

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0643181011](#)
Status: **Active**
Overview: [cmc connectors](#)
Description: .635mm (.025"), 1.50mm (.059"), 2.80mm (.110"), Power CMC Receptacle, 28 Circuits, Left Wire Output, Black 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 ² wire), 12.0A for 1.5mm Terminal (2.0mm ² wire), 2.5A for 0.635mm Terminal(0.75mm ² 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	Black
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

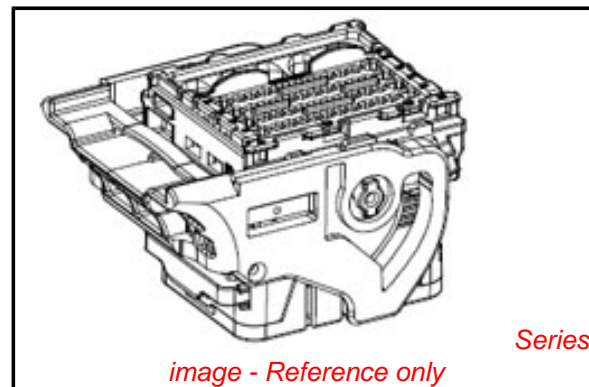
Electrical

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
 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](#)

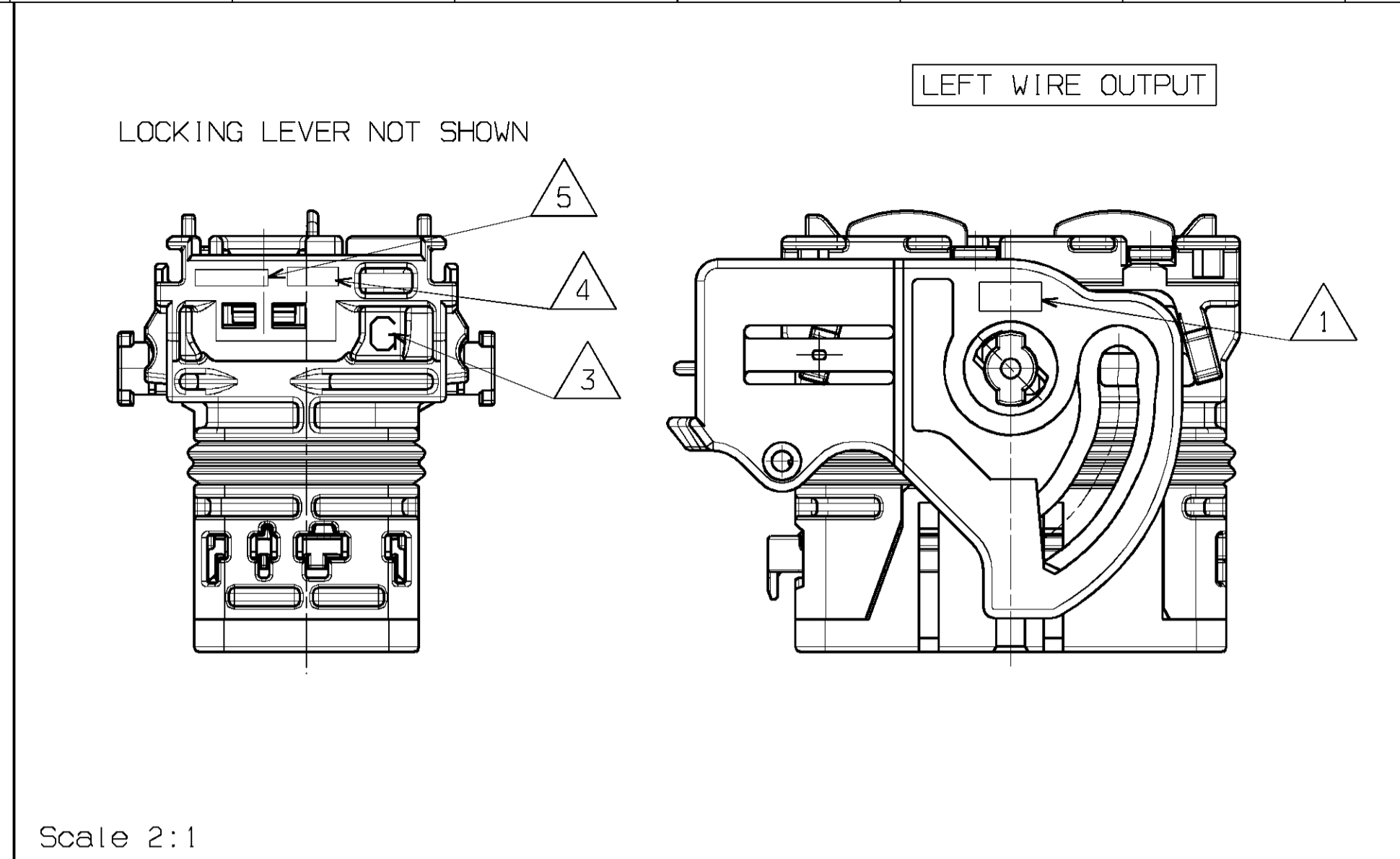
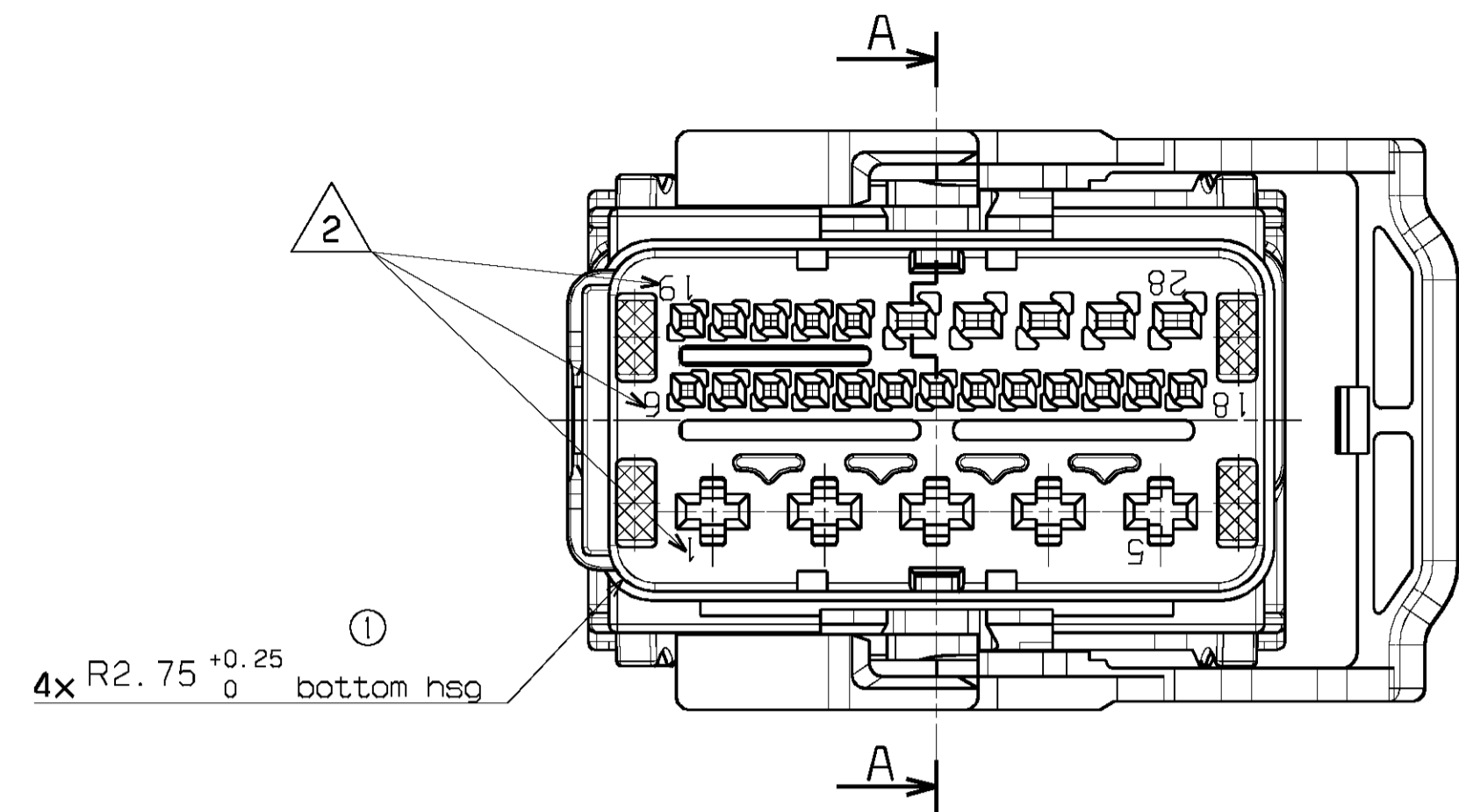
Mates With

