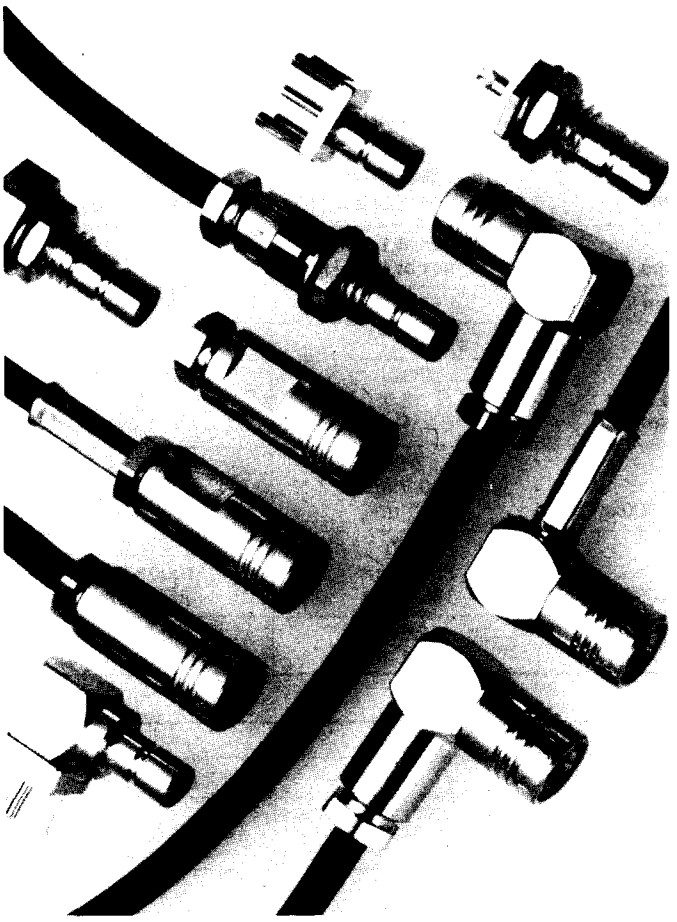


50 Ω	DC – 4 GHz

GENERAL

- 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
- CECC
- NF-CCQ
- STTE/A homologation
- LNZ list

APPLICATIONS

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

SMB

CHARACTERISTICS

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

ELECTRICAL CHARACTERISTICS

Impedance		50 Ω		
Frequency range		DC–4 GHz		
V.S.W.R.	3–14	Cable group Straight type Right angle type	2/50 1.30 + 0.04 F(GHz) 1.45 + 0.06 F(GHz)	2.6/50 1.25 + 0.04 F(GHz) 1.35 + 0.06 F(GHz)
Insertion loss	3–27	Straight type Right angle type	0.3 dB max at 1.5 GHz 0.6 dB max at 1.5 GHz	
RF leakage	3–26	-55 dB min from 2 to 3 GHz		
Insulation resistance	3–11	1000 MΩ min		
Contact resistance	3–16	center contact (mΩ) outer contact (mΩ)	Initial 6 1	After proof 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	3–17	Cable group at sea level : at 70000 ft (21000 m) :	2/50 750 V rms 185 V rms	2.6/50 1000 V rms 250 V rms
RF withstanding voltage (5 MHz sine wave)	3–23	Cable group at sea level :	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 : 14 Lbf (62 N max)
Cabling retention force	3–24	cable 2/50 : 13 Lbf (58 N) – cable 2.6/50 : 25 Lbf (110 N)
Center contact retention		Axial : 2.25 Lbf (10 N)

ENVIRONMENTAL CHARACTERISTICS

Temperature range		standard models hermetic sealed models models for semi-rigid cables	-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%	
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

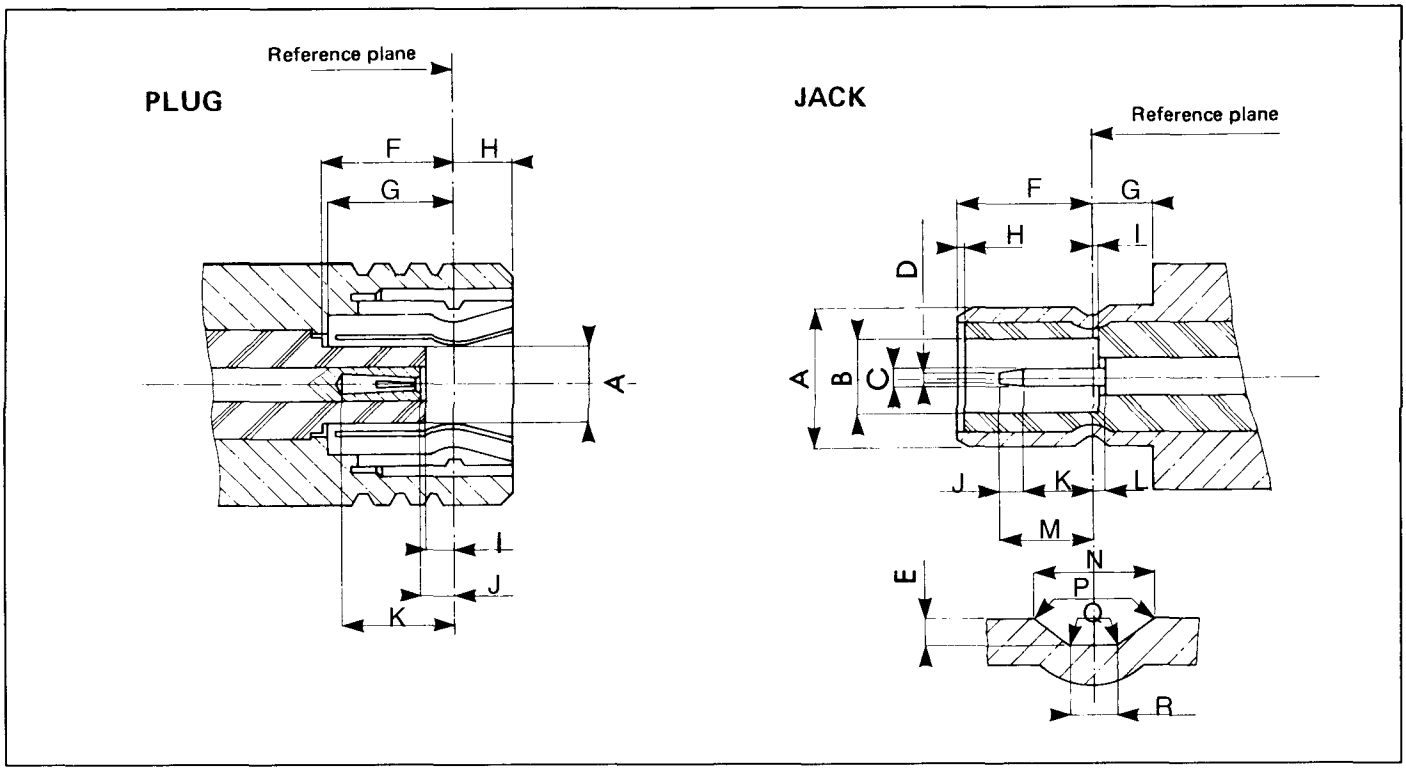
Body and center pin contact		brass half hard as per QQ-B-626
Center socket contact		beryllium copper as per QQ-C-530
Ferrules		brass
Insulators		PTFE teflon
Gaskets		silicone elastomer

PLATING

Body		gold or nickel
Center contacts		gold

All dimensions are given in inches (millimeters)

V



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

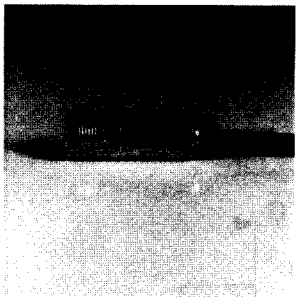
CLAMP TYPE CONNECTORS :

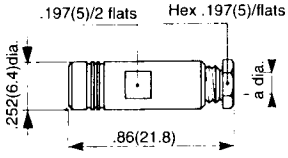
R 114 xxx 000 = braid retention with cylindrical gasket
R 114 xxx 133 = braid retention with V groove gasket

SMB

CABLE CLAMP TYPE FOR FLEXIBLE CABLE

STRAIGHT PLUGS

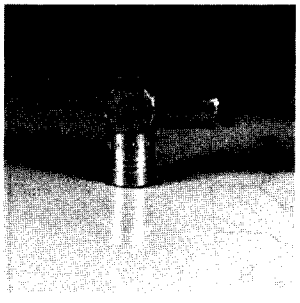


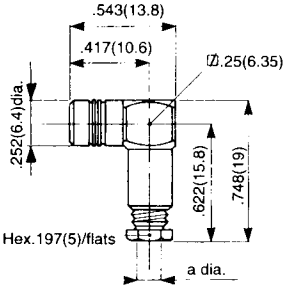


CABLE GROUP	.078 (2) / 50	.102 (2.6) / 50 + 75 S	.150 (3.8) / 95
Part Number *(cyl. gasket)*	**R 114 003 000**	**R 114 005 000**	**R 114 009 000**
a dia.	.087 (2.2)	.118 (3)	.157 (4)
Assembly	M01 page 16		
Part Number *(V groove gasket)*	***R 114 003 133**	***R 114 005 133**	

