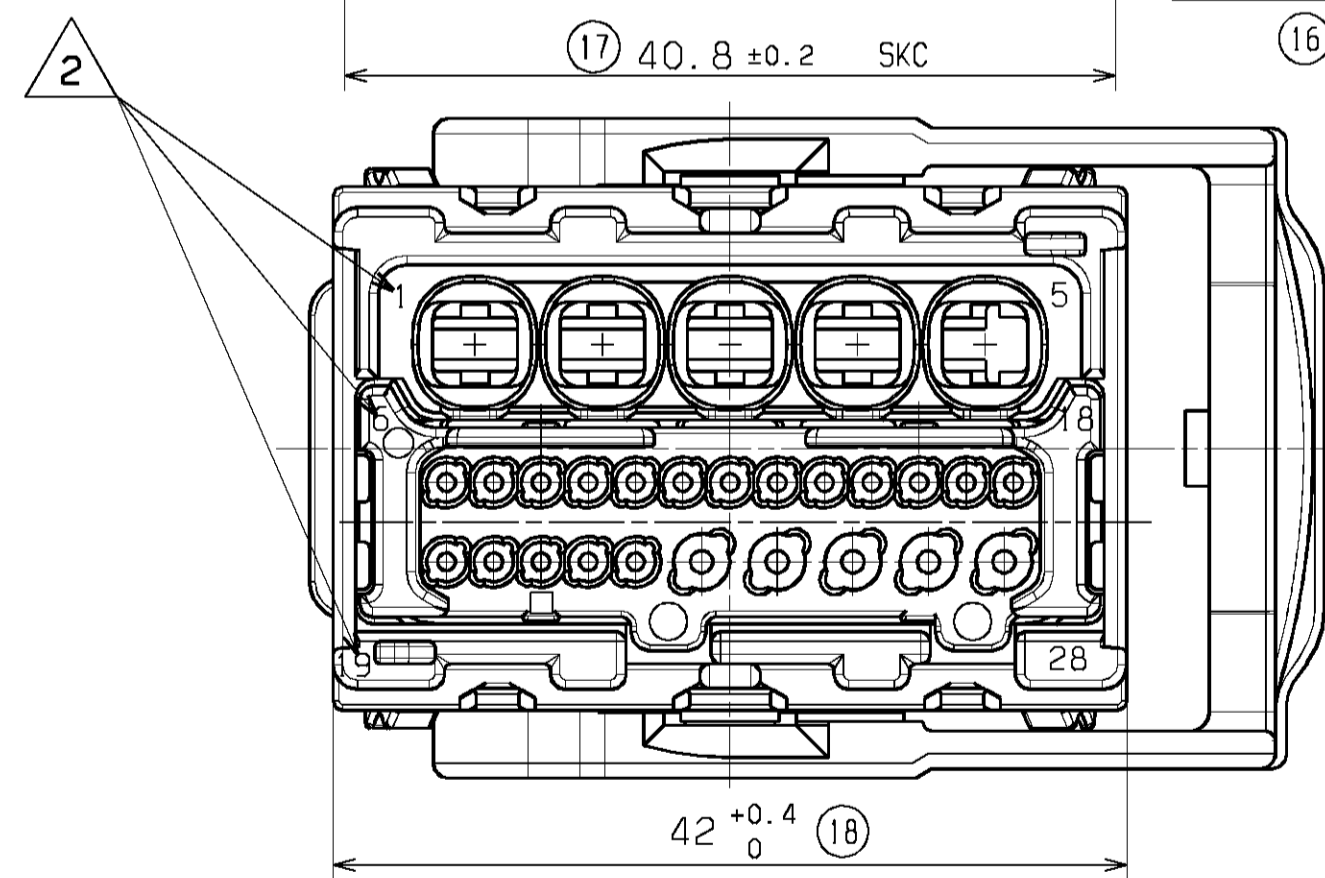
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



LEFT WIRE OUTPUT	
MATERIAL NUMBER	COLOR
0643181011	BLACK
0643181018	GREY
0643181019	BROWN



RIGHT WIRE OUTPUT	
MATERIAL NUMBER	COLOR
0643183011	BLACK
0643183018	GREY
0643183019	BROWN



NOTES

- 1-FOR ILLUSTRATION PURPOSE THE FEMALE HOUSING SHOWN IS THE RIGHT WIRE OUTPUT VERSION CODING 1
- 2-APPLICATION SPECIFICATION: AS-64318-001
- 3-THE CONNECTOR FITS WITH WIRE CAP (48WAY) MOLEX P/N 0643201301
- 4-BLIND PLUG FOR 0.6, 1.5 AND 2.8 CAVITIES (MOLEX P/N 0643251010 0643251023 0643251091) MUST BE USED ON THIS PART
- 5-DELIVERED PRODUCT WEIGHT: 35.2 g

SKC: SPECIAL KEY CHARACTERISTICS
⊠ DENOTES S.P.C DIMENSIONS
⊙ DENOTES CRITICAL DIMENSIONS
● DENOTES FUNCTIONAL DIMENSIONS
QUANTITY PER INDIVIDUAL SHEET
⊠ 0 ⊙ 0 ● 0 SKC: 2

7	MATT SEAL	SILICONE	GREEN ORANGE
6	BACK GRID 23 WAY	>PBT-GF20<	GREY
5	LOCKING LEVER SIZE 3	>PBT-GF30<	BLACK
4	SECONDARY LOCK	>PBT-GF20<	YELLOW
3	PERIPHERAL SEAL SIZE 3	SILICONE	RED
2	BACK PART	>PBT-GF20<	BROWN
1	FRONT PART	>PBT-GF20<	COLOR LINKED TO KEYING
REF.	DESIGNATION	MATERIAL	COLOR

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	DESCRIPTION
EC NO: G2008-0367	
DRWN: TBADAROUX 2008/05/16	
CHK: KO: OPLESSIS 2008/05/16	
APPR: CBOUCHAN 2008/05/16	

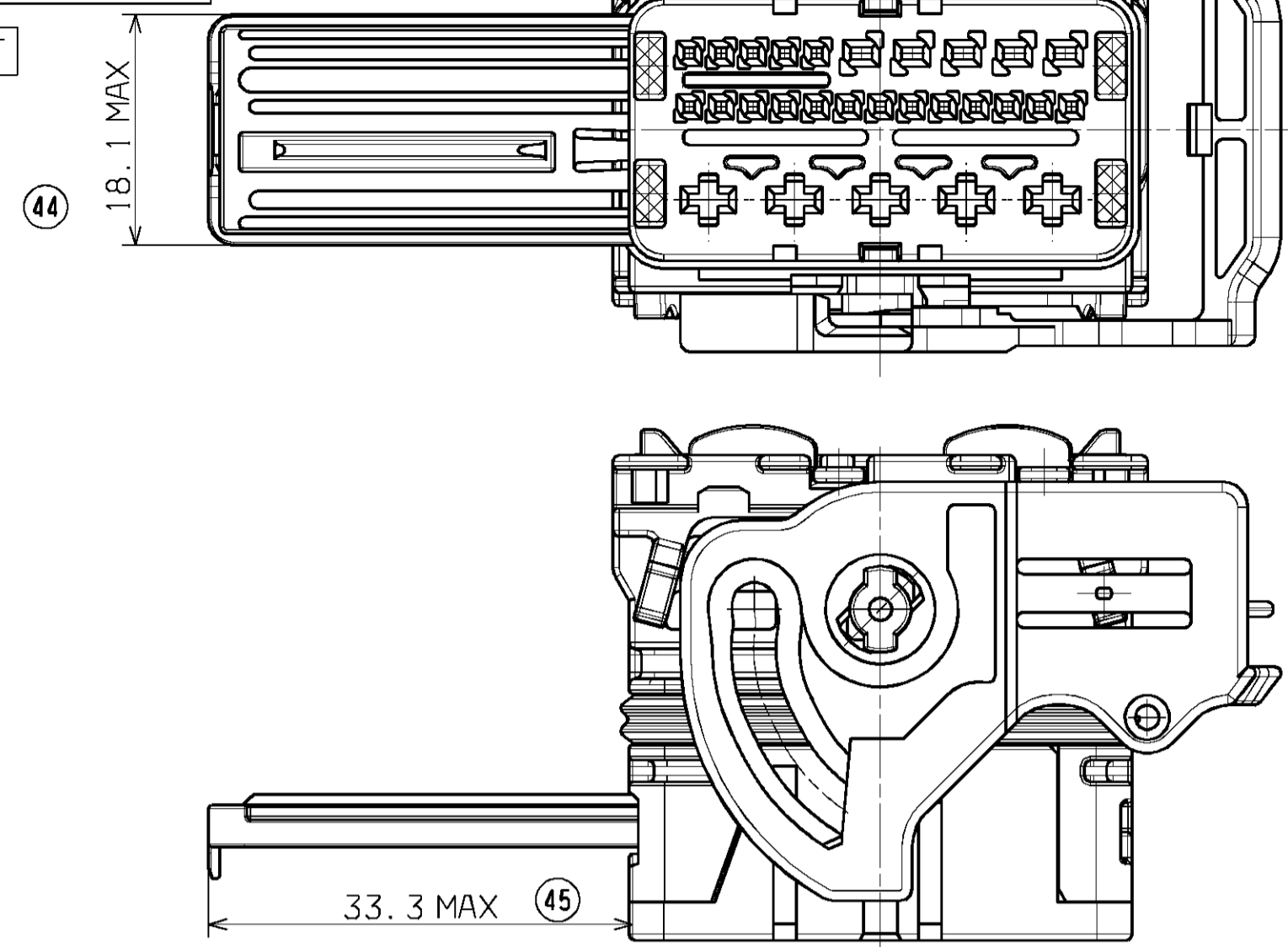
GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
PLACES	mm	INCH	MM ONLY	METRIC	
4 PLACES ±	±	±	2.5:1		
3 PLACES ±	±	±			
2 PLACES ± 0.1	±	±			
1 PLACE ± 0.1	±	±			
ANGULAR ± 2°					