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

Use With

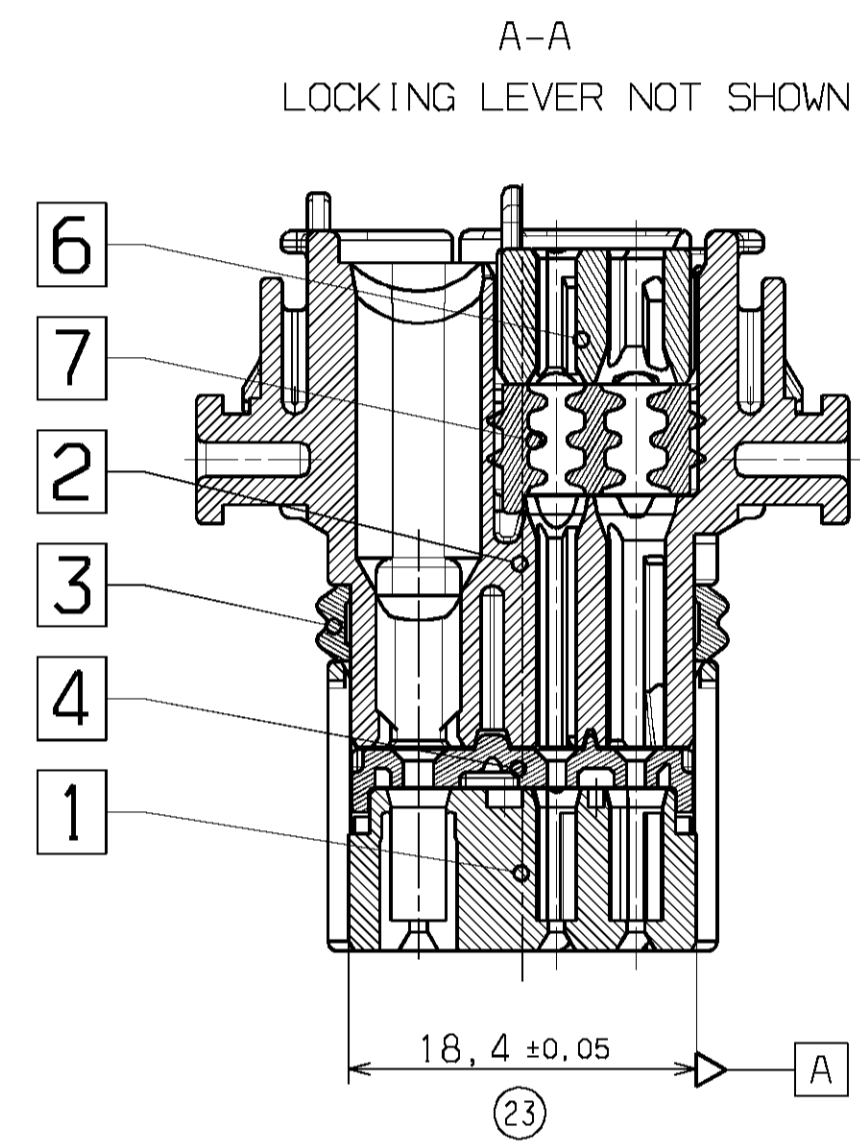
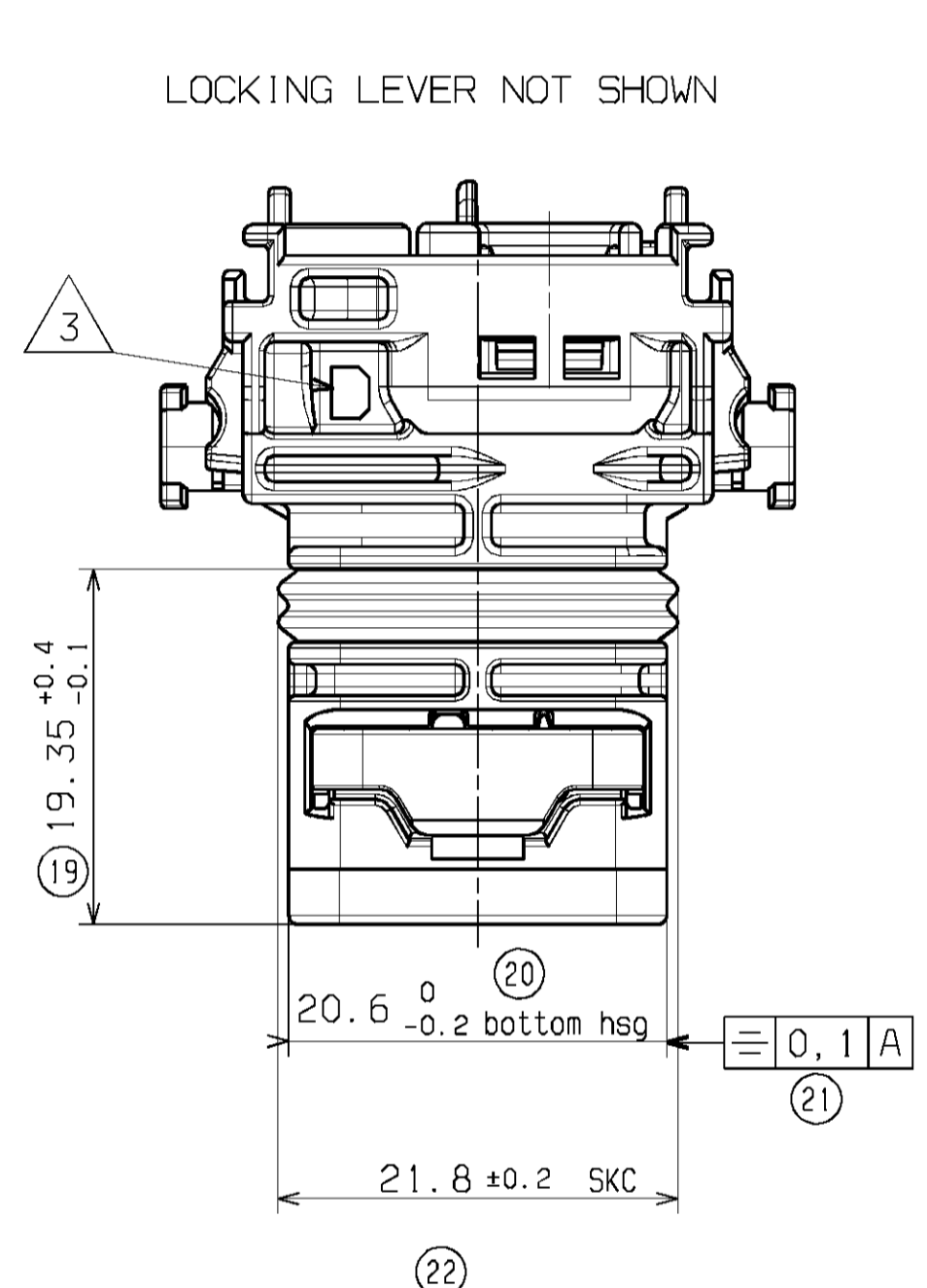
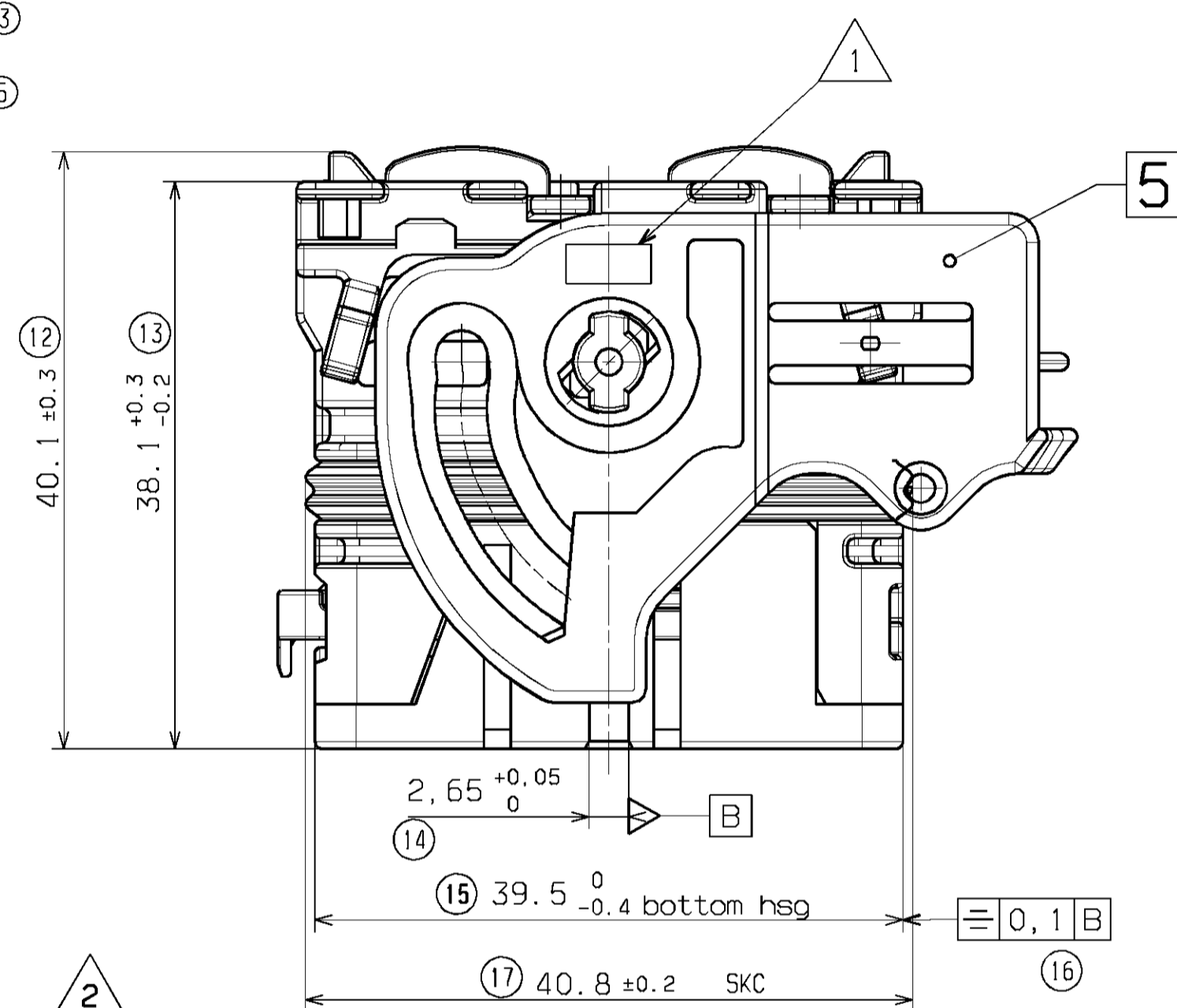
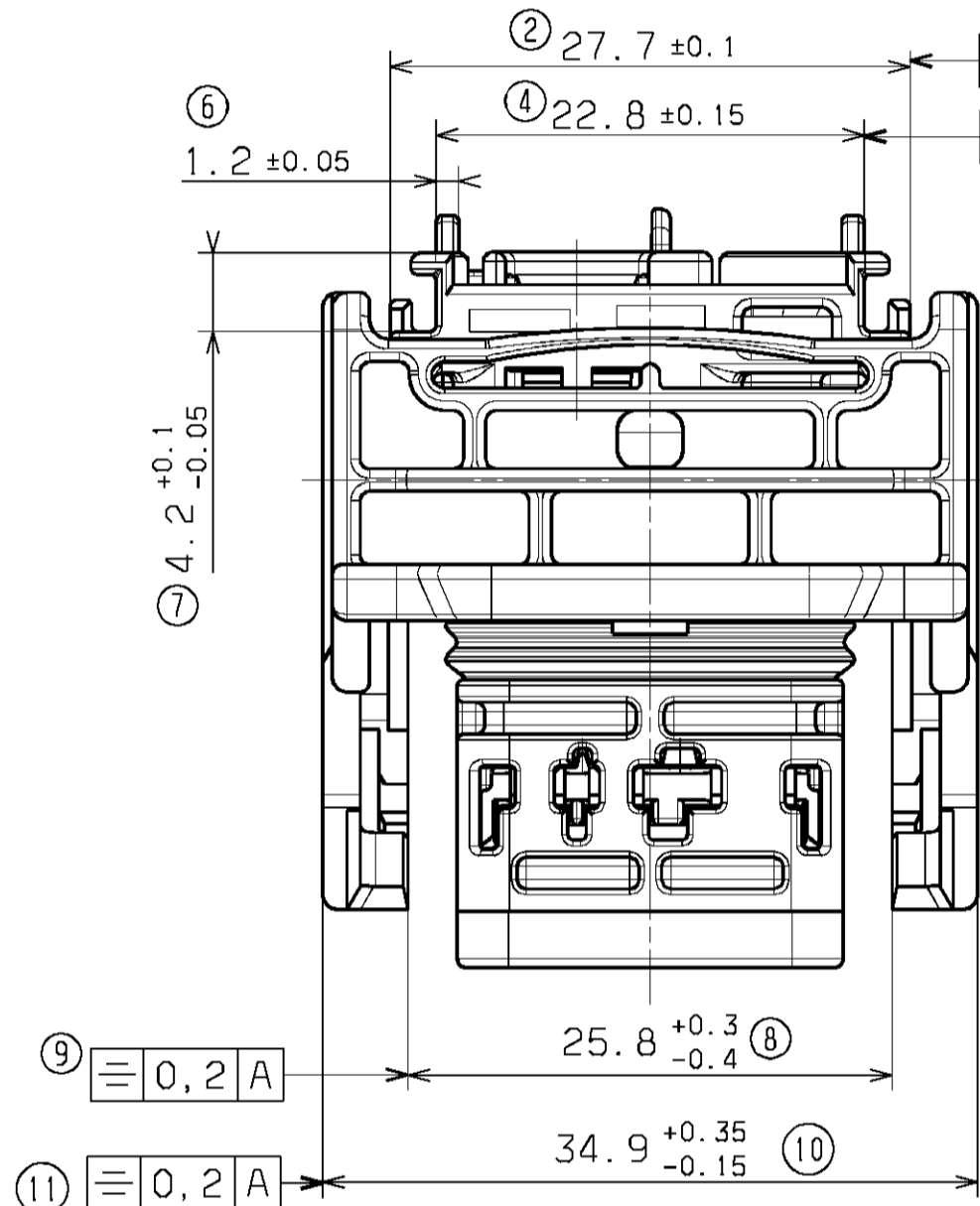
Female Terminals [64322](#) CP 0.635 (.025"), [64323](#) CP 1.5 (.059"), [64324](#) CP 2.8 (.110") .
 Circuit Way Plugs [643251010](#) , [643251023](#) , [643251091](#). CMC Wire Cap [643201301](#)

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



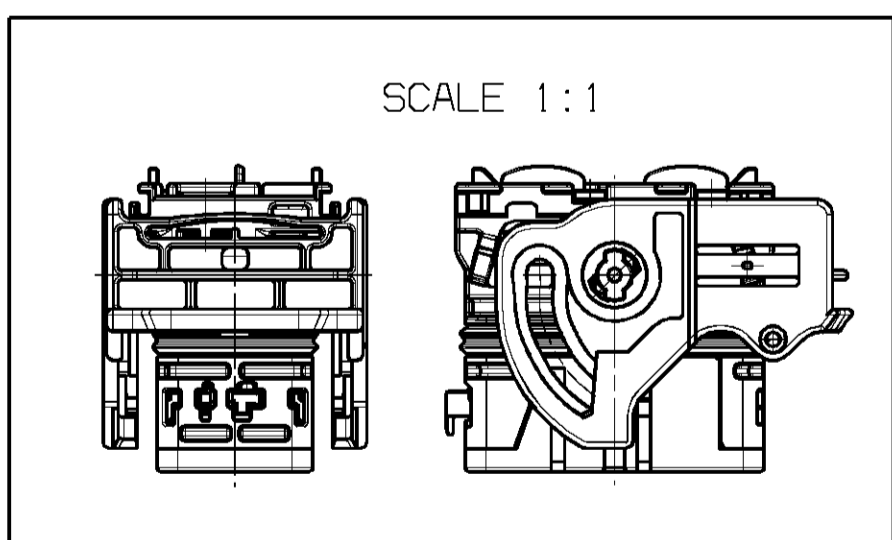
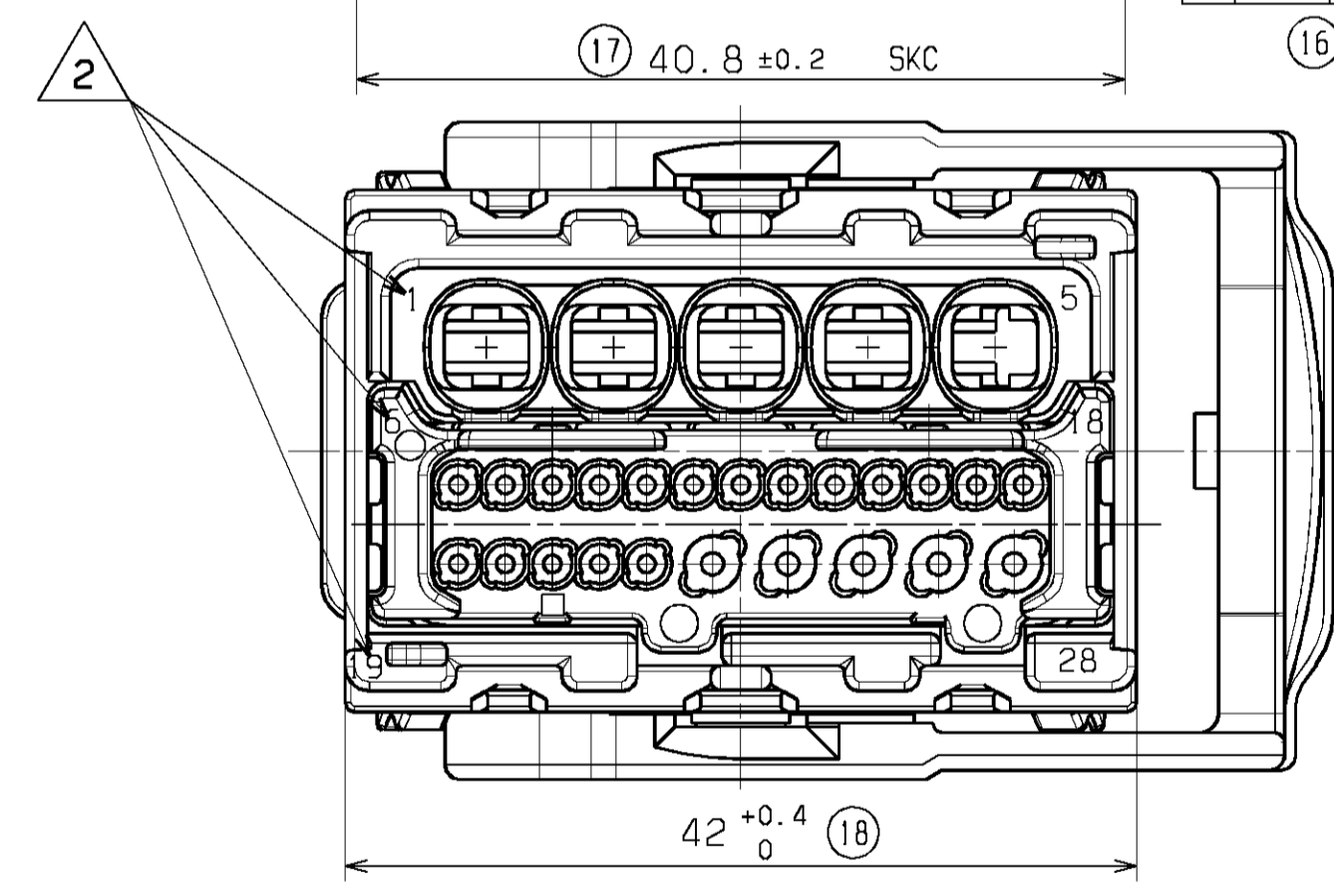
LEFT WIRE OUTPUT

