Table of Contents

PPAP Package for:

Newark Electronics

85C0834

(TE Connectivity Part Number: 917989-6)

13/Aug/2019

Section A	Nondisclosure Agreement
Section # 1	Design Records
Section # 2	Engineering Change Documents
Section # 3	Customer Engineering Approval
Section # 4	Design FMEA
Section # 5	Process Flow Diagrams
Section # 6	Process FMEA
Section # 7	Control Plan
Section # 8	Measurement Systems Analysis Studies
Section # 9	Dimensional Results
Section # 10	Material, Performance Test Results
Section # 11	Initial Process Study
Section # 12	Qualified Laboratory Documentation
Section # 13	Appearance Approval Report
Section # 14	Sample Product
Section # 15	Master Sample
Section # 16	Checking Aids
Section # 17	Records Of Compliance with Customer-Specific Requirements
Section # 18	Part Submission Warrant
Section # 18a	Bulk Material Requirements

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.

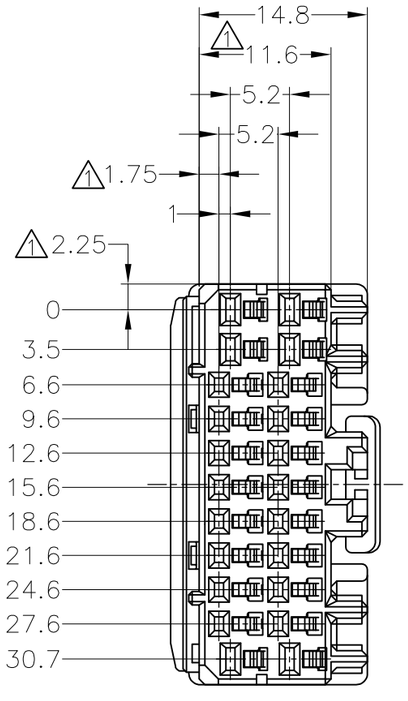
Section 1

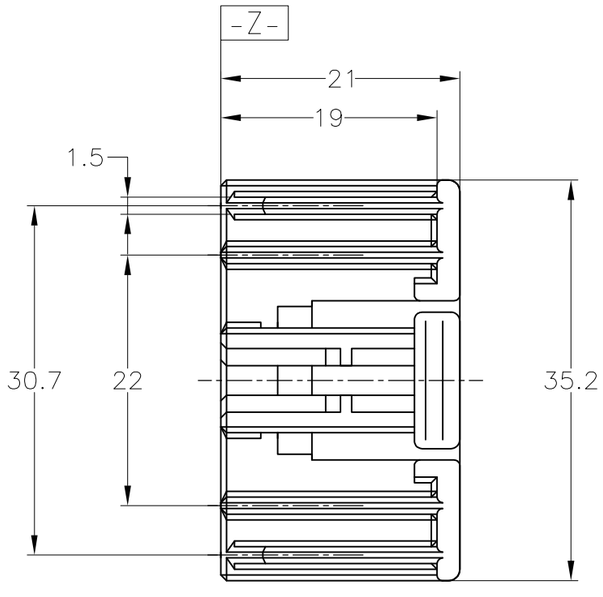
Design Records

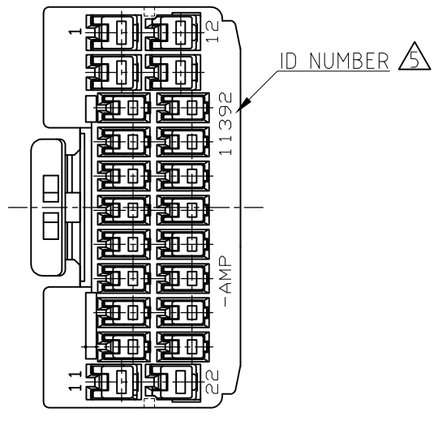
LOC	DIST
J	—

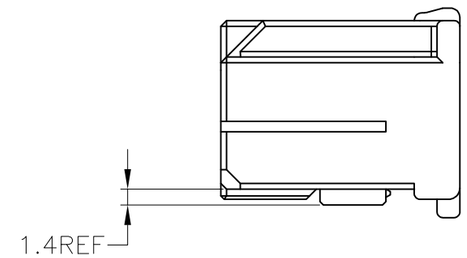
REVISIONS 変更

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A2	REVISED PER ECO-11-005140	28MAR11	RK	HMR









1. MUST BE KEPT BETWEEN -Z- AND 2mm
2. THE MATING CAP HOUSING PART NUMBER ; 178764
3. APPLIED CONTACT PART NUMBER ; 175265, 175266, 175268, 175269
4. APPLICABLE PRODUCT. SPEC. NUMBER; 108-5342
5. RETAINER COLOR; ALL WHITE

1. -Z- 面より2mmの範囲で測定
2. 嵌合相手ハウジング型番：178764
3. 内装するリセプタクルコンタクト型番：175265, 175266, 175268, 175269
4. 適用製品規格番号： 108-5342
5. リテーナーは全て白色

5 色（COLOR）	PART NUMBER
淡灰（LIGHT GRAY）	6-917989-6
黄（YELLOW）	917989-7
灰（DARK GRAY）	917989-6
青（BLUE）	917989-5
SEE DRAWING 917989-4	917989-4
黒（BLACK）	917989-2
白（WHITE）	917989-1

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: 単位： 粍 mm

TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差
0 PLC ± –
1 PLC ± –
2 PLC ± –
3 PLC ± –
4 PLC ± –
ANGLES ± –

TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差
10↘ : ±0.2
30↘ >10 : ±0.25
100↘ >30 : ±0.3
ANGLE : ±3°

MATERIAL 材料: PBT
FINISH 仕上: –

DWN	M.SUGAWARA	25MAY06
CHK	T.SHINOHARA	25MAY06
APVD	K.BETSUI	25MAY06
PRODUCT SPEC 製品規格	SEE NOTE	
APPLICATION SPEC 取付適用規格	—	
WEIGHT	—	

TE Connectivity

NAME 名称: 040/070 HYBRID I/O CONNECTOR MK-II 22POSITION PLUG HOUSING

SIZE	CAGE CODE	DRAWING NO 番号	RESTRICTED TO
A3	00779	C-917989	—

CUSTOMER DRAWING

SCALE 尺度	SHEET	REV
2:1	1 OF 1	A2

Section 2

Engineering Change Documents

Product Change Notification

Current Date: 19-Jul-2018

TE Connectivity

Product Change Notification: P-18-016097 **PCN Date:** 17-JUL-18

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:
One Roof - Connectors stage

Description of Changes
Dear Customer, TE Connectivity Automotive Business Unit is in the fourth phase of a process Consolidation Project in the Empalme Campus, the objective is to consolidate Plant 1 (Molding & Mechatronics) and Plant 4 (Assembly) into a single building, in the same industrial park. The fourth phase involves migration of TE4 Connector Assembly processes to TE2 One Roof Building, As part of our ongoing activities to provide our customers the highest quality products, this will drive to a Vertical Integration, Safety Systems improvements, Warehouse optimization, and excellent customer experience. The building is being prepare to start moving in September 2018 through December 2018. **Other attachments:** TE Empalme Consolidation

