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PPAP Package for:

Customer Name: Newark Electronics
Customer Part Number: 07X1741
(TE Connectivity Part Number): 1-1670916-1
Date: April 2021

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Nondisclosure Agreement

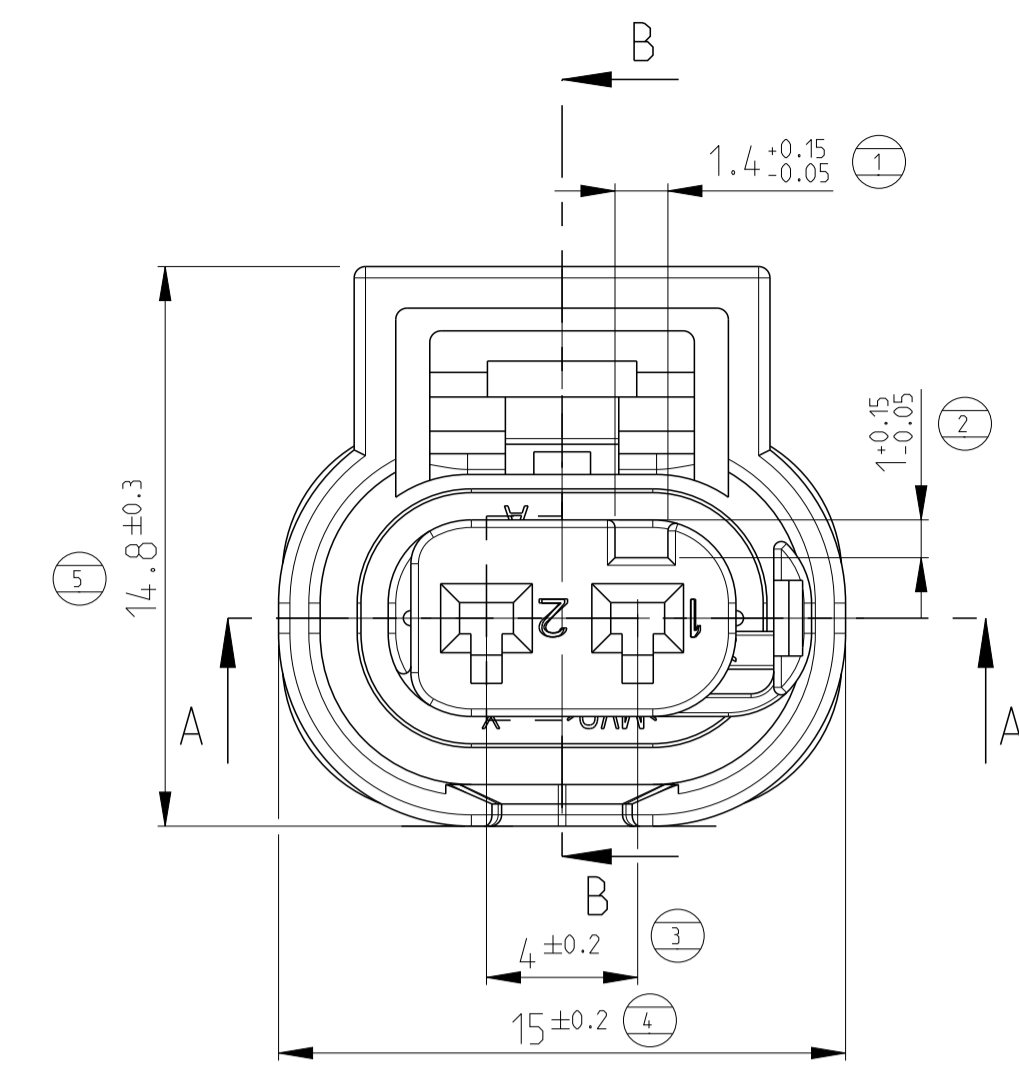
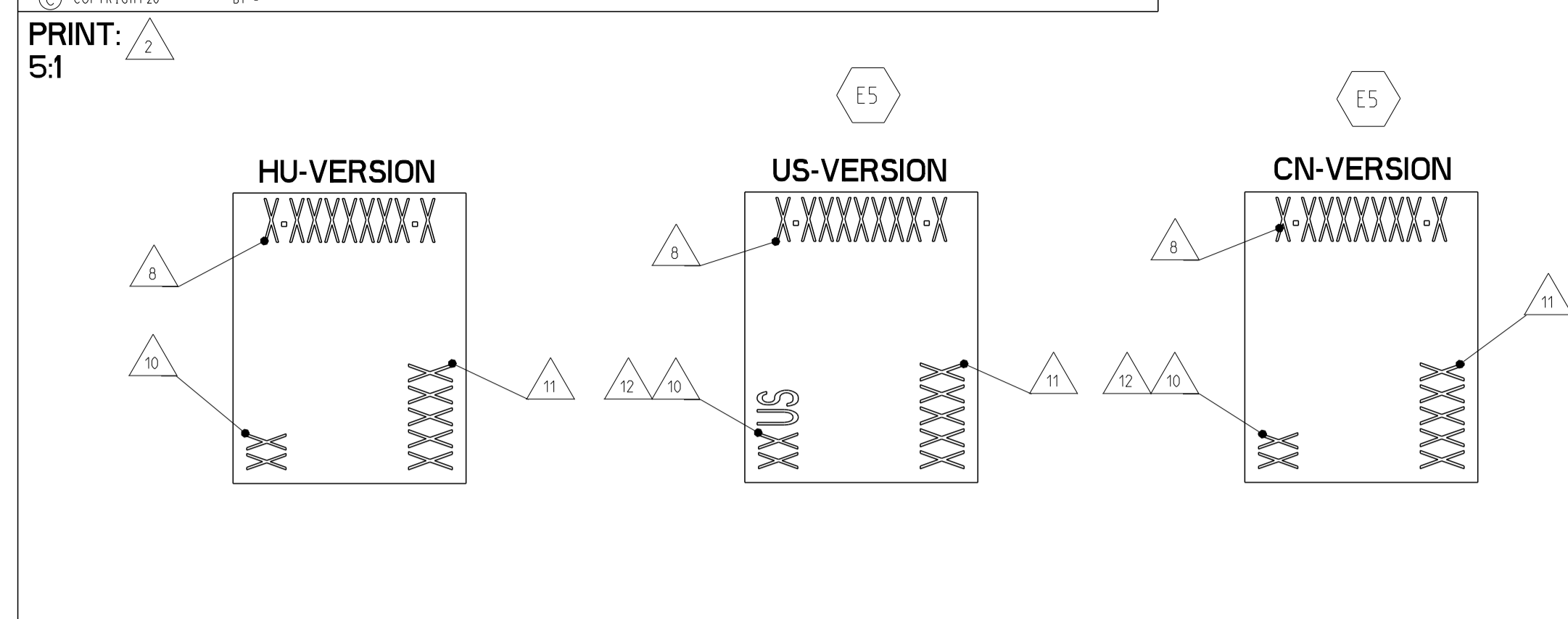
If a nondisclosure agreement has been reached with your company, it will be included on the following page(s). Please review the terms of this agreement to ensure that further actions associated with information contained within this PPAP package do not violate these terms.

If a nondisclosure agreement HAS NOT been reached, certain documents deemed confidential by TE Connectivity will not be included in this PPAP package. These documents include but are not limited to the Design FMEA, the Process Flow Diagram, the Process FMEA and the Control Plan. These documents can be reviewed by you company but cannot be retained.



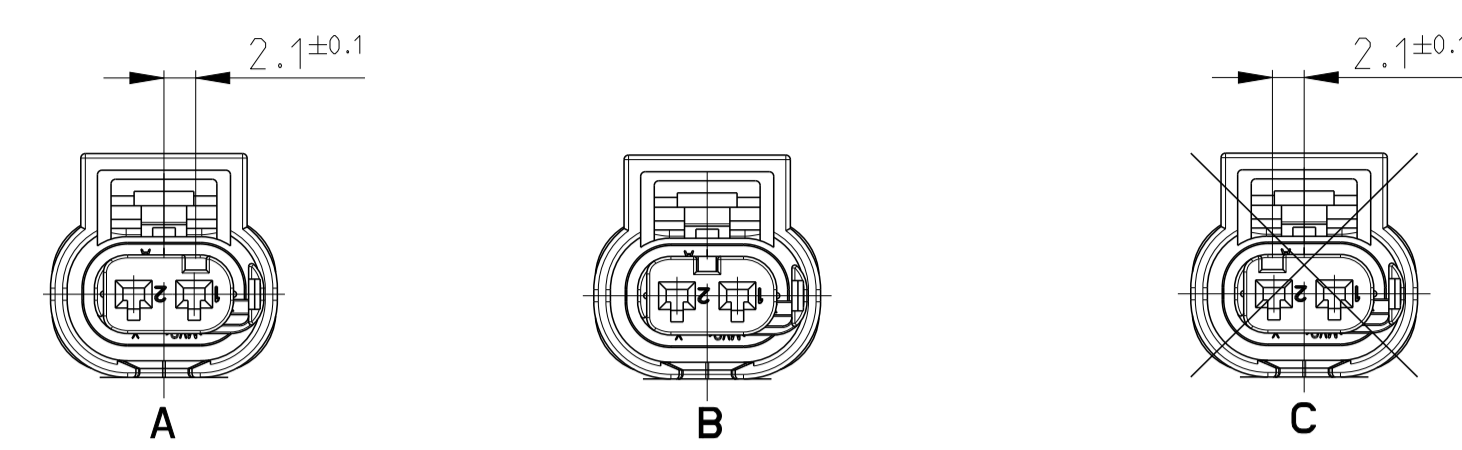
Section 1

Design Records



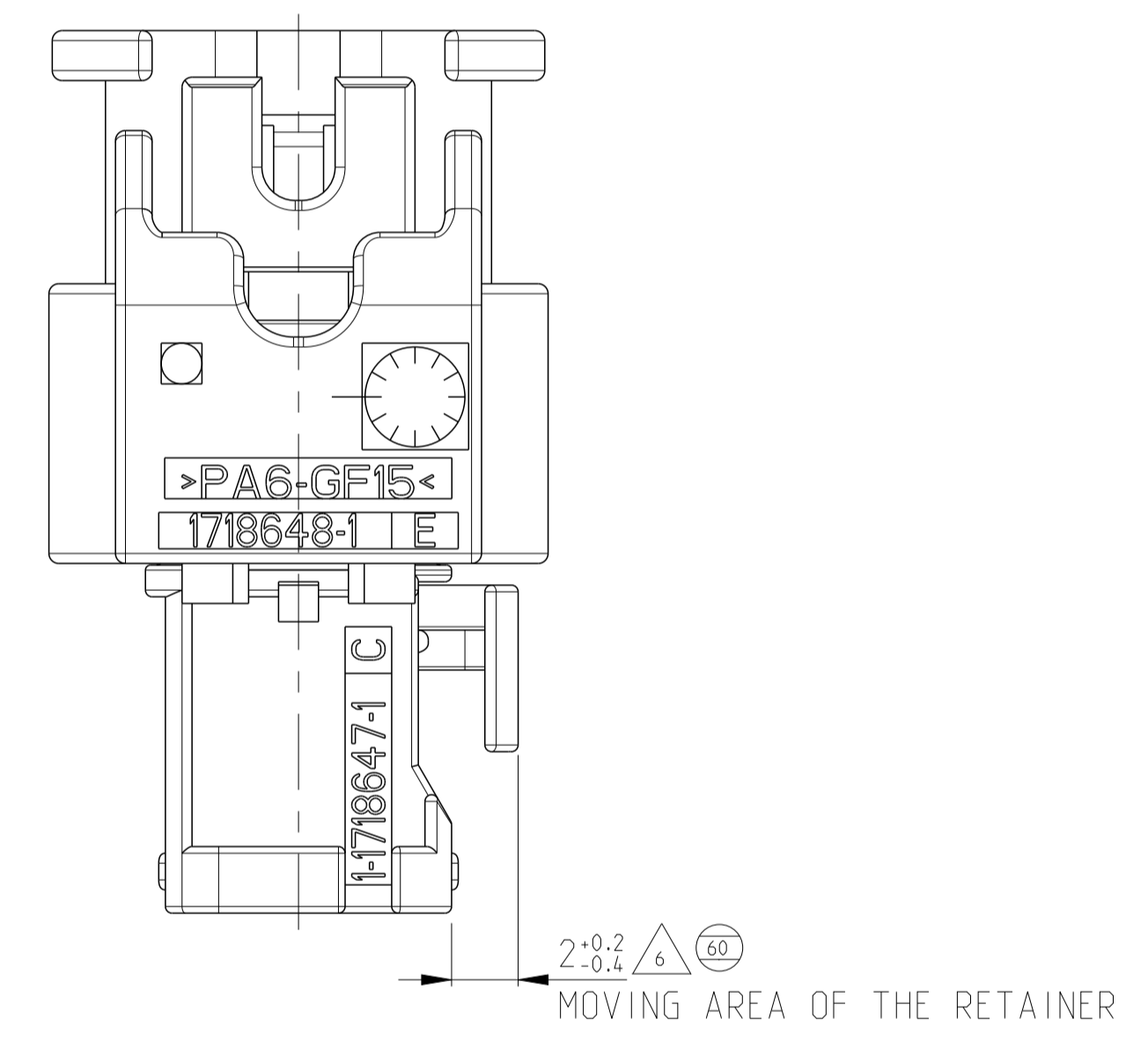
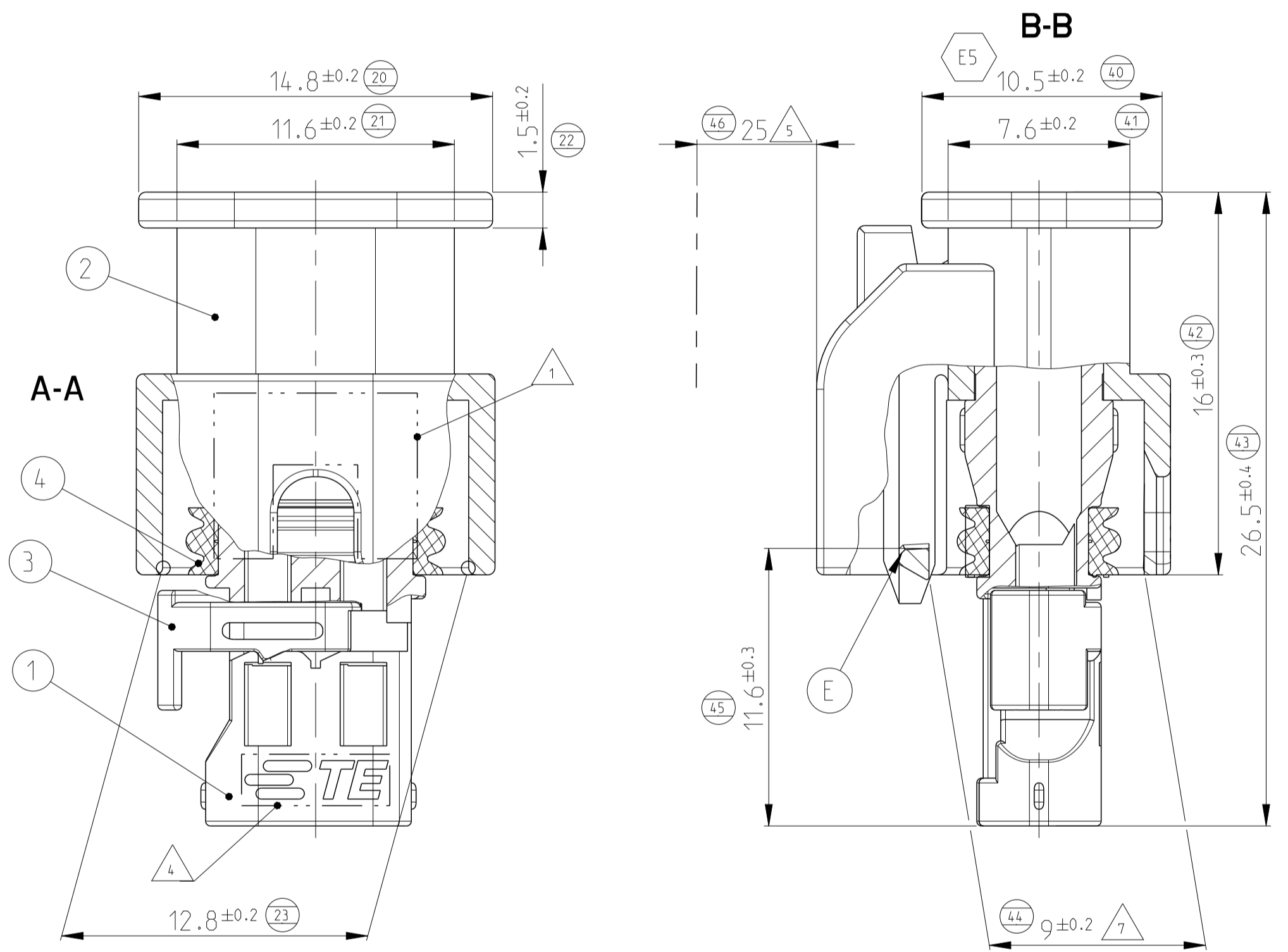
CODINGS
M 2:1