MATERIAL NUMBER	COLOR
0643181011	BLACK
0643181018	GREY
0643181019	BROWN



RIGHT WIRE OUTPUT

MATERIAL NUMBER	COLOR
0643183011	BLACK
0643183018	GREY
0643183019	BROWN



NOTES

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

EC NO: G2008-0367

DRWN: TBADAROUX 2008/05/16

CHK: KO: OPLESSIS 2008/05/16

APPR: CBOUCHAN 2008/05/16

REV B

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	±	±
3 PLACES	±	±
2 PLACES	± 0.1	±
1 PLACE	± 0.1	±
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 TBADAROUX DATE 2007/09/25

CHECKED BY OPLESSIS DATE 2007/09/25

APPROVED BY CBOUCHAN DATE 2007/09/25

MATERIAL NO. SEE CHART

DOCUMENT NO. SD-64318-001

SHEET NO. 1 OF 2

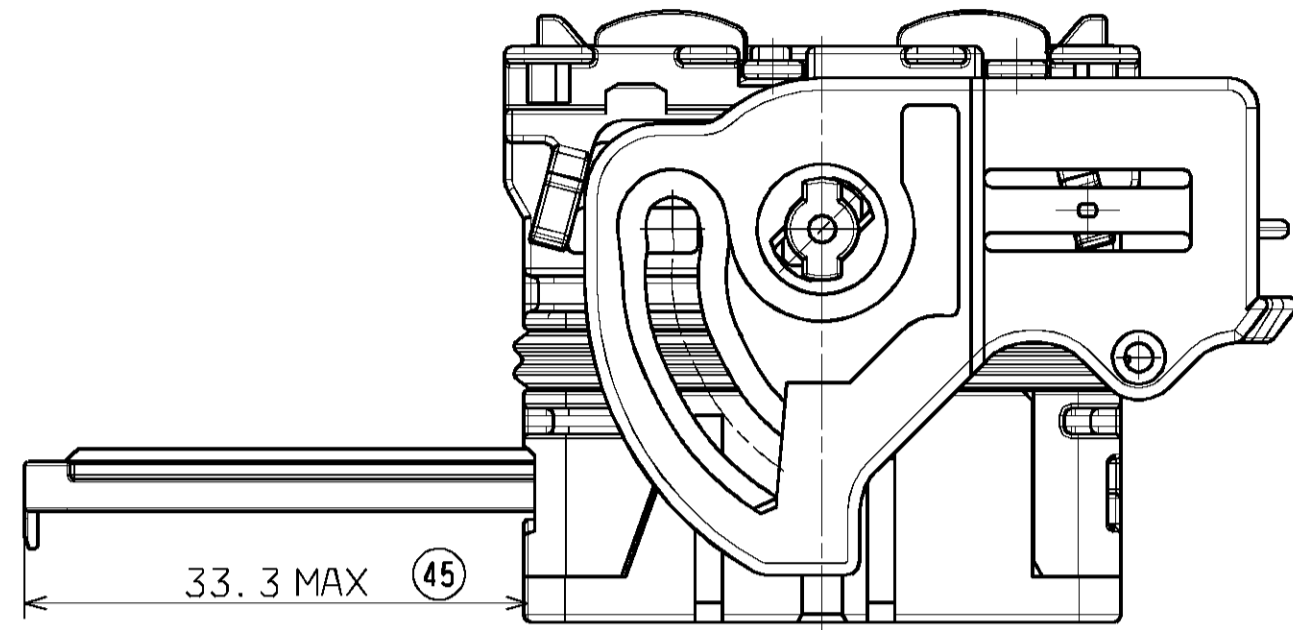
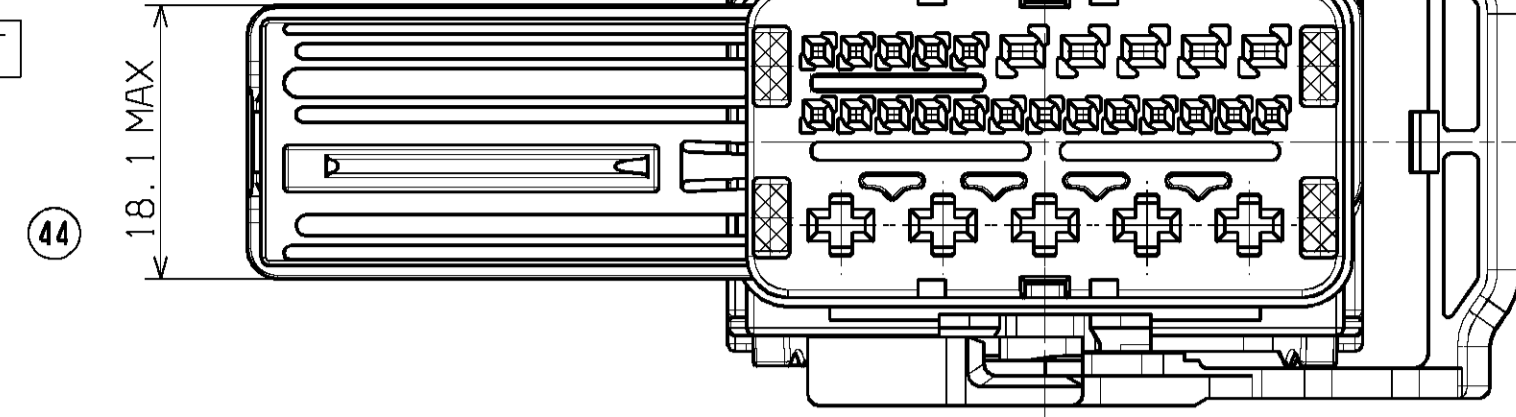
TITLE

CMC CONNECTOR 28 CKT POWER MAT SEAL VERSION

MOLEX INCORPORATED

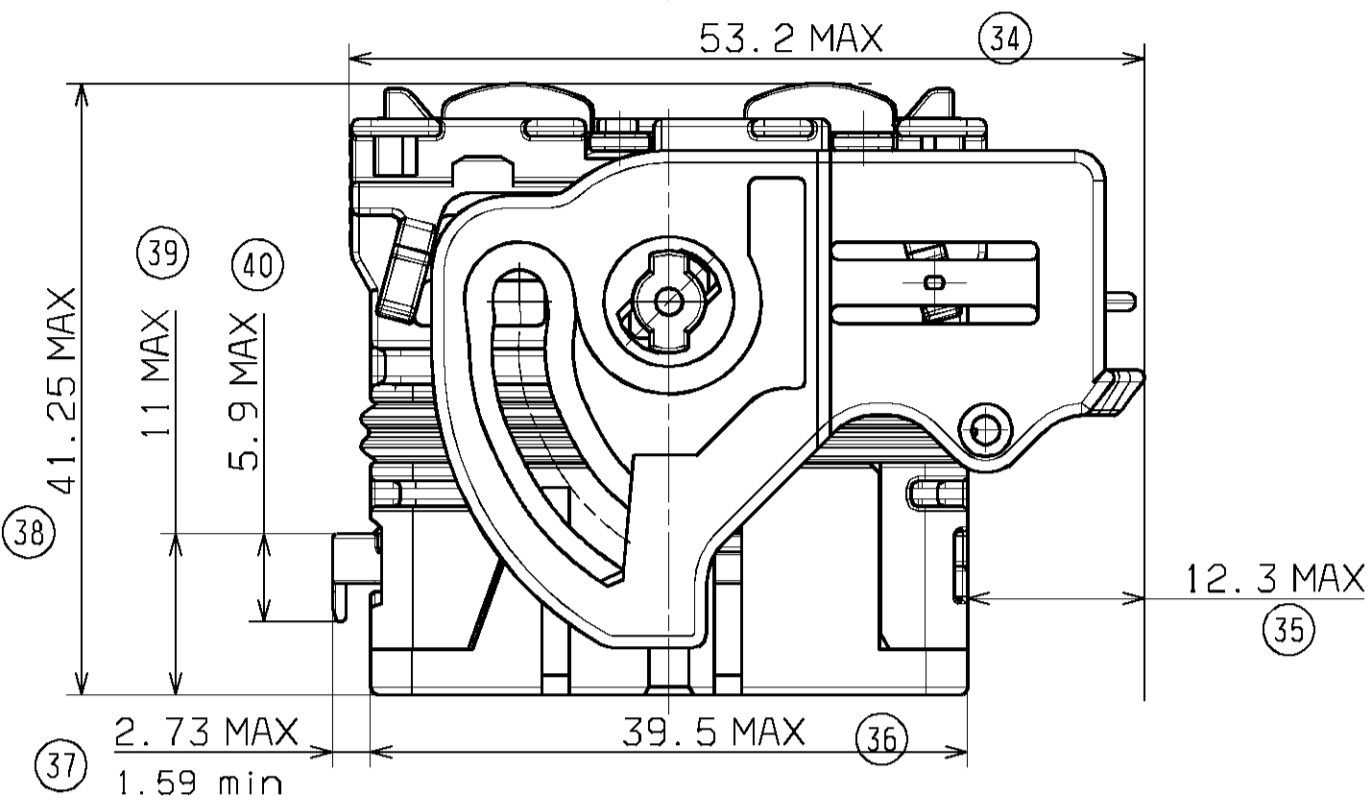
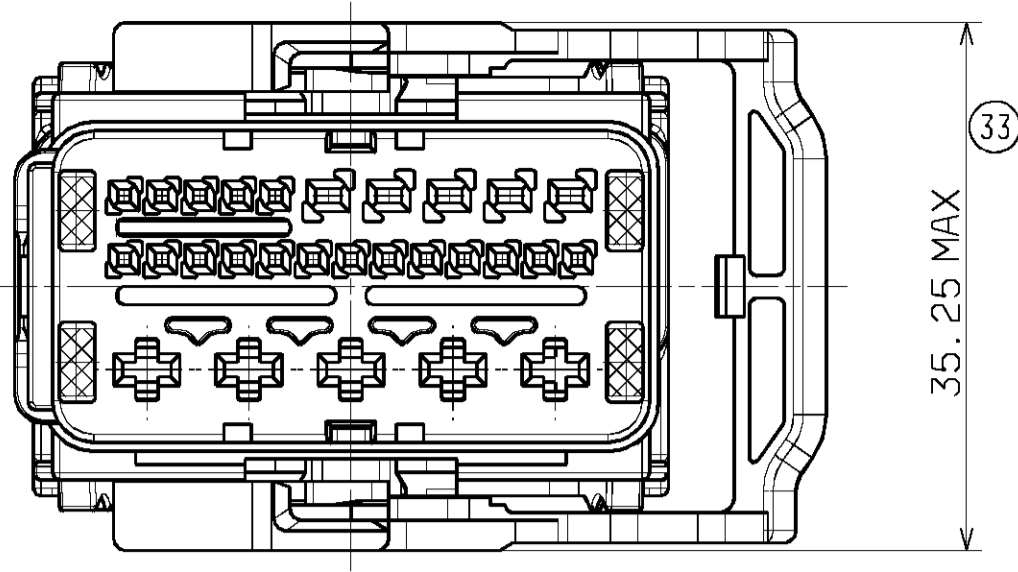
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING FULLY OPENED
FOR TERMINAL INSERTION

