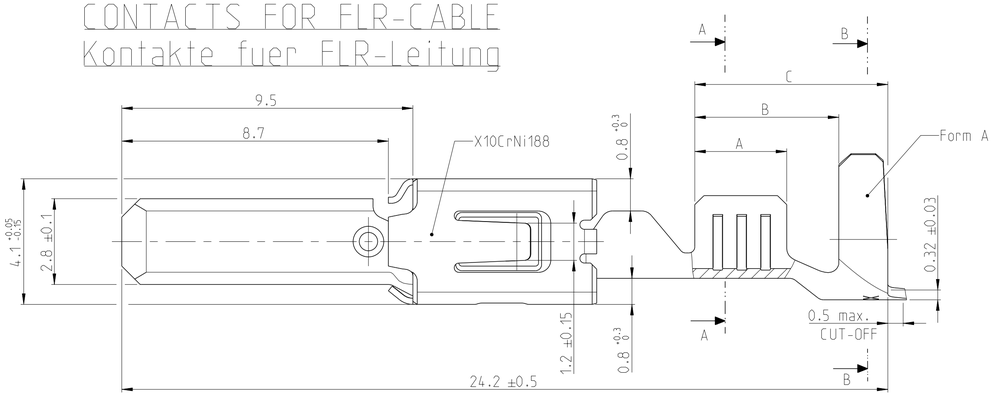
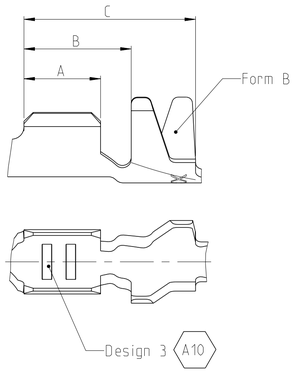
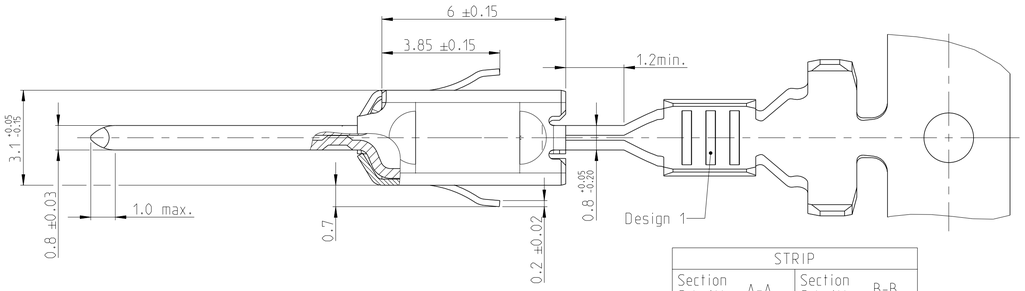
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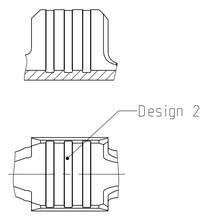
REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
	A7	PNs and design 2 added	21DEC2011	L. Kirschbaum	M. Schuster
	A8	PNs added	06NOV2013	L. Kirschbaum	M. Merz
	A9	ECR-15-012070	13AUG2015	JBJH	BK
	A10	Clarification of Serrations amount for PN 964292 and PN 964298.	25MAR2020	FRAN	MERZ

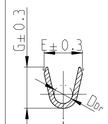
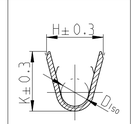
CONTACTS FOR FLR-CABLE
Kontakte fuer FLR-Leitung







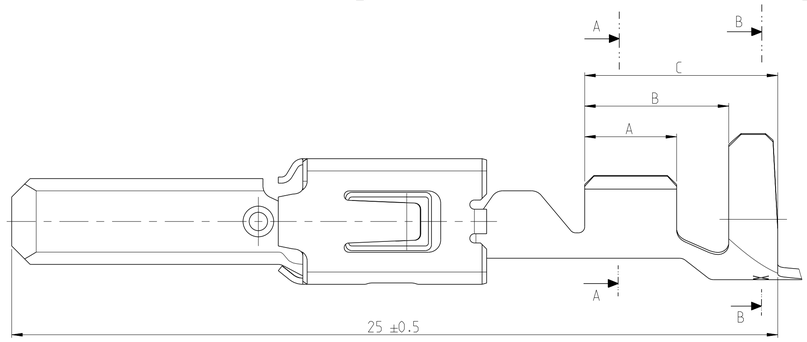


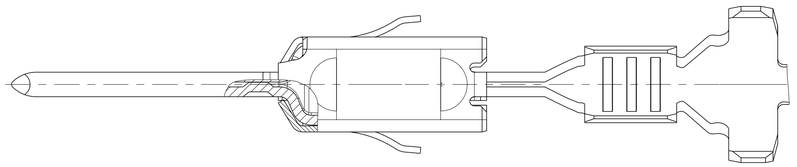
STRIP	
Section A-A Schnitt	Section B-B Schnitt
	

