

Part Name Mqs Socket Contact Cleanbody sws Cust. Part Number n/a  
 Shown on Drawing Number C - 1703040 Org.Part Number 0 - 1703032 - 1  
 Engineering Change Level A3 Dated 20.11.2014  
 Additional Engineering Changes \_\_\_\_\_ Dated \_\_\_\_\_  
 Safety and/or Government Regulation  Yes  No Purchase Order No. \_\_\_\_\_ Weight (kg) 0.1287 gms  
 Checking Aid Number \_\_\_\_\_ Checking Aid Engineering Change Level \_\_\_\_\_ Dated \_\_\_\_\_

**ORGANIZATION MANUFACTURING INFORMATION**
**CUSTOMER SUBMITTAL INFORMATION**

**TE Electronics AMP GmbH** / \_\_\_\_\_  
 Organization Name and Supplier Code  
**AMPèrestraße 12-14** \_\_\_\_\_  
 Street Address  
**Bensheim** **64625** **Germany**  
 City Region Postal Code Country

**Nursan Otomotiv Ltd.** \_\_\_\_\_  
 Customer Name/Division  
n/a \_\_\_\_\_  
 Buyer/Buyer Code  
**All Models** \_\_\_\_\_  
 Application

**MATERIALS REPORTING**

Has customer-required Substance of Concern information been reported  
 Submitted by IMDS or other customer format

Yes  No  n/a  
IMDS ID : 22743487/9

Are polymeric parts identified with appropriate ISO marking codes?

Yes  No  n/a

**REASON FOR SUBMISSION (Check at least one)**

- 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 measurement  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

**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 the production rate of xxxxx / x hours  
 I also certify that documented evidence of such compliance is on file and is available for review. I have noted any deviations from this declaration below.

**EXPLANATION/COMMENTS** PSW cover sheet is additional to report no. 2014-948981

Is each Customer Tool properly tagged and numbered?  Yes  No

Organization Authorized Signature \_\_\_\_\_ Date 17.03.2015

Print Name Sabrina Kipfmueller Phone No. +49 6232 30 2822 Fax \_\_\_\_\_

Title Product Compliance Technican Email sabrina.kipfmueller@te.com

**FOR CUSTOMER USE ONLY (IF APPLICABLE)**

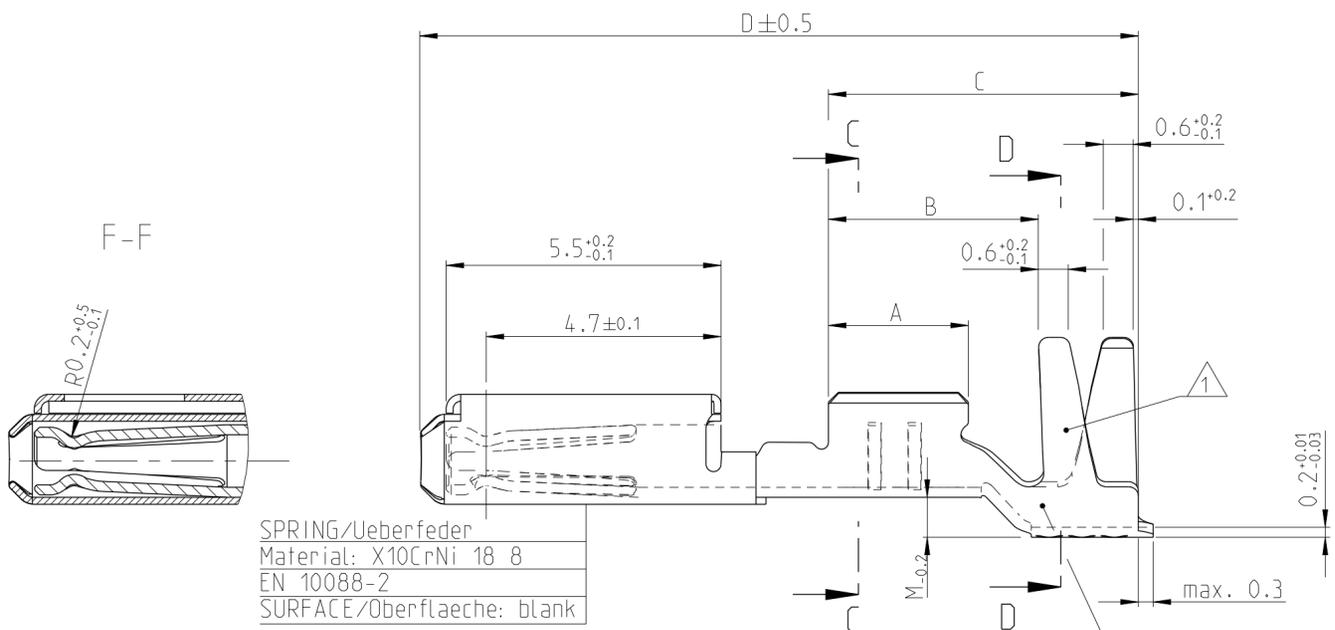
PPAP Warrant Disposition :  Approved  Rejected  Other \_\_\_\_\_