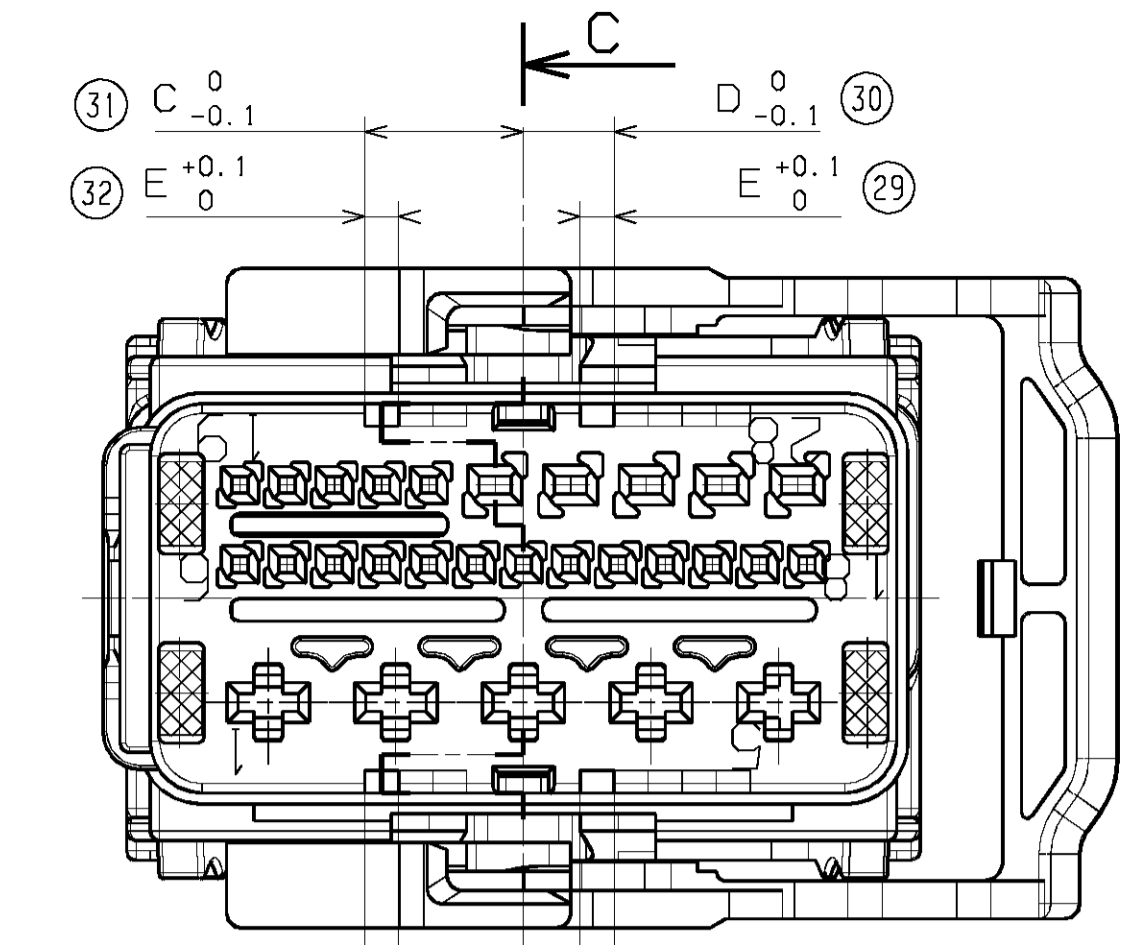


CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING IN
DELIVERY POSITION

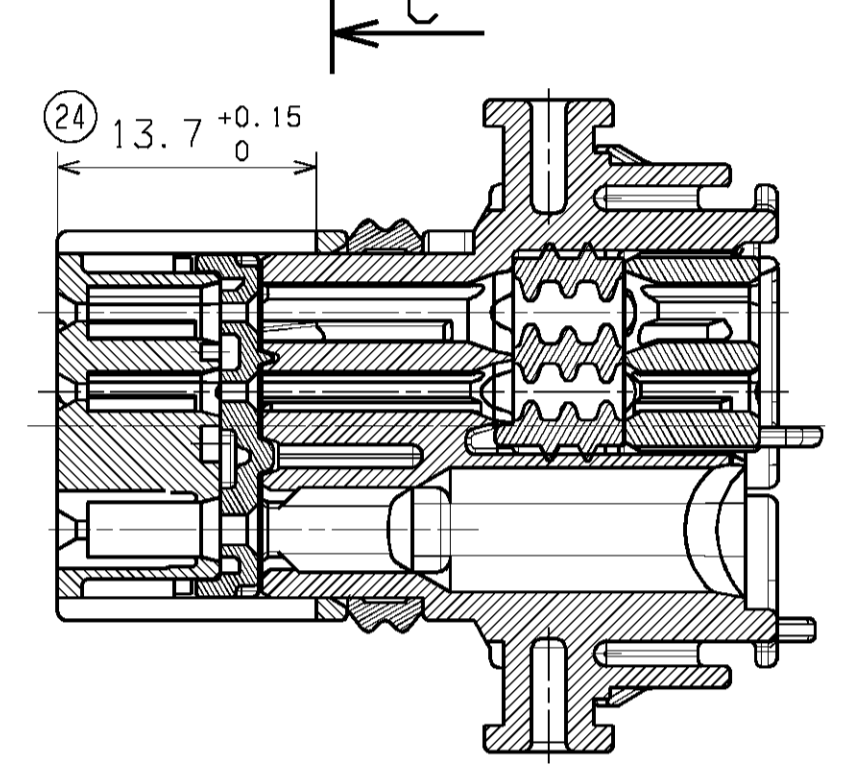
RIGHT WIRE OUTPUT



CODING POSITION

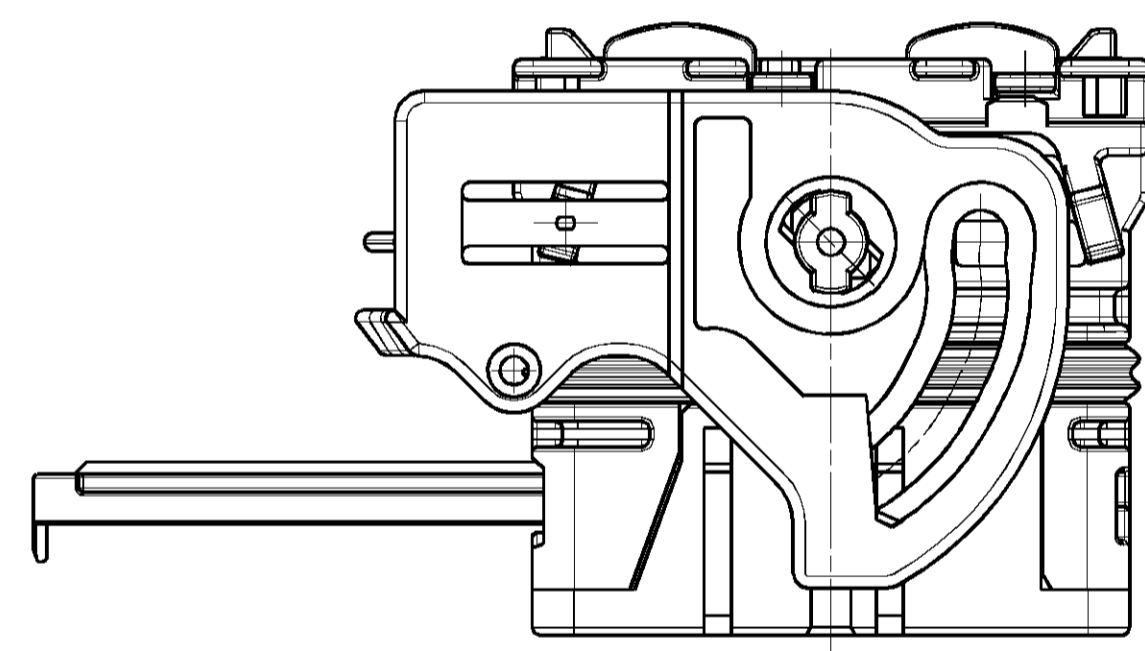
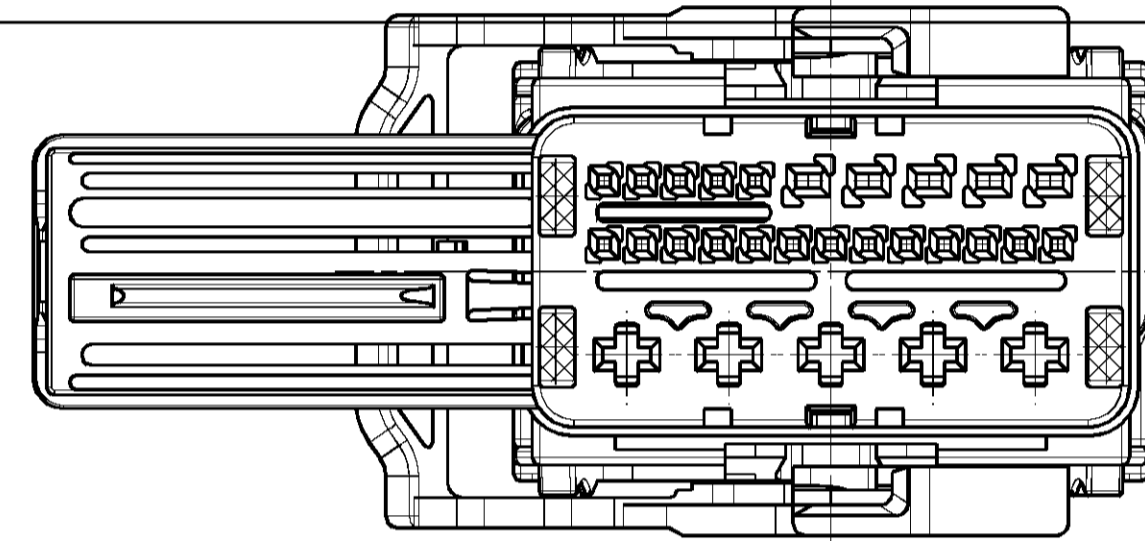


C-C
LOCKING LEVER NOT SHOWN



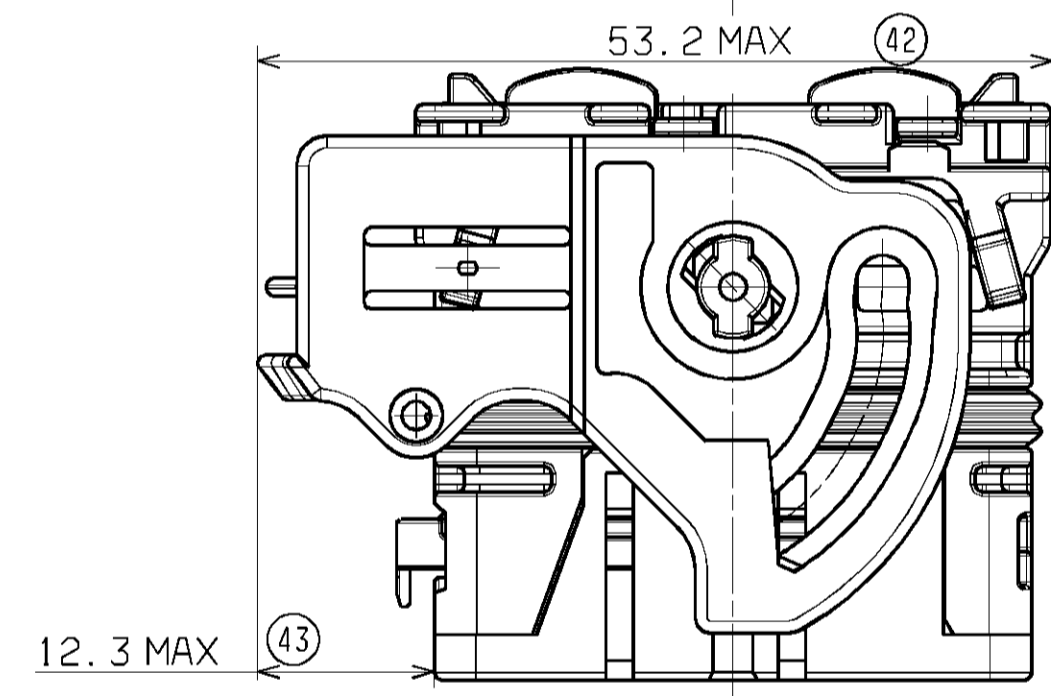
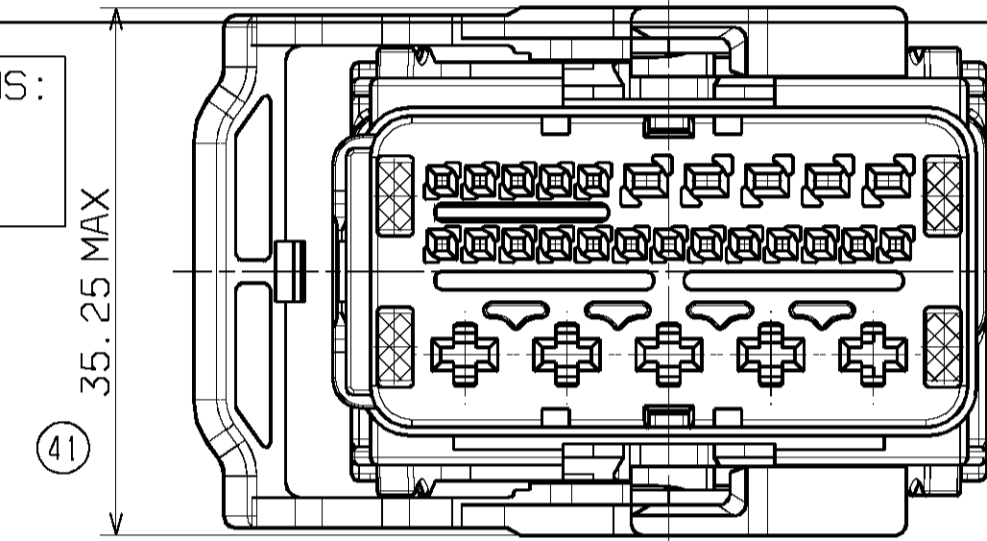
CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING FULLY OPENED
FOR TERMINAL INSERTION

