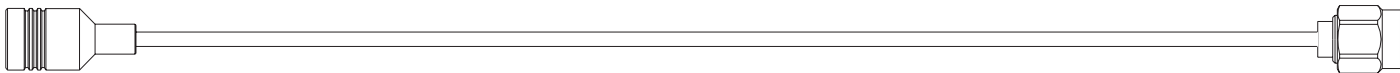


CABLE ASSEMBLIES

FLEXIBLE CABLE 5/50 S (RG58 - KX15)



MIL-C-17/28-RG58 → Radiall p/n : C291 305 000 **S+**

NF-C-93/550-KX15 → Radiall p/n : C291 305 010 **S+**

FLEXIBLE AND ECO-FRIENDLY CABLES



CONSTRUCTION / DIMENSIONS

	material	mm	inches
center conductor	stranded TC ⁽¹⁾	0,90	0,035
dielectric	solid PE ⁽²⁾	2,95	0,116
inner shield	TC ⁽¹⁾ braid	3,66	0,144
outer shield	-	-	-
jacket	black PVC ⁽³⁾	4,95	0,195

ELECTRICAL CHARACTERISTICS

characteristic impedance	50 Ω ± 2 Ω	
operating frequency range	D C - 1 GHz	
shielding effectiveness	40 dB	
voltage withstanding	5 000 V rms	
peak power	2.6 kW	
capacitance	96 pF / m	29 pF / ft
velocity of propagation	66% (5 ns / m)	

MECHANICAL CHARACTERISTICS

recommend. min. bend radius	20 mm	0.787 inch
weight	35 g / m	0.0234 lbs / ft

APPLICATION NOTE

Due to its construction and raw materials sélection, RG58 / KX15 is far to be as performant as the equivalent 5/50 cables (RG 142, RG 223, ECO 142)

However, this very flexible cable must be considered for applications requiring low electrical performance and reduced cost.

ENVIRONMENTAL CHARACTERISTICS

operating temperature range	-40 / +85 °C	-40 / +185 °F
fire resistance	no	
halogen free	no	

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

GHz	dB / m	dB / ft	Watts
0,05	0,14	0,04	246
0,1	0,20	0,06	174
0,2	0,29	0,09	123
0,3	0,36	0,11	100
0,5	0,47	0,14	78
0,6	0,51	0,16	71
0,7	0,56	0,17	66
0,8	0,60	0,18	61
1,0	0,67	0,20	55
attenuation calculation (dB/m)	(0.63 x √F GHz) + (0.04 x F GHz)		
power calculation (W)	55 / √F GHz		

⁽¹⁾ TC = Tinned Copper

⁽²⁾ PE = PolyEthylene

⁽³⁾ PVC = Poly Vinyl Chloride

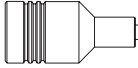
Note : typical attenuation for a couple of connectors (dB) = 0.045 x √F GHz



: for the  program, please read page 88.

CABLE ASSEMBLIES

CONNECTORS COMPATIBLE WITH FLEXIBLE CABLES 5/50 S (RG58 - KX15)



SMA series (advised torque wrench for R125 plugs : R282 320 000 / 8 mm / 80-120 Ncm)

(advised torque wrench for R124 plugs : R282 320 030 / 8 mm / 60 Ncm)

