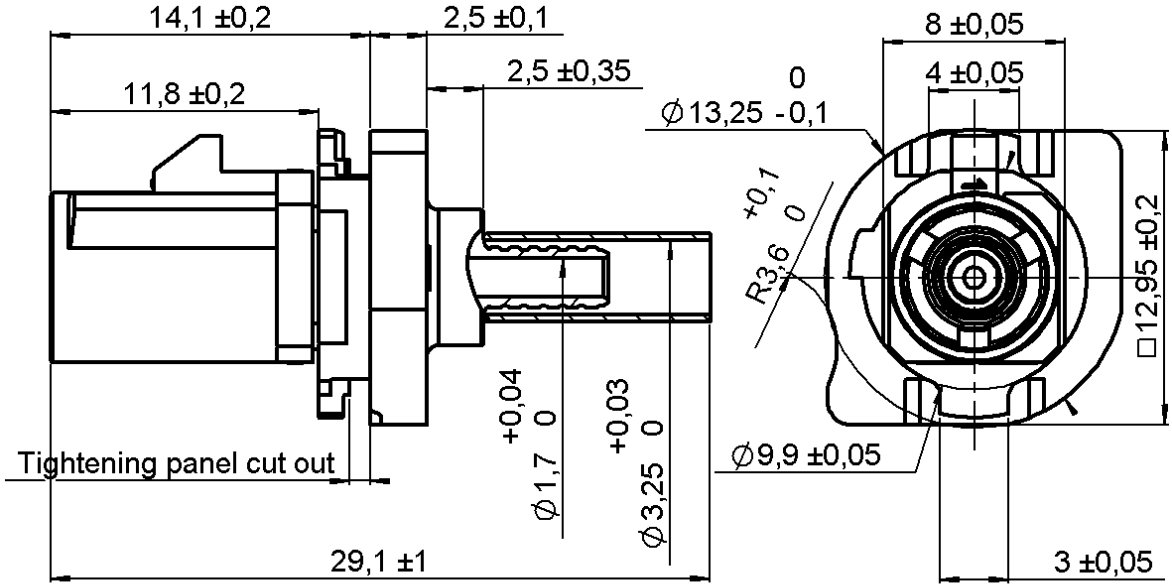
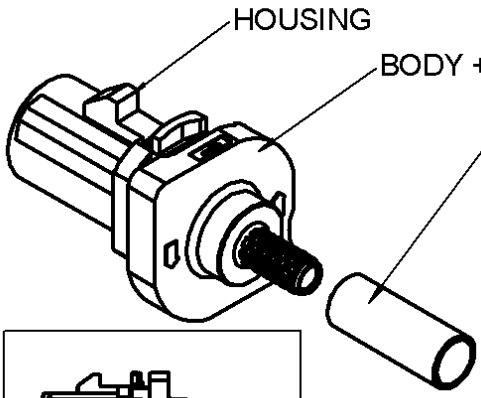
TWIST AND LOCK CONNECTOR

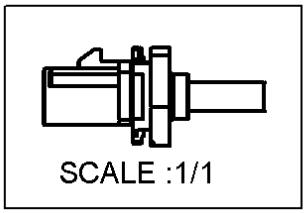
ONLY FOR 1 MM PANEL CUT OUT

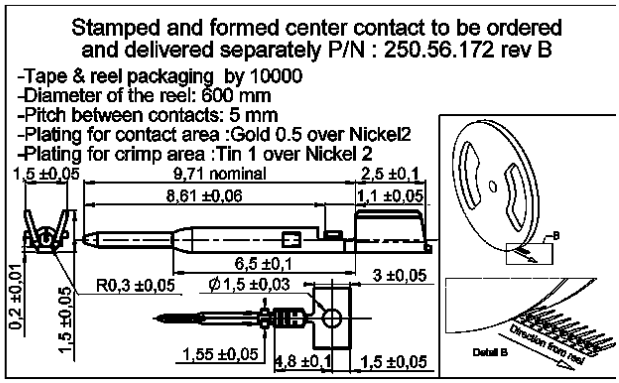
R197.134.E30

Series : **SMB CARLOCK**









All dimensions are in mm.