Order No. BESTELL - Nr. Strip BANDWARE	Rev.	Design Serrations	Wire Range Drahtgroessen Bereich (mm²)	Insulation ø Isolations ø (mm)	Material Werkstoff	Surface Oberflaeche	Lenght Laenge	Wire crimp Drahtcrimp	Insul.crimp Iso crimp	
							Crimp Dimension Crimpabmessungen (mm)			
2-964302-2	A	1	>1.0-2.5	2.2-3.0	CuFe 2	3	A = 3.5 B = 5.2 C = 6.8	E = 3.6 G = 3.8 D_{DR} = 1.8	H = 5.3 K = 5.0 D_{ISO} = 3.5	Single wire sealing system EDS 2
2-964302-1	C				CuFe 2	vorverzinnt				
1-964302-3	C				CuSn 4	1				
4-964300-1	A	1	0.5-1.0	1.4-2.7	CuNi18Zn20		A = 3.0 B = 4.7 C = 6.3	E = 2.5 G = 2.7 D_{DR} = 1.2	H = 5.1 K = 4.8 D_{ISO} = 3.3	
2-964300-2	A				CuFe 2	3				
2-964300-1	C				CuFe 2	vorverzinnt				
1-964300-3	C				CuSn 4	1				
2-2141876-2	A	2	0.35	3.4	CuFe 2	3	A = 2.5 B = 4.7 C = 6.3	E = 2.4 G = 2.3 D_{DR} = 1.0	H = 4.7 K = 4.5 D_{ISO} = 3.2	
2-2141876-1	A				CuFe 2	vorverzinnt				
1-2141876-3	A				CuSn 4	1				
2-964298-1	C	3 A10	0.2-0.5	1.2-2.3	CuFe 2	vorverzinnt	A = 2.5 B = 4.7 C = 6.3	E = 2.1 G = 2.1 D_{DR} = 0.8	H = 4.7 K = 4.5 D_{ISO} = 3.2	
1-964298-3	C				CuSn 4	1				
2-964296-2	B	1	>1.0-2.5	2.2-3.0	CuFe 2	3	A = 3.3 B = 4.3 C = 5.8	E = 3.6 G = 3.8 D_{DR} = 1.8	H = 4.7 K = 4.9 D_{ISO} = 2.6 Form A	FLR - Cable / Leitung
2-964296-1	C				CuFe 2	vorverzinnt				
1-964296-3	C				CuSn 4	1				
2-964294-2	A	1	0.5-1.0	1.4-2.1	CuFe 2	3	A = 3.0 B = 4.0 C = 5.5	E = 2.5 G = 2.7 D_{DR} = 1.2	H = 3.7 K = 3.9 D_{ISO} = 1.8 Form A	
2-964294-1	B				CuFe 2	vorverzinnt				
1-964294-3	B				CuSn 4	1				
2-2141874-1	A	2	0.35	1.15-1.6	CuFe 2	vorverzinnt	A = 2.5 B = 3.5 C = 5.6	E = 2.4 G = 2.3 D_{DR} = 1.0	H = 2.7 K = 2.8 D_{ISO} = 1.4 Form B	
1-2141874-3	A				CuSn 4	1				
2-964292-1	B	3 A10	0.2-0.5	1.15-1.6	CuFe 2	vorverzinnt	A = 2.5 B = 3.5 C = 5.6	E = 2.1 G = 2.1 D_{DR} = 0.8	H = 2.7 K = 2.8 D_{ISO} = 1.4 Form B	
1-964292-3	B				CuSn 4	1				

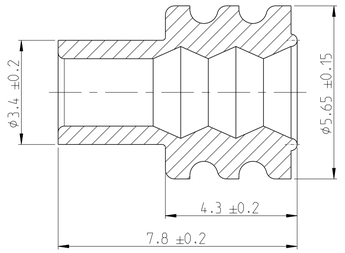
4805 (3/13)

Contacts for
Single Wire Sealing System: FLR-and FLK-Cable
Kontakt fuer Einzel-Dichtung-System: FLR und FLK-Leitung
Dimensions see Figure Contacts for FLR - Cable
Masse siehe Darstellung der Kontakte fuer FLR-Leitung





SINGLE WIRE SEAL 2 Einzel-Dichtung		
963292-1	2.7-3.0	yellow gelb
963293-1	2.0-2.7	redbrown rotbraun
963294-1	1.2-2.1	blue blau
ORDER NO. Bestell-Nr.	Insulation ø Isolations ø	Colour Farbe



NOTES
Bemerkungen:

1. BODY ELECTRO TIN PLATED OVER NICKEL 0.2 µm MIN.
   CONTACT AREA SELECTIVE GOLD OVER NICKEL 0.8 µm MIN.
   WIRE CRIMP AREA ELECTRO TIN PLATED 1µm MIN. OVER NICKEL
   Kontaktkoerper gal. verzinnt ueber Nickel 0.2 µm min.
   Kontaktzone selectiv vergoldet ueber Nickel 0.8 µm min.
   Drahtcrimpbereich gal. verzinnt 1µm min. ueber Nickel

2. ACCORDING INSULATION ø IS TO CHOOSE THE SINGLE WIRE SEAL
   Entsprechend dem Isolationsdurchmesser ist die Einzel-Dichtung auszuwaehlen