LEFT WIRE OUTPUT



CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING IN
DELIVERY POSITION

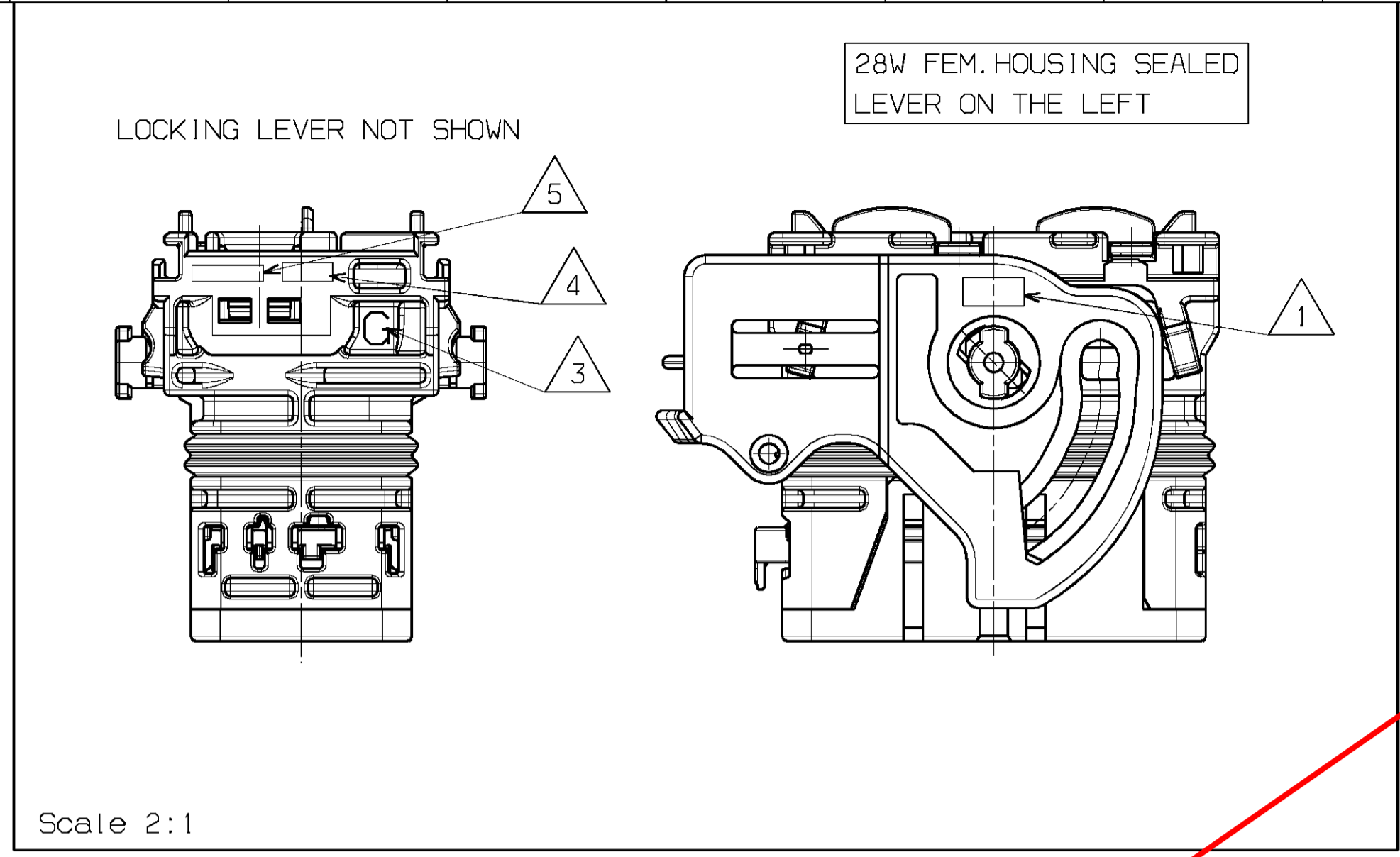
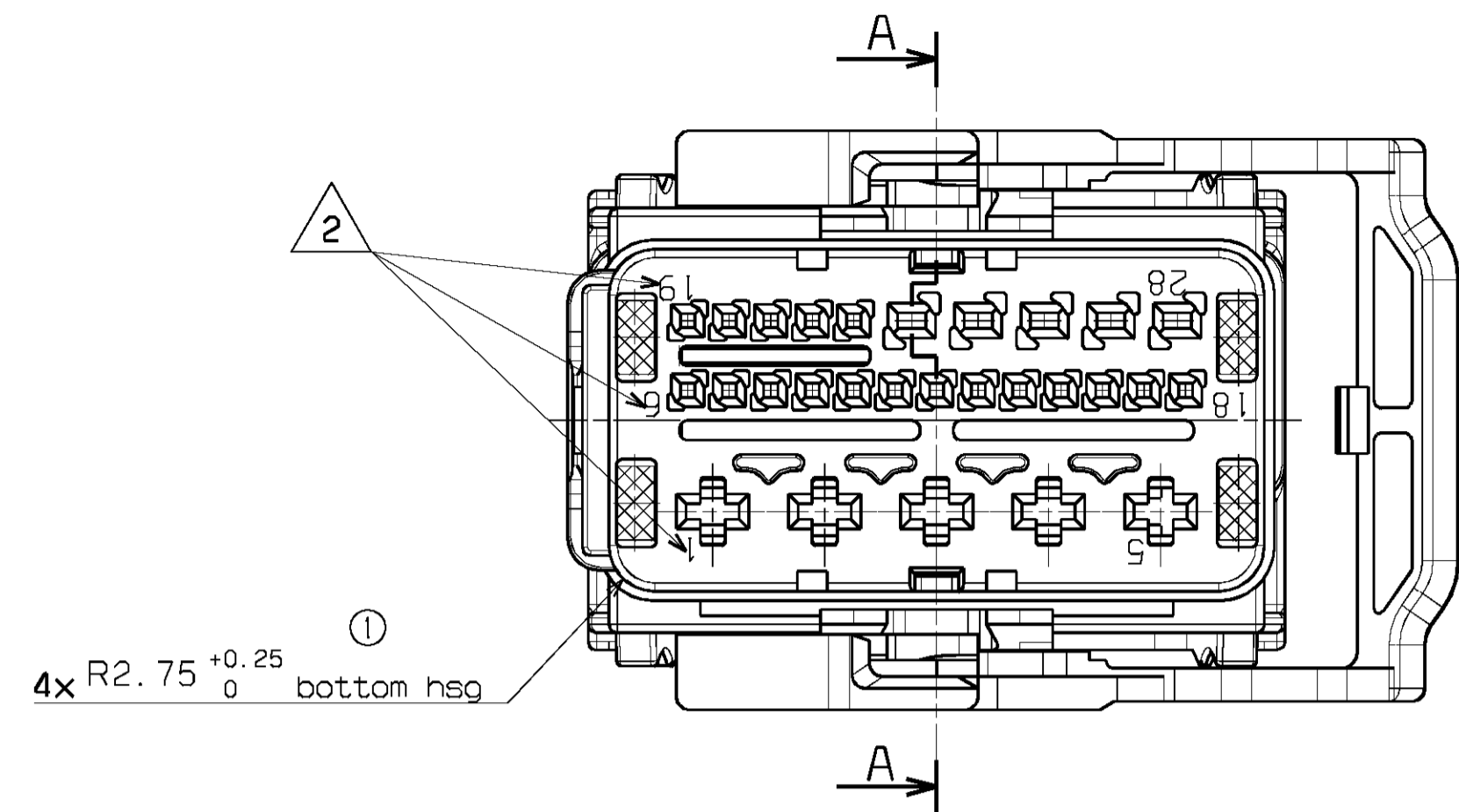
LEFT WIRE OUTPUT