**For dimensions and assembly instructions ask for the technical data sheet.*

RIGHT ANGLE PLUGS

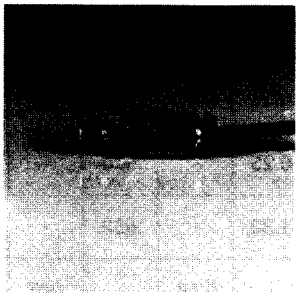


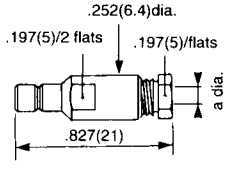


CABLE GROUP	.078 (2) / 50	.102 (2.6) / 50 + 75 S
Part Number *(cyl. gasket)*	**R 114 163 000**	**R 114 165 000**
a dia.	.087 (2.2)	.118 (3)
Assembly	M02 page 17	
Part Number *(V groove gasket)*	***R 114 163 133**	***R 114 165 133**

**For dimensions and assembly instructions ask for the technical data sheet.*

STRAIGHT JACKS



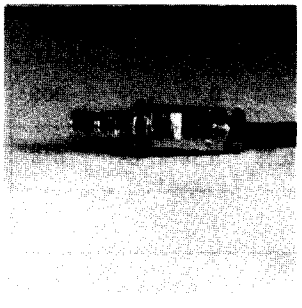


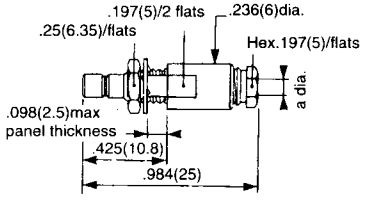
CABLE GROUP	.078 (2) / 50	.102 (2.6) / 50 + 75 S
Part Number *(cyl. gasket)*	**R 114 203 000**	**R 114 205 000**
a dia.	.087 (2.2)	.118 (3)
Assembly	M01 page 16	
Part Number *(V groove gasket)*	***R 114 203 133•**	***R 114 205 133**

• *Manufactured upon request.*

**For dimensions and assembly instructions ask for the technical data sheet.*

BULKHEAD STRAIGHT JACKS





CABLE GROUP	.078 (2) / 50	.102 (2.6) / 50 + 75 S
Part Number *(cyl. gasket)*	**R 114 303 000**	**R 114 305 000**
a dia.	.087 (2.2)	.118 (3)
Assembly	M01 page 16	
Part Number *(V groove gasket)*	***R 114 303 133**	***R 114 305 133**
Panel pattern	P01 page 24	

**For dimensions and assembly instructions ask for the technical data sheet.*

Standard plating : gold – Available upon request with nickel plating : Please consult us.

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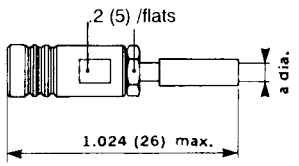
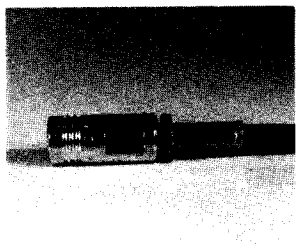
CRIMP TYPE FOR FLEXIBLE CABLE

STRAIGHT PLUGS

CABLE GROUP	.078 (2) / 50	.102 (2.6) / 50 + 75 S	.102 (2.6) / 50 D
Part Number *(5mm/flats)*	**R 114 073 000**	**R 114 075 000**	
Part Number *(5.5mm/flats)*	***R 114 073 134**	***R 114 075 134**	**R 114 075 120**
Part Number *(reverse crimping)*		***R 114 015 000**	
a dia.	.098 (2.5)	.126 (3.2)	.138 (3.5)
Assembly	M05 page 20		

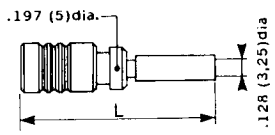


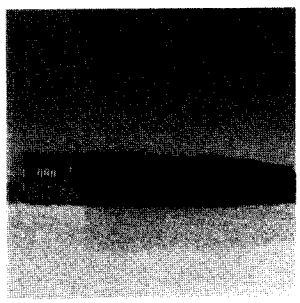


For dimensions and assembly instructions ask for the technical data sheet.

STRAIGHT PLUGS - *Full crimp type*

CABLE GROUP	.102 (2.6) / 50 + 75 S	.102 (2.6) / 50 D
Part Number	**R 114 082 000**	**R 114 083 000**
L	.803 (20.4)	.740 (18.8)
Assembly	M07 page 22	

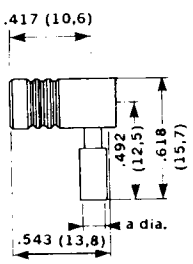


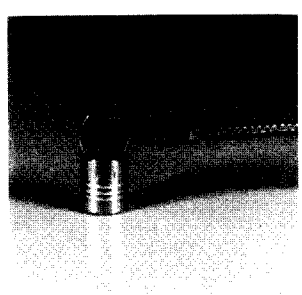


*Photographied with the sleeve **R 280 560 000**, see page 27.*

RIGHT ANGLE PLUGS

CABLE GROUP	.078 (2) / 50 S	.102 (2.6) / 50 + 75 S	.102 (2.6) / 50 D
Part Number *(Gold plating)*	**R 114 183 000**	**R 114 186 000**	**R 114 182 000**
Part Number *(1/2 body : zamak plating : nickel)*	***R 114 183 420**	***R 114 186 720**	
a dia.	.098 (2.5)	.126 (3.2)	
Assembly	M06 page 21		

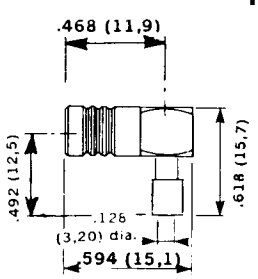


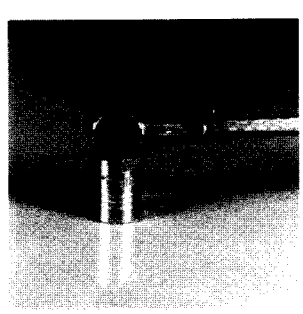


For dimensions and assembly instructions ask for the technical data sheet.

RIGHT ANGLE PLUGS

CABLE GROUP	.102 (2.6) / 50 + 75 S	BT 3002
Part Number	**R 114 187 000** *(full crimp)*	***R 114 188 000**	***R 114 191 300**
Assembly	M08 page 23	





For dimensions and assembly instructions ask for the technical data sheet.

Standard plating : gold – Available upon request with nickel plating : Please consult us.

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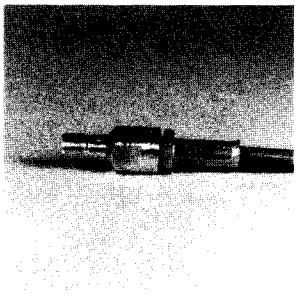
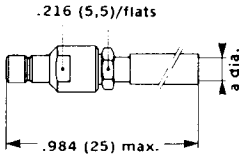
SMB

CRIMP TYPE FOR FLEXIBLE CABLE

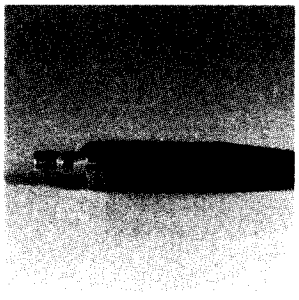
STRAIGHT JACKS

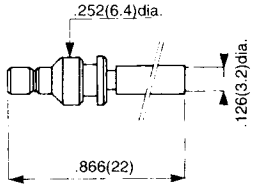




CABLE GROUP	.078 (2) / 50	.102 (2.6) / 50 + 75 S
Part Number	**R 114 237 000**	**R 114 239 000**
a dia.	.098 (2.5)	.126 (3.2)
Assembly	M05 page 20	

STRAIGHT JACK

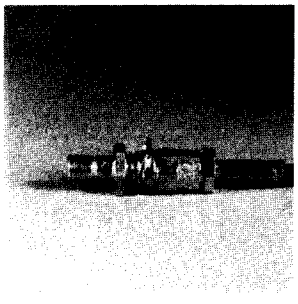


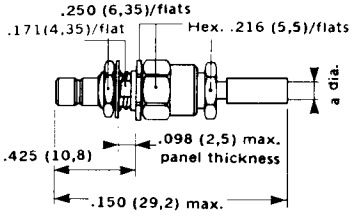


CABLE GROUP	.102 (2.6) / 50 + 75 S
Part Number	**R 114 238 000**
Assembly	M07 page 22

*Photographied with the sleeve **R 280 560 000**, see page 27.*

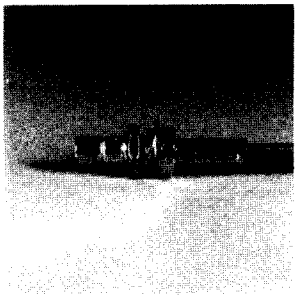
BULKHEAD STRAIGHT JACKS

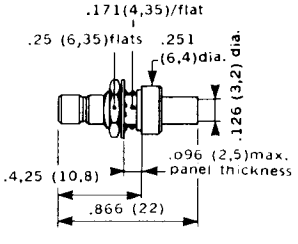




CABLE GROUP	.078 (2) / 50	.102 (2.6) / 50 + 75 S
Part Number	**R 114 311 000**	**R 114 312 000**
a dia.	.098 (2.5)	.126 (3.2)
Assembly	M05 page 20	
Panel pattern	P01 page 24	

BULKHEAD STRAIGHT JACK





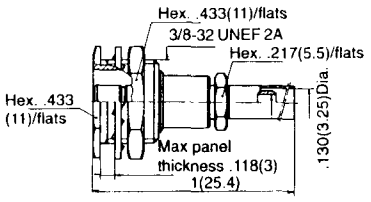
CABLE GROUP	.102 (2.6) / 50 + 75 S
Part Number	**R 114 313 000**
Assembly	M07 page 22
Panel pattern	P01 page 24

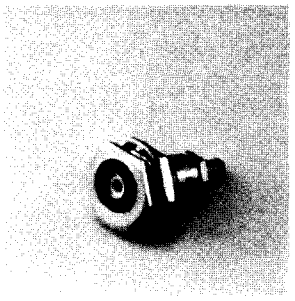
Standard plating : gold – Available upon request with nickel plating : Please consult us.

