

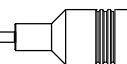
SUBMINIATURE COAXIAL CONNECTORS

SMB series

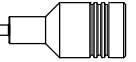


ISO 9001 APPROVED





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Head Office - Rosny sous Bois

Since 1952, **RADIAL** has specialized in the field of coaxial connectors and cables assemblies. **RADIAL**'s experience and high technology focus, combined with our large worldwide production capability have made the company a major supplier of RF coaxial connectors in the world and the number one in Europe.

RESEARCH & DEVELOPMENT

The ever increasing sophistication of microwave communication systems is continually requiring components to meet a higher level of performance. **RADIAL**'s research and development groups understand these needs and are committed to searching for product solutions that will be needed in the future. They also are providing continued improvements to our already extensive lines of high performance products. All our engineer teams are equipped with state of the art equipment and facilities, in an effort to provide the best solutions to our customers.



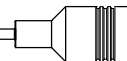
CAD workstation



Screw-machining shop

MANUFACTURING

RADIAL knows that the quality of the connectors components is directly related to the mechanical precision of the machining process, along with good quality procedures. In an effort to continually meet the highest quality standards, all our production plants are equipped with the latest state of the art production equipment. **RADIAL**'s manufacturing process maintains strict control of all procedures and incorporates all tooling, machining, surface treatment and assembly operations into the manufacturing process of each production group.



Base station of cellular network

HIGH RELIABILITY

Reliability of inter-connection systems is of the utmost importance in telecommunications applications. This industry need has led **RADIAL** to link high performance design, manufacturing and quality control. This has given the company the capability to produce connectors that will operate in the most stringent environments. The wide range of our product offering allows us to propose the best complete solution for your exact need.



Microwave test device

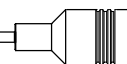
QUALITY ASSURANCE

RADIAL, as a TQM company, continually searches for improvements to the quality process. We operate a Quality Assurance Program that has been developed in accordance with the national and **CECC** agencies (equivalent to **MIL-I-45208** and **MIL-C-45662** standards). This program has enabled us to achieve QPL approval on several of our connector series. **RADIAL**'s Quality Assurance Program operates at all levels of manufacturing from the initial raw incoming material to the final testing procedures just prior to shipping. All test equipment is part of the quality process and is continually inspected on a regular scheduled basis. All production plants in Europe are **AQA P4-NATO** certified.



ISO 9001 ACCREDITATION

This certificate is witness to **RADIAL**'s achievement and commitment to the Total Quality Process. **RADIAL** has always been, since its inception, a company committed to being a Total Quality supplier. Quality is our way of life at **RADIAL**.



The SMB snap-on subminiature coaxial connectors provide a fast and reliable connection for high density packaging for applications up to 4 GHz.

Radiall offers a very large range of SMB connectors, including cable plugs and jacks with bulkhead and panel mount configurations, bulkhead and panel mount receptacles; PCB, SMT and edge card receptacles and in-series and between series adapters.

The SMB series also features versions with lower mating forces than standard. Three types of interconnection mechanisms are available :

- **SMB : standard** snap-on connection (page 10 to 25)

The design permits quick engagement and disengagement in limited spaces.

- **SMB limited detent (SMB-A)** : snap-on connection with **low mating force** (page 30 to 31)

The design permits quick engagement and disengagement in limited spaces and is suitable for printed circuit boards. Radiall offers a range of PCB and bulkhead receptacles with female center contact.

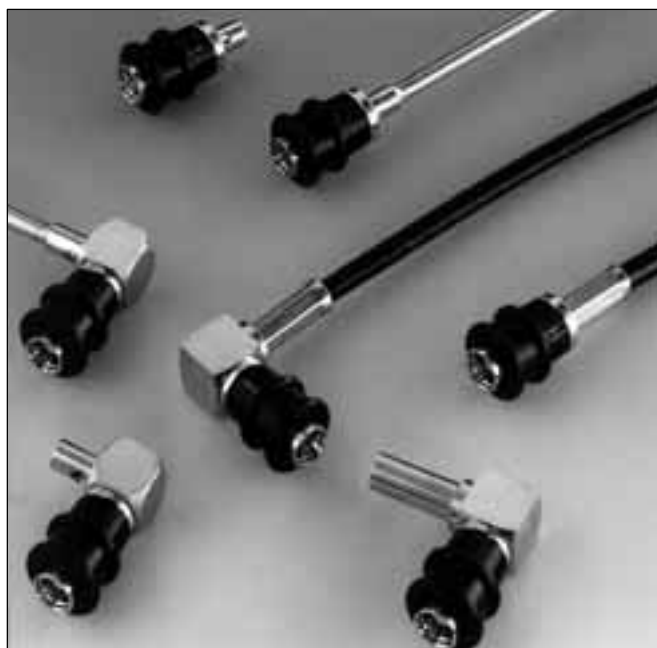
The SMB-A receptacles are completely intermateable with standard SMB jacks.

- **SMB slide-on (SUBGLIS)** : **slide-on** connection (page 32 to 35)

The design is suitable for back plane and blind mate applications. In this case, we recommend the association of a mobile connector (floating jack / receptacle) with a fixed connector (panel plug / jack, receptacle).

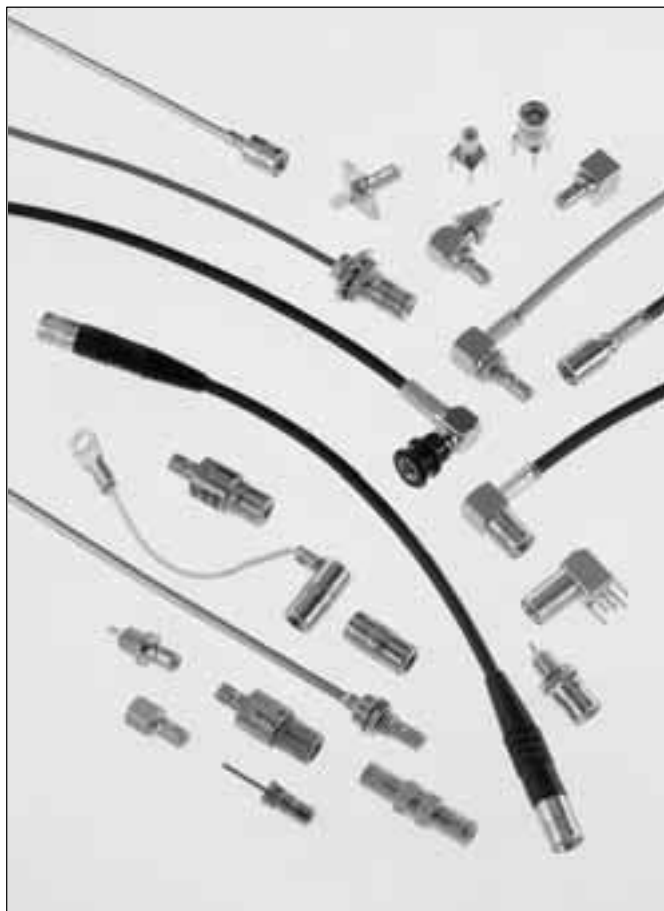
The SUBGLIS connectors are completely intermateable with standard SMB and SMB-A connectors and for that, they can be used for test applications.

Radiall also offers a range of **SMB LOCK** plugs (with female center contact) with coupling nut allowing a reliable lock-on connection (50 N min). This range allows a visual control of the locking system (page 26-29).



These four types of SMB connectors have the same electrical performances (see page 11-12).

Radiall also offers a complete range of **MICROWAVE COMPONENTS** : terminations, attenuators, etc. designed around the SMB interface (page 38-39).



50 Ω

DC - 4 GHz

INTRODUCTION

- Subminiature coaxial connectors
- Snap-on coupling
- Plugs have female contacts
- Jacks have male contacts
- Low weight and reduced outline dimensions
- Captive contact (except contrary specification)

APPLICABLE STANDARDS

- SMB series MIL-C-39012
MIL-C-39012/67-72
- IEC 169-10
- CECC 22130
- BS 9210 N0007

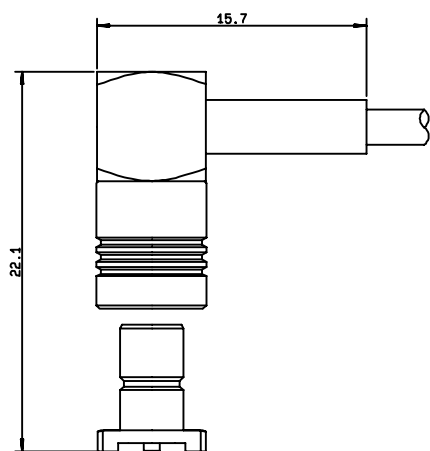
QUALIFICATIONS / APPROVALS

- MIL-C-39012 QPL type
- CECC
- NF-CCQ
- STTE/A homologation
- LNZ list

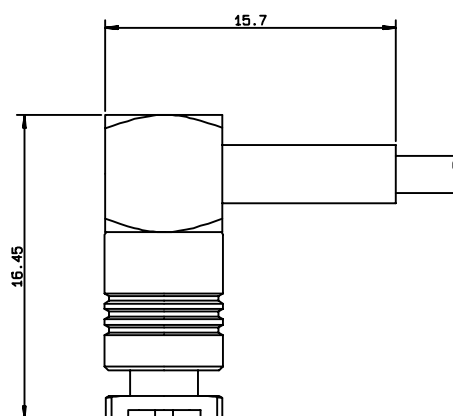
APPLICATIONS

- Mobile communication systems
- Civil and military telecommunications
- Aeronautics
- Video
- IF systems

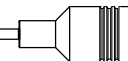
PROFILE



Unmated



Mated



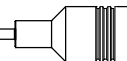
CABLE CONNECTORS (R114 : SMB / R115 : SMB-A / R116 : Subglis)

model	straight plug			bulkhead straight plug		right-angle plug			straight jack		bulkhead straight jack			right angle bulkhead jack
cable	crimp and full crimp	clamp	solder	clamp	solder	crimp	clamp	solder	crimp	clamp	crimp	clamp	solder	crimp
2/50/S (RG 178)	R 114 073 000 R 114 073 134 R 114 081 020 (page 13)	R 114 003 000 R 114 003 020 R 114 003 133 (page 13)		R 116 003 900 (page 32)		R 114 183 000 R 114 183 020 R 114 183 430 (page 14)	R 114 163 000 R 114 163 133 (page 15)		R 114 237 000 (page 16)	R 114 203 000 R 114 203 133 (page 16)	R 114 311 000 (page 17) R 116 311 000 (page 33)	R 114 303 000 R 114 303 133 (page 17) R 116 303 330 (page 33)		R 116 372 000 (page 33)
2.6/50+75/S (RG 316)	R 114 015 000 R 114 075 000 R 114 075 134 R 114 082 0X0 (page 13) R 117 082 807 (page 28)	R 114 005 000 R 114 005 133 (page 13)				R 114 185 000 R 114 185 020 R 114 186 000 R 114 186 X20 R 114 186 730 R 114 187 0X0 (page 14) R 117 186 807 (page 28)	R 114 165 000 R 114 165 133 (page 15)		R 114 238 000 R 114 238 120 R 114 239 000 (page 16)	R 114 205 000 R 114 205 133 (page 16)	R 114 312 000 R 114 313 000 R 114 313 020 R 114 316 000 R 114 316 020 (page 17) R 116 312 000 (page 33)	R 114 305 000 R 114 305 133 (page 17)		R 114 373 020 R 114 373 120 (page 18) R 116 373 000 (page 33)
2.6/50/D (RD 316)	R 114 083 000 R 114 083 020 (page 13) R 117 083 807 (page 28)					R 114 192 000 R 114 191 130 (page 14) R 117 187 807 (page 28)					R 114 315 000 (page 17)			
3/50/D (K02252d)									R 114 245 020 (page 16)					
3.6/75/D (BT3002)						R 114 191 300 (page 14)								
3.8/95/S (RG180)		R 114 009 000 (page 13)												
5/50/S (RG 58)	R 117 086 827 (page 28)					R 114 192 420 (page 14) R 117 178 827 (page 28)								
5/50/D (RG 142)	R 117 087 827 (page 28)					R 117 179 827 (page 28)								
.085 (RG 405)	R 117 053 807 (page 28)		R 114 053 000 (page 14)		R 116 056 000 (page 32)	R 117 152 807 (page 29)		R 114 152 000 R 114 169 000 (page 15)					R 114 222 000 (page 18)	

RECEPTACLES (R114 : SMB / R115 : SMB-A / R116 : Subglis)

model	straight male flange			straight male bulkhead			straight female bulkhead		right angle male bulkhead	PCB male receptacle		PCB female receptacle	
back	square	2-holes	round	front mount	rear mount	front mount recessed	front mount		front mount	straight	right-angle	straight	right-angle
solder contact with extended dielectric	R 114 413 000 (page 19)	R 114 450 000 R 114 450 205 (page 19)		R 114 552 400 (page 20)									
solder slotted contact	R 114 409 030 (page 19)	R 114 453 307 (page 19)											
solder cylindrical contact			R 114 510 000 (page 19)	R 114 553 000 (page 20) R 116 553 000 (page 34)	R 114 554 000 (page 20) R 116 554 000 (page 34)	R 114 566 000 R 114 566 020 (page 20) R 116 566 000 (page 34)	R 116 556 000 R 116 557 000 (page 34) R 115 556 000 (page 30)		R 114 670 000 R 114 670 020 R 114 671 000 (page 20)				
press mount			R 114 505 220 (page 19)										
surface mount (on board)										R 114 424 XX0 (page 21)	R 114 664 000 R 114 664 100 R 114 664 120 (page 22)		
surface mount (edge card)										R 114 423 XX0 (page 21)		R 114 444 800 (page 21)	
solder pins										R 114 426 XXX R 114 560 200* R 114 590 035* (page 21) R 116 426 000 R 116 426 030 (page 35)	R 114 665 XXX (page 21) R 114 673 020* R 114 673 120* (page 22) R 116 665 000 (page 35)	R 114 425 00X (page 21) R 116 425 010 (page 35) R 115 427 000 R 115 427 830 (page 30)	R 116 666 030 (page 35) R 115 666 000 (page 31)
harpon pins										R 114 426 530 (page 21)			
press fit pins										R 114 416 020 R 114 416 000 (page 21)	R 114 661 020 (page 22)		

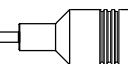
* with rear bulkhead mount



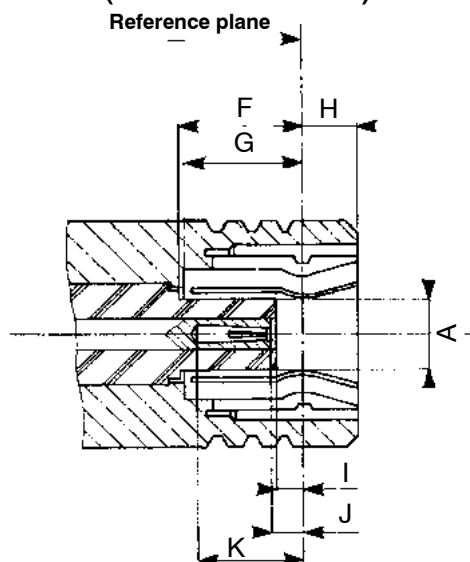
IN-SERIES ADAPTERS

model	straight	straight bulkhead	straight bulkhead (herm.sealed)	tee
M - M	R 114 703 000 (page 23)	R 114 720 000 R 114 720 020 (page 23)	R 114 753 000 (page 23)	
F - F	R 114 704 000 (page 23)			
M - F			R 114 754 000 (page 23)	
M - M / F				R 114 780 000 R 114 780 020 (page 23)
M - M / M				R 114 781 000 (page 23)
F - F / M				R 114 783 000 (page 23)

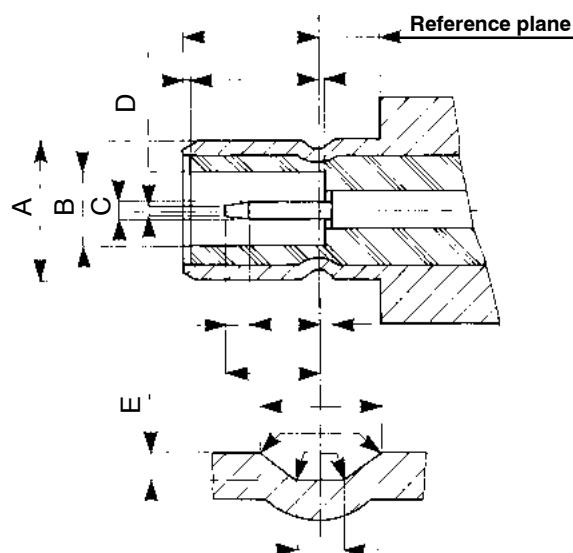
ATTENTION ! This guide is intended as an information and does not include all SMB SERIES P/N



PLUG (with female contact)



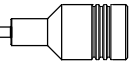
JACK (with male contact)



Letter	PLUG				JACK			
	mm		inch		mm		inch	
	min.	max.	min.	max.	min.	max.	min.	max.
Dia. A	-	2.06	-	.081	-	3.71	-	.146
Dia. B	-	-	-	-	2.08	-	.082	-
Dia. C	-	-	-	-	0.48	0.53	.019	.021
Dia. D	-	-	-	-	-	0.25	-	.010
E	-	-	-	-	0.15	0.25	.006	.010
F	3.58	-	.141	-	3.33	3.58	.131	.141
G	3.58	-	.141	-	1.65	-	.065	-
H	-	1.63	-	.064	0	-	.000	-
I	0.18	-	.007	-	-	0.18	-	.007

Letter	PLUG				JACK			
	mm		inch		mm		inch	
	min.	max.	min.	max.	min.	max.	min.	max.
J	0.18	0.94	.007	.037	0.25	-	.010	-
K	2.97	-	.117	-	1.32	-	.052	-
L	-	-	-	-	-	0.18	-	.007
M	-	-	-	-	-	2.97	-	.117
N	-	-	-	-	0.69	0.94	.027	.037
P	-	-	-	-	0.05	0.15	.002	.006
Q	-	-	-	-	-	0.13	-	.005
R	-	-	-	-	0.28	0.38	.011	.015

CLAMP TYPE CONNECTORS : R 114 xxx 000 = braid retention with cylindrical gasket
R 114 xxx 133 = braid retention with V groove gasket



TEST/CHARACTERISTICS	MIL-C-39012 A	VALUES/REMARKS
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ELECTRICAL CHARACTERISTICS

Impedance			50 Ω		
Frequency range			DC-4 GHz		
V.S.W.R. (typ.) Straight models	cable group: .085" 2 2.6 Right angle models .085" 2	Frequency 3-14	1 GHz 1.12 1.10 1.12 1.10 1.10	2.5 GHz 1.22 1.22 1.22 1.18 1.20	4 GHz 1.33 1.33 1.35 1.26 1.25
Insertion loss (typ.) Straight models	cable group: .085" 2 2.6 Right angle models .085"	3-27	0.05 0.05 0.05 0.05	0.07 0.10 0.05 0.07	0.15 0.25 0.05 0.12
RF leakage			3-26 -55 dB min from 2 to 3 GHz		
Insulation resistance			3-11 1000 MΩ min		
Contact resistance	center contact (mΩ) outer contact (mΩ)	3-16	Initial 6 1	After test 8 1.5	
Working voltage	Cable group at sea level at 70000 ft (21000 m)		2/50 250 V rms 60 V rms	2.6/50 335 V rms 85 V rms	
Dielectric withstanding voltage	Cable group at sea level at 70000 ft (21000 m)	3-17	2/50 750 V rms 185 V rms	2.6/50 1000 V rms 250 V rms	
RF withstanding voltage (5 MHz sine wave)	Cable group at sea level	3-23	2/50 500 V rms	2.6/50 700 V rms	

MECHANICAL CHARACTERISTICS

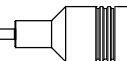
Durability	3-15	500 matings
Mating / unmating	3-5-1	axial force : 62 N max (14 Lbf)
Cabling retention force cable group: 2/50 2.6/50	3-24	58 N (13 Lbf) 110 N (25 Lbf)
Center contact retention		Axial : 10 N (2.25 Lbf)

ENVIRONMENTAL CHARACTERISTICS

Temperature range standard models hermetic sealed models models for semi-rigid cables		<table> <tr> <th>-65°C / + 165°C</th><th>-65°C / +165°C</th><th>-65°C / +105°C</th></tr> </table>	-65°C / + 165°C	-65°C / +165°C	-65°C / +105°C
-65°C / + 165°C	-65°C / +165°C	-65°C / +105°C			
Combined climate tests		MIL-STD-202. method 102. condition C			
Thermal shock	3-20	MIL-STD-202. method 107. condition B			
High temperature endurance		MIL-STD-202. method 108			
Corrosion (salt spray)	3-13	MIL-STD-202. method 101. condition B, 5%			

All dimensions are given in millimeters

Standard packaging : 100 pieces (Same part number). For unit packaging, add "W" after the P/N.



