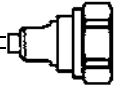


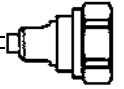
7/16 series

RI85





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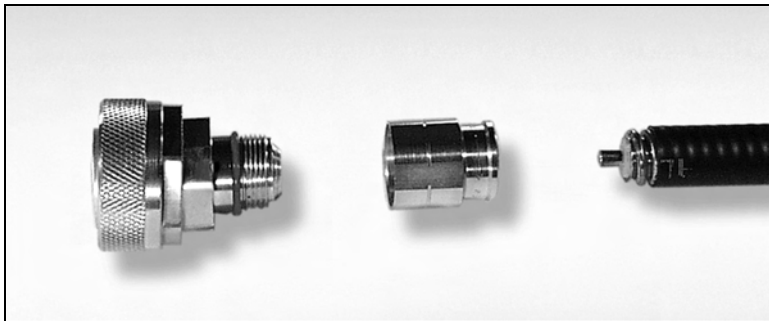
The Radiall 7/16 series has been developed using the latest advances in connector design. These connectors are easy-to-use, highly reliable, innovative and are designed to meet the needs of Telecommunications market. The complete series features the following characteristics:

- extensive range, with optimized component part design,
- upgraded cross-knurled coupling nut allowing better manual tightening.

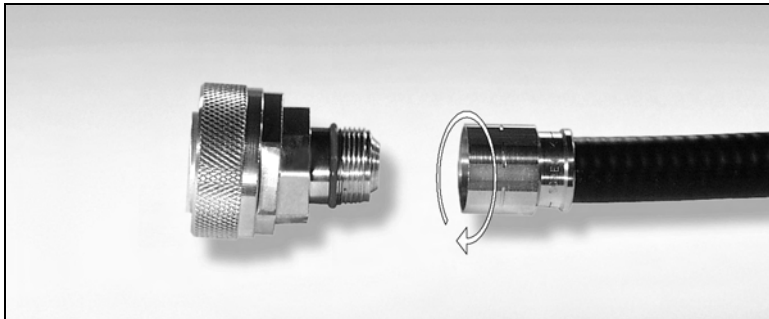
EZ FIT connectors

We have developed EZ FIT connectors for 1/4", 3/8", 1/2" superflexible corrugated cables and for 1/2" and 7/8" flexible corrugated cable with 2 piece parts for easy and quick outdoor installation.

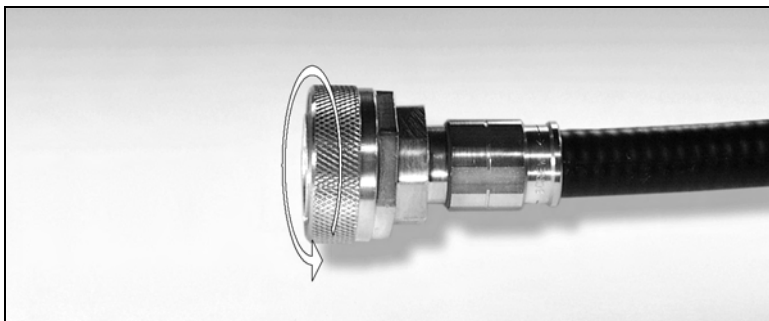
Only 3 assembly steps:



1- Strip your cable using Radiall's stripping tool.



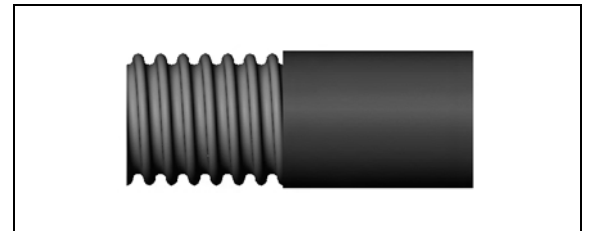
2- Screw the clamp nut onto your cable.



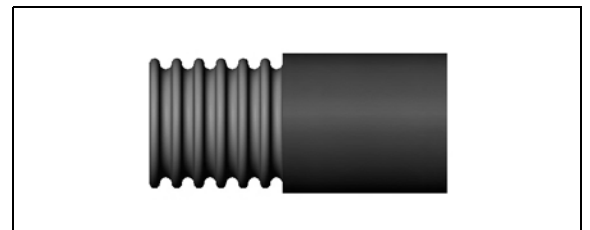
3- Screw the body onto the clamp nut using Radiall's torque wrench.

Our standard EZ FIT 7/16 connectors for corrugated cables have been specially designed to fit both HELIAX[®] coaxial cables and CELLFLEX[®], HYPERCELL[®] cables.

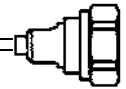
We can also develop custom 7/16 connectors to be assembled on your specific corrugated cable. We offer connectors for superflexible corrugated and flexible corrugated cables. The difference between both corrugated cable types stands in the conformability, as shown here below.



Helical cable = Superflexible cable.

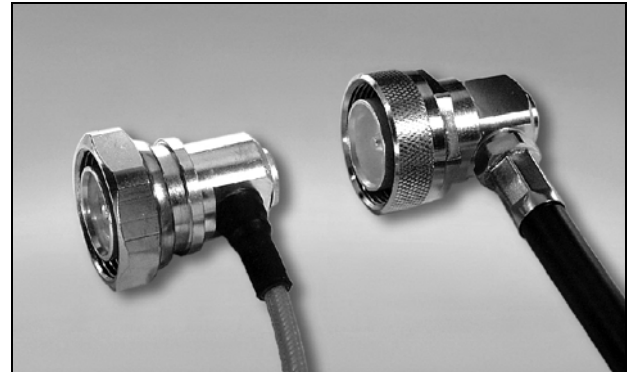


Ring cable = Flexible cable.



High performance range

- Frequency range: DC - 7.5 GHz
- 2 types of coupling nut:
 - cross-knurled and 6 flats 27mm wide *coupling nut (3 000 N.cm)*,
 - 6 flats coupling nut (32 mm wide), allowing high *coupling torque (3 500 N.cm)*, thanks to torque wrench.
- Intermodulation performance: 2 levels
 - 125 dBm cable assemblies (see page 22-23).
 - 110 dBm connectors and cable assemblies .



2 types of coupling nut

RADIALL has developed its intermodulation measurement equipment following the IEC 46 D/292/NP standard proposal. It is aimed at third order IMP measurements through the reflection method. The range of this test set-up is -132 dBm (-175 dBc) under 2 x 20 W.

- High performance non magnetic material (brass) and plating (silver) with anti tarnishing finish (strike of BBR)
- Non slotted outer contact on standard products

The Radiall 7/16 series benefits from a complete easy-to-use range of tooling.

Custom models



Designed to fulfil customer requirements according to the 7/16 series standard. Radiall fully masterizes the complete designing of custom connectors.

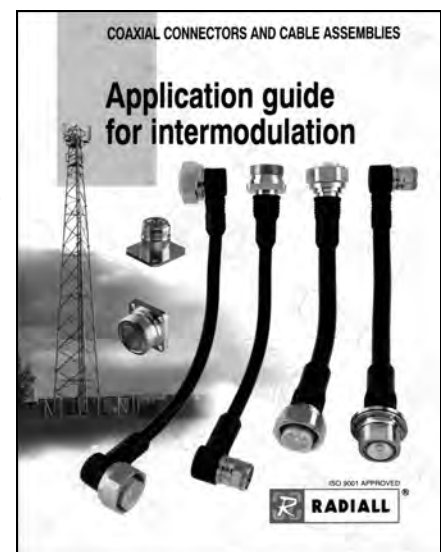
What is INTERMODULATION ?

IM (abbreviation for InterModulation) is an undesired modulation which leads to a distortion of the output High Frequency carrier.

It is defined as the ratio of the 3rd order intermodulation products against the incident signal power because the most troublesome IM products are those of 3rd order.

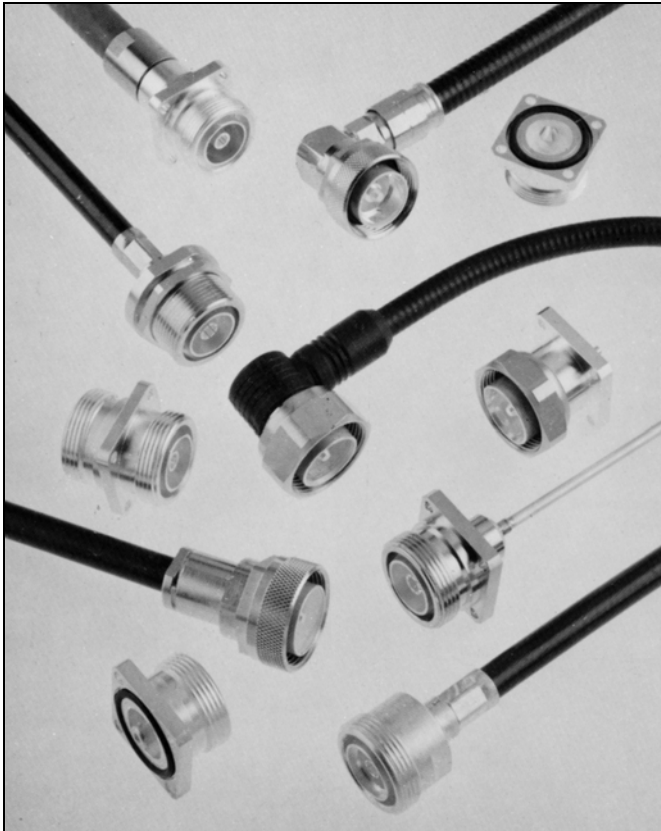
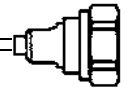
For more detailed information, please ask for our application guide where we present:

- our intermodulation measurement system,
- our product range.



For further details, please read our:

INTERMODULATION APPLICATION GUIDE **D1 032 DE** - BBR PLATING APPLICATION GUIDE **D1 030 DE**.