Customer Signature \_\_\_\_\_ Date \_\_\_\_\_

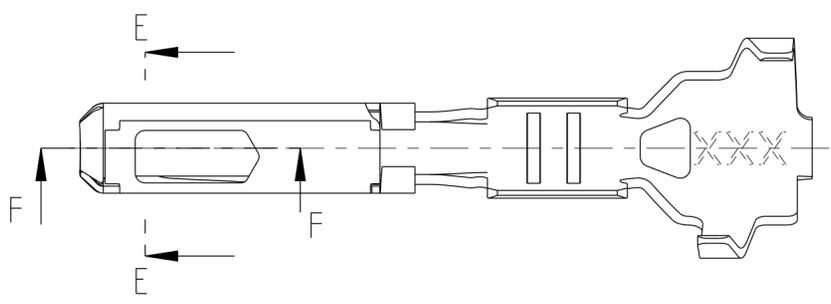
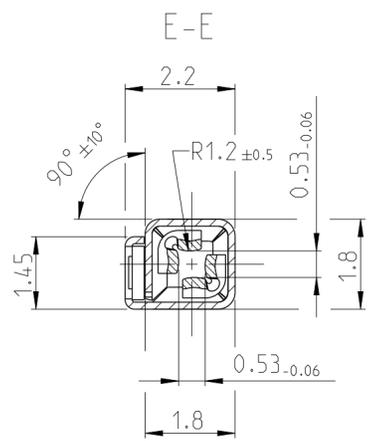
Print Name \_\_\_\_\_ Customer Tracking Number (optional) \_\_\_\_\_

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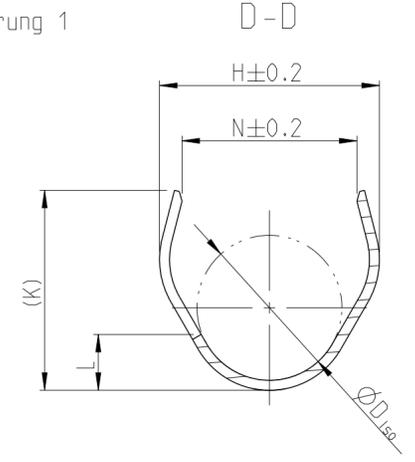
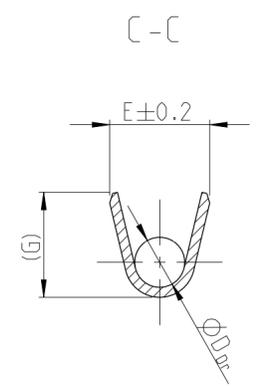
LOC		DIST		REVISIONS			
P	LTR	DESCRIPTION	DATE	DWN	APVD		
A		NEW DRAWING CREATED	01JUN04	Abr	H.K.		
A1		NEW TE LOGO (ECR-11-014427)	18JUL2011	Abr	Brun		
A2		LP variants removed. ECR-13-015135	30SEP2013	Abr	Brun		
A3		Design 2 and PN 2288140 added. ECR-14-018067	20NOV2014	Bren	Brun		



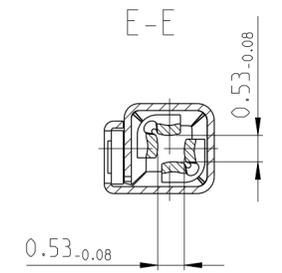
BODY/Kontaktkoerper
Material: CuNiSi
Oberflaeche: siehe Tabelle
SURFACE: SEE CHART