ENVIRONMENTAL CHARACTERISTICS

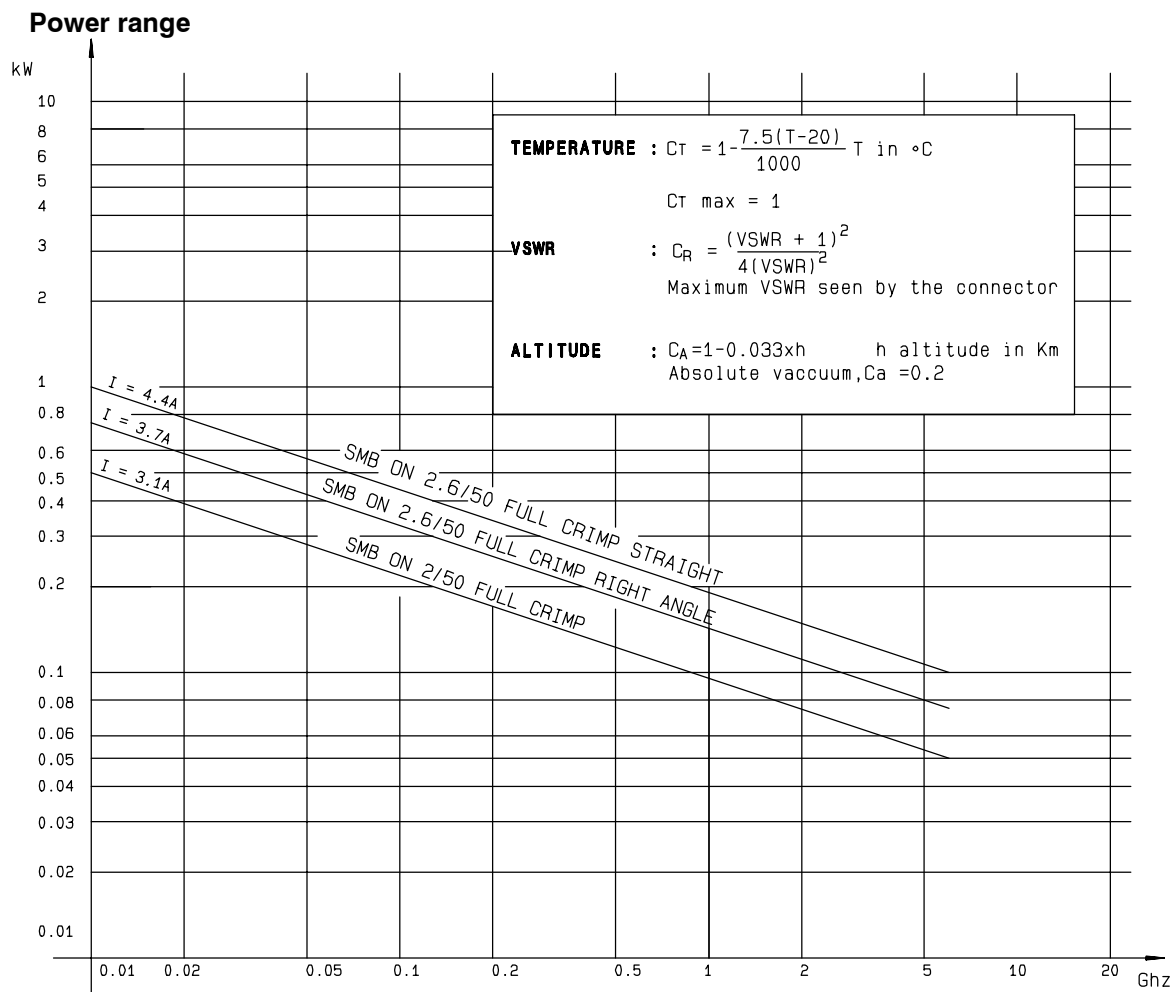
Vibrations	3-18	MIL-STD-202. method 204. condition B, 15g
Shocks	3-19	MIL-STD-202. method 213. condition B, 75g
Low pressure	3-22	MIL-STD-202. method 105. condition C
Hermetic seal		applied vacuum 10^{-6} mm of Hg (Torrs) leakage rate $< 10^{-6}$ atm/cm ³ /s

MATERIALS

Body and center pin contact		half hard brass as per QQ-B-626
Center socket contact		beryllium copper as per QQ-C-530
Ferrules		brass
Insulators		PTFE teflon
Gaskets		silicone elastomer

PLATING

Body		gold or nickel
Center contacts		gold



All dimensions are given in millimeters

Standard packaging : 100 pieces (Same part number). For unit packaging, add "W" after the P/N.

STRAIGHT PLUGS CRIMP TYPE FOR FLEXIBLE CABLES

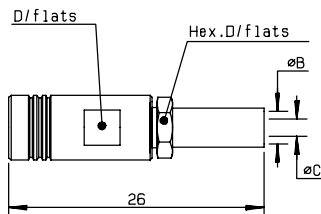


Fig. 1

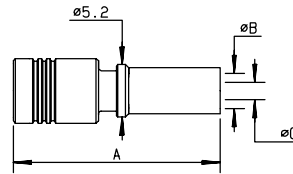


Fig. 2

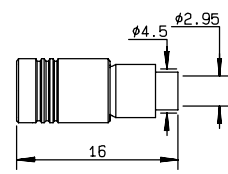


Fig. 3

cable	part number	fig.	dimensions				captive center contact	assembly	finish	note
			A	B	C	D				
2/50/S	R114 073 000	1		2.55	0.95	5	yes	M03	Gold	
2/50/S	R114 073 134*●	1		2.55	0.95	5.5	yes	M03	Gold	
2/50/S	R114 081 020*●	2	20.4	3.25	0.95		yes	M10	Nickel	full crimp
2.6/50/S	R114 015 000	3					yes	M11	Gold	reverse crimping/full crimp
2.6/50+75/S	R114 075 000	1		3.25	1.7	5	yes	M03	Gold	
2.6/50+75/S	R114 075 134	1		3.25	1.7	5.5	yes	M03	Gold	
2.6/50+75/S	R114 082 000	2	19.8	3.25	1.7		yes	M10	Gold	full crimp
2.6/50+75/S	R114 082 020	2	19.8	3.25	1.7		yes	M10	Nickel	full crimp
2.6/50/D	R114 083 000	2	18.8	3.25	1.7		yes	M10	Gold	full crimp
2.6/50/D	R114 083 020	2	18.8	3.25	1.7		yes	M10	Nickel	full crimp

STRAIGHT PLUGS CLAMP TYPE FOR FLEXIBLE CABLES

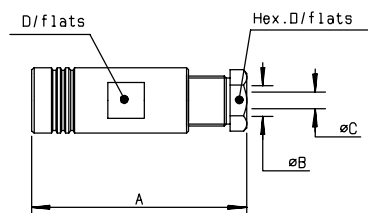


Fig. 1

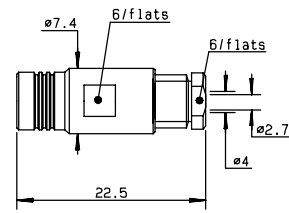


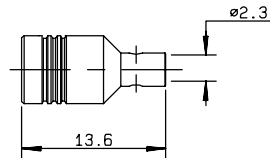
Fig. 2

cable	part number	fig.	dimensions				captive center contact	assembly	finish	note
			A	B	C	D				
2/50/S	R114 003 000	1	21.8	2.2	0.95	5	yes	M02	Gold	
2/50/S	R114 003 020*●	1	17	2.2	0.95	5.5	yes	M01	Nickel	conical braid clamp
2/50/S	R114 003 133	1	17	2.2	0.95	5.5	yes	M01	Gold	conical braid clamp
2.6/50+75/S	R114 005 000	1	21.8	3	1.7	5	yes	M02	Gold	
2.6/50+75/S	R114 005 133	1	17	3	1.7	5.5	yes	M01	Gold	conical braid clamp
3.8/95/S	R114 009 000*●	2					yes	M02	Gold	RG180 cable

● upon request

* packaging: unit

STRAIGHT PLUG SOLDER TYPE FOR SEMI RIGID CABLE



cable	part number	captive center contact	assembly	finish
.085"	R114 053 000	no	M08	Gold

RIGHT ANGLE PLUGS CRIMP TYPE FOR FLEXIBLE CABLES

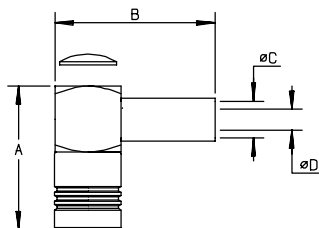


Fig. 1

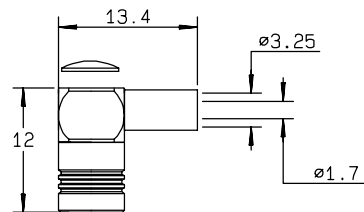


Fig. 2

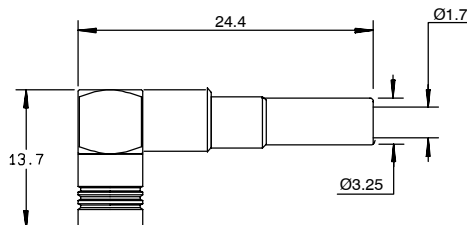


Fig. 3

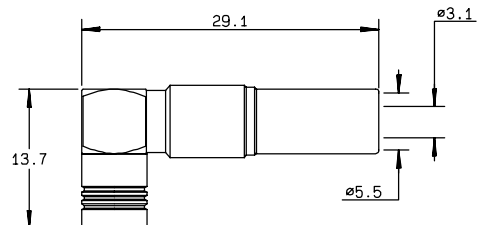


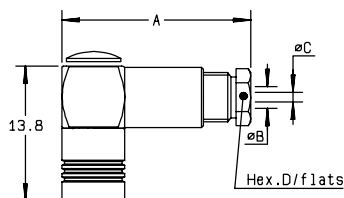
Fig. 4

cable	part number	fig.	dimensions				captive center contact	assembly	finish	note
			A	B	C	D				
2/50/S	R114 183 000	1	13.8	15.7	2.55	0.95	yes	M06	Gold	
2/50/S	R114 183 020	1	13.8	15.7	2.55	0.95	yes	M06	Nickel	
2/50/S	R114 183 430	1	13.7	15.3	3.25	0.95	yes	M06	Nickel	1/2 body Zamak
2.6/50+75/S	R114 185 000	2					yes	M06	Gold	short version
2.6/50+75/S	R114 185 020	2					yes	M06	Nickel	short version
2.6/50+75/S	R114 186 000	1	13.8	15.7	3.25	1.7	yes	M06	Gold	
2.6/50+75/S	R114 186 020	1	13.8	15.7	3.25	1.7	yes	M06	Nickel	
2.6/50+75/S	R114 186 420*●	3					yes	M10	Nickel	full crimp
2.6/50+75/S	R114 186 730	1	13.7	15.3	3.25	1.7	yes	M06	Nickel	1/2 body Zamak
2.6/50+75/S	R114 187 000	1	15.1	15.7	3.25	1.7	yes	M09	Gold	full crimp
2.6/50+75/S	R114 187 020	1	15.1	15.7	3.25	1.7	yes	M09	Nickel	full crimp
2.6/50/D	R114 182 000	1	13.8	15.7	3.25	1.7	yes	M06	Gold	
2.6/50/D	R114 191 130	1	13.7	15.3	3.5	1.7	yes	M06	Nickel	1/2 body Zamak
3.6/75/D	R114 191 300	1	13.7	18.3	4.4	2.1	yes	M06	Gold	cable BT 3002
5/50/S	R114 192 420*●	4					yes	M10	Nickel	full crimp

● upon request

* packaging: unit

RIGHT ANGLE PLUGS CLAMP TYPE FOR FLEXIBLE CABLES



cable	part number	dimensions				captive center contact	assembly	finish	note
		A	B	C	D				
2/50/S	R114 163 000	19	2.2	1	5	yes	M04	Gold	
2/50/S	R114 163 133	16.1	2.2	1	5.5	yes	M05	Gold	conical braid clamp
2.6/50+75/S	R114 165 000	19	3	1.7	5	yes	M04	Gold	
2.6/50+75/S	R114 165 133	16.1	3	1.7	5.5	yes	M05	Gold	conical braid clamp

RIGHT ANGLE PLUGS SOLDER TYPE FOR SEMI RIGID CABLE

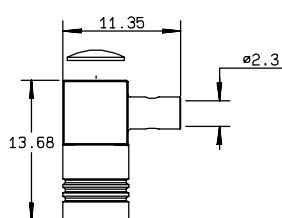


Fig. 1

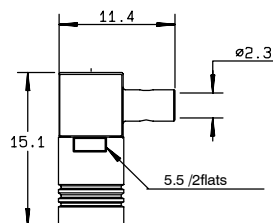


Fig. 2

cable	part number	fig.	captive center contact	assembly	finish	note
.085"	R114 152 000	1	yes	M13	Gold	
.085"	R114 169 000●	2	yes	M07	Gold	cable bending required

● upon request

* packaging: unit

STRAIGHT JACKS CRIMP TYPE FOR FLEXIBLE CABLES

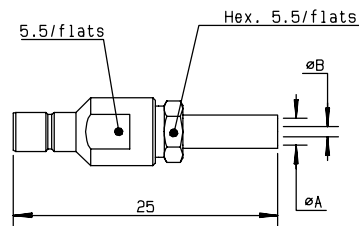


Fig. 1

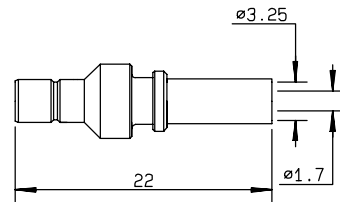


Fig. 2

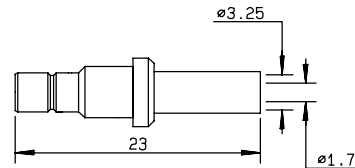
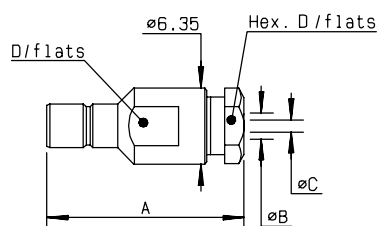


Fig. 3

cable	part number	fig.	dimensions		captive center contact	assembly	finish	note
			A	B				
2/50/S	R114 237 000	1	2.55	0.95	yes	M03	Gold	
2.6/50+75/S	R114 238 000	2			yes	M10	Gold	full crimp
2.6/50+75/S	R114 238 120	2			yes	M10	Nickel	full crimp
2.6/50+75/S	R114 239 000	1	3.25	1.7	yes	M03	Gold	
2.6/50/D	R114 245 020●	3			yes	M10	Nickel	full crimp

STRAIGHT JACKS CLAMP TYPE FOR FLEXIBLE CABLES



cable	part number	dimensions				captive center contact	assembly	finish	note
		A	B	C	D				
2/50/S	R114 203 000	21	2.2	1	5	yes	M02	Gold	
2/50/S	R114 203 133*●	16.5	2.2	1	5.5	yes	M01	Gold	conical braid clamp
2.6/50+75/S	R114 205 000	21	3	1.7	5	yes	M02	Gold	
2.6/50+75/S	R114 205 133	16.5	3	1.7	5.5	yes	M01	Gold	conical braid clamp

● upon request

* packaging: unit

STRAIGHT BULKHEAD JACKS CRIMP TYPE FOR FLEXIBLE CABLES

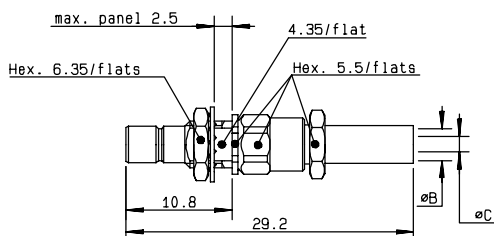


Fig. 1

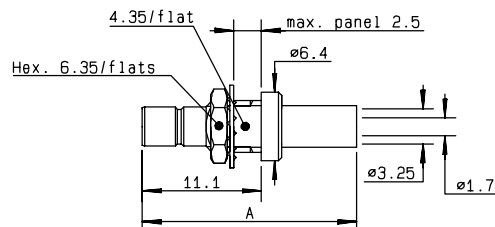


Fig. 2

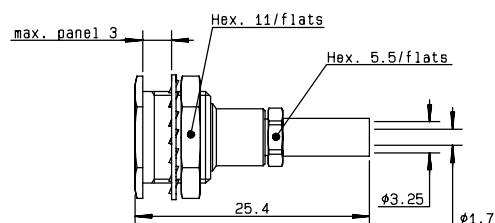


Fig. 3

cable	part number	fig.	dimensions			captive center contact	assembly	panel	finish	note
			A	B	C					
2/50/S	R114 311 000	1		2.55	1	yes	M03	P01	Gold	back mount
2.6/50+75/S	R114 312 000	1		3.25	1.7	yes	M03	P01	Gold	back mount
2.6/50+75/S	R114 313 000	2	22			yes	M10	P01	Gold	back mount / full crimp
2.6/50+75/S	R114 313 020	2	20			yes	M10	P01	Nickel	back mount / full crimp
2.6/50+75/S	R114 316 000	3				yes	M03	P10	Gold	recessed/front mount
2.6/50+75/S	R114 316 020	3				yes	M03	P10	Nickel	recessed/front mount
2.6/50/D	R114 315 000*●	2	20			yes	M10	P01	Gold	back mount / full crimp

STRAIGHT BULKHEAD JACKS CLAMP TYPE FOR FLEXIBLE CABLES

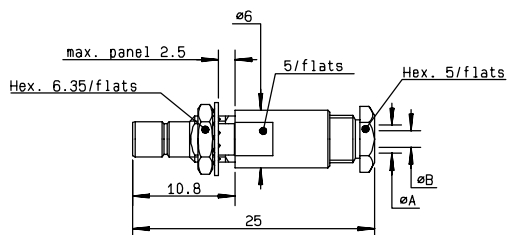


Fig. 1

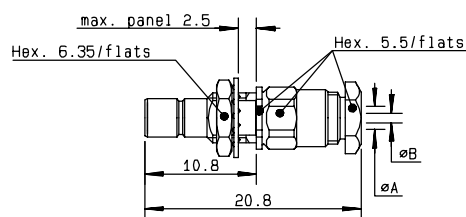


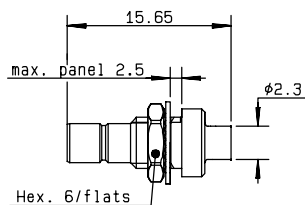
Fig. 2

cable	part number	fig.	dimensions		captive center contact	assembly	panel	finish	note
			A	B					
2/50/S	R114 303 000	1	2.2	1	yes	M02	P01	Gold	
2/50/S	R114 303 133	2	2.2	1	yes	M01	P01	Gold	conical braid clamp
2.6/50+75/S	R114 305 000	1	3	1.7	yes	M02	P01	Gold	
2.6/50+75/S	R114 305 133	2	3	1.7	yes	M01	P01	Gold	conical braid clamp

● upon request

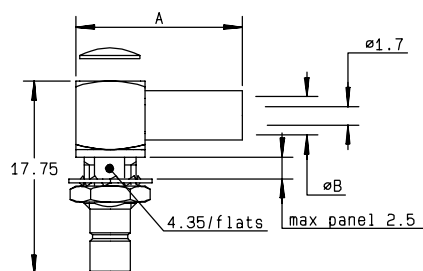
* packaging: unit

BULKHEAD JACK SOLDER TYPE FOR SEMI RIGID CABLE



cable	part number	captive center contact	assembly	panel	finish
.085"	R114 222 000	yes	M08	P01	Gold

RIGHT ANGLE BULKHEAD JACKS CRIMP FOR FLEXIBLE CABLE



cable	part number	dimensions		captive center contact	assembly	panel	finish
		A	B				
2.6/50/S	R114 373 020*●	15.7	3.25	yes	M06	P01	nickel
2.6/50/D	R114 373 120*●	15.35	3.5	yes	M06	P01	nickel

● upon request

* packaging: unit

STRAIGHT FLANGE RECEPTACLE (MALE CENTER CONTACT)

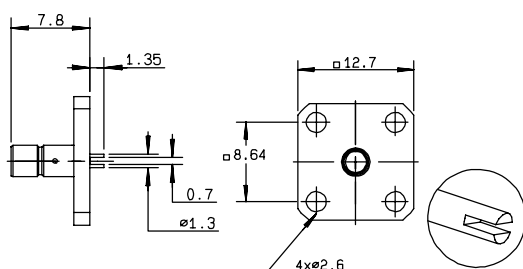


Fig. 1

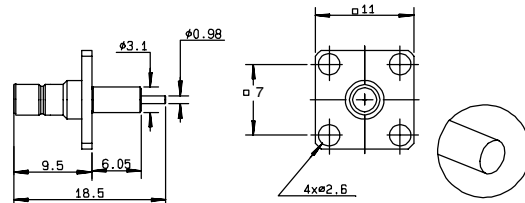


Fig. 2

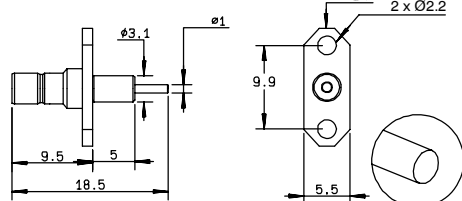


Fig. 3

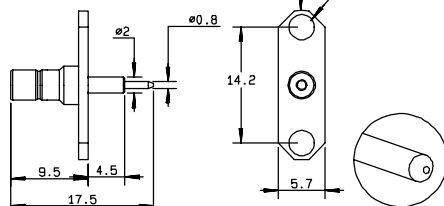


Fig. 4

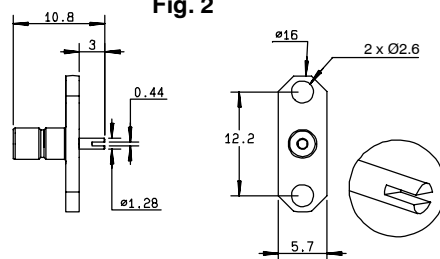


Fig. 5

part number	fig.	captive center contact	panel	finish	note
R114 409 030●	1	yes	P14	Gold	square flange
R114 413 000	2	no	P07	Gold	square flange / extended dielectric
R114 450 000*●	3	no	P15	Gold	2 hole flange / extended dielectric
R114 450 205*●	4	yes	P16	nickel	2 hole flange / flange dimensions of BMA series (1)
R114 453 307*●	5	yes	P08	BBR	flange dimensions of SMA series (2) / 2 hole flange / slotted contact

(1) Ask for our catalog D1 128 CE

(2) Ask for our catalog D1 125 CE

STRAIGHT ROUND FLANGE RECEPTACLE (MALE CENTER CONTACT)