50 Ω

DC - 7.5 GHz

GENERAL

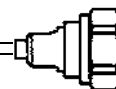
- Standard coaxial connectors
- Screw-on coupling
- High power rating
- Excellent RF performance

APPLICABLE STANDARDS

- IEC 169-4
- DIN 47223
- CECC 22 190

APPLICATIONS

- Mobile communication infrastructure networks: combiner, diplexer, filter...
- Jumper and feeder cables assemblies
- Radio links
- Indoor and outdoor applications



CABLE CONNECTORS

Model Cable	Straight plug			Right angle plug		Straight jack	
	Full crimp	Clamp/EZ FIT	Solder	Crimp	Clamp/EZ FIT	Full crimp	Clamp/EZ FIT
5/50S (LMR 200)	R185 082 027 (page 10)						
10/50 S + D (RG213 + RG 393)	R185 074 000 (page 10)	R185 010 000 (page 10)		R185 174 000 (page 12)	R185 160 000 (page 12)	R185 234 000 (page 13)	R185 210 000 (page 13)
11/50D (RG 214)	R185 077 000 (page 10)			R185 177 000 (page 12)		R185 237 000 (page 13)	
.250" (RG 401)			R185 054 020 (page 11)				
1/4" superflexible corrugated		R185 030 200 (page 11)			R185 164 200 (page 12)		R185 215 200 (page 13)
3/8" superflexible corrugated		R185 032 200 (page 11)			R185 166 200 (page 12)		R185 217 200 (page 13)
1/2" superflexible corrugated		R185 031 200 (page 11)			R185 165 200 (page 12)		R185 216 200 (page 13)
1/2" flexible corrugated		R185 031 020W (page 11)					R185 216 020W (page 13)
7/8" flexible corrugated		R185 033 020W (page 11)					R185 218 020W (page 13)

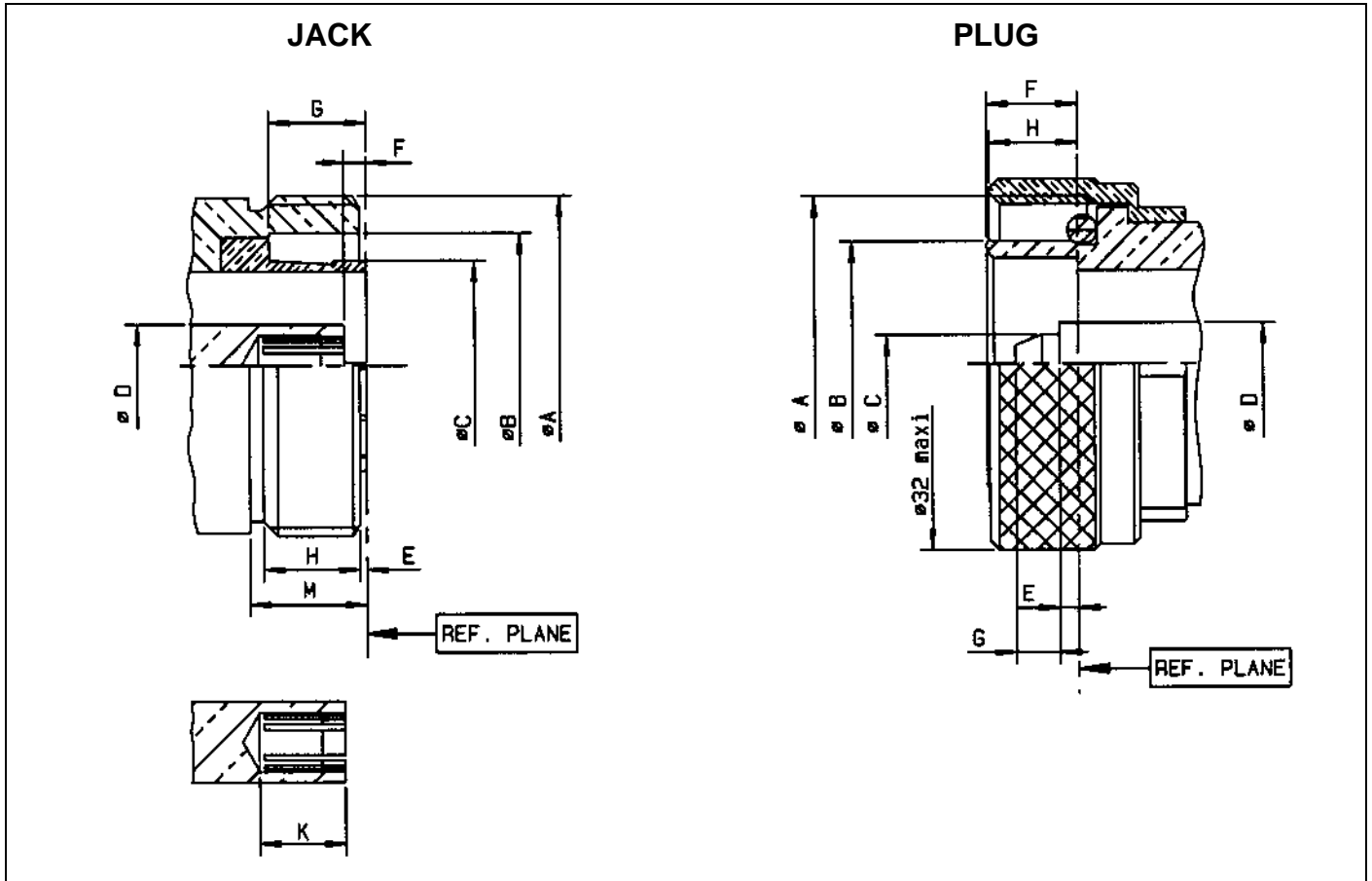
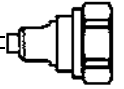
Model Cable	Straight flange mount jack			Straight bulkhead mount jack	
	Full crimp	Clamp/EZ FIT	Solder	Full crimp	Clamp/EZ FIT
10/50 S + D (RG213 + RG 393)	R185 274 000 (page 14)	R185 260 000 (page 14)		R185 304 000 (page 16)	R185 310 000 (page 16)
11/50 D (RG 214)	R185 277 000 (page 14)			R185 307 000 (page 16)	
.250" (RG 401)			R185 254 000 (page 15)		
1/4" superflexible corrugated		R185 265 200 (page 15)			R185 315 200 (page 16)
3/8" superflexible corrugated		R185 267 200 (page 15)			R185 317 200 (page 16)
1/2" superflexible corrugated		R185 266 200 (page 15)			R185 316 200 (page 16)

PANEL RECEPTACLES

Model	Straight female flange	Straight male flange
back	32 mm square	32 mm square
contact with solder tab	R185 403 490 (page 17)	
contact with solder pot	R185 403 547 (page 17)	
solder cylindrical contact	R185 405 200 - R185 405 248 - R185 405 270 (page 17)	R185 441 200 (page 18)
threaded contact	R185 406 080 - R185 406 090 (page 17)	

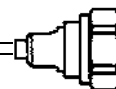
IN SERIES ADAPTERS

Model	Straight	Straight flange	Straight PUSH-ON
M - M	R185 703 000 (page 18)		
F - F	R185 705 000 (page 18)	R185 710 000 (page 18)	
M - F	R185 707 000 (page 18)		R185 791 500 (page 18)



LETTER	mm		inch	
	min.	max.	min.	max.
A DIA	M29 x 1.5		M29 x 1.5	
B DIA	22.5	22.7	.885	.893
C DIA	17.9	17.96	.704	.707
D DIA	6.95	7	.273	.275
E	0.5	0.7	.019	.027
F	1.77	2.07	.069	.081
G	8.2	8.4	.322	.330
H	8.25	8.75	.324	.344
K	7.25	7.55	.285	.297

LETTER	mm		inch	
	min.	max.	min.	max.
A DIA	M29 x 1.5		M29 x 1.5	
B DIA	20.8	21	.818	.826
C DIA	4.97	5.03	.195	.198
D DIA	6.95	7	.273	.275
E	1.47	1.77	.057	.069
F	7.4	7.8	.291	.307
G	3.6	4	.141	.157
H	7.3	7.8	.287	.307



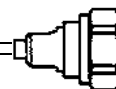
TEST/CHARACTERISTICS	STANDARD REFERENCE	VALUES/REMARKS
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ELECTRICAL CHARACTERISTICS

Impedance		50 Ω																								
Frequency range		DC - 7.5 GHz																								
V.S.W.R. (typ.)		1 GHz 2.5 GHz 5 GHz 7.5 GHz																								
<ul style="list-style-type: none"> <i>Straight models</i> 		1.10 max from DC to 3 GHz - 1.20 max from 3 to 7.5 GHz																								
RG213-RG214-RG393 .141" .250" 1/2" superflexible corrugated 3/8" superflexible corrugated 1/4" superflexible corrugated		<table border="1"> <tr> <td>1.04</td> <td>1.06</td> <td>1.08</td> <td>1.10</td> </tr> <tr> <td>1.04</td> <td>1.07</td> <td>1.08</td> <td>1.20</td> </tr> <tr> <td>1.03</td> <td>1.05</td> <td>1.11</td> <td>1.13</td> </tr> <tr> <td>1.02</td> <td>1.04</td> <td>1.05</td> <td>1.05</td> </tr> <tr> <td>1.03</td> <td>1.03</td> <td>1.12</td> <td>1.20</td> </tr> <tr> <td>1.01</td> <td>1.02</td> <td>1.09</td> <td>1.17</td> </tr> </table>	1.04	1.06	1.08	1.10	1.04	1.07	1.08	1.20	1.03	1.05	1.11	1.13	1.02	1.04	1.05	1.05	1.03	1.03	1.12	1.20	1.01	1.02	1.09	1.17
1.04	1.06	1.08	1.10																							
1.04	1.07	1.08	1.20																							
1.03	1.05	1.11	1.13																							
1.02	1.04	1.05	1.05																							
1.03	1.03	1.12	1.20																							
1.01	1.02	1.09	1.17																							
<ul style="list-style-type: none"> <i>Right angle models</i> 		1.15 max from DC to 3 GHz																								
RG213-RG214-RG393 1/2" superflexible corrugated 3/8" superflexible corrugated 1/4" superflexible corrugated		<table border="1"> <tr> <td>1.02</td> <td>1.04</td> <td>1.12</td> <td>1.50</td> </tr> <tr> <td>1.04</td> <td>1.04</td> <td>1.14</td> <td>1.60</td> </tr> <tr> <td>1.05</td> <td>1.08</td> <td>1.12</td> <td>1.80</td> </tr> <tr> <td>1.02</td> <td>1.06</td> <td>1.13</td> <td>1.60</td> </tr> </table>	1.02	1.04	1.12	1.50	1.04	1.04	1.14	1.60	1.05	1.08	1.12	1.80	1.02	1.06	1.13	1.60								
1.02	1.04	1.12	1.50																							
1.04	1.04	1.14	1.60																							
1.05	1.08	1.12	1.80																							
1.02	1.06	1.13	1.60																							
Intermodulation product (IMP ₃) <ul style="list-style-type: none"> <i>Connectors</i> <i>Home made cable assemblies</i> 		-110 dBm typ. (- 153 dBc typ / 20 W) -125 dBm typ. (- 168 dBc typ. / 20 W)																								
Insertion loss (dB) <ul style="list-style-type: none"> <i>Straight connectors and</i> <i>Right-angle connectors</i> 	MIL	0.05 \sqrt{f} (GHz)																								
RF Leakage	CECC	130 dB at 1 GHz																								
Insulation resistance	CECC	10 000 M Ω min																								
Contact resistance <ul style="list-style-type: none"> <i>Center contact</i> <i>Outer contact</i> 	CECC	< 0.4 m Ω \leq 1.5 m Ω																								
Working voltage in VRMS <ul style="list-style-type: none"> <i>at sea level</i> 	CECC	2 700																								
Dielectric withstanding voltage in VRMS <ul style="list-style-type: none"> <i>at sea level</i> <i>(at 70, 000 feet)</i> 	CECC	4 000 350																								

MECHANICAL CHARACTERISTICS

Durability	CECC	500 matings
Force to engage and disengage	CECC	15 N
Recommended coupling nut torque <ul style="list-style-type: none"> <i>Hex. coupling nut</i> <i>Hex. + cross knurl coupling nut</i> 		3 500 Ncm (with torque wrench R 282 303 500) 3 000 Ncm (with torque wrench R 282 303 520)
Proof torque	CECC	3 500 Ncm
Coupling nut retention force	CECC	1 000 N
Cable retention force Cable 5/50 & 10/50 Cable 1/4" Cable 3/8" Cable 1/2" Cable 7/8"	CECC	250 N 200 N 250 N 350 N 500 N
Center contact retention force	CECC	200 N



TEST/CHARACTERISTICS	STANDARD REFERENCE	VALUES/REMARKS
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ENVIRONMENTAL CHARACTERISTICS