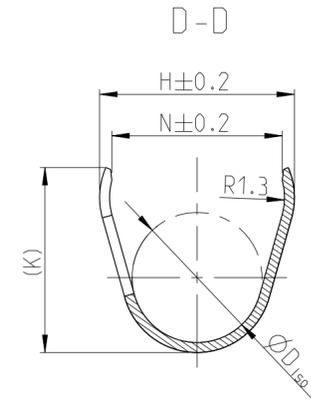
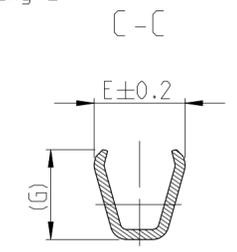
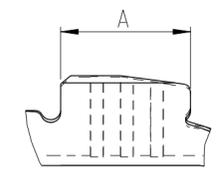
DESIGN 1 / Ausfuehrung 1



GOLD VERSION  
Vergoldete Ausfuehrung

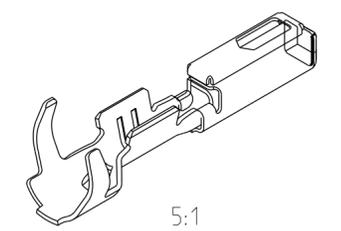
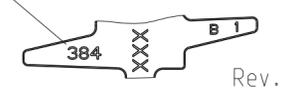


DESIGN 2 / Ausfuehrung 2



NOTES  
Bemerkungen

- DATE-CODE (WEK/YEAR (E.G. WEEK NUMBER 38/ YEAR 2004) AND TE REVISION (E.G. REV. B)  
Datumscode (Woche / Jahr, z.B. KW 38/ Jahr 2004) und TE-Revision (z.B. Rev.B)
- SUITABLE FOR PIN CONTACT SEE DRAWING: TE: 929453  
Passend zu Stiftkontakt siehe Zeichnung: TE: 929453
- DETAILS OF DESIGN ARE LEFT TO MANUFACTURER  
Einzelheiten der Ausfuehrung bleiben dem Hersteller ueberlassen



Bestell-Nr. Ausfuehrung ORDER NO. DESIGN	Bestell-Nr. Ausfuehrung ORDER NO. DESIGN	Rev	DGB Wire Size Range mm <sup>2</sup>	Oberflaeche SURFACE	Laenge LENGTH mm	Drahtcrimp WIRE CRIMP mm	Iso-crimp INSU-CRIMP mm	DGB Wire Size Range mm <sup>2</sup>	Isolations INSULATION DIA. mm	fuer Kammer Ø3.45 FOR CAVITY DIA. 3.45 mm	Blindstopfen RUBBER PLUG	fuer Kammer Ø4 FOR CAVITY DIA. 4 mm	Blindstopfen RUBBER PLUG
2288140-1		A	0.35	Sn	A = 2.6 B = 4.2 C = 6.2 D = 14.2 M = 0.8	E = 1.8 G = 1.8	H = 4.2 K = 4.2 N = 3.6 D Iso = 2.6	0.22-0.35	0.9-1.4	967067-2 gelb YELLOW	967056-1 blau / BLUE	963142-2 grau GREY	967056-1 blau / BLUE
1703032-5		A	0.5-0.75	Au	A = 2.8 B = 4.2 C = 6.2 D = 14.2 M = 0.8	E = 2 G = 2.1 D Dr = 1	H = 4.4 K = 4 L = 1.5 N = 3.5 D Iso = 2.9	0.75-0.5	1.4-1.9	967067-1 grün GREEN	967056-1 blau / BLUE	963142-1 schwarz BLACK	967056-1 blau / BLUE
1703032-1		A	0.5-0.75	Sn	A = 2.8 B = 4.2 C = 6.2 D = 14.2 M = 0.8	E = 2 G = 2.1 D Dr = 1	H = 4.4 K = 4 L = 1.5 N = 3.5 D Iso = 2.9	0.75-0.5	1.4-1.9	967067-1 grün GREEN	967056-1 blau / BLUE	963142-1 schwarz BLACK	967056-1 blau / BLUE

zugehoerige Einzeldichtung / SUITABLE SINGLE WIRE SEAL

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DWN Abraham.G. 01JUN2004	TE Connectivity
	±0.2 ±°	CHK Kampmann.H. 02JUN2004	
		APVD Bleicher.M. 27SEP2004	
		PRODUCT SPEC 108-18030	
MATERIAL	FINISH	APPLICATION SPEC 114-18025	NAME MQS SOCKET CONTACT CLEANBODY SWS Tabellenzeichnung Buchsenkontakt
		WEIGHT 0.13 g	SIZE A2 CAGE CODE 00779 DRAWING NO. C-1703040 RESTRICTED TO
		Customer Drawing	SCALE 10:1 SHEET 1 OF 1 REV A3