REVISIONS				
P.	LTN.	DESCRIPTION	DATE	APVD.
E2		LASER PRINT UPDATED WITH US VERS	17JUL2017	SZN RT
E3		LASER PRINT CORRECTED	06DEC2017	SZN LSZ
E4		DIVERGENT MARKING ADDED	16AUG2018	LSZ SZN
E5		LASER PRINT UPDATED. DIMENSION CORRECTED	08JAN2020	SZN LSZ

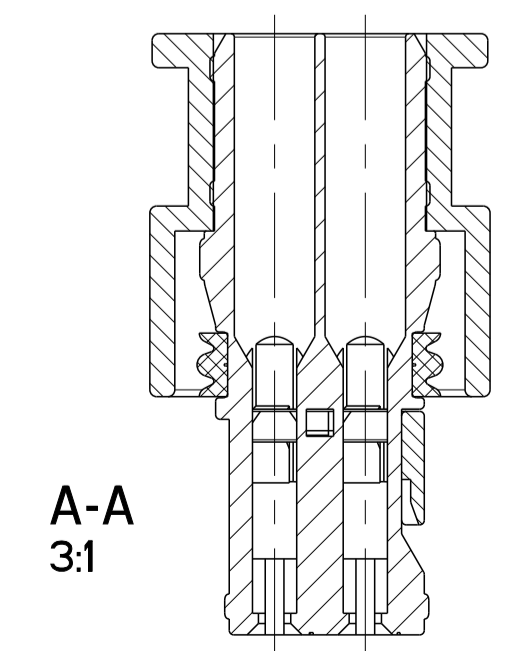


NOTES:

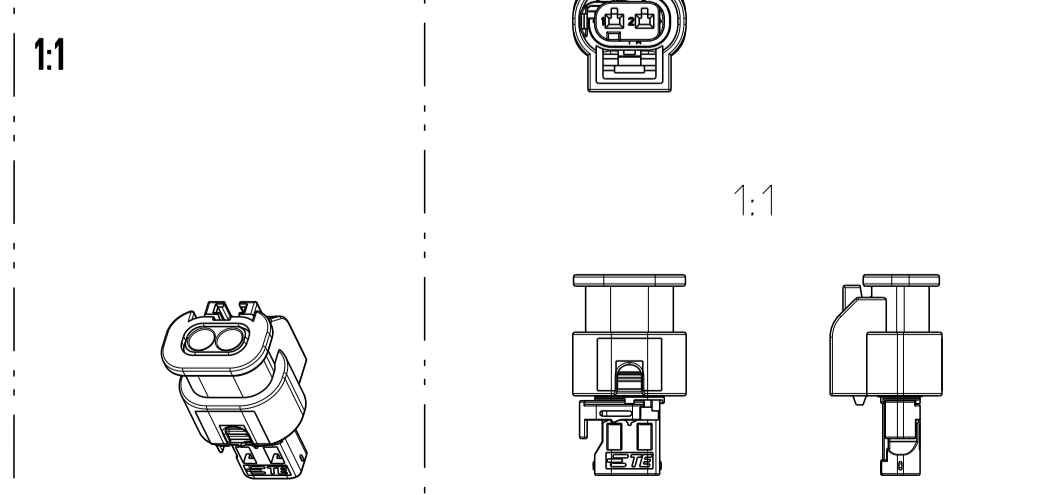
- 1 AREA FOR PRINT
- 2 USABLE CONTACTS MCON 1.2
SEE TE-NO. 1452674, SINGLE WIRE SYSTEM
- 3 MAX. WIRE SIZE RANGE 1.0 mm² FLR PERMITTED
FOR CAVITY-Ø 3.55MM
QUANTITY SEE WIRE HARNESS DRAWING
FOR PERMISSIBLE CURRENT CARRYING CAPACITY OF THE SINGLE CONTACT
SEE PRODUCT SPECIFICATION NO.108-18782
- 4 SUPPLIER-MARK
- 5 SPACE OF ACTIVITY
- 6 SUPPLY CONDITION: RETAINER IN PRELOCKED POSITION
- 7 WARPAGE PERMITTED TO MAX. -0.5mm
- 8 TE ORDER-NO.
- 9 ACCORDING TO INTERFACE DRAWING
SEE TE-NO. 114-18679-3
- 10 ASSEMBLY LINE SEGMENT IDENTIFICATION
- 11 DATE CODE (DDYY)
- E5 12 DIVERGENT MARKING FOR PARTS FROM U.S. and CHINA PRODUCTION



RETAINER IN END POSITION



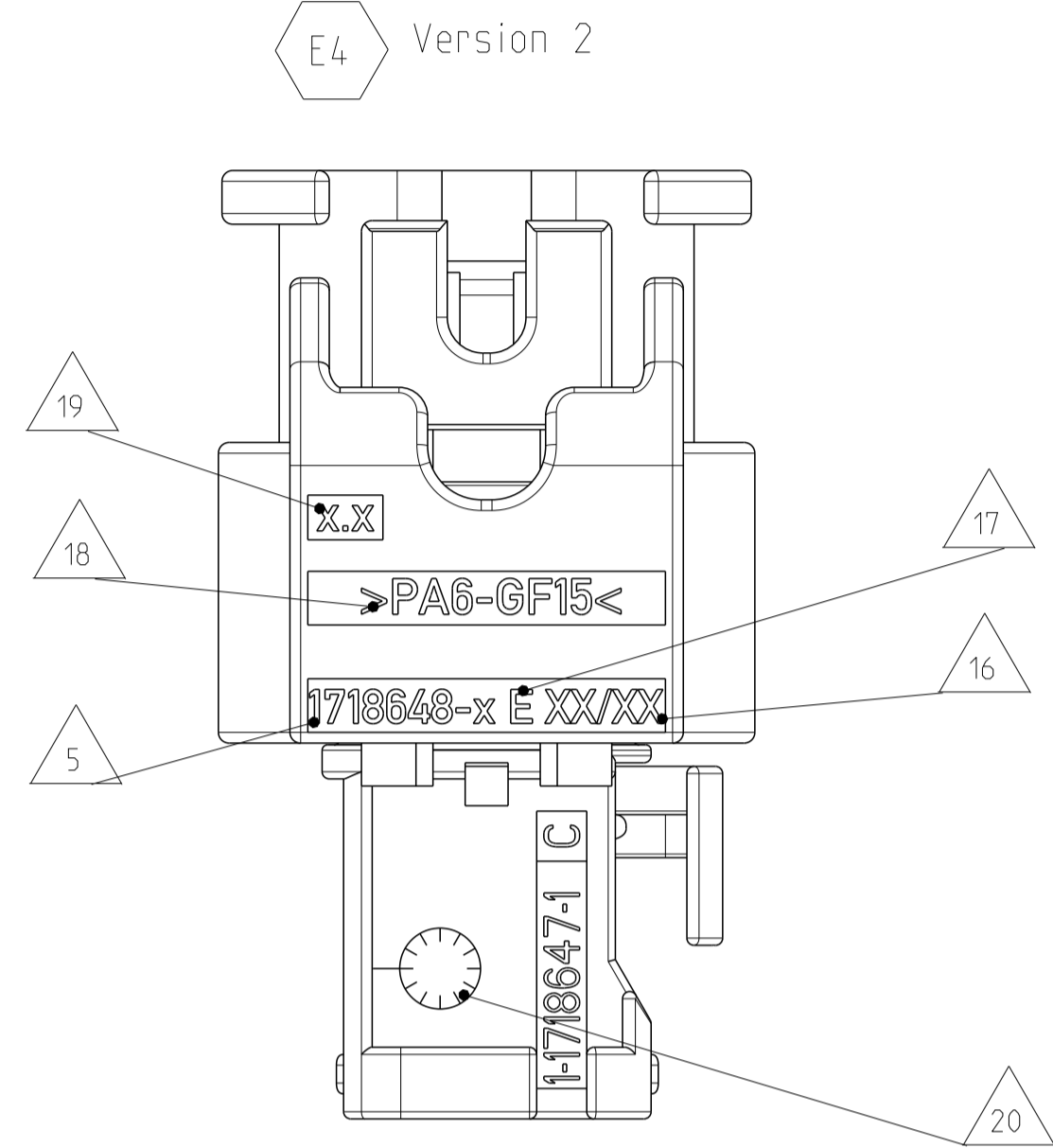
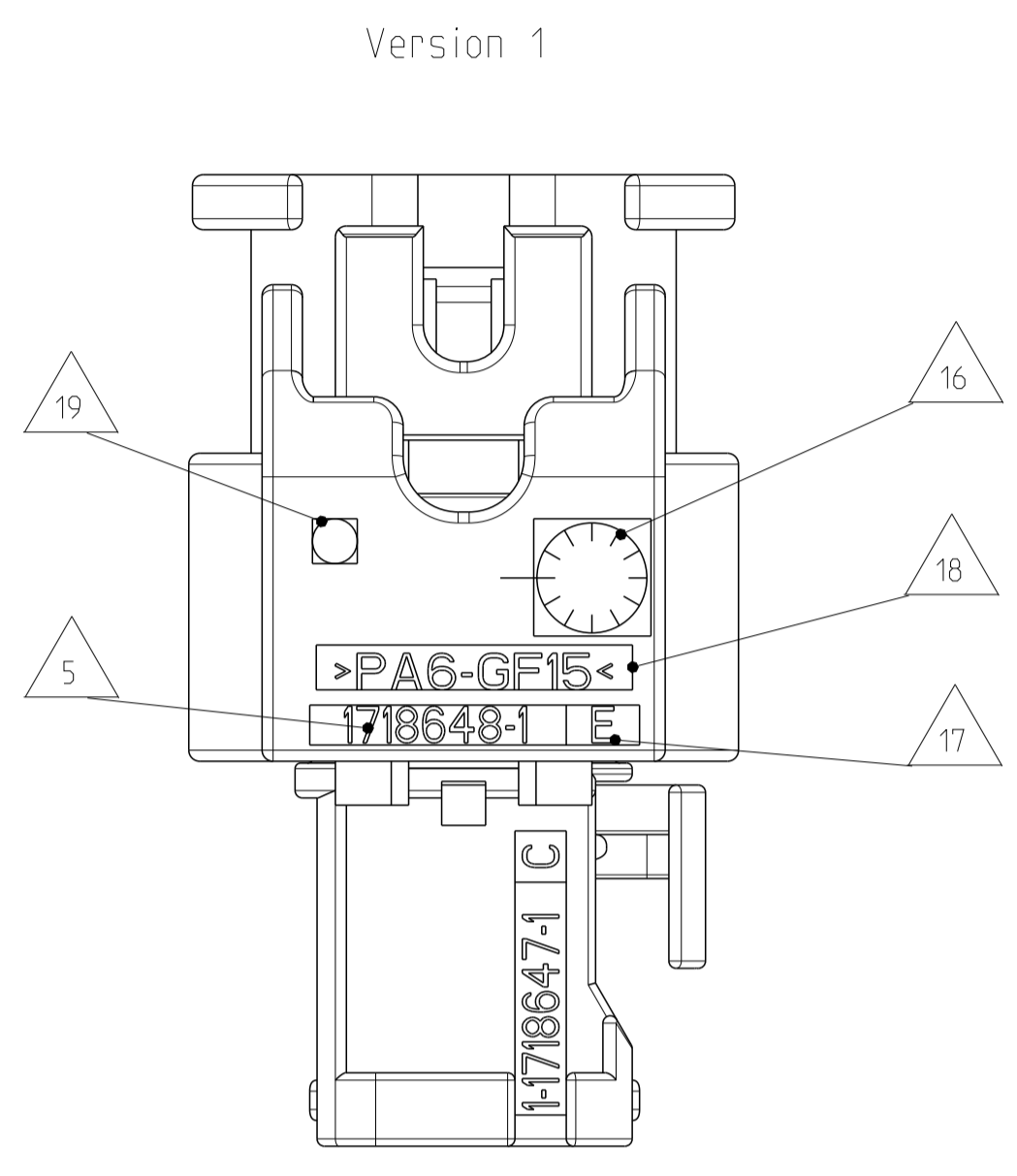
3D VIEW