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

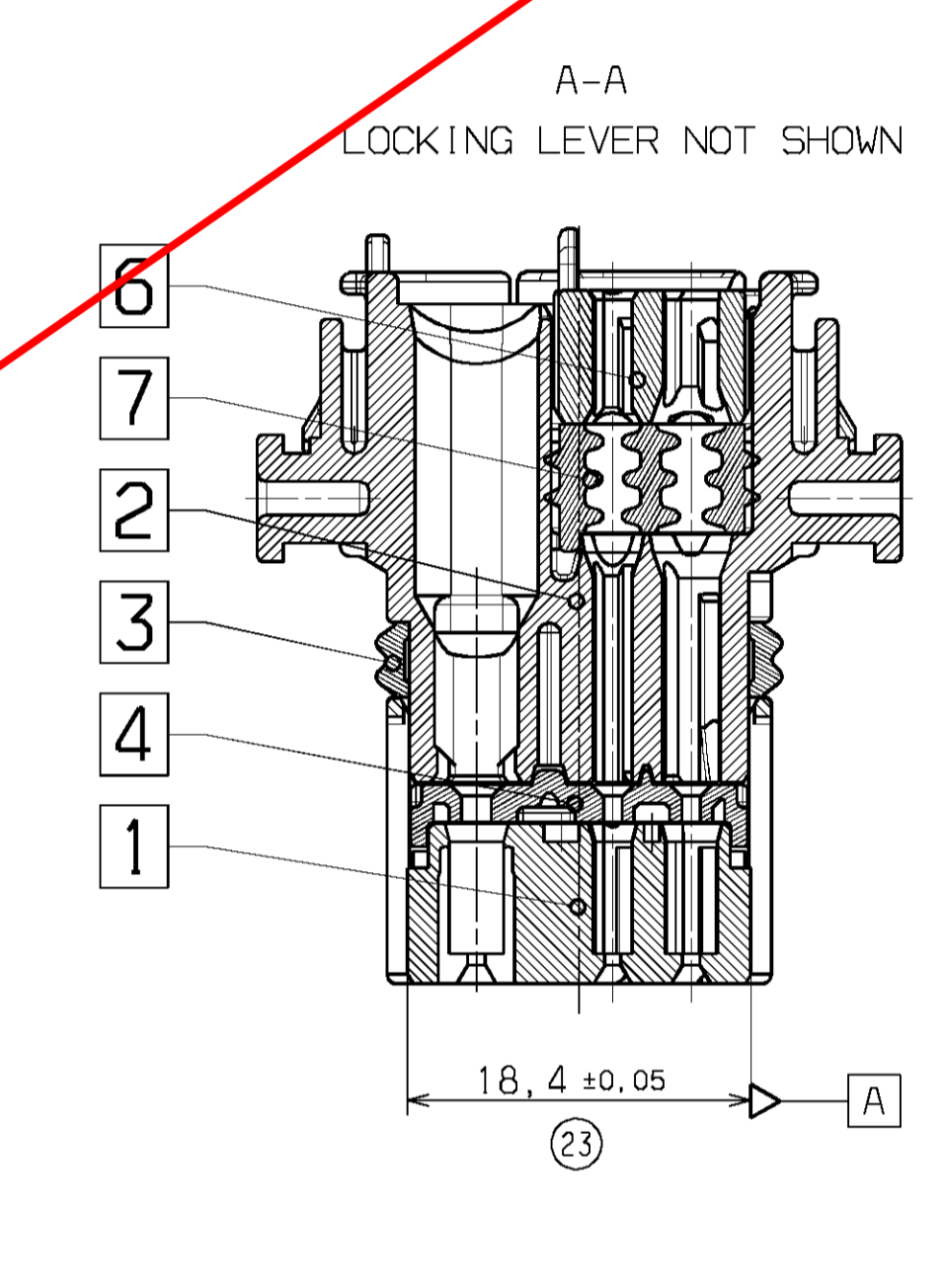
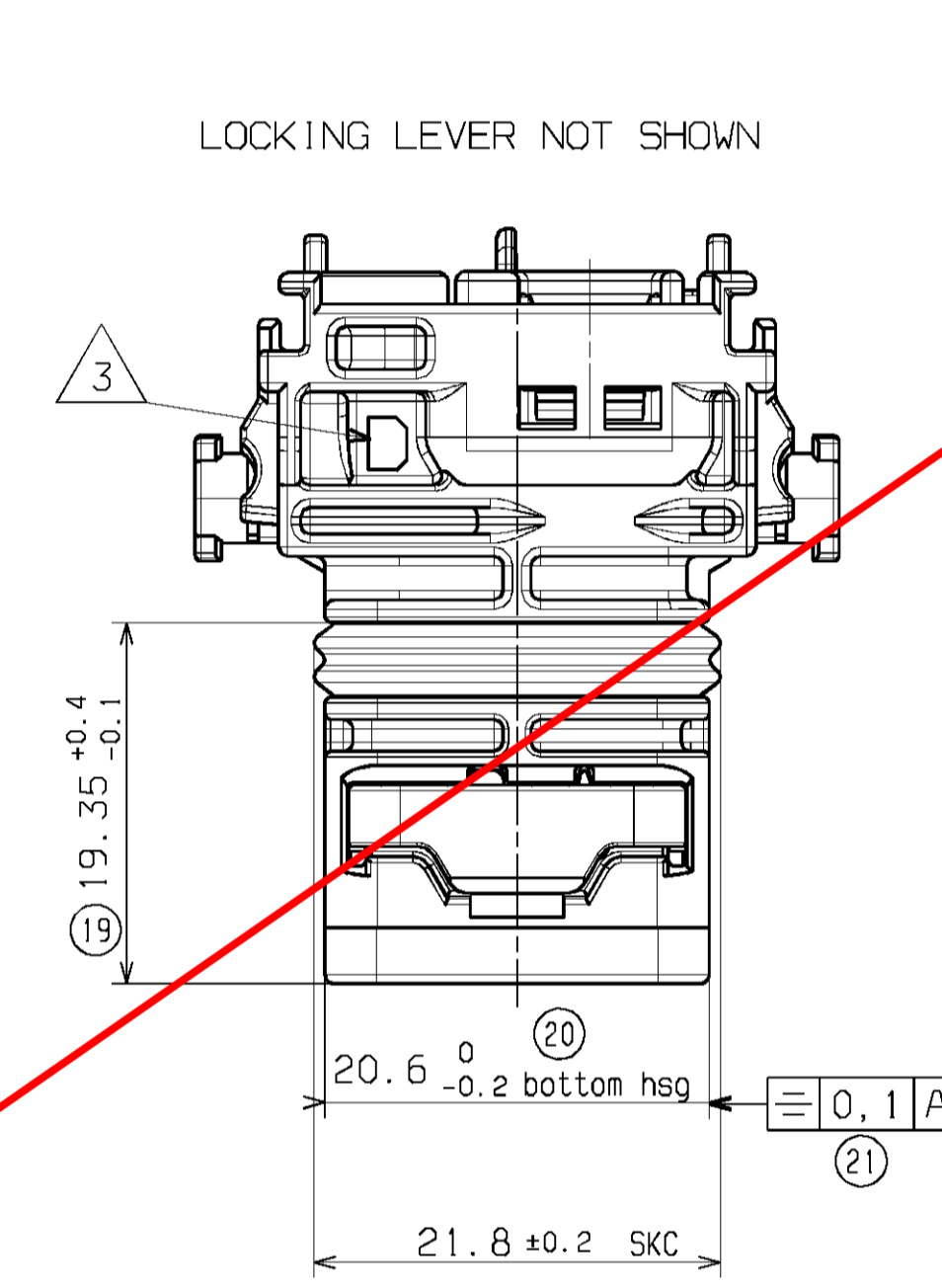
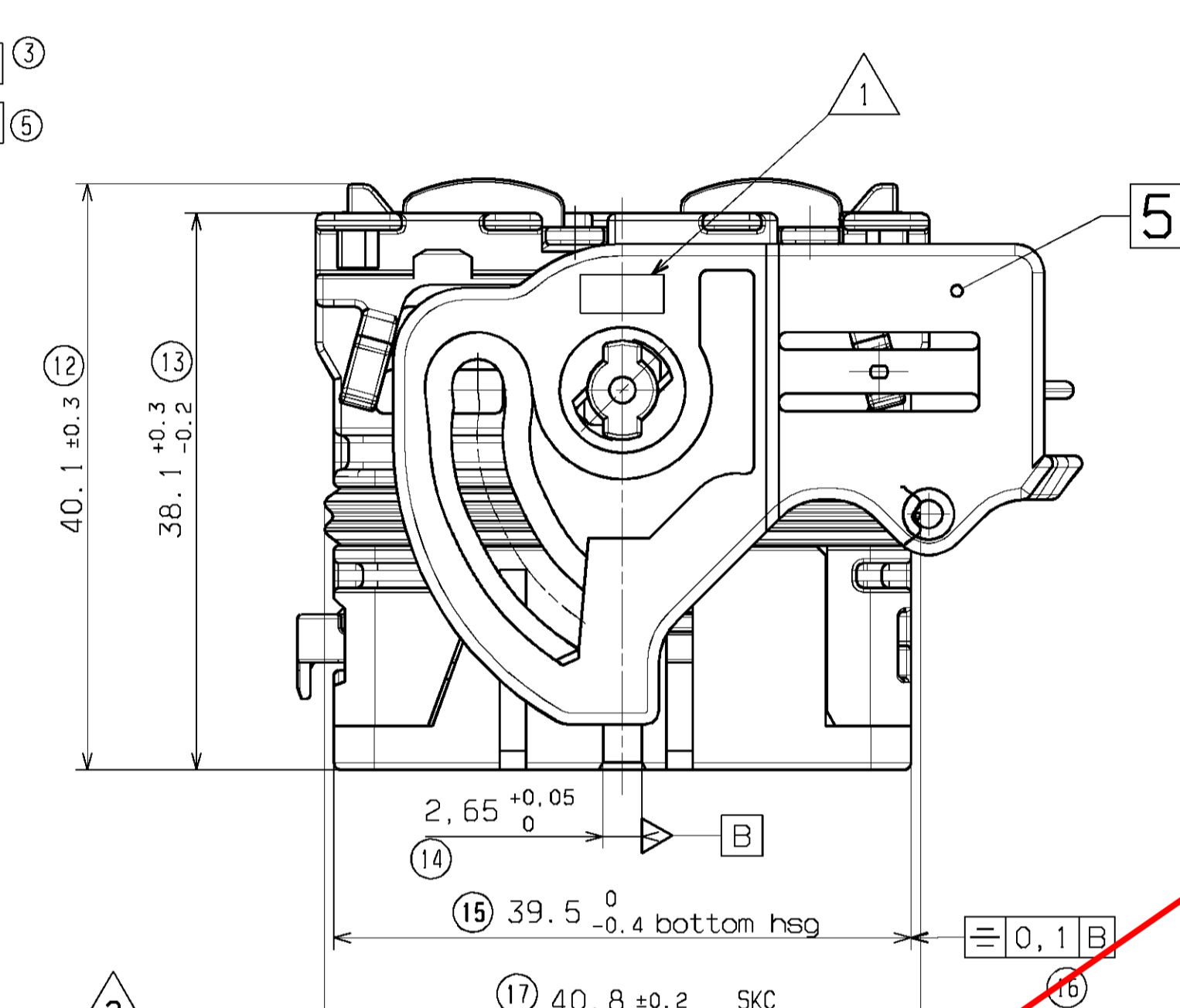
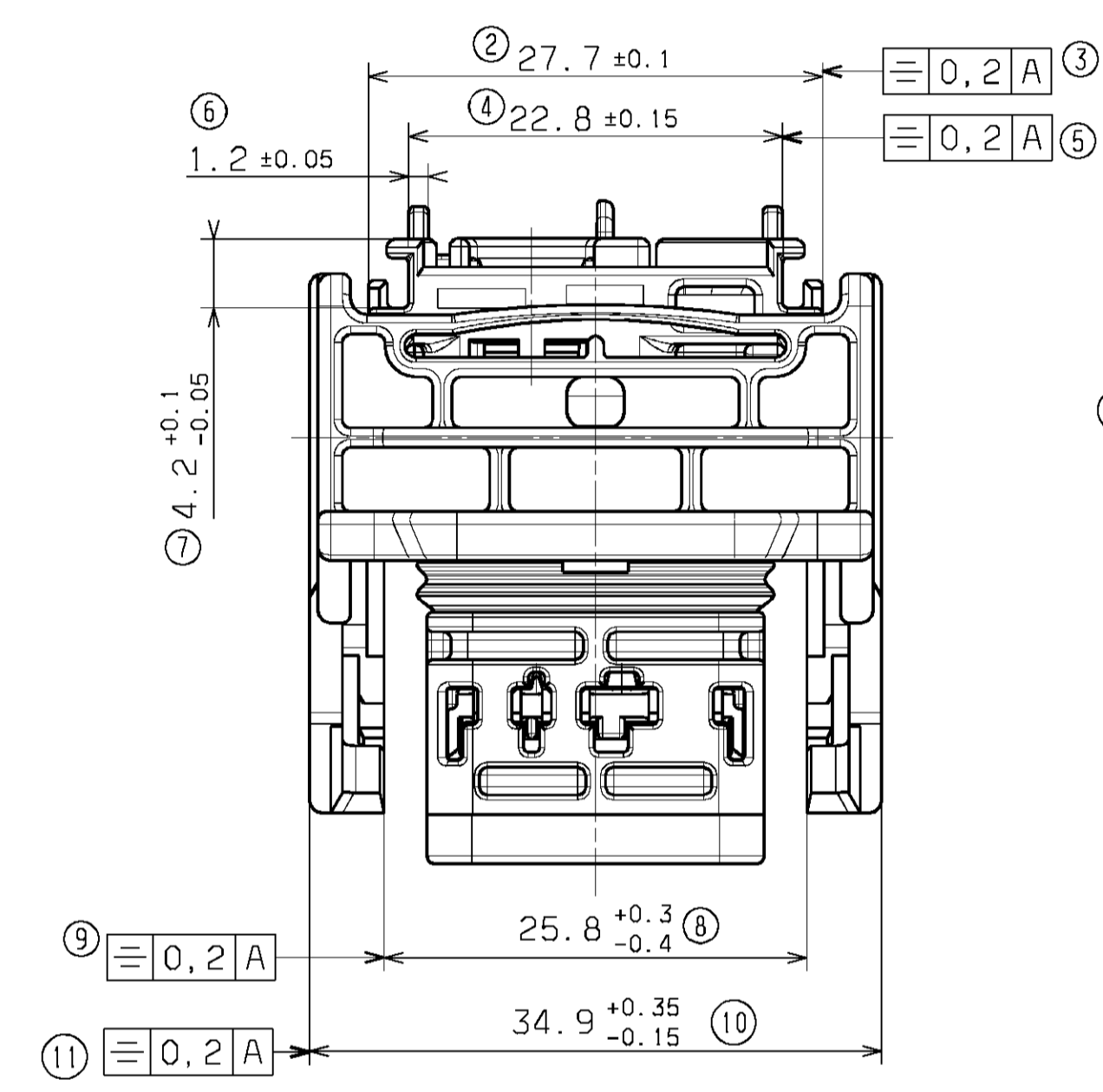
TERMINALS USED							
CAVITIES ID.	TERMINALS (Section mm ²)	REVEITEMENT PLATING	MOLEX P/N	WIRE SEAL	WIRE INSULATION DIAMETER		
6 to 23	CP 0.6 (0.35mm ² to 0.44mm ²)	Tin plated	0643221019	/	Ø1.25 min / Ø1.40 Max		
		Gold plated	0643221229				
	CP 0.6 (0.5mm ²)	Tin plated	0643221039			Ø1.40 min / Ø1.90 Max	
		Gold plated	0643221239			Ø1.40 min / Ø1.90 Max	
24 to 28	CP 0.6 (0.75mm ²)	Tin plated	0643221029	/	Ø1.40 min / Ø1.90 Max		
		Gold plated	0643221219				
	CP 1.5 (0.5mm ² to 1mm ²)	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 ² to 2mm ²)	Tin plated	0643231039	/	Ø2.10 min / Ø2.80 Max		
		Gold plated	0643231219				
	CP 2.8 (>0.5mm ² to 1mm ²)	Tin plated	0643241049			0643251162	Ø1.40 min / Ø2.15 Max
		Gold plated	0643241149				
	CP 2.8 (>1mm ² to 2mm ²)	Tin plated	0643241039			/	Ø2.10 min / Ø2.80 Max
		Gold plated	0643241139				
CP 2.8 (>2mm ² to 3mm ²)	Tin plated	0643241029	0643251188	Ø2.65 min / Ø3.45 Max			
	Gold plated	0643241129					
CP 2.8 (>3mm ² to 5mm ²)	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 MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
		mm INCH	DRAWN BY TBADAROUX	DATE 2007/09/25	TITLE CMC CONNECTOR 28 CKT POWER MAT SEAL VERSION		
		4 PLACES ± ± 3 PLACES ± ± 2 PLACES ± 0.1 ± 1 PLACE ± 0.1 ± ANGULAR ± 2°	CHECKED BY OPLESSIS	DATE 2007/09/25	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY CBOUCHAN	DATE 2007/09/25	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-64318-001	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					