Reason for Changes:	
Dear Customer, we hereby inform you about a transfer of tools and/or processes. The transfer follows a strict procedure, which fully maintains quality, ability to supply and form-fit-function of the concerned products. The new manufacturing location operates under a certified quality management system in accordance with standard automotive requirements. A TE-internal release test based on the relevant part specifications will be executed before delivery. Upon request, a PPAP Level 2 will be available if it concerns a transfer of a tool which produces a finished TE-product. A PPAP Level 1 will be available if it concerns a component of a TE-product, where the production location of the finished TE-product remains unchanged. If you require such a PPAP, please notify the responsible TE Sales Contact within 14 calendar days after receipt of this PCN	
Estimated Dates:	
Last Order Date (Obsolete Parts Only):	**First Date To Ship** (Changed Parts Only):
	02-NOV-2018
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
1-1326132-0	NO					
1-1326327-1	NO					
1-1326328-2	NO					
1-1326727-9	NO					
1-1411001-0	NO					
1-1437855-9	NO		"108525A"			
1-1438454-1	NO					
1-1438726-6	NO					
1-1438726-7	NO					
1-1456315-1	NO					
1-1456315-2	NO					
1-1456315-5	NO					
1-1456426-1	NO					
1-1456426-2	NO					
1-1456426-5	NO					
1-1456426-6	NO					
1-1587041-4	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					
1-1924337-3	NO					
1-1924939-6	NO					
1-1924940-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-1924940-3	NO					
1-1924940-7	NO					
1-1924940-8	NO					
1-1924941-0	NO					
1-1924941-2	NO					
1-1924941-3	NO					
1-1924941-4	NO					
1-1924941-5	NO					
1-1924941-8	NO					
1-1924943-7	NO					
1-1924943-8	NO					
1-1924944-1	NO					
1-1924944-5	NO					
1-1924944-7	NO					
1-2035363-0	NO					
1-2098067-3	NO					
1-2098067-4	NO					
1-2098067-5	NO					
1-2098067-6	NO					
1-2098923-0	NO					
1-2098923-4	NO					
1-2138685-5	NO					
1-2203515-1	NO					
1-2203529-2	NO					
1-2203529-5	NO					
1-2203654-2	NO					
1-2203654-7	NO					
1-2203773-2	NO					
1-2208018-3	NO					
1-2208018-4	NO					
1-2208021-1	NO					
1-2208021-2	NO					
1-2208408-2	NO					
1-2272975-1	NO					
1-2296697-1	NO					
1-2296697-2	NO					
1-2300499-1	NO					
1-2300499-2	NO					
1-2309436-1	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					
1274412-1	NO					
1326055-3	NO					
1326110-1	NO					
1326122-1	NO					
1326122-3	NO					
1326132-1	NO					
1326132-2	NO					
1326132-4	NO					
1326132-9	NO					
1326136-1	NO					
1326136-2	NO					
1326140-1	NO					
1326140-3	NO					
1326226-1	NO					
1326226-2	NO					
1326226-3	NO					
1326328-5	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1326339-1	NO					
1326339-6	NO					
1326339-7	NO					
1326339-8	NO					
1326353-1	NO					
1326353-3	NO					
1326362-1	NO					
1326362-3	NO					
1326362-7	NO					
1326509-1	NO					
1326729-1	NO					
1326942-3	NO					
1326964-1	NO					
1411001-1	NO		"V23542-G1508-A115"			
1411001-6	NO					
1411001-7	NO					
1411001-8	NO					
1411001-9	NO					
1411169-1	NO					
1411169-3	NO					
1411169-4	NO					
1411367-1	NO					
1432654-1	NO		"VATS-0022"			
1437882-8	NO		"109640A", "X109640A"			
1438031-1	NO		"V23542-G1516-A101"			
1438082-1	NO					
1438083-1	NO					
1438122-1	NO					
1438156-1	NO					
1438156-3	NO					
1438399-1	NO					
1438426-1	NO					
1438426-3	NO					
1438454-1	NO					
1438521-1	NO					
1438545-1	NO					
1438726-2	NO					
1438759-1	NO					
1438761-6	NO					
1438766-1	NO					
1438794-1	NO					
1438794-2	NO					
1438810-1	NO					
1438841-1	NO					
1438841-2	NO					
1438848-1	NO					
1438975-2	NO					
1443966-1	NO					
1452187-1	NO					
1456016-1	NO		"130025602403"			
1456016-2	NO		"130025602404"			
1456016-3	NO		"130025602405"			
1456016-4	NO		"130025602406"			
1456078-1	NO		"1X2078701"			
1456078-2	NO		"1X2078702"			
1456315-1	NO					
1456315-2	NO					
1456315-3	NO					
1456315-5	NO					
1456315-6	NO					
1456315-9	NO					
1456471-1	NO					
1456471-2	NO					
1456471-4	NO					
1456471-5	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1456471-6	NO					
1456554-1	NO					
1456601-1	NO					
1456602-2	NO					
1456867-3	NO					
1456950-2	NO					
1456987-1	NO					
1456987-3	NO					
1456987-4	NO					
1456987-5	NO					
1456987-7	NO					
1456989-1	NO					
1456989-2	NO					
1456989-3	NO					
1456989-4	NO					
1488107-1	NO					
1488573-1	NO					
1488750-1	NO					
1488846-4	NO					
1488846-6	NO					
1488903-1	NO					
1557052-1	NO					
1557636-1	NO					
1557667-1	NO					
1587041-1	NO					
1587255-1	NO					
1587268-4	NO					
1587270-5	NO					
1587392-7	NO					
1587392-8	NO					
1642407-5	NO					
1670118-1	NO					
1670120-1	NO					
1670120-2	NO					
1718981-1	NO					
1732120-1	NO					
1732120-2	NO					
1732510-3	NO					
174971-2	NO					
174973-2	NO					
174975-2	NO					
174979-2	NO					
179678-6	NO					
179679-6	NO					
179680-5	NO					
179681-6	NO					
184000-1	NO					
184002-1	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					
184020-1	NO					
184022-1	NO					
184032-1	NO					
184034-1	NO					
184042-1	NO					
184042-2	NO					
184046-1	NO		"EM3604-000", "AMP-0-0184046-1"			
184050-2	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
184060-1	NO					
184097-1	NO					
184115-1	NO					
184116-1	NO					
184116-2	NO					
184124-1	NO					
184207-1	NO					
184212-1	NO					
184212-2	NO					
184214-1	NO					
184216-1	NO					
184220-1	NO					
184240-1	NO					
184246-1	NO					
184248-1	NO					
184254-1	NO					
184270-1	NO					
184292-1	NO					
184305-1	NO					
184311-1	NO					
184315-1	NO					
184322-1	NO					
184328-1	NO					
184334-1	NO					
184340-1	NO					
184341-1	NO					
184344-1	NO					
184346-1	NO					
184346-2	NO					
184349-1	NO					
184355-1	NO					
184355-2	NO					
184370-1	NO					
184375-1	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					
184406-1	NO					
184408-1	NO					
184408-2	NO					
184409-1	NO					
184435-1	NO					
184452-1	NO					
1924117-4	NO					
1924211-1	NO					
1924211-3	NO					
1924212-1	NO					
1924212-2	NO					
1924227-2	NO					
1924292-1	NO					
1924292-5	NO					
1924292-6	NO					
1924337-1	NO					
1924337-2	NO					
1924337-3	NO					
1924346-1	NO					
1924346-3	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1924484-1	NO					
1924639-1	NO					
1924639-2	NO					
1924779-1	NO					
1924900-1	NO					
1924900-4	NO					
1924939-1	NO					
1924940-1	NO					
1924940-5	NO					
1924940-6	NO					
1924941-1	NO					
1924941-2	NO					
1924941-4	NO					
1924941-5	NO					
1924941-6	NO					
1924941-7	NO					
1924941-8	NO					
1924941-9	NO					
1924942-1	NO					
1924942-2	NO					
1924942-3	NO					
1924942-6	NO					
1924943-1	NO					
1924944-1	NO					
1924944-2	NO					
1924944-4	NO					
1924944-6	NO					
2-1326327-8	NO					
2-1438083-1	NO					
2-1438454-1	NO					
2-1438521-4	NO					
2-1438521-5	NO					
2-1438521-7	NO					
2-1438950-1	NO					