THIS DRAWING IS A CONTROLLED DOCUMENT.		OWN R. Bachmann 19DEC2006	TE Connectivity	
DIMENSIONS: mm		CHK A. Schraebel		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD J. Woller	NAME 2pos. MCON 1.2 - LL Connector, Sealed	
Ø	0-PLC ±0.15	PRODUCT SPEC	SIZE	
Ø	1-PLC ±0.13	108-18969	CAGE CODE	
Ø	2-PLC ±0.13	APPLICATION SPEC	DRAWING NO	
Ø	3-PLC ±0.13	114-18861	RESTRICTED TO	
Ø	4-PLC ±0.13	114-18861	A1 00779 C=1670916	
Ø	ANGLES ±0.001	WEIGHT 2.4 g	SCALE 5:1 SHEET 1 OF 2 REV E5	
MATERIAL TBD	FINISH	CUSTOMER DRAWING		

REVISIONS				
P.	LTN	DESCRIPTION	DATE	APVD
		SEE SHEET 1		

E4 Divergent marking is allowed for parts from different tools



- △ 5 TE PART NO.:
- △ 16 - CIRCULAR DATE INSERT ONLY FOR VERSION 1
- DATE FORMAT FOR VERSION 2 (YY/MM)
- △ 17 REVISION, CORRESPONDING TO ACTUAL REVISION
- △ 18 MATERIAL IDENTIFICATION
- △ 19 MOULD CAVITY IDENTIFICATION
- △ 20 DATE INSERT FOR RECEPTACLE HOUSING

TE-ORDER-NO.	COD	DESCRIPTION	REV	QTY	DESCRIPTION	MATERIAL	SURFACE/COLOUR	ITEM
3-1670916-1	C	2pos. MCON 1.2 - LL Connector Sealed	A	1	2pos. MCON 1.2 - Seal	MVQ	NATURE	4
				1	2pos. MCON 1.2 - Retainer	PA66-GF15	VIOLETT	3
				1	2pos. MCON 1.2 - Protec. Cover	PA6-GF15	BLACK	2
				1	2pos. MCON 1.2 - Receptacle Hsg.	PA66-GF30	BLUE	1
2-1670916-1	B	2pos. MCON 1.2 - LL Connector Sealed	E	1	2pos. MCON 1.2 - Seal	MVQ	NATURE	4
				1	2pos. MCON 1.2 - Retainer	PA66-GF15	VIOLETT	3
				1	2pos. MCON 1.2 - Protec. Cover	PA6-GF15	BLACK	2
				1	2pos. MCON 1.2 - Receptacle Hsg.	PA66-GF30	NATURE	1
1-1670916-1	A	2pos. MCON 1.2 - LL Connector Sealed	E	1	2pos. MCON 1.2 - Seal	MVQ	NATURE	4
				1	2pos. MCON 1.2 - Retainer	PA66-GF15	VIOLETT	3
				1	2pos. MCON 1.2 - Protec. Cover	PA6-GF15	BLACK	2
				1	2pos. MCON 1.2 - Receptacle Hsg.	PA66-GF30	BLACK	1

THIS DRAWING IS A CONTROLLED DOCUMENT. DWN: 16AUG2018

TE Connectivity

NAME: CONNECTOR, 2 POS., MCON-1.2, SEALED Gehäuse, 2 pol., MCON-1.2, d1ch1

SIZE: A1 CAGE CODE: 00779 DRAWING NO: 1670916

SCALE: 5:1 SHEET: 2 OF 2 REV: E5



Section 2

Engineering Change Documents



Product Change Notification

Current Date: 14-Jul-2020

TE Connectivity

Product Change Notification: P-19-018198

PCN Date: 11-NOV-19

TE would like to inform you of the following change(s) to the listed TE Connectivity Product. In case of any further questions about this change(s), please contact your TE Connectivity Sales Engineer. Affected part, drawing and/or specification numbers are listed on the attached sheet(s).

General Product Description:

Multiple Part numbers. Phase 1. Americas Footprint Optimization.

Description of Changes

We hereby inform you about a transfer of tools and/or processes of the components of the Finished Goods that we ship to you to further improve our Supply Chain towards our customers. The transfer follows a strict procedure, which fully maintains quality, ability to supply and form-fit-function of the concerned products. The receiving manufacturing location operates under a certified quality management system in accordance with standard automotive requirements. These moves will be validated not to affect product FFF, tool geometry or quality performance. TE will uphold our responsibility to internally validate and approve these tools among appropriate first article dimensional and capability analysis, comparative 2-sample T-tests before and after moves, before and after CT scans where needed, and PV test as defined by TE product engineering. TE is willing to provide any such validation data to our customers as our joint non-disclosure agreement statuses allow. AMEND with PCN P-19-018058

Reason for Changes:

Product improvement. These changes are part of an overall effort from TE to improve our supply chain toward our customers and to focus each plant on core products and processes. A TE-internal release test based on the relevant part specifications will be executed before delivery and this notification serves to fulfill our notification requirements as prescribed by AIAG 4th edition. This change notification document accompanies a letter sent to your organization on September 13, 2019 signed by our Vice President of Sales and Marketing. Follow up conversations can occur upon request with your sales contact within 15 calendar days after receipt of this PCN. TE can share validation data with your organization upon request. If you have any questions or needs from this move, please contact your sales engineer within 15 days of receipt of this letter. If no response is received on this period, TE will consider this as an approval and tools must move to the new locations.

Estimated Dates:

Last Order Date (Obsolete Parts Only):	First Date To Ship (Changed Parts Only):
	03-JAN-2020
Last Ship Date (Obsolete Parts Only):	Last Date for Mixed Shipments: (Changed Parts Only):
	No Mixed Shipments

Part Number(s) being Modified:

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-1417746-2	NO					
1-1419168-1	NO		"V23542-G1506-D101"			
1-1419168-2	NO		"V23542-G1506-D102"			
1-1419168-3	NO		"V23542-G1506-D103"			
1-1419168-5	NO					
1-1438096-8	NO					
1-1438103-3	NO					
1-1438103-9	NO					
1-1438153-1	NO					
1-1438153-3	NO					
1-1438153-4	NO					
1-1438153-7	NO					
1-1438153-8	NO					
1-1438435-3	NO					
1-1438693-4	NO					
1-1438693-6	NO					
1-1438693-8	NO					
1-1438693-9	NO					
1-1438841-1	NO					
1-1438841-2	NO					
1-1438841-7	NO					
1-1456426-1	NO					
1-1456426-2	NO					
1-1456426-5	NO					
1-1456426-6	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-1456985-0	NO					
1-1587041-4	NO					
1-1670915-1	NO					
1-1670917-1	NO					
1-1718644-5	NO					
1-1732466-0	NO					
1-1924067-1	NO					
1-1924067-2	NO					
1-1924067-3	NO					
1-1924067-4	NO					
1-1924067-5	NO					
1-1924067-6	NO					
1-1924067-9	NO					
1-1924513-5	NO					
1-1924513-9	NO					
1-1924674-0	NO					
1-1924674-2	NO					
1-1924674-3	NO					
1-1924675-9	NO					
1-1924783-1	NO					
1-1924783-3	NO					
1-1924783-7	NO					
1-1924783-8	NO					
1-1924939-0	NO					
1-1924939-1	NO					
1-1924939-5	NO					
1-1924939-6	NO					
1-1924941-0	NO					
1-1924941-1	NO					
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1-1924941-4	NO					
1-1924941-5	NO					
1-1924941-6	NO					
1-1924941-8	NO					
1-1924943-7	NO					
1-1924943-8	NO					
1-1924944-0	NO					
1-1924944-1	NO					
1-1924944-5	NO					
1-1924944-7	NO					
1-1924944-8	NO					
1-2035383-1	NO					
1-2035383-9	NO					
1-2098198-1	NO					
1-2098559-2	NO					
1-2098863-1	NO					
1-2098922-3	NO					
1-2098922-4	NO					
1-2098922-5	NO					
1-2098923-0	NO					
1-2098923-1	NO					
1-2098923-3	NO					
1-2098923-4	NO					
1-2098923-7	NO					
1-2098924-2	NO					
1-2103177-1	NO					
1-2103177-2	NO					
1-2103177-4	NO					
1-2138020-0	NO					
1-2203455-0	NO					
1-2203515-0	NO					
1-2203515-1	NO					
1-2203515-3	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-2203515-4	NO					
1-2203515-7	NO					
1-2203529-2	NO					
1-2203654-2	NO					
1-2203654-7	NO					
1-2203663-0	NO					
1-2203663-6	NO					
1-2203769-1	NO					
1-2203769-3	NO					
1-2203771-1	NO					
1-2203771-3	NO					
1-2203973-0	NO					
1-2203973-1	NO					
1-2272723-0	NO					
1-2296694-1	NO					
1-2296694-2	NO					
1-2296694-3	NO					
1-2296695-1	NO					
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1-2296696-3	NO					
1-2296702-1	NO					
1-2296702-2	NO					
1-2296704-1	NO					
1-2296704-2	NO					
1-2296704-3	NO					
1-2311073-1	NO					
1-2311073-2	NO					
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1-2311073-6	NO					
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1-2311078-5	NO					
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1-2311078-8	NO					
1-2311078-9	NO					
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1-2311082-5	NO					
1-2311082-6	NO					
1-2311082-7	NO					
1-2311082-8	NO					
1-2311082-9	NO					
1-2840672-1	NO					
1-638514-0	NO					
1-638514-2	NO					
1-638514-3	NO					
1-638514-4	NO					
1-638514-5	NO					
1-638514-6	NO					
1-776905-1	NO					
1-776905-2	NO					
1-776905-3	NO					
1419168-7	NO		"V23542-G1506-A101"			