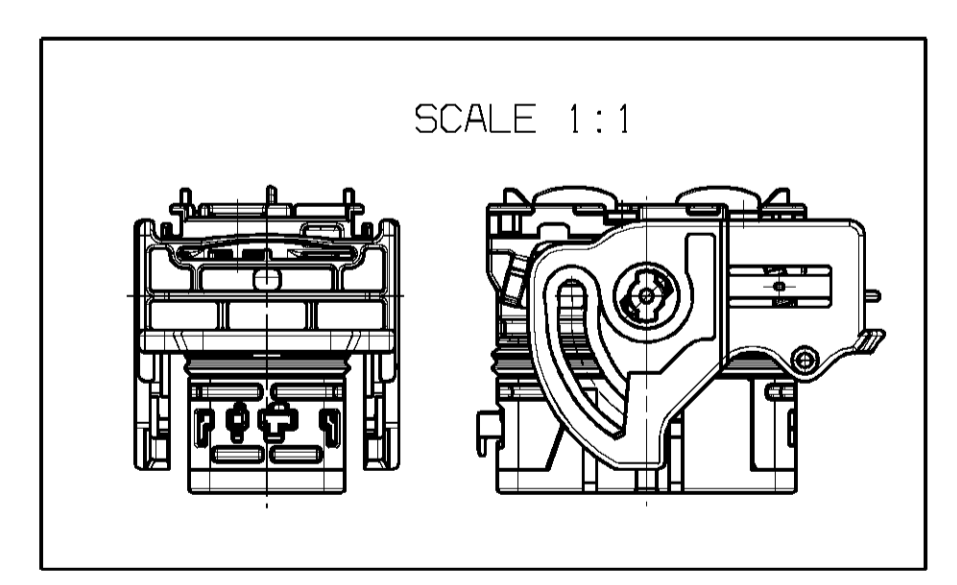
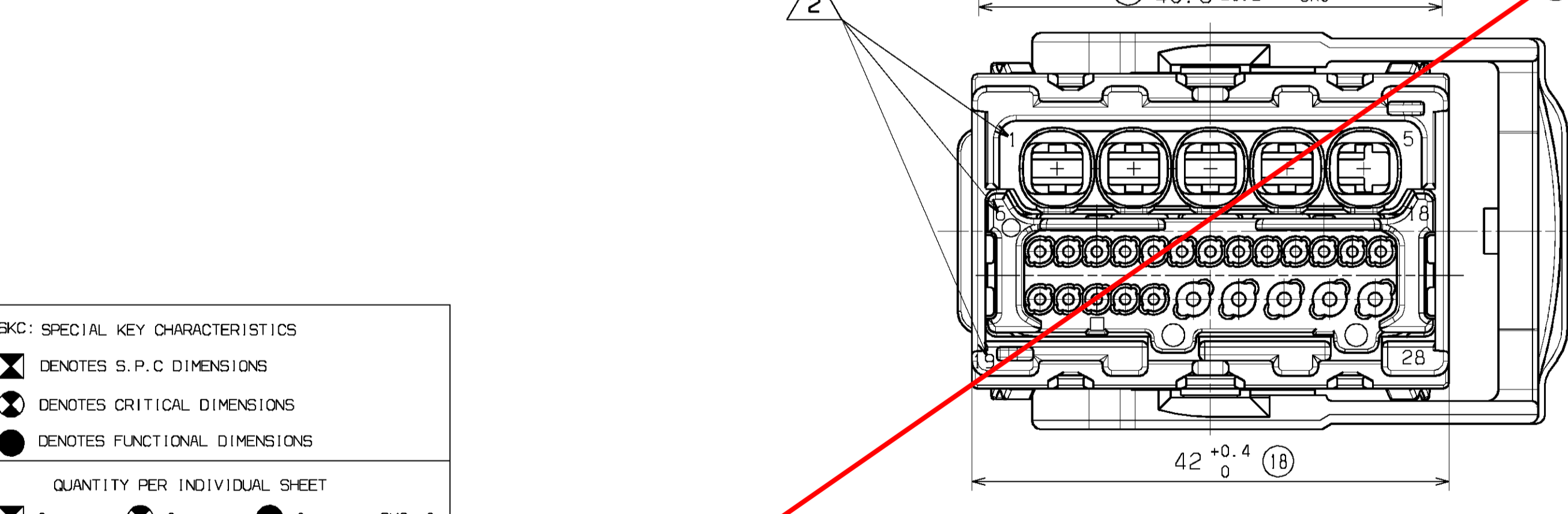
LEVER ON THE LEFT

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

VOID AND SUPERSEDED BY SD-64318-001 rev B

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

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 0989940093	7	MATT SEAL	SILICONE	GREEN ORANGE
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

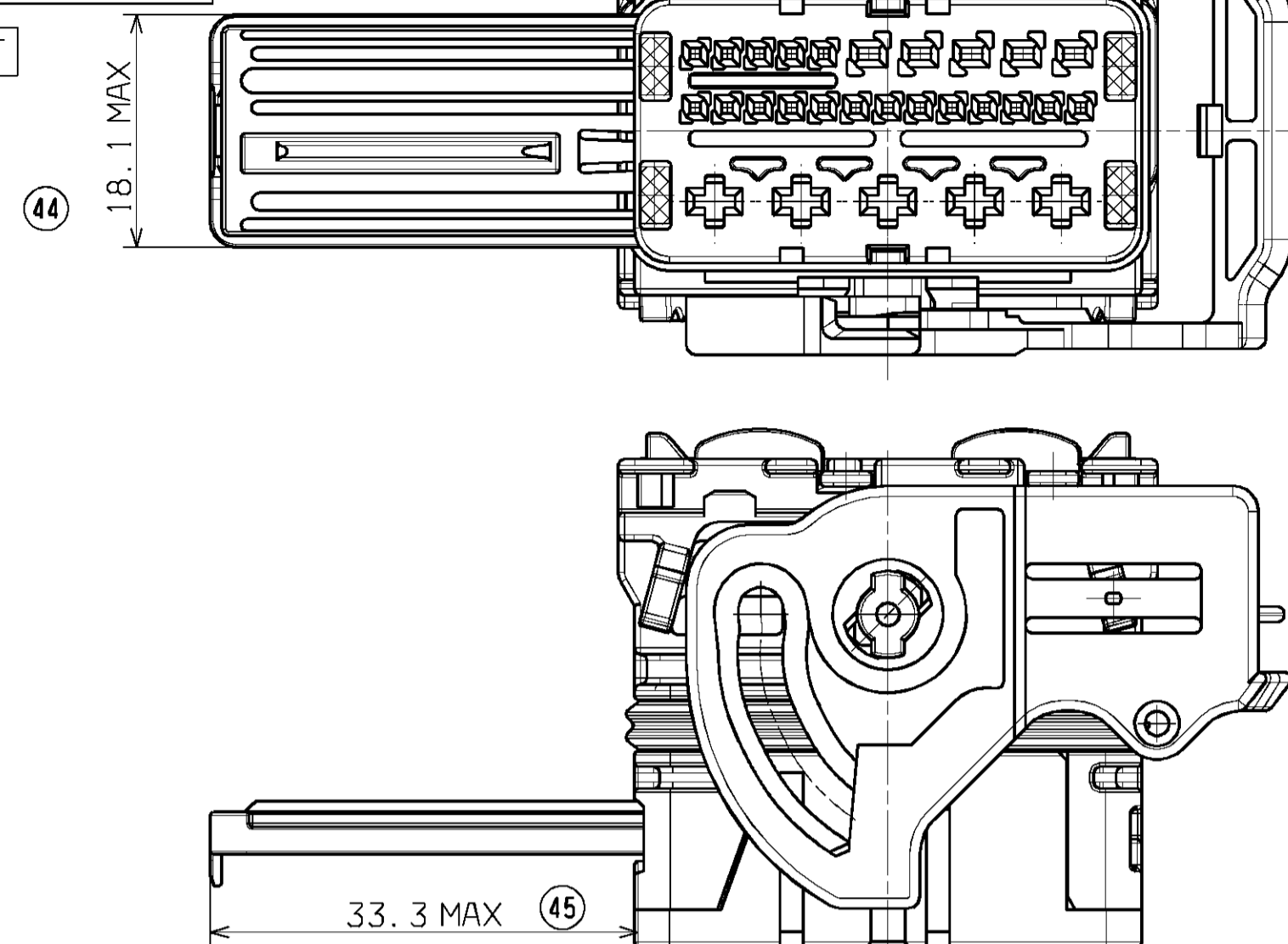
MARKINGS

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

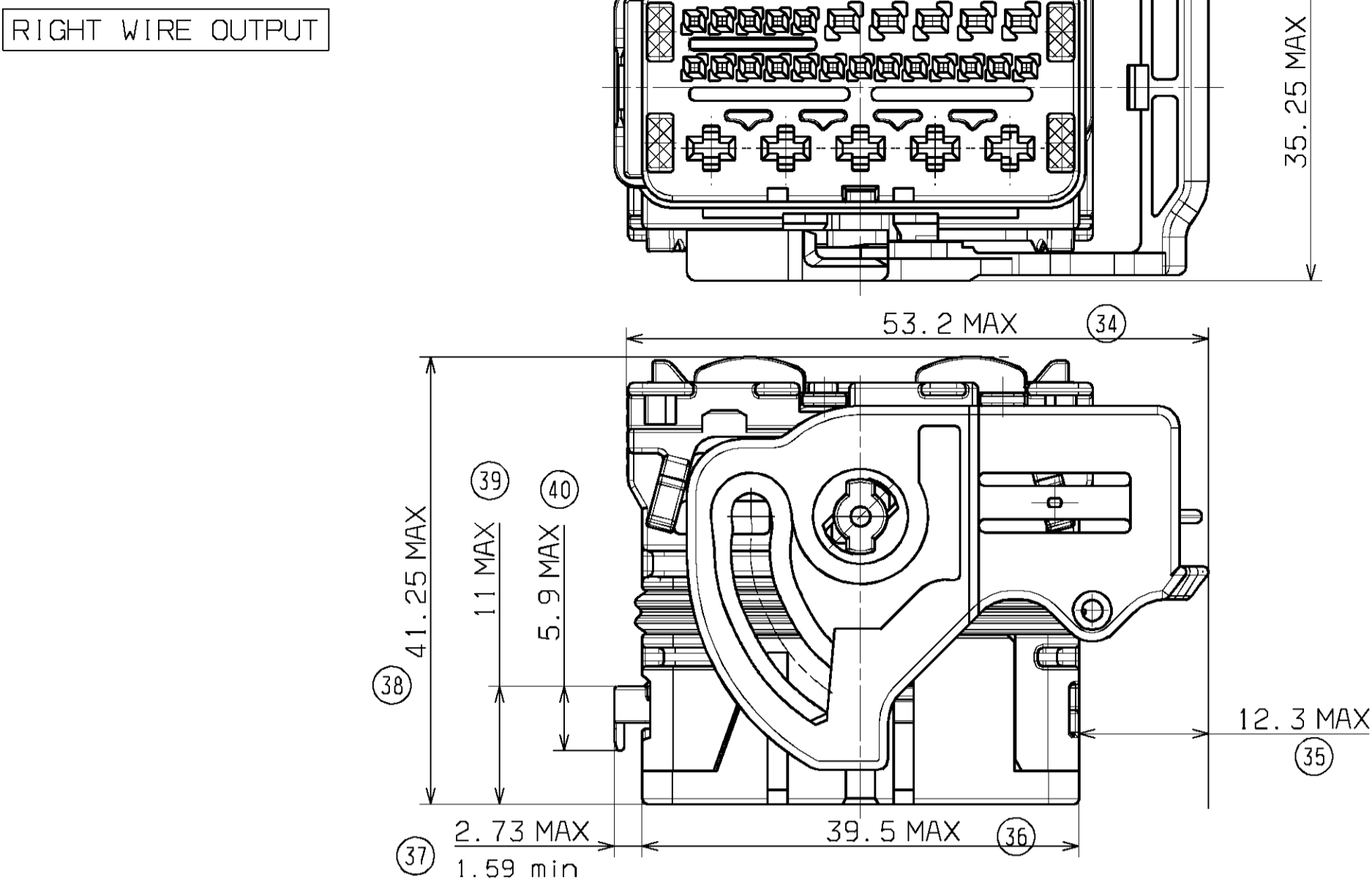
GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2.5:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
PLACES	TOLERANCE	mm	INCH			
4 PLACES	±					
3 PLACES	±					
2 PLACES	± 0.1					
1 PLACE	± 0.1					
ANGULAR ± 2°						

UPDATED DRAWING	EC NO: G2008-0367	DRWN: TBADAROUX 2008/04/21	CHK: OPLESSIS 2008/04/21	APPR: CBOUCHAN 2008/04/21	DESCRIPTION	DRAWN BY TBADAROUX	DATE 2007/09/25	CHECKED BY OPLESSIS	DATE 2007/09/25	APPROVED BY CBOUCHAN	DATE 2007/09/25	TITLE CMC CONNECTOR 28 CKT POWER MATT SEAL VERSION	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-98994-001	SHEET NO. 1 OF 2
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						MOLEX INCORPORATED			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