DRAWN BY TBADAROUX	DATE 2007/09/25	TITLE CMC CONNECTOR 28 CKT POWER MAT SEAL VERSION
CHECKED BY OPLESSIS	DATE 2007/09/25	
APPROVED BY CBOUCHAN	DATE 2007/09/25	
MATERIAL NO. SEE CHART		DOCUMENT NO. SD-64318-001
SIZE A1		SHEET NO. 1 OF 2

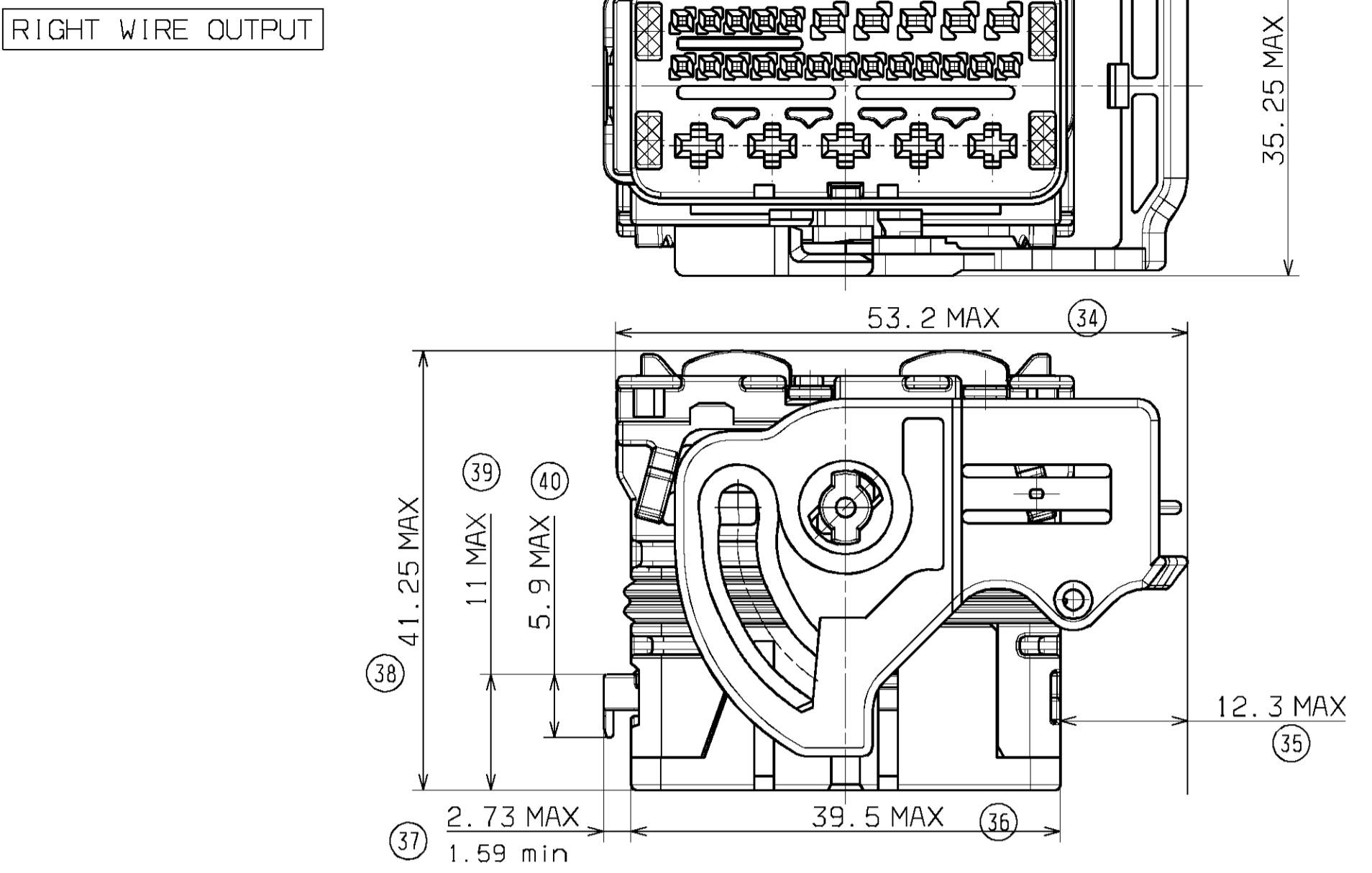
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

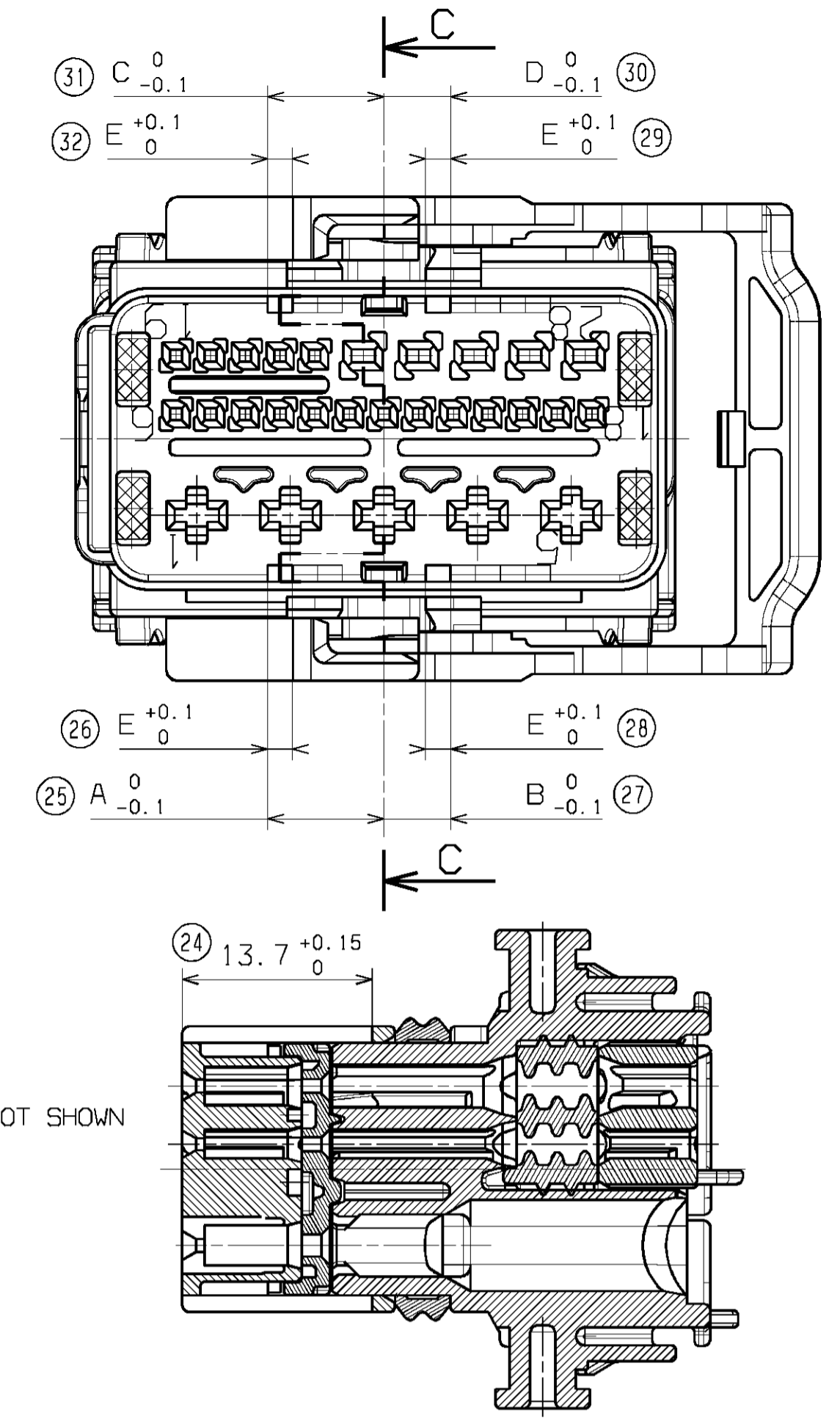
CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING FULLY OPENED  
FOR TERMINAL INSERTION