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1438098-1	NO					
1438099-1	NO					
1438099-8	NO					
1438136-1	NO					
1438136-3	NO					
1438136-4	NO					
1438136-5	NO					
1438426-1	NO					
1438426-3	NO					
1438435-2	NO					
1438435-4	NO					
1438435-7	NO					
1438435-9	NO					
1438442-4	NO					
1438483-1	NO					
1438486-1	NO					
1438545-1	NO					
1438617-1	NO					
1438618-1	NO					
1438618-3	NO					
1438619-1	NO					
1438620-1	NO					
1438691-1	NO					
1438691-2	NO					
1438691-6	NO					
1438691-7	NO					
1438691-8	NO					
1438693-1	NO					
1438693-5	NO					
1438950-4	NO					
1438950-6	NO					
1438950-7	NO					
1456630-1	NO					
1456630-2	NO					
1456897-2	NO					
1456897-5	NO					
1456983-1	NO					
1456983-2	NO					
1456983-3	NO					
1456983-4	NO					
1456983-5	NO					
1456985-1	NO					
1456985-2	NO					
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1456985-7	NO					
1456985-9	NO					
1488651-1	NO					
1488991-1	NO					
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1488991-5	NO					
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1488991-8	NO					
1488992-5	NO					
1488992-6	NO					
1557300-1	NO					
1557304-1	NO					
1557321-1	NO					
1557404-1	NO					
1557405-1	NO					
1557406-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1557408-2	NO					
1557408-3	NO					
1557409-3	NO					
1557409-4	NO					
1557410-2	NO					
1557410-3	NO					
1557410-4	NO					
1557485-3	NO					
1557485-4	NO					
1557671-1	NO					
1557671-2	NO					
1557676-1	NO					
1557676-2	NO					
1557676-3	NO					
1557676-4	NO					
1557773-1	NO					
1557773-2	NO					
1557774-1	NO					
1557774-3	NO					
1557774-4	NO					
1557779-2	NO					
1557779-3	NO					
1557779-5	NO					
1557800-1	NO					
1557800-2	NO					
1557800-3	NO					
1557800-4	NO					
1557800-5	NO					
1557874-1	NO					
1557915-1	NO					
1557921-1	NO					
1557922-1	NO					
1557949-1	NO					
1557989-2	NO					
1587041-1	NO					
1587255-1	NO					
1587671-1	NO					
1587671-2	NO					
1587715-1	NO					
1587715-2	NO					
1587719-1	NO					
1587819-1	NO					
1587819-2	NO					
1587819-4	NO					
1670119-1	NO					
1732377-1	NO					
1732377-2	NO					
1732434-3	NO					
1732466-7	NO					
1732513-3	NO					
1732560-4	NO					
1732789-2	NO					
184000-1	NO					
184004-1	NO					
184006-1	NO					
184006-2	NO					
184008-1	NO					
184010-1	NO					
184012-1	NO					
184014-1	NO					
184016-1	NO					
184022-1	NO					
184026-1	NO					
184032-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
184034-1	NO					
184042-1	NO					
184042-2	NO					
184046-1	NO		"EM3604-000", "AMP-0-0184046-1"			
184050-2	NO					
184060-1	NO					
184115-1	NO					
184116-1	NO					
184116-2	NO					
184124-1	NO					
184139-1	NO					
184140-1	NO					
184141-1	NO					
184207-1	NO					
184212-1	NO					
184212-2	NO					
184214-1	NO					
184216-1	NO					
184220-1	NO					
184240-1	NO					
184244-1	NO					
184248-1	NO					
184270-1	NO					
184292-1	NO					
184311-1	NO					
184315-1	NO					
184322-1	NO					
184340-1	NO					
184341-1	NO					
184349-1	NO					
184370-1	NO					
184375-1	NO					
184391-1	NO					
184392-1	NO					
184392-2	NO					
184393-1	NO					
184393-2	NO					
184394-1	NO					
184396-1	NO					
184397-1	NO					
184398-1	NO					
184399-1	NO					
184400-1	NO					
184401-1	NO					
184435-1	NO					
184452-1	NO					
184455-1	NO					
184471-1	NO					
184471-5	NO					
184471-7	NO					
1924211-1	NO					
1924211-3	NO					
1924211-6	NO					
1924227-2	NO					
1924292-1	NO					
1924292-5	NO					
1924292-6	NO					
1924484-1	NO					
1924513-1	NO					
1924674-9	NO					
1924675-1	NO					
1924675-4	NO					
1924683-1	NO					
1924684-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1924685-1	NO					
1924686-1	NO					
1924689-1	NO					
1924783-4	NO					
1924940-5	NO					
1924940-6	NO					
1924941-7	NO					
1924941-9	NO					
1924942-1	NO					
1924942-2	NO					
1924942-3	NO					
1924942-4	NO					
1924942-5	NO					
1924942-6	NO					
1924943-1	NO					
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1924944-2	NO					
1924944-4	NO					
1924944-6	NO					
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2-1438136-3	NO					
2-1438153-1	NO					
2-1438454-1	NO					
2-1438950-1	NO					
2-1670917-1	NO					
2-1718643-1	NO					
2-1718644-1	NO					
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2-2035383-2	NO					
2-2035383-7	NO					
2-2098922-3	NO					
2-2098922-5	NO					
2-2098922-8	NO					
2-2098922-9	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2-2098923-0	NO					
2-2098923-1	NO					
2-2098923-2	NO					
2-2203654-3	NO					
2-2203654-4	NO					
2-2203654-9	NO					
2-2203663-6	NO					
2-2203663-8	NO					
2-2203663-9	NO					
2-2311078-0	NO					
2-2311078-1	NO					
2-2311078-5	NO					
2-2311078-6	NO					
2-2311078-7	NO					
2-2311078-8	NO					
2-2311078-9	NO					
2-2311082-0	NO					
2-2311082-1	NO					
2-2311082-2	NO					
2-2311082-3	NO					
2-2311082-4	NO					
2-2311082-5	NO					
2-2311082-6	NO					
2-2311082-9	NO					
2-2840440-1	NO					
2-2840672-1	NO					
2035383-3	NO					
2098198-5	NO					
2098256-7	NO					
2098269-1	NO					
2098269-4	NO					
2098541-1	NO					
2098541-2	NO					
2098541-5	NO					
2098541-6	NO					
2098641-1	NO					
2098641-2	NO					
2098641-5	NO					
2098641-6	NO					
2098863-2	NO					
2098863-3	NO					
2098863-4	NO					
2098864-3	NO					
2098865-1	NO					
2098865-2	NO					
2098865-3	NO					
2098865-4	NO					
2098865-5	NO					
2098866-1	NO					
2098866-3	NO					
2098866-4	NO					
2098866-5	NO					
2098866-7	NO					
2098922-1	NO					
2098922-2	NO					
2098922-6	NO					
2098922-8	NO					
2098922-9	NO					
2098923-5	NO					
2098923-6	NO					
2098923-8	NO					
2098923-9	NO					
2098924-5	NO					
2098924-7	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2098924-8	NO					
2103022-1	NO					
2103177-5	NO					
2103385-4	NO					
2103628-1	NO					
2103628-2	NO					
2103628-4	NO					
2103628-5	NO					
2103628-6	NO					
2103628-7	NO					
2103741-2	NO					
2103741-3	NO					
2103742-2	NO					
2103742-3	NO					
2103743-2	NO					
2103743-3	NO					
2103744-1	NO					
2138020-1	NO					
2138020-2	NO					
2138020-3	NO					
2138020-4	NO					
2138020-5	NO					
2138020-6	NO					
2138020-8	NO					
2138020-9	NO					
2138041-1	NO					
2138041-2	NO					
2138043-6	NO					
2138161-1	NO					
2138161-2	NO					
2138161-3	NO					
2177376-1	NO					
2203109-6	NO					
2203455-1	NO					
2203455-7	NO					
2203455-8	NO					
2203455-9	NO					
2203515-5	NO					
2203516-7	NO					
2203516-8	NO					
2203516-9	NO					
2203663-5	NO					
2203773-7	NO					
2203919-1	NO					
2203973-2	NO					
2203973-5	NO					
2203973-6	NO					
2203973-7	NO					
2203973-8	NO					
2203973-9	NO					
2272033-1	NO					
2272723-1	NO					
2272723-5	NO					
2272723-9	NO					
2289050-1	NO					
2289050-2	NO					
2294430-1	NO					
2294430-5	NO					
2296698-1	NO					
2296700-3	NO					
2296700-6	NO					
2296701-1	NO					
2296701-3	NO					
2300498-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2300498-2	NO					
2300498-6	NO					
2300498-7	NO					
2301631-2	NO					
2304305-2	NO					
2304306-1	NO					
2306039-1	NO					
2306271-1	NO					
2306883-1	NO					
2306884-1	NO					
2307223-1	NO					
2307235-1	NO					
2310207-1	NO					
2310239-1	NO					
2310242-1	NO					
2310242-2	NO					
2311069-1	NO					
2311069-3	NO					
2311069-4	NO					
2311069-5	NO					
2311069-6	NO					
2311071-1	NO					
2311073-9	NO					
2311074-1	NO					
2311075-1	NO					
2311077-1	NO					
2311077-2	NO					
2311084-1	NO					
2311084-2	NO					
2311084-3	NO					
2316020-1	NO					
2316023-1	NO					
2321028-1	NO					
2323660-1	NO					
2323661-1	NO					
2324336-1	NO					
2327375-1	NO					
2327375-2	NO					
2327611-1	NO					
2327611-2	NO					
2327904-1	NO					
2327904-2	NO					
2331832-1	NO					
2332200-6	NO					
2332200-7	NO					
2332470-1	NO					
2335239-1	NO					
2336315-1	NO					
2336318-1	NO					
2336334-1	NO					
2336677-1	NO					
2337306-1	NO					
2337311-1	NO					
2339949-1	NO					
2339949-2	NO					
2339949-3	NO					
2348609-1	NO					
2348609-3	NO					
2349476-1	NO					
2840368-2	NO					
2840595-1	NO					
2840624-1	NO					
2840789-1	NO					
2840822-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2840837-1	NO					
2840838-1	NO					
2840960-1	NO					
2840960-2	NO					
3-1419171-9	NO					
3-1438099-1	NO					
3-1438099-4	NO					
3-1438099-5	NO					
3-1438103-1	NO					
3-1438103-3	NO					
3-1438103-4	NO					
3-1438103-8	NO					
3-1438691-1	NO					
3-1438693-1	NO					
3-1438693-2	NO					
3-1438693-6	NO					
3-1438841-2	NO					
3-1438841-5	NO					
3-1438841-8	NO					
3-1438950-5	NO					
3-1587041-0	NO					
3-1924513-2	NO					
3-1924513-6	NO					
3-1924513-8	NO					
3-1924672-4	NO					
3-1924672-7	NO					
3-1924939-0	NO					
3-1924939-1	NO					
3-1924939-4	NO					
3-1924939-5	NO					
3-1924939-8	NO					
3-2035383-3	NO					
3-2035383-5	NO					
3-2035383-7	NO					
3-2035383-8	NO					
3-2098269-1	NO					
3-2098269-2	NO					
3-2098269-3	NO					
3-2098269-6	NO					
3-2098269-7	NO					
3-2098269-8	NO					
3-2098922-0	NO					
3-2098922-3	NO					
3-2098922-5	NO					
3-2098922-7	NO					
3-2138020-1	NO					
3-2138020-2	NO					
3-2138020-4	NO					
3-2203654-2	NO					
3-2203654-4	NO					
3-2203654-5	NO					
3-2203663-1	NO					
3-2203663-3	NO					
3-2311078-0	NO					
3-2311078-1	NO					
3-2311078-2	NO					
3-2311078-3	NO					
3-2311078-4	NO					
3-2311078-5	NO					
3-2311078-6	NO					
3-2311078-7	NO					
3-2311078-9	NO					
3-2311082-0	NO					
3-2311082-2	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
3-2311082-5	NO					
3-2311082-6	NO					
3-2311082-7	NO					
3-2311082-8	NO					
3-2311082-9	NO					
319234-2	NO					
4-1419171-0	NO					
4-1419171-1	NO					
4-1438090-7	NO					
4-1438099-7	NO					
4-1438099-8	NO					
4-1438136-2	NO					
4-1438136-3	NO					
4-1438691-1	NO					
4-1438691-6	NO					
4-1438693-2	NO					
4-1438693-3	NO					
4-1438693-5	NO					
4-1438841-0	NO					
4-1438841-1	NO					
4-1438841-5	NO					
4-1456426-1	NO					
4-1488991-1	NO					
4-1488991-2	NO					
4-1587041-6	NO					
4-1924067-1	NO					
4-1924067-2	NO					
4-1924225-7	NO					
4-1924225-8	NO					
4-1924292-1	NO					
4-1924513-2	NO					
4-1924513-3	NO					
4-1924513-4	NO					
4-1924513-5	NO					
4-1924513-6	NO					
4-1924513-7	NO					
4-1924513-8	NO					
4-1924513-9	NO					
4-1924783-1	NO					
4-1924783-2	NO					
4-1924783-3	NO					
4-1924783-4	NO					
4-1924783-9	NO					
4-1924939-2	NO					
4-1924939-3	NO					
4-1924939-5	NO					
4-1924939-6	NO					
4-1924939-7	NO					
4-1924939-8	NO					
4-1924939-9	NO					
4-2035383-1	NO					
4-2035383-6	NO					
4-2035383-7	NO					
4-2035383-8	NO					
4-2035383-9	NO					
4-2098269-1	NO					
4-2098269-2	NO					
4-2098269-5	NO					
4-2098269-6	NO					
4-2098269-7	NO					
4-2098269-8	NO					
4-2098541-1	NO					
4-2098541-2	NO					
4-2098559-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
4-2098641-1	NO					
4-2098641-2	NO					
4-2098922-1	NO					
4-2098922-2	NO					
4-2098922-3	NO					
4-2098922-4	NO					
4-2098922-6	NO					
4-2098922-8	NO					
4-2103015-1	NO					
4-2103015-2	NO					
4-2103015-4	NO					
4-2103015-5	NO					
4-2103015-6	NO					
4-2103177-1	NO					
4-2103177-2	NO					
4-2103177-4	NO					
4-2103177-5	NO					
4-2103177-6	NO					
4-2103177-7	NO					
4-2103350-1	NO					
4-2103350-2	NO					
4-2103350-4	NO					
4-2103350-5	NO					
4-2103587-1	NO					
4-2103587-2	NO					
4-2203654-2	NO					
4-2203654-3	NO					
4-2203654-6	NO					
4-2203654-7	NO					
4-2203654-8	NO					
4-2203654-9	NO					
4-2203663-3	NO					
4-2203663-4	NO					
4-2203663-6	NO					
4-2203663-7	NO					
4-2203663-8	NO					
4-2203663-9	NO					
4-2272003-1	NO					
4-2272003-2	NO					
4-2272003-3	NO					
4-2272003-4	NO					
4-2272003-5	NO					
4-2272004-1	NO					
4-2272004-2	NO					
4-2272005-1	NO					
4-2272005-2	NO					
4-2272173-1	NO					
4-2272173-2	NO					
4-2272173-3	NO					
4-2840548-1	NO					
4-2840548-2	NO					
5-1438099-1	NO					
5-1438129-9	NO					
5-1438691-4	NO					
5-1438691-6	NO					
5-1438691-7	NO					
5-1438841-9	NO					
5-1557773-1	NO					
5-1557773-2	NO					
5-1557773-3	NO					
5-1557773-5	NO					
5-1557774-1	NO					
5-1557774-3	NO					
5-1557774-4	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
5-1557774-5	NO					
5-1557774-7	NO					
5-1557802-1	NO					
5-1557803-1	NO					
5-1557911-1	NO					
5-1557915-1	NO					
5-1557921-1	NO					
5-1557922-1	NO					
5-1587041-6	NO					
5-1587041-7	NO					
5-1924225-3	NO					
5-1924225-5	NO					
5-1924225-7	NO					
5-1924225-9	NO					
5-1924513-0	NO					
5-1924513-1	NO					
5-1924513-3	NO					
5-1924513-5	NO					
5-1924513-6	NO					
5-1924513-8	NO					
5-1924783-0	NO					
5-1924783-2	NO					
5-1924783-3	NO					
5-1924783-4	NO					
5-1924783-5	NO					
5-1924939-0	NO					
5-1924939-1	NO					
5-1924939-4	NO					
5-1924939-5	NO					
5-1924939-6	NO					
5-1924939-7	NO					
5-1924939-9	NO					
5-2035383-0	NO					
5-2035383-3	NO					
5-2035383-6	NO					
5-2098269-0	NO					
5-2098922-9	NO					
5-2103177-1	NO					
5-2203455-5	NO					
5-2203654-0	NO					
5-2203654-1	NO					
5-2203654-3	NO					
5-2203654-6	NO					
5-2203654-7	NO					
5-2203654-8	NO					
5-2203654-9	NO					
5-2203663-0	NO					
5-2203663-1	NO					
5-2203663-3	NO					
5-2203663-8	NO					
5-2203663-9	NO					
5-2272723-1	NO					
5-2272723-5	NO					
5-2272723-7	NO					
5-2272723-9	NO					
5-2311082-3	NO					
5-2311082-4	NO					
5-2311082-5	NO					
5-2311082-6	NO					
6-1438090-7	NO					
6-1438691-0	NO					
6-1438841-3	NO					
6-1438841-5	NO					
6-1438841-7	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
6-1924225-0	NO					
6-1924225-1	NO					
6-1924225-2	NO					
6-1924225-5	NO					
6-1924225-6	NO					
6-1924225-7	NO					
6-1924225-8	NO					
6-1924783-0	NO					
6-1924783-2	NO					
6-1924783-6	NO					
6-1924783-7	NO					
6-1924783-9	NO					
6-1924939-0	NO					
6-1924939-1	NO					
6-1924939-2	NO					
6-1924939-3	NO					
6-1924939-4	NO					
6-1924939-5	NO					
6-1924939-6	NO					
6-1924939-7	NO					
6-1924939-8	NO					
6-1924939-9	NO					
6-2035383-0	NO					
6-2035383-2	NO					
6-2035383-3	NO					
6-2035383-5	NO					
6-2035383-6	NO					
6-2035383-9	NO					
6-2098922-0	NO					
6-2098922-6	NO					
6-2098922-7	NO					
6-2098922-8	NO					
6-2103177-4	NO					
6-2203654-0	NO					
6-2203654-6	NO					
6-2203654-7	NO					
6-2203654-8	NO					
6-2203654-9	NO					
6-2203663-0	NO					
6-2203663-2	NO					
6-2203663-5	NO					
6-2203663-6	NO					
6-2203663-7	NO					
6-2203663-9	NO					
6-2272723-0	NO					
638514-1	NO					
638514-8	NO					
7-1438136-2	NO					
7-1438136-3	NO					
7-1438691-4	NO					
7-1438691-7	NO					
7-1438691-8	NO					
7-1438691-9	NO					
7-1438841-1	NO					
7-1438841-2	NO					
7-1438841-3	NO					
7-1438841-5	NO					
7-1438841-6	NO					
7-1456659-0	NO					
7-1456659-1	NO					
7-1456659-3	NO					
7-1456659-7	NO					
7-1456659-8	NO					
7-1456659-9	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
7-1924225-0	NO					
7-1924225-1	NO					
7-1924225-2	NO					
7-1924225-3	NO					
7-1924783-0	NO					
7-1924783-1	NO					
7-1924783-2	NO					
7-1924783-3	NO					
7-1924783-4	NO					
7-1924783-5	NO					
7-1924783-6	NO					
7-1924783-7	NO					
7-1924783-8	NO					
7-1924783-9	NO					
7-1924939-0	NO					
7-2035383-0	NO					
7-2035383-2	NO					
7-2035383-3	NO					
7-2035383-8	NO					
7-2098922-2	NO					
7-2098922-3	NO					
7-2098922-6	NO					
7-2098922-8	NO					
7-2203654-0	NO					
7-2203654-1	NO					
7-2203654-2	NO					
7-2203654-3	NO					
7-2203654-9	NO					
7-2203663-0	NO					
7-2203663-1	NO					
776905-8	NO					
8-1438129-4	NO					
8-1438129-5	NO					
8-1438136-2	NO					
8-1438691-0	NO					
8-1438691-1	NO					
8-1438691-2	NO					
8-1438691-3	NO					
8-1438691-4	NO					
8-1438691-5	NO					
8-1438691-7	NO					
8-1438691-8	NO					
8-1438841-3	NO					
8-1438841-4	NO					
8-1438841-5	NO					
8-1438950-3	NO					
8-1438950-5	NO					
8-1438950-6	NO					
8-1456659-0	NO					
8-1456659-7	NO					
8-1456659-9	NO					
8-1924783-1	NO					
8-2035383-0	NO					
8-2035383-3	NO					
8-2035383-9	NO					
828904-1	NO		"CF0547-000", "AMP-0-0828904-1", "80.264.00", "8202609390", "8202611101"			
828904-2	NO					
828922-1	NO		"EG9737-000", "AMP-0-0828922-1", "80.263.00", "820A-37376"			
828922-2	NO					
9-1438090-6	NO					
9-1438136-6	NO					
9-1438841-4	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
9-1438841-7	NO					
9-1456659-2	NO					
9-1456659-7	NO					
9-2035383-4	NO					
9-2035383-5	NO					
9-2035383-6	NO					
9-2035383-7	NO					
963292-1	NO					
963293-1	NO					
963530-1	NO		"1072609867", "820P-37717", "820P-37904", "43119-000"			
963531-1	NO		"1072607258"			
964972-1	NO					
967067-1	NO		"0-0967067-1", "EG9740-000", "AMP-0-0967067-1"			
967067-2	NO					



