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### *PPAP Package for:*

**Customer Name:** Newark Electronics  
**Customer Part Number:** 37K7038  
**(TE Connectivity Part Number):**1-968853-1

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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.

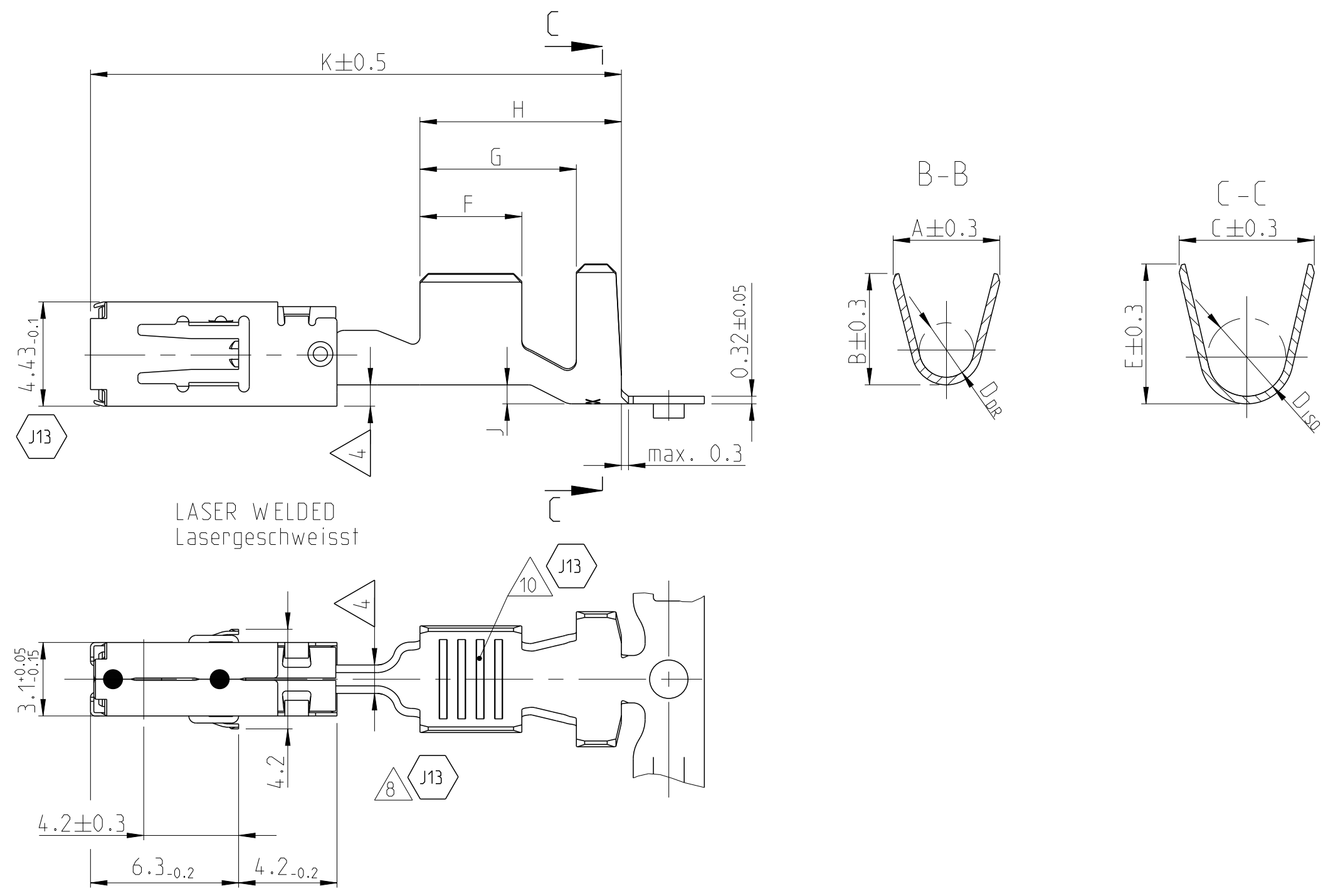
If a nondisclosure agreement HAS NOT been reached, certain documents deemed confidential by TE Connectivity will not be included in this PPAP package. These documents include but are not limited to the Design FMEA, the Process Flow Diagram, the Process FMEA and the Control Plan. These documents can be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



