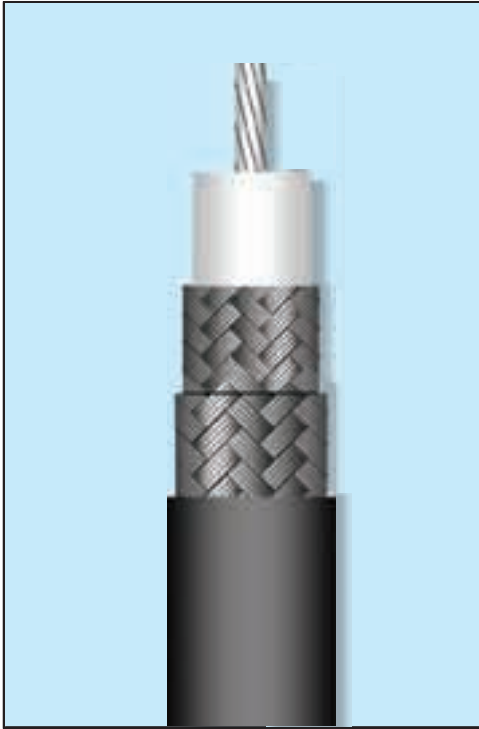


MIL-C-17/174-RG393 → Radiall p/n : C291 511 007



CONSTRUCTION / DIMENSIONS

	material	mm	inches
center conductor	stranded SPC ⁽¹⁾	2,39	0,094
dielectric	solid PTFE ⁽²⁾	7,24	0,285
inner shield	SPC ⁽¹⁾ braid	-	-
outer shield	SPC ⁽¹⁾ braid	8,90	0,350
jacket	brown FEP ⁽³⁾	9,91	0,390

ELECTRICAL CHARACTERISTICS

characteristic impedance	50 Ω ± 2 Ω	
operating frequency range	DC - 11 GHz z	
shielding effectiveness	65 dB (DC - 3 GHz z)	
voltage withstanding	10 000 V rms	
peak power	8.3 kW .	
capacitance	96 pF / m	29 pF / ft
velocity of propagation	70% (4.8 ns / m)	

MECHANICAL CHARACTERISTICS

recomm. mini bend. radius	40 mm	1.57 inch
weight	235 g / m	0.1567 lbs / ft

APPLICATION NOTE

RG393 is one of the most popular RG cables.

This cable may be used for high frequency range and severe thermal conditions applications.

ENVIRONMENTAL CHARACTERISTICS

operating temperature range	-55 / + 200 °C	-67 / + 392 °F
fire resistance	yes (C SA FT6 / IE C 332-2)	
halogen free	no	

FREQUENCY / ATTENUATION (typ.) / CW MAX POWER (sea level - 25°C)

GHz	dB / m	dB / ft	Watts
0,5	0,15	0,05	1273
1,0	0,23	0,07	900
1,5	0,29	0,09	735
2,0	0,35	0,11	636
3,0	0,45	0,14	520
6,0	0,71	0,21	367
8,0	0,86	0,26	318
10,0	1,00	0,30	285
11,0	1,07	0,32	271
attenuation calculation (dB/m)	(0.19 × √F GHz) + (0.04 × F GHz)		
power calculation (W)	900 / √F GHz		

⁽¹⁾ SPC = Silver Plated Copper

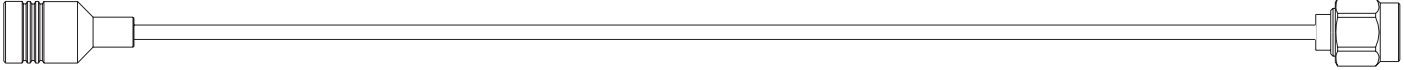
⁽²⁾ PTFE = Poly TetraFluoroEthylene

⁽³⁾ FEP = Fluorinated Ethylene Propylene

Note : typical attenuation for a couple of connectors (dB) = 0.045 × √F GHz

CABLE ASSEMBLIES

CONNECTORS COMPATIBLE WITH FLEXIBLE CABLE 10/50 D (RG393)



BNC series

(temperature range = -65 / +165 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R141 018 000	plug	straight	clamp	4	1500	yes	brass	nickel	

TNC series

(temperature range = -65 / +165 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R143 018 000	plug	straight	clamp	11	1500	yes	brass	nickel	

N series

(advised torque wrench for plugs with 6 fl at coupling nut : R282 303 020 / 18 mm / 170 Ncm)