COMPONENTS	MATERIALS	PLATING (µm)
BODY	**DIE CASTED**	**NICKEL 2 OVER COPPER 8**
CENTER CONTACT	**BRONZE**	**SELECTIVE GOLD+ SELECTIVE TIN**
OUTER CONTACT	-	-
INSULATOR	**TPX**	
GASKET	-	
OTHERS PARTS	**BRASS**	**NICKEL 2**
-	-	-

	UL CLASSIFICATION	COLOR
HOUSING	**PA4.6 GF30 (POLYAMIDE)**	**UL 94 V-2**	**GREEN (RAL6002)**

<u>Remark</u> : Connection interface according to FAKRA specifications.

Issue : 0648 B

RADIALL®

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PACKAGING

Standard	Unit	Other
100	**'W' option**	**Contact us**

SPECIFICATION

QS9000

ELECTRICAL CHARACTERISTICS

Impedance		**50**	Ω
Frequency		**0-4**	GHz
VSWR	**1.27** +	**0,0000**	x F(GHz) Maxi
Insertion loss		**0.5**	√F(GHz) dB Maxi
RF leakage	- (	**NA**	- F(GHz)) dB Maxi
Voltage rating		**335**	Veff Maxi
Dielectric withstanding voltage		**1000**	Veff mini
Insulation resistance		**1000**	MΩ mini

ENVIRONMENTAL

Operating temperature	**-40/+110**	° C
Hermetic seal	**NA**	Atm.cm3/s
Panel leakage	**NA**	

MECHANICAL CHARACTERISTICS

Center contact retention

Axial force – Mating end	**20**	N mini
Axial force – Opposite end	**10**	N mini
Torque	**NA**	N.cm mini

Assembling Torque : max. 0.90 Nm

Dissambling Torque : > 0.3 Nm

Push/Pull force into the panel : mini 150 Nm

Engagement force : 25 N max

Disangagement force : 2 N min

Mating life	**50**	Cycles mini
Weight	**4.75**	g

After assembly on the radio the FAKRA connector

OTHER CHARACTERISTICS

Assembly instruction **Pages 3 to 8.**

Others :

CABLE ASSEMBLY

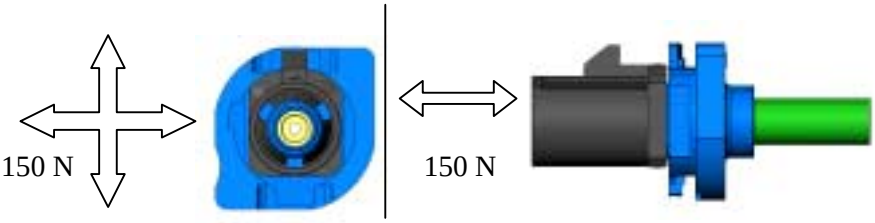
Stripping	a	b	c	d	e	f
mm	3.60	5.50	13.9	0.00	10.3	0.00

Cable retention

- pull off	**RG174**	**60**	N mini
	RG316	**110**	N mini
- torque		**NA**	N.cm

TOOLING

Part Number	Description	Hexagon
.	.	.
R282.235.915	CRIMPING DIES	3.25 (x2)
R282.293.000	CRIMPING TOOL	