3. CONTACT AREA MIN. 3µm PRE-SILVER PLATED
   Kontaktzone min. 3µm vorversilbert

勝特力電材超市-龍山店 886-3-5773766
勝特力電材超市-光復店 886-3-5729570
胜特力电子(上海) 86-21-34970699
胜特力电子(深圳) 86-755-83298787
http://www.100y.com.tw

THIS DRAWING IS A CONTROLLED DOCUMENT.
DIESE ZEICHNUNG IST EIN KONTROLLIERTES DOKUMENT

DIMENSIONS: MASSEINHEITEN: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED: ALLGEMEINTOLERANZEN
0 PLC ±0.2 mm
1 PLC ±
2 PLC ±
3 PLC ±
4 PLC ±
ANGLES ±

MATERIAL
-
-

FINISH/OBERFLAECHE/FARBE
-
-

DWN	05NOV2001 Abraham, G.
CHK	05NOV2001 Meierhofer, T.
APVD	05NOV2001 Bleicher, M.
PRODUCT SPEC	108-18063
APPLICATION SPEC	114-18051
WEIGHT	-

TE Connectivity

NAME
PRODUCT GROUP DRAWING TAB 2.8 x 0.8 MM TYPE A
Produkt-Gruppen-Zeichnung Flachstecker 2.8 x 0.8 mm Typ A

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-1355364	

CUSTOMER DRAWING / KUNDENZEICHNUNG

SCALE	SHEET	OF	REV
10:1	1	1	A10

2,8x0,8mm Flat Contact

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*Trademark
| Indicates change

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1. INTRODUCTION

This specification covers the special guidelines for the application of the Flat Contact System 2,8mm and the Flat Contact System 2,8mm " Type A ".
The instructions are intended primarily for automatic or semi-automatic application of all versions (for both wires and single-wire sealing), but may also be applied, if agreed, to hand tools.
The various contact types are listed in Tables 1 and 2, sorted by their wire ranges and crimping data.
The various Flat Contact System 2,8mm " Type A " are listed in Tables 3 and 4, sorted by their wire ranges and crimping data.

2. REFERENCED DOCUMENTS

2.1 Customer Drawings

There is a customer drawing showing the dimensions and materials for each part number.
In the case of a conflict between this document and a customer drawing, the customer drawing takes precedence.

2.2 Product Specification

The Product Specification 108-18063 describes the characteristics of these contacts, together with the electrical and mechanical requirements.

2.3 Application Specifications

The general guidelines laid down in Application Specifications 114-18022 and 114-18018 also apply to the crimp quality.

2.4 Instructional Material

CM 5128	Contains information about crimping machines for MQC crimping tools.
AI 8025	Describes the MQC crimping tool.
IS 6764	Instruction sheet for AMP CERTI-LOK* hand tool.
IS 7424	Explains how to measure the crimp height.

2.5 National / International Standards

DIN 72 551 T5/05.92	Unscreened low tension cables (FLR)
DIN 72 551 T6/01.92	Unscreened low tension cables (FLR)
DIN ISO 6722 T1/04.85	Unscreened low tension cables (FLK)
DIN ISO 6722 T2/04.84	Unscreened low tension cables (FLK)
DIN ISO 6722 T3/08.87	Unscreened low tension cables (FLK)
DIN IEC 352 T2/04.92	Solderless electrical connections, crimped connections

3. DESCRITION

The terms shown below are used in the specification.