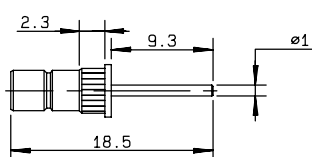


Fig. 1

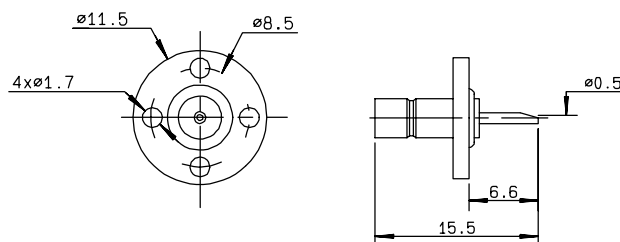
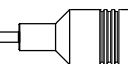


Fig. 2

part number	fig.	captive center contact	panel	finish	note
R114 505 220●	1	yes	P17	nickel	press mount/package 500
R114 510 000*●	2	yes	P18	Gold	hermetically sealed

● upon request

* packaging: unit



STRAIGHT BULKHEAD RECEPTACLES (MALE CENTER CONTACT)

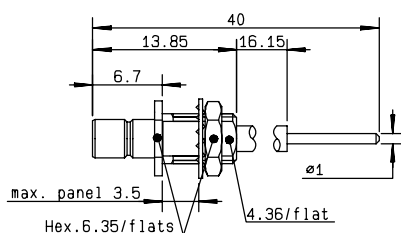


Fig. 1

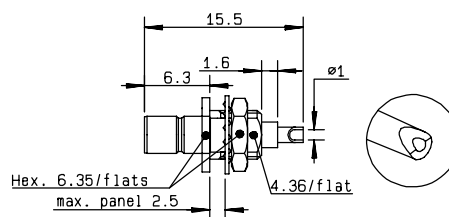


Fig. 2

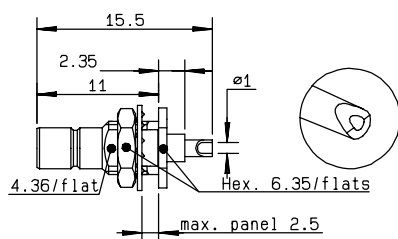


Fig. 3

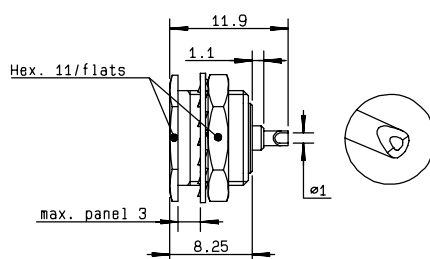


Fig. 4

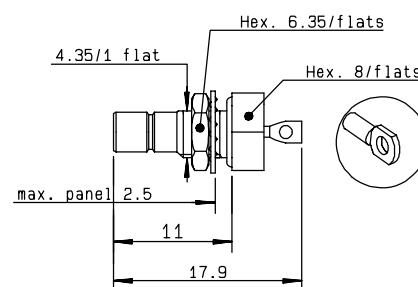


Fig. 5

part number	fig.	captive center contact	panel	finish	note
R114 552 400●	1	yes	P01	Gold	front mount/extended dielectric
R114 553 000	2	yes	P01	Gold	front mount
R114 554 000	3	yes	P01	Gold	rear mount
R114 566 000	4	yes	P10	Gold	front mount/recessed
R114 566 020	4	yes	P10	Nickel	front mount/recessed
R114 603 000	5	yes	P01	Gold	hermetically sealed

RIGHT ANGLE BULKHEAD RECEPTACLES (MALE CENTER CONTACT)

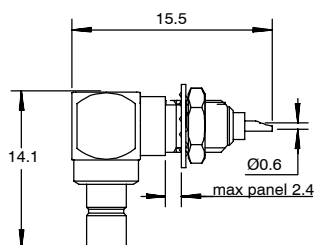


Fig. 1

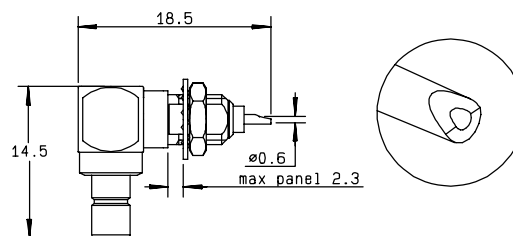


Fig. 2

part number	fig.	captive center contact	panel	finish
R114 670 000	1	yes	P01	Gold
R114 670 020	1	yes	P01	Nickel
R114 671 000*●	2	yes	P01	Gold

- upon request

* packaging: unit

STRAIGHT PCB RECEPTACLES

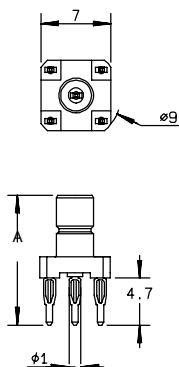


Fig. 1

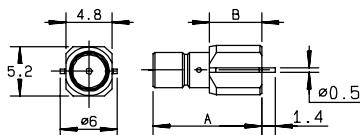


Fig. 2

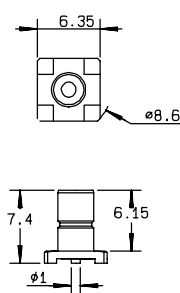


Fig. 3

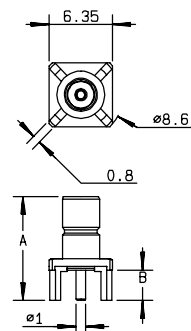


Fig. 4

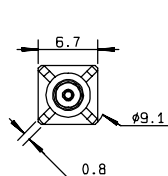


Fig. 5

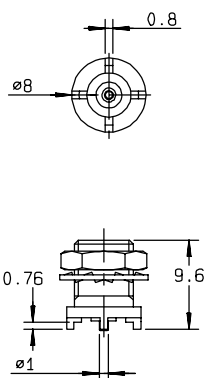


Fig. 6

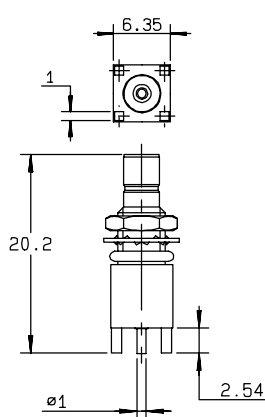


Fig. 7

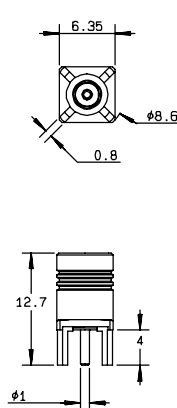


Fig. 8

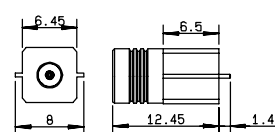


Fig. 9

part number	fig.	dimensions		captive center contact	assembly	panel	finish	note
A	B							
R114 416 000●	1	12.1		yes	M16	P02	Gold	press fit pins
R114 416 020	1	12.9		yes	M16	P02	Nickel	press fit pins
R114 423 000	2	11.5	5.5	yes	M12		Gold	SMT edge card
R114 423 800●	2	12.5	6.5	yes	M12		Gold	SMT edge card / packaging 1000 reel
R114 423 810	2	11.5	5.5	yes	M12		Gold	SMT edge card / packaging 500 reel
R114 423 820	2	11.5	5.5	yes	M12		Gold	SMT edge card / packaging 100 reel
R114 424 000	3			yes	M12		Gold	SMT
R114 424 100	3			yes	M12		Gold	SMT / packaging 100 reel
R114 424 120	3			yes	M12		Gold	SMT / packaging 500 reel
R114 426 000	4	11.4	4	yes		P03	Gold	
R114 426 020	4	11.4	4	yes		P03	Nickel	
R114 426 030	4	11.4	4	yes		P03	Ni+Tin-lead	
R114 426 042	4	10.3	2.9	yes		P03	Nickel	
R114 426 300*●	4	11.4	4	yes		P04	Gold	thin legs
R114 426 530	5			yes		P05	Gold	harpon legs
R114 426 850●	4	11.4	4	yes		P03	Gold	packaging 75 tube
R114 560 200*●	6			yes		P06	Gold	rear mount
R114 590 035*●	7			yes		P03	nickel	rear mount / panel seal
R114 425 000*●	8			yes		P06	Gold	female
R114 425 003●	8			yes		P06	Gold	female
R114 444 800●	9			yes	M12		Gold	female/SMT edge card/packaging 800 reel

● upon request

* packaging: unit

RIGHT ANGLE PCB RECEPTACLES (MALE CENTER CONTACT)

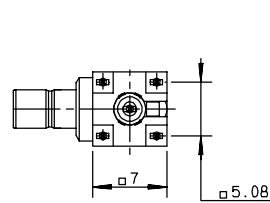


Fig. 1

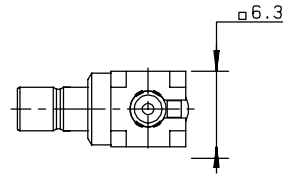


Fig. 2

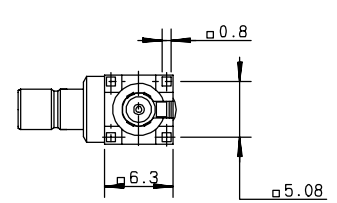


Fig. 3

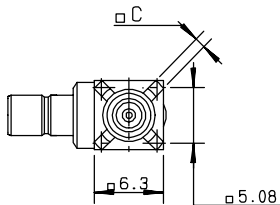
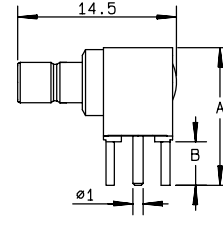
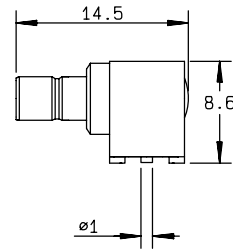
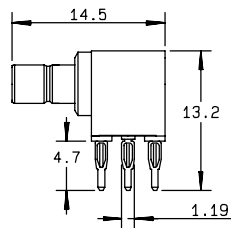


Fig. 4

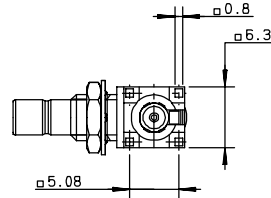


Fig. 5

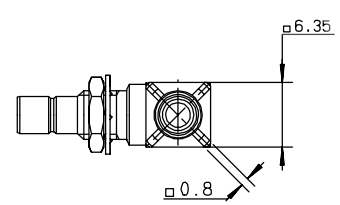
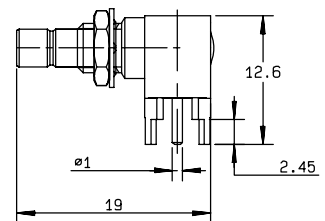
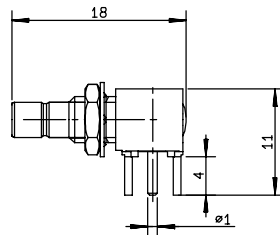
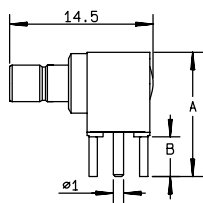


Fig. 6



part number	fig.	dimensions			captive center contact	assembly	panel	finish	note
		A	B	C					
R114 661 020	1				yes	M15	P02	Nickel	Press fit pins
R114 664 000	2				yes	M12		Gold	SMT
R114 664 100	2				yes	M12		Gold	SMT / packaging 100 reel
R114 664 120	2				yes	M12		Gold	SMT / packaging 500 reel
R114 665 000	3	12.6	4		yes		P03	Gold	
R114 665 020	3	12.6	4		yes		P03	Nickel	
R114 665 040*●	4	12.6	2.45	0.8	yes		P03	Gold	
R114 665 104	3	11.6	3		yes		P03	Ni+tin lead	
R114 665 110	3	11.6	3		yes		P03	Nickel	
R114 673 020*●	5				yes		P03	Nickel	rear mount
R114 673 120*●	6				yes		P03	Gold	rear mount

● upon request

* packaging: unit

ADAPTERS

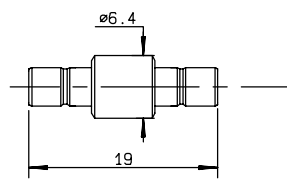


Fig. 1

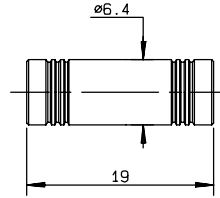


Fig. 2

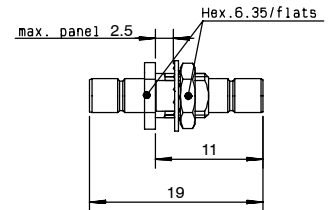


Fig. 3

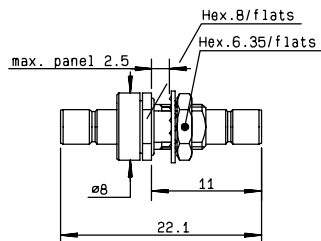


Fig. 4

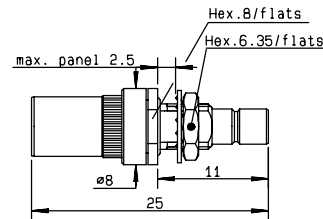


Fig. 5

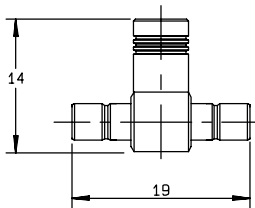


Fig. 6

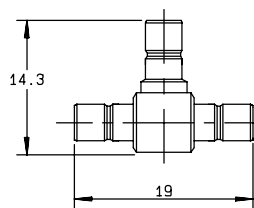


Fig. 7

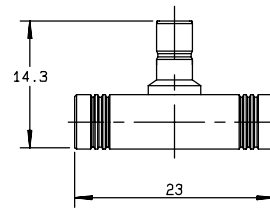


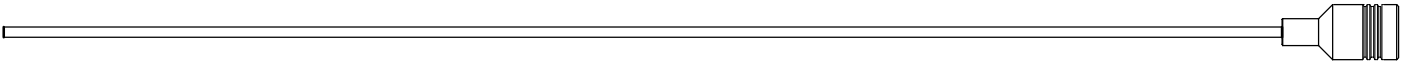
Fig. 8

part number	fig.	captive center contact	panel	finish	note
R114 703 000	1	yes		Gold	male - male
R114 704 000	2	yes		Gold	female - female
R114 720 000	3	yes	P01	Gold	bulkhead male - male
R114 720 020	3	yes	P01	Nickel	bulkhead male - male
R114 753 000	4	yes	P01	Gold	hermetically sealed male - male
R114 754 000*●	5	yes	P01	Gold	hermetically sealed female - male
R114 780 000	6	yes		Gold	tee female / male - male
R114 780 020	6	yes		Nickel	tee female / male - male
R114 781 000	7	yes		Gold	tee male / male - male
R114 783 000*●	8	yes		Gold	tee male / female - female

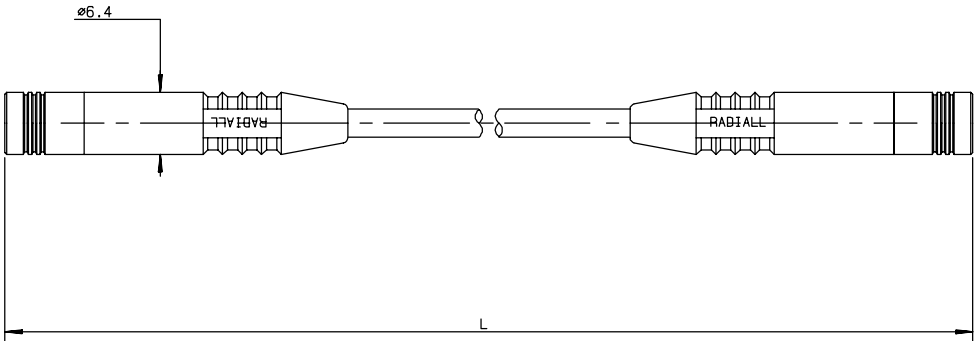
● upon request

* packaging: unit

SMB

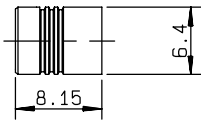


SMB FEMALE-FEMALE CABLE ASSEMBLY

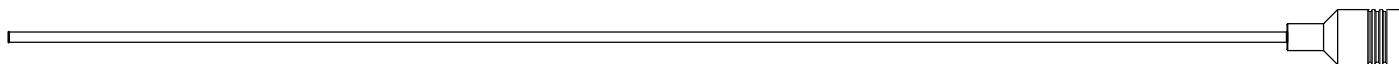


cable	part number	dimension L (mm)	captive center contact	finish
2.6/50/S	R285 212 000	250	yes	Gold
2.6/50/S	R285 214 000	500	yes	Gold
2.6/50/S	R285 213 000	750	yes	Gold
2.6/50/S	R285 215 000	1000	yes	Gold

SHORT CIRCUIT PLUG CAP



part number	captive center contact	finish
R114 880 000	yes	Gold



These connectors, designed according to the military specifications MIL-C-39012, are MIL QPL type (Qualified Product List).

Suffix 180 indicates a gold finish. Ex: P/N R 114 003 180 is the MIL QPL type gold version of R 114 003 000. For exact dimensions and mounting of these connectors, please ask for technical data sheets.

Part number	Description	M39012 P/N
R114 005 180●	STRAIGHT PLUG CLAMP TYPE FOR 2,6/50+75/S	Type M39012/67-0004
R114 163 180●	RIGHT ANGLE CLAMP TYPE FOR 2/50/S	Type M39012/69-0003
R114 165 180●	RIGHT ANGLE CLAMP TYPE FOR 2,6/50+75/S	Type M39012/69-0004
R114 426 180●	STRAIGHT MALE PCB RECEPTACLE	Type M39012/95-0001
R114 427 180●	STRAIGHT MALE PCB RECEPTACLE	Type M39012/95-0002
R114 553 180●	STRAIGHT BULKHEAD MALE PCB RECEPTACLE FRONT MOUNT	Type M39012/71-0002
R114 554 180●	STRAIGHT BULKHEAD MALE PCB RECEPTACLE REAR MOUNT	Type M39012/71-0001
R114 665 180●	RIGHT ANGLE MALE PCB RECEPTACLE	Type M39012/96-0001
R114 666 180●	RIGHT ANGLE FEMALE PCB RECEPTACLE	Type M39012/96-0002

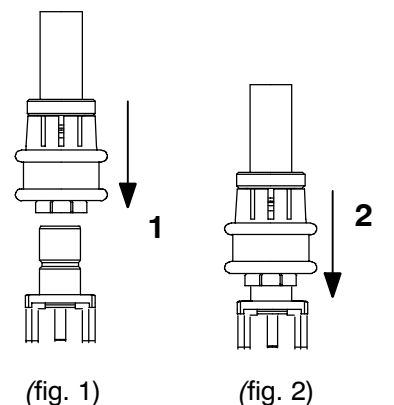
● upon request

RADIALl proposes new **SMB LOCK** plugs with a 2 step connection system :

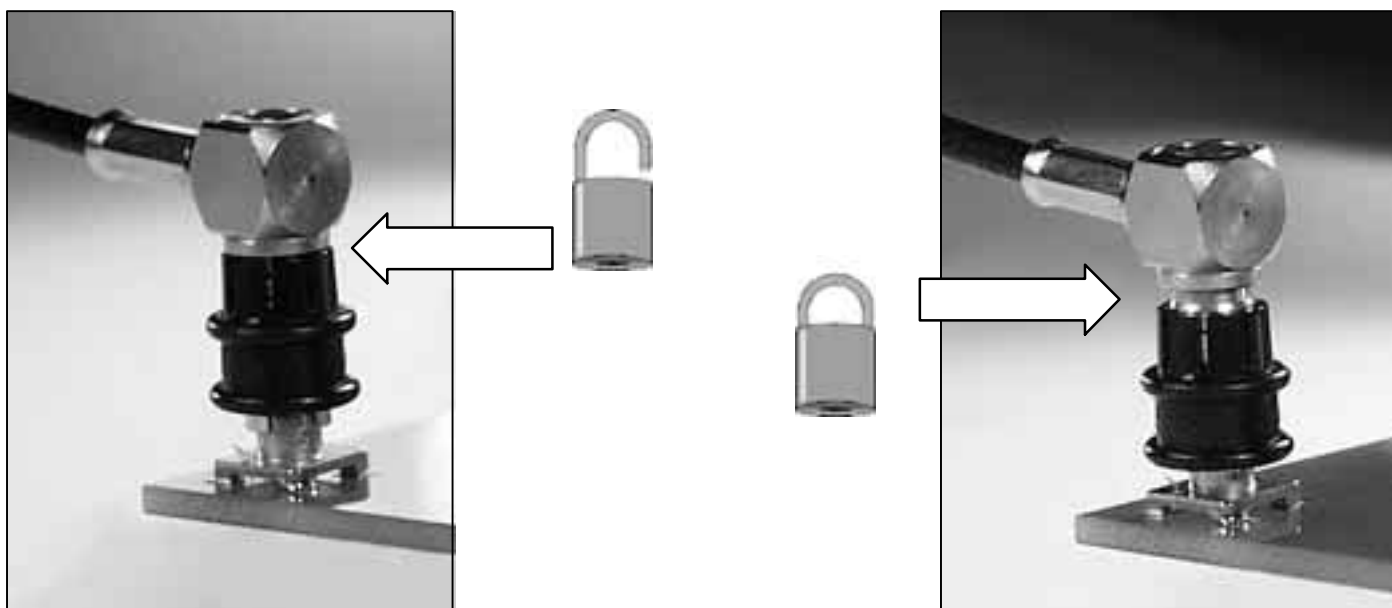
- 1 **Snap** the plug on the male connector (fig. 1),
- 2 **Lock** the couple by pushing down the coupling nut (fig. 2).

This new range

- ◆ is **totally intermateable** with the standard **SMB** male connectors.
- ◆ benefits from a low intermodulation.
- ◆ is intended to replace the standard SMB and screw-on connectors in all applications requiring :
 - a fast connection
 - a reliable lock-on connection
 - long durability.



► Possibility to visually control the locking system.



► The connector allows a 360° cable rotation.

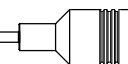
► Coupling nut.

The coupling nut is made with POM (halogen free). Its standard color is black.