2-1924067-0	NO					
2-1924211-1	NO					
2-1924783-9	NO					
2-1924939-2	NO					
2-1924939-4	NO					
2-1924940-3	NO					
2-1924941-0	NO					
2-1924941-1	NO					
2-2098923-0	NO					
2-2098923-1	NO					
2-2098923-2	NO					
2-2203654-3	NO					
2-2203654-9	NO					
2-638517-1	NO					
2-638518-1	NO					
2-638849-1	NO					
2-776728-5	NO					
2035024-1	NO					
2035024-2	NO					
2035037-1	NO					
2035037-2	NO					
2035239-1	NO					
2035360-1	NO					
2035360-3	NO					
2035360-5	NO					
2035363-1	NO					
2035363-2	NO					
2035363-3	NO					
2035363-4	NO					
2035363-5	NO					
2035363-6	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2035363-7	NO					
2098067-1	NO					
2098067-2	NO					
2098067-3	NO					
2098067-4	NO					
2098067-5	NO					
2098067-6	NO					
2098067-7	NO					
2098198-5	NO					
2098256-7	NO					
2098269-1	NO					
2098269-4	NO					
2098401-2	NO					
2098407-1	NO					
2098489-1	NO					
2098491-1	NO					
2098541-1	NO					
2098541-5	NO					
2098541-6	NO					
2098557-1	NO					
2098557-4	NO					
2098557-7	NO					
2098559-5	NO					
2098559-6	NO					
2098559-7	NO					
2098559-8	NO					
2098627-1	NO					
2098627-2	NO					
2098633-1	NO					
2098641-1	NO					
2098641-2	NO					
2098641-5	NO					
2098641-6	NO					
2098681-1	NO					
2098863-1	NO					
2098863-2	NO					
2098863-6	NO					
2098863-7	NO					
2098863-8	NO					
2098865-1	NO					
2098865-2	NO					
2098866-1	NO					
2098923-1	NO					
2098923-3	NO					
2098923-5	NO					
2098923-7	NO					
2098923-8	NO					
2098923-9	NO					
2098924-2	NO					
2098924-8	NO					
2098963-1	NO					
2098963-2	NO					
2098963-3	NO					
2098963-5	NO					
2098963-6	NO					
2098966-1	NO					
2098966-2	NO					
2098966-3	NO					
2098966-6	NO					
2098966-7	NO					
2138045-1	NO					
2138046-3	NO					
2138046-6	NO					
2138047-3	NO					
2138144-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2138209-1	NO					
2138250-1	NO					
2138251-1	NO					
2138252-1	NO					
2138260-1	NO					
2138274-1	NO					
2138281-2	NO					
2138314-1	NO					
2138314-5	NO					
2138314-7	NO					
2138338-5	NO					
2138338-7	NO					
2138414-1	NO					
2138731-1	NO					
2138873-4	NO					
2203111-2	NO					
2203111-6	NO					
2203111-7	NO					
2203314-1	NO					
2203314-2	NO					
2203314-3	NO					
2203318-1	NO					
2203318-2	NO					
2203321-1	NO					
2203321-2	NO					
2203321-3	NO					
2203321-6	NO					
2203321-7	NO					
2203324-2	NO					
2203516-7	NO					
2203537-1	NO					
2203541-1	NO					
2203542-1	NO					
2203654-9	NO					
2203772-1	NO					
2203781-1	NO					
2203781-2	NO					
2203918-1	NO					
2203919-1	NO					
2203937-1	NO					
2203937-4	NO					
2203937-5	NO					
2208408-1	NO					
2272006-1	NO					
2272006-2	NO					
2272010-1	NO					
2272010-2	NO					
2272419-1	NO					
2272431-1	NO					
2272431-2	NO					
2272431-3	NO					
2272926-2	NO					
2272926-3	NO					
2272975-1	NO					
2272975-5	NO					
2272975-7	NO					
2272975-9	NO					
2286018-1	NO					
2287729-2	NO					
2288276-1	NO					
2288276-2	NO					
2289050-1	NO					
2289050-2	NO					
2291594-1	NO					
2296701-1	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
2296701-6	NO					
2297354-1	NO					
2306639-1	NO					
2306984-1	NO					
2309644-1	NO					
2309644-3	NO					
2309644-4	NO					
2311107-1	NO					
2320479-1	NO					
2324011-1	NO					
3-1326328-4	NO					
3-1326339-5	NO					
3-1326339-6	NO					
3-1326339-7	NO					
3-1326727-2	NO					
3-1326727-3	NO					
3-1326729-3	NO					
3-1437287-4	NO		"0941972R01"			
3-1437854-1	NO		"103625"			
3-1438640-2	NO					
3-1438640-5	NO					
3-1438640-7	NO					
3-1438640-9	NO					
3-1438841-8	NO					
3-1924939-1	NO					
3-1924939-4	NO					
3-1924939-5	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					
3-2098922-3	NO					
3-2203654-2	NO					
3-2203654-4	NO					
3-2203654-5	NO					
3-638517-0	NO					
3-776729-0	NO					
4-1326339-1	NO					
4-1326339-5	NO					
4-1326339-7	NO					
4-1437287-0	NO		"0944252L01"			
4-1437287-5	NO		"130025602401"			
4-1437287-6	NO		"130025602402"			
4-1437287-7	NO		"130025603205"			
4-1437290-5	NO		"4001753201"			
4-1437290-6	NO		"4001753202"			
4-1437290-7	NO		"4001753203"			
4-1438083-3	NO					
4-1438083-4	NO					
4-1438640-5	NO					
4-1454396-1	NO		"108104D"			
4-1454396-7	NO		"X109732A"			
4-1456426-1	NO					
4-1456426-2	NO					
4-1488991-1	NO					
4-1488991-2	NO					
4-1587041-6	NO					
4-1924067-1	NO					
4-1924067-2	NO					
4-1924292-1	NO					
4-1924939-2	NO					
4-1924939-3	NO					
4-1924939-5	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
4-1924939-7	NO					
4-1924939-8	NO					
4-1924939-9	NO					
4-2098269-2	NO					
4-2098269-5	NO					
4-2098269-6	NO					
4-2098541-1	NO					
4-2098541-2	NO					
4-2098557-1	NO					
4-2098641-1	NO					
4-2098641-2	NO					
4-2138685-1	NO					
4-2203542-7	NO					
4-2203542-8	NO					
4-2203654-2	NO					
4-2203654-6	NO					
4-2203654-7	NO					
4-2203654-8	NO					
4-2203654-9	NO					
4-2272003-1	NO					
4-2272003-2	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					
4-776728-0	NO					
4-776728-1	NO					
4-776728-2	NO					
4-776728-3	NO					
414946-1	NO					
5-1326339-0	NO					
5-1419166-6	NO					
5-1419167-6	NO					
5-1419168-8	NO		"V23542-G1516-D101"			
5-1437287-0	NO		"1300279"			
5-1437854-0	NO		"104055"			
5-1438082-1	NO					
5-1438841-9	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					
5-2098269-0	NO					
5-2138685-5	NO					
5-2203541-6	NO					
5-2203541-7	NO					
5-2203542-0	NO					
5-2272352-5	NO					
5-2306984-6	NO					
5-2306984-7	NO					
6-1419166-1	NO		"V23542-G1404-A107"			
6-1419166-2	NO		"V23542-G1404-A108"			
6-1419167-1	NO		"V23542-G1416-A107"			
6-1924939-5	NO					
6-1924939-9	NO					
6-2098922-6	NO					
6-2203541-3	NO					
6-2203541-5	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
6-2203541-6	NO					
6-2203542-1	NO					
6-2203542-2	NO					
6-2203542-8	NO					
6-2203542-9	NO					
6-2309433-1	NO					
6-776728-8	NO					
6-776728-9	NO					
6-776729-0	NO					
6-776729-3	NO					
6-776729-4	NO					
6-776729-5	NO					
638014-1	NO					
638079-1	NO					
638082-1	NO					
638097-2	NO					
638113-1	NO					
638116-1	NO					
638119-1	NO					
638137-1	NO					
638141-1	NO					
638143-1	NO					
638147-1	NO					
638151-1	NO					
638157-1	NO					
638199-2	NO					
638207-6	NO					
638207-8	NO					
638245-1	NO					
638245-2	NO					
638286-2	NO					
638392-1	NO					
638392-2	NO					
638392-3	NO					
638393-1	NO					
638393-3	NO					
638393-5	NO					
638393-7	NO					
638394-1	NO					
638394-4	NO					
638394-5	NO					
638397-1	NO					
638444-9	NO					
638514-1	NO					
638514-8	NO					
638517-5	NO					
638518-5	NO					
638518-8	NO					
638817-3	NO					
638817-4	NO					
638817-8	NO					
638817-9	NO					
638818-2	NO					
638832-3	NO		"1000012806-0001"			
638849-7	NO					
638939-5	NO					
7-1326728-8	NO					
7-1326728-9	NO					
7-2098922-2	NO					
7-2203541-2	NO					
7-2203541-3	NO					
7-2203541-4	NO					
7-2203541-5	NO					
7-2203542-0	NO					
7-776728-0	NO					