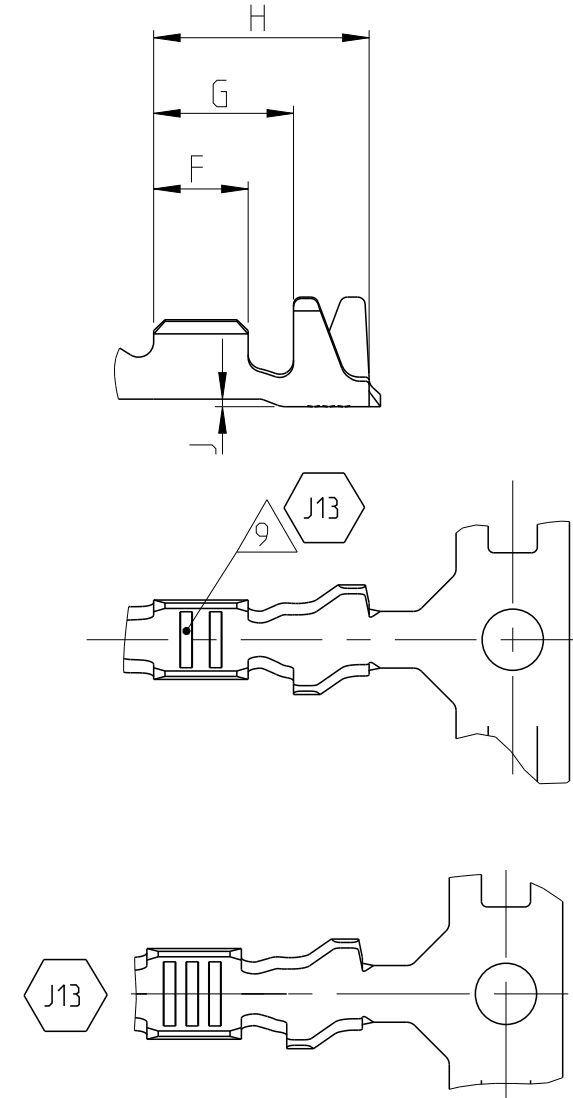
# Section 1

# Design Records

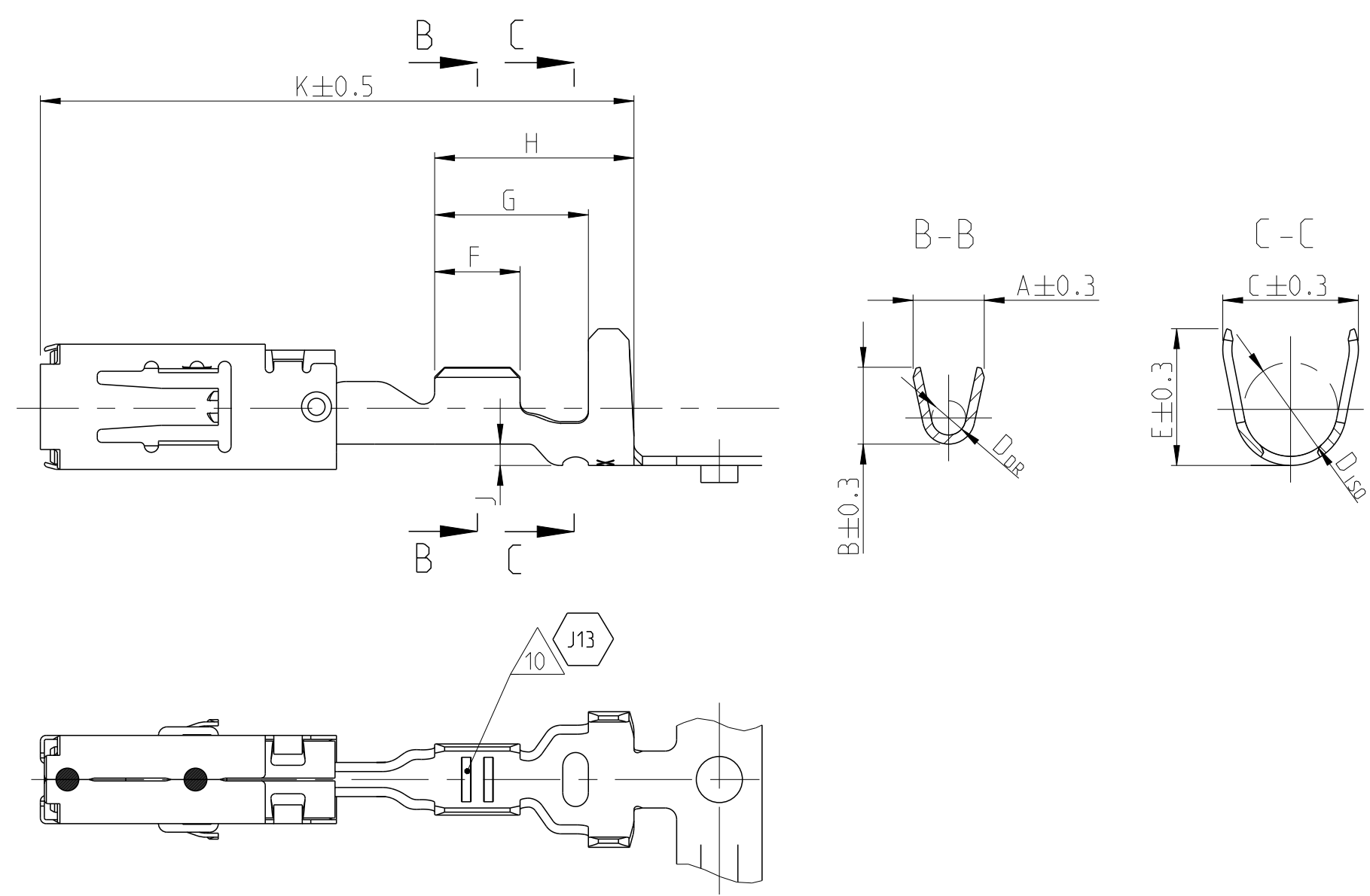
# STANDARD CRIMP



ONLY FOR WIRE SIZE RANGE  
Nur fuer DGB  
0.2 ... 0.5 mm<sup>2</sup>



# SINGLE WIRE SEAL Einzeldichtungssystem



REVISIONS					
P	LTN	DESCRIPTION	DATE	DMN	APVD
J10	ECR-14-010789		18JUL2014	Joas	Leim
J11	NOTE B ADDED. TABLE UPDATE WITH PNs 1-...-4		17MAY2017	MAH.	SBEK
J12	PNs 1-968855-4, 1-968857-4, 1-968859-4 OBSOLETE ON DRW.		05MAY2018	MAH.	SBEK
J13	Added PN 2-968851-3, 2-968853-3, 2-968857-3 and 2-968859-3		07MAY2018	FRAN	BECK