Upon request, other colors for the coupling nut, in the following range are available : red, yellow, green, blue or white.

Please consult us.

Only the black nut provides resistance against UV.



ELECTRICAL CHARACTERISTICS

Impedance		50 Ω
Operating frequency		DC to 4 GHz
Typical V.S.W.R.		2 GHz 4 GHz
Straight models	.085"	1.15 1.20
	$\emptyset$ 2.6/50	1.20 1.25
Right angle models	.085"	1.05 1.15
	$\emptyset$ 2.6/50	1.15 1.25
RF insertion loss.		
Straight models	.085"	0,20 $\sqrt{F}$ (GHz)
	$\emptyset$ 2.6/50	0,25 $\sqrt{F}$ (GHz)
Right angle models	.085"	0,25 $\sqrt{F}$ (GHz)
	$\emptyset$ 2.6/50	0,50 $\sqrt{F}$ (GHz)
Testing voltage (V RMS)	.085"	750
	$\emptyset$ 2.6/50	1000
Working voltage (V RMS)	.085"	335
	$\emptyset$ 2.6/50	335
Insulation resistance (M Ω)		1000

ENVIRONMENTAL CHARACTERISTICS

Temperature range	-35°C / +125°C
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MECHANICAL CHARACTERISTICS

Life	500 matings min
Cable retention force	.085"
	$\emptyset$ 2.6/50
	$\emptyset$ 5/50 S
Coupling nut retention force	50 N min
Vibrations	MIL STD 202 F method 240D, condition B

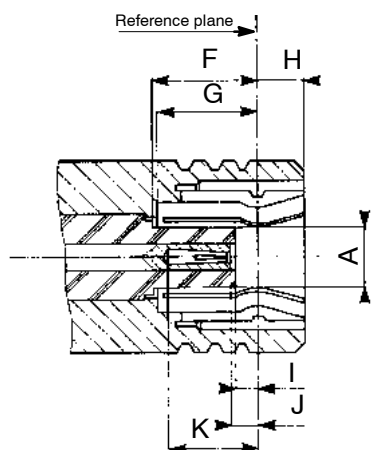
MATERIALS

Bodies	Brass
Center contact	Beryllium copper
Outer contact	Bronze
Insulator	PTFE
Coupling nut	POM (halogen free)

PLATING

Bodies	BBR (<i>non magnetic plating</i>)
Center contact	Gold

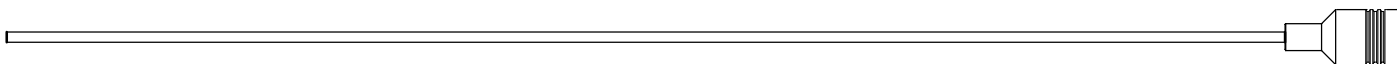
PLUG (with female contact)



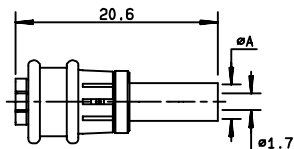
Letter	mm		inch	
	min.	max	min.	max
Dia. A	-	2.06	-	.081
F	3.58	-	.141	-
G	3.58	-	.141	-
H	-	1.63	-	.064
I	0.18	-	.007	-
J	0.18	0.94	.007	.037
K	2.97	-	.117	-

Standard packaging : 100 pieces (Same part number). For unit packaging, add "W" after the P/N

SMB LOCK

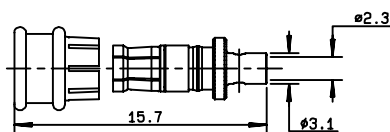


STRAIGHT PLUG FULL CRIMP TYPE FOR FLEXIBLE CABLES



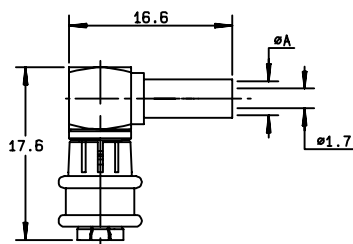
cable type	cable	part number	A	captive center contact
2.6/50/S	RG174-188-316 / SHF 2.7 TU*	R117 082 807	3.25	yes
2.6/50/D	RD316 / SHF 2.7 TD/1*	R117 083 807	3.5	yes
5/50/S	RG 58 - 141 / SHF 142	R117 086 827 •	5.55	yes
5/50/D	RG 142 - 223 - 400	R117 087 827 •	5.55	yes

STRAIGHT PLUG SOLDER TYPE FOR SEMI-RIGID CABLE



cable type	cable	part number	captive center contact
.085"	RG 405/U	R117 053 807	no

RIGHT ANGLE PLUG CRIMP TYPE FOR FLEXIBLE CABLES

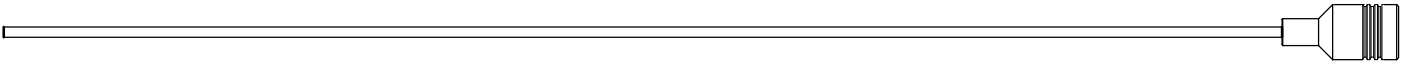


cable type	cable	part number	A	captive center contact
2.6/50/S	RG174-188-316 / SHF 2.7 TU*	R117 186 807	3.25	yes
2.6/50/D	RD316 / SHF 2.7 TD/1*	R117 187 807	3.5	yes
5/50/S	RG 58 - 141 / SHF 142	R117 178 827 •	5.55	yes
5/50/D	RG 142 - 223 - 400	R117 179 827 •	5.55	yes

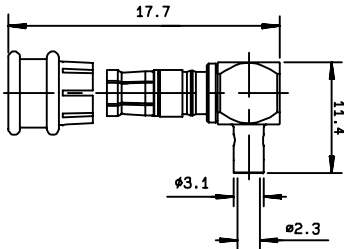
• upon request

* These RADIAL cables are "low loss-low cost" option to RG cables. Their main advantages are : **low loss level, low intermod level, high shielding effectiveness, halogen free**. Part number : SHF 2.7 TU : **C291 999 904** - SHF 2.7 TD/1 : **C 291 999 905** - SHF 142 : **C291 325 290**.

SMB LOCK

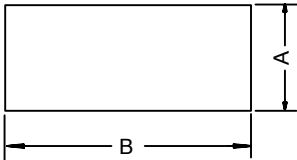


RIGHT ANGLE PLUG SOLDER TYPE FOR SEMI-RIGID CABLE



cable type	cable	part number	captive center contact
.085"	RG 405/U	R117 152 807	yes

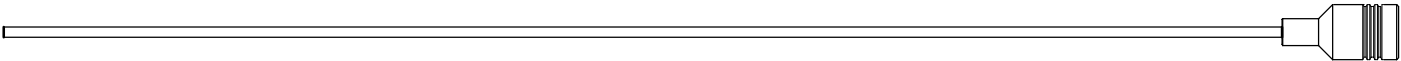
HEATSHRINK SLEEVE



cable group	part number	A	B	packaging
2/50	R280 637 010	3.2	22	100
2.6/50	R280 637 020	4.8	22	
5/50	R280 637 030	6.4	25.4	

Ask for our full detailed catalog of SMB series **D1 114 CE**



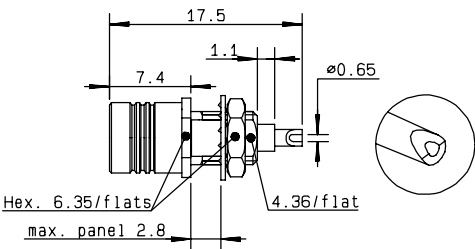


- Lower mating/unmating force (from 2.5 N to 6N).
- Receptacles intermateable with SMB connectors.
- Gold finish.

recommended for PCB

The SMB-A connectors have the same electrical characteristics as standard SMB connectors.

STRAIGHT RECEPTACLE (FEMALE CENTER CONTACT)



part number	captive center contact	panel	finish
R115 556 000	yes	P01	Gold

STRAIGHT PCB RECEPTACLES (FEMALE CENTER CONTACT)

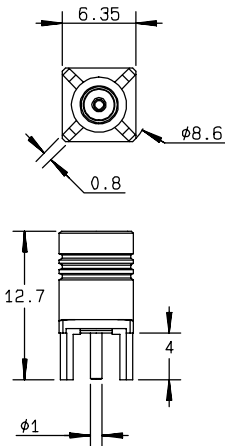


Fig. 1

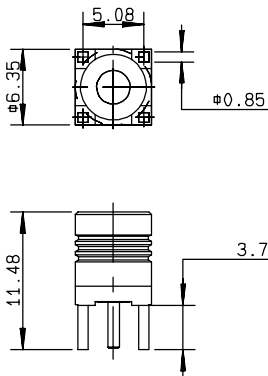


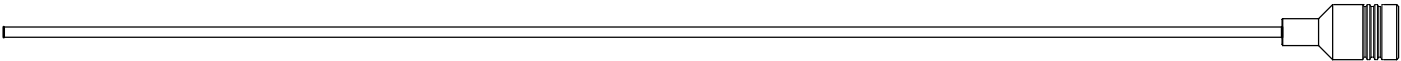
Fig. 2

part number	fig.	captive center contact	PCB	finish	note
R115 427 000	1	yes	P06	Gold	
R115 427 830●	2	yes	P06	Gold	packaging 75

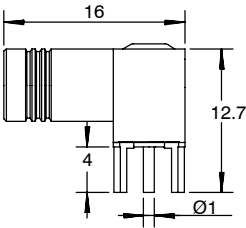
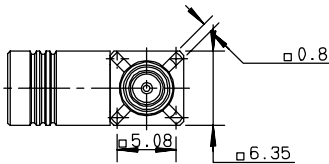
• upon request

standard packaging: unit



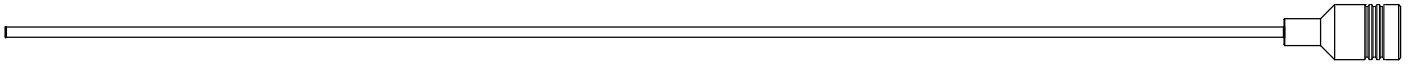


RIGHT ANGLE PCB RECEPTACLE (FEMALE CENTER CONTACT)



part number	captive center contact	panel	finish
R115 666 000	yes	P04	Gold

standard packaging: unit



Slide on connectors (mating/unmating force: 2.2 N to 4.9 N).

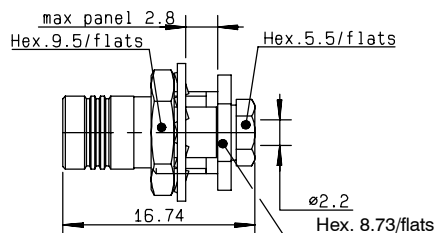
The design is suitable for **back plane and blind mate applications**. In this case, we recommend the association of a mobile connector (floating jack / receptacle) with a fixed connector (panel plug / jack, receptacle). Please see the available combinations in the table below.

The SUBGLIS connectors are completely intermateable with standard SMB and SMB-A connectors and in this regard, they can be used for **test applications**.

The Subglis connectors have the same electrical characteristics as standard SMB connectors.

part number	description	center contact	R116303330	R116556000
			Bulkhead floating jack clamp type for 2/50/S cable	Straight bulkhead floating receptacle (front mount)
R116003900	Bulkhead plug clamp type for 2/50/S cable	female	*	
R116056000	Bulkhead plug solder type for .085 cable	female	*	
R116311000	Bulkhead jack crimp type for 2/50/S cable	male		*
R116312000	Bulkhead jack crimp type for 2.6/50+75/S cable	male		*
R116372000	Right angle bulkhead jack crimp type for 2/50/S cable	male		*
R116373000	Right angle bulkhead jack crimp type for 2.6/50/S cable	male		*
R116425010	Straight PCB receptacle	female	*	
R116426000	Straight PCB receptacle	male		*
R116426030	Straight PCB receptacle	male		*
R116553000	Straight bulkhead receptacle (front mount)	male		*
R116554000	Straight bulkhead receptacle (rear mount)	male		*
R116557000	Straight bulkhead receptacle (front mount)	female	*	
R116566000	Straight bulkhead receptacle (front mount/recessed)	male		*
R116665000	Right angle PCB receptacle	male		*
R116666030	Right angle PCB receptacle	female	*	

BULKHEAD PLUG CLAMP TYPE FOR FLEXIBLE CABLE

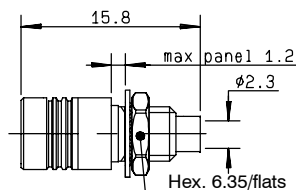


cable	part number	captive center contact	assembly	panel	finish	note
2/50S	R116 003 900●	yes	M01	P20	Gold	conical braid clamp

● upon request

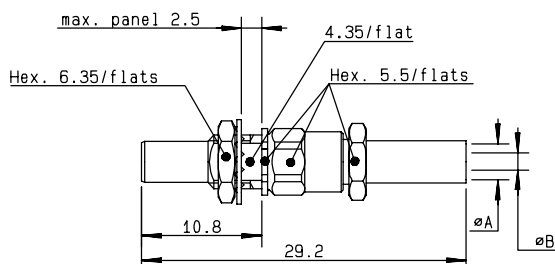
standard packaging: unit

BULKHEAD PLUG SOLDER TYPE FOR SEMI RIGID CABLE



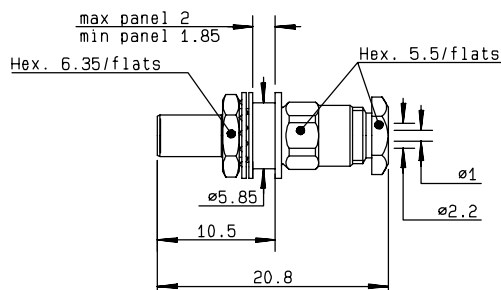
cable	part number	captive center contact	assembly	panel	finish
.085"	R116 056 000●	no	M08	P19	Gold

STRAIGHT BULKHEAD JACKS CRIMP TYPE FOR FLEXIBLE CABLES



cable	part number	dimensions		captive center contact	assembly	panel	finish
		A	B				
2/50/S	R116 311 000●	2.55	0.95	yes	M03	P01	Gold
2,6/50+75/S	R116 312 000●	3.25	1.7	yes	M03	P01	Gold

STRAIGHT BULKHEAD FLOATING JACK CLAMP TYPE FOR FLEXIBLE CABLE

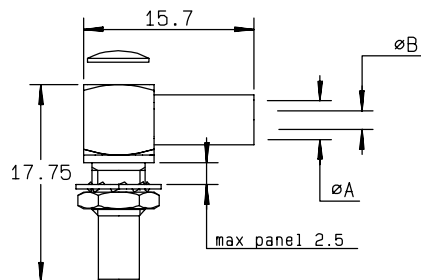


cable	part number	captive center contact	assembly	panel	finish	note
2/50/S	R116 303 330●	yes	M01	P09	Gold	conical braid clamp

● upon request

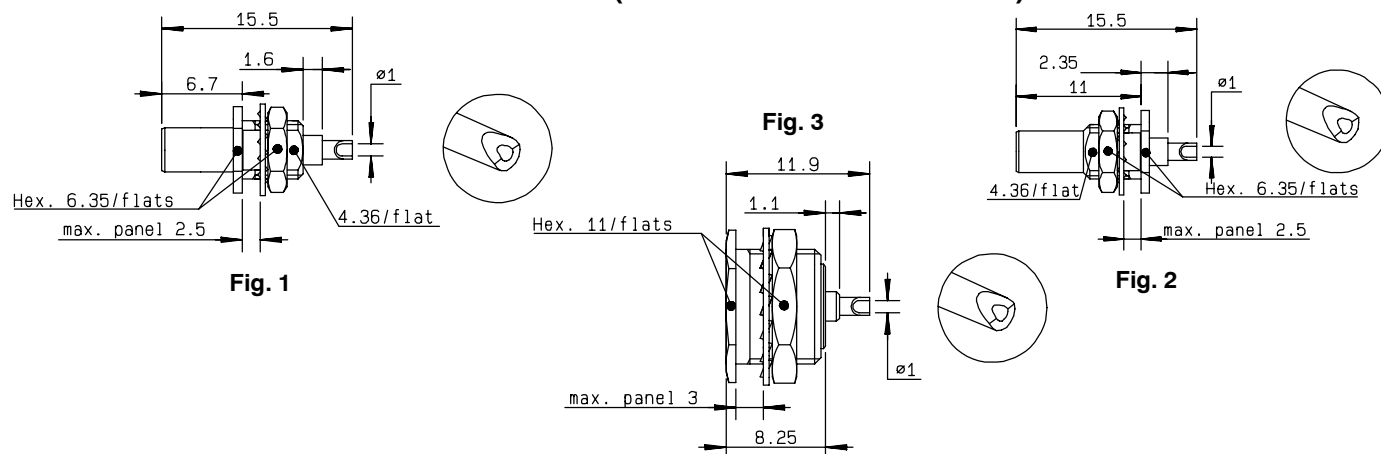
standard packaging: unit

RIGHT ANGLE BULKHEAD JACKS CRIMP TYPE FOR FLEXIBLE CABLES



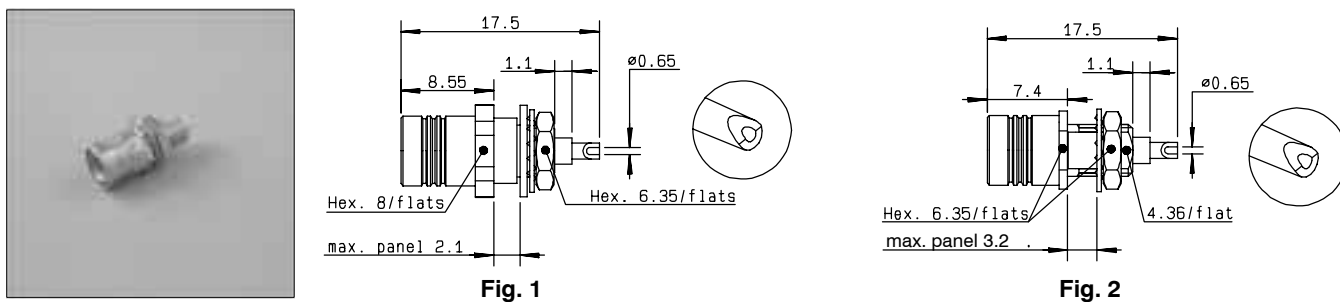
cable	part number	dimensions		captive center contact	assembly	panel	finish
		A	B				
2/50/S	R116 372 000●	2.55	0.95	yes	M06	P19	Gold
2,6/50/S	R116 373 000●	3.25	1.7	yes	M06	P19	Gold

STRAIGHT BULKHEAD RECEPTACLES (MALE CENTER CONTACT)



part number	fig.	captive center contact	panel	finish	note
R116 553 000	1	yes	P01	Gold	front mount
R116 554 000●	2	yes	P01	Gold	rear mount
R116 566 000●	3	yes	P10	Gold	front mount/recessed

STRAIGHT BULKHEAD RECEPTACLES (FEMALE CENTER CONTACT)



part number	fig.	captive center contact	panel	finish	note
R116 556 000●	1	yes	P09	Gold	Floating type
R116 557 000●	2	yes	P01	Gold	

● upon request

standard packaging: unit

STRAIGHT PCB RECEPTACLES

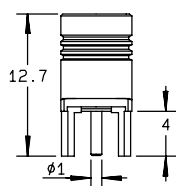
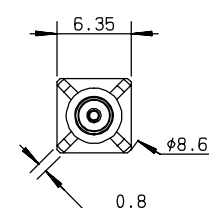


Fig. 1

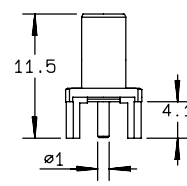
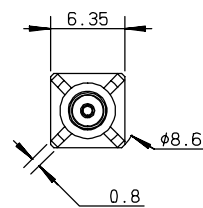


Fig. 2

part number	fig.	captive center contact	PCB	finish	note
R116 425 010●	1	yes	P06	Gold	female center contact
R116 426 000	2	yes	P03	Gold	male center contact
R116 426 030●	2	yes	P03	Gold	male center contact / packaging 100

RIGHT ANGLE PCB RECEPTACLES

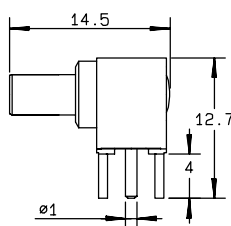
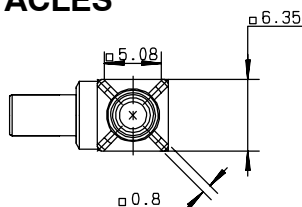


Fig. 1

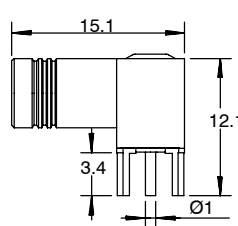
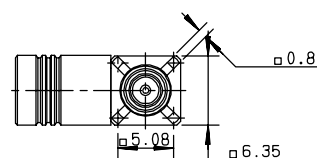


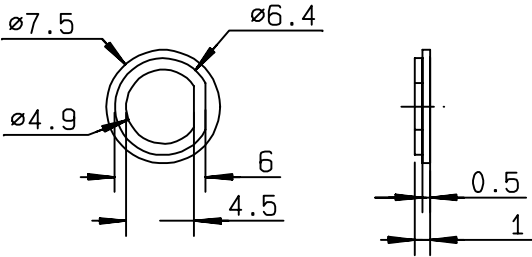
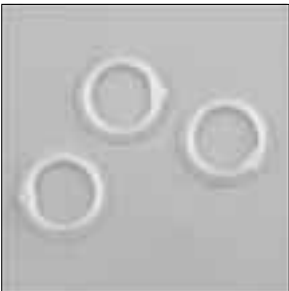
Fig. 2

part number	fig.	captive center contact	panel	finish	note
R116 665 000●	1	yes	P03	Gold	male center contact
R116 666 030●	2	yes	P04	Gold	female center contact

● upon request

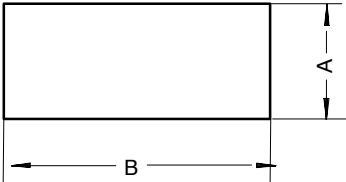
standard packaging: unit

INSULATING WASHERS

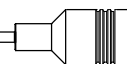


part number	to be used on	packaging
R280 902 010	R114 311 000	100 sets (200 washers)
	R114 312 000	
	R114 313 000	
	R114 553 000	
	R114 553 010	
	R114 553 134	
	R114 554 000	
	R114 603 000	
	R114 671 000	
	R114 720 000	
	R114 753 000	
	R115 556 000	
	R116 553 000	

HEATSHRINK SLEEVE



cable group	part number	A	B	packaging
2 / 50	R280 637 010	3.2	22	100
2.6 / 50	R280 637 020	4.8	22	
5 / 50	R280 637 030	6.4	25.4	



For more details, see our detailed catalog "BETWEEN SERIES COAXIAL ADAPTERS" D1 191 CE.