CRIMP TYPE FOR FLEXIBLE CABLE

RECESSED BULKHEAD JACK

CABLE GROUP	.102 (2.6) / 50 + 75
Part Number	**R 114 316 000**
Panel pattern	P03 page 24



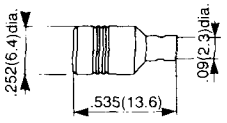


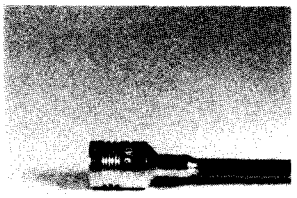
V

SOLDER TYPE FOR SEMI-RIGID CABLE

STRAIGHT PLUG

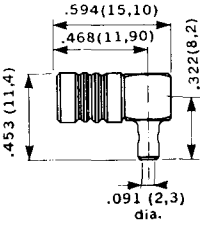
CABLE GROUP	.085"
Part Number	**R 114 053 000**
Assembly	M03 page 18

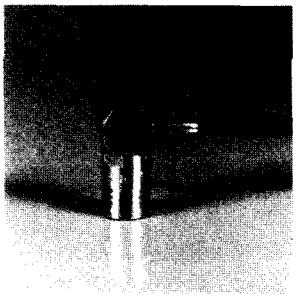




RIGHT ANGLE PLUG

CABLE GROUP	.085"
Part Number	**R 114 169 000**
Assembly	M04 page 19



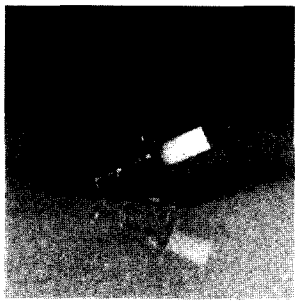


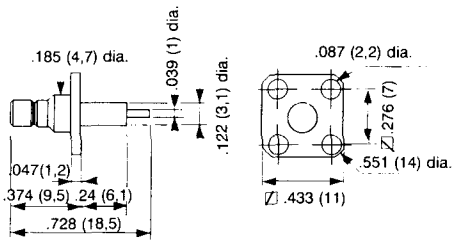
Standard plating : gold – Available upon request with nickel plating : Please consult us.

SMB

PANEL MOUNT RECEPTACLES

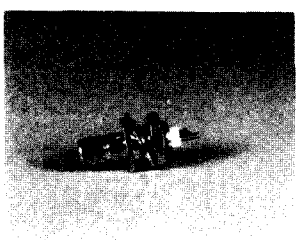
SQUARE FLANGE STRAIGHT JACK (STRAIGHT TERMINAL)

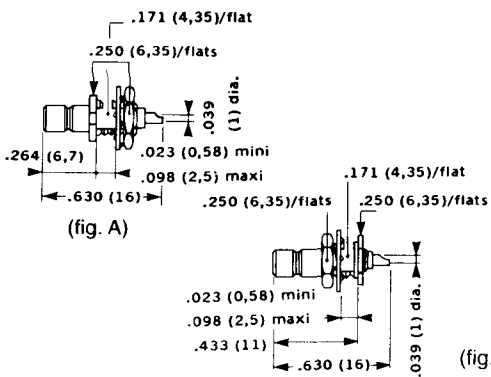




Part Number	R 114 413 000
Captive contact	NO

BULKHEAD STRAIGHT JACK (SOLDER POT)

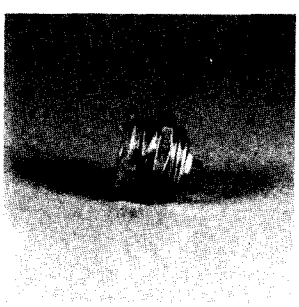


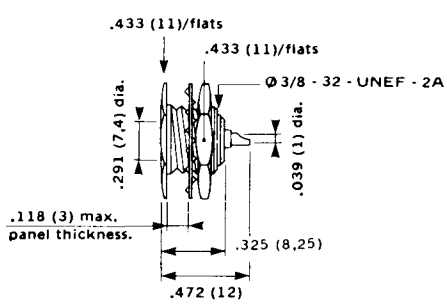


(fig. B)

Part Number	R 114 553 000	R 114 554 000
Figure	A	B
Mounting	FRONT	REAR
Panel pattern	P01 page 24	

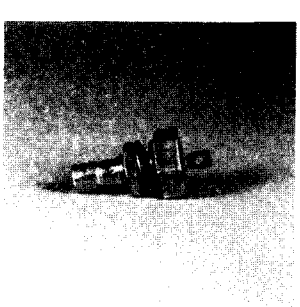
RECESSED BULKHEAD STRAIGHT JACK (SOLDER POT)

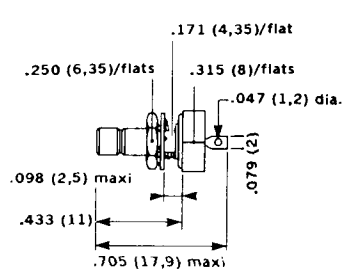




Part Number	R 114 566 000
Panel pattern	P03 page 24

BULKHEAD HERMETICALLY SEALED STRAIGHT PLUG - *Rear mount*





Part Number	R 114 603 000
Panel pattern	P01 page 24

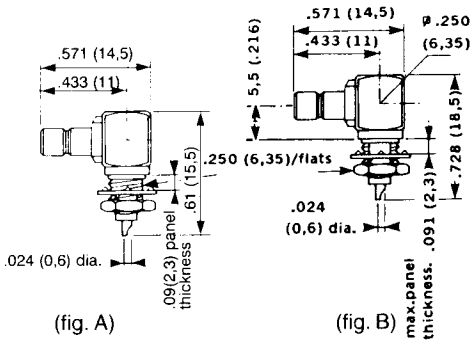
Standard plating : gold – Available upon request with nickel plating : Please consult us.

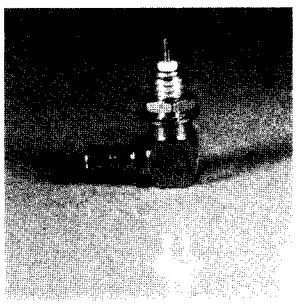
RADIALL®

PANEL MOUNT RECEPTACLES

BULKHEAD RIGHT ANGLE JACK (SOLDER POT)

Part Number	R 114 670 000	R 114 671 000
Figure	A	B
Panel pattern	P01 page 24	



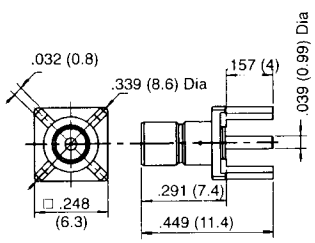


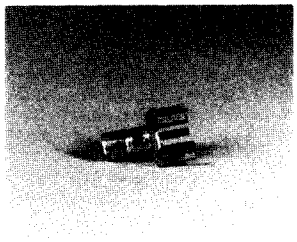
V

PCB MOUNT RECEPTACLES

STRAIGHT PLUGS, SOLDER PINS

Part Number	R 114 426 000	R 114 426 020	R 114 426 030	R 114 426 042
Plating	Gold	Nickel	Nickel *(selective SnPb plating on the pins)*	Nickel
Pin length	.157 (4)			.114 (2.9)
Packaging	Unit	100		
Panel pattern	P04 page 24			

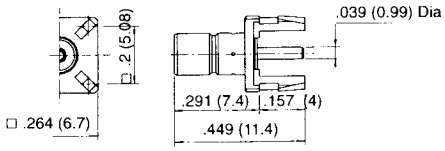


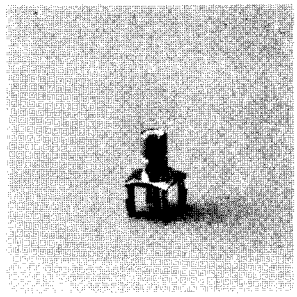


STRAIGHT PLUG, SOLDER PROFILED PINS

Part Number	R 114 426 530
Panel pattern	P05 page 24

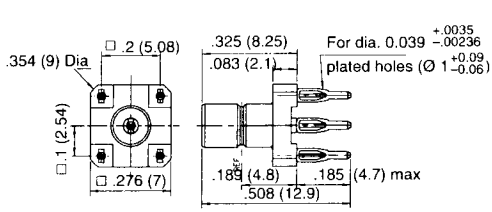
The profile of the pins ensures that no movement occurs during the soldering operation.