Temperature range <ul style="list-style-type: none"> flexible cables semi-rigid cables corrugated cables 	CECC	- 55 °C + 155 °C - 55 °C + 105 °C - 55 °C + 155 °C
Thermo cycling test	CECC	- 55 °C / + 155 °C / 56 days
Rapid change of temperature	IEC	- 55 °C / + 155 °C / 5 cycles
Hight temperature test	CECC	1000 hours / 155 °C
Corrosion salt spray	IEC	48 hours / Na Cl 5% / 35 °C
Vibration	CECC	98 m/s ² - 10 Hz at 500 Hz
Moisture resistance <ul style="list-style-type: none"> clamp type crimp type home made cable assemblies 	IEC 529	IP67 IP65 (with heatshrink sleeve) IP68 (overmolding)
Hermetic test	CECC	5 Pa. cm ³ /s
Leakage	CECC	1 cm ³ /h max

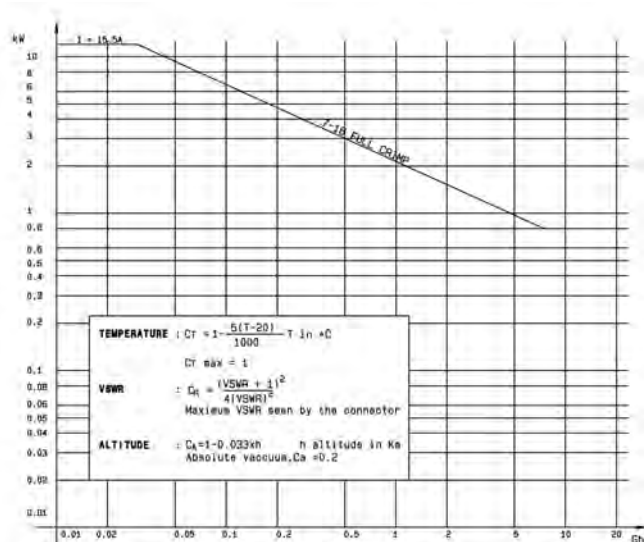
MATERIALS

Bodies	Brass
Nut	Brass
Center contact <i>male</i> <i>female</i>	Brass Beryllium copper
Insulator	PTFE
Gasket	Silicon rubber

PLATINGS

Bodies	Silver + BBR*
Coupling nut	BBR*
Center and outer contacts	Silver

POWER RANGE



Some connectors may feature different performance depending on the application they have been designed for, or according to the applicable cable.

* BBR: Bright Bronze Radiall

Standard packaging = 20 pieces. For unit packaging add «W» after the P/N

STRAIGHT PLUGS, CRIMP TYPE, FOR FLEXIBLE CABLES

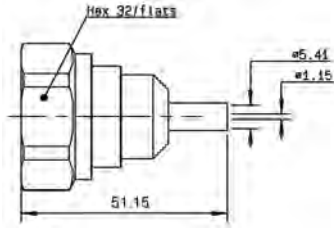


Fig. 1

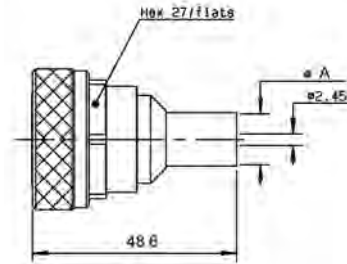
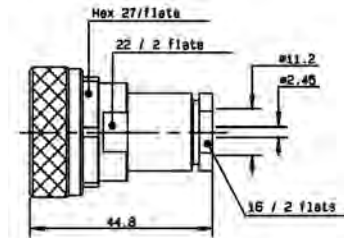


Fig. 2

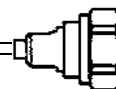
Cable group	Part number	Fig	Dimension (mm) A	Captive center contact	Assembly instructions	Finish	Note
5/50 S	R185 082 027•	1	-	yes	M05	BBR	LMR 200 cable
10/50 S + D	R185 074 000	2	12.25		M05	Silver + BBR	RG 213 & RG 393
11/50 D	R185 077 000		11.4				

STRAIGHT PLUG, CLAMP TYPE, FOR FLEXIBLE CABLES



Cable group	Part number	Captive center contact	Assembly instructions	Finish
10 + 11/50 S + D	R185 010 000	yes	M01	Silver + BBR

• Manufactured upon request



STRAIGHT PLUGS EZ FIT TYPE FOR CORRUGATED CABLES

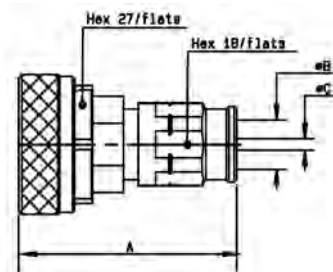


Fig. 1

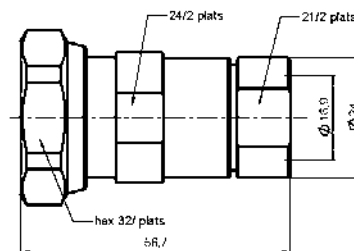


Fig. 2

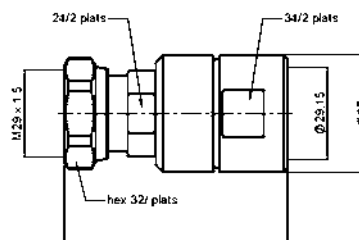
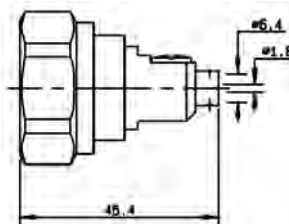


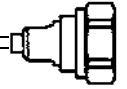
Fig. 3

Cable group	Part number	Fig.	Dimensions (mm)			Captive center contact	Assembly instructions	Finish
			A	B	C			
1/4" superflexible corrugated	R185 030 200	1	47	7.95	4.7	yes	M02	Silver + BBR
1/2" superflexible corrugated	R185 031 200		49	14	8.8			
3/8" superflexible corrugated	R185 032 200		49	11	7.1			
1/2" flexible corrugated	R185 031 020W	2	-	-	-	M07	Silver + BBR	
7/8" flexible corrugated	R185 033 020W	3	-	-	-	M08		

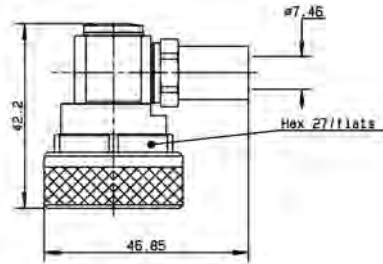
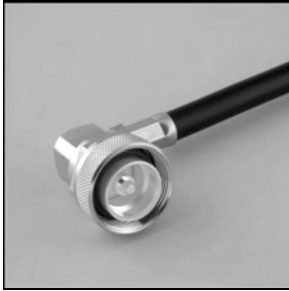
STRAIGHT PLUG SOLDER TYPE FOR SEMI RIGID CABLES



Cable group	Part number	Captive center contact	Assembly instructions	Finish
.250"	R185 054 020	yes	M06	Copper + silver

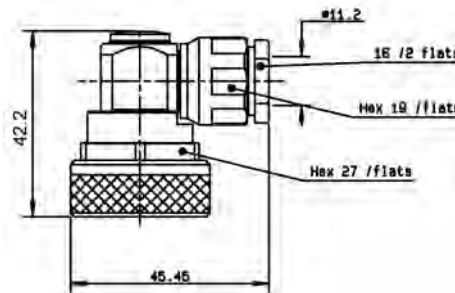


RIGHT ANGLE PLUGS CRIMP TYPE FOR FLEXIBLE CABLES



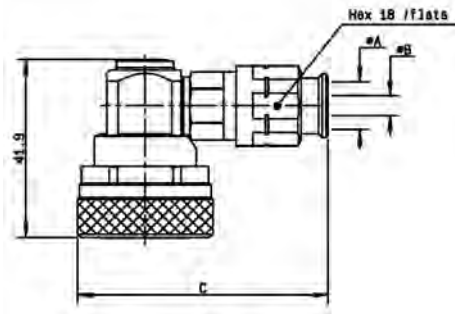
Cable group	Part number	Captive center contact	Assembly instructions	Finish	Note
10/50 S	R185 174 000	yes	M04	Silver + BBR	RG 213
11/50 D	R185 177 000				

RIGHT ANGLE PLUG CLAMP TYPE FOR FLEXIBLE CABLES



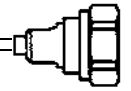
Cable group	Part number	Captive center contact	Assembly instructions	Finish
10 +11/50 D	R185 160 000	yes	M03	Silver + BBR

RIGHT ANGLE PLUGS EZ FIT TYPE FOR CORRUGATED CABLES

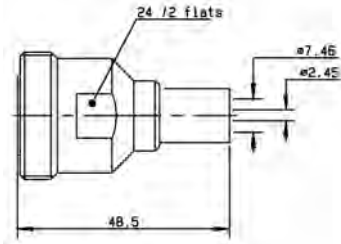
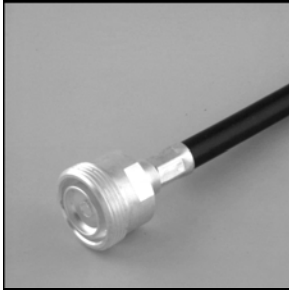


Cable group	Part number	Dimensions (mm)			Captive center contact	Assembly instructions	Finish
		A	B	C			
1/4" superflexible corrugated	R185 164 200	7.95	4.7	57.9	yes	M02	Silver + BBR
1/2" superflexible corrugated	R185 165 200	14	8.8	57.85			
3/8" superflexible corrugated	R185 166 200	11	7.1	58.4			

Standard packaging = 20 pieces. For unit packaging add «W» after the P/N

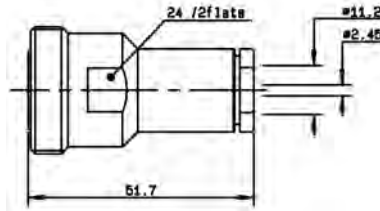


STRAIGHT JACKS CRIMP TYPE FOR FLEXIBLE CABLES



Cable group	Part number	Captive center contact	Assembly instructions	Finish	Note
10/50 S + D	R185 234 000	yes	M05	Silver + BBR	RG 213 & RG 393
11/50 S + D	R185 237 000				

STRAIGHT JACK CLAMP TYPE FOR FLEXIBLE CABLES



Cable group	Part number	Captive center contact	Assembly instructions	Finish
10 + 11/50 D	R185 210 000	yes	M01	Silver + BBR