Product Change Notification

Current Date: 14-Jul-2020

TE Connectivity

Product Change Notification: P-19-018199

PCN Date: 11-NOV-19

TE would like to inform you of the following change(s) to the listed TE Connectivity Product. In case of any further questions about this change(s), please contact your TE Connectivity Sales Engineer. Affected part, drawing and/or specification numbers are listed on the attached sheet(s).

General Product Description:

Multiple Part numbers. Phase 1. Americas Footprint Optimization.

Description of Changes

We hereby inform you about a transfer of tools and/or processes of the components of the Finished Goods that we ship to you to further improve our Supply Chain towards our customers. The transfer follows a strict procedure, which fully maintains quality, ability to supply and form-fit-function of the concerned products. The receiving manufacturing location operates under a certified quality management system in accordance with standard automotive requirements. These moves will be validated not to affect product FFF, tool geometry or quality performance. TE will uphold our responsibility to internally validate and approve these tools among appropriate first article dimensional and capability analysis, comparative 2-sample T-tests before and after moves, before and after CT scans where needed, and PV test as defined by TE product engineering. TE is willing to provide any such validation data to our customers as our joint non-disclosure agreement statuses allow. AMEND with PCN P-19-018058

Reason for Changes:

Product improvement. These changes are part of an overall effort from TE to improve our supply chain toward our customers and to focus each plant on core products and processes. A TE-internal release test based on the relevant part specifications will be executed before delivery and this notification serves to fulfill our notification requirements as prescribed by AIAG 4th edition. This change notification document accompanies a letter sent to your organization on September 13, 2019 signed by our Vice President of Sales and Marketing. Follow up conversations can occur upon request with your sales contact within 15 calendar days after receipt of this PCN. TE can share validation data with your organization upon request. If you have any questions or needs from this move, please contact your sales engineer within 15 days of receipt of this letter. If no response is received on this period, TE will consider this as an approval and tools must move to the new locations.

Estimated Dates:

Last Order Date (Obsolete Parts Only):	First Date To Ship (Changed Parts Only):
	03-JAN-2020
Last Ship Date (Obsolete Parts Only):	Last Date for Mixed Shipments: (Changed Parts Only):
	No Mixed Shipments

Part Number(s) being Modified:

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-1438356-1	NO					
1-1438356-8	NO					
1-1438454-1	NO					
1-1924940-1	NO					
1-1924940-3	NO					
1-1924940-7	NO					
1-1924940-8	NO					
1-1924940-9	NO					
1-2203312-1	NO					
1-2203312-2	NO					
1-2203312-3	NO					
1-2203773-3	NO					
1438129-1	NO					
1438129-2	NO					
1438129-3	NO					
1456554-1	NO					
1557407-2	NO					
1557407-3	NO					
1557801-1	NO					
1557801-2	NO					
1557801-3	NO					
1557801-4	NO					
1557873-1	NO					
1587902-2	NO					
1670120-1	NO					
1670120-2	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
184002-1	NO					
184020-1	NO					
184097-1	NO					
184099-1	NO					
184344-1	NO					
184471-6	NO					
184471-8	NO					
2-1438693-0	NO					
2-1438693-1	NO					
2-1438693-8	NO					
2-1438693-9	NO					
2-1456659-4	NO					
2-1924225-9	NO					
2098557-1	NO					
2098557-2	NO					
2098557-4	NO					
2098557-7	NO					
2098559-5	NO					
2098559-6	NO					
2098559-7	NO					
2098559-8	NO					
2098863-5	NO					
2098863-6	NO					
2098863-7	NO					
2098863-8	NO					
2098863-9	NO					
2103149-1	NO					
2103149-4	NO					
2103149-7	NO					
2103534-1	NO					
2103534-2	NO					
2103534-4	NO					
2138089-1	NO					
2203654-5	NO					
2203654-9	NO					
2272763-1	NO					
2311072-1	NO					
2321027-1	NO					
2324337-1	NO					
3-1438136-4	NO					
3-1924783-0	NO					
3-1924783-7	NO					
3-1924783-8	NO					
3-1924783-9	NO					
4-2098557-1	NO					
4-2311082-0	NO					
4-2311082-1	NO					
4-2311082-2	NO					
4-2311082-4	NO					
4-2311082-5	NO					
4-2311082-6	NO					
4-2311082-7	NO					
4-2311082-8	NO					
5-1456659-3	NO					
5-1456659-8	NO					
5-1557909-1	NO					
5-1557910-1	NO					
5-1557910-2	NO					
5-1924670-0	NO					
5-2304580-1	NO					
6-1438136-2	NO					
6-1438136-8	NO					
6-1438136-9	NO					
6-1587041-6	NO					
6-1587041-9	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
776671-1	NO					
776834-3	NO					
776834-4	NO					
776834-5	NO					
776887-2	NO					
776887-3	NO					
776887-5	NO					
9-1438691-0	NO					
9-1438691-1	NO					
9-1438691-3	NO					
9-2301631-2	NO					
963294-1	NO					



Section 3

Customer Engineering Approval



ENGINEERING SAMPLE EVALUATION REPORT

PART NAME: PLUG ASSEMBLY, 2 POSITION, 1.2mm LL MCON, 2pc, Class 3 Inner Housing Mold Move		PART NO.: See table below in "Change Details"					
		CHANGE TYPE:	CHECK APPLICABLE:				
SUBMITTED BY: Stacie Ice	CURRENT MANUFACTURING SITE: Pegg Road, Greensboro, NC	TOOL MOVE:	<table border="1"> <tr><td>X</td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table>	X			
	X						
FUTURE MANUFACTURING SITE: Empalme, MX	PROCESS CHANGE:	MATERIAL/MATERIAL SUPPLIER CHANGE:					
	CAPACITY TOOL:						
SUPPLIER: TE Connectivity		DATE SUBMITTED: 3/16/2021	MADE TO DRAWING DATED: 7V6T-14A464-GB				

CHANGE DETAILS: Greensboro Consolidation
 As part of the Greensboro Consolidation, TE is moving the 2P 2pc MCON LL Plug Assembly Inner Housing mold (Mold M1928314) from Pegg Road, Greensboro, NC to Empalme, MX.
 This document is intended to obtain final approval for the testing performed to move the mold (M1928314).

Ford Part Number	TE Part Number (Parent)	Component	Mold/Die Number
7V6T-14A464-AB	1-1670916-1	1-1718647-1	M1928314

APPROVED:	<input checked="" type="checkbox"/>	PRODUCT ENGINEERING SIGNATURE*: <i>Josh Chappelle</i>	DATE: Mar 25, 2021
REJECTED:	<input type="checkbox"/>		

IDENTIFY WITH REMARKS AFFECTING PRODUCT ENGINEERING CRITICAL REQUIREMENTS

*By signing this document, you state that you have verified the physical part/s with the drawing/s and agree with key dimensional data, notes and appearance.



ENGINEERING SAMPLE EVALUATION REPORT

PART NAME: PLUG ASSEMBLY, 2 POSITION, 1.2mm LL MCON, 2pc, Class 3 Inner Housing Mold Move		PART NO.: See table below in "Change Details"					
		CHANGE TYPE:	CHECK APPLICABLE:				
SUBMITTED BY: Stacie Ice	CURRENT MANUFACTURING SITE: Pegg Road, Greensboro, NC	TOOL MOVE:	<table border="1"> <tr><td>X</td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table>	X			
	X						
FUTURE MANUFACTURING SITE: Empalme, MX	PROCESS CHANGE:	MATERIAL/MATERIAL SUPPLIER CHANGE:					
	CAPACITY TOOL:						
SUPPLIER: TE Connectivity		DATE SUBMITTED: 3/16/2021	MADE TO DRAWING DATED: 7V6T-14A464-GB				

CHANGE DETAILS: Greensboro Consolidation
 As part of the Greensboro Consolidation, TE is moving the 2P 2pc MCON LL Plug Assembly Inner Housing mold (Mold M1928315) from Pegg Road, Greensboro, NC to Empalme, MX.
 This document is intended to obtain final approval for the testing performed to move the mold (M1928315).