VERSION Ausfuhrung	ORDER-NO. STRIP-FORM Bestell-Nr. Bandware	REV	BODY Werkstoff	SPRING	SURFACE Oberflaeche	WIRE SIZE RANGE Leiter- quer- schnitt mm <sup>2</sup>	INSULATION DIAMETER Isolations- durchmesser mm	CRIMP DIMENSIONS / Crimpabmessungen mm											WEIGHT Gewicht g	SINGLE WIRE SEAL Einzeldichtung	TE CONNECTIVITY NO. DEAD END PLUG Blindstopfen	TE CONNECTIVITY NO.	APPLICATION TOOLS Verarbeitungswerkzeuge
								A	B	D <sub>DR</sub>	C	E	D <sub>ISO</sub>	F	G	H	J	K					
J13	1-1719506-3	A			SILVER PLATED versilbert	12 AWG	3.0	4.0	4.2	2.0	5.0	5.0	3.5	3.5	5.9	7.5	0.8	21.0	0.59	828905-1	828922-1		
J13	1-1719506-1	A			PRE TIN PLATED verzinkt		3.8																
J13	2-968859-3	D			SILVER PLATED versilbert	4	3.4	4.5	4.7	2.3	6.0	6.0	4.3	4.3	7.0	8.5	1.25	22.6	0.65	828985-1	828986-1		
J13	1-968859-3	E			SILVER PLATED versilbert		-																
J13	1-968859-1	E			PRE TIN PLATED verzinkt		3.7																
J13	2-968857-3	B			SILVER PLATED versilbert	1.5	2.2	3.6	3.8	1.7	5.0	5.0	3.5	3.5	6.0	7.6	0.8	21.0	0.58	828905-1	828922-1		
J13	1-968857-3	E			SILVER PLATED versilbert		-																
J13	1-968857-2	D			GOLD PLATED vergoldet	2.5	3.0																
J13	1-968857-1	E			PRE TIN PLATED verzinkt		-																
J13	1-968855-3	E			SILVER PLATED versilbert	0.5	1.4	2.5	2.7	1.2	4.8	4.8	3.3	3.0	5.6	7.2	0.75	21.0	0.54	828904-1	828922-1		
J13	1-968855-2	E			GOLD PLATED vergoldet		-																
J13	1-968855-1	E			PRE TIN PLATED verzinkt	1.0	2.1																
J13	1-2141859-3	A			SILVER PLATED versilbert	0.2	1.2	2.4	2.3	1.0	4.5	4.5	3.2	2.5	5.1	6.7	0.75	21.0	0.52	828904-1	828922-1		
J13	1-2141859-2	A			GOLD PLATED vergoldet		-																
J13	1-2141859-1	A			PRE TIN PLATED verzinkt	0.5	1.4																
J13	1-968882-3	E			SILVER PLATED versilbert	0.2	1.2	2.1	2.1	0.8	4.5	4.5	3.2	2.5	5.1	6.7	0.75	21.0	0.52	828904-1	828922-1		
J13	1-968882-2	E			GOLD PLATED vergoldet		-																
J13	1-968882-1	E			PRE TIN PLATED verzinkt	0.5	1.4																
J13	2-968853-3	D			SILVER PLATED versilbert	4	2.7	4.5	4.7	2.3	5.7	5.9	3.3	4.3	6.8	8.7	0.8	22.6	0.65	-	-		
J13	1-968853-3	E			SILVER PLATED versilbert		-																
J13	1-968853-1	E			PRE TIN PLATED verzinkt		3.7																
J13	2-968851-3	D			SILVER PLATED versilbert	1.5	2.2	3.6	3.8	1.7	4.6	4.8	2.6	3.5	5.1	6.7	0.3	20.2	0.56	-	-		
J13	1-968851-3	E			SILVER PLATED versilbert		-																
J13	1-968851-2	E			GOLD PLATED vergoldet	2.5	3.0																
J13	1-968851-1	E			PRE TIN PLATED verzinkt		-																
J13	1-968849-3	E			SILVER PLATED versilbert	0.5	1.4	2.5	2.7	1.2	3.3	3.5	1.8	3.0	4.6	6.2	0.2	20.2	0.51	-	-		
J13	1-968849-2	E			GOLD PLATED vergoldet		-																
J13	1-968849-1	E			PRE TIN PLATED verzinkt	1.0	2.1																
J13	1-2141857-3	A			SILVER PLATED versilbert	0.2	1.2	2.4	2.3	1.0	2.9	2.9	1.4	2.5	3.8	5.7	0.2	20.2	0.48	-	-		
J13	1-2141857-1	A			PRE TIN PLATED verzinkt	0.5	1.4																
J13	1-968880-3	E			SILVER PLATED versilbert	0.2	1.2	2.1	2.1	0.8	2.9	2.9	1.4	2.5	3.8	5.7	0.2	20.2	0.48	-	-		
J13	1-968880-1	E			PRE TIN PLATED verzinkt	0.5	1.4																

SEE APPLICATION SPECIFICATION 114-18148  
siehe Verarbeitungsspezifikation 114-18148

NOTES:  
Bemerkungen:

- MATING PART SEE INTERFACE DRAWING  
TE-NO.: 114-18230-002  
Gegenstecker nach Ausfuhrungsvorschrift  
TE-Nr.: 114-18230-002
- SURFACE:  
- PRE TIN PLATED 1 TO 3 μm  
- GOLD PLATED MIN. 2 μm (ONLY CONTACT AREA)  
- SILVER PLATED 3 TO 5 μm (ONLY CONTACT AREA)  
Oberflaeche:  
- verzinkt 1 bis 3 μm  
- vergoldet min. 2 μm (nur Kontaktzone)  
- versilbert 3 bis 5 μm (nur Kontaktzone)
- DOUBLE CRIMPS ARE ONLY POSSIBLE WITH  
APPLICATORS AUTHORIZED BY TE (NO HAND TOOL)  
SUITABLE TOOLS ON REQUEST  
Doppelanschlaege sind nur mit von TE zugelassenen  
Anschlagwerkzeugen moeglich (keine Handzangen)  
passende Werkzeuge auf Anfrage
- GAUGE INSPECTION  
Lehrenpruefung
- DETAILS OF DESIGN ARE LEFT TO MANUFACTURER  
Einzelheiten der Ausfuhrung bleiben dem Hersteller ueberlassen
- ONLY GERMAN LANGUAGE VERSION SHALL BE BINDING  
Massgebend ist der deutsche Text
- PUNCHING OIL RAZIOL CLF 11 SG  
Stanzol:
- "Ag+" MARKING ON SILVER PLATED VERSIONS FOR INCREASED LIMIT TEMPERATURE  
"Ag+" Markierung auf versilberten Versionen fuer erhoehte Grenztemperatur
- 968880 nicht fuer Neuanwendungen. wird ersetzt durch 2141857  
968882 nicht fuer Neuanwendungen. wird ersetzt durch 2141859  
968880 SUPERSEDED BY PN 2141857  
968880 SUPERSEDED BY PN 2141857
- Unterschiedliche Ausfuhrung und Anzahl der Rillen moeglich  
DIFFERENT FORM AND NUMBER OF THE SERRATIONS POSSIBLE

THIS DRAWING IS A CONTROLLED DOCUMENT.		DMN S. Blidar	22SEP97		TE Connectivity
DIMENSIONS: mm		CHK G. Hotea	22SEP97		NAME PRODUCT SPEC
TOLERANCES UNLESS OTHERWISE SPECIFIED: ±0.2		APVD J. Woller	22SEP97	PRODUCT GROUP DRAWING FOR Tabellenzeichnung fuer AMP MCP 2.8	SCALE 5:1
MATERIAL		FINISH	WEIGHT	SIZE 114-18148	SHEET 1 OF 1
CUSTOMER DRAWING		DRAWING NO. 00779		SCALE 5:1	REV 13



## **Section 2**

# **Engineering Change Documents**



# Product Change Notification

Current Date: 03-Mar-2020

## TE Connectivity

**Product Change Notification: E-18-006008**

**PCN Date: 14-AUG-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:**  
 PRODUCT GROUP DRAWING FOR Tabellenzeichnung fuer AMP MCP 2.8

**Description of Changes**  
 New PNs added, 2-968851-3 with Revision D, 2-968853-3 with Revision D, 2-968857-3 with Revision B, 2-968859-3 with Revision D, 1-2141857-1 with Revision A, 1-2141857-3 with Revision A, 1-2141859-1 with Revision A, 1-2141859-2 with Revision A, 1-2141859-3 with Revision A. New Note 8, 9 and 10 added. Changed dimension from 4,4-0,1 to 4,43-0,1. Changed dimension G at PN 1-968880-1, PN 1-968880-2, PN 1-214857-1, PN 1-214857-3, PN 1-968859-1, PN 1-968859-3. Changed dimension G and F under PN 1-968853-1, PN 1-968853-3, PN 1-968882-1, PN 1-968882-2, PN 1-968882-3, PN 1-2141859-1, PN 1-2141859-2, PN 1-2141859-3, PN 1-968855-1, PN 1-968855-2, PN 1-968855-3, PN 1-968857-1 and PN 1-968857-3.  
**Other attachments:**  
[E-18-006008](#)  
[E-18-006008-PowerPoint](#)  
[E-18-006008](#)  
[E-18-006008-PowerPoint](#)

**Reason for Changes:**  
 New Product. New Production Introduction.

**Estimated Dates:**

<b>Last Order Date</b> (Obsolete Parts Only):	<b>First Date To Ship</b> (Changed Parts Only):
<b>Last Ship Date</b> (Obsolete Parts Only):	<b>Last Date for Mixed Shipments:</b> (Changed Parts Only):
	No Mixed Shipments

The documents listed below are being modified. Related parts that are not explicitly listed on this PCN are not being modified or discontinued as per the PCN. The Last Order Date, Last Ship Date, First Date to Ship Changed Parts and last date for Mixed Shipments apply only to parts explicitly listed on this PCN.  
**Note: This PCN contains only document changes, these changes do not affect the form, fit or function of the parts referenced.**