STRAIGHT JACKS EZ FIT TYPE FOR CORRUGATED CABLES

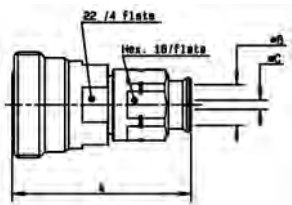


Fig. 1

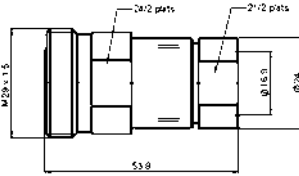


Fig. 2

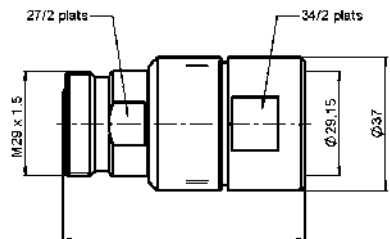
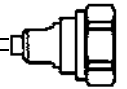
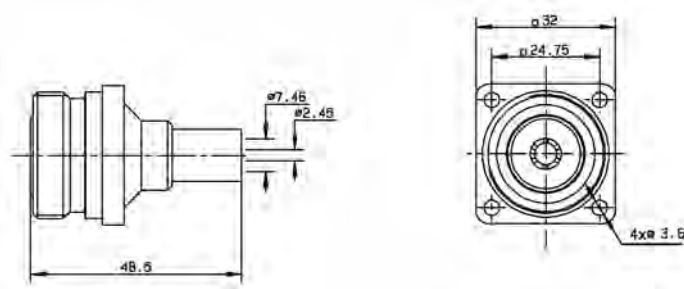
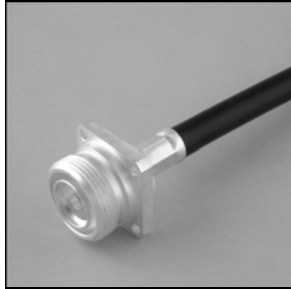


Fig. 3

Cable group	Part number	Fig.	Dimensions (mm)			Captive center contact	Assembly instructions	Finish
			A	B	C			
1/4" superflexible corrugated	R185 215 200	1	49.45	7.95	4.7	yes	M02	Silver + BBR
1/2" superflexible corrugated	R185 216 200		50	14	8.8			
3/8" superflexible corrugated	R185 217 200		11	7.1				
1/2" flexible corrugated	R185 216 020W	2	-	-	-	M07		
7/8" flexible corrugated	R185 218 020W	3	-	-	-	M08		

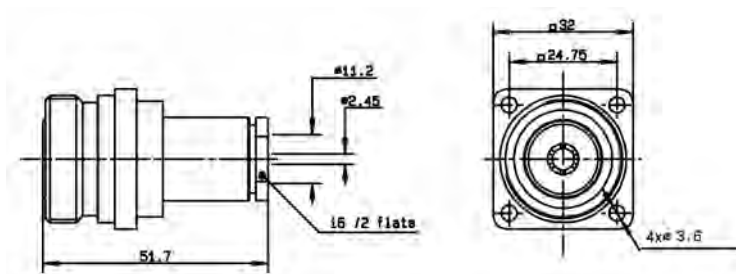


STRAIGHT SQUARE FLANGE JACKS CRIMP TYPE FOR FLEXIBLE CABLES

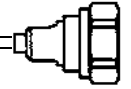


Cable group	Part number	Captive center contact	Assembly instructions	Panel drilling	Finish	Note
10/50 S + D	R185 274 000	yes	M05	P01	Silver+BBR	RG 213 & RG 393
11/50 D	R185 277 000					

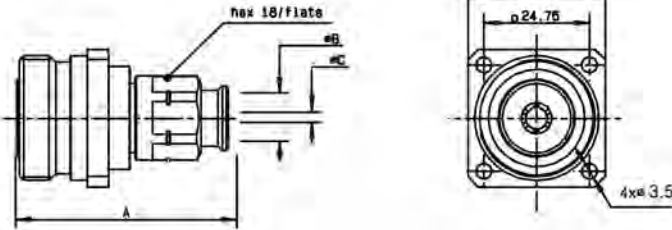
STRAIGHT SQUARE FLANGE JACK CLAMP TYPE FOR FLEXIBLE CABLES



Cable group	Part number	Captive center contact	Assembly instructions	Panel drilling	Finish
10 + 11/50 D	R185 260 000	yes	M01	P01	Silver + BBR

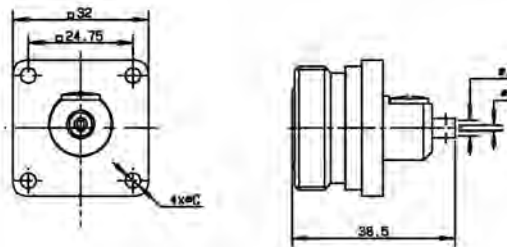


STRAIGHT SQUARE FLANGE JACKS EZ FIT TYPE FOR CORRUGATED CABLES



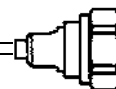
Cable group	Part number	Dimensions (mm)			Captive center contact	Assembly instructions	Panel drilling	Finish
		A	B	C				
1/4" superflexible corrugated	R185 265 200	49.5	7.95	4.7	yes	M02	P01	Silver + BBR
1/2" superflexible corrugated	R185 266 200	50	14	8.8				
3/8" superflexible corrugated	R185 267 200		11	7.1				

STRAIGHT SQUARE FLANGE JACK SOLDER TYPE FOR SEMI RIGID CABLES

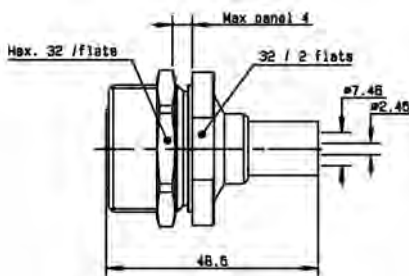


Cable group	Part number	Captive center contact	Dimensions (mm)			Assembly instructions	Panel drilling	Finish
			A	B	C			
.250"	R185 254 000•	yes	6.45	1.75	3.6	M06	P01	Silver + BBR

• Manufactured upon request

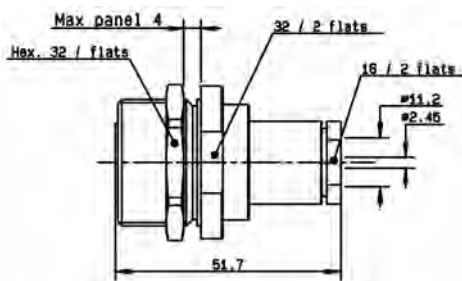


STRAIGHT BULKHEAD JACKS CRIMP TYPE FOR FLEXIBLE CABLES



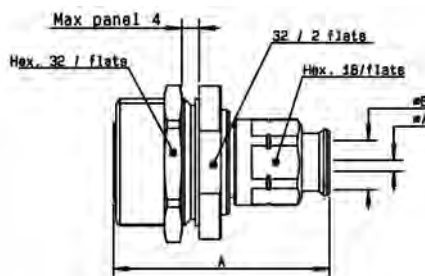
Cable group	Part number	Captive center contact	Assembly instructions	Panel drilling	Finish	Note
10/50 S + D	R185 304 000	yes	M05	P02	Silver + BBR	RG 213 & RG393
11/50 D	R185 307 000					

STRAIGHT BULKHEAD JACK CLAMP TYPE FOR FLEXIBLE CABLES



Cable group	Part number	Captive center contact	Assembly instructions	Panel drilling	Finish
10 + 11/50 D	R185 310 000	yes	M01	P02	Silver + BBR

STRAIGHT BULKHEAD JACKS EZ FIT TYPE FOR CORRUGATED CABLES



Cable group	Part number	Dimensions (mm)			Captive center contact	Assembly instructions	Panel drilling	Finish
		A	B	C				
1/4" superflexible corrugated	R185 315 200	49.5	7.95	4.7	yes	M02	P02	Silver + BBR
1/2" superflexible corrugated	R185 316 200	50	14	8.8				
3/8" superflexible corrugated	R185 317 200		11	7.1				

STRAIGHT FLANGE FEMALE RECEPTACLES

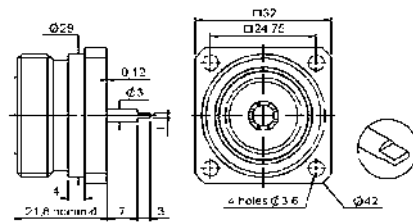
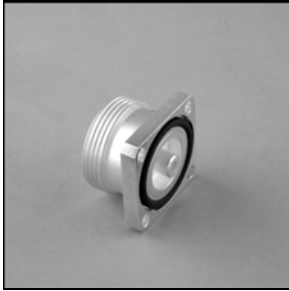


Fig. 1

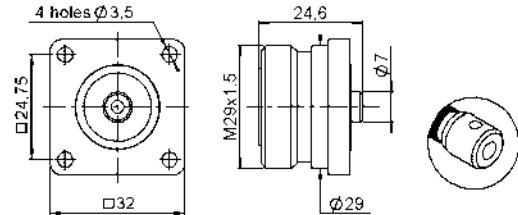


Fig. 2

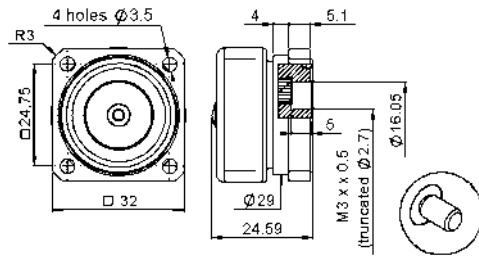


Fig. 3

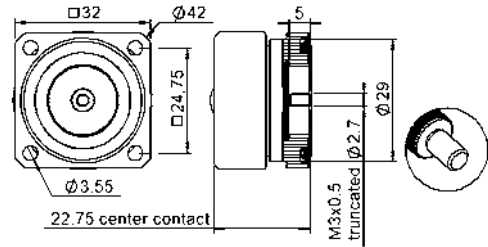


Fig. 4

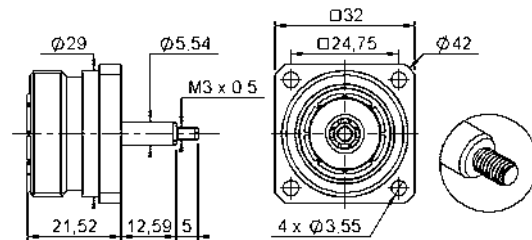


Fig. 5

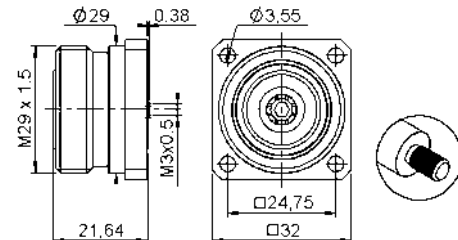
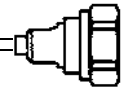


Fig. 6

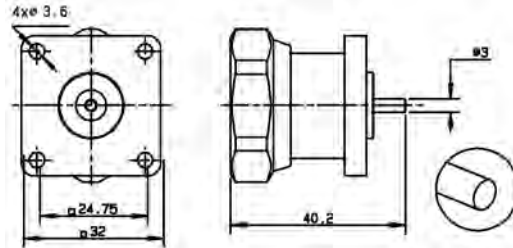
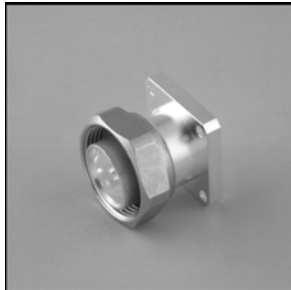
Part number	Captive center contact	Fig.	Panel drilling	Finish	Slotted outer contact	Packaging	Note
R185 403 490	yes	1	P04	BBR	no		With tab contact
R185 403 547		2	P03				With solder pot contact
R185 405 200		3	P05	Silver + Copper	yes	(unit)	Panel seal flange mount with threaded contact
R185 405 248•				Tin + Nickel			
R185 405 270		4	P05	BBR	no		With a dust cap intermod -125 dB
R185 406 080		5			yes	50	intermod -125 dB
R185 406 090		6			no	50	

• Manufactured upon request

For unit packaging add «W» after the P/N.