Part Number	Part Discontinued per PCN	Customer Drawing	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
7-776728-1	NO					
7-776729-2	NO					
7-776729-4	NO					
7-776729-5	NO					
776728-1	NO					
776729-1	NO					
776793-1	NO					
776793-2	NO					
776905-1	NO					
776905-8	NO					
776932-1	NO					
776932-3	NO					
776932-4	NO					
9-1419157-6	NO		"V23542-G1410-A107"			
9-1419166-0	NO		"V23542-G1408-A101"			
9-1438082-2	NO					
9-1454396-3	NO		"X109644C"			
917981-1	NO					
917981-2	NO					
917981-6	NO					
917989-1	NO		"0-0917989-1"			
917989-2	NO					
917989-6	NO					
917992-1	NO					
917992-6	NO					

Section 3

Customer Engineering Approval

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

DATA - GRR ATTRIBUTE STUDY

Empalme Site

DATE:	16-Mar-19
REQUEST:	Mario Baidon
QUALITY ENGINEER:	Mario Baidon
MANUFACTURE ENGINEER	Josue Garcia
PLANT:	Plant 2
SPC TECHNICIAN:	Alejandro Rodriguez
PART NUMBER:	917989-6
COMMENT General:	Vision System 49784844

Work Center:	8557
NUM. Gage-Fixture	49784844
OPERATOR 1	-OPERATOR 1
OPERATOR 2	-OPERATOR 2
OPERATOR 3	-OPERATOR 3
Standard Record	2019-0482

Known Population				-OPERATOR 1			Expert	-OPERATOR 2			Expert	-OPERATOR 3			Expert	OPER VS OPER	OPER VS SAMPLE
# ID	Num Sample	DETAILS	Standard	Try #1	Try #2	Try #3	Result	Try #1	Try #2	Try #3	Result	Try #1	Try #2	Try #3	Result	Agree	Agree
1	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
2	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
3	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
4	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
5	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
6	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
7	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
8	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
9	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
10	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
11	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
12	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
13	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
14	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
15	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
16	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
17	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
18	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
19	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
20	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
21	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
22	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
23	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
24	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
25	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
26	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
27	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
28	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
29	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
30	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK

DATA - GRR ATTRIBUTE STUDY

Empalme Site

DATE:	16-Mar-19
REQUEST:	Mario Baidon
QUALITY ENGINEER:	Mario Baidon
MANUFACTURE ENGINEER	Josue Garcia
PLANT:	Plant 2
SPC TECHNICIAN:	Alejandro Rodriguez
PART NUMBER:	917989-6
COMMENT General:	Vision System 49784844

Work Center:	8557
NUM. Gage-Fixture	49784844
OPERATOR 1	-OPERATOR 1
OPERATOR 2	-OPERATOR 2
OPERATOR 3	-OPERATOR 3
Standard Record	2019-0482

Known Population				-OPERATOR 1			Expert	-OPERATOR 2			Expert	-OPERATOR 3			Expert	OPER VS OPER	OPER VS SAMPLE
# ID	Num Sample	DETAILS	Standard	Try #1	Try #2	Try #3	Result	Try #1	Try #2	Try #3	Result	Try #1	Try #2	Try #3	Result	Agree	Agree
31	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
32	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
33	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
34	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
35	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
36	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
37	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
38	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
39	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
40	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
41	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
42	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
43	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
44	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
45	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
46	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
47	4	WRONG HOUSING (COLOR)	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
48	3	CLOSED TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK
49	1	GOOD SAMPLE	YES	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	YES	YES	YES	ACCEPTED	OK	OK
50	2	MISSING TPA	NO	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	NO	NO	NO	ACCEPTED	OK	OK

Final comments of the study:

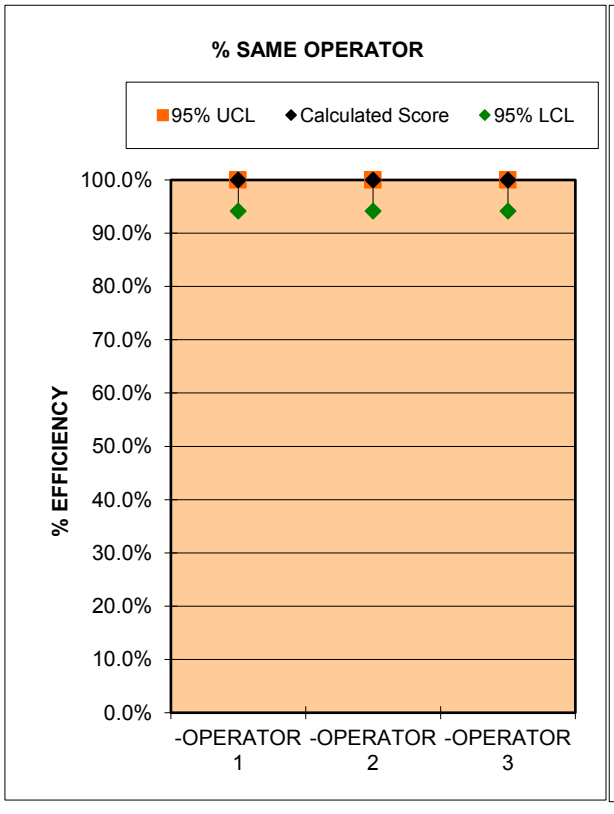
SPC Technician: Must be sent to answer to request, quality engineer and manufacture engineer.

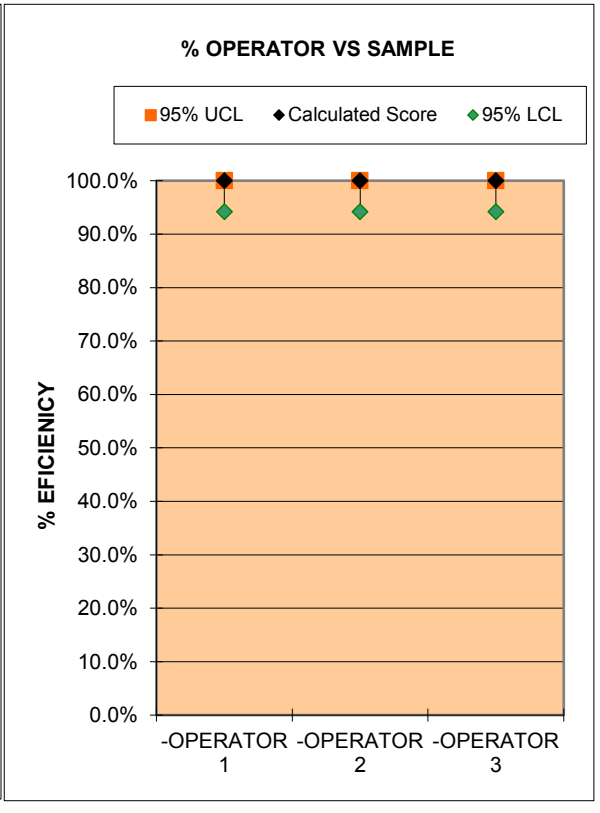
REPORT GRR ATTRIBUTE

DATE	16-Mar-19	ID - EQUIPMENT
STANDAR RECORD	*2019-0482*	49784844
Work Center:	8557	
RESULT	ACCEPTED	

	% OPER VS OPER			% OPER VS SAMPLE		
Operators	- OPERATOR 1	- OPERATOR 2	- OPERATOR 3	- OPERATOR 1	- OPERATOR 2	- OPERATOR 3
Inspeced total	50	50	50	50	50	50
# Agreement	50	50	50	50	50	50
95% UCL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Calculated Score	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
95% LCL	94.18%	94.18%	94.18%	94.18%	94.18%	94.18%