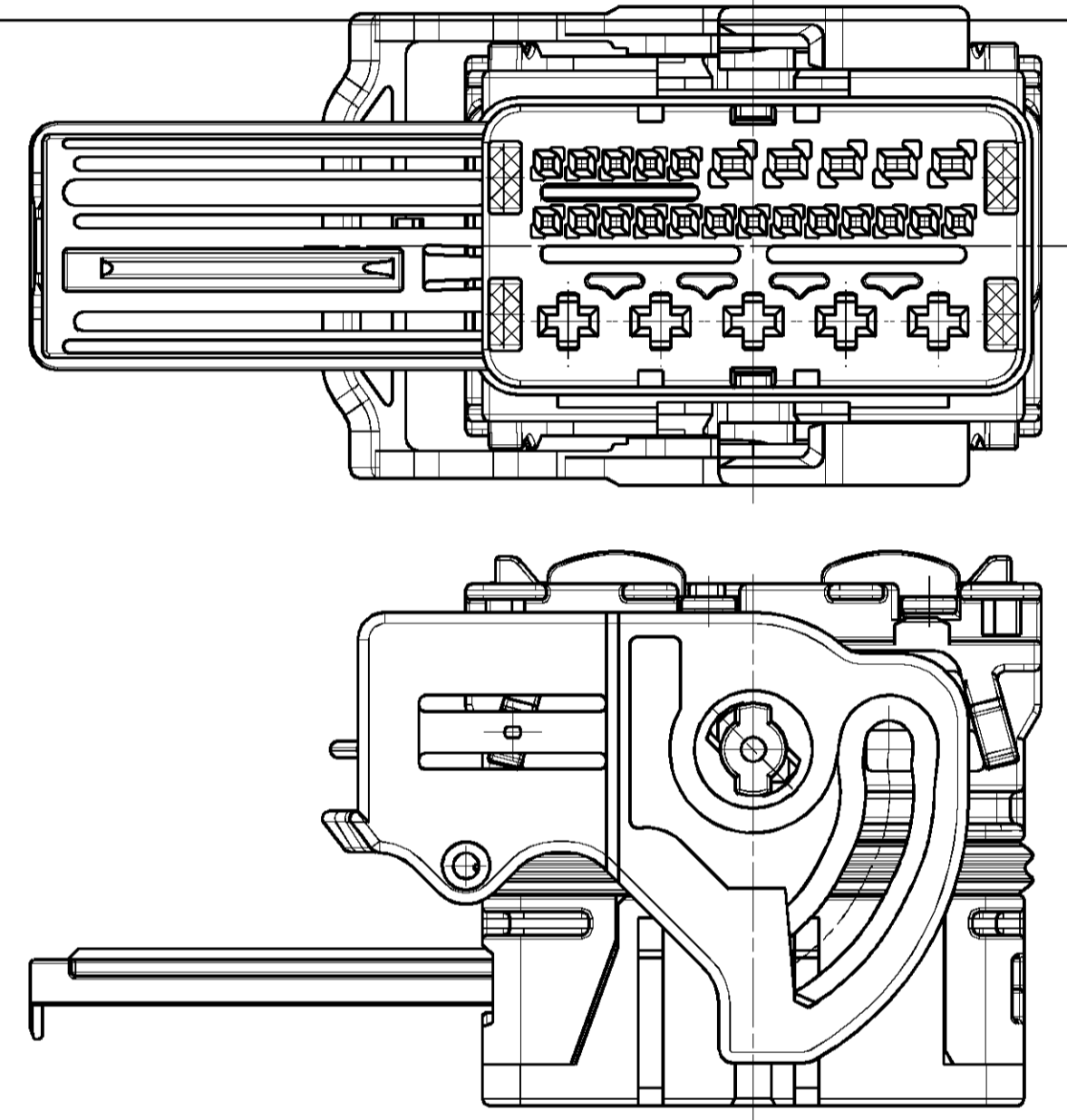
CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING IN  
DELIVERY POSITION



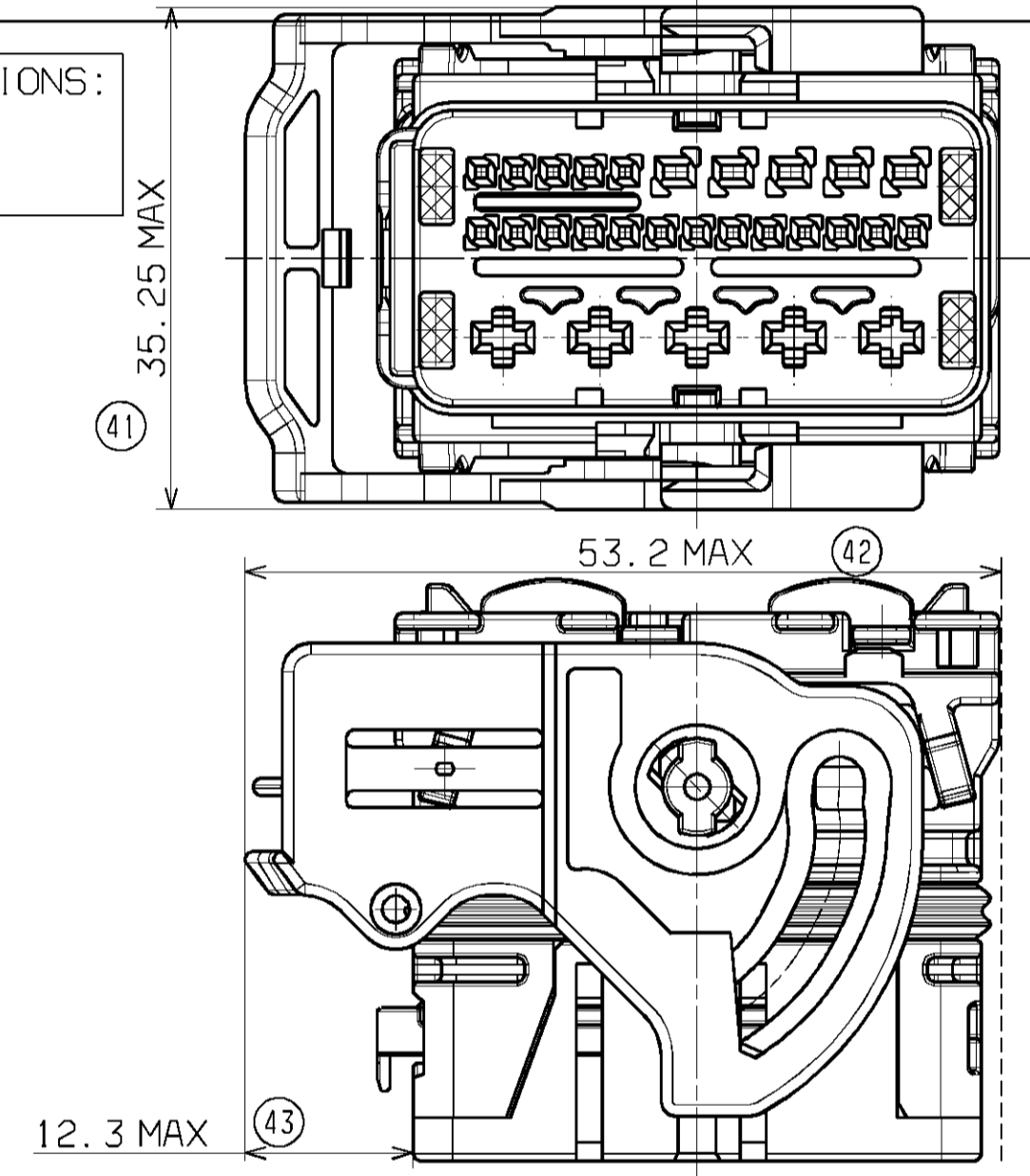
CODING POSITION



CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING FULLY OPENED  
FOR TERMINAL INSERTION



CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING IN  
DELIVERY POSITION



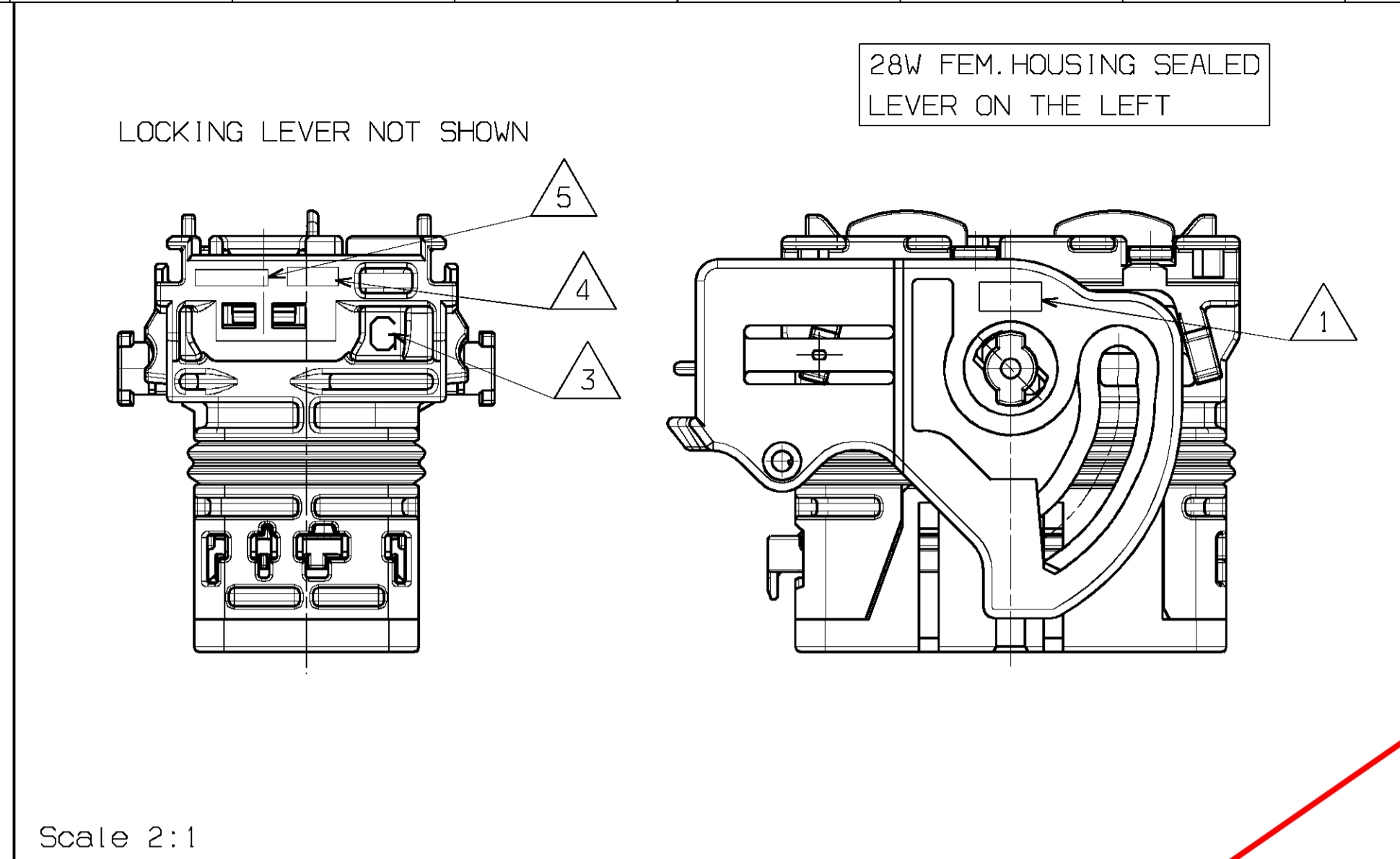
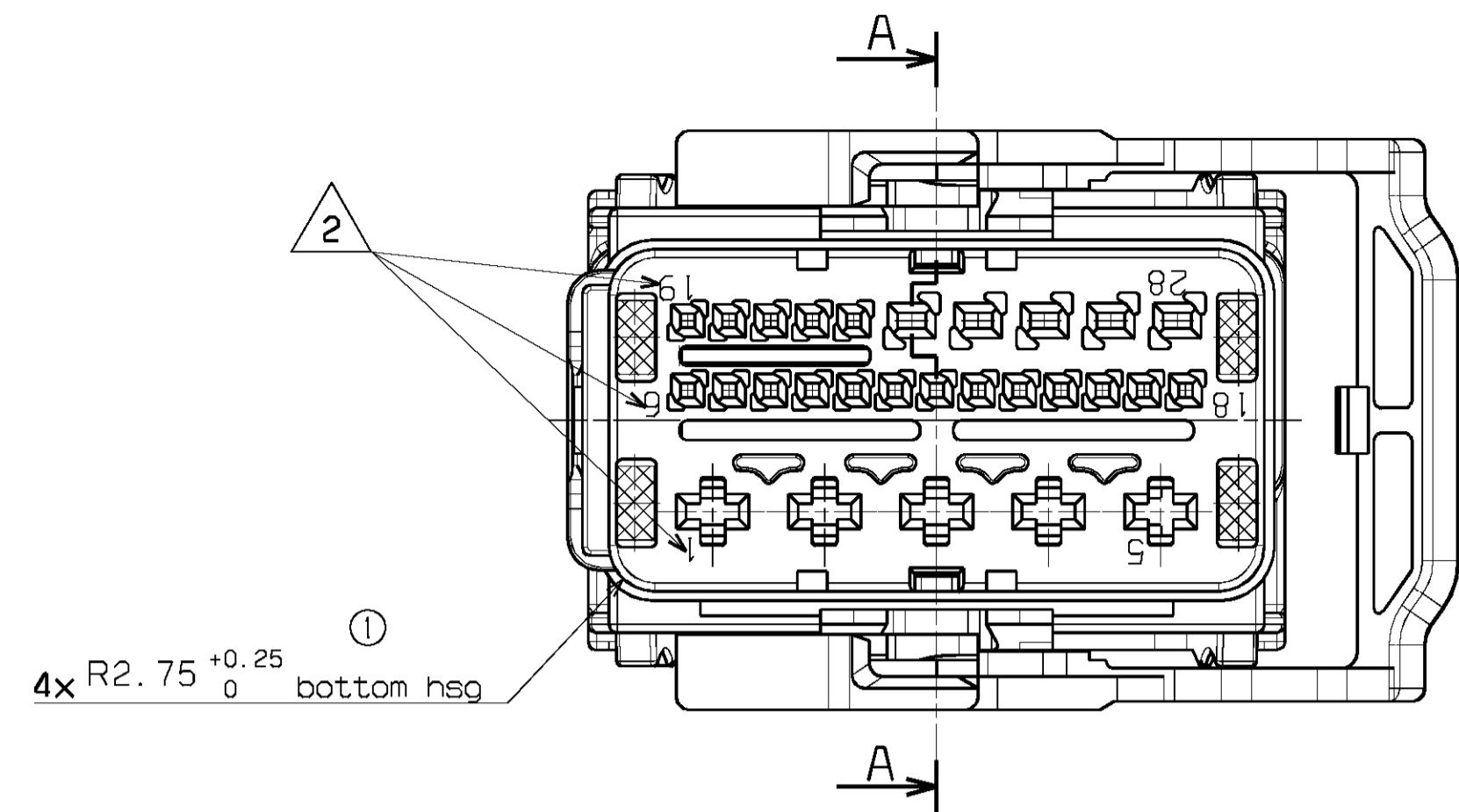
C-C  
LOCKING LEVER NOT SHOWN

COLOR	KEYING	A	B	C	D	E
BLACK	1	8.4	4.8	8.4	4.8	1.8
GREY	2	8.4	6.6	6.6	6.6	1.8
BROWN	3	8.4	8.4	4.8	10.2	1.8

TERMINALS USED							
CAVITIES ID.	TERMINALS (Section mm <sup>2</sup> )	REVEITEMENT PLATING	MOLEX P/N	WIRE SEAL	WIRE INSULATION DIAMETER		
6 to 23	CP 0.6 (0.35mm <sup>2</sup> to 0.44mm <sup>2</sup> )	Tin plated	0643221019	/	Ø1.25 min / Ø1.40 Max		
		Gold plated	0643221229				
	CP 0.6 (0.5mm <sup>2</sup> )	Tin plated	0643221039				
		Gold plated	0643221239				
24 to 28	CP 0.6 (0.75mm <sup>2</sup> )	Tin plated	0643221029	/	Ø1.40 min / Ø1.90 Max		
		Gold plated	0643221219				
	CP 1.5 (0.5mm <sup>2</sup> to 1mm <sup>2</sup> )	Tin plated	0643231029				
		Gold plated	0643231319				
1 to 5	CP 1.5 (>1mm <sup>2</sup> to 2mm <sup>2</sup> )	Tin plated	0643231039	/	Ø2.10 min / Ø2.80 Max		
		Gold plated	0643231219				
	CP 2.8 (>0.5mm <sup>2</sup> to 1mm <sup>2</sup> )	Tin plated	0643241049			0643251162	Ø1.40 min / Ø2.15 Max
		Gold plated	0643241149				
CP 2.8 (>1mm <sup>2</sup> to 2mm <sup>2</sup> )	Tin plated	0643241039	0643251175	Ø2.10 min / Ø2.80 Max			
	Gold plated	0643241139					
CP 2.8 (>2mm <sup>2</sup> to 3mm <sup>2</sup> )	Tin plated	0643241029			0643251188	Ø2.65 min / Ø3.45 Max	
	Gold plated	0643241129					
CP 2.8 (>3mm <sup>2</sup> to 5mm <sup>2</sup> )	Tin plated	0643241019	0643251196	Ø3.40 min / Ø4.00 Max			
	Gold plated	0643241119					