3.1 Contacts for Wires

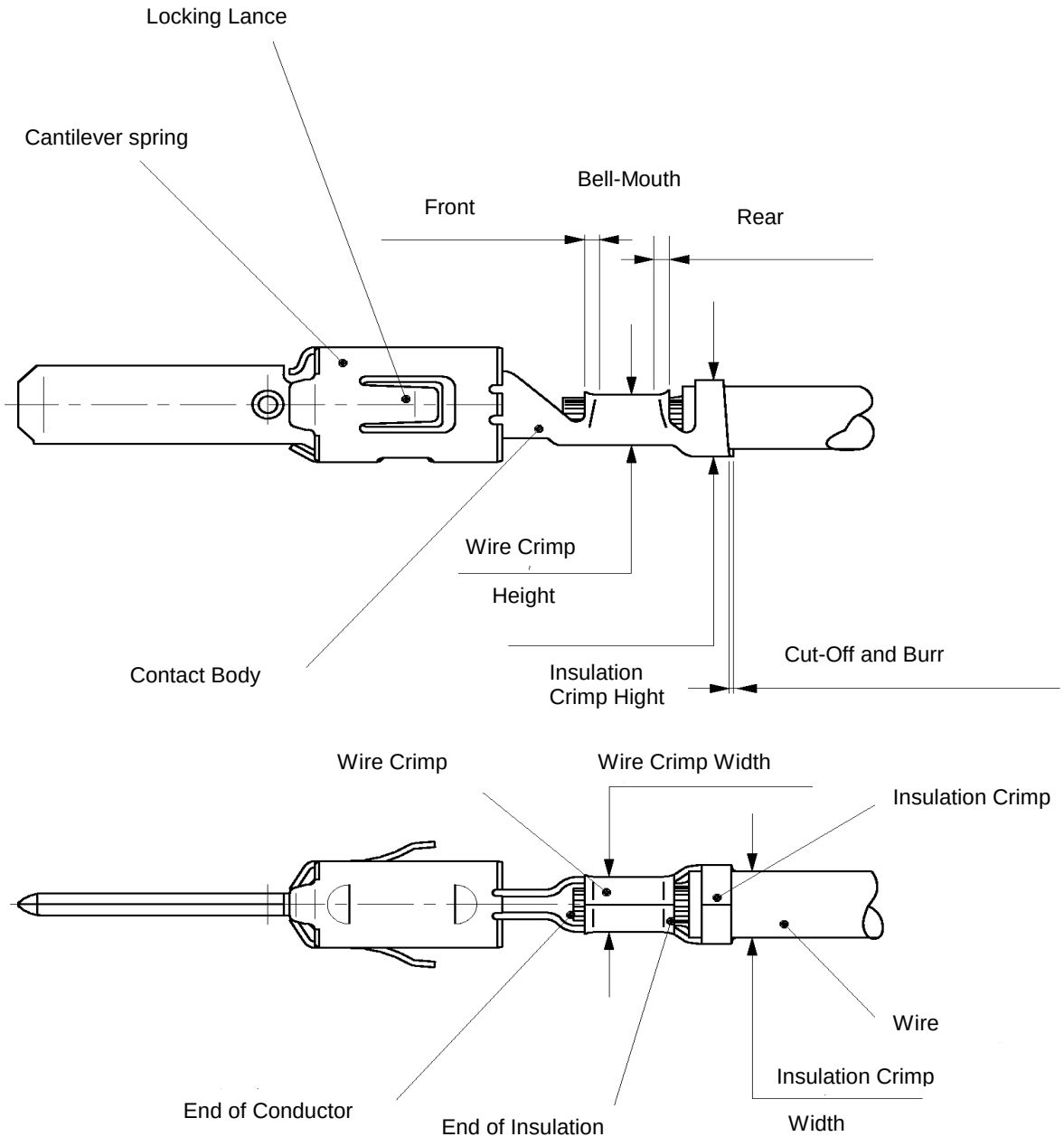


Fig. 1

3.2 Contacts for Single-Wire Sealing

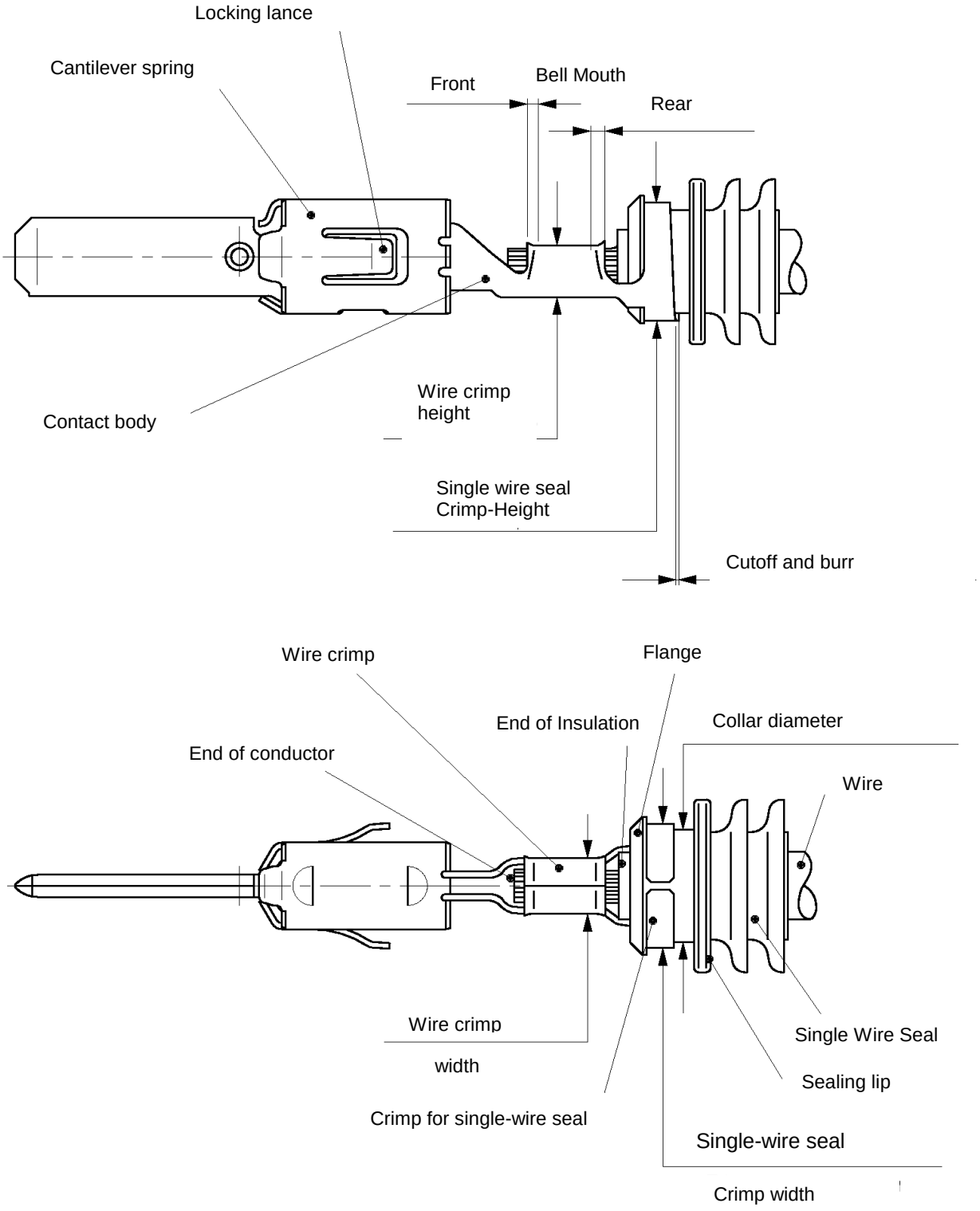


Fig. 2

4. REQUIREMENTS

4.1 Wires

A Selection
The contacts and single-wire seals are designed for FLR conductors to DIN 72 551 Part 5 and Part 6 or FLK conductors to DIN ISO 6722 Parts 1-3 (formerly DIN 72551 Part 2), as well as FLR and FLU wires in accordance with LV112-1.
Other wires require the approval of the Engineering Department. Single termination is preferred. Double termination is possible within the wire range with FLR conductors; with FLK conductors, this is possible only with restrictions.

B Preparation
The wire must be stripped to the lengths shown in Tables 1 till 4.
Take care that the individual strands of the wire are not be bent or cut off.
For single wire sealing, care must be taken that the insulation of the wire in the sealing area is not damaged, compressed or deformed.
The insulation must be clean and free of contamination.

4.2 Cut-Off and Burr

The cutoff must be visible after crimping.
The maximum length of the cutoff is 0.5 mm.
Any burrs at the shearing point may not exceed 0.08 mm.

4.3 Wire Crimp

A Wire position
After crimping, the end of the wire must extend 0.1 ... 1.0 mm beyond the front end of the wire crimp.

B Crimping data
The shape, height and width of the crimp, and the wire range, are shown in Tables 1 till 4.

C Extraction forces
The crimp extraction forces must fulfill the requirements of DIN IEC 352 Part 2.

D Crimp bell-mouth
The size of the rear bell-mouth depends on the wire range:
0.2 - 0.5 mm² : 0.25 ± 0.15 mm
0.5 - 2.5 mm² : 0.40 ± 0.20 mm

A front bell-mouth is permissible.

4.4 Insulationcrimp or Crimp for Single-Wire Seal

A Position of the end of the insulation