STRAIGHT FLANGE MALE RECEPTACLE



Part number	Captive center contact	Panel drilling	Finish	Packaging	Note
R185 441 200•	yes	P06	Silver + Copper	20	straight terminal

IN SERIES ADAPTERS

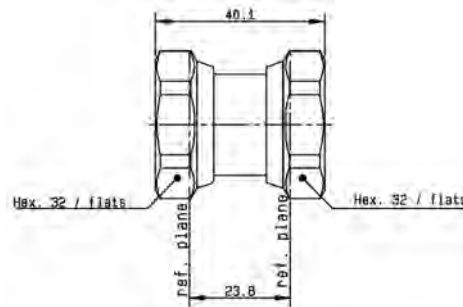


Fig. 1

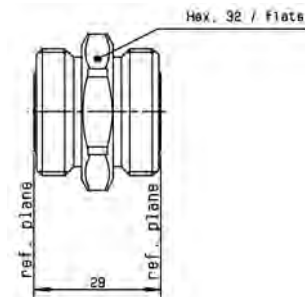


Fig. 2

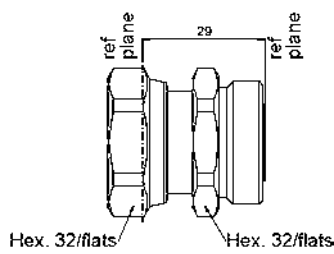


Fig. 3

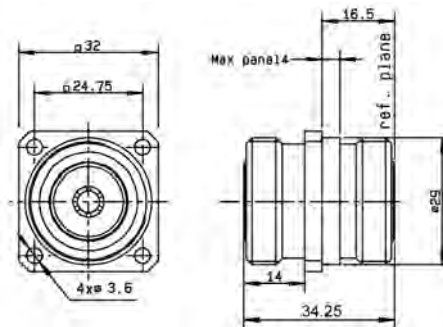


Fig. 4

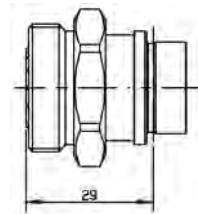
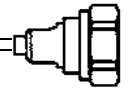


Fig. 5

Part number	Fig.	Captive center contact	Panel drilling	Finish	Note
R185 703 000	1	yes	P01	Silver + Copper	male - male
R185 705 000	2				female - female
R185 707 000	3				male - female
R185 710 000	4				female - female flange mount
R185 791 500	5				Push-on* male - screw on female

• Manufactured upon request



BETWEEN SERIES ADAPTERS

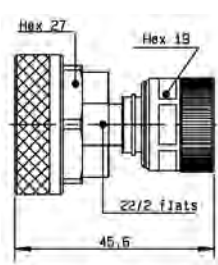
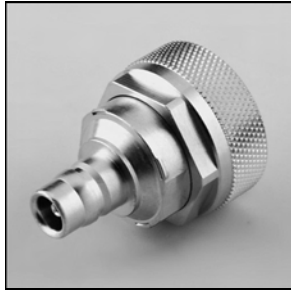


Fig. 1

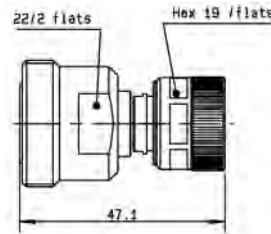


Fig. 2

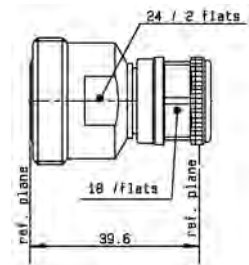


Fig. 3

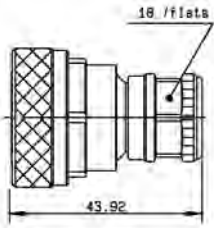


Fig. 4

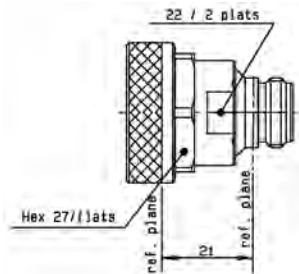


Fig. 5

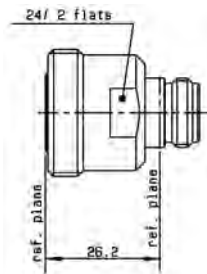


Fig. 6

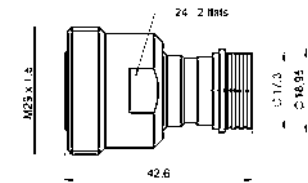


Fig. 7

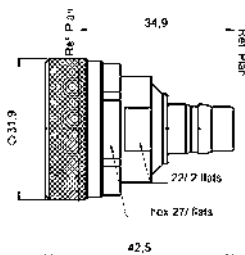


Fig. 8

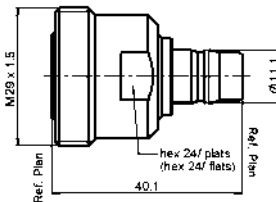


Fig. 9

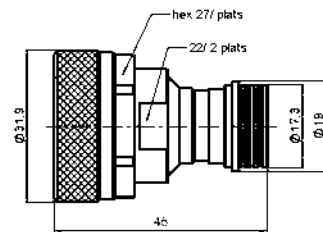
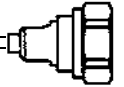


Fig. 10

Part number	Fig	Captive center contact	Finish	Note	Packaging
R191 096 000	1	yes	Silver + Gold	7/16 male - PC7	unit
R191 096 300	2			7/16 female - PC7	
R191 720 000	3		7/16 female - N male		
R191 721 000	4		7/16 male - N male		
R191 722 000	5		7/16 male - N female		
R191 723 000	6		7/16 female - N female		
R191 922 000	7		7/16 female - QN male		
R191 923 000	8		7/16 male - QN female		
R191 924 000	9		7/16 female - QN female		
R191 925 000	10		7/16 male - QN male		

Ask for our full detailed catalog of COAXIAL BETWEEN SERIES ADAPTERS 50 & 75 Ω : **D1 C047 DE**.



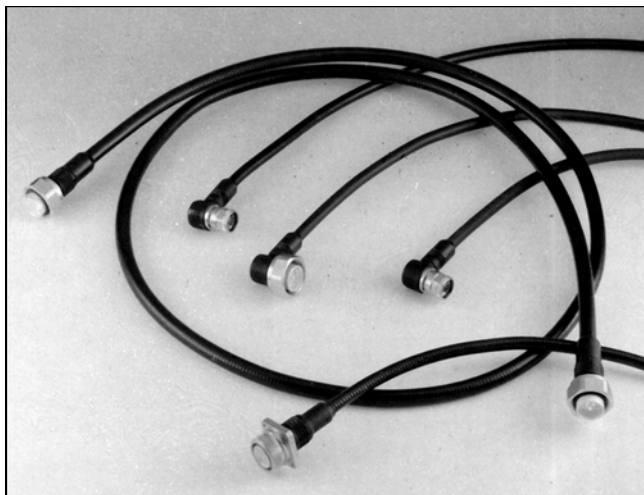
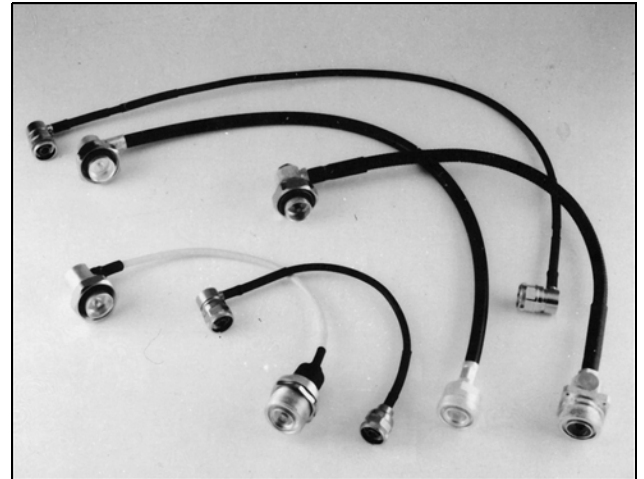
Radiall offers 2 types of cable assemblies with 7/16 series connectors.

This range includes standard and custom cable assemblies, offering you 2 levels of intermodulation: -110 dBm or -125 dBm (see our intermodulation application guide: **D1 032 DE**).

- Good features : **IMP³ = -110 dBm typical** (see page page 21-22)

The main features of this range are:

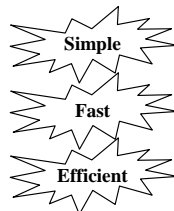
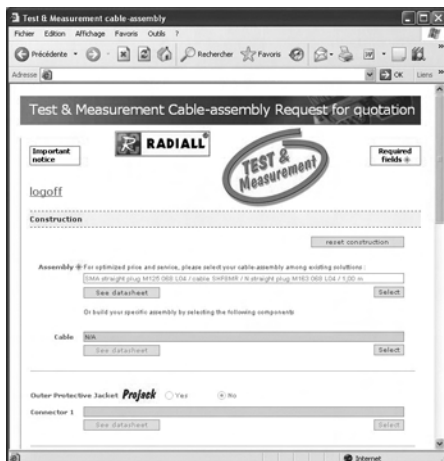
- hexagonal coupling nut (3 000 Ncm)
- non-slotted outer contact
- non magnetic plating: silver
- anti tarnishing finish: strike of BBR*
- connectors also available uncabled (except for SHF cable)
- 3 types of cable attachment: full crimp, clamp or solder.



- Excellent features: **IMP³ = -125 dBm typical** (see page 23-24)

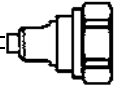
The main features of this range are:

- hexagonal coupling nut (3500 Ncm)
- non-slotted outer contact
- non magnetic plating: silver
- anti tarnishing finish: strike of BBR*
- connectors only available on **cable assemblies made by Radiall**
- only solder type models: the most rigid cable attachment
- Intermodulation curves available upon request.
- Moisture resistance: IP 68 overmolding.

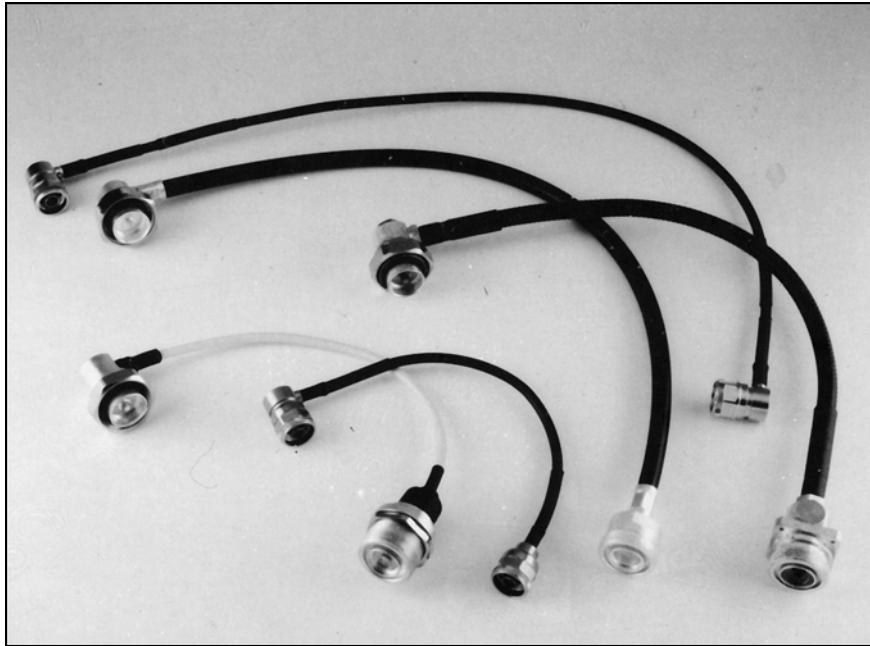


SERVICE + webtool: fast and reliable:
Your solution for RF & Microwave cable-assemblies
on www.radiall.com

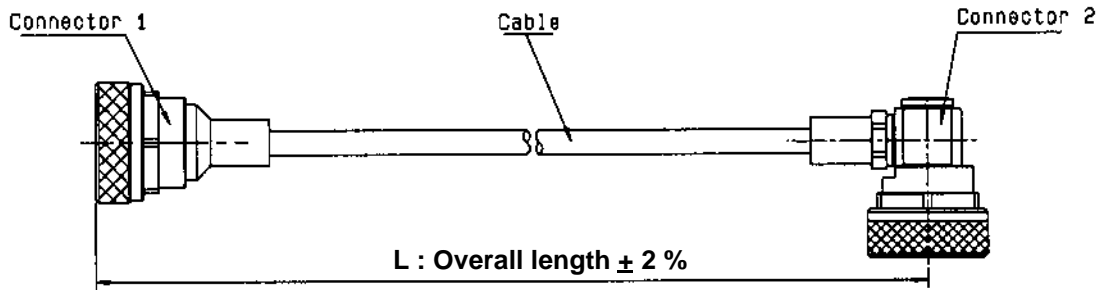
* BBR: Bright Bronze Radiall.