Ford Part Number	TE Part Number (Parent)	Component	Mold/Die Number
7V6T-14A464-AB	1-1670916-1	1-1718647-1	M1928315

APPROVED: <input checked="" type="checkbox"/>	PRODUCT ENGINEERING SIGNATURE*: <i>Joseph Chappelle</i>	DATE: Mar 25, 2021
REJECTED: <input type="checkbox"/>		

IDENTIFY WITH REMARKS AFFECTING PRODUCT ENGINEERING CRITICAL REQUIREMENTS

*By signing this document, you state that you have verified the physical part/s with the drawing/s and agree with key dimensional data, notes and appearance.

PF90012 Design Validation Plan & Report Document

Supplier:	TE Connectivity
Supplier Part Number:	X-1718643-X, X-1670916-X
Part Description	2P MCON 1.2 - LL Conn Sld
Lead Application:	Various
Lead Carline	Various
Lead MY:	Various
PF90012 Temperature Class	T3
PF90012 Vibration Class	V2

Were There Failures on Testing?	Yes
<i>(If yes, please explain on Failure Analysis Page)</i>	

Prepared By:	Stacie Ice
Date:	3/16/2021

Comments:
 This PV Report was to validate the move of Mold M1928315 for TE Inner Housing PN -1718647-X, per the TE/FCA Greensboro Consolidation agreement. Original validation was done via AK testing specification. All subsequent capacity tool testing followed USCAR 2, Rev 4 (dated 2004). This PV followed the USCAR-2, Rev 4 specification with the noted deviations.



Date:	Rev.	Content of Revision

FCA CoC Approval		
Laura Borthwick		3/24/2021
Paul Dang		

Test	USCAR req't	Deviation	Orig Val	NA Assembly Capacity Tool	After Move Empalme
Terminal - Connector Insertion Force - TPA in Open Position, Max Wire Size	30 N Max.		Not Conducted	Min: 9.61N Max: 17.17N	Min: 7.84N Max: 11.20N Avg: 9.02N
Terminal - Connector Extraction Force - TPA in Open Position, Max Wire Size	30 N Min.		Min: 76.40N Max: 81.00N	Min: 75.22N Max: 82.45N	Min: 71.23N Max: 85.70N Avg: 80.38N
Misc Component Engage/Disengage Force - TPA, Pre-set to Full Install (Lock), No terminals	15N Min	2N Min 60N Max	Min: 4.80N Max: 6.20N	Min: 5.05N Max: 7.43N	Min: 2.85N Max: 6.83N Avg: 4.97N

DESIGN VERIFICATION PLAN AND REPORT

Date:		3/16/2021	
Assembly/Part Number: 1-1718643-1, 2-1718643-1, 1-1670916-1, X-1718643-X, X-1670916-X	Component Description: 2pos, MCON 1.2 - LL Connector Sealed		Design Engineer: Stacie Ice
System: N/A	Subsystem: N/A	DVP&R Level: <input type="checkbox"/> Prototype <input checked="" type="checkbox"/> Production	
Specifications: Chrysler PF90012 (Class <u>TBD</u>) Change Level B, USCAR 2, Rev 4			

Test Type	Test Sub-Category	Acceptance Criteria	Test Results				Minimum Required Data Points	Timing		Notes
			DV		PV			Sched	Actual	
			Pass/Fail	Result	Pass/Fail	Result		Start / End	Start / End	
Terminal - Connector Insertion/Retention Force PF90012.6.4.2 A-B										
Connector - Mechanical	Insertion Force 6.4.2.A	Insertion effort must be smooth with no stalling or false lock-up. Maximum Insertion Force (by wire cross section): < 1 mm ² : ≤ 15N = 1mm ² : ≤ 20N > 1mm ² : ≤ 30N	PASS	0.75mm ² : Min: 7.45N, Max: 13.50N	PASS	0.75mm ² : 7.84N Min, 11.20N Max	10 Lg Data Points 10 Sm Data Points See Sec. 6.4.2.A.B Notes 1 & 2	3/1/2021	3/1/2021	Test Request 20210214ACL
		Forward stop must withstand a push-through force of: (By Terminal Size) 0.50mm: > 35N > 0.50mm: > 50N	TBD	TBD	TBD	TBD				
		Mating of a terminal with ISL fully seated shall not be possible.	TBD	TBD	TBD	TBD				
		A minimum load of at least twice the limits of maximum Insertion Force above is required for seated PLR's.	TBD	TBD	TBD	TBD				
	Retention Force w/o Secondary Lock 6.4.2.B	Terminal retention w/o secondary lock: Terminal Size: ≤ 0.64: 30 N Min ≤ 1.5mm 45N Min ≤ 2.8mm 60N Min ≤ 6.3mm 80N Min ≤ 9.5mm 100N Min	PASS	66.41N Min, 87.33N Max	PASS	71.23N Min, 85.70N Max	10 Data Points Each Test	3/1/2021	3/1/2021	
	Retention Force w/ Secondary Lock 6.4.2.B	Post Moisture Conditioning Terminal Size: ≤ 0.64: 60 N Min ≤ 1.5mm 70N Min ≤ 2.8mm 100N Min ≤ 6.3mm 130N Min ≤ 9.5mm 150N Min	TBD	TBD	TBD	TBD	10 Data Points Each Test	TBD	TBD	NOTE 1: Includes connectors not designed for use with secondary lock.

PF90012 Design Validation Plan & Report Document

Supplier:	TE Connectivity
Supplier Part Number:	X-1718643-X, X-1670916-X
Part Description	2P MCON 1.2 - LL Conn Sld
Lead Application:	Various
Lead Carline	Various
Lead MY:	Various
PF90012 Temperature Class	T3
PF90012 Vibration Class	V2

Were There Failures on Testing?	Yes
<i>(If yes, please explain on Failure Analysis Page)</i>	

Prepared By:	Stacie Ice
Date:	3/16/2021

Comments:
 This PV Report was to validate the move of Mold M1928314 for TE Inner Housing PN -1718647-X, per the TE/FCA Greensboro Consolidation agreement. Original validation was done via AK testing specification. All subsequent capacity tool testing followed USCAR 2, Rev 4 (dated 2004). This PV followed the USCAR-2, Rev 4 specification with the noted deviations.



Date:	Rev.	Content of Revision

FCA CoC Approval	
Laura Borthwick	 3/24/2021
Paul Dang	

Test	USCAR req't	Deviation	Orig Val	NA Assembly Capacity Tool	After Move Empalme
Terminal - Connector Insertion Force - TPA in Open Position, Max Wire Size	30 N Max.		Not Conducted	Min: 9.61N Max: 17.17N	Min: 8.13N Max: 10.47N Avg: 9.20N
Terminal - Connector Extraction Force - TPA in Open Position, Max Wire Size	30 N Min.		Min: 76.40N Max: 81.00N	Min: 75.22N Max: 82.45N	Min: 77.35N Max: 89.14N Avg: 82.47N
Misc Component Engage/Disengage Force - TPA, Pre-set to Full Install (Lock), No terminals	15N Min	2N Min 60N Max	Min: 4.80N Max: 6.20N	Min: 5.05N Max: 7.43N	Min: 4.12N Max: 5.82N Avg: 4.90N

DESIGN VERIFICATION PLAN AND REPORT			Date:	3/16/2021
Assembly/Part Number: 1-1718643-1, 2-1718643-1, 1-1670916-1, X-1718643-X, X-1670916-X	Component Description: 2pos, MCON 1.2 - LL Connector Sealed			Design Engineer: Stacie Ice
System N/A	Subsystem N/A			DVP&R Level: <input type="checkbox"/> Prototype <input checked="" type="checkbox"/> Production
Specifications: Chrysler PF90012 (Class TBD) Change Level B, USCAR 2, Rev 4				

Test Type	Test Sub-Category	Acceptance Criteria	Test Results				Minimum Required Data Points	Timing		Notes
			DV		PV			Sched	Actual	
			Pass/Fail	Result	Pass/Fail	Result		Start / End	Start / End	
Terminal - Connector Insertion/Retention Force PF90012.6.4.2 A-B										
Connector - Mechanical	Insertion Force 6.4.2.A	Insertion effort must be smooth with no stalling or false lock-up. Maximum Insertion Force (by wire cross section): < 1 mm ² : ≤ 15N = 1mm ² : ≤ 20N > 1mm ² : ≤ 30N	PASS	0.75mm ² : Min: 7.45N, Max: 13.50N	PASS	0.75mm ² : 8.13N Min, 10.47N Max	10 Lg Data Points 10 Sm Data Points See Sec. 6.4.2.A.B Notes 1 & 2	3/1/2021	3/1/2021	Test Request 20210214ACL
		Forward stop must withstand a push-through force of: (By Terminal Size) 0.50mm: > 35N > 0.50mm: > 50N	TBD	TBD	TBD	TBD				
		Mating of a terminal with ISL fully seated shall not be possible.	TBD	TBD	TBD	TBD				
		A minimum load of at least twice the limits of maximum Insertion Force above is required for seated PLR's.	TBD	TBD	TBD	TBD				
	Retention Force w/o Secondary Lock 6.4.2.B	Terminal retention w/o secondary lock: Terminal Size: ≤ 0.64: 30 N Min ≤ 1.5mm 45N Min ≤ 2.8mm 60N Min ≤ 6.3mm 80N Min ≤ 9.5mm 100N Min	PASS	66.41N Min, 87.33N Max	PASS	77.35N Min, 89.14N Max	10 Data Points Each Test	3/1/2021	3/1/2021	
	Retention Force w/ Secondary Lock 6.4.2.B	Post Moisture Conditioning Terminal Size: ≤ 0.64: 60 N Min ≤ 1.5mm 70N Min ≤ 2.8mm 100N Min ≤ 6.3mm 130N Min ≤ 9.5mm 150N Min	TBD	TBD	TBD	TBD	10 Data Points Each Test	TBD	TBD	NOTE 1: Includes connectors not designed for use with secondary lock.



Section 4

Design FMEA

**See Section A for nondisclosure conditions.
The Design FMEA, if included, is a Class II confidential document
belonging to TE Connectivity. A class II document may not be
further distributed and is subject to the conditions of the
nondisclosure agreement.**



Section 5

Process Flow Diagram

See Section A for nondisclosure conditions.

The Process Flow Diagram, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.



Section 6

Process FMEA

See Section A for nondisclosure conditions.

The Process FMEA, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.



Section 7

Control Plan

See Section A for nondisclosure conditions.
The Control Plan, if included, is a Class II confidential document belonging to TE Connectivity. A class II document may not be further distributed and is subject to the conditions of the nondisclosure agreement.



Section 8

Measurement System Analysis

Section 9

Dimensional Results

Final assembly dimensions not affected by this change.



Production Part Approval

DIMENSIONAL TEST RESULTS



TE Connectivity-Empalme is accredited by ANSI-ASQ National Accreditation Board for ISO/IEC 17025 under a defined calibration and/or testing scope.

Organization: TE Connectivity	Part Number: 1-1670916-1
Supplier/Vendor Code: N/A	Part Name: 2Pos. MCON 1.2 - LL Connector Sealed
INSPECTION FACILITY: TE Connectivity Empalme Metrology lab	Design Record Change Level: DWG: C-1670916 REV. E5
	Engineering Change Documents: N/A
	# Folio: 50811 WC-8917 Page <u>1</u> of <u>2</u>

Item	Dim./Spec.	Spec. / Limits		Units	Organization Measurement Results (Data)						Ok	Not Ok	Instrument # ID
		tol +	tol -		SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6			
1	1.4	0.15	0.05	mm	1.451	1.452	1.420	1.445	1.451	1.450	✓		LMMC-009
2	1.0	0.15	0.05	mm	1.039	1.031	1.024	1.021	1.027	1.030	✓		LMMC-009
3	4	0.2	0.2	mm	4.003	4.002	4.013	4.016	4.012	4.014	✓		LMMC-009
4	15	0.2	0.2	mm	15.147	15.171	15.154	15.159	15.151	15.166	✓		LMMI-238
5	14.8	0.3	0.3	mm	14.865	14.828	14.851	14.857	14.836	14.857	✓		LMMI-238
20	14.8	0.2	0.2	mm	14.861	14.870	14.856	14.867	14.871	14.875	✓		LMMI-238
21	11.6	0.2	0.2	mm	11.686	11.684	11.680	11.685	11.692	11.675	✓		LMMI-010
22	1.5	0.2	0.2	mm	1.483	1.480	1.493	1.488	1.496	1.483	✓		LMMC-009
23	12.8	0.2	0.2	mm	12.986	12.996	12.971	12.998	12.987	12.995	✓		LMMC-009
40	10.5	0.2	0.2	mm	10.641	10.640	10.661	10.610	10.642	10.614	✓		LMMC-009
41	7.6	0.2	0.2	mm	7.639	7.633	7.659	7.610	7.628	7.636	✓		LMMC-009
42	16	0.3	0.3	mm	15.996	16.019	15.986	16.005	16.007	15.987	✓		LMMI-238
43	26.5	0.4	0.4	mm	26.513	26.505	26.499	26.508	26.494	26.496	✓		LMMC-009
44	9	0.2	0.2	mm	8.888	8.863	8.875	8.902	8.916	8.856	✓		LMMC-009
45	11.6	0.3	0.3	mm	11.561	11.598	11.546	11.548	11.559	11.591	✓		LMMC-009
46	25	REFERENCE		mm	OK	OK	OK	OK	OK	OK	✓		
60	2	0.2	0.4	mm	2.122	2.118	2.098	2.080	2.063	2.020	✓		LMMC-009
N/A	2.1	0.1	0.1	mm	2.055	2.104	2.096	2.026	2.128	2.107	✓		LMMC-009

NOTES:														
1	ONLY THE GERMAN LANGUAGE VERSION IS AUTHORITATIVE				OK	OK	OK	OK	OK	OK	OK	✓		
2	AREA FOR PRINT				OK	OK	OK	OK	OK	OK	OK	✓		
3	USABLE CONTACTS MCON 1.2 SEE TE-NO. 1452674, SINGLE WIRE SYSTEM				NOTED PER APQP TEAM						✓			
4	MAX. WIRE SIZE RANGE 1.0mm2 FLR PERMITTED FOR CAVITY - Ø3.55MM QUANTITY SEE WIRE HARNESS DRAWING FOR PERMISSIBLE CURRENT CARRYING CAPACITY ON THE SINGLE CONTACT SEE PRODUCT SPECIFICATION NO. 108-18782				OK	OK	OK	OK	OK	OK	OK	✓		
5	SUPPLIER- MARK				OK	OK	OK	OK	OK	OK	OK	✓		
6	SPACE FOR ACTIVITY				OK	OK	OK	OK	OK	OK	OK	✓		
7	SUPPLY CONDITION; RETAINER IN PRELOCKED POSITION				OK	OK	OK	OK	OK	OK	OK	✓		

March 2006	CFG-1003		
AEF004J-EG Rev: J	SIGNATURE Omar Sánchez	TITLE Metrology Chief	DATE June 18, 2020



Production Part Approval

DIMENSIONAL TEST RESULTS



TE Connectivity-Empalme is accredited by ANSI-ASQ National Accreditation Board for ISO/IEC 17025 under a defined calibration and/or testing scope.