	SMB plug with female center contact	SMB bulkhead plug with female center contact	SMB jack with male center contact	SMB bulkhead jack with male center contact
BNC plug	R191 214 000		R191 209 000	
BNC jack	R191 215 000	R191 216 000*		R191 211 000*
BNC bulkhead jack			R191 213 000	
BNC square flange jack			R191 212 000 R191 212 050*●	
N plug			R191 233 000	R191 234 000
N jack	R191 239 000			
N square flange jack			R191 236 000	
PC7	R191 007 000●		R191 005 000●	

* Chrome plated black

● upon request

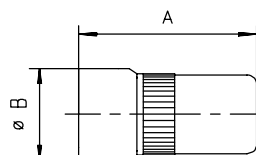
LOW POWER TERMINATION (100W peak)

Part Number	Average power (W)	Frequency range	Impedance	Type
R404 104 000	1	DC – 2.5 GHz	50 Ω	male
R404 105 000				female
R404 165 000	0.5	DC – 8 GHz		female

LOW LEVEL ATTENUATORS (100W peak)

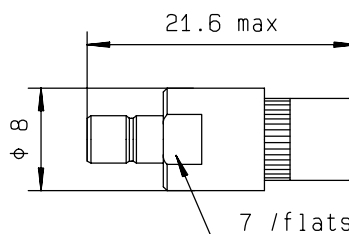
ATTENUATION (dB)	Frequency range (GHz)
	DC – 8 GHz
3	R410 203 121
6	R410 206 121
10	R410 210 121
20	R410 220 121

LOW POWER TERMINATION

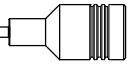


Part number	Freq. range GHz	V.S.W.R. (max)				Power (W)		Impedance (Ω)	Type	Weight (g)	Dimensions (mm)	
		DC - 1	1 - 2.5	2.5 - 4	4 - 8	Avg.	Peak				A	B
R404 104 000	DC - 2.5	≤ 1.08	≤ 1.20			1	100	$50 \Omega \pm 5\%$	M	2	11.4	$\varnothing 7$
R404 105 000		≤ 1.08	≤ 1.20						F	2	11.3	$\varnothing 7.2$
R404 165 000	DC - 8	≤ 1.10		≤ 1.20	≤ 1.25	0.5			F	3	13.5	$\varnothing 6.4$

LOW LEVEL ATTENUATORS



Part number	Freq. range GHz	Attenuation (dB)			V.S.W.R. (max)		Power (W)		Weight (g)
		Nom .	Deviation						
			DC – 4	4 – 8	DC – 4	4 – 8	Avg.	Peak	
R410 203 121	DC - 8	3	± 0.3	± 0.5	≤ 1.15	≤ 1.30	2	100	5
R410 206 121		6	± 0.4	± 0.5					
R410 210 121		10	± 0.4	± 0.5					
R410 220 121		20	± 0.5	± 0.5					



Joule effect soldering device

Compliant with European standard n° 89/336/CEE and 73/23/CEE (electromagnetic compatibility and low voltage)

It allows to solder :

- center contacts and bodies to semi-rigid cables,
- center contacts to flexible cables,
- solder pot receptacles.

P/N of the soldering device: **R282 800 000**.

Please, ask for our leaflet about Joule effect soldering device **D1 035 DE**.

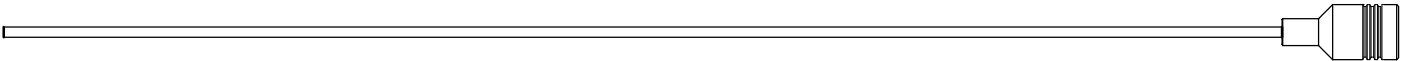
Radiall recommends to always carry out soldering operations in well ventilated areas and to make use of fume extraction equipment.

Our fume extraction device complies also with European standards n° 89/336/CEE, 89/392/CEE and 73/23/CEE. Its flow is adjustable up to 240 m³/h and it uses active coal filter.

P/N of the fume extraction device: **R282 803 000**.

Fume extraction device





MIL CRIMP TOOL (M22520/5-01) R282 293 000 (DIES NOT INCLUDED)

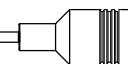


DIES

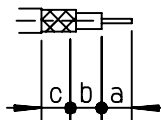
Part number	Cable group		
R282 235 003	2.6/50 S	3.25 (.128)	2.67 (.105)
R282 235 011	5/50 S - 5/50 D	5.41 (.213)	1.73 (.068)
R282 235 037	2.6/50 D	3.84 (.131)	2.67 (.105)

CRIMP TOOL R282 281 000 and POSITIONER R282 967 012



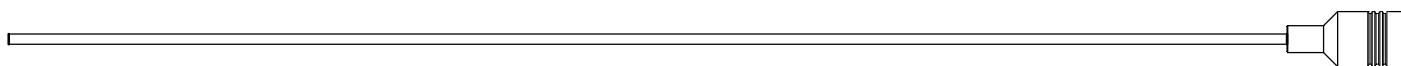


MATCHING P/N WITH CRIMP TOOLS

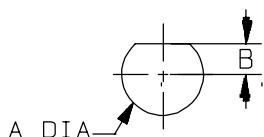


Part number	Assembly	Stripping dimensions			Center contact Crimp tool R 282 281 000 (M222520/2-01) + Positioner	Ferrule *		
		a	b	c		Hex. dim. H	Standard crimp tools	MIL Crimp tool R 282 293 000 + Dies P/N
R114 073 000	M03	2.2	7.9	5.4		2.67	R 282 211 000	R 282 235 003
R114 073 134	M03	2.2	7.9	5.4				
R114 075 000	M03	2.2	7.9	5.4		3.25	R 282 211 000	R 282 235 003
R114 075 134	M03	2.2	7.9	5.4				
R114 081 020	M10	2.5	2.5	6				
R114 082 000	M10	2.5	3.1	5.4	R 282 983 000 (pos.3)	3.25	R 282 211 000	R 282 235 003
R114 082 020	M10	2.5	3.1	5.4				
R114 083 000	M10	2.5	3.1	5.4				
R114 083 020	M10	2.5	3.1	5.4				
R114 182 000	M06	1.5	2.7	5.4		3.25	R 282 211 000	R 282 235 003
R114 183 000	M06	1.5	2.7	5.4		2.67	R 282 211 000	R 282 235 003
R114 183 020	M06	1.5	2.7	5.4				
R114 183 430	M06	1.5	2.7	5.4				
R114 185 000	M06	1.5	2.5	4.5		3.25	R 282 211 000	R 282 235 003
R114 185 020	M06	1.5	2.5	4.5				
R114 186 000	M06	1.5	2.7	5.4				
R114 186 020	M06	1.5	2.7	5.4				
R114 186 420	M10	3	3	6	R 282 983 000 (pos.3)	3.25	R 282 211 000	R 282 235 003
R114 186 730	M06	1.5	2.7	5.4		3.25	R 282 211 000	R 282 235 003
R114 187 000	M09	3.5	4.5	8	R 282 983 000 (pos.2)	3.25	R 282 211 000	R 282 235 003
R114 187 020	M09	3.5	4.5	8	R 282 983 000 (pos.2)			
R114 188 000	M06	1.5	5.7	5.4		3.25	R 282 211 000	R 282 235 003
R114 191 130	M06	1.5	2.7	5.4		3.84	R 282 271 000	R 282 235 037
R114 191 200	M06	1.5	2.7	5.4		3.25	R 282 211 000	R 282 235 003
R114 191 300	M06	1.5	2.7	5.4		4.53	R 282 211 000	R 282 235 003
R114 192 420	M10	3	3.2	6.5	R 282 967 010 (pos.5)	5.4	R 282 223 000	R 282 235 011
R114 237 000	M03	2.2	7.9	5.4		2.67	R 282 211 000	R 282 235 003
R114 238 000	M10	2.5	3.1	5.4	R 282 983 000 (pos.3)	3.25	R 282 211 000	R 282 235 003
R114 238 120	M10	2.5	3.1	5.4				
R114 239 000	M03	2.2	7.9	5.4		3.25	R 282 211 000	R 282 235 003
R114 245 020	M10	2.5	3.1	5.4	R 282 983 000 (pos.3)	3.25	R 282 211 000	R 282 235 003
R114 311 000	M03	2.2	7.9	5.4		2.67	R 282 211 000	R 282 235 003
R114 312 000	M03	2.2	7.9	5.4		3.25	R 282 211 000	R 282 235 003
R114 313 000	M10	2.5	3.1	5.4	R 282 983 000 (pos.3)	3.25	R 282 211 000	R 282 235 003
R114 313 020	M10	2.5	3.1	5.4				
R114 315 000	M10	2.5	3	4.5				
R114 316 000	M03	2.2	7.9	5.4		3.25	R 282 211 000	R 282 235 003
R114 316 020	M03	2.2	7.9	5.4				
R114 373 020	M06	1.5	2.7	5.4		3.25	R 282 211 000	R 282 235 003
R114 373 120	M06	1.5	2.7	5.4		3.84	R 282 271 000	R 282 235 037
R116 311 000	M03	2.2	7.9	5.4		2.67	R 282 211 000	R 282 235 003
R116 312 000	M03	2.2	7.9	5.4		3.25	R 282 211 000	R 282 235 003
R116 372 000	M06	1.5	2.7	5.4		2.67	R 282 211 000	R 282 235 003
R116 373 000	M06	1.5	2.7	5.4		3.25	R 282 211 000	R 282 235 003

* To crimp the ferrule you can choose :
 - either one standard Crimp tool with included dies
 - or the MIL crimp tool and its separated dies

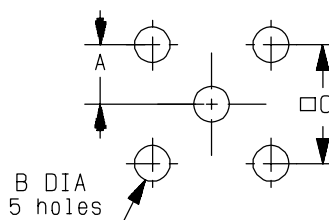


P01



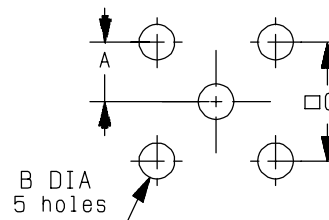
MM		
	maxi	mini
A	5	4.9
B	2.08	2.01

P02



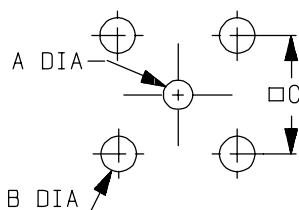
MM		
	maxi	mini
A	2.565	2.515
B	1.09	0.94
C	5.105	5.055

P03



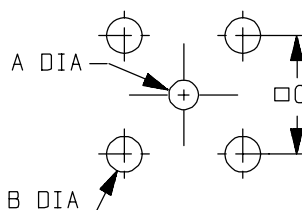
MM		
	maxi	mini
A	2.59	2.49
B	1.4	1.3
C	5.16	5

P04



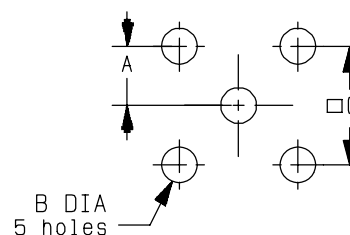
MM		
	maxi	mini
A	1.29	1.19
B	1.8	1.7
C	5.13	5.03

P05



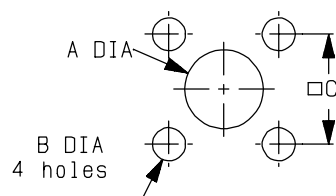
MM		
	maxi	mini
A	1.40	1.14
B	1.78	1.52
C	5.16	5

P06



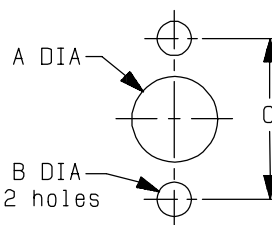
MM		
	maxi	mini
A	2.56	2.52
B	1.5	1.4
C	5.13	5.03

P07



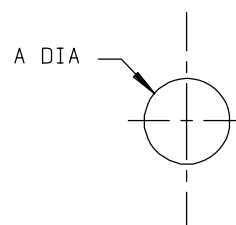
MM		
	maxi	mini
A	3.3	3.2
B	2.3	2.1
C	7.05	6.95

P08

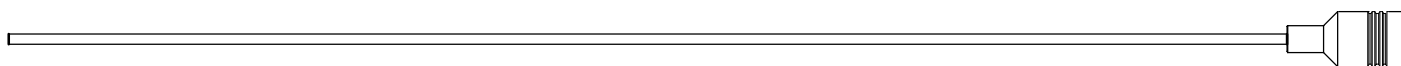


MM		
	maxi	mini
A	2.95	2.9
B	2.8	2.6
C	12.3	12.1

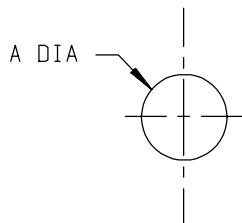
P09



MM		
	maxi	mini
A	6.45	6.05

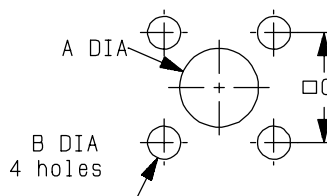


P10



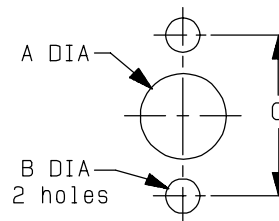
MM		
	maxi	mini
A	9.7	9.6

P14



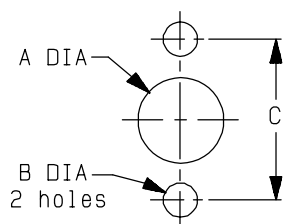
MM		
	maxi	mini
A	2.95	2.9
B	2.8	2.6
C	8.69	8.59

P15



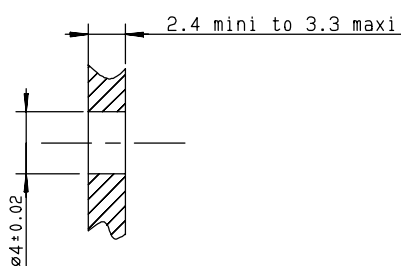
MM		
	maxi	mini
A	3.25	3.2
B	2.4	2.2
C	9.95	9.85

P16

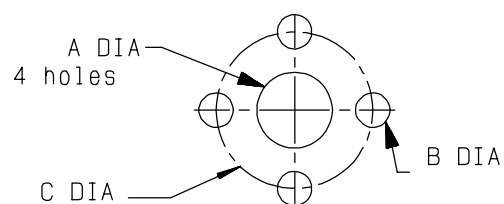


MM		
	maxi	mini
A	2.3	2.15
B	3.2	3.05
C	14.4	14

P17

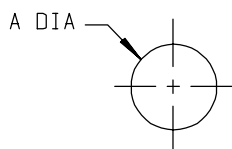


P18



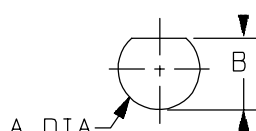
	MM		INCH	
	maxi	mini	maxi	mini
A	3.85	3.75	0.152	0.148
B	1.8	1.7	0.071	0.067
C	8.5	-	0.334	-

P19



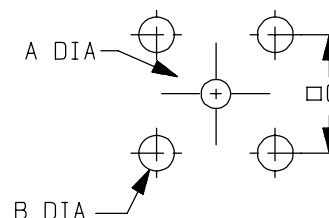
MM		
	maxi	mini
A	5.05	4.95

P20



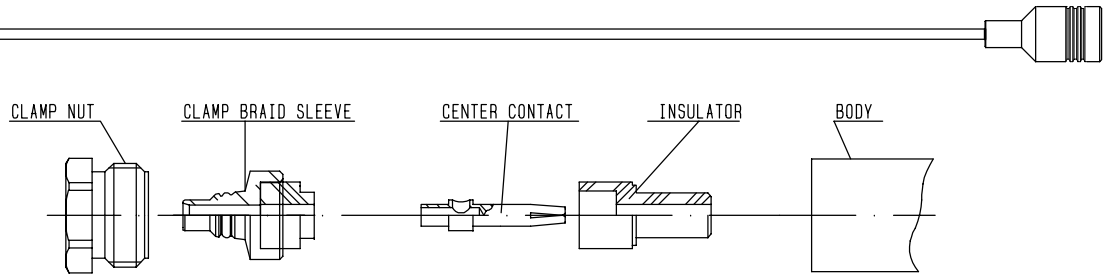
MM		
	maxi	mini
A	7.3	7.2
B	6.5	6.4

P21



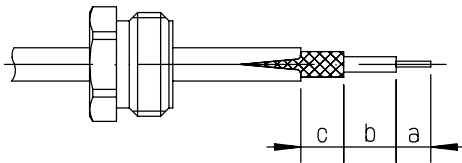
MM		
	maxi	mini
A	1.29	1.19
B	2	1.8
C	5.16	5

M 01



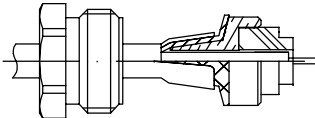
P/N	STRIPPING DIM.			RECOMMENDED COUPLING TORQUE
	a	b	c	
R114 003 020	2	1	1	70 N.cm
R114 003 133				
R114 005 133				
R114 005 180				
R114 203 133				
R114 205 133				
R114 303 133				
R114 305 133				
R116 003 900				
R116 303 330				

1



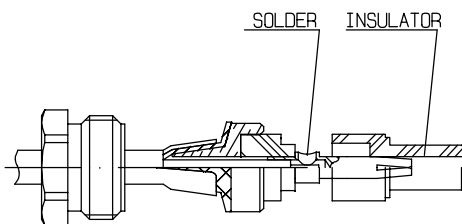
- 1.1 Slide the clamp nut onto the cable
- 1.2 Strip the cable.
- 1.3 Cut 2 slots in the sheath 180° appart longitudinally.

2



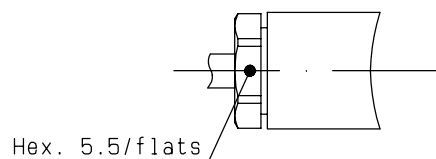
- 2.1 Slide the clamp braid sleeve between the cable dielectric and the braid.
- 2.2 Cut the braid flush with the clamp braid sleeve.

3



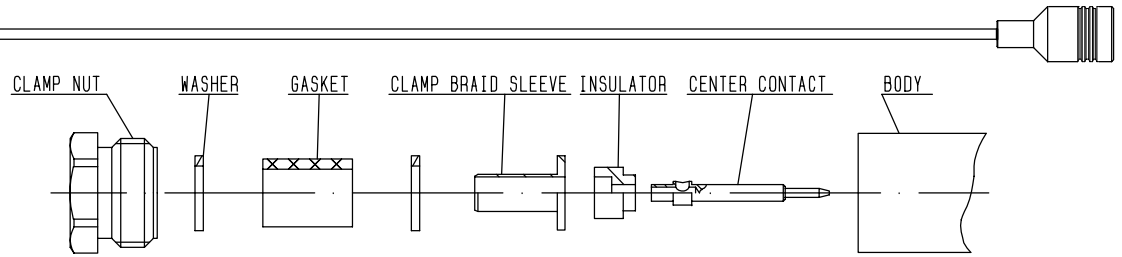
- 3.1 Solder the center contact onto the cable center conductor.
- 3.2 Mount the insulator.
- 3.3 Slide the back nut over the clamp assembly.

4



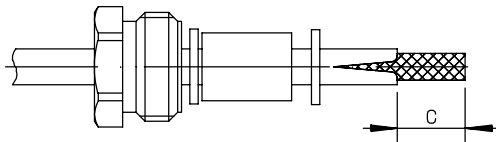
- 4.1 Screw the sub-assembly into the conductor body.

M 02



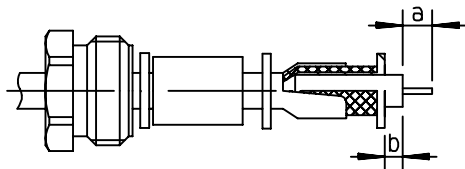
P/N	STRIPPING DIM.			RECOMMENDED COUPLING TORQUE
	a	b	c	
R114 003 000	2.5	1.2	4.5	40 N.cm
R114 005 000				150 N.cm
R114 009 000				40 N.cm
R114 203 000	2.5	1.2	4.5	40 N.cm
R114 205 000				
R114 303 000				
R114 305 000				

1



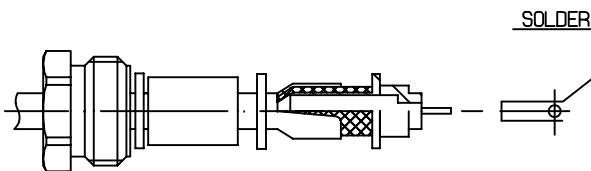
- 1.1 Slide the clamp nut, first washer, gasket, and the second washer onto the cable.
- 1.2 Strip the cable.
- 1.3 Cut 2 slots in the jacket if necessary.

2



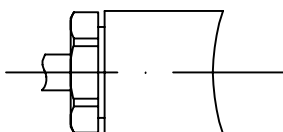
- 2.1 Slide the clamp braid sleeve between the cable dielectric and braid.
- 2.2 Cut the braid flush with the clamp braid sleeve.