LOW INTERMODULATION CABLE ASSEMBLIES (-110 dBm typ.) (-153 dBc typ./20 W)



HOW TO ORDER



Example: Straight plug 7/16 / Cable 11/50 D RG 214 / Right angle plug 7/16 / length 100 cm.

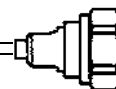
R185 077 000 / C291 600 000 / R185 177 000 / 100

Connector 1 part number (see table 1) _____

Coax cable part number (see table 2) _____

Connector 2 part number (see table 1) _____

Overall length in cm _____



LOW INTERMODULATION CABLE ASSEMBLIES (-110 dBm typ.) (-153 dBc typ./20W)

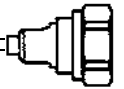
Table 1 Connectors part number guide

MODEL		SEMI-RIGID CABLES	FLEXIBLE CABLES		
		.250"	5/50 S	10/50 D (RG393)	11/50 D
Straight plug	Full crimp		R185 082 027	R185 074 000	R185 077 000
	Clamp		R185 010 000		
	Solder	R185 054 020			
R/A plug	Crimp			R185 174 000	R185 177 000
	Clamp		R185 160 000		
Straight jack	Full crimp			R185 234 000	R185 237 000
	Clamp		R185 210 000		
Straight flange mount jack	Full crimp			R185 274 000	R185 277 000
	Clamp		R185 260 000		
	Solder	R185 254 000			
Straight bulkhead mount jack	Full crimp			R185 304 000	R185 307 000
	Clamp		R185 310 000		

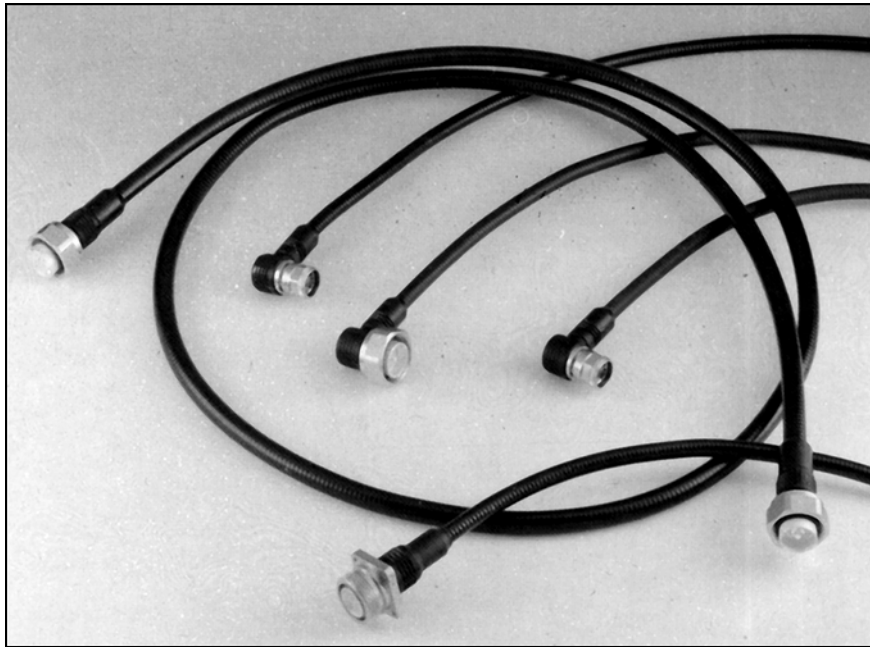
MODEL		SUPERFLEXIBLE CORRUGATED CABLES			FLEXIBLE CORRUGATED CABLES	
		1/4"	3/8"	1/2"	1/2"	7/8"
Straight plug	EZ FIT	R185 030 200	R185 032 200	R185 031 200	R185 031 020W	R185 033 020W
R/A plug	Crimp					
	EZ FIT	R185 164 200	R185 166 200	R185 165 200		
	Solder					
Straight jack	EZ FIT	R185 215 200	R185 217 200	R185 216 200	R185 216 020W	R185 218 020W
Straight flange mount jack	EZ FIT	R185 265 200	R185 267 200	R185 266 200		
	Solder					
Straight bulkhead mount jack	Full crimp					
	EZ FIT	R185 315 200	R185 317 200	R185 316 200		
R/A flange mount jack	Solder					

Table 2 Radiall cable part number guide

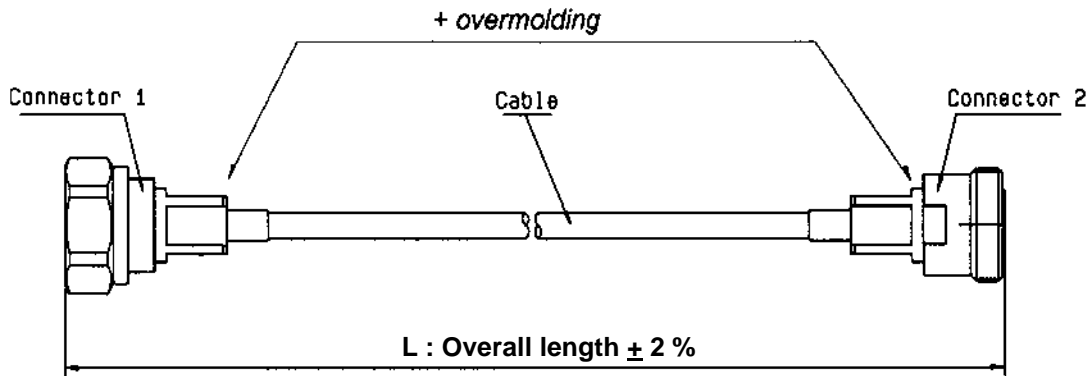
		CABLE TYPE	P / N
SEMI-RIGID	.250"	RG 401	C291 870 001
FLEXIBLE	5 / 50 S	LMR 200	C291 316 070
(PTFE) FLEXIBLE	10 / 50 D	RG 393	C291 511 007
	11 / 50 D	RG214	C291 600 000
CORRUGATED	1/4" superflexible corrugated	High flexible CELLFLEX	C291 993 170
		HELIAX	C291 993 070
	3/8" superflexible corrugated	High flexible CELLFLEX	C291 996 170
		HELIAX	C291 996 070
	1/2" superflexible corrugated	High flexible CELLFLEX	C291 994 170
		HELIAX	C291 994 070
	1/2" flexible corrugated	CELLFLEX	C291 972 080
		HELIAX	C291 972 085
7/8" flexible corrugated	HELIAX	Please consult us	
SHF	5 MD	RADIALL	5 MD
	5 LI		5 LI



VERY LOW INTERMODULATION CABLE ASSEMBLIES (-125 dBm typ.) (-165 dBc typ./20 W)



HOW TO ORDER



Example: Straight plug 7/16 / Cable 1/4" high flexible Cellflex / straight jack 7/16 / length 50 cm

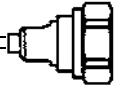
865 06 250 / C291 993 170 / 865 06 300 / 50

Connector 1 part number (see table 1) _____

Coax cable part number (see table 2) _____

Connector 2 part number (see table 1) _____

Overall length in cm _____



VERY LOW INTERMODULATION CABLE ASSEMBLIES (-125 dBm typ.) (-165 dBc typ./20 W)

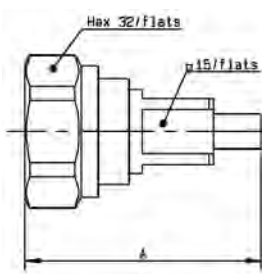


Fig. 1

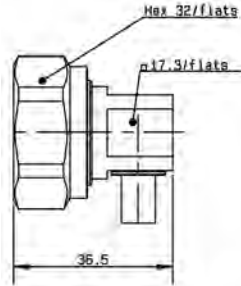


Fig. 2

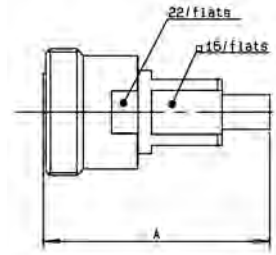


Fig. 3

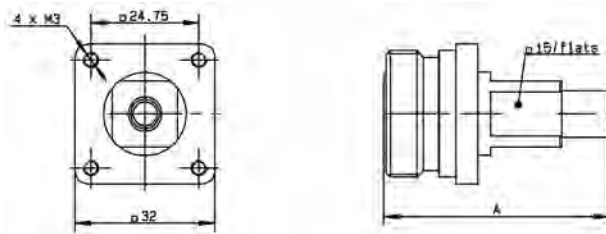
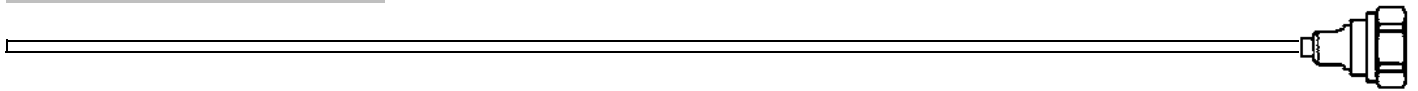


Fig. 4

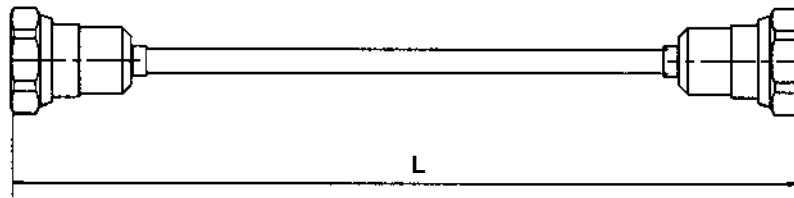
Table 1 Connectors part number guide

MODEL Solder type	SUPERFLEXIBLE CORRUGATED CABLE			RG CABLES (PTFE) RG 400 - RG 393
	1/4"	3/8"	1/2"	
Straight plug	865 06 250 (Fig. 1 A= 54,2)	865 06 260 (Fig. 1 A= 56,2)	865 06 270 (Fig. 1 A= 58,2)	Please consult us.
R/A plug	865 06 350 (Fig. 2)	865 06 360 (Fig. 2)	865 06 370 (Fig. 2)	
Straight jack	865 06 300 (Fig. 3 A= 51,8)	865 06 310 (Fig. 3 A= 53,8)	865 06 320 (Fig. 3 A= 55,8)	
Straight flange mount jack (panel P01 page 26)	865 06 400 (Fig. 4 A= 51,8)	865 06 410 (Fig. 4 A= 53,8)	865 06 420 (Fig. 4 A= 55,8)	

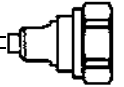
These connectors are only available on cable assemblies made by RADIALL.