Issue : 0648 B

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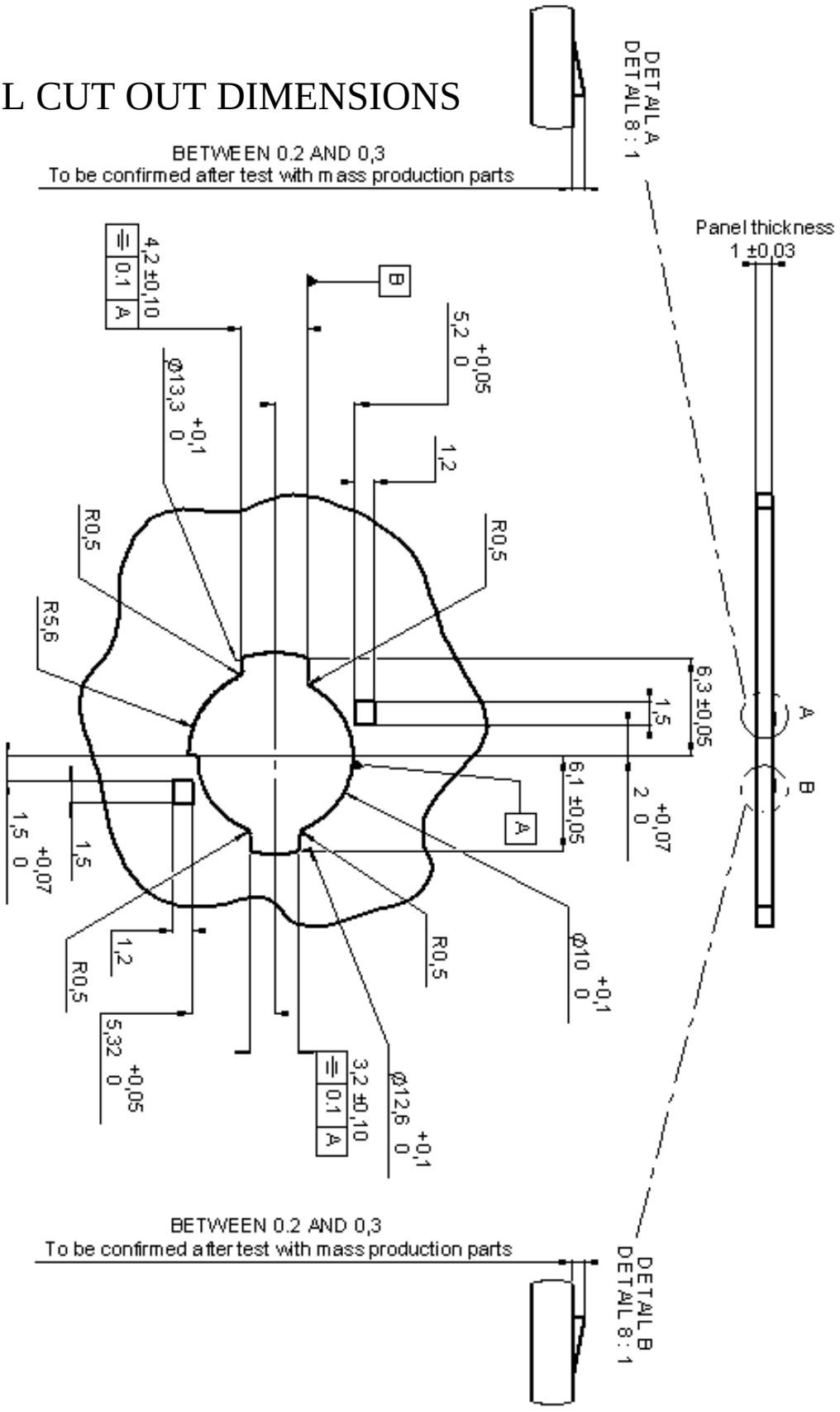
R197.134.E30

