

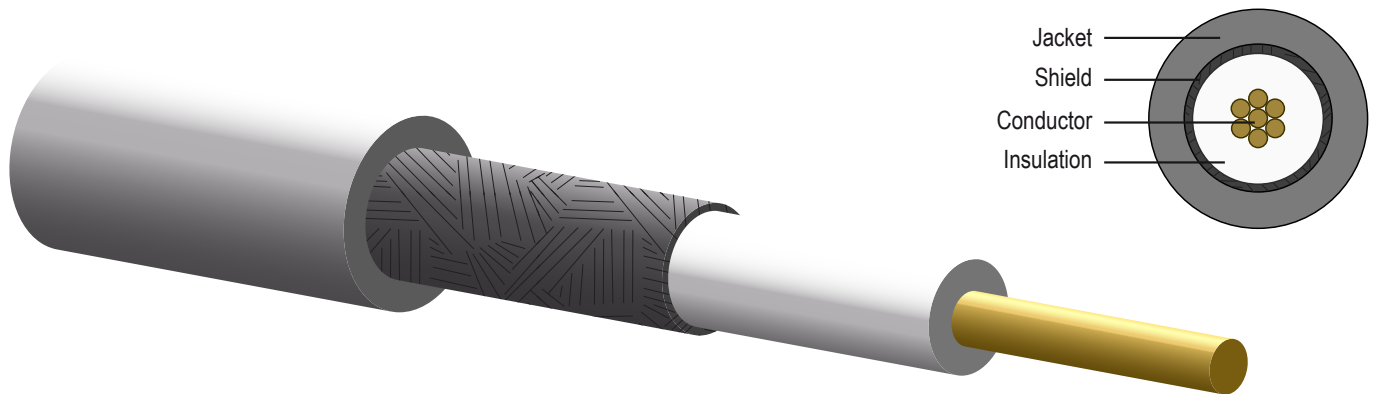


Diameter Types

Cable Type		0.81mm	1.13mm	1.13mm Low Loss	1.32mm	1.37mm	1.48mm
Conductor	Material	Silver-Coated Copper	Silver-Coated Copper	Silver-Coated Copper	Silver-Coated Copper	Silver-Coated Copper	Silver-Coated Copper, Clad Steel
	Construction AWG (mm)	36 (7/0.05)	32 (7/0.08 ±0.003)	32 (7/0.085)	32 (7/0.085)	30 (7/0.107)	30 (7/0.102)
	Diameter (approx mm)	0.15	0.22	0.26	0.22	0.32	0.31
Insulation	Material	FEP or PFA	FEP	FEP	FEP	FEP	FEP
	Average Thickness (mm)	0.125	0.20	0.22	0.20	0.30	0.28
	Colour	Clear	Clear	Clear	Clear	Clear	Clear
	Diameter (mm)	0.40+0.04 - 0.02	0.70 ±0.02	0.70 ±0.03	0.70 ±0.02	0.92 ±0.03	0.86 ±0.03
Binder	Material			Cu-PET Tape			
Shield	Material	Tinned-Coated Copper	Tinned-Coated Copper	Tinned-Coated Copper	Silver-Coated Copper	Tinned-Coated Copper	Silver-Coated Copper
	Construction (mm)	16/3/0.05	16/4/0.05	16/4/0.05	16/4/0.05	16/6/0.05	16/5/0.05
	Coverage (%)	85	89.4	88	90.4	96.4	91.6
Jacket	Material	FEP or PFA	FEP	FEP	FEP	FEP	FEP
	Average Thickness (mm)	0.08	0.12	0.10	0.21	0.13	0.21
	Colour	Grey	Black, Grey, White	Grey	Black, Grey	Black, Grey, White, Brown, Red, Blue, Yellow, Orange, Green	Black, Grey
	Diameter (mm)	0.81 +0.04 -0.02	1.13 ±0.05	1.13 ±0.05	1.32 ±0.05	1.37 ±0.05	1.48 ±0.05

Note this document does not relate to either Hirose, Murata or Sunridge cable assemblies. If you require more information please contact GradConn