3



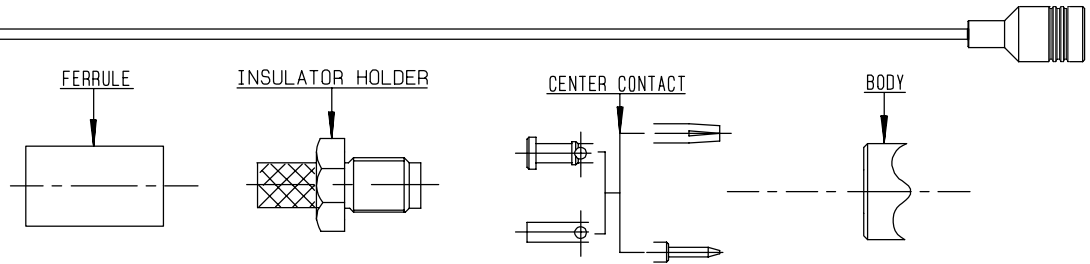
- 3.1 Slide the first insulator onto the cable.
- 3.2 Solder the center contact onto the cable center conductor.
- 3.3 Mount the second insulator.

4

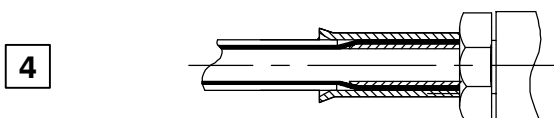
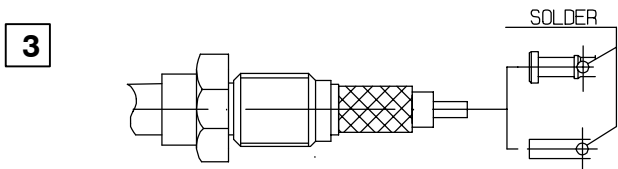
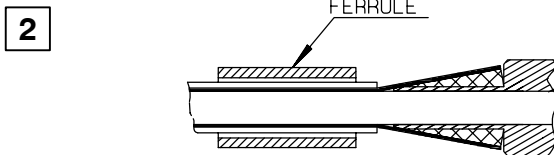
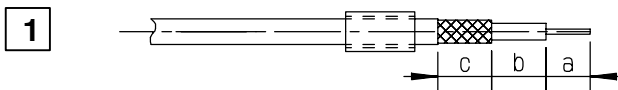


- 4.1 Screw the sub-assembly into the conductor body.

M 03



P/N	STRIPPING DIM.			HEX. DIM. H	DIES INCLUDED	CRIMP TOOLS MIL STANDARD R282 293 000 (M22520/5-01)+DIES	RECOMMENDED COUPLING TORQUE
	a	b	c				
R114 073 000	2.2	7.9	5.4	2.67	R282 211 000	R282 235 003 (M22520/5-03)	40 N.cm
R114 073 134				2.67			70 N.cm
R114 075 000				3.25			40 N.cm
R114 075 134				3.25			70 N.cm
R114 237 000				2.67			
R114 239 000				3.25			
R114 311 000				2.67			
R114 312 000				3.25			
R114 316 000				3.25			
R114 316 020				3.25			
R116 311 000				2.67			
R116 312 000				3.25			



1.1 Slide the ferrule onto the cable.

1.2 Strip the cable.

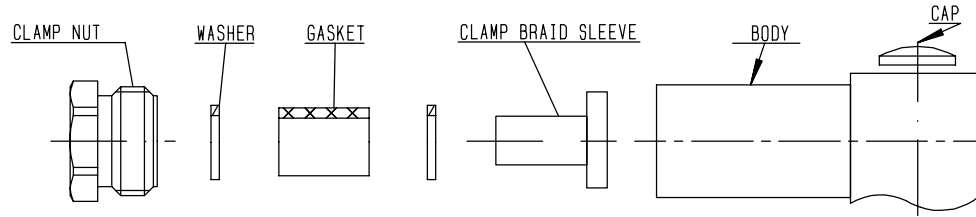
2.1 Mount the insulator holder on the cable.

2.2 Crimp the ferrule.

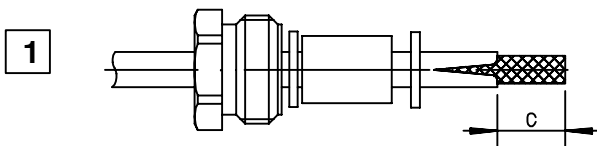
3.1 Solder the cable core into the center contact.

4.1 Mount the cable assembly into the connector body and screw.

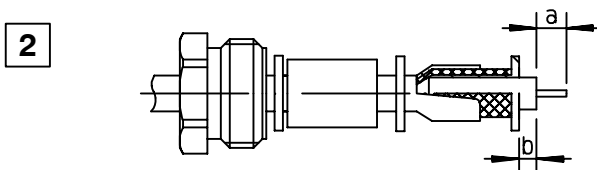
M 04



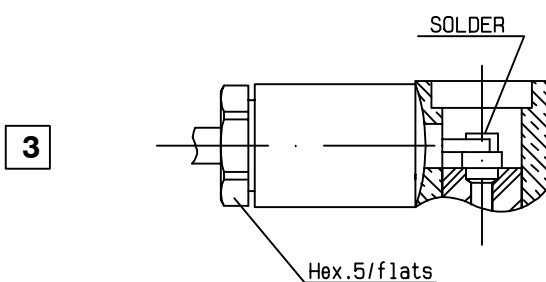
P/N	STRIPPING DIM.			RECOMMENDED COUPLING TORQUE
	a	b	c	
R114 163 000	1.5	2	4	40 N.cm
R114 165 000				



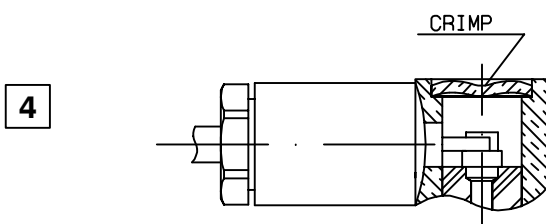
- 1.1 Slide the clamp nut, first washer, gasket, and the second washer onto the cable.
- 1.2 Strip the cable.
- 1.3 Cut 2 slots in the jacket if necessary.



- 2.1 Slide the clamp braid sleeve between the cable dielectric and braid.
- 2.2 Cut the braid flush with the clamp braid sleeve.

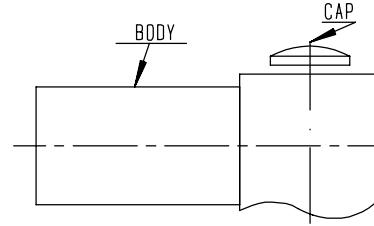
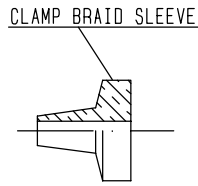
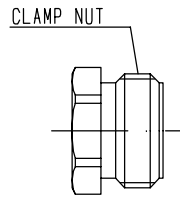


- 3.1 Screw the sub-assembly into the conductor body.
- 3.2 Solder the cable inner conductor.

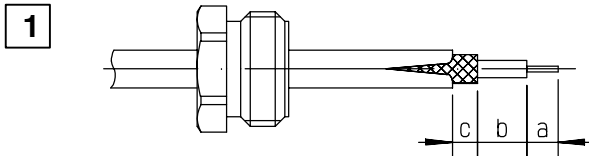


- 4.1 Press the cap flush or slightly below surface of body assembly.

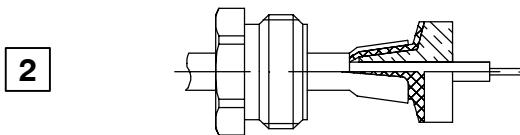
M 05



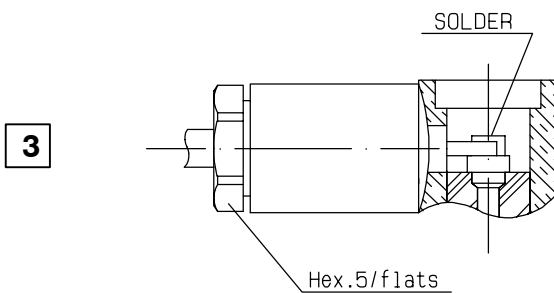
P/N	STRIPPING DIM.			RECOMMENDED COUPLING TORQUE
	a	b	c	
R114 163 020 R114 163 133 R114 165 133	2	4	1	70 N.cm



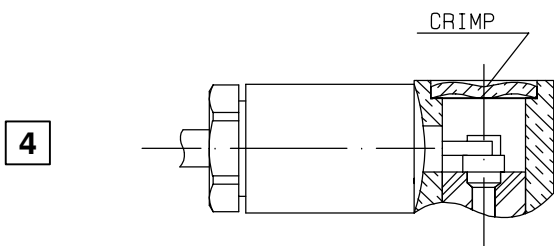
- 1.1 Slide the clamp nut onto the cable.
- 1.2 Strip the cable.
- 1.3 Cut 2 slots in the jacket if necessary.



- 2.1 Slide the clamp braid sleeve between the cable dielectric and braid.
- 2.2 Cut the braid flush with the clamp braid sleeve.

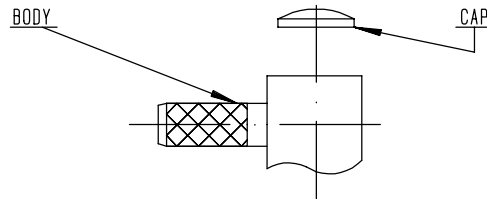
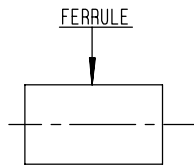


- 3.1 Screw the sub-assembly into the conductor body.
- 3.2 Solder the cable inner conductor.

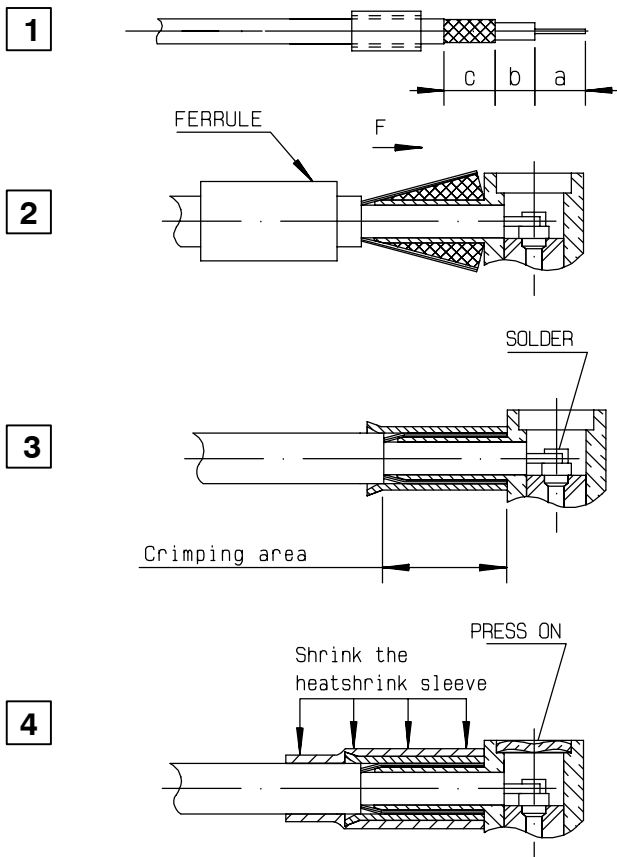


- 4.1 Press the cap flush or slightly below surface of body assembly.

M 06



P/N	STRIPPING DIM.			HEX. DIM. H	CRIMP TOOLS			
	a	b	c		DIES INCLUDED	MIL STANDARD R282 293 000 (M22520/5-01)+DIES		
R114 182 000	1.5	2.7	5.4	3.25	R282 211 000	R282 235 003 (M22520/5-03)		
R114 183 000				2.67				
R114 183 020								
R114 183 430				3.25				
R114 185 000	1.5	2.5	4.5					
R114 185 020								
R114 186 000	1.5	2.7	5.4				3.25	R282 211 000
R114 186 020								
R114 186 730								
R114 191 130				3.84				
R114 191 300				4.53	R282 211 000	R282 235 009 (M22520/5-09)		
R114 373 020				3.25		R282 235 003 (M22520/5-03)		
R114 373 120				3.84		R282 271 000	R282 235 037 (M22520/5-37)	
R116 372 000				2.67	R282 211 000	R282 235 003 (M22520/5-03)		
R116 373 000							3.25	



1.1 Slide the ferrule onto the cable.

1.2 Strip the cable.

2.1 Fan the braid

2.2 Push the connector body under the braid.

2.3 Slide the ferrule over the braid (in direction F).

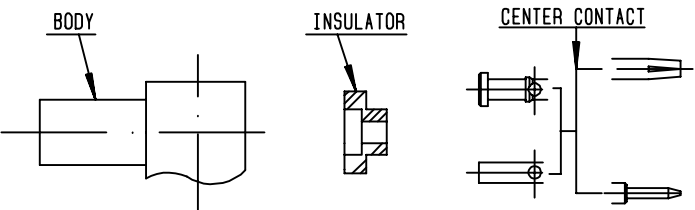
3.1 Crimp the ferrule.

3.2 Solder the inner conductor.

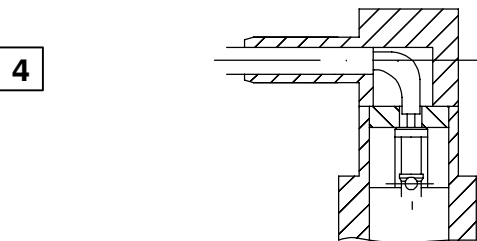
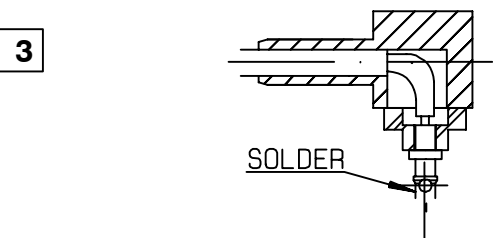
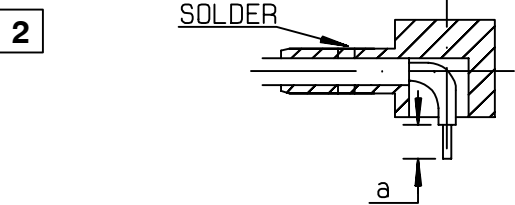
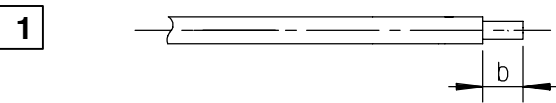
4.1 Press the cap into the body.

4.2 Press the cap flush or slightly below surface of body assembly.

M 07

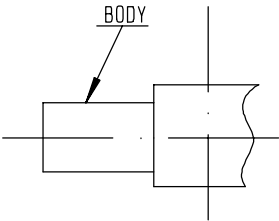
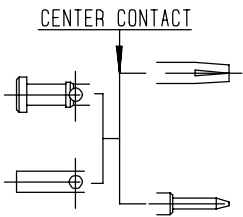


P/N	STRIPPING DIM.		RECOMMENDED COUPLING TORQUE
	a	b	
R114 169 000	2.5	7-8	70 N.cm

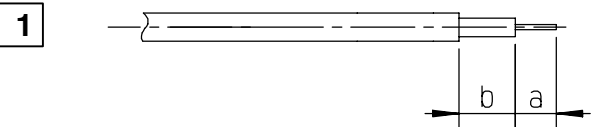


- 1.1 Strip the outer conductor.
- 2.1 Push the cable through the main housing.
2.2 Solder the body onto the semi-rigid.
2.3 Cut back the dielectric.
- 3.1 Fit the rear insulator.
3.2 Solder the contact ensuring that the contact has been pushed home into the rear insulator.
- 4.1 Fit the front insulator.
4.2 Fit the front body onto the sub-assembly.

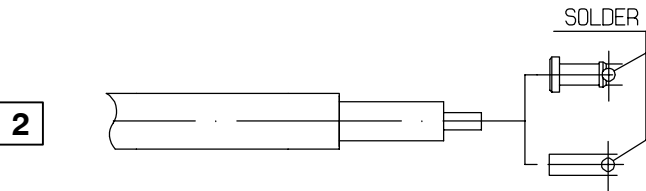
M 08



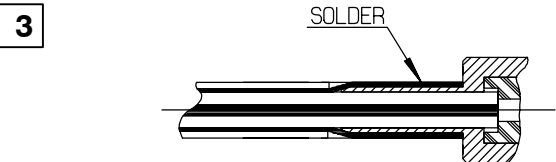
P/N	STRIPPING DIM.	
	a	b
R114 053 000	2	1
R114 222 000	3	2
R116 056 000	2	1



1.1 Strip off the outer conductor and the dielectric.

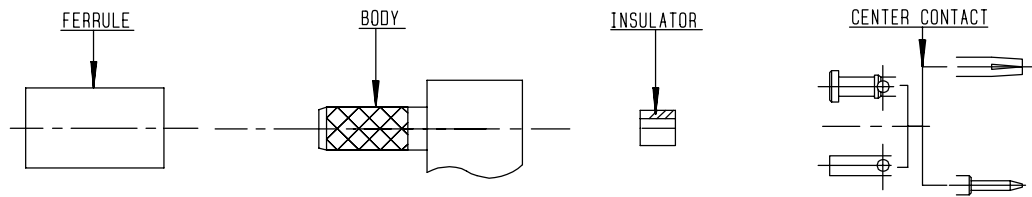


2.1 Solder the center contact.

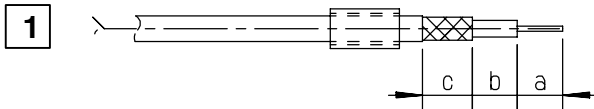


3.1 Put the assembly into the body.
3.2 Solder the cable on the body.

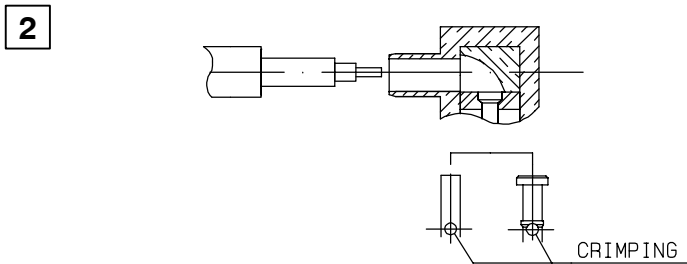
M 09



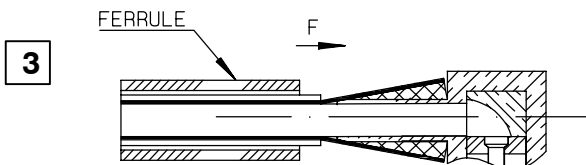
P/N	STRIPPING DIM.			HEX. DIM. H	FERRULE CRIMP TOOL		CENTER CONTACT CRIMP TOOL
	a	b	c		DIES INCLUDED	MIL STANDARD R282 293 000 (M22520/5-01)+POSITIONER	MIL STANDARD R282 281 000 (M22520/2-01)+POSITIONER
R114 187 000 R114 187 020	3.5	4.5	8	3.25	R282 211 000	R282 235 003	R282 983 000 (position 2)



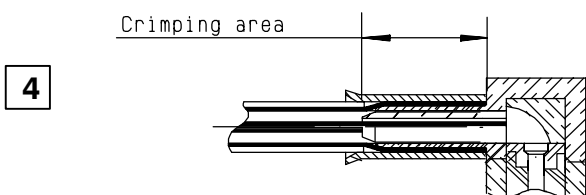
- 1.1 Slide the ferrule nut onto cable.
1.2 Strip the cable.



- 2.1 Push the cable into the body of the connector, the jacket must be against the sleeve.
2.2 Mount the insulator.
2.3 Crimp the center contact against the insulator. 2x4 points crimping.

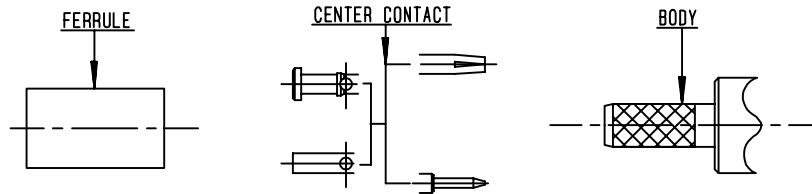


- 3.1 Remove the cable to put the insulator abutment the half-body.

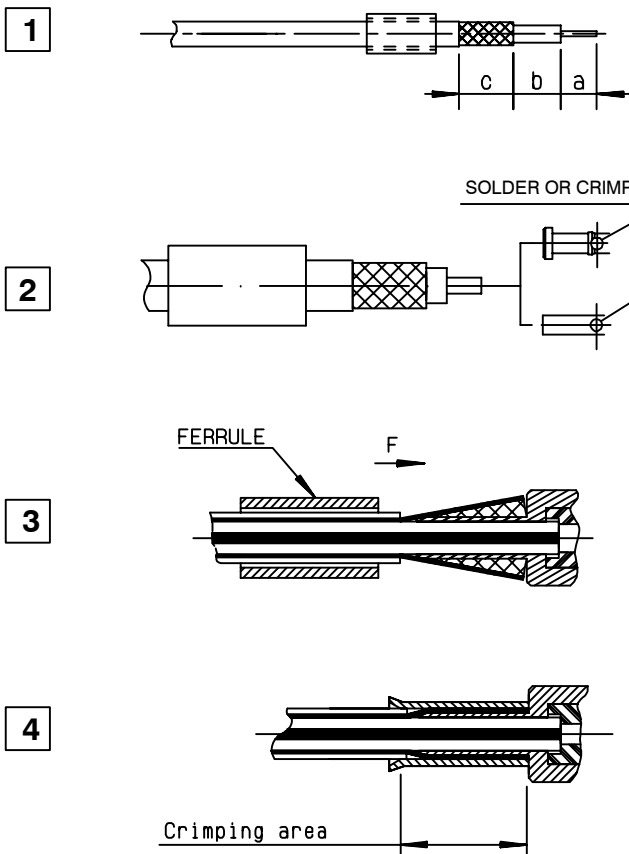


- 4.1 Crimp the ferrule.
4.2 Mount the front insulator on the center contact.
4.3 Screw the front body into the cable assembly.