Series : **SMB CARLOCK**

PANEL CUT OUT DIMENSIONS



Issue : 0648 B

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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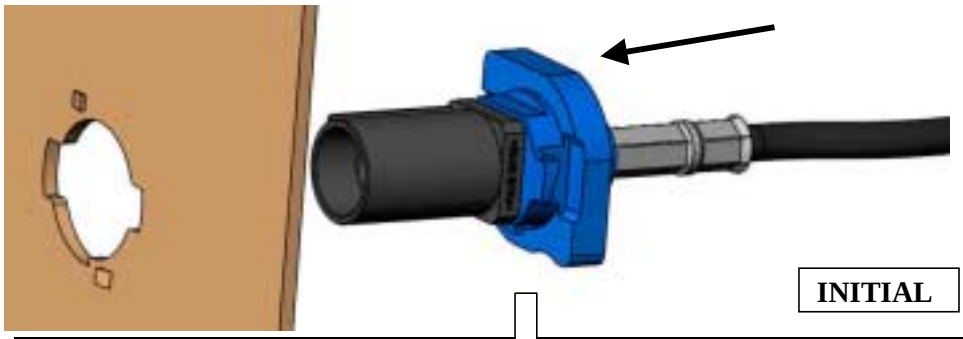
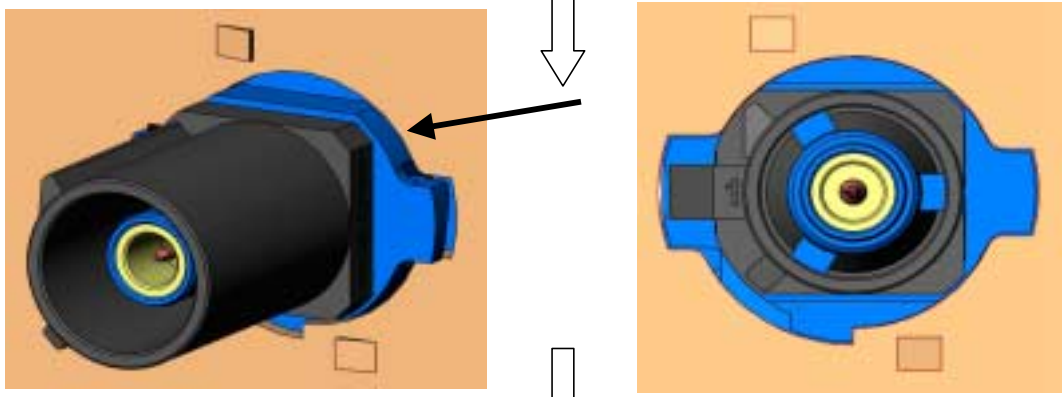
MOUTING PROCEDURE