(temperature range = -65 / +165 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R124 075 320	plug	straight	full crimp	124	1000	yes	brass	BBR	commercial SMA
R124 075 323	plug	straight	full crimp	124	1000	yes	brass	gold	commercial SMA
R125 075 000	plug	straight	crimp	18	1000	no	stainless steel	gold	
R125 075 001	plug	straight	crimp	18	1000	no	stainless steel	passivated	
R125 075 320	plug	straight	full crimp	18	1000	yes	stainless steel	gold	
R125 075 321	plug	straight	full crimp	18	1000	yes	stainless steel	passivated	
R124 175 120	plug	right angle	crimp	124	1000	yes	brass	BBR	commercial SMA
R124 175 123	plug	right angle	crimp	124	1000	yes	brass	gold	commercial SMA
R125 175 000	plug	right angle	crimp	18	1000	yes	stainless steel	gold	
R125 175 001	plug	right angle	crimp	18	1000	yes	stainless steel	passivated	
R124 277 120	jack	straight	full crimp	124	1000	yes	brass	BBR	commercial SMA / square flange 12.7 mm / 4 holes dia. 2.6 mm
R124 277 123	jack	straight	full crimp	124	1000	yes	brass	gold	commercial SMA / square flange 12.7 mm / 4 holes dia. 2.6 mm
R125 277 000	jack	straight	crimp	18	1000	no	stainless steel	gold	square flange 12.7 mm / 4 holes dia. 2.6 mm
R125 277 001	jack	straight	crimp	18	1000	no	stainless steel	passivated	square flange 12.7 mm / 4 holes dia. 2.6 mm
R124 314 120	jack	straight	full crimp	124	1000	yes	brass	BBR	commercial SMA / bulkhead feedthrough / panel nut to torque = 150 Ncm
R124 314 123	jack	straight	full crimp	124	1000	yes	brass	gold	commercial SMA / bulkhead feedthrough / panel nut to torque = 150 Ncm
R125 314 120	jack	straight	full crimp	18	1000	yes	stainless steel	gold	bulkhead feedthrough / panel nut to torque = 150 Ncm
R125 314 121	jack	straight	full crimp	18	1000	yes	stainless steel	passivated	bulkhead feedthrough / panel nut to torque = 150 Ncm

QMA series

(temperature range = -40 / +80 °C)

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R123 075 000	plug	straight	full crimp	6	1000	yes	brass	BBR	
R123 175 000	plug	right angle	crimp	6	1000	yes	brass	BBR	
R123 314 000	jack	straight	crimp	6	1000	yes	brass	BBR	bulkhead feedthrough / panel nut to torque = 150 Ncm

BNC series

(temperature range = -65 / +165 °C) except p/n ending in 161 = -35 / +70 °C

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R141072 000	plug	straight	full crimp	4	1500	yes	brass	nickel	long length / plastic boot compatible
R141082 000	plug	straight	full crimp	4	1500	yes	brass	nickel	short length / plastic boot compatible
R141082 161	plug	straight	crimp	15	1500	yes	brass	nickel	commercial BNC / plastic boot compatible
R141182 000	plug	right angle	crimp	4	1500	yes	brass	nickel	plastic boot compatible
R141208 000	jack	straight	clamp	4	1500	yes	brass	nickel	
R141237 000	jack	straight	full crimp	4	1500	yes	brass	nickel	plastic boot compatible
R141237 161	jack	straight	full crimp	15	1500	no	brass	nickel	commercial BNC / plastic boot compatible
R141256 000	jack	straight	clamp	4	1500	no	brass	nickel	square insulated flange 18.5 mm / 4 holes dia. 2.6 mm
R141258 000	jack	straight	clamp	4	1500	no	brass	nickel	square flange 17.5 mm / 4 holes M2.5 x 0.45
R141292 000	jack	straight	full crimp	4	1500	yes	brass	nickel	square flange 17.5 mm / plastic boot compatible / 4 holes dia. 2.6 mm



for the

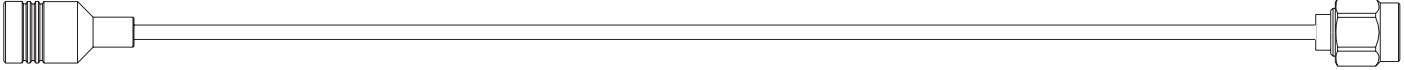


program, please read page 88.

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

CABLE ASSEMBLIES

CONNECTORS COMPATIBLE WITH FLEXIBLE CABLES 5/50 S (RG58 - KX15)



BNC series (fig)

(temperature range = -65 / +165 °C) except p/n ending in 161 = -35 / +70 °C

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R141327 000	jack	straight	clamp	4	1500	no	brass	nickel	bulkhead feedthrough / panel sealed / panel nut to torque = 370 Ncm
R141332 161	jack	straight	full crimp	15	1500	yes	brass	nickel	commercial BNC / plastic boot compatible / bulkhead feedthrough / panel nut to torque = 370 Ncm
R141332 500	jack	straight	crimp	4	1500	yes	brass	nickel	bulkhead feedthrough/ plastic boot compatible/ panel sealed/ panel nut to torque = 370 Ncm