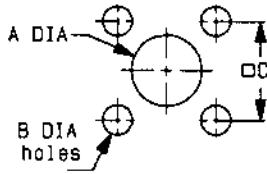
VERY LOW INTERMODULATION CABLE ASSEMBLIES (-125 dBm typ.) (-165 dBc typ./20 W)



Connector 1		Cable		Connector 2		Cable assembly
series	model	type	length(m)	series	model	P/N
7/16	straight plug	3/8" superflexible corrugated	1	7/16	straight plug	R284C0341007
			2			R284C0341008
			3			R284C0341009
		1/2" superflexible corrugated	1			R285 700 082
			2			R285 700 084
			3			R284C0341010
N	straight plug	3/8" superflexible corrugated	1	N	straight plug	R284C0341001
			2			R284C0341002
			3			R284C0341003
		1/2" superflexible corrugated	1			R284C0341001
			2			R284C0341002
			3			R284C0341003

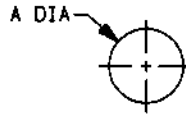


P01



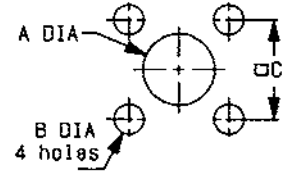
	MM		INCH	
	maxi	mini	maxi	mini
A	29.2	29.1	1.15	1.146
B	3.7	3.6	0.146	0.142
C	24.8	24.7	0.976	0.972

P02



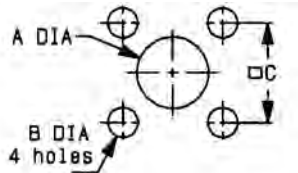
	MM		INCH	
	maxi	mini	maxi	mini
A	29.2	29.1	1.15	1.146

P03



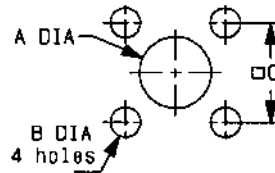
	MM		INCH	
	maxi	mini	maxi	mini
A (Ø Mount)	16.2	16	0.638	0.63
A (Ø Mount)	29.3	29.1	1.154	1.146
B	3.7	3.6	0.146	0.142
C	24.8	24.7	0.976	0.972

P04



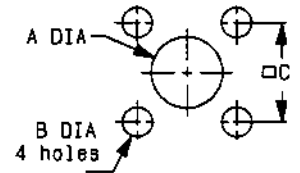
	MM		INCH	
	maxi	mini	maxi	mini
A	12.3	12.1	0.484	0.476
B	3.8	3.7	0.15	0.146
C	24.8	24.7	0.976	0.972

P05



	MM		INCH	
	maxi	mini	maxi	mini
A	16.2	16	0.638	0.63
B	3.7	3.6	0.146	0.142
C	24.8	24.7	0.976	0.972

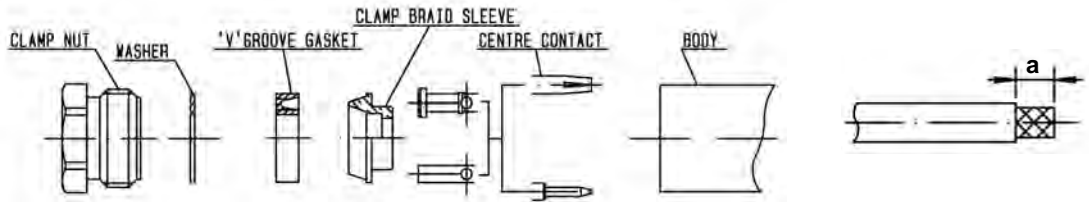
P06



	MM		INCH	
	maxi	mini	maxi	mini
A	15.2	15.1	0.598	0.594
B	3.7	3.6	0.146	0.142
C	24.8	24.7	0.976	0.972

M 01

STRIPPING DIMENSIONS



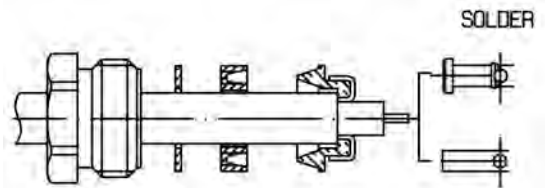
Part number	Stripping length (mm) a	Stripping tool	Cassette	Recommended coupling torque
R185 010 000 R185 210 000 R185 260 000 R185 310 000	8.5	R282 078 000	R282 078 205	800 N.cm

1

- Strip the cable.

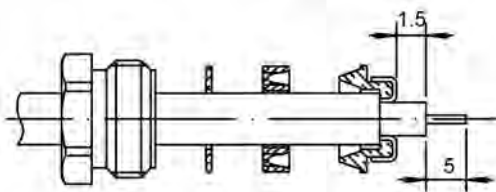
3

- Solder the cable inner conductor into the centre contact.



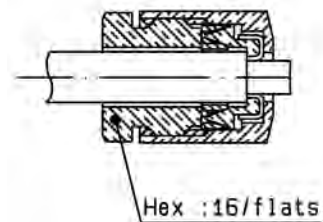
2

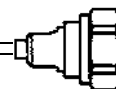
- Slide the clamp nut and the "V" groove gasket onto the cable.
- Slide the clamp braid sleeve over the braid.
- Fold back the braid and trim off excess of braid.
- Trim back the dielectric as shown.



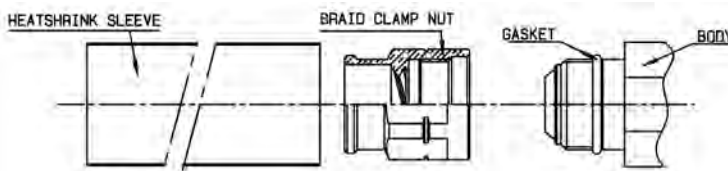
4

- Screw the sub-assembly into the connector body.

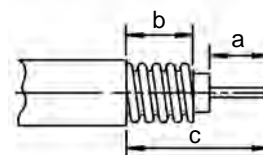




M 02



STRIPPING DIMENSIONS



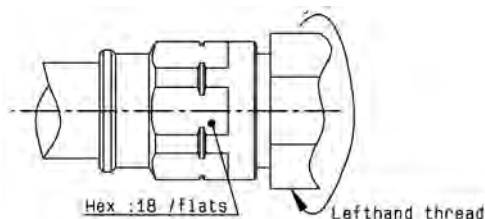
Part number	Stripping length (mm)			Stripping tool	Torque wrench	Recommended coupling torque
	a	b	c			
R185 030 200 R185 164 200 R185 215 200	5.5	5	11.5	R282 010 030	R282 303 220	950 N.cm
R185 031 200 R185 165 200 R185 216 200				R282 010 050		
R185 032 200 R185 166 200 R185 217 200				R282 010 040		

1

- Strip the cable.
- Do not damage the outer conductor.
- Deburr cable inner conductor.

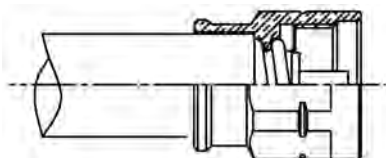
3

- Screw the connector onto the assembly.
- **WARNING:** screw the connector on the braid clamp turning left (lefthand thread) so that the copper outer conductor is being squeezed.



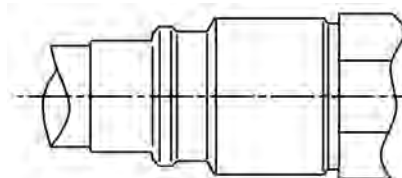
2

- Slide the heatshrink sleeve onto the cable.
- Screw manually the braid clamp nut onto cable outer conductor until stop.

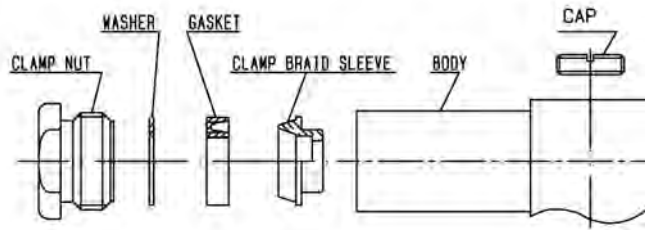


4

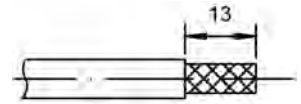
- Shrink the heatshrink sleeve.



M 03



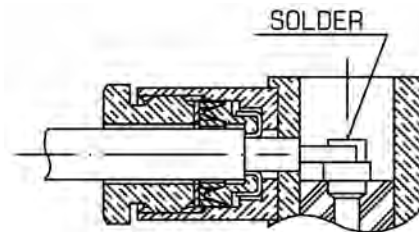
STRIPPING DIMENSIONS



Part Number	Stripping tool	Cassette	Recommended coupling torque
R185 160 000	R282 078 000	R282 078 205	800 N.cm

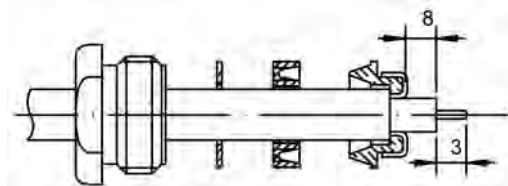
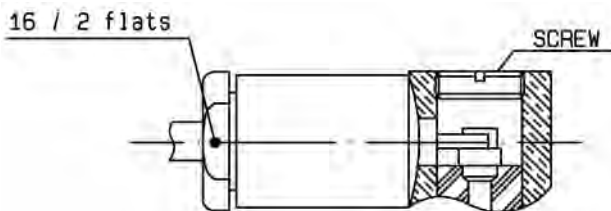
1 - Strip the cable.

3 - Screw sub-assembly into the connector body.
- Solder center contact.

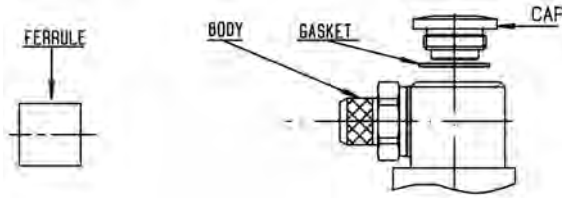


2 - Slide the clamp nut, the washer and the gasket onto the cable.
- Slide clamp braid sleeve over braid.
- Fold back braid and trim off excess braid.
- Trim back dielectric as shown.

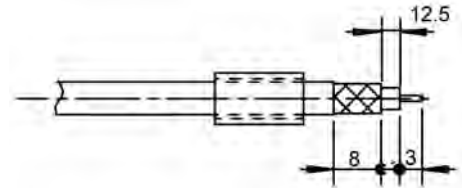
4 - Screw cap into the body.