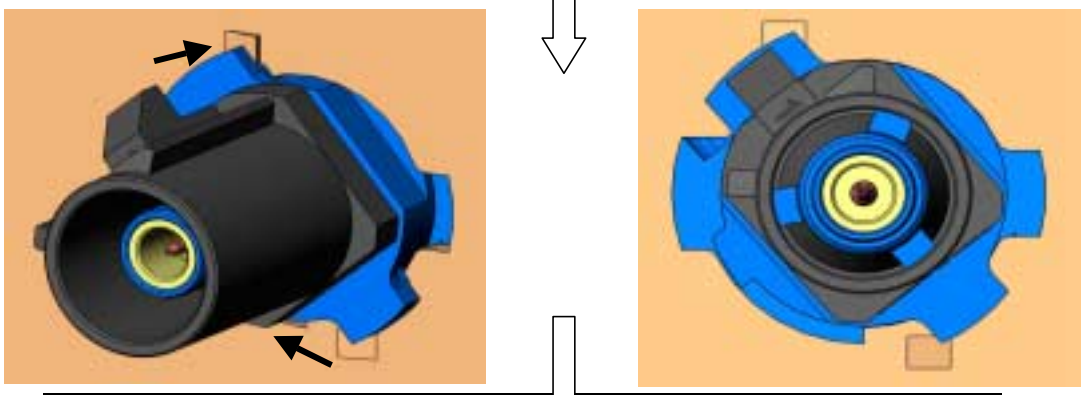


INITIAL

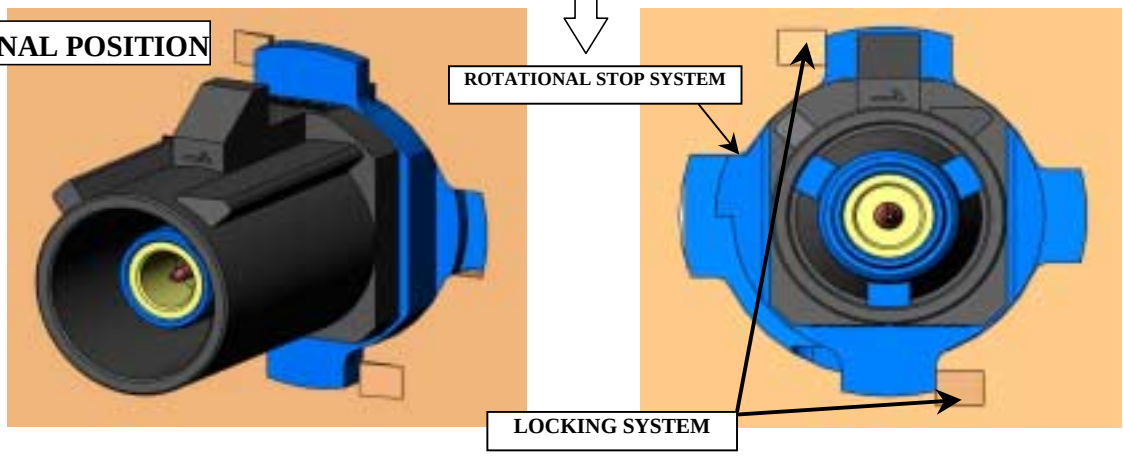
INSERTION



ROTATION



LOCKING-FINAL POSITION



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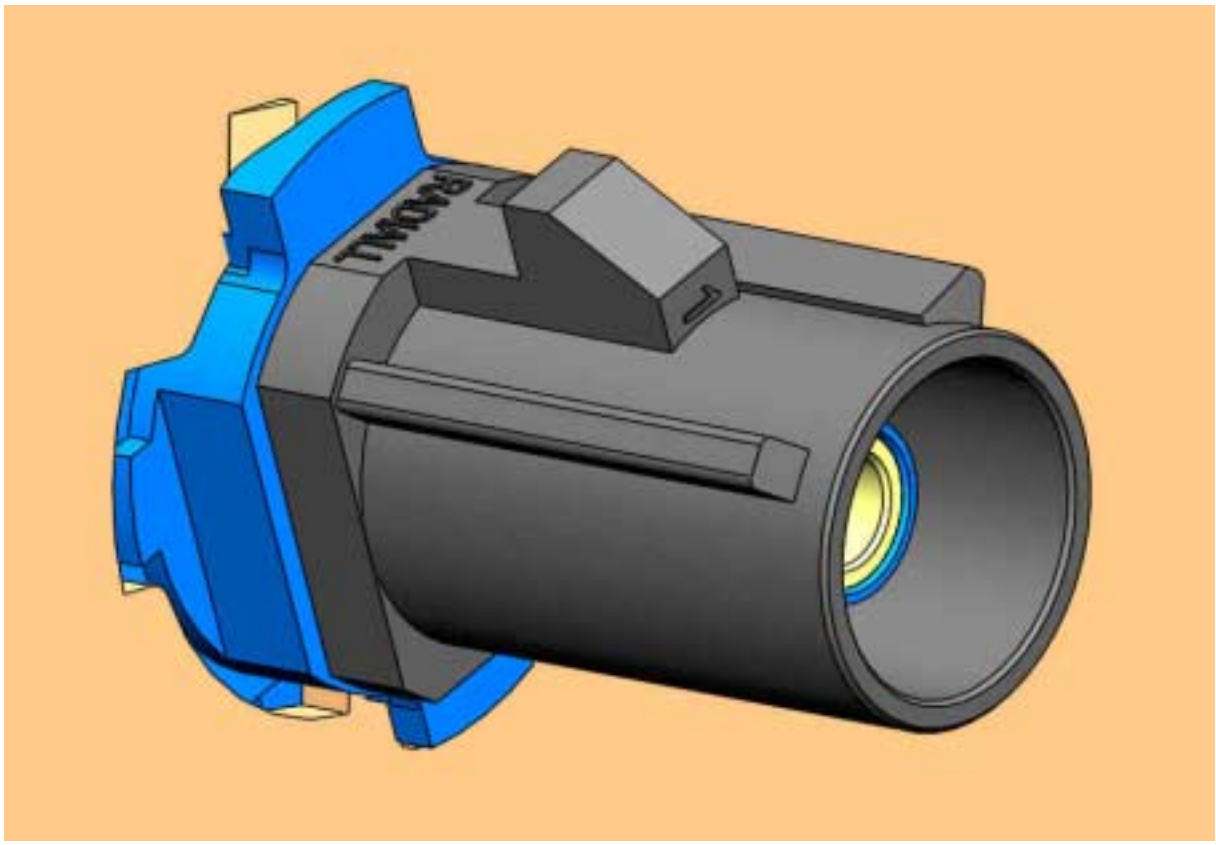
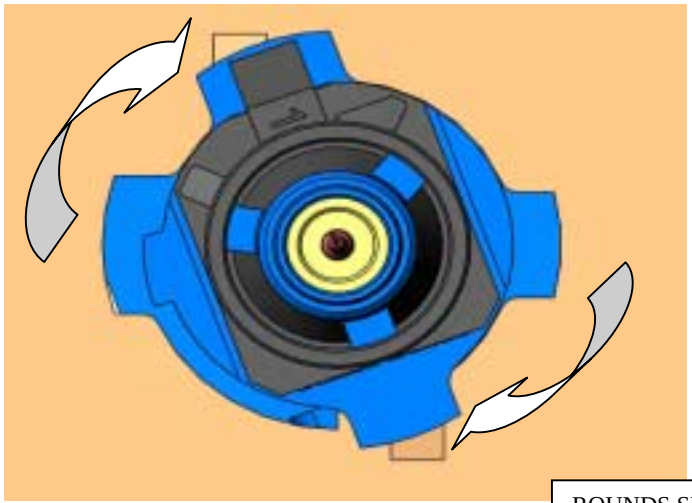
Series : **SMB CARLOCK**