	Screen % Effective Score	Screen % Effective Score vs Standard
Total Inspected	50	50
coincidencias	50	50
95% UCL	100.0%	100.0%
Calculated Score	**100.0%**	**100.0%**
95% LCL	94.18%	94.18%





Section 9

Dimensional Results

Production Part Approval

DIMENSIONAL TEST RESULTS

ACT-1173

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

Supplier/Vendor Code: N/A

INSPECTION FACILITY:

TE Connectivity Empalme Metrology lab

Part Number: 917989-2

Part Name: 040/070 HYBRID I/0 CONNECTOR MK-II 22 POSITION PLUG HOUSING

Design Record Change Level: DWG: C - 917989 REV. A2

Engineering Change Documents: N/A

Folio: 45058 Page ___1___ of ___3___

Item	Dim./Spec.	Spec. / Limits tol +	Spec. / Limits tol -	Units	Organization Measurement Results (Data) SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6	Ok	Not Ok	Instrument # ID
1	35.2	0.3	0.3	mm	35.12	35.12	35.10	35.13	35.12	35.10	✔		LMMC-009
2	30.7	0.3	0.3	mm	30.530	30.535	30.541	30.526	30.533	30.547	✔		LMMC-009
3	22	0.3	0.3	mm	21.837	21.859	21.852	21.842	21.844	21.848	✔		LMMC-009
4	1.5	0.2	0.2	mm	1.50	1.50	1.49	1.47	1.51	1.50	✔		LMMC-009
	1.5	0.2	0.2	mm	1.50	1.50	1.49	1.50	1.52	1.50	✔		
	1.5	0.2	0.2	mm	1.51	1.50	1.50	1.49	1.47	1.48	✔		
	1.5	0.2	0.2	mm	1.49	1.49	1.51	1.51	1.51	1.50	✔		
5	21	0.25	0.25	mm	20.90	20.94	20.95	20.92	20.91	20.90	✔		LMMC-009
6	19	0.25	0.25	mm	19.017	19.005	19.038	19.001	18.987	18.998	✔		LMMC-009
	19	0.25	0.25	mm	18.960	18.948	19.002	18.956	19.007	18.993	✔		
	19	0.25	0.25	mm	18.976	18.975	18.941	18.976	18.944	18.957	✔		
	19	0.25	0.25	mm	19.047	19.036	18.989	19.040	19.013	18.997	✔		
7	3.5	0.2	0.2	mm	3.488	3.487	3.480	3.491	3.483	3.484	✔		LMMC-009
	3.5	0.2	0.2	mm	3.476	3.475	3.478	3.479	3.493	3.493	✔		
8	6.6	0.2	0.2	mm	6.545	6.548	6.558	6.550	6.557	6.558	✔		LMMC-009
	6.6	0.2	0.2	mm	6.524	6.525	6.544	6.532	6.563	6.562	✔		
9	9.6	0.2	0.2	mm	9.545	9.548	9.557	9.547	9.555	9.556	✔		LMMC-009
	9.6	0.2	0.2	mm	9.522	9.525	9.544	9.527	9.557	9.557	✔		
10	12.6	0.25	0.25	mm	12.541	12.544	12.553	12.542	12.547	12.549	✔		LMMC-009
	12.6	0.25	0.25	mm	12.514	12.517	12.532	12.520	12.543	12.544	✔		
11	15.6	0.25	0.25	mm	15.541	15.547	15.552	15.531	15.547	15.549	✔		LMMC-009
	15.6	0.25	0.25	mm	15.498	15.502	15.523	15.501	15.535	15.536	✔		
12	18.6	0.25	0.25	mm	18.537	18.546	18.549	18.529	18.537	18.539	✔		LMMC-009
	18.6	0.25	0.25	mm	18.492	18.498	18.512	18.497	18.524	18.525	✔		
13	21.6	0.25	0.25	mm	21.534	21.544	21.545	21.525	21.539	21.540	✔		LMMC-009
	21.6	0.25	0.25	mm	21.483	21.489	21.501	21.481	21.515	21.516	✔		
14	24.6	0.25	0.25	mm	24.532	24.543	24.540	24.519	24.531	24.533	✔		LMMC-009
	24.6	0.25	0.25	mm	24.475	24.484	24.494	24.472	24.508	24.509	✔		
15	27.6	0.25	0.25	mm	27.537	27.549	27.538	27.524	27.538	27.539	✔		LMMC-009
	27.6	0.25	0.25	mm	27.475	27.489	27.493	27.476	27.486	27.487	✔		
16	30.7	0.3	0.3	mm	30.601	30.610	30.596	30.590	30.596	30.595	✔		LMMC-009
	30.7	0.3	0.3	mm	30.548	30.556	30.548	30.539	30.561	30.562	✔		
17	2.25	0.2	0.2	mm	2.298	2.301	2.308	2.294	2.349	2.324	✔		LMMC-009
	2.25	0.2	0.2	mm	2.287	2.289	2.264	2.274	2.271	2.262	✔		

SIGNATURE	TITLE	DATE
Daniel Zazueta	Metrology Chief	April 3, 2019

Production Part Approval

DIMENSIONAL TEST RESULTS

ACT-1173

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

Supplier/Vendor Code: N/A

INSPECTION FACILITY:

TE Connectivity Empalme Metrology lab

Part Number: 917989-2

Part Name: 040/070 HYBRID I/0 CONNECTOR MK-II 22 POSITION PLUG HOUSING

Design Record Change Level: DWG: C - 917989 REV. A2

Engineering Change Documents: N/A

Folio: 45058

Item	Dim./Spec.	Spec. / Limits tol +	Spec. / Limits tol -	Units	Organization Measurement Results (Data) SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6	Ok	Not Ok	Instrument # ID
18	14.8	0.3	0.3	mm	14.554	14.648	14.642	14.697	14.662	14.639	✔		LMMC-009
	14.8	0.3	0.3	mm	14.733	14.690	14.661	14.656	14.666	14.699	✔		
19	11.6	0.25	0.25	mm	11.644	11.599	11.532	11.568	11.542	11.580	✔		LMMC-009
	11.6	0.25	0.25	mm	11.587	11.570	11.511	11.539	11.531	11.559	✔		
	11.6	0.25	0.25	mm	11.420	11.438	11.397	11.429	11.410	11.428	✔		
	11.6	0.25	0.25	mm	11.481	11.529	11.492	11.545	11.508	11.511	✔		
	11.6	0.25	0.25	mm	11.476	11.554	11.521	11.576	11.540	11.527	✔		
20	5.2	0.2	0.2	mm	5.168	5.167	5.176	5.176	5.166	5.164	✔		LMMC-009
	5.2	0.2	0.2	mm	5.159	5.161	5.171	5.165	5.156	5.155	✔		
	5.2	0.2	0.2	mm	5.159	5.159	5.179	5.158	5.167	5.162	✔		
21	5.2	0.2	0.2	mm	5.234	5.184	5.133	5.129	5.146	5.164	✔		LMMC-009
	5.2	0.2	0.2	mm	5.216	5.216	5.217	5.216	5.216	5.217	✔		
	5.2	0.2	0.2	mm	5.206	5.208	5.211	5.201	5.198	5.197	✔		
	5.2	0.2	0.2	mm	5.209	5.210	5.207	5.208	5.215	5.209	✔		
	5.2	0.2	0.2	mm	5.224	5.226	5.229	5.229	5.232	5.232	✔		
	5.2	0.2	0.2	mm	5.245	5.247	5.248	5.239	5.255	5.247	✔		
	5.2	0.2	0.2	mm	5.202	5.202	5.202	5.202	5.202	5.202	✔		
	5.2	0.2	0.2	mm	5.159	5.159	5.159	5.160	5.160	5.159	✔		
22	1.75	0.2	0.2	mm	1.750	1.748	1.700	1.750	1.681	1.681	✔		LMMC-009
	1.75	0.2	0.2	mm	1.742	1.743	1.689	1.741	1.674	1.674	✔		
	1.75	0.2	0.2	mm	1.727	1.730	1.677	1.728	1.664	1.663	✔		
	1.75	0.2	0.2	mm	1.719	1.726	1.671	1.722	1.661	1.660	✔		
	1.75	0.2	0.2	mm	1.717	1.727	1.682	1.718	1.660	1.659	✔		
	1.75	0.2	0.2	mm	1.724	1.738	1.689	1.719	1.667	1.665	✔		
	1.75	0.2	0.2	mm	1.733	1.752	1.707	1.729	1.676	1.675	✔		
	1.75	0.2	0.2	mm	1.739	1.757	1.717	1.735	1.695	1.693	✔		
23	1.0	0.2	0.2	mm	0.902	0.965	0.983	1.002	0.998	0.975	✔		LMMC-009
	1.0	0.2	0.2	mm	1.079	1.015	0.979	0.974	1.001	1.023	✔		
	1.0	0.2	0.2	mm	1.108	1.029	0.984	0.972	1.003	1.030	✔		
24	1.4	REFERENCE		mm	1.183	1.291	1.256	1.257	1.166	1.227	✔		LMMC-009
25	MUST BE KEPT BETWEEN - Z - AND 2mm			visual	OK	OK	OK	OK	OK	OK	✔		
26	THE MATING CAP HOUSING PART NUMBER, 178764.			visual	OK	OK	OK	OK	OK	OK	✔		