In the case of contacts for crimping on wire, the end of the insulation must be visible in the transition between the wire crimp and the insulation crimp.
In no case may the insulation be crimped in the wire crimp; conversely, the insulation must extend at least to the front edge of the insulation crimp.
In the case of contacts for single-wire sealing, the end of the insulation must be flush with the front edge of the single-wire seal or may project by up to 1.0 mm from this seal.

B Crimping data for wires
The shape and width of the crimp, and the insulation diameter, are shown in Table 1 and 3.
The crimp height is adjusted either after the bending test to DIN 41611 Part 1 or after the wrapping test to DIN 41640 Part 66.

C Crimping data for single-wire seals
The shape and width of the crimp, and the part number of the single-wire seal, are shown in Table 2 and 4 The crimp height is correctly adjusted if the crimp encloses the seal in the shape of a circle.
Oval enclosure as the result of differing insulation diameters is permissible.

D Position of the single-wire seal
Single-wire seals without a collar on the sleeve must be flush with the front edge of the crimp or may project up to 1 mm from the crimp.
In the case of single-wire seals with a collar on the sleeve, this collar is positioned in front of the front edge of the crimp.
The collar must be centered within the window on the bottom of the crimp.

4.5 Contact Area

After crimping, neither the cantilever spring, the locking lances nor the contact body may be bent or deformed.

4.6 Shape and Position Tolerances

A Contacts for crimping on wire (see Fig. 3)

Parallelism

The bottom of the wire crimp or of the insulation crimp must be parallel with the contact body, with a tolerance of 0,3 mm.

Symmetry

The width of the insulation crimp must be symmetrical with the contact body, with a tolerance of 0,3 mm.