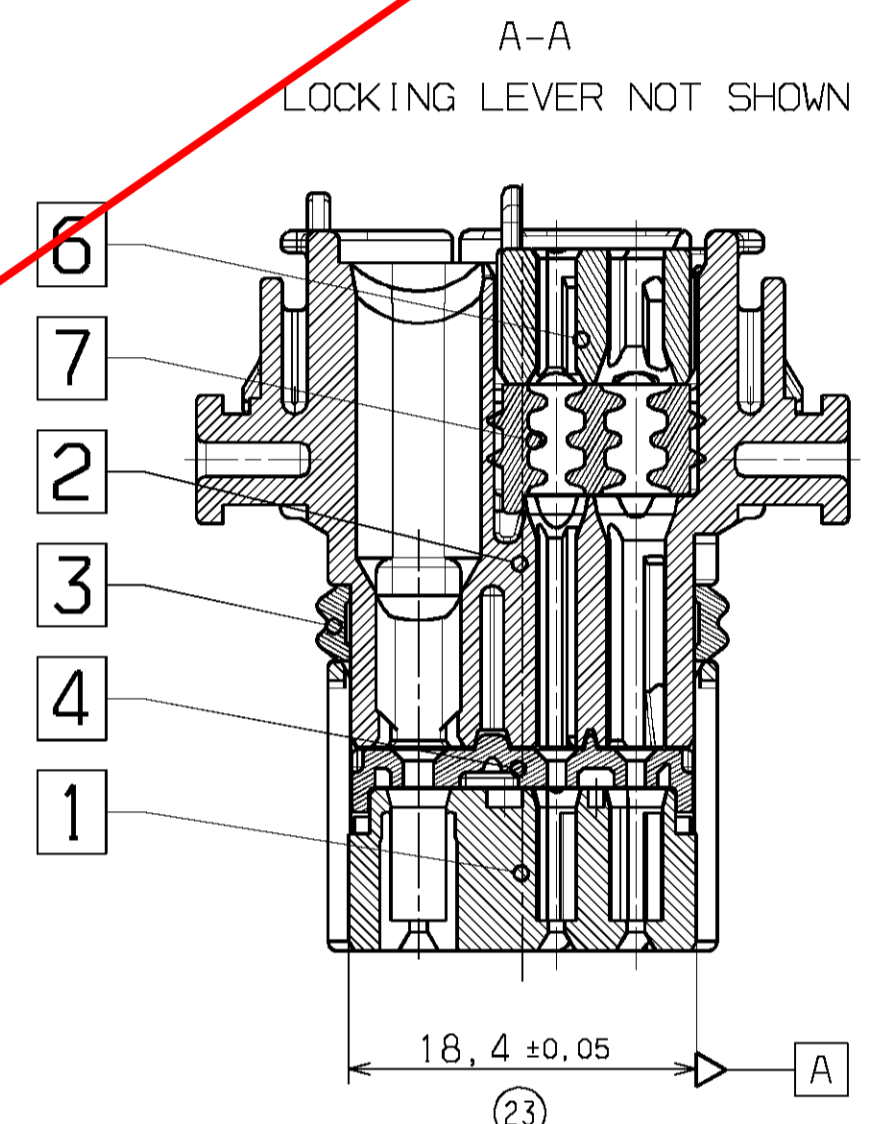
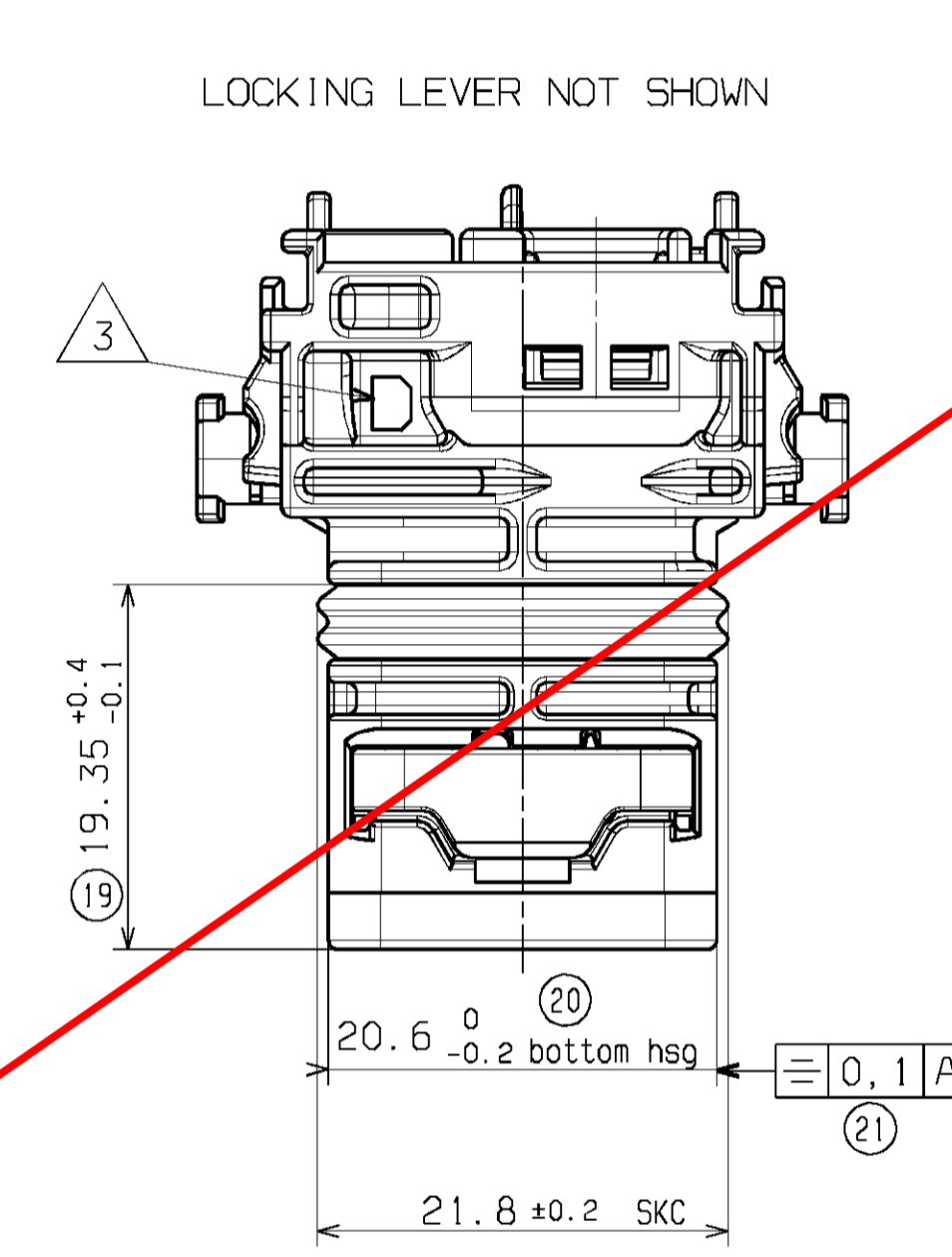
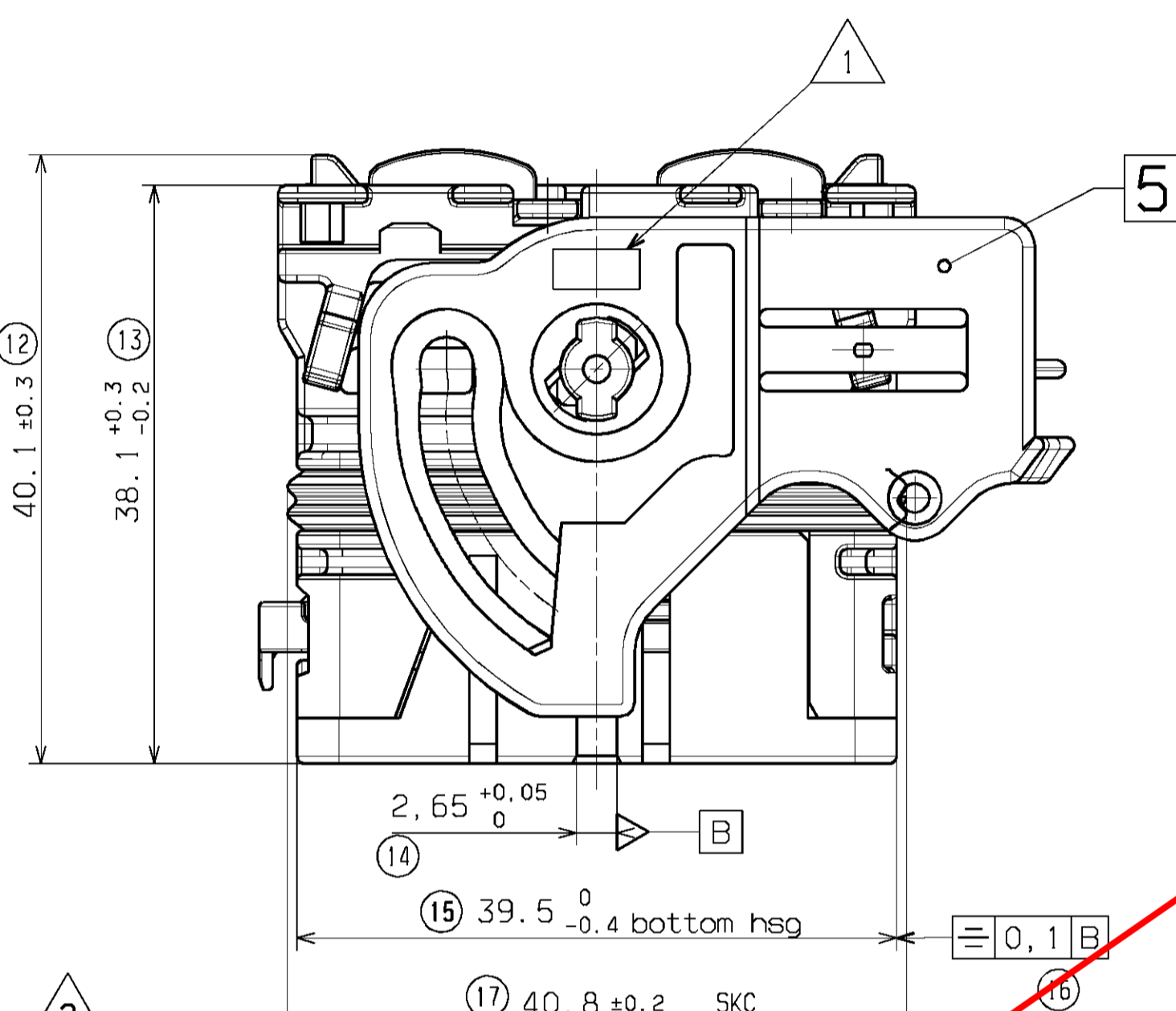
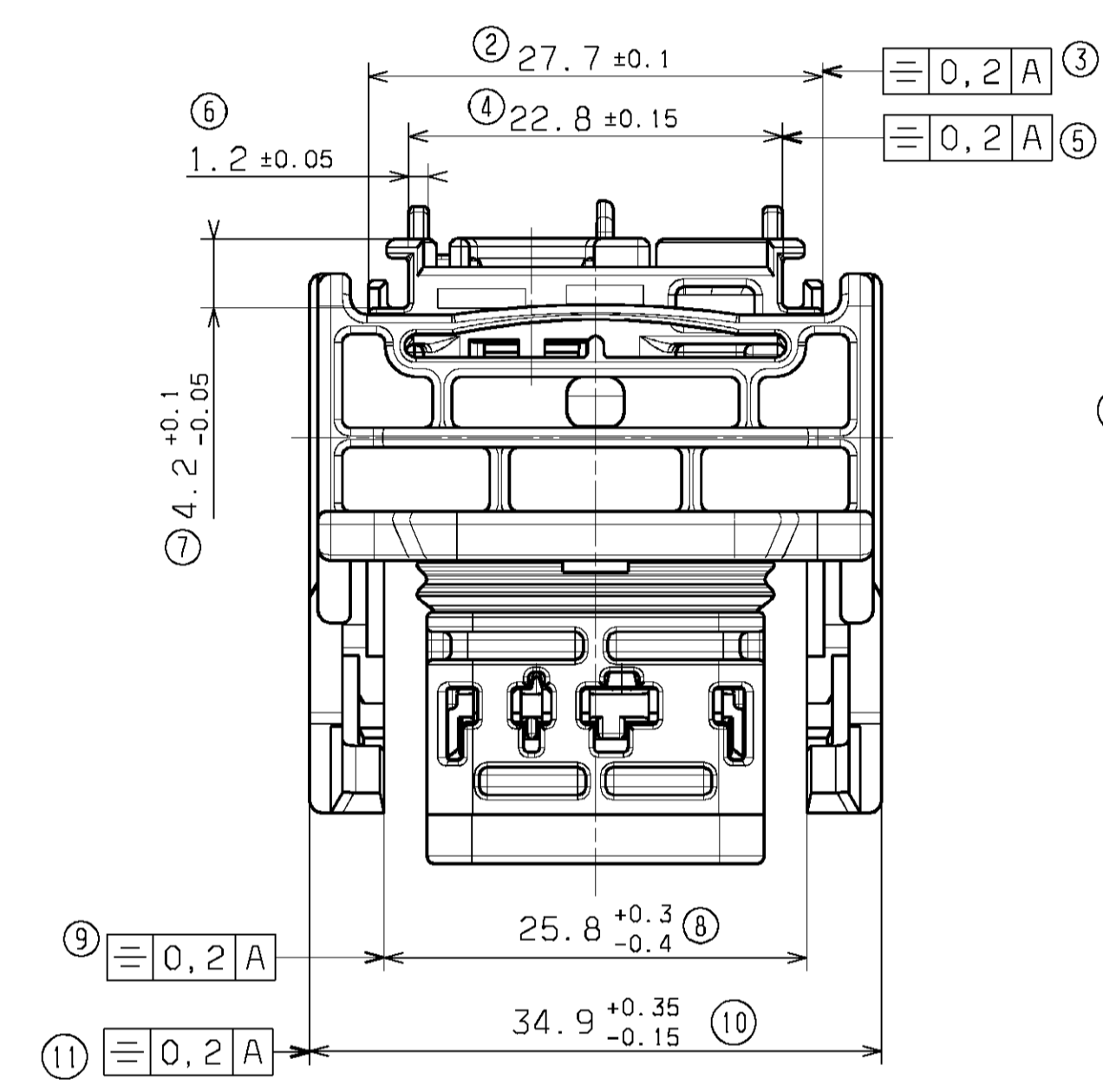
UPDATED DRAWING EC NO: G2008-0367 DRAWN: TBADAROUX 2008/05/16 CH'KO: OPLESSIS 2008/05/16 APPR: CBOUCHAN 2008/05/16	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION	
		mm	INCH	MM ONLY	2:1	METRIC		
		4 PLACES ±	±	DRAWN BY	DATE	TITLE		
		3 PLACES ±	±	TBADAROUX	2007/09/25	CMC CONNECTOR 28 CKT POWER MAT SEAL VERSION		
2 PLACES ± 0.1	±	CHECKED BY	DATE	MATERIAL NO.				
1 PLACE ± 0.1	±	OPLESSIS	2007/09/25	SEE CHART				
ANGULAR ± 2°		APPROVED BY	DATE	DOCUMENT NO.				
		CBOUCHAN	2007/09/25	SD-64318-001				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
		A1	SHEET NO. 2 OF 2					