**Customer Drawing(s) Being Modified:**

Drawing Number	Current Revision	New Revision
<a href="#">1355036</a>	12	



## **Section 3**

# **Customer Engineering Approval**



**Not Applicable**





# 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**

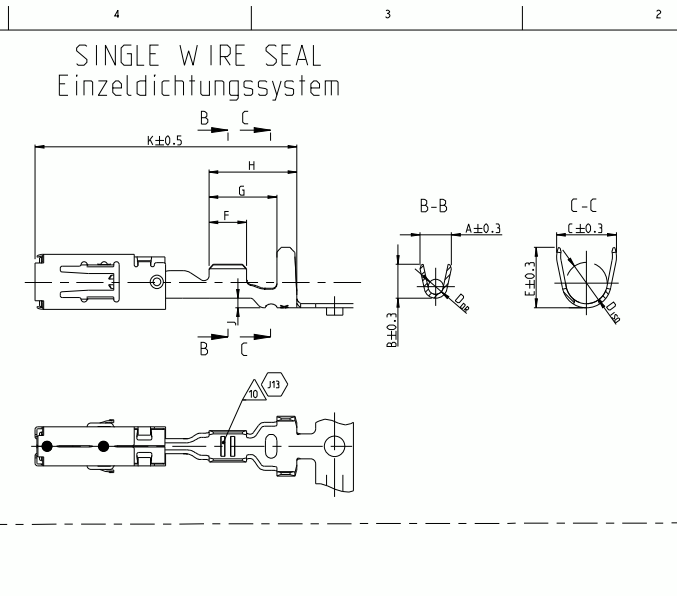
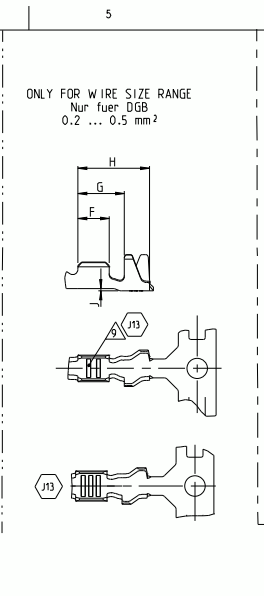
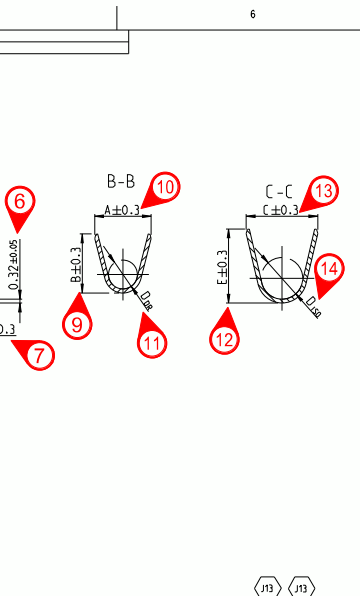
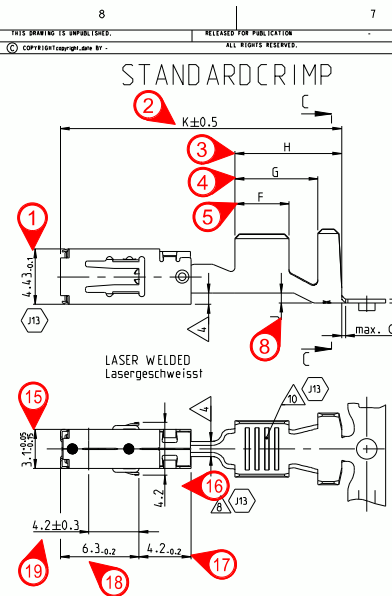


**Not Applicable**

# Section 9

# Dimensional Results

Drawing: C:\Users\fr010800\Desktop\1-968853-3.pdf Printed on: Oct 23, 2018 9:03am



REV		DESCRIPTION	DATE	BY	APP
1	J10	ECB-A-000789	18.04.2016	JGAS	el/m
2	J11	NOTE B ADDED, TABLE UPDATE WITH PNs 1...4	17.04.2017	MAHL	EBEC
3	J12	Pn: 1-96885-4, 1-96887-4, 1-96889-4 OBSOLETE ON DOW.	05.04.2018	MAHL	EBEC
4	J13	Added Pn 2-96885-3, 2-96883-3, 2-96887-3 and 2-96889-3	07.04.2018	FRAN	BECK

VERSION	ORDER-NO. STRIP-FORM	REV	BODY WIRE STRIP SPRING	MATERIAL	WIRE SIZE RANGE	INSULATION DIAMETER	A	B	D <sub>DR</sub>	C	E	D <sub>ISO</sub>	F	G	H	J	K	WEIGHT	TE CONNECTIVITY NO.	TE CONNECTIVITY NO.	APPLICATION TOOLS	Verarbeitungswerkzeuge
1-1719506-3	A	1-1719506-1	D	SILVER PLATED versilbert	12 AWG	3.0 - 3.8	4.0	4.2	2.0	5.0	5.0	3.5	3.5	5.9	7.5	0.8	21.0	0.59	828905-1	828922-1		
2-968859-3	A	1-968859-3	E	SILVER PLATED versilbert	4	3.4 - 3.7	4.5	4.7	2.3	6.0	6.0	4.3	4.3	7.0	8.5	1.25	22.6	0.65	828985-1	828986-1		
2-968857-3	B	1-968857-3	E	SILVER PLATED versilbert	1.5	2.2 - 2.5	3.6	3.8	1.7	5.0	5.0	3.5	3.5	6.0	7.6	0.8	21.0	0.58	828905-1	828922-1		
1-968855-2	E	1-968855-1	E	GOLD PLATED verguldet	0.5	1.4 - 1.0	2.5	2.7	1.2	4.8	4.8	3.3	3.0	5.6	7.2	0.75	21.0	0.54	828904-1	828922-1		
1-2141859-3	A	1-2141859-2	A	SILVER PLATED versilbert	0.2	1.2 - 0.5	2.4	2.3	1.0	4.5	4.5	3.2	2.5	5.1	6.7	0.75	21.0	0.52	828904-1	828922-1		
1-968882-3	E	1-968882-2	E	GOLD PLATED verguldet	0.2	1.2 - 0.5	2.1	2.1	0.8	4.5	4.5	3.2	2.5	5.1	6.7	0.75	21.0	0.52	828904-1	828922-1		
1-968853-3	D	1-968853-1	E	SILVER PLATED versilbert	4	2.7 - 3.7	4.5	4.7	2.3	5.7	5.9	3.3	4.3	6.8	8.7	0.8	22.6	0.65	-	-		
1-968851-3	D	1-968851-2	E	SILVER PLATED versilbert	1.5	2.2 - 2.5	3.6	3.8	1.7	4.6	4.8	2.6	3.5	5.1	6.7	0.3	20.2	0.56	-	-		
1-968849-3	E	1-968849-2	E	GOLD PLATED verguldet	0.5	1.4 - 1.0	2.5	2.7	1.2	3.3	3.5	1.8	3.0	4.6	6.2	0.2	20.2	0.51	-	-		
1-2141857-3	A	1-2141857-1	A	SILVER PLATED versilbert	0.2	1.2 - 0.5	2.4	2.3	1.0	2.9	2.9	1.4	2.5	3.8	5.7	0.2	20.2	0.48	-	-		
1-968880-3	E	1-968880-1	E	SILVER PLATED versilbert	0.2	1.2 - 0.5	2.1	2.1	0.8	2.9	2.9	1.4	2.5	3.8	5.7	0.2	20.2	0.48	-	-		