SIGNATURE	TITLE	DATE
Daniel Zazueta	Metrology Chief	April 3, 2019

Production Part Approval

DIMENSIONAL TEST RESULTS

ACT-1173

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: 917989-2
Supplier/Vendor Code: N/A	Part Name: 040/070 HYBRID I/0 CONNECTOR MK-II 22 POSITION PLUG HOUSING
INSPECTION FACILITY: TE Connectivity Empalme Metrology lab	Design Record Change Level: DWG: C - 917989 REV. A2
	Engineering Change Documents: N/A
	# Folio: 45058 Page ___3___ of ___3___

Item	Dim./Spec.	Spec. / Limits tol +	tol -	Units	Organization Measurement Results (Data) SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	SAMPLE 6	Ok	Not Ok	Instrument # ID
27	APPLIED CONTACT PART NUMBER, 175265, 175266, 175268, 175269			visual	OK	OK	OK	OK	OK	OK	✔		
28	APPLICABLE PRODUCT SPEC NUMBER, 108 - 5342			visual	OK	OK	OK	OK	OK	OK	✔		
29	RETAINER COLOR, ALL WHITE			visual	OK	OK	OK	OK	OK	OK	✔		

CONCLUSION:

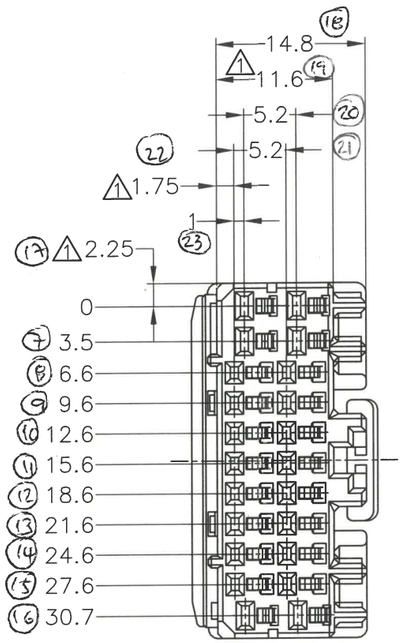
TOTAL # OF FEATURES	384	
LESS BASIC DIMENSIONS	0	
LESS REFERENCE DIMENSIONS	6	
REPORTED DIMENSIONS		378
# DIMENSIONS IN TOLERANCE		**378**
# DIMENSIONS OUT OF TOLERANCE		**0**
% DIMENSION IN TOLERANCE		**100.00** %
% DIMENSION OUT OF TOLERANCE		**0.00** %

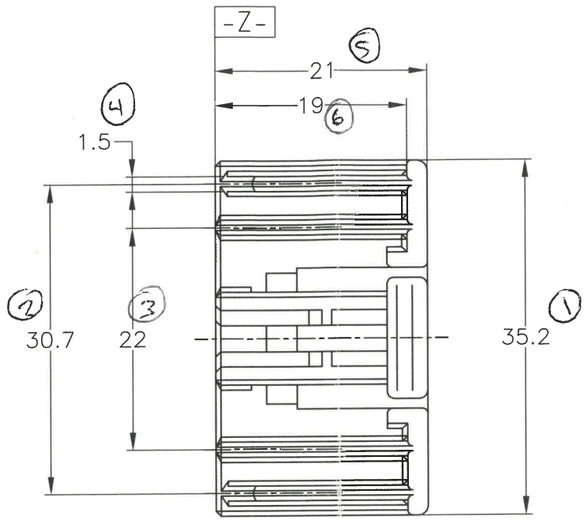
SIGNATURE	TITLE	DATE
Daniel Zazueta	Metrology Chief	April 3, 2019

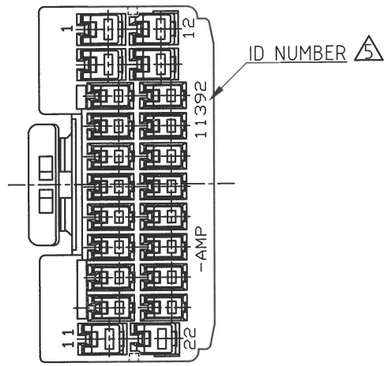
LOC	DIST
J	—

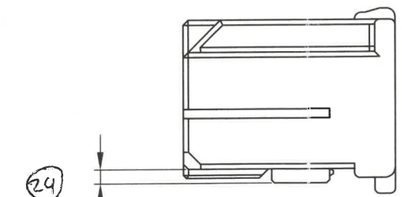
REVISIONS 変更

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A2	REVISED PER ECO-11-005140	28MAR11	RK	HMR









1. MUST BE KEPT BETWEEN -Z- AND 2mm
2. THE MATING CAP HOUSING PART NUMBER ; 178764
3. APPLIED CONTACT PART NUMBER ; 175265, 175266, 175268, 175269
4. APPLICABLE PRODUCT. SPEC. NUMBER; 108-5342
5. RETAINER COLOR; ALL WHITE

1. -Z- 面より2mmの範囲で測定
2. 嵌合相手ハウジング型番：178764
3. 内装するリセプタクルコンタクト型番：175265, 175266, 175268, 175269
4. 適用製品規格番号： 108-5342
5. リテーナーは全て白色

淡灰（LIGHT GRAY）	6-917989-6
黄（YELLOW）	917989-7
灰（DARK GRAY）	917989-6
青（BLUE）	917989-5
SEE DRAWING 917989-4	917989-4
黒（BLACK）	917989-2
白（WHITE）	917989-1
5 色（COLOR）	PART NUMBER

TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差
10₂ : ±0.2
30₂ > 10 : ±0.25
100₂ > 30 : ±0.3
ANGLE : ±3°

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: 単位： 粍 mm

TOLERANCES UNLESS OTHERWISE SPECIFIED: 一般公差
0 PLC ±—
1 PLC ±—
2 PLC ±—
3 PLC ±—
4 PLC ±—
ANGLES ±—

MATERIAL 材料: PBT
FINISH 仕上: —

DWN M.SUGAWARA 25MAY06
CHK T.SHINOHARA 25MAY06
APVD K.BETSUI 25MAY06
PRODUCT SPEC 製品規格: SEE NOTE
APPLICATION SPEC 取付適用規格: —
WEIGHT: —

CUSTOMER DRAWING

TE Connectivity

NAME 名称: 040/070 HYBRID I/O CONNECTOR MK-II 22POSITION PLUG HOUSING

SIZE	CAGE CODE	DRAWING NO 番号	RESTRICTED TO
A3	00779	C-917989	—

SCALE 尺度 2:1 | SHEET 1 OF 1 | REV A2

Section 10

Material, Performance Test Results

TO WHOM IT MAY CONCERN

NO. 04127733

SEPTEMBER 05 2018

NOVADURAN CERTIFICATE OF ANALYSIS

GRADE	5010R8 M	COLOR	NA
LOT NO.	8F0090M	DATE (INSPECT)	JUN. 22. 2018
PURCHASE ORDER		OUR ORDER	PR16573-00

三菱エンジニアリングプラスチックス株式会社
Mitsubishi Engineering-Plastics Corp.
環境・品質保証部
ENVIRONMENT AND QUALITY ASSURANCE DEPT.
TEL：03-6274-9060
FAX：03-6274-9085

ITEM TEST METHOD	UNIT	ANALYSIS	SPECIFICATION
MELT VOLUME RATE ISO 1133	CM3/10MIN	33	20～40
TENSILE STRENGTH ISO 527	MPA	45	30～50
TENSILE STRAIN ISO 527	%	277	MIN. 120
CONTAMINATION JUDGE(EYES)	/KG	0	EQ. 0

REMARKS

Straight Bill Of Lading

BOL # S44556

Page 1

Carrier Customer Pickup

Received, Subject to the classification and lawfully filed tariffs in effect on the date of issue of this original Bill of Lading.