STRAIGHT PLUG, PRESS-FIT COMPLIANT PINS

Part Number	R 114 416 020
Plating	Nickel
Panel pattern	P06 page 24



For detailed mounting procedure, please consult our catalog : PRESS-FIT COAXIAL CONNECTORS.

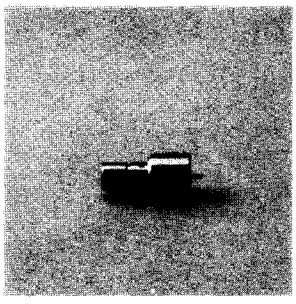
Standard plating : gold – Available upon request with nickel plating : Please consult us.

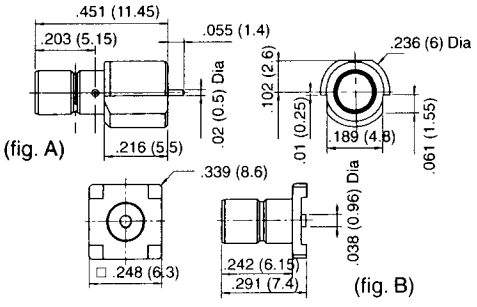
RADIALL®

SMB

PCB MOUNT RECEPTACLES

STRAIGHT PLUGS, SURFACE MOUNT, *(SMT)*

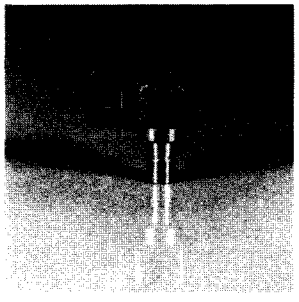


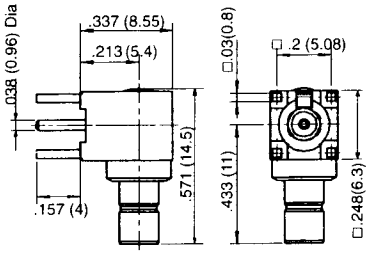


Part Number	R 114 423 000	*R 114 424 000
Figure	A	B
Application	"Edge card"	"on card"
Packaging	unit	
Packaging in reel of *100 receptacles* *500 receptacles*		R 114 424 100 R 114 424 120

**For dimensions and assembly instructions ask for the technical data sheet.*
For reel packaging and detailed mounting procedure, please consult our catalog : SMT COAXIAL CONNECTORS.

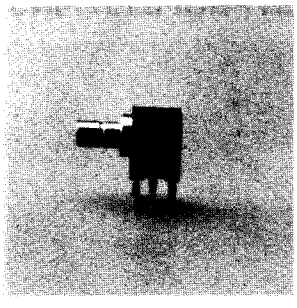
RIGHT ANGLE PLUG, SOLDER PINS

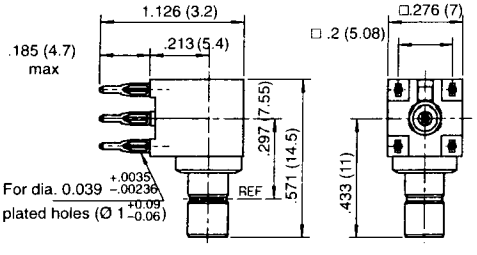




Part Number	R114665000	R114665020	R114665104	R114665110
Plating	Gold	Nickel		
Pin length	4 mm		3 mm selected plating SnPb	3 mm
Packaging	unit	100	unit	100
Panel pattern	P04 page 24			

RIGHT ANGLE PLUG, PRESS-FIT PINS

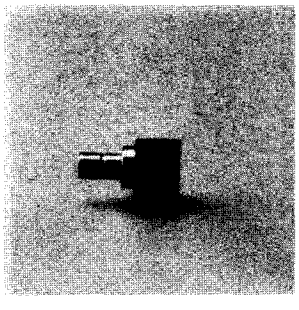


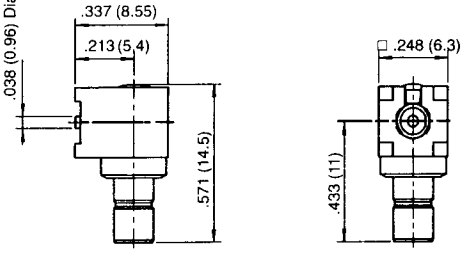


Part Number	R 114 661 020
Plating	Nickel
Packaging	unit
Panel pattern	P06 page 24

For detailed mounting procedure, please consult our catalog : PRESS-FIT COAXIAL CONNECTORS.

RIGHT ANGLE PLUG, SURFACE MOUNT, *(SMT)*





Part Number	R 114 664 000
Plating	Gold
Packaging	unit

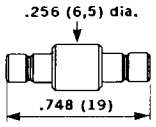
For detailed mounting procedure, please consult our catalog : SMT COAXIAL CONNECTORS.

RADIALL®

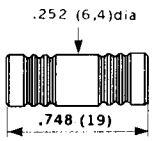
IN SERIES ADAPTERS

STRAIGHT

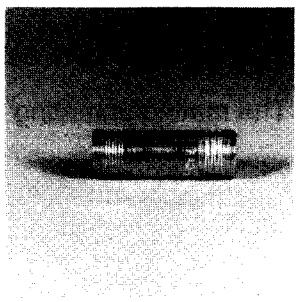
Part Number	R 114 703 000	R 114 704 000
Figure	A	B



(fig. A)



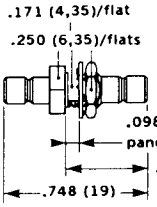
(fig. B)



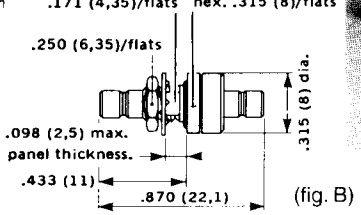
V

BULKHEAD STRAIGHT MALE/MALE

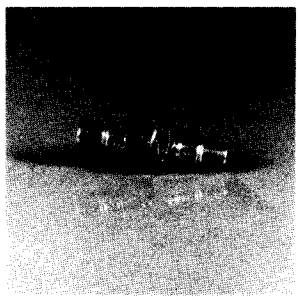
Part Number	R 114 720 000	R 114 753 000
Figure	A	B
Panel pattern	P01 page 24	
Note		hermetical



(fig. A)

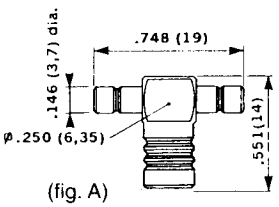


(fig. B)

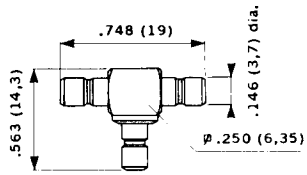


TEES

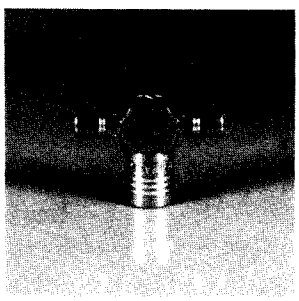
Part Number	R 114 780 000	R 114 781 000
Figure	A	B



(fig. A)



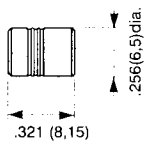
(fig. B)

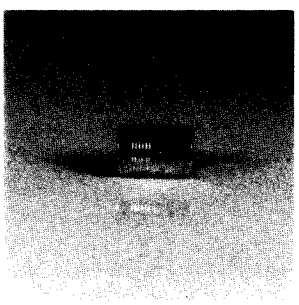


CAPS

FEMALE SHORT-CIRCUIT

Part Number	R 114 880 000





Standard plating : gold – Available upon request with nickel plating : Please consult us.

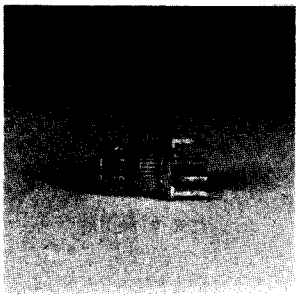
SMB – A

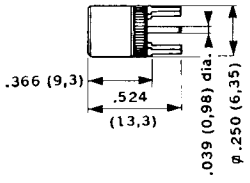
BULKHEAD AND PCB MOUNT RECEPTACLES

These receptacles, which mate with all the SMB jacks and receptacles, have a lower mating/unmating force than the SMB connectors, thereby avoiding any possible damage to PCB.

The mating/unmating force is from 0.56 Lbf (2.5 N) to 1.35 Lbf (6 N).