SEE APPLICATION SPECIFICATION 114-18148  
siehe Verarbeitungspezifikation 114-18148

- NOTES:  
Bemerkungen:
- MATING PART SEE INTERFACE DRAWING  
TE-NO.: 114-18230-002  
Gegenstecker nach Ausfuehrungsvorschrift  
TE-Nr.: 114-18230-002
  - SURFACE:  
- PRE TIN PLATED 1 TO 3 µm  
- GOLD PLATED MIN. 2 µm (ONLY CONTACT AREA)  
- SILVER PLATED 3 TO 5 µm (ONLY CONTACT AREA)  
Oberflaeche:  
- verzinkt 1 bis 3 µm  
- verguldet min. 2 µm (nur Kontaktzone)  
- versilbert 3 bis 5 µm (nur Kontaktzone)
  - DOUBLE CRIMPS ARE ONLY POSSIBLE WITH APPLICATORS AUTHORIZED BY TE (NO HAND TOOL)  
SUITABLE TOOLS ON REQUEST  
Doppelanschlaege sind nur mit von TE zugelassenen Anschlagwerkzeugen moeglich (keine Handzaengen)  
passende Werkzeuge auf Anfrage
  - GAUGE INSPECTION  
Lehrenpruefung
  - DETAILS OF DESIGN ARE LEFT TO MANUFACTURER  
Einzelheiten der Ausfuehrung bleiben dem Hersteller ueberlassen
  - ONLY GERMAN LANGUAGE VERSION SHALL BE BINDING  
Massgebend ist der deutsche Text
  - PUNCHING OIL RAZIOL CLF 11 SG  
Stanzoel:  
"Ag" MARKING ON SILVER PLATED VERSIONS FOR INCREASED LIMIT TEMPERATURE  
"Ag" Markierung auf versilberten Versionen fuer erhoehnte Grenztemperatur
  - 968880 nicht fuer Neuanwendungen, wird ersetzt durch 2141857  
968882 nicht fuer Neuanwendungen, wird ersetzt durch 2141859  
968880 SUPERSEDED BY PN 2141857  
968880 SUPERSEDED BY PN 2141857
  - Unterschiedliche Ausfuehrung und Anzahl der Rillen moeglich  
DIFFERENT FORM AND NUMBER OF THE SERRATIONS POSSIBLE

THIS DRAWING IS A CONTROLLED DOCUMENT.		REV	22SEP09	TE Connectivity
DRAWINGS: S. Blücher		REV	22SEP09	
DESIGNERS: J. Müller		REV	22SEP09	
PRODUCT SPEC: 108-18513		REV	108-18513	
APPLICATION SPEC: 114-18148		REV	114-18148	
MATERIAL: -		REV	-	
DIMENSIONS: mm		SCALE	1:1	
TOLERANCES: ±0.2		DATE	00779	
APPLICATOR: -		PROJECT	1355036	
MATERIAL: -		REV	-	
CUSTOMER DRAWING		SCALE	5:1	
		SHEET	1 of 1	
		REV	J13	







## **Section 10**

# **Material, Performance Test Results**



SCHENKER DEUTSCHLAND AG  
 GESCHÄFTSSTELLE CRAILSHEIM  
 LUDWIG ERHARD STRASSE 100

74564 CRAILSHEIM  
 GERMANY

Seite 1

<b>Abnahmeprüfzeugnis 3.1</b>		Coil	Herst.	Packliste	Auftrag	Kunde
EN 10204:2005		100186719B	KM	163820	2105798 - 1	03004755
Anzahl	1	Gewicht netto			866,00 KG	
Packstuecke WC401496						
Ihre Bestellung		2550120873 H. LUTTENBERG				
Kunden-Material-Nummer		6-705314-3 Rev E		Artikel	7094135	
STOL76 0,320x 27,30 SN		100-1230 REV S				
		112-20-5 REV AD				
<b>Mechanische Prüfung</b>		Soll		Ist		
		min.	max.	min.	max.	
Dicke	mm	0,31	0,33	0,318	0,321	
Breite	mm	27,2	27,4	27,29	27,31	
Zugfestigkeit	RM N/mm <sup>2</sup>	580	650	618	623	
Streckgrenze	RP N/mm <sup>2</sup>	540		572	576	
Bruchdehnung	A 50mm    %	8		12,2	12,6	
Biegebarkeit	90° r= 0.48mm BK =			rissfrei	rissfrei	
Biegebarkeit	180° r= 1.12mm BK :			rissfrei	rissfrei	
Biegebarkeit	+ 90° r= 0.32mm BK =			rissfrei	rissfrei	
Biegebarkeit	+ 180° r= 0.80mm BK :			rissfrei	rissfrei	
Drall-Grad	°/ 900		10	1	2	
Korngröße	µm		25	15	15	
Leitfähigkeit	m/(Omm <sup>2</sup> )	29		31,4	31,4	
Querwölbung	mm/ 27		0,054	0,005	0,005	
Oberflächenrautiefe Ra	Ra µm		0,35	0,07	0,12	
Säbelförmigkeit	mm/ 900		1,6	0,21	0,26	
Schneidgrat	mm		0,032	0,004	0,007	
Ausbiegung	mm/ 900		225	5	19	
Auflagendicke	Rein-Feuerverzinkt µm 1		3	1,78	2,44	
<b>Chemische Zusammensetzung %</b>		bleifrei				
NI						1.4685
SI						0.2492
ANDERE						Rest
Alle Elemente, die nicht explizit aufgelistet sind, entsprechen in ihren jeweiligen Anteilen der Spezifikation aus Ihrer o.g. Bestellung.						
Werkstoffprüfung				Telefon	:+49 2402 105-516	
Abnahmebeauftragter: Herr Fuchs				Fax	:+49 2402 105-279	
(Dieses Schreiben wurde maschinell erstellt und ist auch ohne Unterschrift gültig.)				Email	:andreas.fuchs@kmdgroup.com	