Ship From:
MEP America
Carolina Public Warehouse
3609 N. Glenn Ave
Winston Salem, NC 27105

Deliver To :
TE Connectivity Corporation
TE North Carolina DC Components
8000 Piedmont Triad Parkway
Greensboro, NC 27409

Frt Bill Type Prepaid

Ship Date 05/23/19 **Order Date** 05/22/19

Quantity	Unit	HM	Lot #	Description	Grs Wgt.	NMFC Code	Class
40	BAG		5010R8MBK2.	RESIN NATURAL	2200 LB		60
			8C6001M	704058-7			
			P.O.#	2708146773			
3	GYLD		5010G30ZBK8E	RESIN BLACK KG	5280 LB		60
			8L0212M	704894-1			
			P.O.#	2708146579			
43					7,480 LB		

Dock # _____

0980NCUP #1 '0' LBS

21540528

Received in Good Order: Driver's Signature _____ **Date:** 5-23-19

ATTN: TRUCKER Your Signature will acknowledge receipt of the correct description, (size and grade) AND total amount of pieces. THIS WAREHOUSE will NOT be responsible if shipment of incorrect product is made.

Subject to Section 7 of conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statment.

The carrier shall not make delivery of this shipment without payment of freight and all lawful charges.

(Signature of Consignor)

* If the shipment moves between two ports by carrier by water, the law requires that the bill of lading shall state whether it is "Carrier or Shippers weight."
NOTE - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby stated by the shipper to be not exceeding $ _____

per _____

The description and weight indicated on the Bill of Lading are correct, subject to verification by governing TCFB and/or WWIB Agreements.

+ The fibre boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of Rule 41 of Consolidated Freight Classification or applicable rules in NMFC

+ Shipper's imprint in lieu of stamp, not a part of Bill of Lading approved by the Interstate Commerce Commission.

Charges are to be prepaid only if stated here.

Received $ _____

to apply in prepayment of the charges on the property described hereon.

Per Prepaid

(Acknowledging prepaid amt.)

MEP America
790 WELCH ROAD
COMMERCE TOWNSHIP, MI 48390

Permanent Post-Office Address of Shipper

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation.

Shipper, Per _____ **Agent** _____ **Per** _____

Section 11

Initial Process Studies

Section 12

Qualified Laboratory Documentation

CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

TE Connectivity - Empalme

Carretera Internacional Km. 1969 Guad-Nog. Km.2
Sonora, C.P. 85340, Mexico

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2017

while demonstrating technical competence in the fields of

CALIBRATION, TESTING
and DIMENSIONAL MEASUREMENT

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

ACT-1173

Certificate Number

ANAB Approval

Certificate Valid Through: 05/03/2021
Version No. 005 Issued: 05/02/2019

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

ANSI National Accreditation Board

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

TE Connectivity - Empalme

Carretera Internacional Km.1969 Guad-Nog. Km.2,
Sonora, C.P. 85340, Mexico
Daniel Zazueta 011-622-225-1174

CALIBRATION / DIMENSIONAL MEASUREMENT / TESTING

Valid to: **May 3, 2021** Certificate Number: **ACT-1173**

TESTING

Mechanical Testing

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Force (0 to 200) lbf	Equipment Manual	Wiring Harnesses, Plastic and Metal Automotive Components	Force Gag
Mass (0 to 4) kg	Equipment Manual	Plastic and Metal Automotive Components	Scales
Moisture Content 45 g (50 to 200) ºC	Work Instruction AEW021T-LB, Equipment Manual	Plastic Automotive Components	Ohaus MB 45 Moisture Analyzer
Melt Flow Rate	Work Instruction AEW022T-LB based on ASTM D1238, Equipment Manual	Plastic Automotive Components	Extrusion Plastometer Oven

DIMENSIONAL MEASUREMENT

Dimensional Measurement

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)[1]	Reference Standard, Method and/or Equipment
Dimensional Measurement 1D	Up to 50 mm	0.0030 mm	Digital Height Indicator ASME Y14.5M, Engineering Drawing, Equipment Manual
Dimensional Measurement 1D	Up to 0.20 mm	0.0030 mm	Dial Test Indicator ASME Y14.5M, Engineering Drawing, Equipment Manual
Dimensional Measurement 1D	Up to 200 mm	0.021 mm	Calipers ASME Y14.5M, Engineering Drawing, Equipment Manual

Dimensional Measurement

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)[1]	Reference Standard, Method and/or Equipment
Dimensional Measurement 1D	Up to 25.4 mm	0.0055 mm	Micrometers ASME Y14.5M, Engineering Drawing, Equipment Manual
Dimensional Measurement 1D	Up to 8 m	1.5 mm	Steel Measuring Tapes ASME Y14.5M, Engineering Drawing, Equipment Manual
Dimensional Measurement 1D	Up to 1 220 mm	1.5 mm	Steel Rule ASME Y14.5M, Engineering Drawing, Equipment Manual
Dimensional Measurement 3D	210 mm (X) 215 mm (Y) 100 mm (Z)	(2.34 + 1.14L) µm	Vision Systems ASME Y14.5M, Engineering Drawing, Equipment Manual

CALIBRATION

Length – Dimensional Metrology

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)[1]	Reference Standard, Method and/or Equipment
Steel Measuring Tapes	Up to 8 m	0.28 mm	Digital Scale Work Instruction AEW001T-LB Tyco Spec 117-95 Calibration Steel Measuring Tapes. JIS B 7512 (1993)
Steel Rules	Up to 1 220 mm	0.12 mm	Master Height Gage Digital Scale Work Instruction AEW001T-LB Tyco Spec. 117-94 Calibration Steel Rules, JIS B 7516 (1987)
Granite Surfaces Plates Repeatability Resolution 0.00001 in	(12 x 18) in to (40 x 60) in	39 µin	Mahr Repeat-o-meter Precision Dial Indicator Work Instruction AEW002T-LB, JIS B 7513 (1992), GGG-P-463c-1973
Dial Test Indicator (lever-type)	Up to 1 mm	0.012 mm	Height Master Work Instruction AEW004T-LB, JIS B 7533 (1990), Tyco Spec 117-14 Dial Indicator, Electronic and
Calipers	Up to 200 mm	0.023 mm	Gage Blocks Ring Gages Work Instruction AEW005T-LB, JIS B 7507 (1993), Tyco Spec 117-9 Caliper, Vernier, Dial and Digital

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)[1]	Reference Standard, Method and/or Equipment
Micrometer	Up to 25.4 mm	0.0016 mm	Gage Blocks Grade 2 Work Instruction AEW006T-LB, JIS B 7502 (1994), Tyco Spec 117-5 Micrometer, Inch/Metric, Outside, Blade and Flange
Optical Comparator	Up to 300 mm (X,Y)	0.0046 mm	Glass Scale Work Instruction AEW007T-LB, JIS B 7184:1999, Tyco Spec 117-19 Optical Comparators
Video Comparator	Up to 300 mm (X,Y,Z)	0.0052 mm	Glass Scale Gage Blocks Work Instruction AEW007T-LB. JIS B 7184:1999
Digital Height Indicator (Travel-Type)	Up to 50 mm	0.0021 mm	Gage Blocks Work Instruction AEW008T-LB, Tyco Spec. 117-14 Dial Indicator Electronic and Mechanical

Mass

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)[1]	Reference Standard, Method and/or Equipment
Force Gage	Up to 200 lb·f	0.057 lb·f	Master Weights Work Instruction AEW003T-LB, Tyco Spec 117-70 Force Gages
Scales (0.01 g Resolution)	(0 to 4) kg	0.091 g	Master Weights Class NIST Handbook & ASTM Work Instruction AEW015T-LB, NOM-010-SCFI-1994

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (k=2), corresponding to a confidence level of approximately 95%.