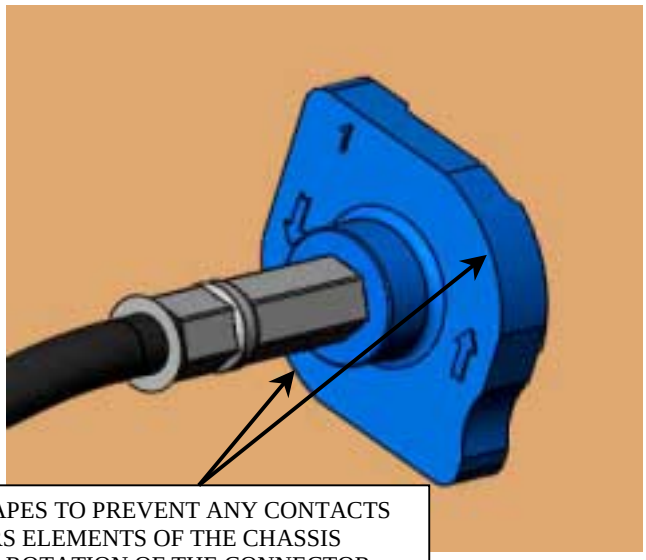
DETAILS VIEW DURING THE ROTATION



FRONT VIEW



BACK VIEW



ROUNDS SHAPES TO PREVENT ANY CONTACTS WITH OTHERS ELEMENTS OF THE CHASSIS DURING THE ROTATION OF THE CONNECTOR

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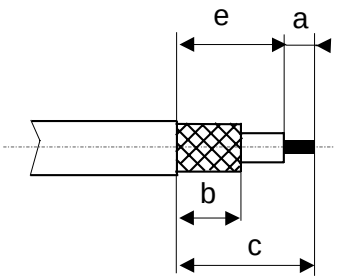
Series : **SMB CARLOCK**