**LEVER ON THE LEFT**

MATERIAL NUMBER	COLOR
0643181011	BLACK
0643181018	GREY
0643181019	BROWN
	GREEN



**LEVER ON THE RIGHT**

MATERIAL NUMBER	COLOR
0643183011	BLACK
0643183018	GREY
0643183019	BROWN
	GREEN

**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-98994-002
- 3-CAVITIES TERMINALS DESIGN AS PER
- 7-BLIND PLUG FOR 0.6, 1.5 AND 2.8 CAVITIES (MOLEX P/N 0643251010 0643251023 0643251091) MUST BE USED ON THIS PART
- 8-DELIVERED PRODUCT WEIGHT: 35,2 g

**VOID AND SUPERSEDED BY SD-64318-001 rev B**

SKC: SPECIAL KEY CHARACTERISTICS

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

QUANTITY PER INDIVIDUAL SHEET

☒ 0 ⊙ 0 ● 0 SKC: 2

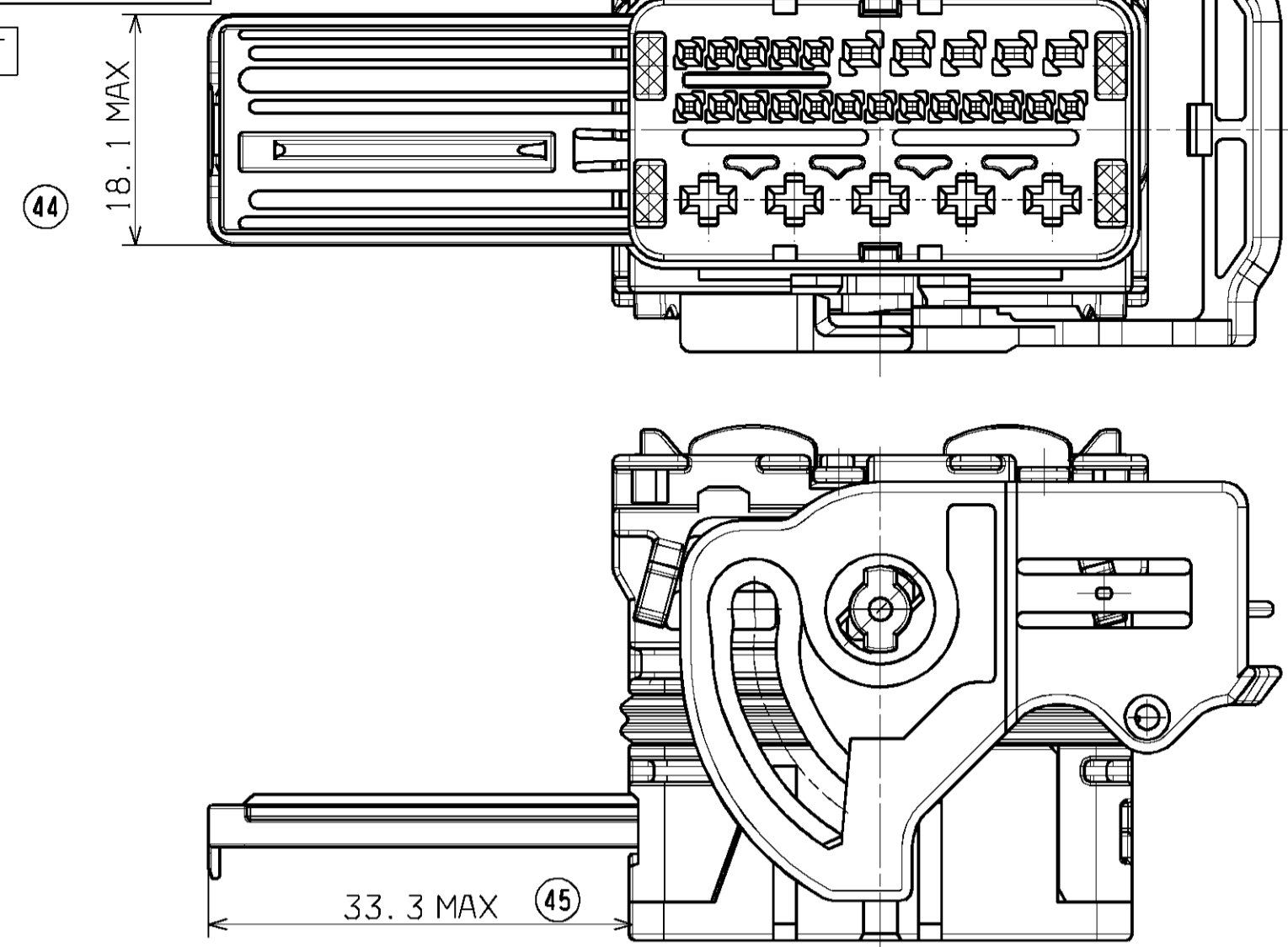
0989940094	7	MATT SEAL	SILICONE	GREEN ORANGE
0989940093				
0989940058	6	BACK GRID 23 WAY	>PBT-GF20<	GREY
0989930341	5	LOCKING LEVER SIZE 3	>PBT-GF30<	BLACK
0989940034	4	SECONDARY LOCK	>PBT-GF20<	YELLOW
0986560002	3	PERIPHERAL SEAL SIZE 3	SILICONE	RED
0989940019	2	BACK PART	>PBT-GF20<	BROWN
0989940021				
0989940028				
0989940029	1	FRONT PART	>PBT-GF20<	COLOR ASSOCIATED TO KEYING
MATERIAL NUMBER	MARK	DESIGNATION	MATERIAL	COLOR