M 10

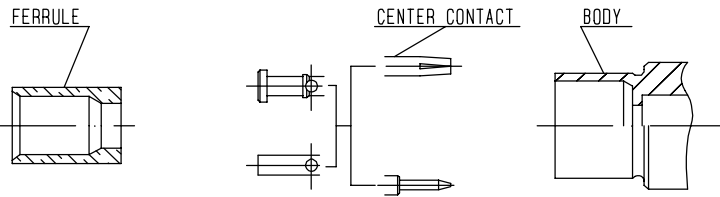


P/N	STRIPPING DIM.			HEX. DIM. H	FERRULE CRIMP TOOL		CENTER CONTACT CRIMP TOOL
	a	b	c		DIES INCLUDED	MIL STANDARD R282 293 000 (M22520/5-01)+POSITIONER	MIL STANDARD R282 281 000 (M22520/2-01)+POSITIONER
R114 081 020	2.5	2.5	6	3.25	R282 211 000	R282 235 003 (M22520/5-03)	R282 983 000 (position 3) for 50 Ω cables (position 1) for 75 Ω cables
R114 082 000	2.5	3.1	5.4				
R114 082 020	2.5	3.1	5.4				
R114 083 000 R114 083 020	2.5	3.1	5.4				
R114 186 420	3	3	6	3.25	R282 211 000	R282 235 011 (M22520/5-11)	R282 967 010 (position 5)
R114 192 420	3	3.2	6.5	5.4	R282 223 000		
R114 238 000 R114 238 120	2.5	3.1	5.4	3.25	R282 211 000	R282 235 003 (M22520/5-03)	R282 983 000 (position 3) for 50 Ω cables (position 1) for 75 Ω cables
R114 245 020							
R114 313 000							
R114 313 020 R114 315 000	2.5	3	4.5				



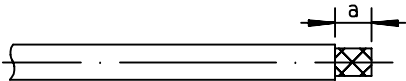
- 1.1 Slide the ferrule nut onto the cable.
- 1.2 Strip the cable.
- 2.1 Slide center contact on until it bottoms against cable dielectric.
- 2.2 Solder center contact or crimp.
- 3.1 Fan the braid.
- 3.2 Slide the cable into the body until it bottoms against insulator.
- 3.3 Slide the ferrule over the braid. (In direction F)
- 4.1 Crimp the ferrule.
- 4.2 Cut the exees of braid if necessary.

M 11



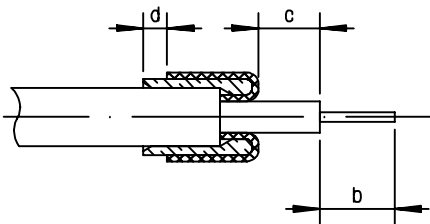
P/N	STRIPPING DIM.				HEX. DIM. H	FERRULE CRIMP TOOL	CENTER CONTACT CRIMP TOOL
	a	b	c	d		MIL STANDARD R282 240 000 (M22520/5-01)+POSITIONER	MIL STANDARD R282 281 000 (M22520/2-01)+POSITIONER
R114 015 000	6	2.5	1.5	1.5	4.5	R282 241 000	R282 983 000

1



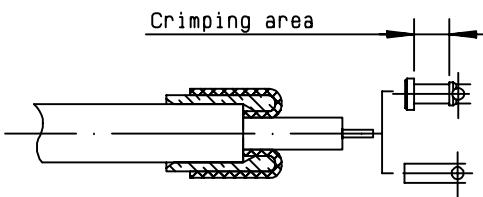
1.1 Strip the cable.

2



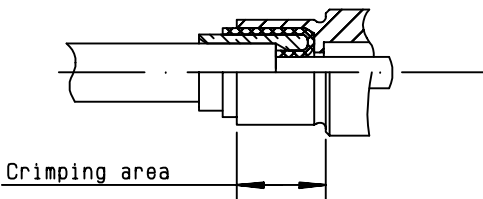
- 2.1 Slide the ferrule onto the cable until it bottoms against jacket.
- 2.2 Fold braid back and trim off the extra braid.
- 2.3 Trim the inner conductor as shown.

3



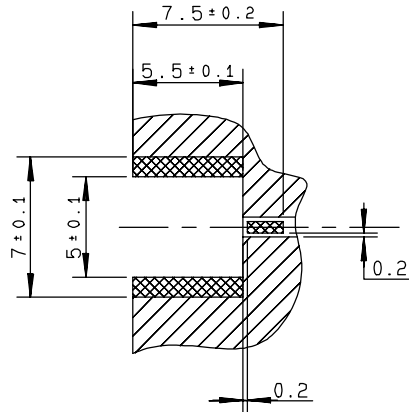
- 3.1 Slide center contact on until it bottoms against cable dielectric.
- 3.2 Crimp center contact.

4

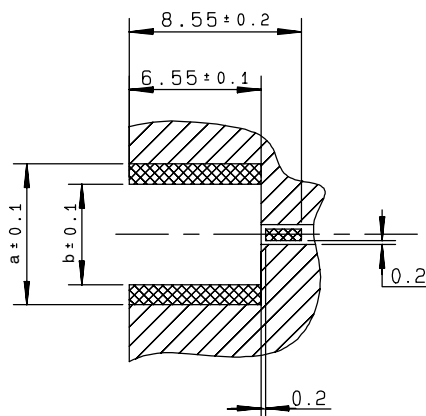


- 4.1 Slide the sub-assembly into the connector body.
- 4.2 Crimp the body.

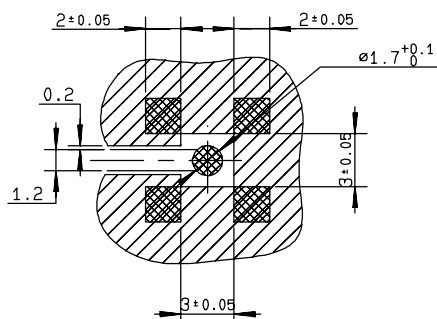
M 12



Connectors	R114 423 000 R114 423 810 R114 423 820
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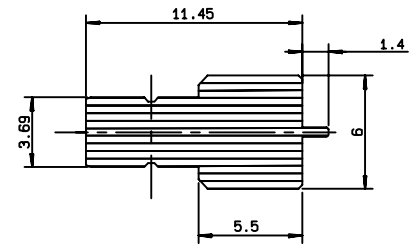


Connectors	dim. a	dim. b
R114 423 800	7	5
R114 444 800	9	6.65

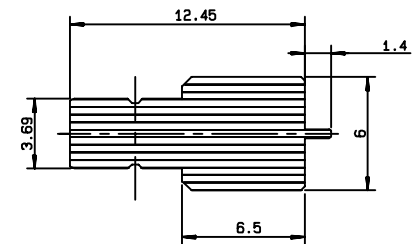


Connectors	R114 424 000 R114 424 100 R114 424 120 R114 664 000
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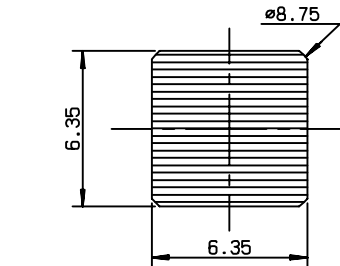
Video shadow:
R114 423 000
R114 423 810
R114 423 820



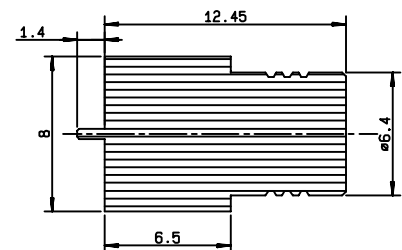
Video shadow:
R114 423 800



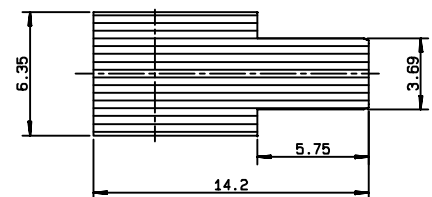
Video shadow:
R114 424 000
R114 424 100
R114 424 120



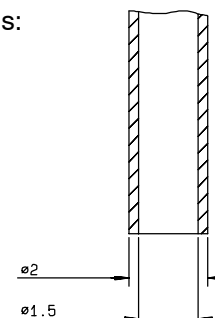
Video shadow:
R114 444 800

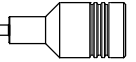


Video shadow:
R114 664 000



Vaccum nozzle dimensions:
R114 424 000





M12 (flg)

A - SOLDERING PROCEDURE USING AUTOMATIC PICK AND PLACE EQUIPMENT:

1) Solder paste:

- RADIALL recommends using a **solder paste Sn63-Pb35-Ag2 type** (63% tin – 35% lead – 2% silver) “**no clean – low residue**” (5% solid residue of flux quantity) that will permit the **elimination of the cleaning operation step** after soldering.
- When using a conventional solder paste with high level (50%) of flux solid residue, it is important to incorporate a good cleaning operation step, similar to what is described below in paragraph 5.
- Note: when choosing a solder paste for gold-plated PCB pattern, it is important to use a paste made with silver. This will help to avoid formation of intermetallics as part of the solder joint.

2) Solder paste deposition:

- The solder paste should be deposited on the designated zone areas (see patterns p56) by a screen printing process. RADIALL advises a thickness of .008” (0.2 mm).
- If using a thickness of less than .008” (0.2 mm) the zone area must be specifically designed for this thickness (please consult RADIALL).
- Please optically verify that the edges of the zone are clean and without contaminates.

3) Placement of the component:

- Place the receptacle onto the PCB with automatic pick and place equipment. Please verify that the PCB zoned areas have not oxidised.
- Various types of suction can be used (see vacuum nozzle dimensions, p56).
- RADIALL does not recommend using adhesive agents on the receptacle or on the PCB.
- The use of a video camera is preferred for checking the positioning of the components (see video shadow, p56).

4) Soldering: infra-red reflow process:

- Please follow RADIALL’s recommended profile as illustrated.
- When using a “no clean – low residue” type of solder paste, RADIALL recommends a linear pre-heat profile not to exceed 160°C with a 1 to 2°C/s. rise.

5) Cleaning of the PCB:

- When using a conventional solder paste with high level of residue, please clean the PCB with a substitute product, similar to CFC, that complies with International Environmental Agency rules.
- RADIALL recommends using a vapor phase process (ultrasonic waves are acceptable).

6) Quality check:

- Verify by visual inspection that center contact of the receptacle has not been contaminated by solder or flux..
- Solder joints: verify by visual inspection that the formation of meniscus on the sides of the receptacle legs are proper.

B - SOLDERING PROCEDURE BY MANUAL OPERATION:

1) Solder paste: (Refer to procedure A – 1)

2) Flux deposition:

- Deposit a thin layer of flux on mounting zone.
- Allow the flux to evaporate a few seconds before applying the solder paste (in order to avoid dilution of the paste).

3) Solder paste deposition:

- Deposit a small quantity of solder paste on mounting zone area by syringe.
- Be careful, do not apply solder paste outside of the zone area.

4) Placement of the component:

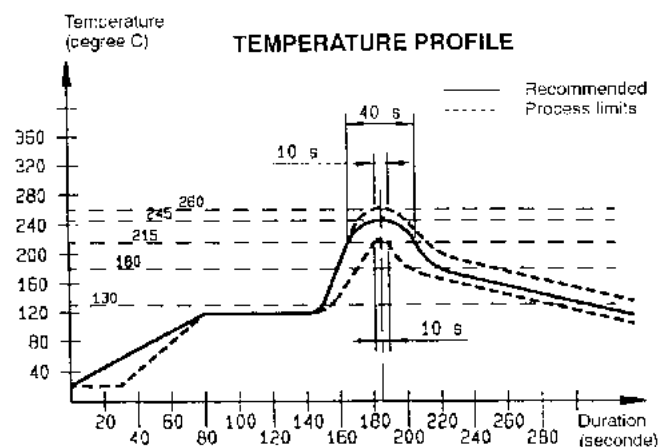
- Lift the body of the receptacle with tweezers. Do not use your fingers (fingers risk twisting the legs of the receptacle or ejecting the center contact and can contaminate contact surfaces).
- Place the component on the mounting zone by pressing lightly on the top of the receptacle with tweezers. The receptacle legs will stick into the solder paste.

5) Soldering:

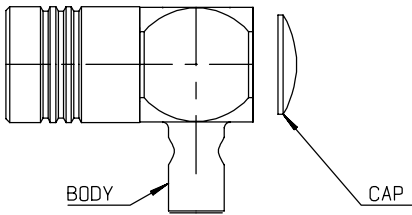
- Pre-heat stage: use a heat gun (soldering iron is not recommended) at a distance of .800” (20 mm) from the receptacle, applying the jet of air in a continuous circular motion, until the solder paste starts to look dull. this stage avoids any thermal shock since both areas to be soldered are brought up to the same temperature.
- Final re-melting step is carried out by moving the heat gun to a closer distance of .200” (5 mm) from the receptacle while guiding the jet of air onto each receptacle leg, at a 45° angle.

6) Cleaning of the PCB: (Refer to procedure A – 5)

7) Quality check: (Refer to procedure A – 6)

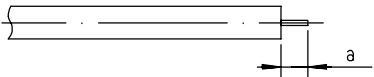


M 13

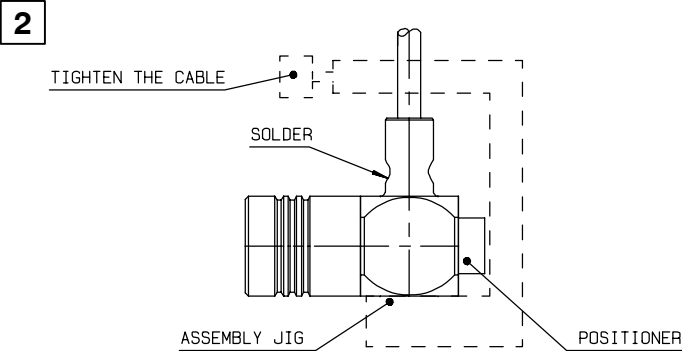


P/N	STRIPPING DIM. a	STRIPPING TOOL	TRIMMER (3.17 mm)	ASSEMBLY JIG	POSITIONER 2
R114 152 000	2.3	R282 051 000	R282 063 000	R282 740 000	R282 744 210

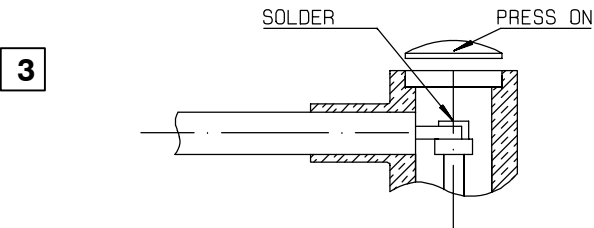
1 We recommend a thermal preconditionning cable .



- 1.1 Strip the cable.
- 1.2 Cut manually the inner conductor at 2.3 mm.



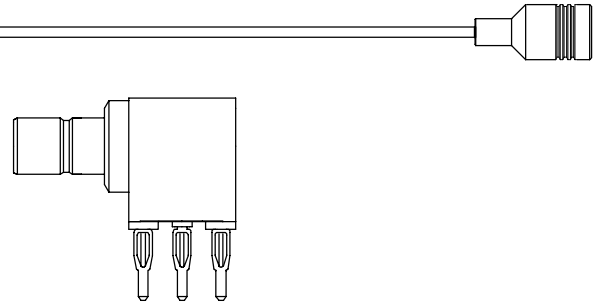
- 2.1 Mount the cable into the body.
- 2.2 Mount the positioner.
- 2.3 Place the sub-assembly into the assembly jig.
- 2.4 Solder body onto the cable.
- 2.5 Let the assembly cool down before removing it from the jig.



- 3.1 Solder the center contact.
- 3.2 Press on the cap.

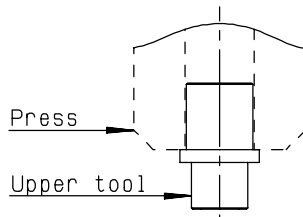
M 15

Insertion procedure



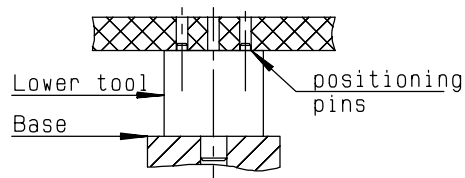
P/N	UPPER TOOL	LOWER TOOL
R114 661 020	R282 878 500	R282 878 523

1



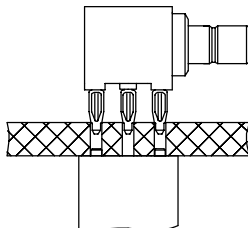
- 1.1 Slide the upper tool (look at upper tool board) into the machine (press) or the flat tool.

2



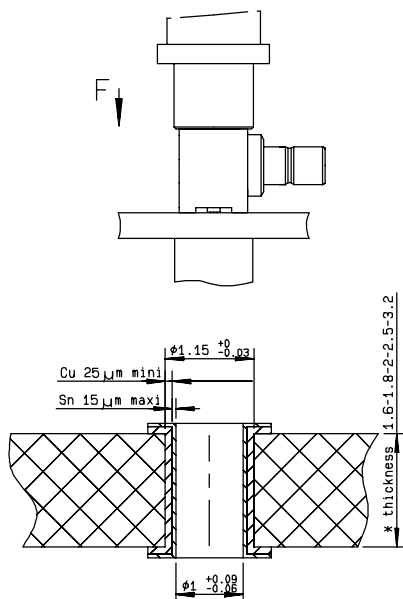
- 2.1 Slide the lower tool into the base and place correctly the PCB on this tool (positioning pins).

3



- 3.1 Place correctly the right angle connector with press-fit termination on the PCB and introduce the press-fit extremity in the holes of the PCB.

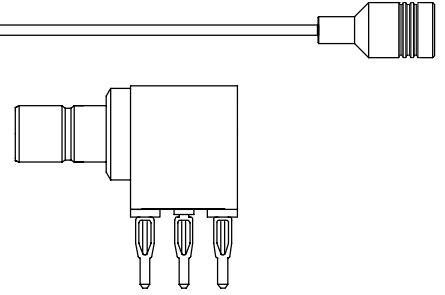
4



- 4.1 Push on the top (about 500 N) until total insertion (in direction F). (Push connector body until it bottoms against PCB). Remove the connector and the PCB assembly.

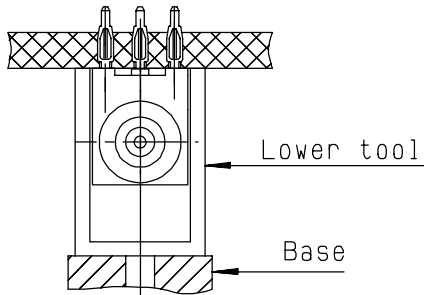
PC BOARD MATERIAL	GLASS FIBRE EPOXYD NEMA : G10, G11, FR4, FR5 DIN 40802 : EP-GC 01, EP-GC 02
HOLE	FOR 1mm COMPLIANT PIN

M15 (flg) Extraction procedure



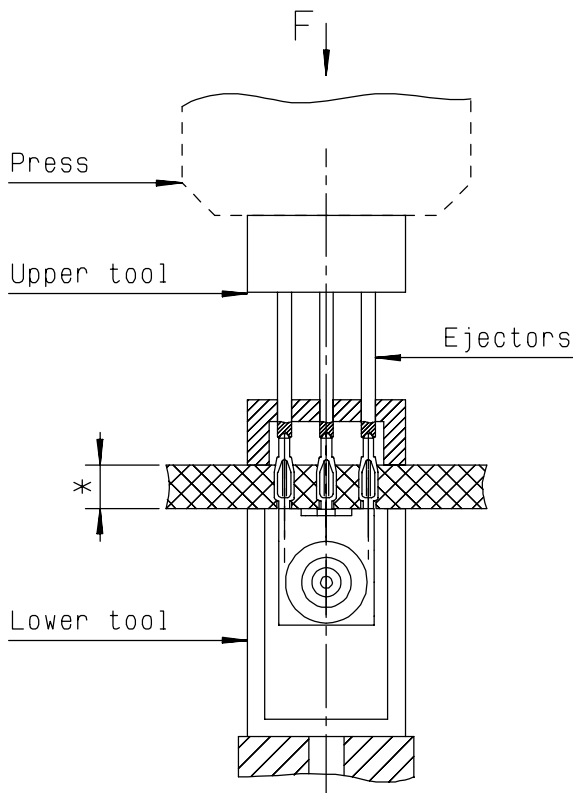
P/N	UPPER TOOL	LOWER TOOL
R114 661 020	R282 878 513	R282 878 533

1



1.1 Place correctly the PCB and the connector on lower tool.

2



2.1 Place the upper tool at the back of the connector and place correctly the ejectors :

- on Press-fit pins (if PCB thickness < 4.5mm)
- in the holes of the PCB (if PCB thickness > 4.5mm)

2.2 Press the back of the upper tool to remove the connector (about 500 N) into the connector slide down onto lower tool.

CAUTION !

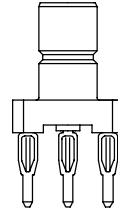
It's impossible to use a COAXIPRESS a twice.

A plated hole of the PCB can't be used over 3 times.

* panel thickness : 1.6 to 7mm

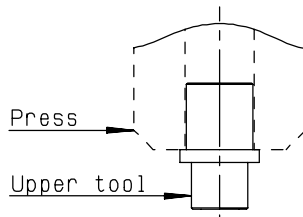
M 16

Insertion procedure



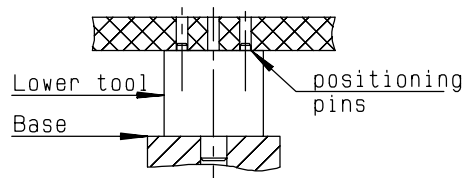
P/N	UPPER TOOL	LOWER TOOL
R114 416 000 R114 416 020	R282 878 150	R282 878 150

1



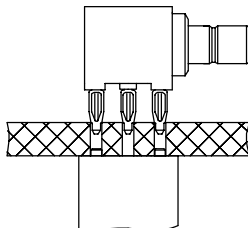
- 1.1 Slide the upper tool (look at upper tool board) into the machine (press) or the flat tool.