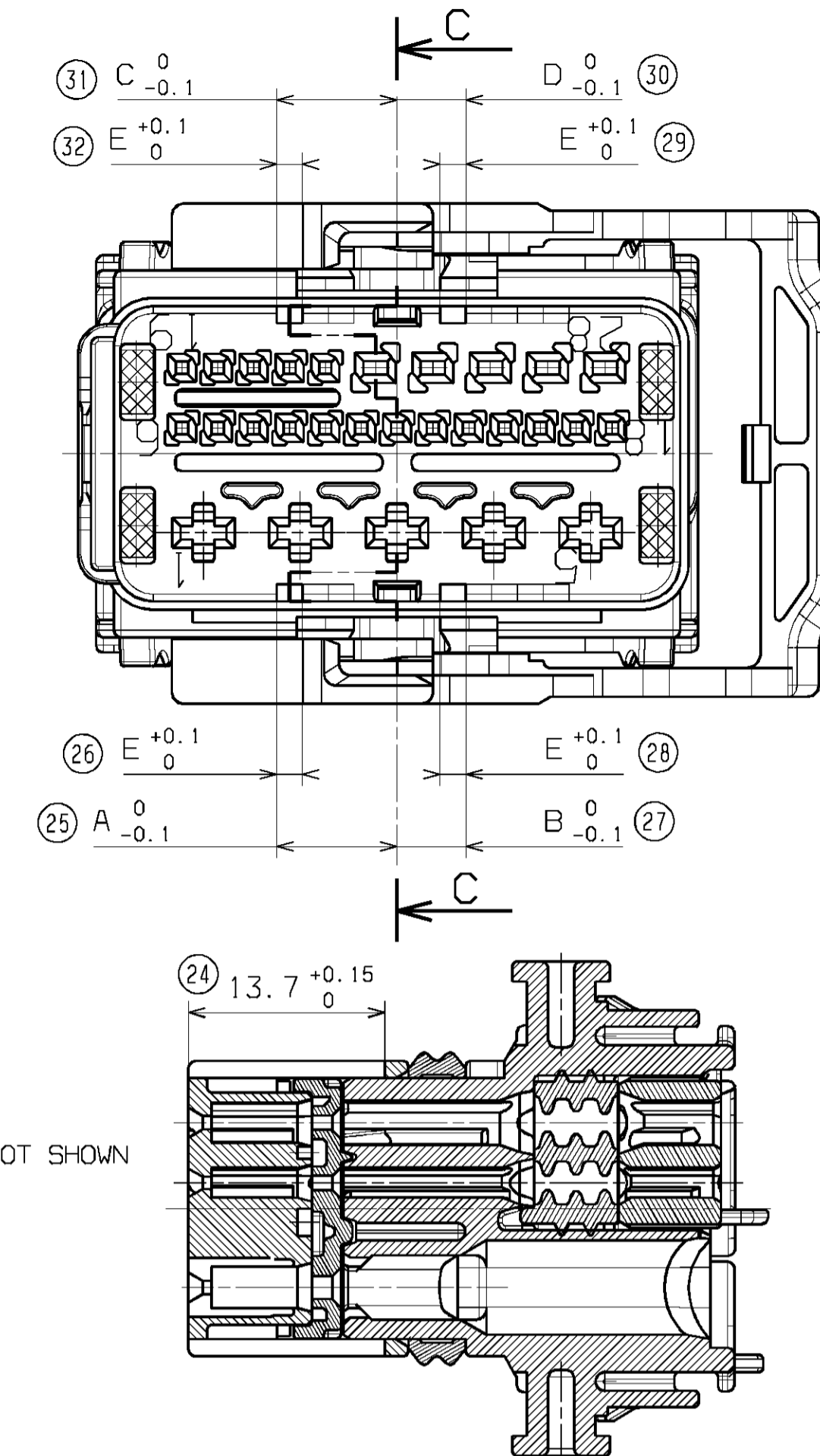
CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING FULLY OPENED
FOR TERMINAL INSERTION



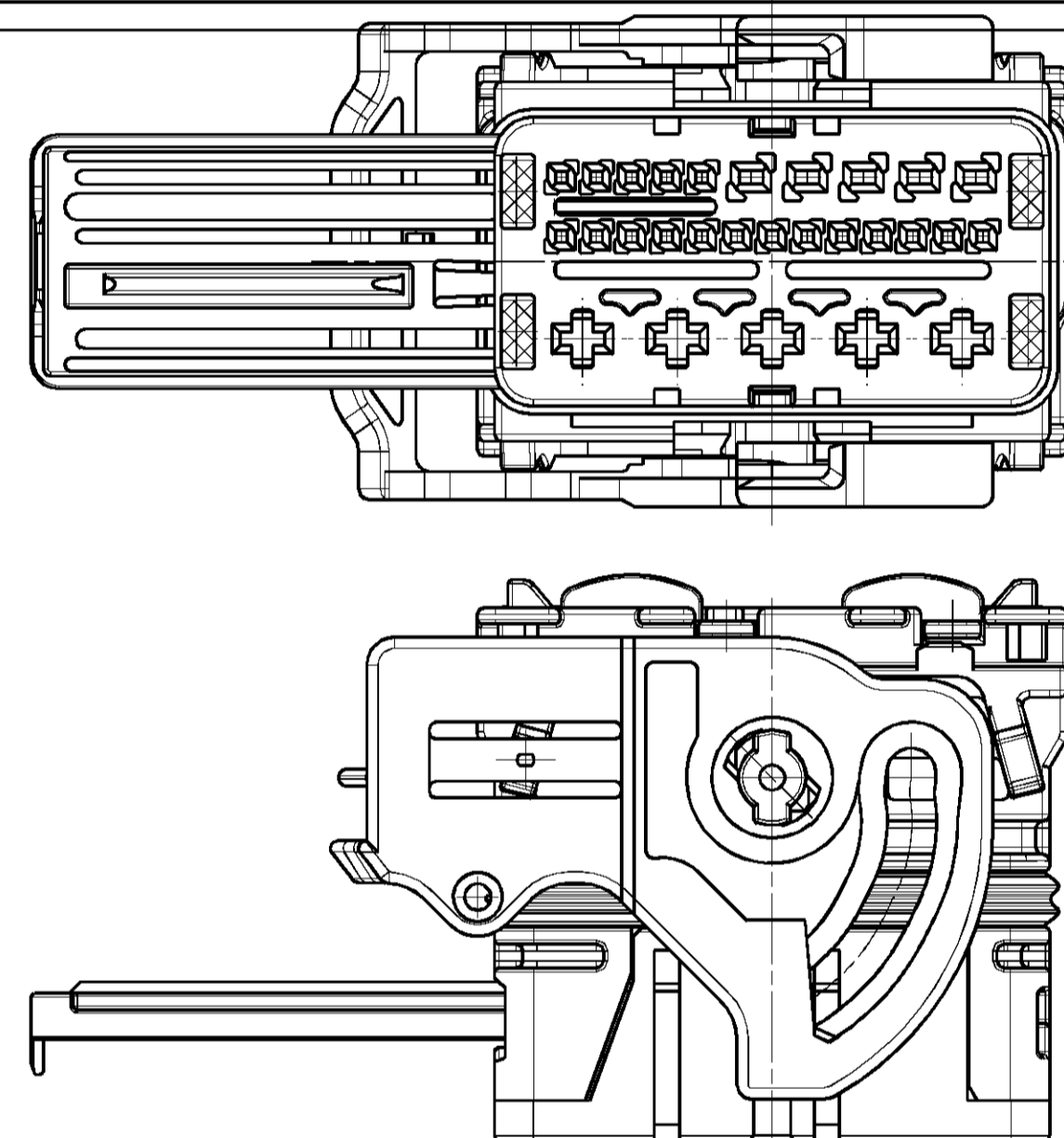
CONNECTOR OVERALL DIMENSIONS:
SECONDARY LOCKING IN
DELIVERY POSITION



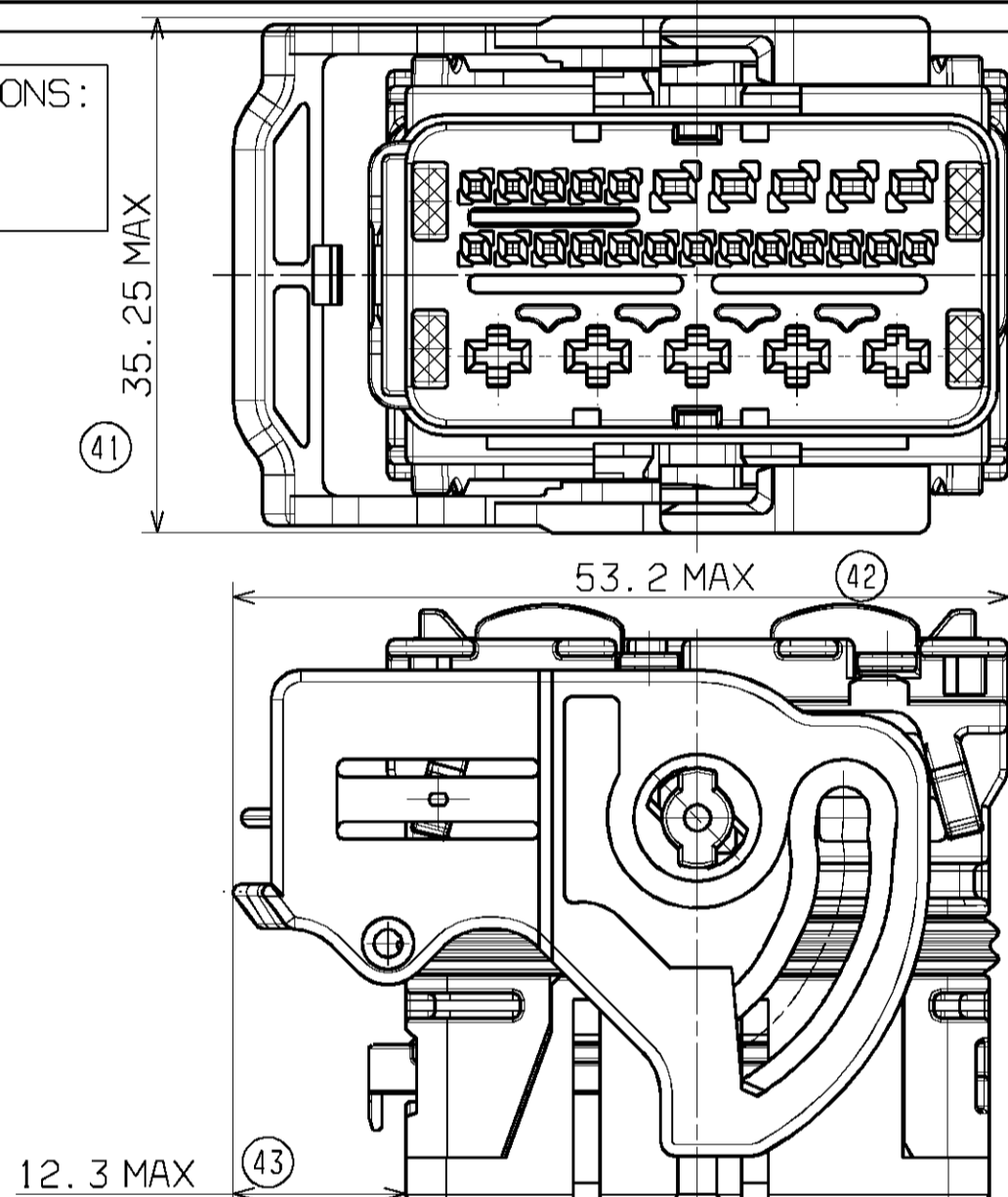
CODING POSITION



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 ²)	REVEITEMENT PLATING	MOLEX P/N	WIRE SEAL	WIRE INSULATION DIAMETER		
6 to 23	CP 0.6 (0.35mm ² to 0.44mm ²)	Tin plated	0643221019	/	Ø1.25 min / Ø1.40 Max		
		Gold plated	0643221229				
	CP 0.6 (0.5mm ²)	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 ²)	Tin plated	0643221029	/	Ø1.40 min / Ø1.90 Max		
		Gold plated	0643221219				
	CP 1.5 (0.5mm ² to 1mm ²)	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 ² to 2mm ²)	Tin plated	0643231039	/	Ø2.10 min / Ø2.80 Max		
		Gold plated	0643231219				
	CP 2.8 (>0.5mm ² to 1mm ²)	Tin plated	0643241049			0643251162	Ø1.40 min / Ø2.15 Max
		Gold plated	0643241149				
	CP 2.8 (>1mm ² to 2mm ²)	Tin plated	0643241039			0643251175	Ø2.10 min / Ø2.80 Max
Gold plated		0643241139					
CP 2.8 (>2mm ² to 3mm ²)		Tin plated	0643241029	0643251188	Ø2.65 min / Ø3.45 Max		
	Gold plated	0643241129					
CP 2.8 (>3mm ² to 5mm ²)	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	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
		mm INCH	DRAWN BY TBADAROUX	DATE 2007/09/25	TITLE CMC CONNECTOR 28 CKT POWER MATT SEAL VERSION		
		4 PLACES ± ± 3 PLACES ± ± 2 PLACES ± 0.1 ± 1 PLACE ± 0.1 ± ANGULAR ± 2°	CHECKED BY OPLESSIS	DATE 2007/09/25	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY CBOUCHAN	DATE 2007/09/25	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-98994-001	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					