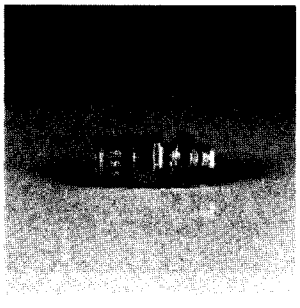
PCB STRAIGHT FEMALE

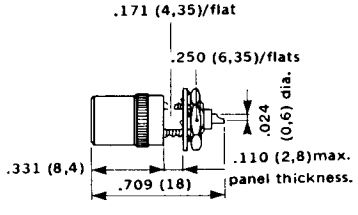




Part Number	R 115 427 000
Panel pattern	P04 page 24

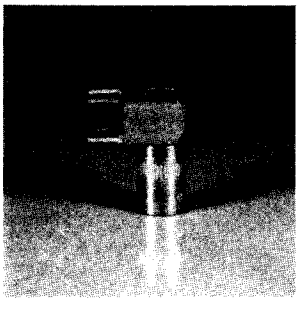
BULKHEAD STRAIGHT FEMALE

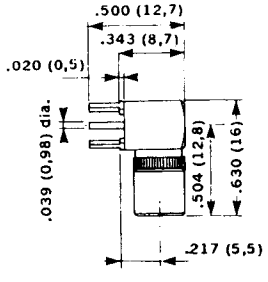




Part Number	R 115 556 000
Panel pattern	P01 page 24

PCB RIGHT ANGLE FEMALE





Part Number	R 115 666 000
Panel pattern	P04 page 24

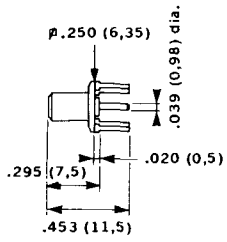
"BACK PLANE" SMB RECEPTACLES

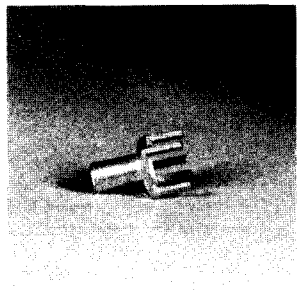
These snap-on receptacles have no latching mechanism other than contact pressure.

The mating/unmating force is from 0.50 Lbf (2.2 N) to 1.10 Lbf (4.9 N) and make these connectors specially suited for rack and panel systems.

PCB STRAIGHT MALE

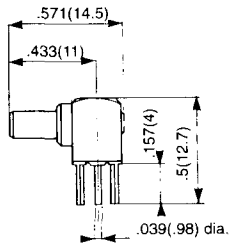
Part Number	R 116 426 000●
Panel pattern	P07 page 24

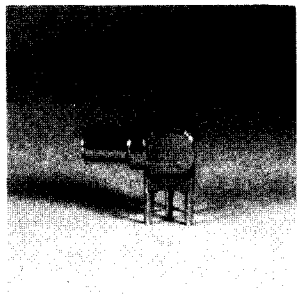




PCB RIGHT ANGLE MALE

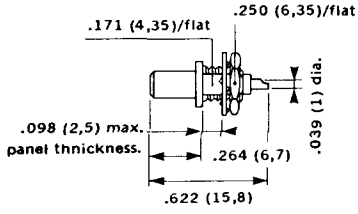
Part Number	R 116 665 000●
Panel pattern	P07 page 24

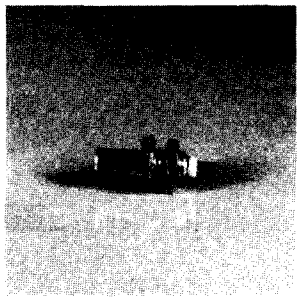




BULKHEAD STRAIGHT MALE - *Front mount*

Part Number	R 116 553 000●
Panel pattern	P01 page 24

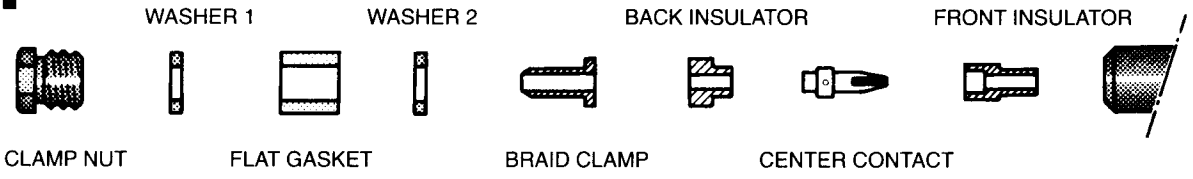




● *Manufactured upon request.*

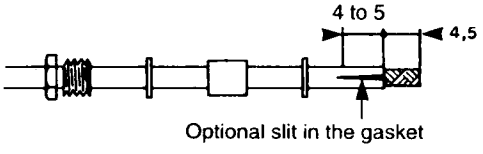
ASSEMBLY INSTRUCTIONS

M 01



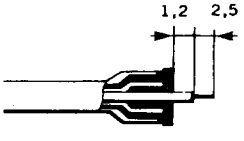
CONNECTORS	
R 114 003 000 **R 114 005 000** **R 114 009 000** **R 114 203 000** **R 114 205 000** **R 114 303 000** **R 114 305 000**	**Nota** The plug and jack for 2.6/50 + 75 cables are supplied with two braid clamps : – for 2.6/50 cable use the knurled braid clamp. – for the 2.6/75 cable use the smooth braid clamp.

1



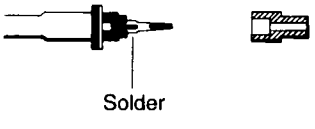
1-1 Place the back nut, washer 1, gasket, washer 2 on the cable.
1-2 Strip the jacket.
1-3 If necessary, make 2 slits in the jacket (when it is not possible to introduce the braid clamp under the braid).

2



2-1 Introduce the braid clamp between the dielectric and the braid.
2-2 Cut the braid to diameter of braid clamp.
2-3 Strip the dielectric.

3

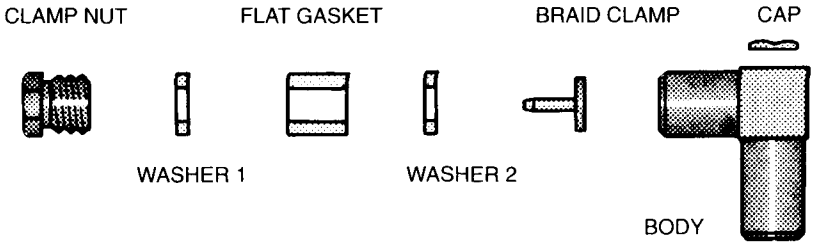


3-1 Mount the rear insulator.
3-2 Solder the contact.
3-3 Mount the front insulator on the contact.

4

4-1 Mount the assembly into the body.

M 02

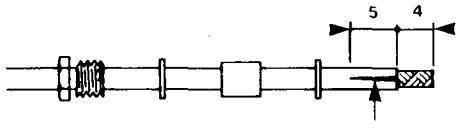


V

CONNECTORS
R 114 163 000 **R 114 165 000**

1-1 Place the back nut, washer 1, gasket, washer 2 on the cable.
1-2 Strip the cable.
1-3 If necessary, make 2 slits in the jacket (when it is not possible to introduce the braid clamp under the braid).

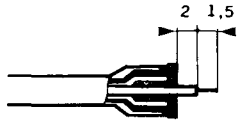
1



Optional slit in the gasket

2

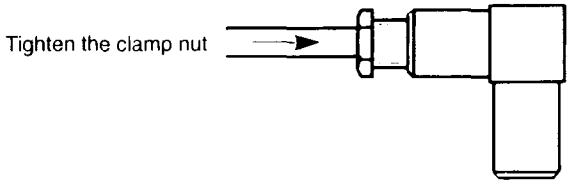
2-1 Introduce the braid clamp between the dielectric and the braid.
2-2 Cut the braid to diameter of braid clamp.
2-3 Strip the dielectric.



Cut the braid

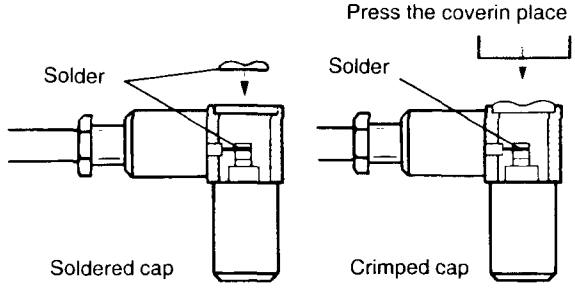
3

3-1 Mount the body.



4

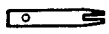
4-1 Solder the cable core on the slotted contact.
4-2 Mount the cap (press or solder).



ASSEMBLY INSTRUCTIONS

M 03

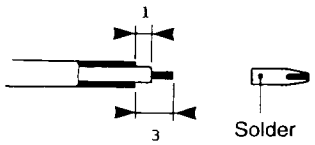
CENTER CONTACT



BODY

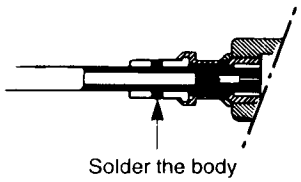
CONNECTORS
R 114 053 000

1



1-1 Strip the outside conductor and the dielectric.
1-2 Solder the contact.