RECOMMENDED MOUNTING PROCEDURE

1

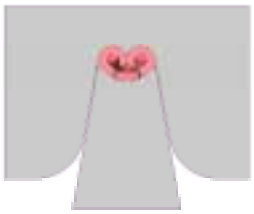


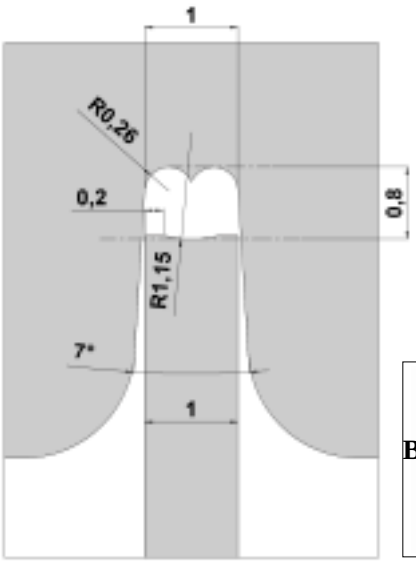
• Strip the cable

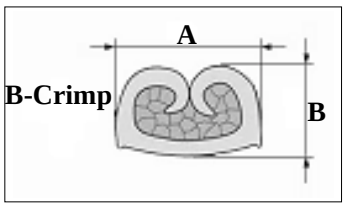
2

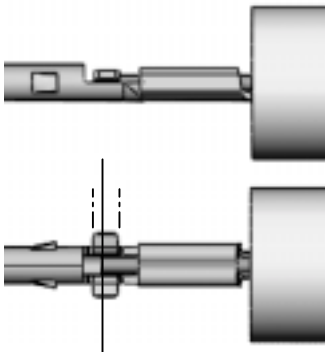
• Crimp the centre contact with crimping dies as described ,using standard mini applicator.

• check the crimping height B=0. 8 +/-0.03 and the crimping width A=1 +/-0.05 of the center contact.



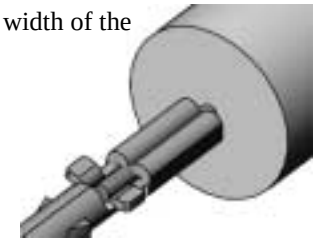


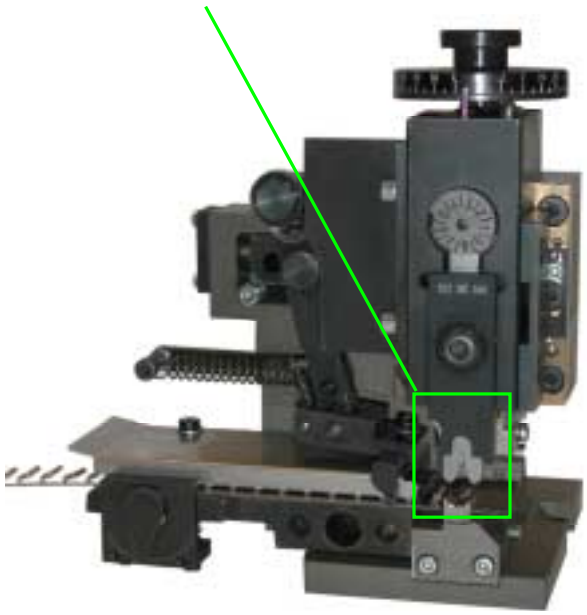




Visual checking

The tip of the cable conductor must be within the width of the positive stop tap.





Mini applicator

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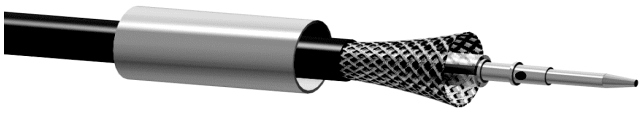
RECOMMENDED MOUNTING PROCEDURE