INSPECTION CERTIFICATE	
1000536587	
(according to DIN EN 10204, type 3.1)	
Manufacturer:	SC Otelinox SA
Address:	16, Gaesti Street, Targoviste, 130087, Romania

Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM  
IATF 16949  
Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM  
ISO 9001



LABORATORY ACCREDITED BY  
RENAR  
ISO/CEI 17025  
Cert. no. U/007

**IDENTITY**

Product:	CRC/Slit1.4310 HT5 2H 0.14x15.5mm MULTICOIL
Customer:	TE Connectivity Germany GmbH
SO No. / Cust PO.	1000324779 / PO 2550146684
Customer Art No:	705410-4 REV A
Otx Art No:	N13717M
Spec No:	EN 10088-2 ; TEC-100-309-2 rev U ; ID 875 Version A1
Pallet No.	1000536587
Coil No.	NE24/101-203304/2/A/3 / 10 11 12 13 14 2 3 4 5 6 7 8 9
Net Weight [kg]	1,400
Heat Treatment	Without

**CHEMICAL ANALYSIS(%) Heat No: 15271**

**Melting Process: E**

xxx	C	Mn	Si	P	S	Cr	Ni
Req. (min-max)	0.05-0.15	MAX 2.0	MAX 2.0	MAX 0.045	MAX 0.015	16.00-19.00	6.00-9.50
Measured	0.1100	1.2900	0.8800	0.02500	0.00100	16.8000	6.6000
Element	Mo	Ti	N	Al	Cu	Co	
Req. (min-max)	MAX 0.8	xxx	MAX 0.10	xxx	xxx	xxx	
Measured	0.0300	xxx	0.0750	xxx	xxx	xxx	

**TEST RESULTS**

Test Direction	Longitudinal						
Position/Test No:	T/ 270	B/ 271					
Requirement	Rp02(MPa)	Rm(MPa)	Elong(A80%)	HV2	Ra(um)	Bending Test	
min-max	min 1,000	1,350-1,500	min 13.0	xxx	xxx		
T	1,247	1,429	18.5	448	0.16	Ok	
B	1,280	1,381	21.0	445	0.14	Ok	

**GEOMETRY MEASUREMENTS**

Requirement	Thick[mm]	Width[mm]	Burr[%]
Nominal Value	0.140	15.50	
min/max	-0.010/0.007	-0.05/0.05	max 5%
Min	0.137	15.476	2.9
Max	0.138	15.511	3.7

**Other Test Results**

PN-International 0-0705410-4/Rev.O PN-Germany 1-1262050-0/Rev.A
--

Surface and dimensional control, material identity test : OK

Marking: Producer Trade Mark, Material, Heat No., Coil No.

Delivered product is in conformity with order requirements.





# **Section 11**

# **Initial Process Studies**

**Not Applicable**



## **Section 12**

# **Qualified Laboratory Documentation**





# CERTIFICATE



This is to certify that

## TE Connectivity Solutions GmbH

Plant Steinach

Amperestr. 3  
9323 Steinach  
Switzerland

has implemented and maintains a **Quality Management System**.

Scope:

Design and manufacturing of electronic and mechatronic components and connector systems

An audit, conducted and documented in a report, has verified that this quality management system fulfills the requirements of the following International Automotive Standard:

## IATF 16949:2016

(with product design)

Certificate registration no.	515113 IATF16
Main certificate registration no.	515099 IATF16
Issuing date	2018-05-19
This certificate is valid until	2021-05-18
IATF No.	0306141



2-IAO-QMC-01001

### For and on behalf of DQS

Stefan Heinloth  
Managing Director, DQS GmbH

Michael Drechsel  
Managing Director, DQS Holding GmbH



**Annex to certificate registration no.: 515113 IATF16**  
**IATF-No.: 0306141**

**TE Connectivity Solutions GmbH**

Plant Steinach

Amperestr. 3  
9323 Steinach  
Switzerland



2-IAO-QMC-01001

**Remote Location**

**Scope**

**515099**

**TE Connectivity Germany GmbH**  
**Amperestr. 12-14**  
**64625 Bensheim**  
**Germany**

Continuous Improvement, Customer Service,  
Human Resource, Internal Audit Management,  
Management Review, Policy making,  
Production Equipment Development,  
Process Design, Product Design, Purchasing,  
Quality System Management, Sales,  
Supplier Management