Organization: TE Connectivity	Part Number: 1-1670916-1
Supplier/Vendor Code: N/A	Part Name: 2Pos. MCON 1.2 - LL Connector Sealed
INSPECTION FACILITY: TE Connectivity Empalme Metrology lab	Design Record Change Level: DWG: C-1670916 REV. E5
	Engineering Change Documents: N/A
	# Folio: 50811 WC-8917 Page <u>2</u> of <u>2</u>

Item	Dim./Spec.	Spec. / Limits tol + tol -	Units	Organization Measurement Results (Data)						Ok	Not Ok	Instrument # ID
				SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6			
8	WARPAGE PERMITTED TO MAX. - 0.5mm			OK	OK	OK	OK	OK	OK	✓		
9	TE ORDER-NO.			OK	OK	OK	OK	OK	OK	✓		
10	ACCORDING TO INTERFACE DRAWING SEE TE-NO. 114-18679-3			NOTED PER APQP TEAM						✓		
11	ASSEMBLY LINE SEGMENT IDENTIFICATION			OK	OK	OK	OK	OK	OK	✓		
12	DATE CODE (DDDYY)			OK	OK	OK	OK	OK	OK	✓		
13	DIVERGENT ,MARKING FOR PARTS FROM U.S. PRODUCTION			OK	OK	OK	OK	OK	OK	✓		
	CODING A AS SHOWN			OK	OK	OK	OK	OK	OK	✓		
5	TE PART NO.:			OK	OK	OK	OK	OK	OK	✓		
16	CIRCULAR DATE INSERT ONLY FOR VERSION 1 - DATE FORMAT FOR VERSION 2 (YY/MM)			OK	OK	OK	OK	OK	OK	✓		
17	REVISION, CORRESPONDING TO ACTUAL REVISION			OK	OK	OK	OK	OK	OK	✓		
18	MATERIAL IDENTIFICATION			OK	OK	OK	OK	OK	OK	✓		
19	MOLD CAVITY IDENTIFICATION			OK	OK	OK	OK	OK	OK	✓		
20	DATE INSERT FOR RECEPTACLE HOUSING			NA	NA	NA	NA	NA	NA	✓		

CONCLUSION:

TOTAL # OF FEATURES	108
LESS BASIC DIMENSIONS	0
LESS REFERENCE DIMENSIONS	6
REPORTED DIMENSIONS	102
# DIMENSIONS IN TOLERANCE	102
# DIMENSIONS OUT OF TOLERANCE	0
% DIMENSION IN TOLERANCE	100.00 %
% DIMENSION OUT OF TOLERANCE	0.00 %

March 2006 CFG-1003

AEF004J-EG Rev: J

SIGNATURE Omar Sánchez	TITLE Metrology Chief	DATE June 18, 2020
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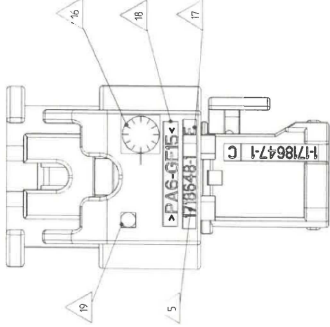
Digitally signed
by Sarahi
Cabrera
DN: cn=Sarahi
Cabrera,
o=STE,
ou=STE,
c=US,
email=sarahi.cabrera@ste.com



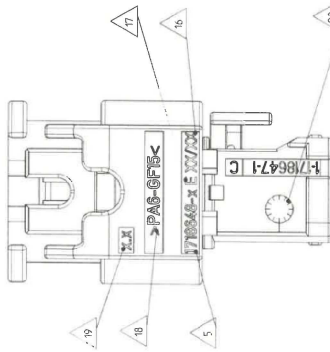
1131910-0700'

Divergent marking is allowed for parts from different tools

Version 1



Version 2



- 5 TE PART NO.:
- 16 - CIRCULAR DATE INSERT ONLY FOR VERSION 1
- 17 - DATE FORMAT FOR VERSION 2 (YY/MM)
- 17 REVISION, CORRESPONDING TO ACTUAL REVISION
- 18 MATERIAL IDENTIFICATION
- 19 MOULD CAVITY IDENTIFICATION
- 20 DATE INSERT FOR RECEPTACLE HOUSING

REV. NO.	DESCRIPTION	DATE	BY
1	SEE SHEET 1		

ORDER NO.	COD	DESCRIPTION	REV	QTY	DESCRIPTION	MATERIAL	SURFACE/COLOR	ITEM
3-1670916-1	C	2pos. MCON 1.2 - LL Connector Sealed	A	1	2pos. MCON 1.2 - Seal	MVD	NATURE	4
			A	1	2pos. MCON 1.2 - Retainer	PAG-GF15	VIOLETT	3
			A	1	2pos. MCON 1.2 - Protet. Cover	PAG-GF15	BLACK	2
			A	1	2pos. MCON 1.2 - Receptacle Hsg.	PAG-GF30	BLACK	1
2-1670916-1	B	2pos. MCON 1.2 - LL Connector Sealed	E	1	2pos. MCON 1.2 - Seal	MVD	NATURE	4
			E	1	2pos. MCON 1.2 - Retainer	PAG-GF15	VIOLETT	3
			E	1	2pos. MCON 1.2 - Protet. Cover	PAG-GF15	BLACK	2
			E	1	2pos. MCON 1.2 - Receptacle Hsg.	PAG-GF30	BLACK	1

THIS DRAWING IS A CONTROLLED DOCUMENT.

STE

TE Connectivity

MARK: CONNECTOR, 2 POS-MCON 1.2, SEALED
 PACKAGE: 2 POS-MCON 1.2, GIGI

REV: 000779

DATE: 07/20/2007

DESIGNER: S1

DRAWING NO: 1-1670916-1

SHEET: 5/1



Section 10

Material, Performance Test Results

Certificate of Analysis

<p>Customer:</p> <p>TE CONNECTIVITY CORPORATION 8000 PIEDMONT TRIAD PKWY GREENSBORO NC 27409-9407</p> <p>Attention:</p> <p>FAX:</p> <p>Cust Prod: 1573118-4</p> <p>Cust Prod Name: ULT.B3ZG3 LS BK23189 726KG 11G</p> <p>Cust P.O.: 2711418284</p> <p>Cust P.O. Line: 20</p> <p>Inspection Certificate 3.1 according to EN 10204</p>	<p>Product Number : 50561383</p> <p>Product Name : ULTRAMID® B3ZG3 LS BLACK 23189 POLYAMIDE 726KG Fibreboard IBC (11G)</p> <p>Vehicle :</p> <p>Batch/Lot : 0209077540</p> <p>Manuf.Date : Jun-02-2020</p> <p>Shipped Date :</p> <p>Shipped Quantity : 6,402.224 LB</p> <p>Delivery Date : Jun-19-2020</p> <p>Order Number : 117436379 000020</p> <p>Delivery Note : 144594167 900001</p>
---	--

Characteristic	Result	UOM	----Specification----		Test Method
			Minimum	Maximum	
Ash / Filler Content	15.115	%	13.000	17.000	ASTM5630/ISO3451
Moisture Content	0.12	%		0.15	ASTM D6869 / ISO 15512B
Viscosity Number for Polyamides	159	ml/g	142	178	ISO 307

Comments :

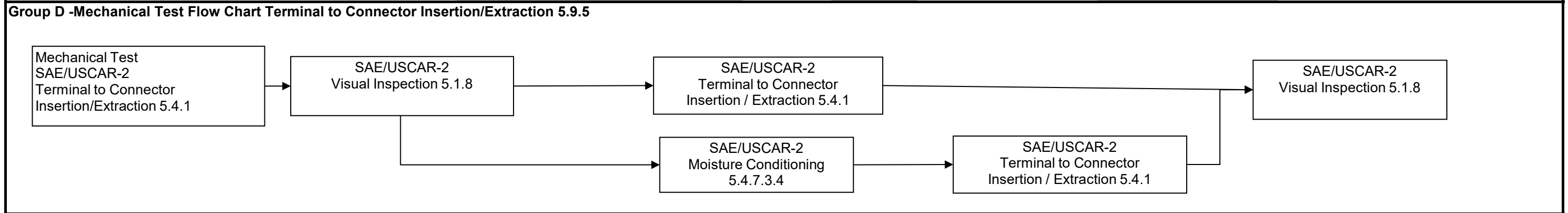
Results shown are the means of individual test values for those samples taken during production of the lot specified.



Design Verification Plan and Report

System: CPSC 18.01.07 Connectors		Ford part number (s): See ESER Tab		Model Year and Program: Multiple		Ford Design Engineer: Joe Chappelle <i>Joe Chappelle</i>	
Temperature Class	T3	T1, T2, T3, T4 T5	Supplier: TE Connectivity		Ford Design Engineer Approval Mar 25, 2021		
Vibration Class	V2	V1, V2,V3, V4, V5	Reason for Validation:	Tool Transfer	Part Level:	PV - production	Plan:
Sealing Class	S2	S1, S2,S2.5, S3					Report: 3/16/2021

Test Name/Source	Acceptance Criteria	Test Results	Design Level Tested	Sample Size		Timing		Remarks
				Required	Tested	Sched.	Actual	



D-1. Visual Inspection - SAE/USCAR-2 5.1.8 To document the physical appearance of test samples.	The connectors assemblies must not show , with the aid of 10X magnification, any evidence of deterioration, cracks, deformities, etc., that could affect their functionality or distort their appearance. Connector locking mechanism must function without breaking	Pass	PV	Determined thru Table 5.4.1.3.1		3/1/2021	Test Request 20210214ACL
D-2. Insertion Force USCAR 2, 5.4.1.3 A	Maximum Insertion Force for a terminal is 15N, 20N or30 N based on terminal size (see 5.4.1.4.1)	Max	Min	Ave	PV	10	3/1/2021
	Largest Wire	10.47N	8.13N	9.20N			
D-3a. Extraction Force - With Primary Lock SAE/USCAR-2, 5.4.1.3 B	Acceptance Criteria found in USCAR 2 Table 5.4.1.4	Max	Min	Ave	PV	10	3/1/2021
	Largest Wire	89.14N	77.35N	82.47N			
D-4. Visual Inspection - SAE/USCAR-2 5.1.8 To document the physical appearance of test samples.	The connectors assemblies must not show , with the aid of 10X magnification, any evidence of deterioration, cracks, deformities, etc., that could affect their functionality or distort their appearance. Connector locking mechanism must function without breaking	Pass	PV	10		3/1/2021	



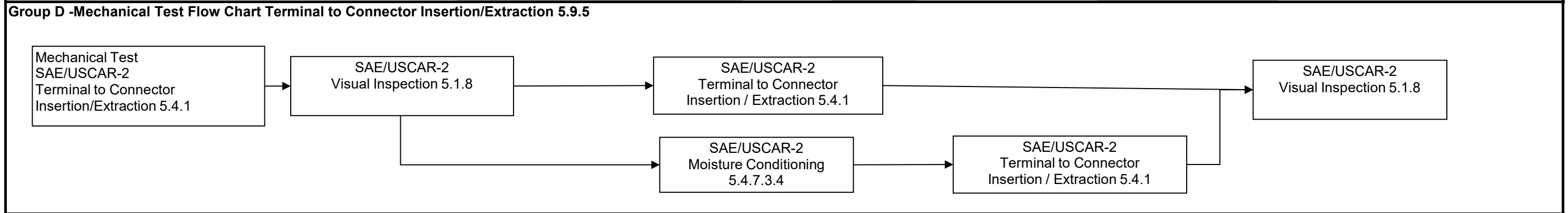
Design Verification Plan and Report

Mar 25, 2021

page 4 of 11

System: CPSC 18.01.07 Connectors		Ford part number (s): See ESER Tab		Model Year and Program: Multiple		Ford Design Engineer: Joe Chappelle <i>Joe Chappelle</i>	
Temperature Class	T3	T1, T2, T3, T4 T5		Supplier: TE Connectivity			
Vibration Class	V2	V1, V2,V3, V4, V5		Reason for Validation:	Tool Transfer	Part Level:	PV - production
Sealing Class	S2	S1, S2,S2.5, S3		Plan:			
				Report: 3/16/2021			