Part Name Mqs Socket Contact Cleanbody sws Cust. Part Number n/a

Shown on Drawing Number C-1703040 Org.Part Number 1703032-1

Engineering Change Level A2 Dated 30.09.2013

Additional Engineering Changes \_\_\_\_\_ Dated \_\_\_\_\_

Safety and/or Government Regulation  Yes  No Purchase Order No. \_\_\_\_\_ Weight (kg) 0.1287 gms

Checking Aid Number \_\_\_\_\_ Checking Aid Engineering Change Level \_\_\_\_\_ Dated \_\_\_\_\_

**ORGANIZATION MANUFACTURING INFORMATION**
**CUSTOMER SUBMITTAL INFORMATION**

TE Electronics AMP GmbH / \_\_\_\_\_  
 Organization Name and Supplier Code

AMPèrestraße 12-14 \_\_\_\_\_  
 Street Address

Bensheim 64625 Germany  
 City Region Postal Code Country

n/a \_\_\_\_\_  
 Customer Name/Division

n/a \_\_\_\_\_  
 Buyer/Buyer Code

All Models \_\_\_\_\_  
 Application

**MATERIALS REPORTING**

Has customer-required Substance of Concern information been reported  Yes  No  n/a  
 Submitted by IMDS or other customer format IMDS ID : 22743487

Are polymeric parts identified with appropriate ISO marking codes?  Yes  No  n/a

**REASON FOR SUBMISSION (Check at least one)**

- |   |  |
|---|--|
| <input checked="" 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 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.
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**SUBMISSION RESULTS**

The results for  dimensional measurement  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

**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 the production rate of xxxxx / x hours I also certify that documented evidence of such compliance is on file and is available for review. I have noted any deviations from this declaration below.

**EXPLANATION/COMMENTS** General Parts according to tyco customer drawings. ISIR is depending on part number and independant from used tool.General Parts must not be signed by the customer.