M 04



STRIPPING DIMENSIONS



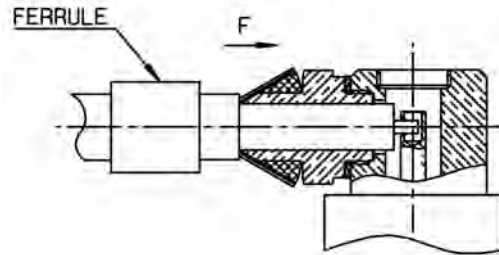
Part Number	Stripping tool	Cassette	Hex	DIES included	Crimp Tools
					MIL Standard R282 293 000 (M22520/5-01)+DIES
R185 174 000 R185 177 000	R282 078 000	R282 078 225	10.54	R282 231 000	R282 235 116 (Y116 DANIELS)

1

- Slide ferrule onto cable.
- Strip the cable.

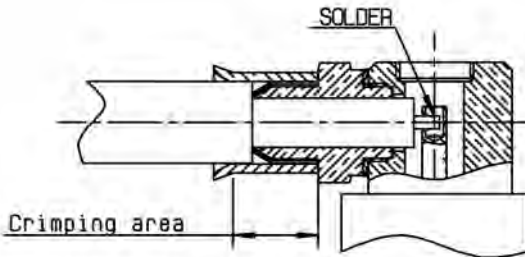
3

- Crimp the ferrule.
- Solder inner conductor.



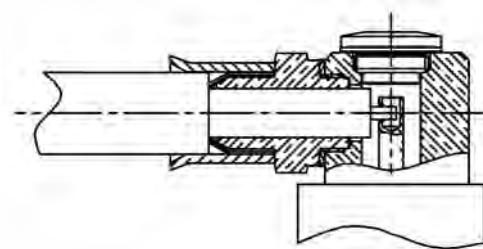
2

- Fan the braid.
- Push connector body under braid.
- Slide ferrule over the braid (in direction F).

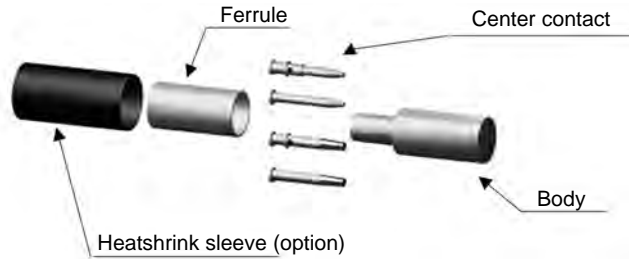


4

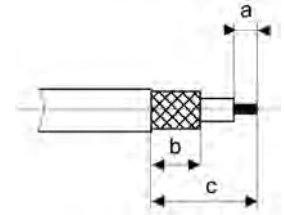
- Tightly screw the cap with gasket onto connector body.



M 05



STRIPPING DIMENSIONS



Part number	Stripping length (mm)			Stripping tool	Cassette	Hex	DIES included	Crimp Tools MIL standard R282 293 000 (M22520/5-01) + DIES
	a	b	c					
R185 074 000 R185 077 000 R185 234 000 R185 237 000 R185 274 000 R185 277 000 R185 304 000 R185 307 000	4.5	7.5	12	R282 078 000	R282 078 205	10.54	R282 231 000	R282 235 116 (Y116 DANIELS)
R185 082 027	5.6	6.8	14			5.41	R282 223 000	R282 235 011

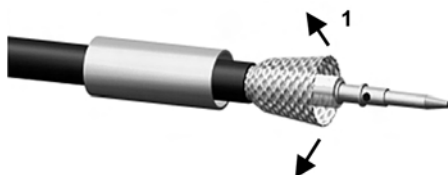
- 1**
- Slide the heatshrink sleeve onto the cable (Option).
 - Slide the ferrule onto the cable.
 - Strip the cable.



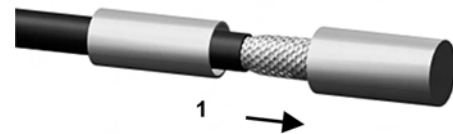
- 2**
- Slide the center contact on until it bottoms against the cable dielectric.
 - Solder the centre contact.
 - Clean solder area.



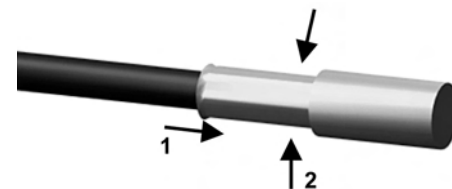
- 3**
- Fan the braid.



- 4**
- Slide the cable into the body until it bottoms against the insulator.

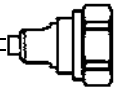


- 5**
- Slide the ferrule over the braid.
 - Crimp the ferrule with crimping tool (see table).

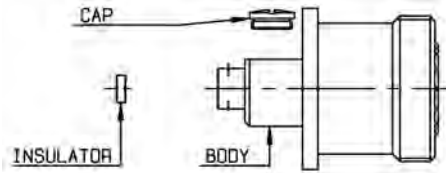


- 6**
- Cut the excess of braid if necessary.
 - Slide the sleeve over the ferrule and heatshrink it in place (Option).





M 06



STRIPPING DIMENSIONS



Part number	Stripping dim. A	Stripping tool	Positioner	Assembly jig
R185 054 020 R185 254 000	5.1	R282 054 000	R282 074 000	R282 740 030

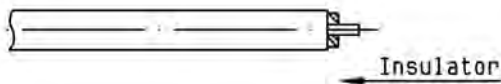
Take the tool kit : **R282 114 207** (.250" cable).

1

- Strip the cable.

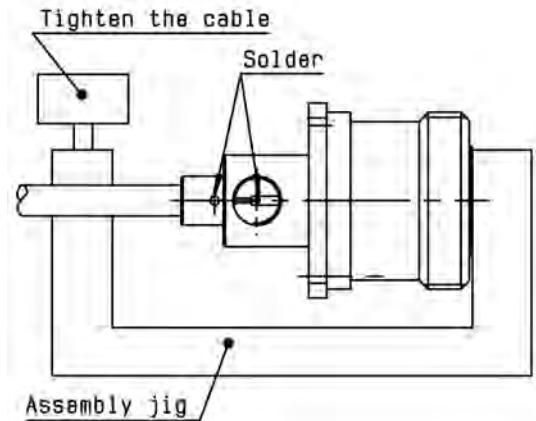
2

- Slide the insulator onto the cable inner conductor.



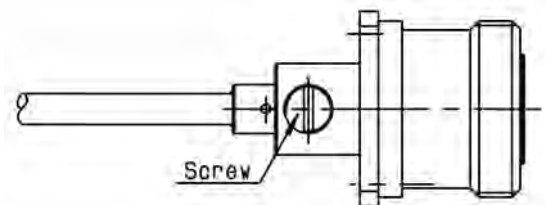
3

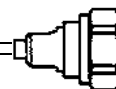
- Introduce the cable into the connector body until it stops.
- Place the sub assembly into the assembly jig and tighten it.
- Solder the body onto the cable.
- Let the assembly cool down before removing it from the jig.



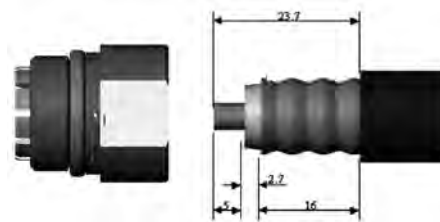
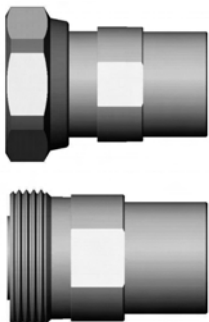
4

- Screw the cap.





M 07

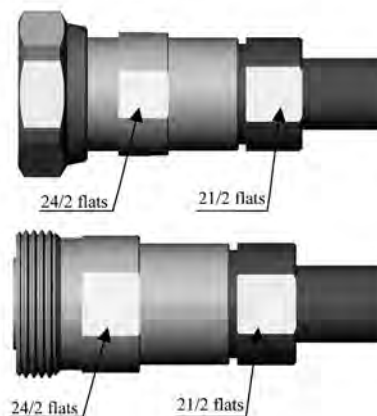


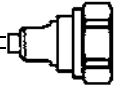
Part number	Stripping tool
R185 031 020W R185 216 020W	R282 011 050

- 1
 - Cut the cable end in a hollow (between two rings) with a hacksaw.
 - Raise the handle and introduce the cable until it stops in the stripping tool.
 - Push down the handle by exerting a light pressure on it; keep turning the tool until it turns freely.
 - Hold the handle down and turn the tool (of approximately 1/4 of tour) in the opposite direction, while pulling gently on the cable in order to release pieces of the cable cut.
 - Raise the handle, slide the cable out and remove loose pieces of cable.
 - In case of cut parts jammed in the tool: raise the handle, introduce again the stripped cable in the tool, screw slightly the cable into the copper previously cut and remove cable + loose parts.
 - Push down again the handle.
- 3
 - Introduce the cable in the tool as shown.
 - Turn the tool to point the inner conductor of the cable.

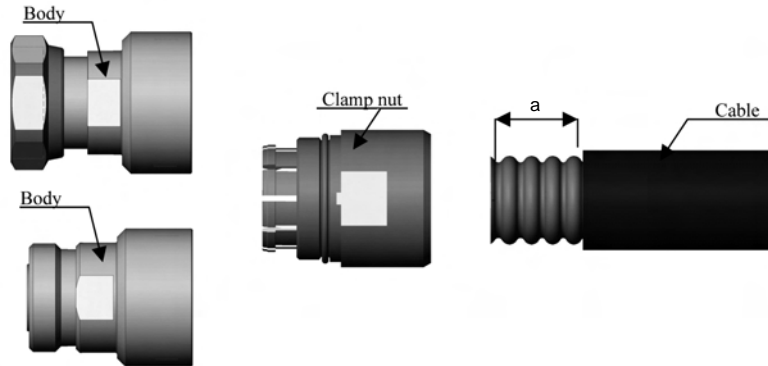


- 2
 - Introduce the cable in the opposite side of the tool.
 - Turn the tool and exert a light pressure until stop.
 - After cutting the dielectric cut will be extracted on the other side of the tool.
- 4
 - Mount the clamp nut on the cable, until the clipsage of the elastic contact on the first annelure.
 - To push the part defers the tow press in stop on the elastic contact.
- 5
 - Mount the clamp nut with the cable in the body of the connector.
 - Couple of tightening recommended: 800 N.cm.





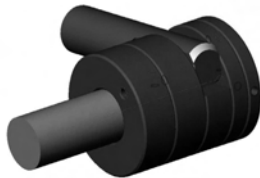
M 08



Part number	Stripping length (mm) a	Stripping tool
R185 033 020W R185 218 020W	26	R282 011 060

1

- Cut the front extremity of the cable in the summit of a annelure with a hacksaw.
- Raise the handle and introduce the cable until it stops in the stripping tool.
- Push down the handle by exerting a light pressure on it, keep turning the tool until it turns freely + appointing of the interior of the soul of the cable.
- Raise the handle and slide the cable out.
- To split the sheath with a tool cutting perpendiculary to the previously undertaken split.
- To remove the sheath cut.



2

- Mount the clamp nut on the cable, until the clipsage of the elastic contact on first annelure.
- To push the part defers the tow press in stop on the elastic contact.



3

- Mount the clamp nut with the cable in the body of the connector.
- Couple of tightening recommended: 2 500 N.cm.