TNC series

(temperature range = -65 / +165 °C) except p/n ending in 161 = -35 / +70 °C

p/n	interface	geometry	attachment	frequency (GHz)	voltage with-standing (V rms)	captive cent. cont.	material	finish	miscellaneous
R143 072 000	plug	straight	full crimp	11	1500	yes	brass	nickel	long length / plastic boot compatible
R143 082 000	plug	straight	full crimp	11	1500	yes	brass	nickel	short length / plastic boot compatible
R143 082 161	plug	straight	full crimp	15	1500	yes	brass	nickel	commercial TNC / plastic boot compatible
R143 182 000	plug	right angle	full crimp	11	1500	yes	brass	nickel	plastic boot compatible
R143 182 161	plug	right angle	full crimp	15	1500	yes	brass	nickel	commercial TNC / plastic boot compatible
R143 207 000	jack	straight	clamp	11	1500	no	brass	nickel	
R143 235 161	jack	straight	full crimp	15	1500	yes	brass	nickel	commercial TNC / plastic boot compatible
R143 258 000	jack	straight	clamp	11	1500	no	brass	nickel	square flange 17.5 mm / 4 holes M2.5 x 0.45
R143 325 000	jack	straight	clamp	11	1500	yes	brass	nickel	bulkhead feedthrough / panel sealed / panel nut to torque = 370 Ncm

N series (advised torque wrench for plugs with 6 flat 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
R161006 020	plug	straight	clamp	11	1500	yes	brass	BBR	hex. coupl. nut : 20 mm on flats / coupling nut to torque = 170 Ncm
R161082 000	plug	straight	full crimp	11	1500	yes	brass	BBR	plastic boot compatible
R161082 040	plug	straight	full crimp	11	1500	yes	brass	BBR	6 flat coupling nut
R161182 000	plug	right angle	crimp	11	1500	yes	brass	BBR	plastic boot compatible
R161182 230	plug	right angle	crimp	11	1500	yes	brass	BBR	6 flat coupling nut
R161237 000	jack	straight	crimp	11	1500	yes	brass	BBR	plastic boot compatible
R161282 000	jack	straight	full crimp	11	1500	yes	brass	BBR	square flange 25.4 mm / plastic boot compatible / 4 holes 3.3mm
R161329 000	jack	straight	full crimp	11	1500	yes	brass	BBR	bulkhead feedthrough/ plastic boot compatible/ panel sealed/ panel nut to 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 075 000	plug	straight	full crimp	11	1500	yes	brass	BBR	
R164 175 000	plug	right angle	crimp	11	1500	yes	brass	BBR	
R164 282 000	jack	straight	crimp	11	1500	yes	brass	BBR	square flange 25.4 mm / 4 holes 3.3 mm
R164 329 000	jack	straight	full crimp	11	1500	yes	brass	BBR	bulkhead feedthrough / panel sealed / panel nut to torque = 500 Ncm

: for the

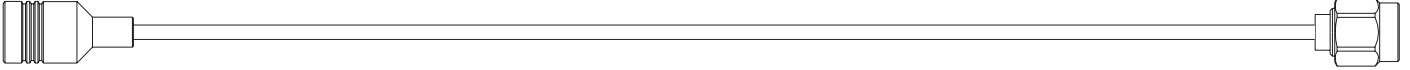


program, please read page 88.

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.

CABLE ASSEMBLIES

CONNECTORS COMPATIBLE WITH FLEXIBLE CABLES 5/50 S (RG58 - KX15)



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 005 000	plug	straight	clamp	3	1500	no	brass	nickel	
R166 256 000	jack	straight	clamp	3	1500	no	brass	nickel	square flange 25.4 mm / 4 holes dia 3.2 mm
R166 326 000	jack	straight	clamp	3	1500	no	brass	nickel	bulkhead feedthrough / panel sealed / panel nut torque = 500 Nc.m

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 006 000	plug	straight	clamp	3	2500	no	brass	nickel	

plastic boots (for **BNC**, **TNC** and **N** compatible connectors) (PVC / length = 67.54 mm)

p/n	color
R280 570 000 	black
R280 571 000 	red
R280 572 000 	green
R280 573 000 	blue
R280 574 000 	yellow
R280 575 000 	grey
R280 576 000 	white
R280 577 000 	brown
R280 578 000 	orange
R280 579 000 	purple
R280 580 000	translucent

heatshrink sleeves : a large range of heatshrink sleeves and labels is available : please consult us.



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.