Is each Customer Tool properly tagged and numbered?  Yes  No

Organization Authorized Signature Vedak Date 28.05.2014

Print Name Veda Kulkarni Phone No. +49 6152 133 1986 Fax +49 6152 133 1206

Title Quality Engineering Email jkirchmeier@te.com

**FOR CUSTOMER USE ONLY (IF APPLICABLE)**

PPAP Warrant Disposition :  Approved  Rejected  Other \_\_\_\_\_

Customer Signature \_\_\_\_\_ Date \_\_\_\_\_

Print Name \_\_\_\_\_ Customer Tracking Number (optional) \_\_\_\_\_

# Production Part Approval Dimension Test Results

14/948981.16a

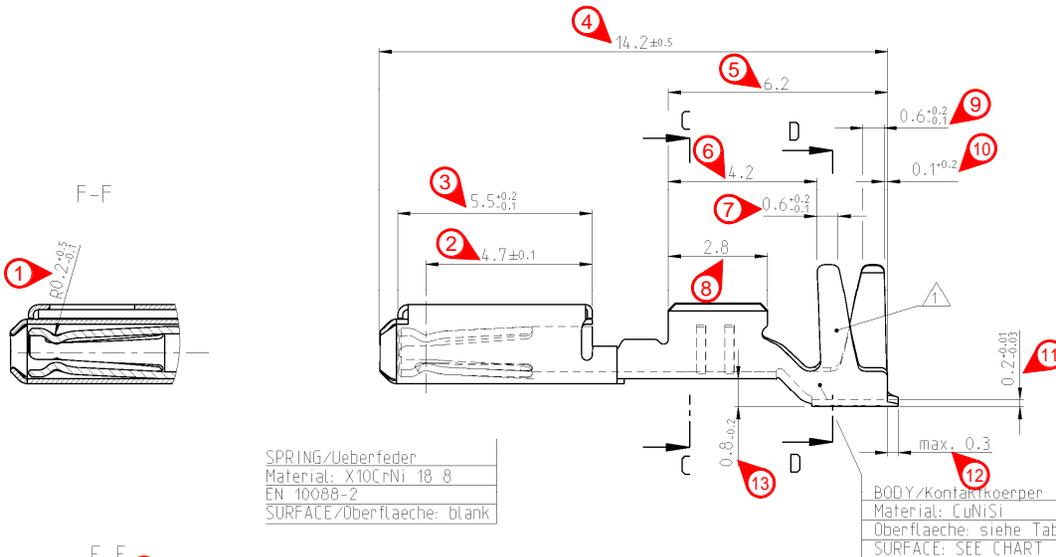
ORGANIZATION				PART NUMBER				1703032-1	
SUPPLIER/VENDER				PART NAME				Mqs Socket Contact Cleanbody sws	
INSPECTION FACILITY				DESIGN RECORD CHANGE LEVEL				C-1703040	
<b>Bensheim</b>				ENGINEERING CHANGE DOCUMENT				A2	
ITEM	DIMENSION/ SPECIFICATION	USL (To+)	LSL (To-)	ORGANIZATION MEASUREMENT RESULT (DATA)				OK	NOT OK
1	Radius 0.20	0.50	-0.10	Unable to measured				-	
2	4.70	0.10	-0.10	Unable to measured				-	
3	5.50	0.20	-0.10		5.49			x	
4	14.20	0.50	-0.50		14.26			x	
5	6.20	0.20	-0.20		6.15			x	
6	4.20	0.20	-0.20		4.21			x	
7	0.60	0.20	-0.10		0.75			x	
8	2.80	0.20	-0.20		2.82			x	
9	0.60	0.20	-0.10		0.70			x	
10	0.10	0.20	0.00		0.10			x	
11	0.20	0.01	-0.03		0.20			x	
12	Max 0.30	0.00	-0.30	Unable to measured on strip				-	
13	0.80	0.00	-0.20		0.73			x	
14	1.45	0.20	-0.20		1.46			x	
15	90.00	10.00	-10.00		89.22			x	
16	2.20	0.20	-0.20		2.19			x	
17	Radius 1.20	0.50	-0.50		0.72			x	
18	0.53	0.00	-0.06		0.49			x	
19	1.80	0.20	-0.20		1.79			x	
20	0.53	0.00	-0.06		0.49			x	
21	1.80	0.20	-0.20		1.79			x	
22	2.10	0.20	-0.20		2.22			x	
23	2.00	0.20	-0.20		2.02			x	
24	Ø Dia 1.00	0.20	-0.20		1.09			x	
25	4.00	0.20	-0.20		3.94			x	
26	1.50	0.20	-0.20		1.30			x	
27	3.50	0.20	-0.20		3.69			x	
28	4.40	0.20	-0.20		4.46			x	
29	Ø Dia 2.90	0.20	-0.20		3.08			x	

Blanked statements of conformance are unacceptable for any test results

<u>SIGNATURE</u> Veda Kulkarni	<u>TITEL</u> Quality Engineering	<u>DATE</u> 28.05.2014
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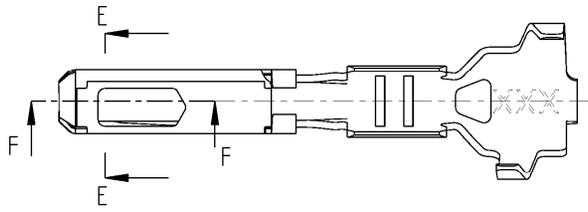
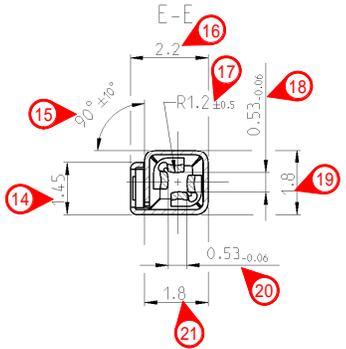
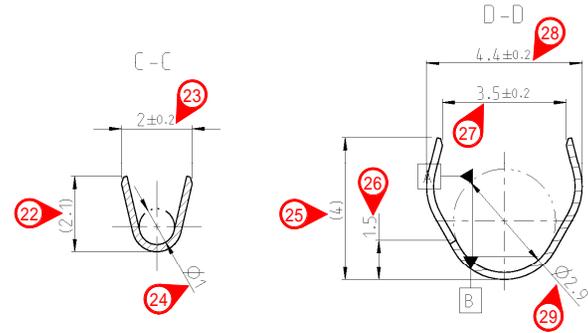