**515116**

**TE Connectivity Germany GmbH**  
**Amperestr. 12-14**  
**73499 Wört**  
**Germany**

Process Design, Warehousing

**515103**

**TE Connectivity Germany GmbH**  
**Amperestr. 11**  
**91550 Dinkelsbühl**  
**Germany**

Production Equipment Development,  
Process Design

**515110**

**Tyco Electronics France SAS**  
**1 rue Ampère**  
**95300 Pontoise**  
**France**

Customer Service, Product Design, Sales

**515514**

**Tyco Electronics AMP Italia Products S.r.l.**  
**Corso Fratelli Cervi 15**  
**10093 COLLEGNO TORINO**  
**Italy**

Customer Service, Sales



**Annex to certificate registration no.: 515113 IATF16**  
**IATF-No.: 0306141**

## **TE Connectivity Solutions GmbH**

Plant Steinach

Amperestr. 3  
9323 Steinach  
Switzerland



2-IAO-QMC-01001

### **Remote Location**

### **Scope**

**525517**

**TE Connectivity Morocco**  
**I Lot 60, Zone Franche Tangier**  
**90 000 Tangier**  
**Morocco**

Warehousing

**525515**

**TE Connectivity Tunisia office**  
**Immeuble Lake Forum,**  
**4 ème étage 5 rue de la feuille d'érable**  
**1053 Tunis**  
**Tunisia**

Warehousing



## **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.: **1-0968853-1**  
Description: **Amp MCP2.8 Flat Type Receptacle**  
Report No.: -  
Date of Report: -  
Purchase Order No.: -  
Bill of Delivery No.: -  
Preliminary MDS: **No**  
IMDS ID / Version: **4998433 / 20**  
Node ID: **764443367**  
MDS Status (Change Date): **Internally released (08/23/2018)**

## 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.: **1-0968853-1**      Report No.: **-**  
 Description: **Amp MCP2.8 Flat Type Receptacle**      IMDS ID / Version: **4998433 / 20**  
 Node ID: **764443367**

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	Amp MCP2.8 Flat Type Receptacle	1-0968853-1	4998433 / 20		0.7304				
└2	Body			1	0.6104				
└3	High Copper Alloy		158414641 / 4		0.6085			3.2	No
└4	Copper	7440-50-8				98.12		D	

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	Nickel	7440-02-0				1.3	0.8 - 1.8	D	Not applicable [34]
└4	Phosphorus	7723-14-0				0.03	0.01 - 0.05		
└4	Silicon	7440-21-3				0.25	0.15 - 0.35		
└4	Misc., not to declare	system				0.25	0 - 0.5		
└4	Silver	7440-22-4				0.05	0 - 0.1	D / P	
└3	e-plate Sn (electrodeposited Tin Coatings, bright and matt)		756885 / 5		0.0019			4.2	No
└4	Carbon	7440-44-0				0.505	0.01 - 1		
└4	Sulphur	7704-34-9				0.02	0 - 0.04		
└4	Lead	7439-92-1				0.015	0 - 0.03	D / P / SVHC	Concentration within acceptable GADSL limits [44]
└4	Tin	7440-31-5				99.46			
└2	Spring AMP MCP 2.8mm Flat Type Receptacle	0-0968863-1	4003185 / 20	1	0.12				
└3	X10CrNi18-8		36413360 / 6		0.12			1.1.2	No
└4	Carbon	7440-44-0				0.1	0.05 - 0.15		
└4	Chromium	7440-47-3				17.5	16 - 19		
└4	Manganese	7439-96-5				1	0 - 2		
└4	Nitrogen	7727-37-9				0.05	0 - 0.1		

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	Nickel	7440-02-0				7.75	6 - 9.5	D	Other application (Surface not routinely touched or nickel release rate < 0.5µg/cm2/week) [33]
└4	Phosphorus	7723-14-0				0.0225	0 - 0.045		
└4	Sulphur	7704-34-9				0.0075	0 - 0.015		
└4	Silicon	7440-21-3				1	0 - 2		
└4	Iron	7439-89-6				71.67			
└4	Copper	7440-50-8				0.5	0 - 1	D	
└4	Molybdenu	7439-98-7				0.4	0 - 0.8		

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	<b>AMP MCP 2.8, CONTACT</b>	Cust. Part Number	<b>37K7038</b>
Shown on Drawing No.	<b>C-1355036</b>	Org. Part Number	<b>1-968853-1</b>
Engineering Change Level	<b>J13</b>	Dated	<b>7-May-2018</b>
Additional Engineering Changes	<b>N / A</b>	Dated	<b>N / A</b>
Safety and/or Government Regulation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Purchase Order No.	<b>N / A</b>
Weight (kg)			<b>0.0007</b>
Checking Aid Number	<b>N / A</b>	Checking Aid Engineering Change Level	<b>N / A</b>
Dated			<b>N / A</b>

**ORGANIZATION MANUFACTURING INFORMATION**

**TE Connectivity**

Supplier Name & Supplier/Vendor Code  
**Amperestr. 3**

Street Address  
**Steinach 9323 Switzerland**

City Region Postal Code Country  
**Steinach 9323 Switzerland**

**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: **4998433 / 20**

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 type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment, or additional	<input type="checkbox"/> Change in Part Processing
<input type="checkbox"/> Correction of Discrepancy	<input type="checkbox"/> Parts produced at Additional Location
<input type="checkbox"/> Tooling Inactive > than 1 year	<input checked="" type="checkbox"/> Other - please specify <b>E-18-006008</b>

**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 **Stamping process**

**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.**

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

Organization Authorized Signature *Barbara Figueroa* Date **6/19/2020**

Print Name **Barbara Figueroa** Phone No. **+52 622 225 11 54** Fax No. **N/A**

Title **PPAP Technician** E-mail [barbara.figueroa@te.com](mailto:barbara.figueroa@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**