**MARKINGS**

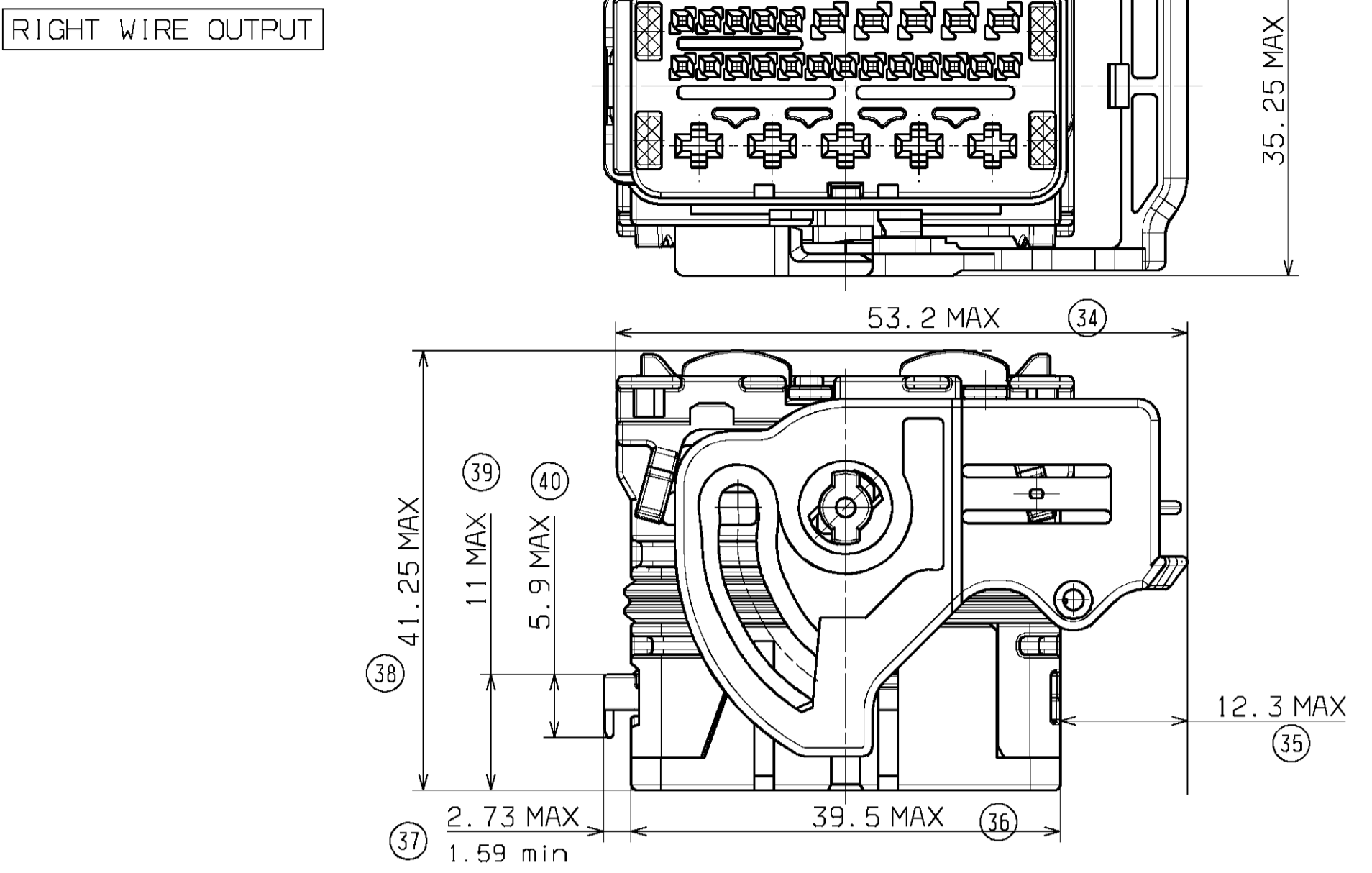
- 1 Assembled part tracability day + year
- 2 Terminal cavities identification
- 3 Lever position indicator:  
"D" LETTER VISIBLE= part with "LEVER ON THE RIGHT"  
"G" LETTER VISIBLE= part with "LEVER ON THE LEFT"
- 4 Supplier identification
- 5 Material identification

GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
mm	INCH	MM ONLY		2.5:1	METRIC	⊙ ▷
4 PLACES ±	±	DRAWN BY TBADAROUX		DATE 2007/09/25	TITLE CMC CONNECTOR 28 CKT POWER MATT SEAL VERSION	
3 PLACES ±	±	CHECKED BY OPLESSIS		DATE 2007/09/25	MOLEX INCORPORATED	
2 PLACES ± 0.1	±	APPROVED BY CBOUCHAN		DATE 2007/09/25	DOCUMENT NO. SD-98994-001	
1 PLACE ± 0.1	±	MATERIAL NO. SEE CHART		SHEET NO. 1 OF 2		
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						

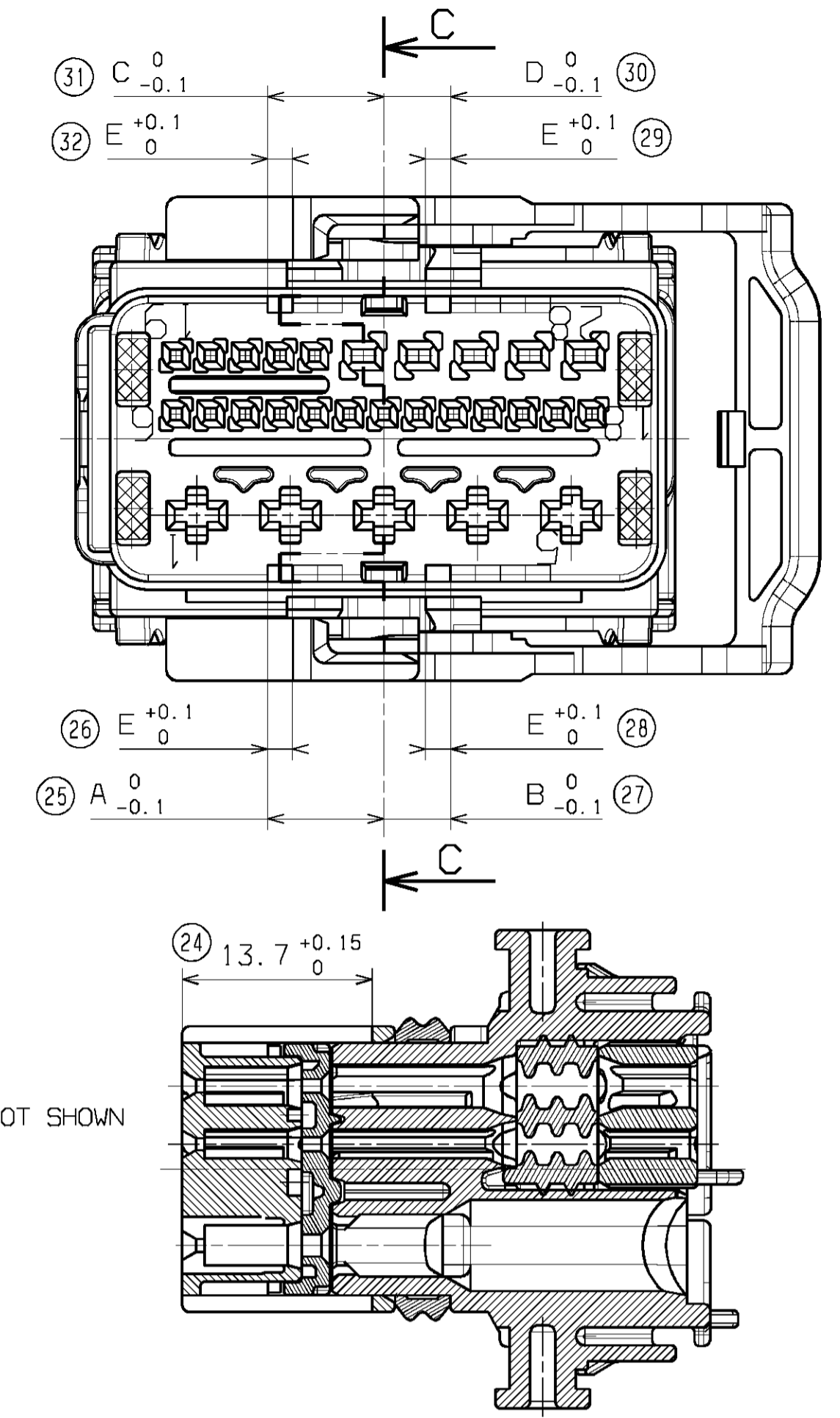
CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING FULLY OPENED  
FOR TERMINAL INSERTION