2

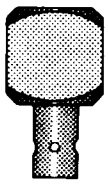


2-1 Mount the assembly into the body.
2-2 Solder the assembly on the outside conductor.

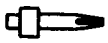
Nota :
In order to ensure correct positionning of the contact, it is recommended that a receptacle is fitted to the plug prior to soldering the body.

M 04

BODY

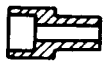


CENTER CONTACT



BACK INSULATOR

FRONT INSULATOR



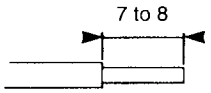
COUPLING NUT

V

CONNECTORS
R 114 169 000

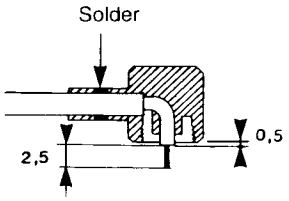
1

1-1 Strip the outside conductor.



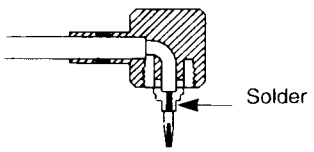
2

2-1 Push the cable into the main body.
2-2 Solder the main body on the outside coductor.
2-3 Strip the dielectric.



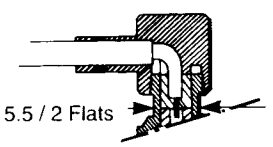
3

3-1 Mount the rear insulator.
3-2 Solder the contact, ensuring that the contact has been pushed onto the rear insulator.



4

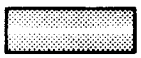
4-1 Mount the front insulator on the contact.
4-2 Screw the body onto the assembly.



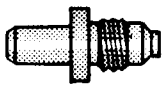
ASSEMBLY INSTRUCTIONS

M 05

FERRULE



BACK NUT



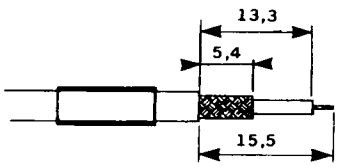
CENTER CONTACT

FRONT INSULATOR

BODY

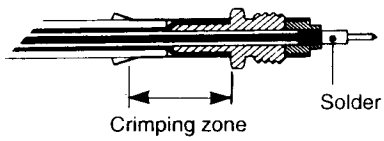
CONNECTORS	TOOLING
R 114 073 000 **R 114 075 000** **R 114 075 120** **R 114 237 000** **R 114 239 000** **R 114 311 000** **R 114 312 000**	Crimp tool **R 282 211 000** or Crimp tool (M22520/5-01) **R 282 240 000** + Dies (M 22520/5-03) **R 282 241 000**
.078(2) cable dia. : hex .105(2.67) ; .102(2.6) cable dia : hex .120(3.25)	

1



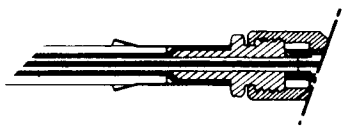
1-1 Place the ferrule on the cable.
1-2 Strip the cable.
1-3 Fold back the braid.

2



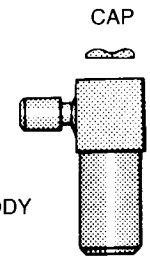
2-1 Introduce the back nut between the braid and the dielectric.
2-2 Crimp the ferrule.
2-3 Solder the contact, ensuring that the contact has been pushed onto the rear insulator.

3



3-1 Mount the front insulator on the contact.
3-2 Mount the assembly into the body.

M 06

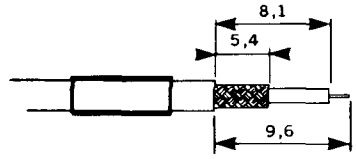


V

CONNECTORS	TOOLING	
R 114 182 000 **R 114 183 000** **R 114 186 000**	Crimp tool or Crimp tool (M22520/5-01) + Dies (M 22520/5-03)	**R 282 211 000** **R 282 293 000** **R 282 235 003**
.078(2) cable dia. : hex .105(2.67) ; .102(2.6) cable dia. : hex .120(3.25)		

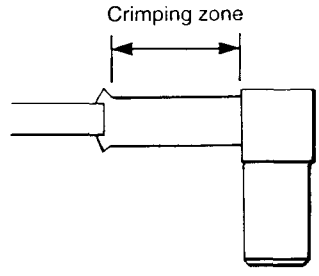
1

1-1 Place the ferrule on the cable.
1-2 Strip the cable.
1-3 Fold back the braid.



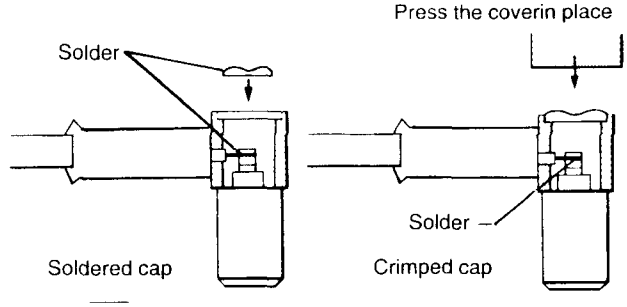
2

2-1 Mount the body on the dielectric.
2-2 Crimp the ferrule.



3

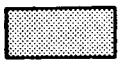
3-1 Solder the cable core on the slotted contact.
3-2 Mount the cap (press or solder).



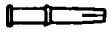
ASSEMBLY INSTRUCTIONS

M 07

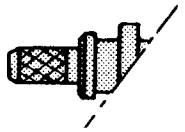
FERRULE



CENTER CONTACT

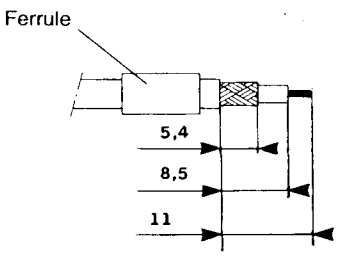


BODY



CONNECTORS	TOOLING for contact	for ferrule
R 114 082 000 **R 114 238 000** **R 114 313 000**	Crimp tool (M22520/2-01) **R 282 281 000** + Positioner **R 282 983 000**	Crimp tool **R 282 211 000** or Crimp tool (M22520/5-01) **R 282 293 000** + Dies (M 22520/5-03) **R 282 235 003**
.102(2.6) cable dia. : hex .120(3.25)		

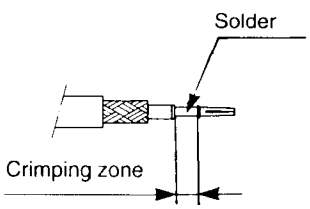
1



1-1 Place the ferrule on the cable.

1-2 Strip the cable.

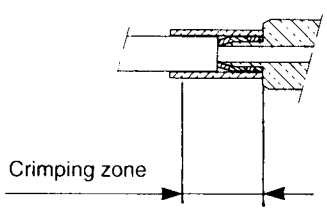
2



2-1 Introduce the center contact on the cable core, ensuring that the contact has been pushed onto the dielectric.

2-2 Crimp (2 x 4 indents) or solder the contact.

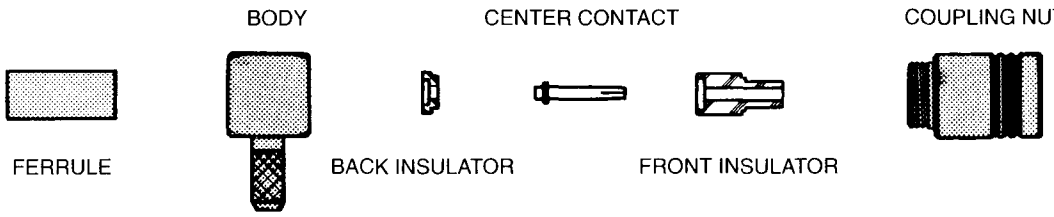
3



3-1 Introduce the body under the braid.

3-2 Crimp the ferrule.

M 08

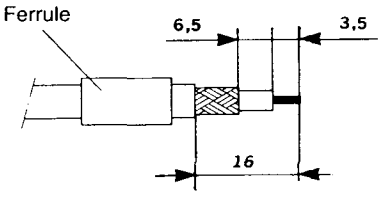


CONNECTORS	TOOLING for contact	TOOLING for ferrule
R 114 187 000	Crimp tool (M22520/2-01) **R 282 281 000** + Positioner **R 282 983 000**	Crimp tool **R 282 211 000** or *Crimp tool* (M22520/5-01) **R 282 293 000** + Dies (M 22520/5-03) **R 282 235 003**
.102 (2.6) cable dia. : hex .120 (3.25)		

V

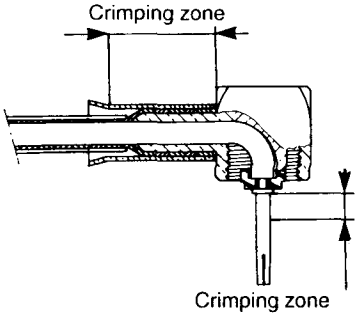
1

1-1 Place the ferrule on the cable.
1-2 Strip the cable.