Cable Type		0.81mm	1.13mm	1.13mm Low Loss	1.32mm	1.37mm	1.48mm						
Nominal Impedance (Ω)		50 \pm 3	50 \pm 3	50 \pm 3	50 \pm 3	50 \pm 3	50 \pm 5						
Conductor Resistance (Ω /km Max. at 20°C)		1400	545	482	850	314	828C						
Insulation Resistance (M Ω /km min.)		1000	3000	3000	1000	3000	3000						
Nominal Capacitance (pF/M)		96	96 \pm 3	96 \pm 3	96 \pm 3	95.8	95.8						
Dielectric Strength (KV/Min)		AC 1	AC 1	AC 1	AC 0.5	AC 1	AC 1						
Spark Test (KV)		5	2.5	1	2.5	2	2						
Flame Test			VW-1 OK	VW-1 OK	VW-1 OK	VW-1 OK							
Nom. Vel. of Prop. (%)		70	69	69	69	69.5	69.5						
VSWR (0-6 GHz)			1.3 Max.	1.3 Max.	1.3 Max.	1.3 Max.	1.3 Max.						
Rating Temp Voltage		90°C 30V	105°C 30V	105°C 30V	105°C 30V	105°C 30V	105°C 30V						
Minimum Bend Radius (mm)		3.24	5.0	5.0		9	9						
Insulation	Unaged	Tensile Strength		2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)					
		Elongation (min)		200%	200%	200%	200%	200%					
	Aged (168Hrs x 232°C)	Tensile Strength		Unaged min. 75%	Unaged min. 75%	Unaged min. 75%	Unaged min. 75%	Unaged min. 75%					
		Elongation											
Jacket	Unaged	Tensile Strength		2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)					
		Elongation (min)		200%	200%	200%	200%	200%					
	Aged (168Hrs x 232°C)	Tensile Strength		Unaged min. 75%	Unaged min. 75%	Unaged min. 75%	Unaged min. 75%	Unaged min. 75%					
		Elongation											
Attenuation		dB/1m	dB/1ft	dB/1m	dB/1ft	dB/1m	dB/1ft	dB/1m	dB/1ft	dB/1m	dB/1ft	dB/1m	dB/1ft
	1 GHz	3.0	0.92			1.6	0.49			1.6	0.49	1.8	0.55
	1.8 GHz											2.6	0.79
	2 GHz	4.4	1.34	2.90	0.89	2.2	0.68	2.80	0.85	2.3	0.71		
	2.4 GHz	4.9	1.49	3.20	0.98	2.5	0.77	3.10	0.95	2.5	0.76	2.9	0.88
	2.5 GHz	5.0	1.56	3.28	1.00			3.15	0.96	2.6	0.79		
	3 GHz	5.5	1.68										
	4 GHz	6.5	1.98										
	5 GHz	7.5	2.29	5.05	1.54			4.85	1.48				
	5.15 GHz									3.9	1.19		
	5.2 GHz											4.5	1.37
	5.35 GHz									4.0	1.22		
	6 GHz	8.5	2.59	5.40	1.65	4.2	1.29	5.20	1.59	4.3	1.32	4.9	1.49
	8 GHz					5.1	1.56						
12 GHz													
Cable Type		0.81mm	1.13mm	1.13mm Low Loss	1.32mm	1.37mm	1.48mm						



Radio Guide (RG) Types

Cable Type	RG174(/U)	RG178B/U	RG316	RD316
Conductor	Material	Copper Strand	Silver-Coated Copper, Clad Steel	Silver-Coated Copper, Clad Steel
	Construction AWG (mm)	26 (7/0.16)	30 (7/0.102 ±0.003)	26 (7/0.175)
	Diameter (approx mm)	0.48	0.31	0.53
Insulation	Material	XLPE	FEP	FEP
	Average Thickness (mm)	0.455	0.28	0.51
	Colour		Clear	Clear
	Nominal Thickness (mm)	0.535		
	Diameter (mm)	1.55 ±0.05	0.86 ±0.03	1.53 ±0.03
Shield	Material	Tinned-Coated Copper	Silver-Coated Copper	Silver-Coated Copper
	Construction (mm)	16/5/0.1	16/3/0.10	16/5/0.092
	Coverage (%)	95	92.7	92.3
Jacket	Material	PVC	FEP	FEP
	Average Thickness (mm)	0.22	0.25	0.30
	Colour	Black	Black Brown	White
	Diameter (mm)	2.70 ±0.10	1.80 ±0.05	2.53 ±0.10

Note this document does not relate to either Hirose, Murata or Sunridge cable assemblies. If you require more information please contact GradConn

Cable Type		RG174(/U)	RG178B/U	RG316	RD316				
Nominal Impedance (Ω)		50 \pm 5	50 \pm 5	50	50				
Conductor Resistance (Ω /km Max. at 20°C)		142.6	838	281	281				
Insulation Resistance (M Ω /km min.)		1000	3000	3000	3000				
Nominal Capacitance (pF/M)		100 \pm 8	95.8 \pm 3	95.8	95.8				
Dielectric Strength (KV/Min)			AC 1	AC 1	AC 1				
Spark Test (KV)			2	5	2				
Flame Test									
Nom. Vel. of Prop. (%)			69.5	69.5	69.5				
VSWR (0-6 GHz)			1.3 Max.	1.3 Max.	1.3 Max.				
Rating Temp Voltage		80°C 30V	105°C 30V	105°C 30V	105°C 30V				
Minimum Bend Radius (mm)		10.5	9	10.5					
Insulation	Unaged	Tensile Strength	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)				
		Elongation (min)	200%	200%	200%				
	Aged (168Hrs x 232°C)	Tensile Strength	Unaged min. 75%	Unaged min. 75%	Unaged min. 75%				
		Elongation							
Jacket	Unaged	Tensile Strength	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)	2500 PSI min. (1.76 Kg/mm ²)				
		Elongation (min)	200%	200%	200%				
	Aged (168Hrs x 232°C)	Tensile Strength	Unaged min. 75%	Unaged min. 75%	Unaged min. 75%				
		Elongation							
Attenuation		dB/1m	dB/1ft	dB/1m	dB/1ft	dB/1m	dB/1ft	dB/1m	dB/1ft
	100 MHz	0.36	0.01			0.34	0.10	0.34	0.10
	400 MHz	0.66	0.02						
	1 GHz	1.18	0.03	1.8	0.52				
	1.8 GHz			2.6					
	2 GHz				0.76	1.40	0.43	1.40	0.43
	2.4 GHz			2.9					
	2.5 GHz								
	3 GHz	2.10	0.06		0.95				
	4 GHz				1.07	2.63	0.80	2.05	0.63
	5 GHz				1.22				
	5.15 GHz								
	5.2 GHz			4.5					
	5.35 GHz								
	6 GHz			4.9	1.37			2.63	0.80
8 GHz					3.19	0.97	3.19	0.97	
12 GHz					4.80	1.46	4.80	1.46	
Cable Type		RG174(/U)	RG178B/U	RG316	RD316				