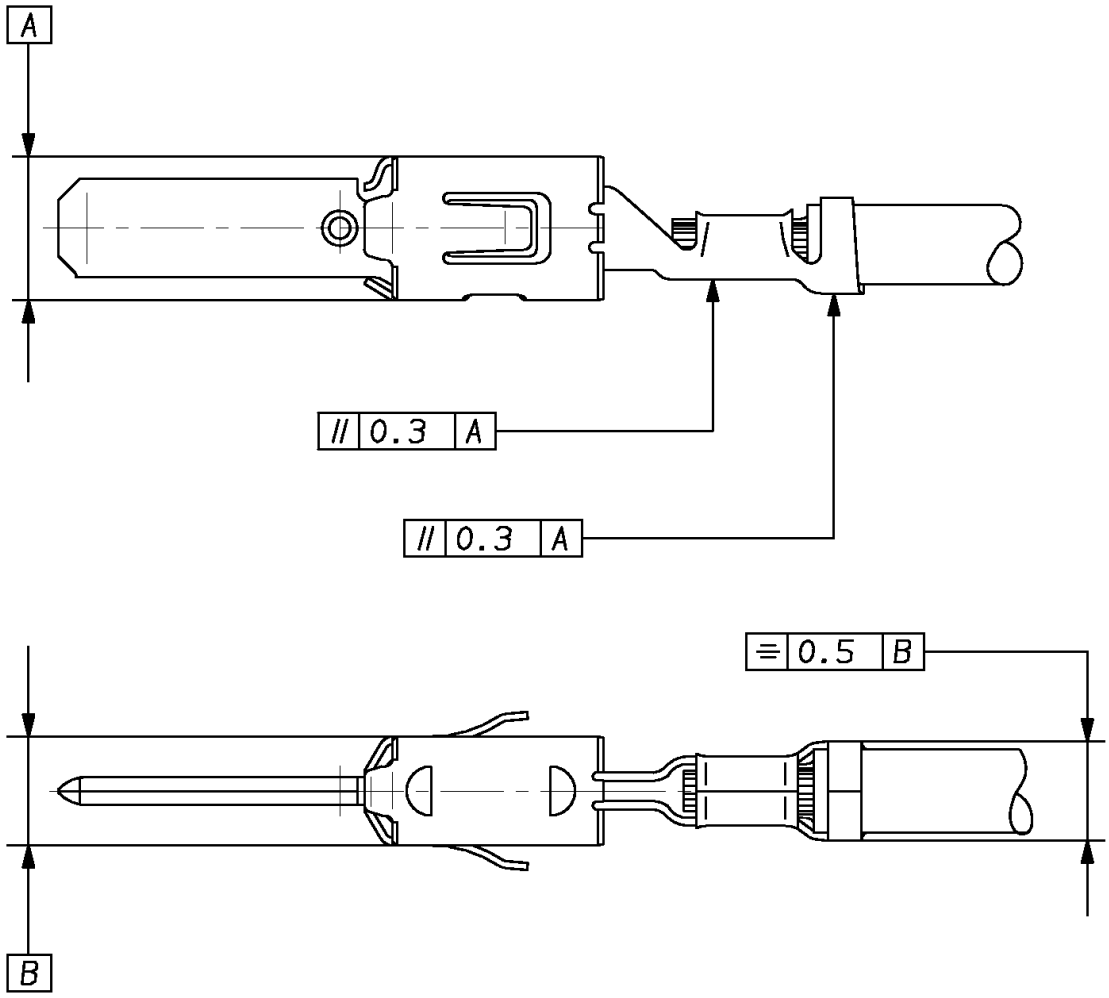


Bild 3

B Contacts for single-wire seals (Fig. 4)

Parallelism

The bottom of the wire crimp or of the insulation crimp must be parallel with the contact body, with a tolerance of 0.3 mm.

Symmetry

The crimp for the single-wire seal must lie within a symmetrical tolerance of 0,5 mm relative to the longitudinal axis of the contact.
The single-wire seal must be symmetrical in both directions with the longitudinal axis of the contact, with a tolerance of 0,8 mm.