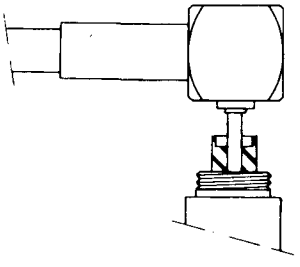
2

2-1 Push the cable into the main body.
2-2 Mount the rear insulator.
2-3 Crimp the contact (2 x 4 indents) ensuring that the contact has been pushed home into the rear insulator.
2-4 Crimp the ferrule.



3

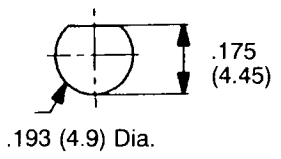
3-1 Mount the front insulator on the contact.
3-2 Screw the body onto the assembly.



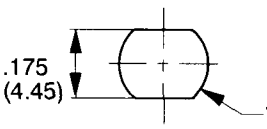
SMB

PANEL PATTERNS

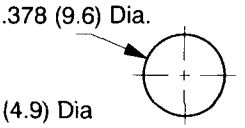
P01



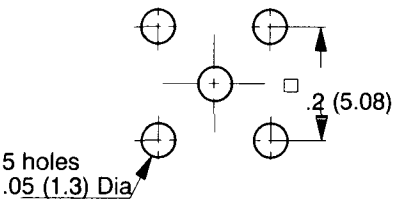
P02



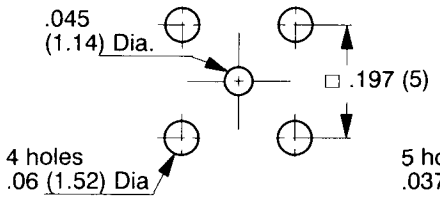
P03



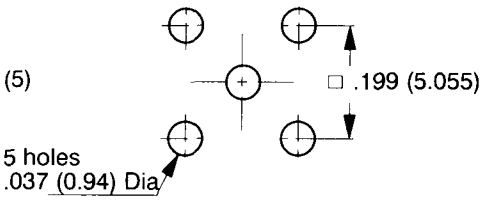
P04



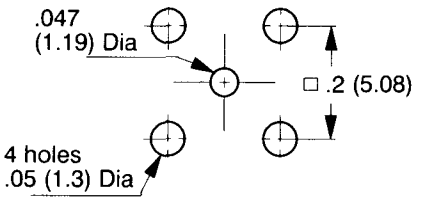
P05



P06



P07



All dimensions are mini and given in inch (mm).

STANDARD CABLES AND RELEVANT CONNECTORS

Cable	Desription	P/N	Page
.079 (2) /50 **RG 178 B/U** **RG 196 A/U** **KX 21 A**	Straight plug, clamp type Straight plug, clamp type Right angle plug, clamp type. Right angle plug, clamp type. Straight jack, clamp type. Straight jack, clamp type. Bulkhead straight jack, clamp type. Bulkhead straight jack, clamp type. Straight plug, crimp type. Straight plug, crimp type. Right angle plug, crimp type. Right angle plug, crimp type. Straight jack, crimp type. Bulkhead straight jack, crimp type	**R 114 003 000** **R 114 003 133** **R 114 163 000** **R 114 163 133** **R 114 203 000** **R 114 203 133** **R 114 303 000** **R 114 303 133** **R 114 073 000** **R 114 073 134** **R 114 183 000** **R 114 183 420** **R 114 237 000** **R 114 311 000**	6 6 6 6 6 6 6 6 7 7 7 7 8 8
.102 (2.6) /50S **RG 174 A/U** **RG 188 A/U** **RG 316 /U** **KX 3 B** **KX 22 A**	Straight plug, clamp type Straight plug, clamp type Straight plug, crimp type. Right angle plug, clamp type Right angle plug, clamp type Straight jack, clamp type Straight jack, clamp type. Bulkhead straight jack, clamp type. Bulkhead straight jack, clamp type. Straight plug, crimp type. Straight plug, crimp type. Straight plug, crimp type Right angle plug, crimp type. Right angle plug, crimp type. Right angle plug, crimp type. Right angle plug, crimp type. Straight jack, crimp type Straight jack, crimp type Bulkhead straight jack, crimp type Bulkhead straight jack, crimp type Recessed bulkhead jack, crimp type	**R 114 005 000** **R 114 005 133** **R 114 015 000** **R 114 165 000** **R 114 165 133** **R 114 205 000** **R 114 205 133** **R 114 305 000** **R 114 305 133** **R 114 075 000** **R 114 075 134** **R 114 082 000** **R 114 186 000** **R 114 186 720** **R 114 187 000** **R 114 188 000** **R 114 238 000** **R 114 239 000** **R 114 312 000** **R 114 313 000** **R 114 316 000**	6 6 7 6 6 6 6 6 6 7 7 7 7 7 7 7 8 8 8 8 9

Cable	Description	P/N	Page
.102 (2.6) /50D **RD 316** **Type KX 22 D**	Straight plug, crimp type Straight plug, crimp type Right angle plug, crimp type	**R 114 083 000** **R 114 075 120** **R 114 182 000**	7 7 7
.102 (2.6) /75S **RG 179 B/U** **RG 187 A/U**	Straight plug, clamp type Straight plug, clamp type Straight plug, crimp type. Right angle plug, clamp type Right angle plug, clamp type. Straight jack, clamp type Straight jack, clamp type. Bulkhead straight jack, clamp type Bulkhead straight jack, clamp type Straight plug, crimp type Straight plug, crimp type Straight plug, crimp type. Right angle plug, crimp type. Right angle plug, crimp type. Right angle plug, crimp type. Right angle plug, crimp type. Straight jack, crimp type Straight jack, crimp type Bulkhead straight jack, crimp type Bulkhead straight jack, crimp type Recessed bulkhead jack, crimp type	**R 114 005 000** **R 114 005 133** **R 114 015 000** **R 114 165 000** **R 114 165 133** **R 114 205 000** **R 114 205 133** **R 114 305 000** **R 114 305 133** **R 114 075 000** **R 114 075 134** **R 114 082 000** **R 114 186 000** **R 114 186 720** **R 114 187 000** **R 114 188 000** **R 114 238 000** **R 114 239 000** **R 114 312 000** **R 114 313 000** **R 114 316 000**	6 6 7 6 6 6 6 6 6 7 7 7 7 7 7 7 8 8 8 8 9
.150 (3.8)/95 **RG 180 B/U** **RG 195 A/U**	Straight plug, clamp type	**R 114 009 000**	6
.085" **RD 405 /U** **KS 1**	Straight plug, solder type Right angle plug, solder type	**R 114 053 000** **R 114 169 000**	7 7
BT 3002	Right angle plug, crimp type	**R 114 191 300**	7

DIMENSIONS OF APPLICABLE CABLES

DIMENSION TABLE FOR APPLICABLE COAXIAL CABLES
The following table gives an indication of coaxial cable dimensions.
For further details, refer to standards or cable manufacturer specifications.
All dimensions are nominal or specified values