(temperature range = -55 / +155 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R161 088 000	plug	straight	full crimp	11	2 500	yes	brass	BBR	
R161 088 137	plug	straight	full crimp	11	2 500	yes	brass	BBR	low intermodulation / mixed coupling nut : manual and 6 fl at
R161 186 000	plug	right-angle	crimp	11	2 500	yes	brass	BBR	
R161 186 137	plug	right-angle	crimp	11	2 500	yes	brass	BBR	low intermodulation / mixed coupling nut : manual and 6 fl at
R161 187 000	plug	right-angle	full crimp	11	2 500	yes	brass	BBR	
R161 220 000	jack	straight	clamp	11	2 500	yes	brass	BBR	
R161 286 200	jack	straight	full crimp	11	2 500	yes	brass	BBR	square flange 25.4 mm / 4 holes dia 3.3 mm
R161 331 200	jack	straight	full crimp	11	2 500	yes	brass	BBR	bulkhead feedthrough / panel sealed / panel nut torque = 500 Ncm
R161 332 000	jack	straight	clamp	11	2 500	no	brass	BBR	bulkhead feedthrough / panel sealed / panel nut torque = 500 Ncm

QN series

(temperature range = -55 / +125 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R164 088 000	plug	straight	full crimp	6	2 500	yes	brass	BBR	
R164 186 000	plug	right angle	crimp	6	2 500	yes	brass	BBR	
R164 286 200	jack	straight	crimp	6	2 500	yes	brass	BBR	square flange 25.4 mm / 4 holes 3.3 mm
R164 331 200	jack	straight	full crimp	6	2 500	yes	brass	BBR	bulkhead feedthrough / panel sealed / panel nut torque = 370 Ncm

C series

(temperature range = -55 / +155 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R166 018 000	plug	straight	clamp	3	3 000	no	brass	nickel	
R166 168 000	plug	right angle	clamp	3	3 000	no	brass	nickel	
R166 218 000	jack	straight	clamp	3	3 000	no	brass	nickel	
R166 268 000	jack	straight	clamp	3	3 000	no	brass	nickel	square flange 25.4 mm / 4 holes dia 3.2 mm
R166 332 000	jack	straight	clamp	3	3 000	no	brass	nickel	bulkhead feedthrough / panel sealed / panel nut torque = 350 Ncm

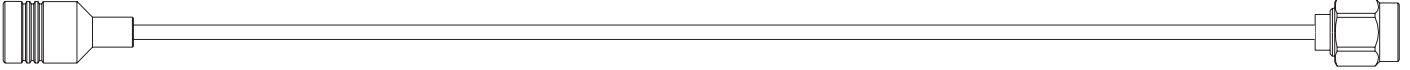


pro gram, please read page 88.

Note : the above information is only listing recommended part-numbers. For other connectors or more information, please consult the general coax connector catalog, our web site or your current sales contact.

CABLE ASSEMBLIES

CONNECTORS COMPATIBLE WITH FLEXIBLE CABLE 10/50 D (RG393)



HNseries

(temperature range = -55 / +155 °C)

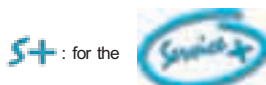
p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R176 019 000	plug	straight	clamp	3	5 000	no	brass	nickel	
R176 218 000	jack	straight	clamp	3	5 000	no	brass	nickel	
R176 268 000	jack	straight	clamp	3	5 000	no	brass	nickel	square flange 30 mm / 4 holes dia 3.3 mm

7/16 series (advised torque wrench for plugs with 6 fl at coupling nut : R282 303 520 / 27 mm / 3000 Ncm)

(temperature range = -55 / +155 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R185 074 000 	plug	straight	crimp	7,5	2 700	yes	brass	BBR	mixed coupling nut : manual and 6 fl at
R185 174 000	plug	right angle	crimp	7,5	2 700	yes	brass	BBR	mixed coupling nut : manual and 6 fl at
R185 234 000	jack	straight	crimp	7,5	2 700	yes	brass	BBR	
R185 274 000	jack	straight	crimp	7,5	2 700	yes	brass	BBR	square flange 32 mm / 4 holes dia 3.6 mm
R185 304 000	jack	straight	crimp	7,5	2 700	yes	brass	BBR	bulkhead feedthrough / panel nut torque = 500 Ncm

FLEXIBLE AND ECO-FRIENDLY CABLES



S+ : for the program, please read page 88.

Note : the above information is only listing recommended part-numbers. For other connectors or more information, please consult the general coax connector catalog, our web site or your current sales contact.