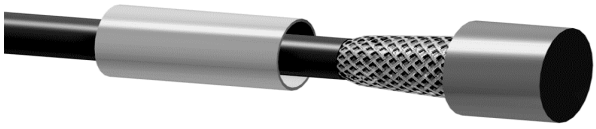
3

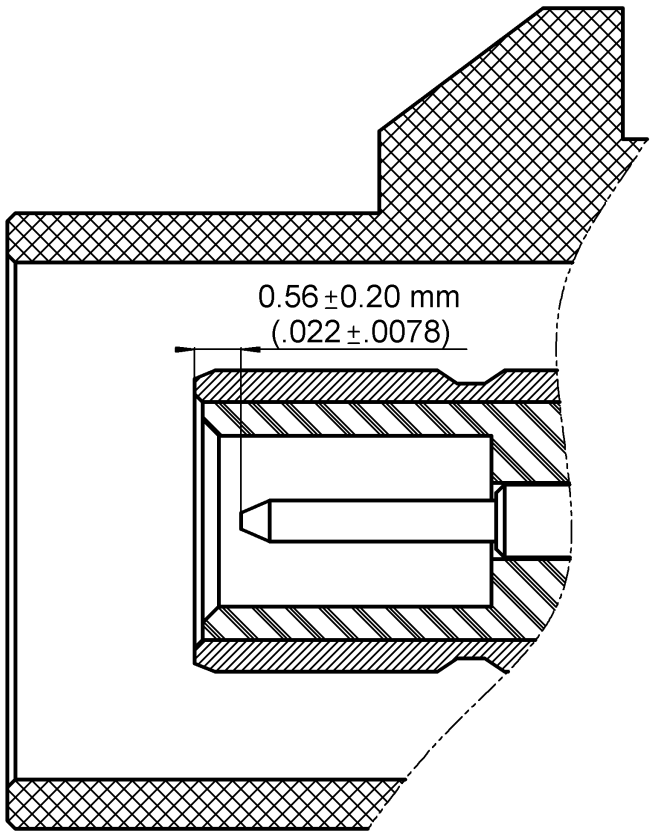
- Slide the ferrule
- Fan the braid



4

- Insert gently the center contact into the insulator ; Be cautious you must feel first a force detente corresponding to the center contact barb insertion, and a second force stage corresponding to the center contact reaching its final location. Do not apply an excessive force on the center contact in order to avoid bad interface. A correct insertion force must lead to the interface dimension compliance.
- Check the position of the center contact between the top of the insulator and the top of the center contact : 0.56 ± 0.2.





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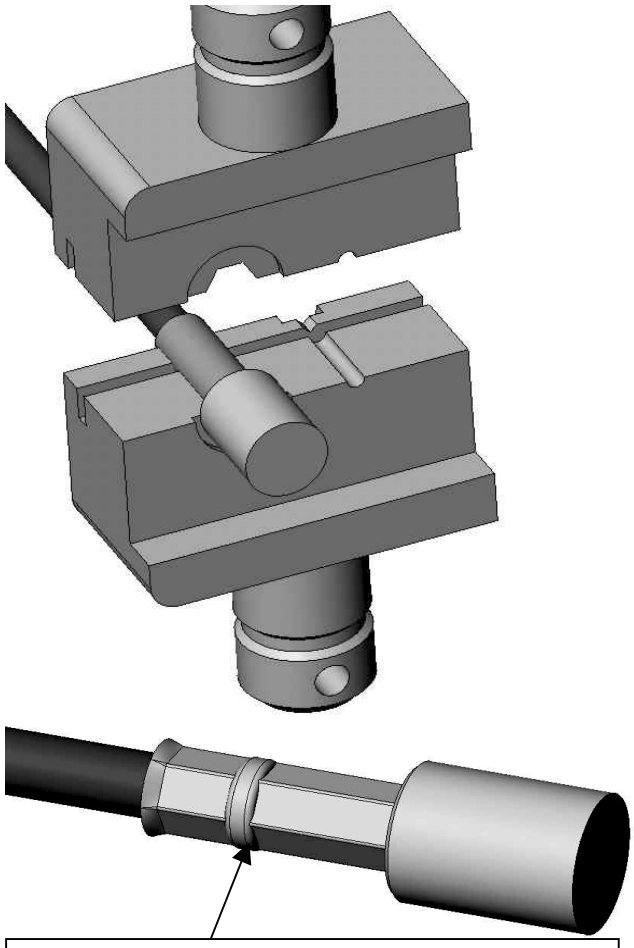
RECOMMENDED MOUNTING PROCEDURE

5

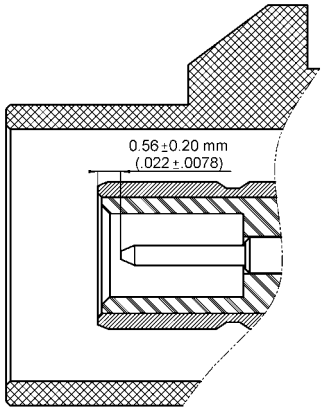
- Slide the ferrule over the braid
- Crimp the ferrule as shown on this picture with crimping tool R282.293.000 (M22520/5-01) + dies R282.235.915 (Double crimping Hex 3.25).



Right tool orientation : (OPTION)
after crimping the bump must be closer to the cable than to the body

6

- Check the position of the center contact between the top of the body and the top of the center contact : 0.56 ±0.20.



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