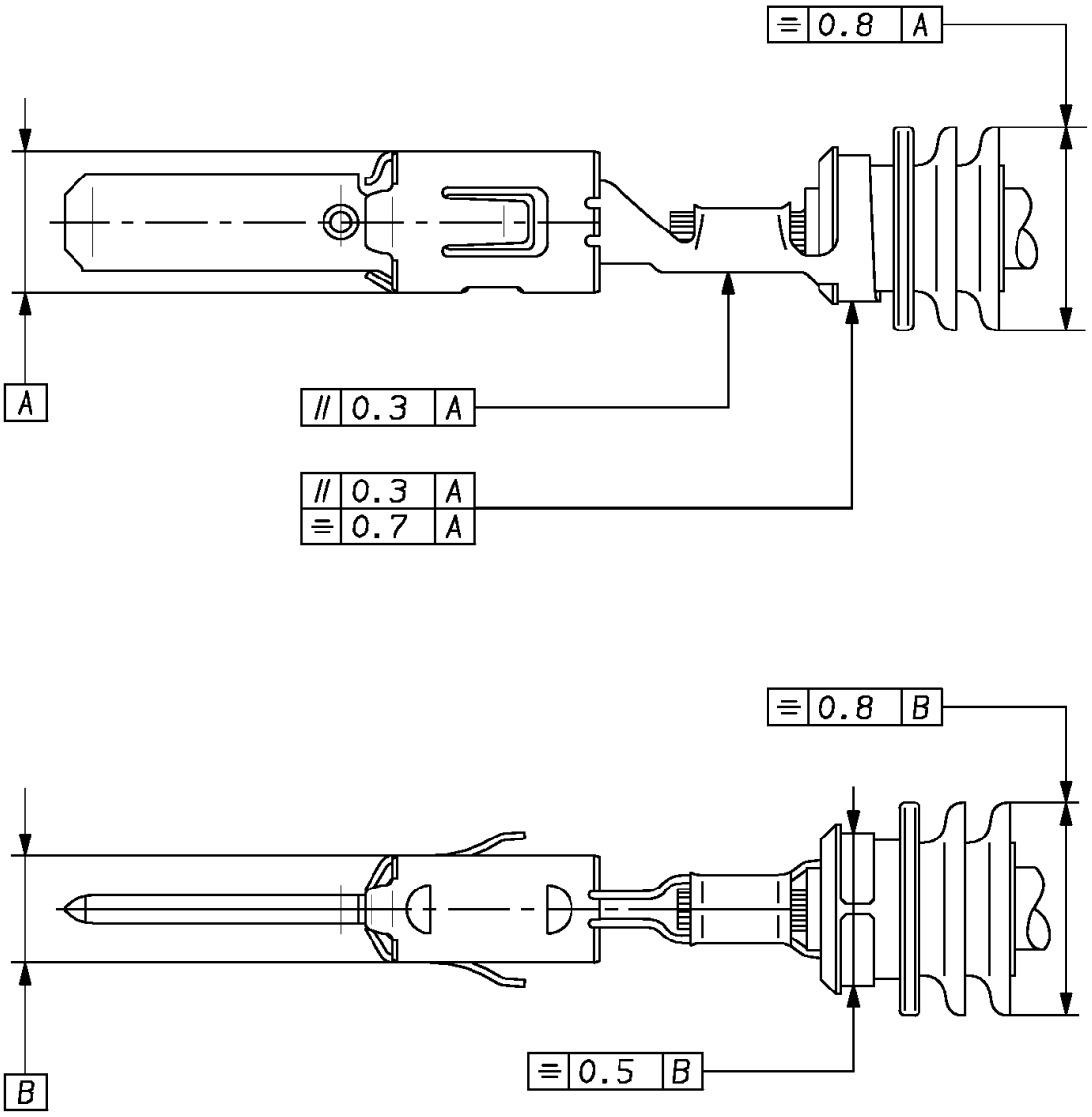


Fig. 4

Table 1

Crimping Data for TAB 2,8mm with wires														
Part-No.			Insulation Diameter (mm)				Wire Crimp				Insulation-crimp			
Strip	Loose Piece	Wire Size (mm²)	FLU	FLR	FLK	Stripped length (mm) ±0,3	Width (mm)	Height (mm) ±0,05 1)	Height (mm) ±0,05 2)	Shape	Width (mm) ±0,2	Shape	Crimping Tool	Die for hand-crimping tool
963860	963861	0,20 0,25 0,35 0,50	3)	1,15-1,6		3,5	1,60	0,98±0,03 1,00±0,03 1,05±0,03 1,12±0,03	- - - -	F	2,30	O	x-878549-x	734538-1
962841	963745	0,50 0,75 1,00	3)	1,4-2,0		4,2	2,05	1,18 1,27 1,36	1,15 1,18 1,20	F	2,55	O	x-878550-x	734417-1
962842	963746	1,50 2,00 2,50	3)	2,1-2,9		5,0	2,55	1,58 1,73 1,88	- - -	F	3,30	O	x-878551-x	734417-2
962843	963747	1,50 2,00 2,50	3)	-	2,4-3,7	5,0	2,55	1,58 1,73 1,88	- -	F	3,95	O	x-878552-x	734417-3
2141598	-	1,50 2,50	3)	-	2,4-3,7	5,0	2,55	1,58 1,88	- -	F	3,95	O	x-2151620-x	734417-3
968946	968965	4,00	3)	3,4-3,7		-	3,05	2,15	-	F	4,1	O	x-541534-x	-
2141600	-	4,00	3)	3,4-3,7		-	3,05	2,15	-	F	4,1	O	x-2151634-x	-

1) current standard
2) preferred standard to meet new requirement @ LV214-2 slow motion bending test
3) Contact-, wire combination has not yet been considered

Table 2

Crimping Data for TAB 2.8mm with single wire seals															
Part-No.			Insulation Diameter (mm)			Wire Crimp				Insulation-crimp				Single wire seal	
Strip	Loose Piece	Wire Size (mm²)	FLU	FLR	Stripped length (mm) ±0,3	Width (mm)	Height (mm) ±0,05 1)	Height (mm) ±0,05 2)	Shape	Width (mm) ±0,2	Shape	Crimping Tool	Die for handcrimp-ing tool	FLU	FLR
965982	965983	0,20 0,25 0,35 0,50	3)	Max.2,1	4,0	1,60	0,98±0,03 1,00±0,03 1,05±0,03 1,12±0,03	- - - -	F	3,95	O	x-878558-x	-	828904	
962915	963748	0,50 0,75 1,00	3)	Max.2,1	4,5	2,05	1,18 1,27 1,36	1,15 1,18 1,20	F	4,05	O	x-878559-x	734438-1	828904	
962916	963749	1,50 2,00 2,50	1.9-2.7	Max.3,0	5,0	2,55	1,58 1,73 1,88	- - -	F	4,30	O	x-878560-x	734440-1	828904 - 828905	828905
968947*	968966	4,00	3)	Max.3,7	-	3,05	2,15	-	F	5,10	O	x-541537-x	-	828985	

1) current standard
2) preferred standard to meet new requirement @ LV214-2 slow motion bending test
3) Contact-, wire combination has not yet been considered
*Attention: Construction of the Contact Cavity in the area of the single wire seal is 6,4 mm +0,1/-0,05.