Notes:

1. L in uncertainties represents length in inches.
2. The uncertainty associated when calibrating a balance/scale is dependent on local conditions, such as the resolution of the unit being calibrated and the environment in which the balance/scale is operating. The uncertainty listed in the scope here represents the best uncertainty for a balance/scale which the organization typically calibrates in its lab. Since field (on-site) conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected in the field (on-site) than what is reported on the accredited scope.
3. This scope is formatted as part of a single document including the Certificate of Accreditation No. ACT-1173.

By Royal Charter

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

...making excellence a habit.™

Certification Date: 2018-07-11 Latest Issue: 2018-07-11 Expiry Date: 2021-07-10

Location	Registered Activities
TE Connectivity Global Automotive Division Americas North Carretera Internacional, KM 1969 Guadalajara-Nogales Km 2 Empalme Sonora 85340 Mexico	Manufacture of interconnecting devices. Including the following remote support functions: TE Connectivity Global Automotive Division Americas North 900 Wilshire Boulevard Suite 150 Troy, MI 48084 Design and Development. TE Connectivity Global Automotive Division Americas North Fulling Mill Road Middletown, PA 17057 Design and Development, Product Testing and Customer Service. TE Connectivity Global Automotive Division Americas North 3800 Reidsville Road Winston-Salem, NC 27102 Design and Development, Product Testing and Calibration, Business Office (Quote Process) and Purchasing. TE Connectivity Global Automotive Division Americas North 20 Esna Park Drive Markham, Ontario L3R 1E1 Canada Design and Development and product testing (optics lab) TE Connectivity Global Automotive Division Americas North 2100 Paxton Street Harrisburg, PA 17111 Provision of Product Testing to TE Connectivity Manufacturing Sites. TE Connectivity North Carolina Distribution Center 8000 Piedmont Triad Parkway Greensboro, North Carolina 27409 Receiving Inspection, Storage / Inventory.

BSI Certificate Number: 514458-003

IATF Number: 0315420

Certification Date: 2018-07-11 Latest Issue: 2018-07-11 Expiry Date: 2021-07-10

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

Informe de la MDS
Sustancias de conjuntos y materiales

1. Empresa y nombre de producto

1.1 Datos del proveedor

Nombre □ID□:	**Tyco Electronics GAD [913]**
N□mero DUNS:	**-**
Calle/C□digo postal:	**Amperestr. 12-14**
Nac./C□d. postal/Ciudad:	**DE 64625 Bensheim**
No. Proveedor:	**-**
Persona de contacto:	**IMDS Team (India) Engineering Services**
- Tel□fono:	**-**
- N.□fa□:	**-**
- Direcci□n de correo electr□nico:	**imds@te.com**

1.2 Identificaci□n del producto

N.□componente/art□culo:	**917989-6**
Descripci□n:	**22 Position Plug Assembly**
No. Reporte de muestra:	**-**
Fecha de reporte de muestra:	**-**
No. Orden de Compra:	**-**
No. Factura de entrega:	**-**
MDS Preliminar:	**No**
ID/versi□n IMDS:	**6980661 / 9**
ID de nodo:	**821577825**
Estado de la MDS (Fecha de modificaci□n):	**Publicado internamente (05/04/2019)**

Informe de la MDS
Sustancias de conjuntos y materiales

No deben incluirse materiales que están sujetos a prohibiciones legales.
Las sustancias peligrosas, formadas o liberadas durante su uso, también se deben declarar.
Recuerde: La lista GADSL de sustancias que deben ser declaradas

2. Caracteri□aci□n del componente

N.□componente/art□culo: **917989-6**
Descripci□n: **22 Position Plug Assembly**

No. Reporte de muestra: **-**
ID/versi□n IMDS: **6980661 / 9**
ID de nodo: **821577825**

Nivel de árbol	Descripción / Descripción / Nombre / Nombre de la sustancia	N.º componente/artículo / N.º artículo/mat. / N.º material / N.º CAS	ID/versión IMDS	Cantidad	Peso [g]	Porción [%]	Porción (desde - hasta) [%]	Clasif. / GADSL, SVHC	Marcado de componentes / Reciclado (Consumidor/industr.) / Aplicación [ID]
1	22 Position Plug Assembly	917989-6	6980661 / 9		6.62				
├2	22 Position Plug Housing-Gray	0-0917987-6	50041859 / 5	1	5.65				No
├3	PBT	703760-	546330958 / 1		5.65			5.1.b	No
├4	Polybutylene terephthalate	26062-94-2				98			

Nivel de árbol	Descripción Descripción Nombre Nombre de la sustancia	N.º componente/artículo N.º artículo/mat. N.º material N.º CAS	ID/versión IMDS	Cantidad	Peso [g]	Porción [%]	Porción (desde - hasta) [%]	Clasif. GADSL, SVHC	Marcado de componentes Reciclado (Consumidor/industr.) Aplicación [ID]
├4	Cobalt-aluminate-blue-spinel	1345-16-0				0.03	0.01 - 0.05	D	
├4	Further Additives, not to declare	system				1.97	0.95 - 2.99		
├2	Lock Plate 22 Position -	917988-	4632910 / 10	1	0.97				No
├3	PBT	704058-3	162727707 / 4		0.97			5.1.b	No
├4	PBT	-				99			
├4	Further Additives, not to declare	system				1	0 - 2		

□sta es una copia no controlada de un documento creado por IMDS. Fin del

Section 18

Part Submission Warrant

Part Submission Warrant

Part Name: HYBRID MK-2 PLUG HSG ASSY 22P
Cust. Part Number: 85C0834
Shown on Drawing No.: C-917989
Org. Part Number: 917989-6
Engineering Change Level: A2
Dated: Mar 28, 2011
Additional Engineering Changes: N / A
Dated: N / A
Safety and/or Government Regulation: ☐ Yes ☑ No
Purchase Order No.: N / A
Weight (kg): 0.0066
Checking Aid Number: N / A
Checking Aid Engineering Change Level: N / A
Dated: N / A

ORGANIZATION MANUFACTURING INFORMATION

TE Connectivity / 588115092
Supplier Name & Supplier/Vendor Code

Carretera Int. Km. 1969 Guadalajara-Nogales Km. 2
Street Address

Empalme	Sonora	85340	México
City	Region	Postal Code	Country

CUSTOMER SUBMITTAL INFORMATION

Newark Electronics
Customer Name/Division

Not provided
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: 6980661 / 9

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

REASON FOR SUBMISSION

- ☐ Initial submission
- ☐ Engineering Change(s)
- ☑ Tooling: Transfer, Replacement, Refurbishment, or additional
- ☐ Correction of Discrepancy
- ☐ Tooling Inactive >than 1 year
- ☐ Change to Optional Construction or Material
- ☐ Sub-Supplier or Material Source Change
- ☐ Change in Part Processing
- ☐ Parts produced at Additional Location
- ☐ 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""C-Explanation Required)

Mold / Cavity / Production Process: Assembly Process

DECLARATION

I affirm that the samples represented by this warrant are representative or our parts, which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm the these samples were produced at a production rate of TE Property /24 hours. 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: P-18-016097. Rate is TE Property.

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

Organization Authorized Signature: Julia Avilés Date: 13-Aug-2019

Print Name: Julia Avilés Phone No.: +52 (662) 500 36 80 Fax No.: N/A

Title: PPAP Technician E-mail: julia.avilez@te.com

FOR CUSTOMER USE ONLY (IF APPLICABLE)

Part warrant Disposition: ☐ Approved ☐ Rejected ☐ Other

Customer Signature Date

Print Name Customer Tracking Number (optional)

Section 18a

Bulk Material Requirements

Not Applicable