LOC	DIST	REVISIONS				
		PLTR	DESCRIPTION	DATE	OWN	APVD
A1	-	A	NEW DRAWING CREATED	01JUN04	ADP	H.K.
		A1	NEW TE LOGO (ECR-11-014427)	18JUL2011	Abt	Brun
		A3	LP variants removed. ECR-13-015135	30SEP2013	Abt	Brun



SPRING/Ueberfeder  
 Material: X10CrNi 18 8  
 EN 10088-2  
 SURFACE/Oberflaeche: blank

BODY/Kontaktkoerper  
 Material: CuNiSi  
 Oberflaeche: siehe Tabelle  
 SURFACE: SEE CHART

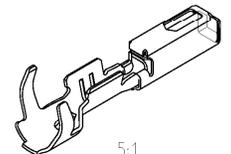
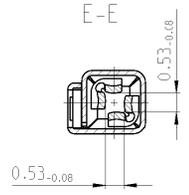


NOTES  
 Bemerkungen

- 1 DATE-CODE (WEK/YEAR (E.G. WEEK NUMBER 38/ YEAR 2004) AND TE REVISION (E.G. REV. B)  
 Datumscode (Woche / Jahr, z.B. KW 38/ Jahr 2004) und TE-Revision (z.B. Rev.B)
- 2 SUITABLE FOR PIN CONTACT SEE DRAWING: TE: 929453  
 Passend zu Stiftkontakt siehe Zeichnung: TE: 929453
- 3 DETAILS OF DESIGN ARE LEFT TO MANUFACTURER  
 Einzelheiten der Ausfuehrung bleiben dem Hersteller ueberlassen
- 4 SUITABLE SINGLE WIRE SEAL 967067-1 COLOR GREEN  
 Zugehoerige Einzeldichtung 967067-1 Farbe gruen



GOLD VERSION  
 Vergoldete Ausfuehrung



INSUL.-DIA Isolationsø	WIRE SIZE RANGE DGB	SURFACE Oberflaeche	PART NUMBER	REV.
2.2 mm	0.5-0.75 mm <sup>2</sup>	Au	1703032-5	A
2.2 mm	0.5-0.75 mm <sup>2</sup>	Sn	1703032-1	A

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm 	TOLERANCES UNLESS OTHERWISE SPECIFIED: 1. PLC ±0.2 2. PLC ±0.2 3. PLC ±0.2 4. PLC ±0.2 ANGLES FINISH #°	DWN: Abraham, G. 01JUN2004 CHK: Kammann, H. 02JUN2004 APVD: Bleicher, M. 27SEP2004	<b>TE</b> TE Connectivity NAME: MQS SOCKET CONTACT CLEANBODY SW S Tabellenzeichnung Buchsenkontakt
MATERIAL: - FINISH: -	PRODUCT SPEC: 108-18030 APPLICATION SPEC: 114-18025 WEIGHT: 0.13 g	SIZE: A2 CAGE CODE: 00779 DRAWING NO: ©=1703040	RESTRICTED TO: - SCALE: 10:1 SHEET: 1 of 1 REV: A2

CUSTOMER DRAWING

## ABNAHMEPRUEFZEUGNIS NACH EN 10 204 3.1

TYCO ELECTRONICS AMPGMBH  
KREDITORENBUCHHALTUNG  
PFNORSTR. 1

64293 DARMSTADT / GERMANY

Zeugnis-Nr. : 176162  
Auftrags-Nr. : 396141 /01  
Datum : 01.04.14  
Kunden-Nr. : 061297  
Liefers.-Nr. : 611451

Bestellung : 2550047327  
Sach-Nr. : 3-704060-8 REV.AA

Artikel	Dicke	Breite	Laenge	Be-Kg	Fe-Kg
67 VERZ. BAND GESPUL	0,200	17,800		3000	2526 [KG]
Werkstoff - 100-1230 +	0,000	0,050	Profil		
290 CU-NI-SI -	0,010	0,050	[MM]		/

**CHARGE:**

1141010001    1141010002    1141010005    1141010004    1141010003

**Chemische Analyse (%):**

Ni : 1,4960 - 1,4960    Si : 0,3067 - 0,3067    P : 0,0242 - 0,0242  
Fe : 0,0141 - 0,0141    Zn : 0,0055 - 0,0055    Pb : 0,0009 - 0,0009