2



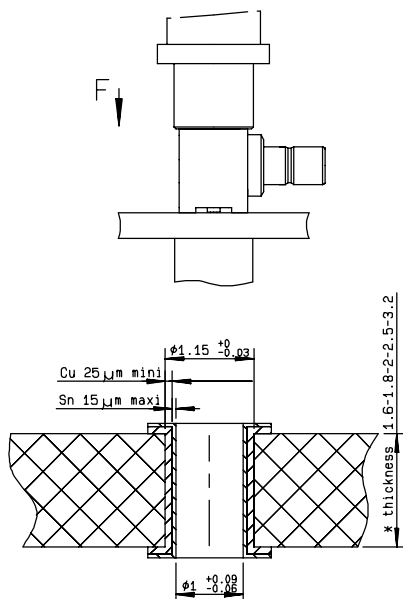
- 2.1 Slide the lower tool into the base and place correctly the PCB on this tool (positioning pins).

3



- 3.1 Place correctly the right angle connector with press-fit termination on the PCB and introduce the press-fit extremity in the holes of the PCB.

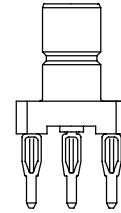
4



- 4.1 Push on the top (about 500 N) until total insertion (in direction F). (Push connector body until it bottoms against PCB). Remove the connector and the PCB assembly.

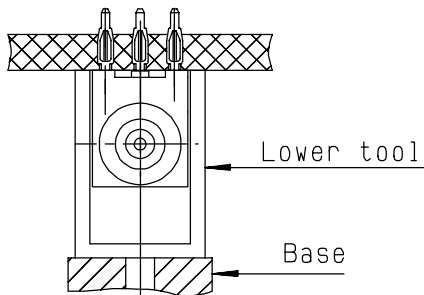
PC BOARD MATERIAL	GLASS FIBRE EPOXYD NEMA : G10, G11, FR4, FR5 DIN 40802 : EP-GC 01, EP-GC 02
HOLE	FOR 1mm COMPLIANT PIN

M16 (flg) Extraction procedure



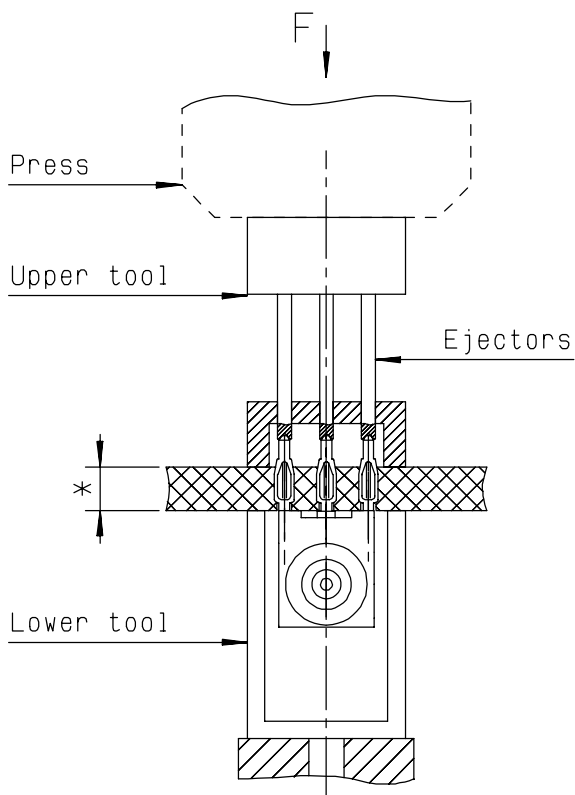
P/N	UPPER TOOL	LOWER TOOL
R114 416 020	R282 878 513	R282 878 533

1



1.1 Place correctly the PCB and the connector on lower tool.

2



2.1 Place the upper tool at the back of the connector and place correctly the ejectors :

- on Press-fit pins (if PCB thickness < 4.5mm)
- in the holes of the PCB (if PCB thickness > 4.5mm)

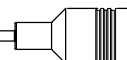
2.2 Press the back of the upper tool to remove the connector (about 500 N) into the connector slide down onto lower tool.

CAUTION !

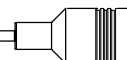
It's impossible to use a COAXIPRESS a twice.

A plated hole of the PCB can't be used over 3 times.

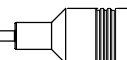
* panel thickness : 1.6 to 7mm



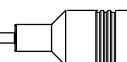
Part number	Description	Page
R114 003 000-----	Straight plug clamp type for 2/50/S -----	13
R114 003 020-----	Straight plug clamp type for 2/50/S -----	13
R114 003 133-----	Straight plug clamp type for 2/50/S -----	13
R114 005 000-----	Straight plug clamp type for 2,6/50+75/S -----	13
R114 005 133-----	Straight plug clamp type for 2,6/50+75/S -----	13
R114 005 180-----	Straight plug clamp type for 2,6/50+75/S (MIL standard) -----	25
R114 009 000-----	Straight plug clamp type for 3,8/95/S -----	13
R114 015 000-----	Straight plug crimp type for 2,6/50/S-----	13
R114 053 000-----	Straight plug solder type for .085 cable -----	14
R114 073 000-----	Straight plug crimp type for 2/50/S -----	13
R114 073 134-----	Straight plug crimp type for 2/50/S -----	13
R114 075 000-----	Straight plug crimp type for 2,6/50+75/S -----	13
R114 075 134-----	Straight plug crimp type for 2,6/50+75/S -----	13
R114 081 020-----	Straight plug crimp type for 2/50/S -----	13
R114 082 000-----	Straight plug crimp type for 2,6/50+75/S -----	13
R114 082 020-----	Straight plug crimp type for 2,6/50+75/S -----	13
R114 083 000-----	Straight plug crimp type for 2,6/50/D -----	13
R114 083 020-----	Straight plug crimp type for 2,6/50/D -----	13
R114 152 000-----	Right angle plug solder type for .085 cable -----	15
R114 163 000-----	Right angle plug clamp type for 2/50/S-----	15
R114 163 133-----	Right angle plug clamp type for 2/50/S-----	15
R114 163 180-----	Right angle plug clamp type for 2/50/S (MIL standard) -----	25
R114 165 000-----	Right angle plug clamp type for 2,6/50+75/S -----	15
R114 165 133-----	Right angle plug clamp type for 2,6/50+75/S -----	15
R114 165 180-----	Right angle plug clamp type for 2,6/50+75/S (MIL standard) -----	25
R114 169 000-----	Right angle plug solder type for .085 cable -----	15
R114 182 000-----	Right angle plug crimp type for 2,6/50/D -----	14
R114 183 000-----	Right angle plug crimp type for 2/50/S -----	14
R114 183 020-----	Right angle plug crimp type for 2/50/S -----	14
R114 183 430-----	Right angle plug crimp type for 2/50/S -----	14
R114 185 000-----	Right angle plug crimp type for 2,6/50+75/S -----	14
R114 185 020-----	Right angle plug crimp type for 2,6/50+75/S -----	14
R114 186 000-----	Right angle plug crimp type for 2,6/50+75/S -----	14
R114 186 020-----	Right angle plug crimp type for 2,6/50+75/S -----	14
R114 186 420-----	Right angle plug crimp type for 2,6/50+75/S -----	14
R114 186 730-----	Right angle plug crimp type for 2,6/50+75/S -----	14
R114 187 000-----	Right angle plug crimp type for 2,6/50+75/S -----	14
R114 187 020-----	Right angle plug crimp type for 2,6/50+75/S -----	14
R114 191 130-----	Right angle plug crimp type for 3/50/D -----	14
R114 191 300-----	Right angle plug crimp type for 3,6/75/D -----	14
R114 192 420-----	Right angle plug crimp type for 5/50/S -----	14
R114 203 000-----	Straight jack clamp type for 2/50/S -----	16
R114 203 133-----	Straight jack clamp type for 2/50/S -----	16
R114 205 000-----	Straight jack clamp type for 2,6/50+75/S -----	16
R114 205 133-----	Straight jack clamp type for 2,6/50+75/S -----	16
R114 222 000-----	Bulkhead jack solder type for .085 cable -----	18
R114 237 000-----	Straight jack crimp type for 2/50/S -----	16
R114 238 000-----	Straight jack crimp type for 2,6/50+75/S -----	16
R114 238 120-----	Straight jack crimp type for 2,6/50+75/S -----	16
R114 239 000-----	Straight jack crimp type for 2,6/50+75/S -----	16
R114 245 020-----	Straight jack crimp type for 2,6/50/D cable -----	16
R114 303 000-----	Straight bulkhead jack clamp type for 2/50/S-----	17
R114 303 133-----	Straight bulkhead jack clamp type for 2/50/S-----	17



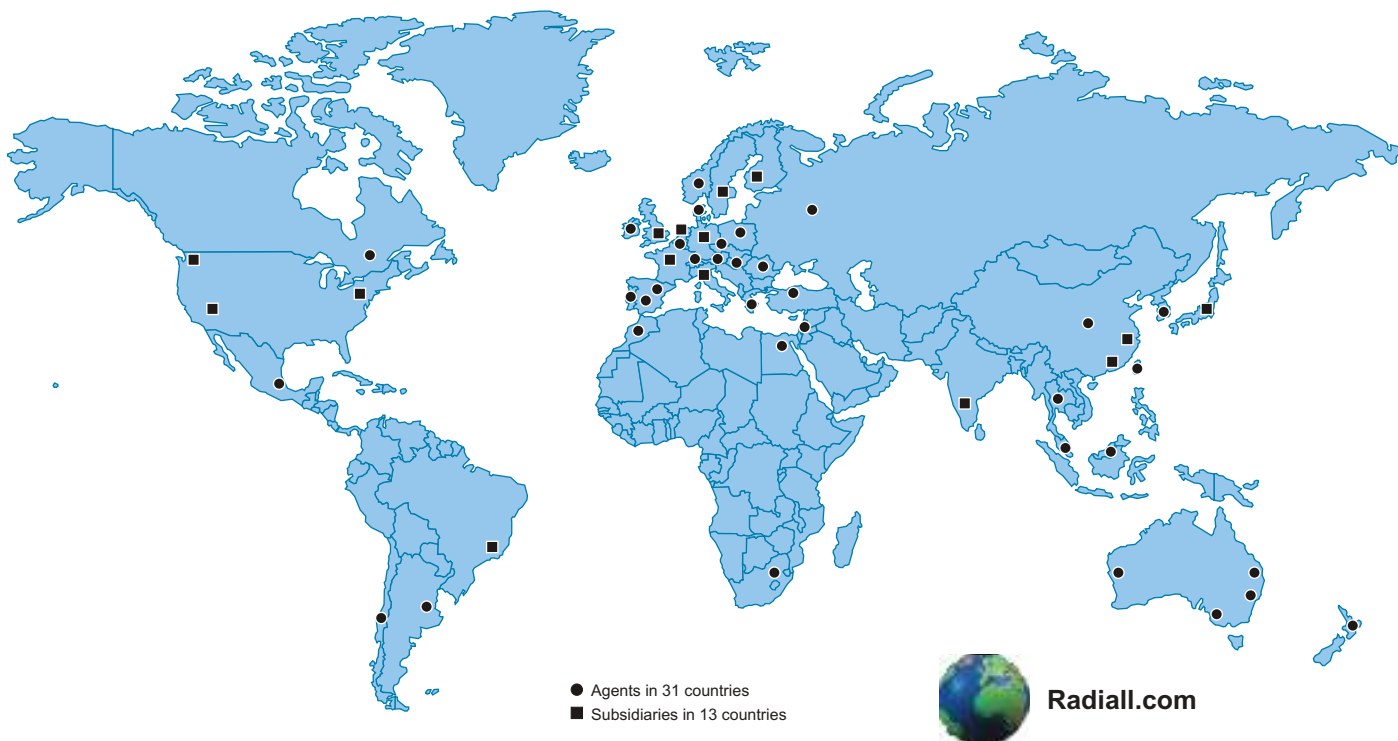
Part number	Description	Page
R114 305 000-----	Straight bulkhead jack clamp type for 2,6/50+75/S-----	17
R114 305 133-----	Straight bulkhead jack clamp type for 2,6/50+75/S-----	17
R114 311 000-----	Straight bulkhead jack crimp type for 2/50/S-----	17
R114 312 000-----	Straight bulkhead jack crimp type for 2,6/50+75/S-----	17
R114 313 000-----	Straight bulkhead jack crimp type for 2,6/50+75/S-----	17
R114 313 020-----	Straight bulkhead jack crimp type for 2,6/50+75/S-----	17
R114 315 000-----	Straight bulkhead jack crimp type for 2,6/50/D-----	17
R114 316 000-----	Straight bulkhead jack crimp type for 2,6/50+75/S-----	17
R114 316 020-----	Straight bulkhead jack crimp type for 2,6/50+75/S-----	17
R114 373 020-----	Right angle bulkhead jack crimp type for 2,6/50+75/S-----	18
R114 373 120-----	Right angle bulkhead jack crimp type for 2,6/50+75/S-----	18
R114 409 030-----	Straight male square flange receptacle-----	19
R114 413 000-----	Straight male square flange receptacle with extended dielectric-----	19
R114 416 000-----	Straight male PCB receptacle press fit pins-----	21
R114 416 020-----	Straight male PCB receptacle press fit pins-----	21
R114 423 000-----	Straight male SMT receptacle edge card-----	21
R114 423 800-----	Straight male SMT receptacle edge card (packaging)-----	21
R114 423 810-----	Straight male SMT receptacle edge card (packaging 500)-----	21
R114 423 820-----	Straight male SMT receptacle edge card (packaging 100)-----	21
R114 424 000-----	Straight male SMT receptacle-----	21
R114 424 100-----	Straight male SMT receptacle (packaging 100)-----	21
R114 424 120-----	Straight male SMT receptacle (packaging 500)-----	21
R114 425 000-----	Straight female PCB receptacle-----	21
R114 425 003-----	Straight female PCB receptacle (packaging 100)-----	21
R114 426 000-----	Straight male PCB receptacle-----	21
R114 426 020-----	Straight male PCB receptacle-----	21
R114 426 030-----	Straight male PCB receptacle (packaging 100)-----	21
R114 426 042-----	Straight male PCB receptacle (packaging 100)-----	21
R114 426 180-----	Straight male PCB receptacle (MIL standard)-----	25
R114 426 300-----	Straight male PCB receptacle thin legs-----	21
R114 426 530-----	Straight male PCB receptacle harpon legs-----	21
R114 426 850-----	Straight male PCB receptacle (packaging 75)-----	21
R114 427 180-----	Straight male PCB receptacle (MIL standard)-----	25
R114 444 800-----	Straight female SMT receptacle edge card-----	15
R114 450 000-----	Straight male narrow flange receptacle with extended dielectric-----	19
R114 450 205-----	Straight male narrow flange receptacle with extended dielectric-----	19
R114 453 307-----	Straight male narrow flange receptacle with slotted contact-----	19
R114 505 220-----	Straight male round flange press mount receptacle-----	19
R114 510 000-----	Straight male round flange receptacle-----	19
R114 552 400-----	Straight bulkhead male receptacle front mount-----	20
R114 553 000-----	Straight bulkhead male receptacle front mount-----	20
R114 553 180-----	Straight bulkhead male receptacle front mount (MIL standard)-----	25
R114 554 000-----	Straight bulkhead male receptacle rear mount-----	20
R114 554 180-----	Straight bulkhead male receptacle rear mount (MIL standard)-----	25
R114 560 200-----	Straight bulkhead female receptacle rear mount-----	21
R114 566 000-----	Straight bulkhead male receptacle front mount-----	20
R114 566 020-----	Straight bulkhead male receptacle front mount-----	20
R114 590 035-----	Straight bulkhead male receptacle + PCB-----	21
R114 603 000-----	Straight bulkhead male receptacle rear mount (hermetically sealed)-----	20
R114 661 020-----	Right angle male PCB receptacle press fit pins-----	22
R114 664 000-----	Right angle male SMT receptacle-----	22
R114 664 100-----	Right angle male SMT receptacle (packaging 100)-----	22
R114 664 120-----	Right angle male SMT receptacle (packaging 500)-----	22



Part number	Designation	Page
R114 665 000	Right angle male PCB receptacle	22
R114 665 020	Right angle male PCB receptacle (packaging 100)	22
R114 665 040	Right angle male PCB receptacle	22
R114 665 104	Right angle male PCB receptacle (packaging 100)	22
R114 665 110	Right angle male PCB receptacle (packaging 100)	22
R114 665 180	Right angle male PCB receptacle (MIL standard)	25
R114 666 180	Right angle female PCB receptacle (MIL standard)	25
R114 670 000	Right angle bulkhead male receptacle	20
R114 670 020	Right angle bulkhead male receptacle	20
R114 671 000	Right angle bulkhead male receptacle	20
R114 673 020	Right angle bulkhead + PCB male receptacle	22
R114 673 120	Right angle bulkhead + PCB male receptacle	22
R114 703 000	Male male adapter	23
R114 704 000	Female female adapter	23
R114 720 000	Male male bulkhead adapter	23
R114 720 020	Male male bulkhead adapter	23
R114 753 000	Male male bulkhead hermetically sealed adapter	23
R114 754 000	Male female bulkhead hermetically sealed adapter	23
R114 780 000	Male male female tee	23
R114 780 020	Male male female tee	23
R114 781 000	Male male male tee	23
R114 783 000	Female female male tee	23
R114 880 000	Short circuit plug cap	24
R115 427 000	Straight female PCB receptacle	30
R115 427 830	Straight female PCB receptacle (packaging 75)	30
R115 556 000	Straight bulkhead female receptacle front mount	30
R115 666 000	Right angle female PCB receptacle	31
R116 003 900	Straight bulkhead plug clamp type for 2/50/S cable	32
R116 056 000	Straight bulkhead plug solder type for .085" cable	33
R116 303 330	Straight bulkhead floating jack clamp type for 2/50/S cable	33
R116 311 000	Straight bulkhead jack crimp type for 2/50/S cable	33
R116 312 000	Straight bulkhead jack crimp type for 2,6/50+75/S cable	33
R116 372 000	Right angle jack crimp type for 2/50/S cable	34
R116 373 000	Right angle jack crimp type for 2,6/50/S cable	34
R116 425 010	Straight female PCB receptacle	35
R116 426 000	Straight male PCB receptacle slide on	35
R116 426 030	Straight male PCB receptacle slide on (packaging 100)	35
R116 553 000	Straight bulkhead male receptacle front mount	34
R116 554 000	Straight bulkhead male receptacle rear mount	34
R116 556 000	Straight bulkhead female receptacle front mount	34
R116 557 000	Straight bulkhead female receptacle front mount	34
R116 566 000	Straight bulkhead male press mount receptacle front mount	34
R116 665 000	Right angle male PCB receptacle	35
R116 666 030	Right angle female PCB receptacle	35
R117 053 807	Straight plug solder type for .085" cable	28
R117 082 807	Straight plug full crimp type for 2,6/50/S cable	28
R117 083 807	Straight plug full crimp type for 2,6/50/D cable	28
R117 086 827	Straight plug full crimp type for 5/50/S cable	28
R117 087 827	Straight plug full crimp type for 5/50/D cable	28
R117 152 807	Right angle plug solder type for .085" cable	29



Part number	Description	Page
R117 178 827	Right angle plug crimp type for 5/50/S cable	28
R117 179 827	Right angle plug crimp type for 5/50/D cable	28
R117 186 807	Right angle plug crimp type for 2.6/50/S cable	28
R117 187 807	Right angle plug crimp type for 2.6/50/D cable	28
R191 005 000	SMB jack - PC7 adapter	37
R191 007 000	SMB plug - PC7 adapter	37
R191 209 000	SMB jack - BNC plug adapter	37
R191 211 000	SMB bulkhead jack - BNC jack adapter	37
R191 212 000	SMB jack - BNC square flange jack adapter	37
R191 212 050	SMB jack - BNC square flange jack adapter	37
R191 213 000	SMB jack - BNC bulkhead jack adapter	37
R191 214 000	SMB plug - BNC plug adapter	37
R191 215 000	SMB plug - BNC jack adapter	37
R191 216 000	SMB bulkhead plug - BNC jack adapter	37
R191 233 000	SMB jack - N plug adapter	37
R191 234 000	SMB bulkhead jack - N plug adapter	37
R191 236 000	SMB jack - N square flange jack adapter	37
R191 239 000	SMB plug - N jack adapter	37
R280 637 010	Heatshrink sleeve for 2/50 cable	36
R280 637 020	Heatshrink sleeve for 2,6/50 cable	36
R280 637 030	Heatshrink sleeve for 5/50 cable	36
R280 902 010	Insulated washers	36
R282 235 003	Positioner	41
R282 235 011	Positioner	41
R282 235 037	Positioner	41
R282 281 000	Crimping tool	41
R282 293 000	Crimping tool	41
R282 800 000	Joule effect soldering device	40
R282 803 000	Fume extraction device	40
R282 967 012	Positioner	41
R282 983 000	Positioner	53
R285 212 000	2 SMB straight plugs/2,6 dia simple braid cable/250 mm	24
R285 213 000	2 SMB straight plugs/2,6 dia simple braid cable/750 mm	24
R285 214 000	2 SMB straight plugs/2,6 dia simple braid cable/500 mm	24
R285 215 000	2 SMB straight plugs/2,6 dia simple braid cable/1000 mm	24
R404 104 000	Low power male termination (DC-2,5 GHz)	39
R404 105 000	Low power female termination (DC-2,5 GHz)	39
R404 165 000	Low power female termination (DC-8 GHz)	39
R410 203 121	Low power attenuator (3 dB)	39
R410 206 121	Low power attenuator (6 dB)	39
R410 210 121	Low power attenuator (10 dB)	39
R410 220 121	Low power attenuator (20 dB)	39



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