Test Name/Source	Acceptance Criteria	Test Results	Design Level Tested	Sample Size		Timing		Remarks
				Required	Tested	Sched.	Actual	



D-1. Visual Inspection - SAE/USCAR-2 5.1.8 To document the physical appearance of test samples.	The connectors assemblies must not show , with the aid of 10X magnification, any evidence of deterioration, cracks, deformities, etc., that could affect their functionality or distort their appearance. Connector locking mechanism must function without breaking	Pass	PV	Determined thru Table 5.4.1.3.1		3/1/2021	Test Request 20210214ACL
D-2. Insertion Force USCAR 2, 5.4.1.3 A	Maximum Insertion Force for a terminal is 15N, 20N or30 N based on terminal size (see 5.4.1.4.1)	Max	Min	Ave	PV	10	3/1/2021
	Largest Wire	11.20N	7.84N	9.02N			
D-3a. Extraction Force - With Primary Lock SAE/USCAR-2, 5.4.1.3 B	Acceptance Criteria found in USCAR 2 Table 5.4.1.4	Max	Min	Ave	PV	10	3/1/2021
	Largest Wire	85.70N	71.23N	80.38N			
D-4. Visual Inspection - SAE/USCAR-2 5.1.8 To document the physical appearance of test samples.	The connectors assemblies must not show , with the aid of 10X magnification, any evidence of deterioration, cracks, deformities, etc., that could affect their functionality or distort their appearance. Connector locking mechanism must function without breaking	Pass	PV	10		3/1/2021	



Section 11

Initial Process Studies

Not Applicable



Section 12

Qualified Laboratory Documentation

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - IATF 16949:2016

This is to certify that:

TE Connectivity
Global Automotive Division
Americas North
Carretera Internacional, KM 1969
Guadalajara-Nogales Km 2
Empalme
Sonora
85340
Mexico

operates a Quality Management System which complies with the requirements of IATF 16949:2016 for the following scope:

Design and manufacture of electrical interconnecting devices.

For and on behalf of BSI:

Carlos Pitanga, Chief Operating Officer Assurance – Americas

BSI Certificate Number: 514458-003

IATF Number: 0315420



Certification Date: 2018-07-11

Latest Issue: 2020-10-27

Expiry Date: 2022-01-09

Page: 1 of 3

...making excellence a habit.™

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at www.bsigroup.com/ClientDirectory

To be read in conjunction with the scope above or the attached appendix.

Further clarifications regarding the scope of this certificate and the applicability of IATF 16949 requirements may be obtained by consulting the organization.

IATF Contracted Office: BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

Location

TE Connectivity
Global Automotive Division
Americas North
Carretera Internacional, KM 1969
Guadalajara-Nogales Km 2
Empalme
Sonora
85340
Mexico

Registered Activities

Manufacture of interconnecting devices.

Including the following remote support functions:

TE Connectivity
Global Automotive Division Americas North
3800 Reidsville Road
Winston-Salem
North Carolina
27102
USA
Calibration, Contract review, Product design, Purchasing,
Sales, Supplier management, Testing

TE Connectivity
Global Automotive Division Americas North
20 Esna Park Drive
Markham
Ontario
L3R 1E1
Canada
Product design, Testing

TE Connectivity
Global Automotive Division Americas North
2901 Fulling Mill Road
Middletown
Pennsylvania
17057
USA
Customer service, Product design, Testing

TE Connectivity
Global Automotive Division Americas North
900 Wilshire Boulevard
Suite 150
Troy
Michigan
48084
USA
Product design

BSI Certificate Number: 514458-003

IATF Number: 0315420



Certification Date: 2018-07-11

Latest Issue: 2020-10-27

Expiry Date: 2022-01-09

Page: 2 of 3

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IATF Contracted Office: BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

Americas Headquarters: BSI Group America Inc., 12950 Worldgate Drive, Suite 800, Herndon, VA 20170-6007 USA

A Member of the BSI Group of Companies.

Location

Registered Activities

TE Connectivity
Global Automotive Division Americas North
2100 Paxton Street
Harrisburg
Pennsylvania
17111
USA
Testing

TE Connectivity
North Carolina Distribution Center
8000 Piedmont Triad Parkway
Greensboro
North Carolina
27409
USA
Distribution, Logistics, Warehousing

TE Connectivity
Global Automotive Division Americas North
32 Celerity Wagon St.
El Paso
Texas
79906
USA
Distribution, Logistics, Packaging, Warehousing

TE Connectivity
West Coast Distribution Center
1643 South Parco Avenue
Ontario
California
91761
USA
Distribution, Logistics, Packaging, Warehousing

TE Connectivity Global Logistics
Blvd. Industrial Norte #23 y Blvd. Solidaridad
Col. Parque Industrial Hermosillo
Hermosillo
Sonora
83118
Mexico
Warehousing, Distribution

BSI Certificate Number: 514458-003

IATF Number: 0315420



Certification Date: 2018-07-11

Latest Issue: 2020-10-27

Expiry Date: 2022-01-09

Page: 3 of 3

This certificate remains the property of BSI and shall be returned immediately upon request.

An electronic certificate can be authenticated [online](http://www.bsigroup.com/ClientDirectory). Printed copies can be validated at www.bsigroup.com/ClientDirectory

To be read in conjunction with the scope above or the attached appendix.

Further clarifications regarding the scope of this certificate and the applicability of IATF 16949 requirements may be obtained by consulting the organization.

IATF Contracted Office: BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.



Section 13

Appearance Approval Report

Not Applicable



Section 14

Sample Product

**Sent in separate package
(if required)**



Section 15

Master Sample

Retained at manufacturing location



Section 16

Checking Aids

Not Applicable



Section 17

Records of Compliance with Customer-Specific Requirements

MDS Report

Substances of assemblies and materials

This report is for internal Automotive industry use only. Distribution to non-Automotive clients is a violation of the Terms of Use, and is not permitted unless a written permission was given by DXC Technology. Parsing is not allowed.

1. Company and Product Name

1.1 Supplier Data

Name [ID]: **Tyco Electronics GAD [913]**

DUNS Number: **-**

Street/Postal Code: **Amperestr. 12-14**

Nat./ZipCode/City: **DE 64625 Bensheim**

Supplier Code: **-**

Contact Person: **IMDS Team (India) Engineering Services**

- Phone: **-**

- Fax No.: **-**

- E-Mail Address: **imds@te.com**

1.2 Product Identification

Part/Item No.: **1-1670916-1**

Description: **Connector Assy 2 Pos AMP MCP 1.2, Sealed**

Report No.: **-**

Date of Report: **-**

Purchase Order No.: **-**

Bill of Delivery No.: **-**

Preliminary MDS: **No**

IMDS ID / Version: **72166237 / 21**

Node ID: **878753777**

MDS Status (Change Date): **Internally released (11/08/2019)**

MDS Report

Substances of assemblies and materials

Materials which are subject to legal prohibitions must not be included!
 Dangerous substances formed or released during use must also be declared
 Please note: GADSL list for substances that require declaration

2. Characterization of the Component

Part/Item No.: **1-1670916-1**
 Description: **Connector Assy 2 Pos AMP MCP 1.2, Sealed**

Report No.: **-**
 IMDS ID / Version: **72166237 / 21**
 Node ID: **878753777**

Tree Level	Description Article Name Name Substance name	Part/Item No. Item- /Mat.-No. Material-No. CAS No.	IMDS ID / Version	Quantity	Weight [g]	Portion [%]	Portion (from - to) [%]	Classif. GADSL, SVHC	Parts Marking Recyclate (Indust./Consumer) Application [ID]
1	Connector Assy 2 Pos AMP MCP 1.2, Sealed	1-1670916-1	72166237 / 21		2.1716				
└2	Inner Housing , 2 Pos,AMP MCP 1.2 - Black	1-1718647-1	21847874 / 7	1	0.8636				Yes
└3	PA66-GF30	704115-1	111794 / 11		0.8636			5.1.a	No
└4	GF-Fibre	-				30			

Tree Level	Description Article Name Name Substance name	Part/Item No. Item- /Mat.-No. Material-No. CAS No.	IMDS ID / Version	Quantity	Weight [g]	Portion [%]	Portion (from - to) [%]	Classif. GADSL, SVHC	Parts Marking Recyclate (Indust./Consumer) Application [ID]
└4	Carbon black	1333-86-4				1			
└4	Further Additives, not to declare	system				1			
└4	PA66	-				68			
└2	Outer Housing 2 Pos, MCON 1.2 - Black	1718648-1	21847922 / 16	1	1.2				Yes
└3	PA6-I-GF15	1573118-4	628899181 / 1		1.2			5.1.a	No
└4	Further Additives, not to declare	system				0.5			
└4	GF-Fibre	-				15			
└4	PA6-I	-				84			
└4	Carbon black	1333-86-4				0.5			
└2	Retainer, 2 Pos, AMP MCP 1.2 - Violet	0-1718649-1	21844428 / 14	1	0.038				Not Applicable
└3	PA66-GF15	705248-3	670079023 / 2		0.038			5.1.a	No
└4	PA66	-				83			
└4	Further Additives, not to declare	system				1.5			
└4	GF-Fibre	-				15			
└4	Pigment portion, not to declare	system				0.5			
└2	Seal for Housing	1718650-1	334290558 / 3	1	0.07				Not Applicable
└3	VMQ		16783934 / 11		0.07			5.3	No
└4	Siloxanes and Silicones, di-Me, di-Ph	68083-14-7				7	6 - 8		

Tree Level	Description Article Name Name Substance name	Part/Item No. Item- /Mat.-No. Material-No. CAS No.	IMDS ID / Version	Quantity	Weight [g]	Portion [%]	Portion (from - to) [%]	Classif. GADSL, SVHC	Parts Marking Recyclate (Indust./Consumer) Application [ID]
└4	Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products...	68909-20-6				24			
└4	VMQ	-				69	64 - 74		

This is an uncontrolled copy of a document created by IMDS. End of the report.



Section 18

Part Submission Warrant

Part Submission Warrant

Part Name	<u>2POS, MCON 1.2 LL REC SEALED</u>	Cust. Part Number	<u>07X1741</u>
Shown on Drawing No.	<u>C-1670916</u>	Org. Part Number	<u>1-1670916-1</u>
Engineering Change Level	<u>E5</u>	Dated	<u>08-Jan-2020</u>
Additional Engineering Changes	<u>N/A</u>	Dated	<u>N/A</u>
Safety and/or Government Regulation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Purchase Order No.	<u>N/A</u>
Weight (kg)			<u>0.00217</u>
Checking Aid Number	<u>N/A</u>	Checking Aid Engineering Change Level	<u>N/A</u>
Dated			<u>N/A</u>

ORGANIZATION MANUFACTURING INFORMATION

TE Connectivity

Supplier Name & Supplier/Vendor Code

Carretera Internacional, KM 1969 Guadalajara-Nogales Km 2

Street Address

Empalme Sonora 85340 Mexico
 City Region Postal Code Country

CUSTOMER SUBMITTAL INFORMATION

Newark Electronics

Customer Name/Division

N/A

Buyer/Buyer Code

Various
 Application

MATERIALS REPORTING

Reporting of all materials, not just Substances of Concern, may be required by certain OEMs or other customers.

Has customer-required Substances of Concern information been reported? Yes No

Submitted by IMDS or other customer format: 72166237 / 21

Are polymeric parts identified with appropriate ISO marking codes? Yes No N/A

REASON FOR SUBMISSION

- | | |
|--|--|
| <input type="checkbox"/> Initial submission | <input type="checkbox"/> Change to Optional Construction or Material |
| <input type="checkbox"/> Engineering Change(s) | <input type="checkbox"/> Sub-Supplier or Material Source Change |
| <input checked="" type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment, or additional | <input type="checkbox"/> Change in Part Processing Location |
| <input type="checkbox"/> Correction of Discrepancy | <input type="checkbox"/> Parts produced at Additional Location |
| <input type="checkbox"/> Tooling Inactive > than 1 year | <input type="checkbox"/> Other - please specify |

REQUESTED SUBMISSION LEVEL (Check one)

- Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- Level 3 - Warrant with product samples and complete supporting data submitted to customer.
- Level 4 - Warrant and other requirements as defined by customer.
- Level 5 - Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.

SUBMISSION RESULTS

The results for dimensional measurements material and functional tests appearance criteria statistical process package

These results meet all design record requirements: YES NO (If "NO" - Explanation Required)

Mold / Cavity / Production Process Assembly

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts, which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at a production rate of Proprietary /1 hour. I also certify that the documented evidence of such compliance is on file and available for review. I have noted any deviation from the declaration below.

EXPLANATION/COMMENTS: Production Rate is TE proprietary.

P-19-018198 & P-19-018199: Component moving 1-1718647-1 transfer from Pegg to Empalme.

Is each Customer Tool properly tagged and numbered? Yes No N/A

Organization Authorized Signature Alejandra Lara A. Date 21/04/2021

Print Name Alejandra Lara Phone No. N/A Fax No. N/A

Title PPAP Technician E-mail alejandra.lara@te.com

FOR CUSTOMER USE ONLY (IF APPLICABLE)

Part Warrant Disposition: Approved Rejected Other

Customer Signature _____ Date _____

Print Name _____ Customer Tracking Number (optional) _____

March 2006 **CFG-1001**

Optional customer tracking number: _____



Section 18a

Bulk Material Requirements



Not Applicable