PART NUMBER	IMP Ω	DIAMETER in inch (mm)					CABLE GROUP	
		CORE		DIELECTRIC	MAX SCREEN	JACKET		
		Composition	Nom. Dia.					
MIL-C-17-F CABLES								
RG 6A/U	75	single core	.028(0.72)	.185(4.70)	.264(6.70) D	.332(8.43)	.315	(8)/75
RG 11A/U	75	7 X .016(0.40)	.047(1.20)	.285(7.25)	.340(8.64) S	.405(10.29)	.394	(10)/75
RG 12A/U	75	7 X .016(0.40)*	.047(1.20)	.285(7.25)	.340(8.64) S	.474(12.06)	.394	(10)/75
RG 58C/U	50	19 X .007(0.18)	.035(0.89)	.116(2.95)	.150(3.81) S	.195(4.95)	.197	(5)/50
RG 59B/U	75	single core	.022(0.57)	.146(3.71)	.191(4.85) S	.242(6.15)	.236	(6)/75
RG 62B/U	93	single core	.025(0.64)	.146(3.71)	.191(4.85) S	.242(6.15)	.236	(6)/93
RG 63B/U	125	single core	.026(0.65)	.285(7.25)	.340(8.64) S	.405(10.29)	.394	(10)/125
RG 71B/U	93	single core	.025(0.64)	.146(3.71)	.208(5.28) D	.245(6.22)	.236	(6)/93
RG 140/U	75	single core	.025(0.64)	.146(3.71)	.176(4.47) S	.233(5.92)	.236	(6)/75
RG 141A/U	50	single core	.039(0.99)	.116(2.95)	.146(3.71) S	.190(4.83)	.197	(5)/50
RG 142B/U	50	single core	.037(0.94)	.116(2.95)	.171(4.34) D	.195(4.95)	.197	(5)/50
RG 144/U	75	7 X .018(0.45)	.053(1.35)	.285(7.25)	.330(8.38) S	.409(10.40)	.394	(10)/75
RG 165/U	50	7 X .031(0.80)	.094(2.40)	.285(7.25)	.340(8.64) S	.409(10.40)	.394	(10)/50
RG 174A/U	50	7 X .006(0.16)	.019(0.48)	.060(1.52)	.088(2.24) S	.110(2.79)	.102	(2.6)/50
RG 178B/U	50	7 X .004(0.10)	.012(0.30)	.033(0.84)	.054(1.37) S	.071(1.80)	.079	(2)/50
RG 179B/U	75	7 X .004(0.10)	.012(0.30)	.063(1.60)	.084(2.13) S	.100(2.54)	.102	(2.6)/75
RG 187A/U	75	7 X .004(0.10)	.012(0.30)	.063(1.60)	.084(2.13) S	.110(2.79)	.102	(2.6)/75
RG 188A/U	50	7 X .007(0.18)	.020(0.51)	.060(1.52)	.081(2.06) S	.110(2.79)	.102	(2.6)/50
RG 196A/U	50	7 X .004(0.10)	.012(0.30)	.033(0.84)	.054(1.37) S	.071(1.80)	.079	(2)/50
RG 213/U	50	7 X .030(0.75)	.089(2.25)	.285(7.25)	.340(8.64) S	.405(10.29)	.394	(10)/50
RG 214/U	50	7 X .030(0.75)	.089(2.25)	.285(7.25)	.360(9.14) D	.425(10.80)	.433	(11)/50
RG 215	50	7 X .030(0.75)	.089(2.25)	.285(7.25)	.340(8.64) S	.405(10.29)	.394	(10)/50
RG 216	75	7 X .016(0.40)	.047(1.20)	.285(7.25)	.360(9.14) D	.425(10.80)	.433	(11)/75
RG 223/U	50	single core	.035(0.89)	.116(2.95)	.176(4.47) D	.212(5.38)	.197	(5)/50
RG 225/U	50	7 X .031(0.80)	.094(2.40)	.285(7.25)	.360(9.14) D	.429(10.90)	.433	(11)/50
RG 303/U	50	single core	.037(0.94)	.116(2.95)	.146(3.71) S	.170(4.32)	.197	(5)/50
RG 400/U	50	19 X .007(0.18)	.039(0.99)	.116(2.95)	.171(4.34) D	.195(4.95)	.197	(5)/50
RG 401/U	50	single core	.064(1.62)	.209(5.31)	--	.250(6.35)	.250"	
RG 402/U	50	single core	.036(0.92)	.117(2.98)	--	.141(3.58)	.141"	
RG 405/U	50	single core	.020(0.51)	.066(1.68)	--	.086(2.20)	.085"	
NF-C 93-550 FLEXIBLE CABLES / NF-C 93551 SEMI-RIGID CABLES								
KX 3B	50	7 X .006(0.16)	.019(0.48)	.059(1.50)	.088(2.23) S	.100(2.54)	.102	(2.6)/50
KX 4	50	7 X .029(0.75)	.089(2.25)	.285(7.25)	.340(8.64) S	.405(10.29)	.394	(10)/50
KX 6A	75	7 X .008(0.20)	.024(0.60)	.145(3.70)	.191(4.85) S	.240(6.10)	.236	(6)/75
KX 8	75	7 X .016(0.40)	.047(1.20)	.285(7.25)	.340(8.64) S	.405(10.29)	.394	(10)/75
KX 13	50	7 X .029(0.75)	.089(2.25)	.285(7.25)	.360(9.14) D	.425(10.80)	.433	(11)/50
KX 15	50	19 X .007(0.18)	.035(0.89)	.116(2.95)	.150(3.81) S	.195(4.95)	.197	(5)/50
KX 21A	50	7 X .004(0.10)	.012(0.30)	.034(0.87)	.054(1.37) S	.071(1.80)	.079	(2)/50
KX 22A	50	7 X .007(0.18)	.020(0.51)	.059(1.50)	.081(2.06) S	.098(2.50)	.102	(2.6)/50
KX 23	50	7 X .013(0.34)	.040(1.02)	.116(2.95)	.171(4.34) D	.201(5.10)	.197	(5)/50
KX 24	50	7 X .031(0.80)	.094(2.40)	.285(7.25)	.360(9.14) D	.429(10.90)	.433	(11)/50
KX 25	75	7 X .009(0.23)	.028(0.71)	.146(3.70)	.176(4.47) S	.232(5.90)	.236	(6)/75
KX 30	93	single core	.025(0.64)	.146(3.70)	.191(4.85) S	.242(6.15)	.236	(6)/93
KX 50	75	single core	.025(0.64)	.146(3.70)	.264(6.70) T	.327(8.30)	.315	(8)/75
KX 51	75	7 X .009(0.23)	.026(0.67)	.146(3.70)	.264(6.70) T	.327(8.30)	.315	(8)/75
KX 52	75	single core	.025(0.64)	.146(3.70)	.185(4.70) S	.240(6.10)	.236	(6)/75
KX 53	75	7 X .009(0.23)	.026(0.67)	.146(3.70)	.185(4.70) S	.240(6.10)	.236	(6)/75
KX 1	50	single core	.020(0.51)	.065(1.67)	--	.086(2.18)	.085"	
KX 2	50	single core	.036(0.91)	.117(2.98)	--	.141(3.58)	.141"	
KX 3	50	single core	.064(1.63)	.210(5.33)	--	.250(6.35)	.250"	

S : 1 Braid ; **D** : 2 Braids ; **T** : 3 Braids
* Armoured

CROSS REFERENCES

QPL - MIL/RADIALL

Theses connectors, designed according to the military specifications MIL-C-39012, are part of the QPL (Qualified Product List). These models are corresponding to the ones without suffix .
Suffix 180 indicates a gold finish. Ex : P/N R 114 003 180 is the MIL QPL gold version of R 114 003 000. For exact dimensions and mounting of these connectors, please ask for technical data sheets.

P/N **M39012**	P/N **RADIALL**
M 39012/67-0004	**R 114 005 180**
M 39012/69-0003	**R 114 163 180**
M 39012/69-0004	**R 114 165 180**
M 39012/71-0001	**R 114 554 180**
M 39012/71-0002	**R 114 553 180**

P/N **M39012**	P/N **RADIALL**
M 39012/95-0001	**R 114 426 180**
M 39012/95-0002	**R 114 427 180**
M 39012/96-0001	**R 114 665 180**
M 39012/96-0002	**R 114 666 180**

NF/RADIALL

Equival. **NF**	P/N **RADIALL**	Page
KMC 1	**R 114 003 000**	6
KMC 2	**R 114 005 000**	6
KMC 3	**R 114 163 000**	6
KMC 4	**R 114 165 000**	6
KMC 5	**R 114 203 000**	6
KMC 6	**R 114 205 000**	6
KMC 7	**R 114 303 000**	6
KMC 8	**R 114 305 000**	6

Equival. **NF**	P/N **RADIALL**	Page
KMC 9	**R 114 553 000**	10
KMC 10	**R 114 554 000**	10
KMC 11	**R 114 670 000**	11
KMC 12	**R 114 426 000**	11
KMC 13	**R 114 665 000**	11
KMC 21	**R 114 073 000**	7
KMC 31	**R 114 075 000**	7

MIL(UG)/RADIALL

Equival. **UG**	P/N **RADIALL**	Page
UG 1451/U	**R 114 003 000**	6
UG 1452/U	**R 114 163 000**	6
UG 1454/U	**R 114 303 000**	6

Equival. **UG**	P/N **RADIALL**	Page
UG 1456/U	**R 114 005 000**	6
UG 1457/U	**R 114 165 000**	6
UG 1459/U	**R 114 305 000**	6

BETWEEN SERIES ADAPTERS

R 191 005 000	**SMB** male -	**APC 7®**
R 191 007 000	**SMB** female -	**APC 7®**
R 191 106 000	**SMB** male -	**SMC** right angle female
R 191 209 000	**SMB** male -	**BNC** male
R 191 211 000	**SMB** male -	**BNC** female *panel sealed* black chromuim
R 191 212 000	**SMB** male -	**BNC** female
R 191 212 500	**SMB** male -	**BNC** bulkhead female
R 191 213 000	**SMB** male -	**BNC** female ***panel sealed***
R 191 214 000	**SMB** female -	**BNC** male
R 191 215 000	**SMB** female -	**BNC** female
R 191 216 000	**SMB** female -	**BNC** female ***panel sealed***
R 191 220 000	**SMB** female -	**TNC** bulkhead female
R 191 225 000	**SMB** male -	**mQ** male
R 191 227 000	**SMB** male -	**mQ** female
R 191 228 000	**SMB** male -	**mQ** female
R 191 233 000	**SMB** male -	**N** male
R 191 234 000	**SMB** male -	**N** female
R 191 236 000	**SMB** male -	**N** female
R 191 239 000	**SMB** female -	**N** female
R 191 244 000	**SMB** male -	**C** female
R 191 265 000	**SMB** female -	**Microclic** male
R 191 267 000	**SMB** female -	**Microclic** female

TAPER SLEEVES

For cable .102(2.6)Dia, *Packaging : 10*

R 280 560 000	Black
R 280 560 001	Red
R 280 560 002	Green
R 280 560 003	Blue
R 280 560 004	Yellow
R 280 560 005	Grey
R 280 560 006	Black
R 280 560 007	Brown
R 280 560 008	Orange
R 280 560 009	Violet
R 280 560 010	*Natural*

V

INDEX OF RADIALL P/N