**Physikalische Analyse:**

	Soll/min	Soll/max	Ist/min	Ist/max	Text
tensile [ N/mm2 ]	580	650	641	641	
yield [ N/mm2 ]	540		610	610	
elongation [ % ]	8		9	9	
grain size [ my ]		25	15	25	
conductivity [ * ]	29		29,2	29,2	
Bend 180 GW [ mm ]	,4				ok
Bend 180 BW [ mm ]	,6				ok
amber [ mm/m ]		1,98	,1	,3	
crossbow [ mm ]		,04	,04	,04	
Cutting bur [ mm ]		,02	,003	,008	
coil set [ * ]		225	40	80	
Twist [ * ]		10			< 10
Flatness [ * ]		,01			ok
roughness [ my ]		,35	,1	,19	
Tin-layer [ my ]	1	2	1,2	2	
thickness [ mm ]	,19	,2	,196	,199	
width [ mm ]	17,75	17,85	17,77	17,85	

**BEMERKUNG:**

Reduced thickness tolerance, compliant to elite supplier program

Die Lieferungen erfolgen gemaess RoHS, ELV und WEEE.

Werkssachverstaendiger : HERR K. ZEIGER

Dieser Ausdruck wurde maschinell erstellt und ist ohne Unterschrift gueltig

Zapp Precision Metals GmbH, Postfach 21 29, D-59411 Unna

**Tyco Electronics AMP GmbH**  
**AMPerestraße**  
**73499 Wört / Ostalbkreis**

**Attest-Nr./Certificate No. 10256191000010 01**

**Datum/Date: 27.01.2014 Seite/Sheet/Page 1/2**

**Kunden-Bestell-Nr.** 2550048879 vom/of/du 21.01.2014  
 Customer PO# / No. de commande  
**Kunden-Material-Nr.** 2-704567-2 REV N  
 Customer Part No. / Votre No. d'article  
**Kunden-Spezifikationen** 100-309-2  
 Customer Specification / Spécification de client

**Kundennr.** 625000 Customer No. / Code client  
**Auftragsnr.** 1319308 Sales Order No./No. de commande  
**Materialnr.** 2008862 Material No./No.d'article  
**Bezeichnung** EDELSTAHL ROSTFREI EN 10151, 10088-2 - PRÄZISBAND EN ISO 9445-1  
 Material Designation / Désignation  
**Werkstoff** ERGSTE 1.4310 FS  
**Abmessung** 0,1400 mm X 12,000 mm  
**Ausführung** kaltgewalzt, streckbiegegerichtet, SR - gerichtet  
**Oberfläche** blank  
**Kante** geschnittene Kanten  
**Breitentoleranz** -0,050 mm / 0,050 mm  
**Dickentoleranz** -0,0100 mm / 0,0100 mm

**Lieferschein-Nr.** 10256191 Pos 10  
 Delivery Note / Bon de livraison  
**Kontakt** Andrea Verleger  
 Contact Tel. +49 2304 79-224

**Chemische Zusammensetzung (%)**  
 Chemical Composition / Composition chimique  
**Erschmelzungsart: VOD**  
 Melting Process / Mode d'élaboration

**Schmelzennr.** 0729260  
 Heat No./ No. de coulée

	C	Si	Mn	P	S	N	Cr	Ni	Mo
Ist	0,1100	0,8800	1,2400	0,0310	0,0010	0,0600	16,7600	6,5300	0,2200

**Produktionslos 3190943** Production Lot / Unité de production  
**Gewicht** 1.418,000 KG Weight / Poids  
**Prüflos / Prüfeinheit** 020000289171 / 000001  
 Inspection Lot / Unité d'inspection

**Packstücke** 1314710999  
 Pack.Unit / No. de caisse

**Prüfergebnisse**  
 Inspection result / Résultats d'examen

	Soll (min)	Soll (max)	Ist (min)	Ist (max)
<b>Rm (MPa)</b>	1150	1300	1253	1264
<b>Rp0,2 (MPa)</b>	650		841	856
<b>A80mm (%)</b>	20,0		33,0	37,0
<b>Abk. r/s quer 180°</b>		0,50	0,36	0,36
<b>Abk. r/s längs 180°</b>		1,00	1,00	1,00
<b>Rauhtiefe Ra (µm)</b>		0,200	0,140	0,150

Maße und Identifikation geprüft und in Ordnung.  
 Visuelle Prüfung der Oberfläche am Endprodukt: ohne Befund  
 Entsprechend den in der Auftragsbestätigung genannten Bedingungen.



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Dieses Zeugnis ist rechnererstellt und somit gemäß  
 EN 10204 Abs. 5 ohne Unterschrift gültig