Table 3

Crimping Data for TAB 2,8mm "Type A" with wire													
Part-No.			Insulation Diameter (mm)			Wire Crimp				Insulation-crimp			
Strip	Loose Piece	Wire Size (mm²)	FLU	FLU	Stripped length (mm) ±0,3	Width (mm)	Height (mm) ±0,05 1)	Height (mm) ±0,05 2)	Shape	Width (mm) ±0,2	Shape	Crimping Tool	Die for hand-crimping tool
964292	964291	0,20 0,25 0,35 0,50	3)	1,15-1,6	3,5	1,60	0,98±0,03 1,00±0,03 1,05±0,03 1,12±0,03	- - - -	F	2,30	O	x-878950-x	539664-2
2141874	-	0,35	3)	1,15-1,6	3,5	1,6	-	1,08±0,03	F	2,30	O	x-878950-x	539664-2
964294	964293	0,50 0,75 1,00	3)	1,4-2,1	4,0	2,05	1,18 1,27 1,36	1,15 1,18 1,20	F	2,55	O	x-878937-x	539664-2
964296	964295	1,25 1,50 2,00 2,50	3)	2,2-3,0	4,3	2,55	1,48 1,55 1,70 1,86	- 1,47 - 1,76	F	3,60	O	x-878704-x	539664-2

1) current standard
2) preferred standard to meet new requirement @ LV214-2 slow motion bending test
3) Contact-, wire combination has not yet been considered

Table 4

Crimping Data for TAB 2.8mm "Type A" with single wire seals														
Part-No.			Insulation Diameter (mm)				Wire Crimp				Insulation -crimp				
Strip	Loose Piece	Wire Size (mm^2)	FLU	FLR	AWG	Stripped length (mm) ±0,3	Width (mm)	Height (mm) ±0,05 1)	Height (mm) ±0,05 2)	Shape	Width (mm) ±0,2	Shape	Crimping Tool	Die for hand-crimping tool	Single wire seal
964298	964297	0,20 0,25 0,35 0,50	3)	1,15-1,6	-	3,5	1,60	$0,98_{\pm 0,03}$ $1,00_{\pm 0,03}$ $1,05_{\pm 0,03}$ $1,12_{\pm 0,03}$	- - - -	F	3,95	O	x-878952-x	539650-2	963294-1
2141876	-	0,35	3)	1,15-1,6	-	3,5	1,60	-	$1,08_{\pm 0,03}$	F	3,95	O	x-878952-x	539650-2	963294-1
964300	964299	0,50 0,75 1,00	3)	1,4-2,1	-	4,5	2,05	1,18 1,27 1,36	1,15 1,18 1,20	F	4,10	O	x-878953-x	539650-2	963294-1
964302	964301	1,50 2,00 2,50	3)	2,2-3,0	-	4,9	2,55	1,55 1,70 1,86	1,47 - 1,76	F	4,20	O	x-878954-x	539650-2	963292-1
1719504	1719503		-	-	3,3 (TXL) 3,8 (GXL)	5,6	CB1 3.05 CB2 3.3	2	-	F	5,08	O	1852291-x	-	828905-x 184141-x

1) current standard
2) preferred standard to meet new requirement @ LV214-2 slow motion bending test
3) Contact-, wire combination has not yet been considered

Table 5

AWG / ISO Comparison in addition to Appl. Spec. 114-18051

2.8mm tab Basic part number	**Wire size ISO 6722** Cross section Type	**USA** SAE J1128 AWG Cable type	**Outer diameter (Insulation)**	**Single Wire Seal**
965982 Applicator 2-878558-2	0,35mm² FLR		1,30-1,40mm	828904-1
		22 TXL	1,50-1,75mm	828904-1
962915 Applicator 2-878559-2	0,5mm² FLR		1,58-1,70mm	828904-1
		20 TXL	1,68-1,93mm	828904-1
	0,75mm² FLR		1,78-1,90mm	828904-1
		18 TXL	1,88-2,13mm	828904-1
	1,0mm² FLR		1,98-2,10mm	828904-1
	0,5mm² FLK		2,06-2,30mm	828905-1
		20 GXL	2,06-2,41mm	828905-1
	0,75mm² FLK		2,26-2,50mm	828905-1
		18 GXL	2,18-2,54mm	828905-1
	1,0mm² FLK		2,46-2,70mm	828905-1
962916 Applicator 2-878560-2		**16** TXL	2,16-2,41mm	828905-1
	1,5mm² FLR		2,28-2,40mm	828905-1
	2,0mm² FLR		2,66-2,80mm	828905-1
		14 TXL	2,51-2,77mm	828905-1
	2,5mm² FLR		2,86-3,00mm	828905-1
		16 GXL	2,57-2,92mm	828905-1
	1,5mm² FLK		2,86-3,00mm	828905-1
		14 GXL	2,82-3,18mm	828905-1
	2,5mm² FLK		3,32-3,60mm	---

G	FLU wires added	M. Merz	S. Raab	05.02.2015
LTR	**REVISION RECORD**	**DWN**	**APP**	**DATE**