



ARMoured FLEXIBLE CABLE RG58

(Armoured MIL-C-17/28-RG58 with BNCB Connectors)



Application:

RG58 is one of the most popular RG cables. Due to its construction and raw materials construction, RG58 / KX15 is far to be as performant as the equivalent 5/50 cables (RG142, RG223, ECO142) However, this very flexible cable must be considered for applications requiring low electrical performance and reduced cost.

CONSTRUCTION / DIMENSIONS			
	material	mm	inches
Center conductor	stranded TC	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

- (1) TC = Tinned Copper
- (2) PE = Polyethylene
- (3) PVC = Polyvinyl Chloride

ELECTRICAL CHARACTERISTICS			
characteristic impedance	50Ω ± 2Ω		
operating frequency range	DC - 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)		

Note: typical VSWR for the cable assembly
VSWR=1.2:1

MECHANICAL CHARACTERISTICS		
recommended minimum bending radius	20 mm inch	0.787
weight	35 g / m	0.0234 lbs / ft

FREQUENCY / ATTENUATION			
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		

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

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