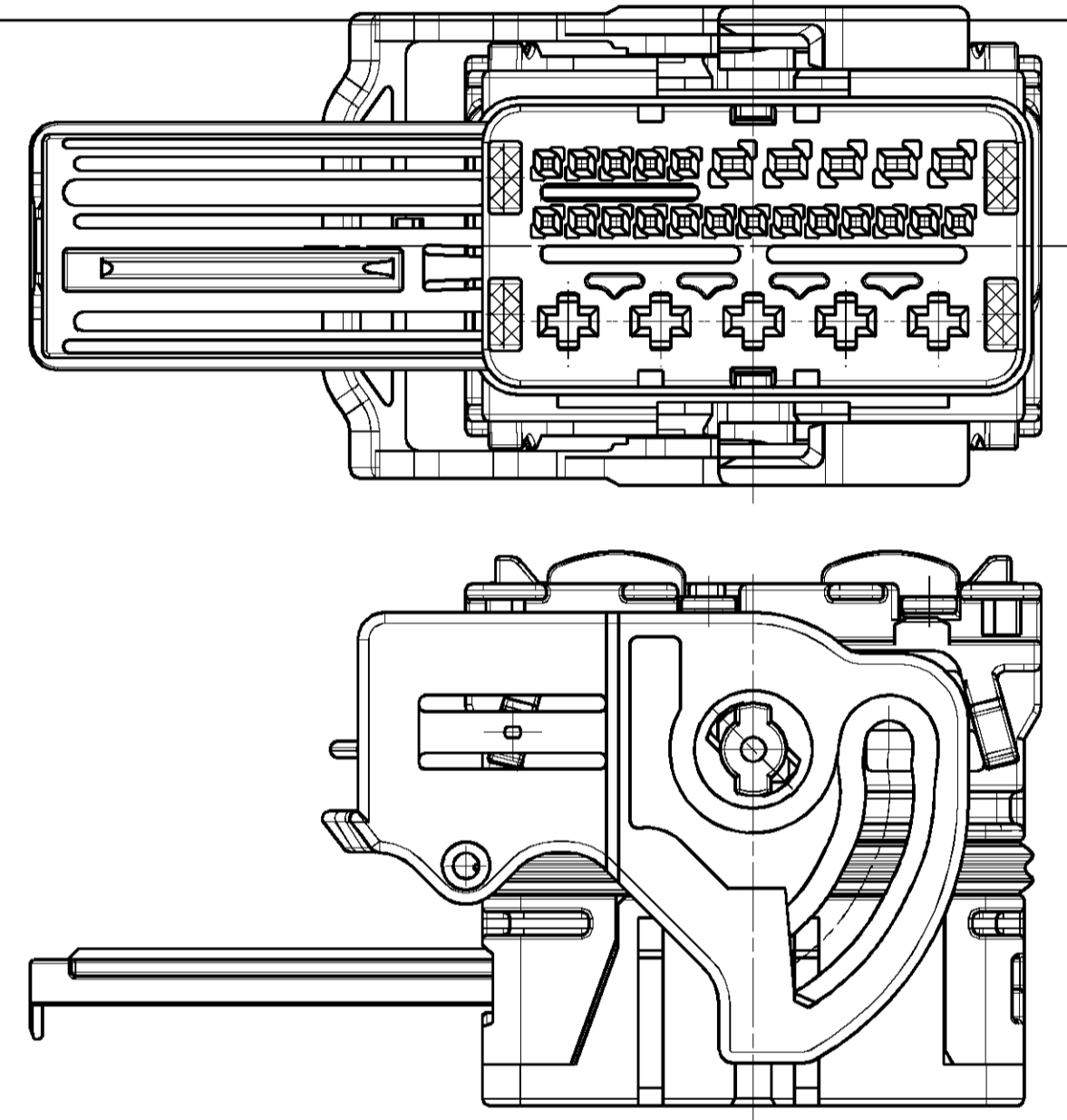
CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING IN  
DELIVERY POSITION



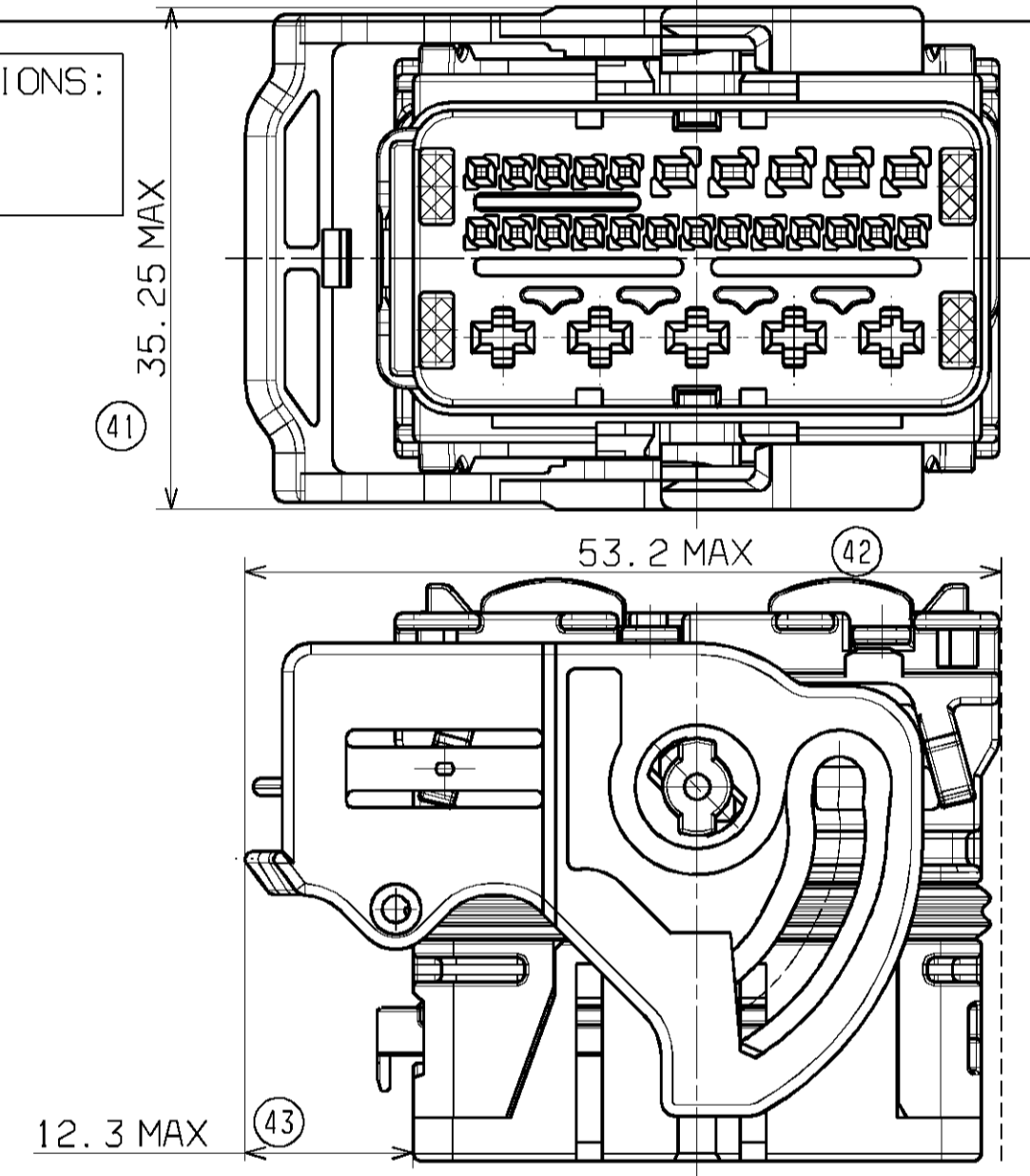
CODING POSITION



CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING FULLY OPENED  
FOR TERMINAL INSERTION



CONNECTOR OVERALL DIMENSIONS:  
SECONDARY LOCKING IN  
DELIVERY POSITION



C-C  
LOCKING LEVER NOT SHOWN

COLOR	KEYING	A	B	C	D	E
BLACK	1	8.4	4.8	8.4	4.8	1.8
GREY	2	8.4	6.6	6.6	6.6	1.8
BROWN	3	8.4	8.4	4.8	10.2	1.8
GREEN	4	4.8	10.2	8.4	12.0	1.8

TERMINALS USED								
CAVITIES ID.	TERMINALS (Section mm <sup>2</sup> )	REVEITEMENT PLATING	MOLEX P/N	WIRE SEAL	WIRE INSULATION DIAMETER			
6 to 23	CP 0.6 (0.35mm <sup>2</sup> to 0.44mm <sup>2</sup> )	Tin plated	0643221019	/	Ø1.25 min / Ø1.40 Max			
		Gold plated	0643221229					
	CP 0.6 (0.5mm <sup>2</sup> )	Tin plated	0643221039			Ø1.40 min / Ø1.90 Max		
		Gold plated	0643221239			Ø1.40 min / Ø1.90 Max		
24 to 28	CP 0.6 (0.75mm <sup>2</sup> )	Tin plated	0643221029	/	Ø1.40 min / Ø1.90 Max			
		Gold plated	0643221219					
	CP 1.5 (0.5mm <sup>2</sup> to 1mm <sup>2</sup> )	Tin plated	0643231029			Ø1.45 min / Ø2.15 Max		
		Gold plated	0643231319			Ø2.10 min / Ø2.80 Max		
1 to 5	CP 1.5 (>1mm <sup>2</sup> to 2mm <sup>2</sup> )	Tin plated	0643231039	/	Ø2.10 min / Ø2.80 Max			
		Gold plated	0643231219					
	CP 2.8 (>0.5mm <sup>2</sup> to 1mm <sup>2</sup> )	Tin plated	0643241049			0643251162	Ø1.40 min / Ø2.15 Max	
		Gold plated	0643241149					
	CP 2.8 (>1mm <sup>2</sup> to 2mm <sup>2</sup> )	Tin plated	0643241039			0643251175	Ø2.10 min / Ø2.80 Max	
		Gold plated	0643241139					
CP 2.8 (>2mm <sup>2</sup> to 3mm <sup>2</sup> )	Tin plated	0643241029	0643251188	Ø2.65 min / Ø3.45 Max				
	Gold plated	0643241129						
CP 2.8 (>3mm <sup>2</sup> to 5mm <sup>2</sup> )	Tin plated	0643241019			0643251196			Ø3.40 min / Ø4.00 Max
	Gold plated	0643241119						

UPDATED DRAWING EC NO: G2008-0367 DRAWN: TBADAROUX 2008/04/21 CH'KO: OPLESSIS 2008/04/21 APPR: CBOUCHAN 2008/04/21	DIMENSION STYLE <b>MM ONLY</b>	SCALE	2:1	DESIGN UNITS	METRIC	FIRST ANGLE PROJECTION	
		GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH	DRAWN BY DATE		
		4 PLACES ±	±	TBADAROUX 2007/09/25			
		3 PLACES ±	±	CHECKED BY DATE			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY DATE		TITLE			
		CBOUCHAN 2007/09/25		CMC CONNECTOR 28 CKT POWER MATT SEAL VERSION			
		ANGULAR ± 2°		MOLEX INCORPORATED			
		SEE CHART		DOCUMENT NO.		SHEET NO.	
				SD-98994-001		2 OF 2	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					