

1. Scope

This specification covers the construction and the electrical properties of 30 Core Multi Cable with Braid. MRI Compatible Materials

2. Construction and material

Item	Unit	Specified Value	
		30AWG Coaxial (A)	28AWG Wire(B)
Number of cores	-	16 *RG178	14
Inner Conductor	Material	-	Silver plated Copper wire
	Stranding	No./mm	7/0.105
	Diameter(Nom.)	mm	0.305
Insulation	Material	-	FEP
	Thick.(Nom.)	mm	0.29
	Diameter	mm	0.90±0.02
	Color	-	Nature
Braid Shielding	Material	-	Silver plated Copper wire
	Strand Dia. (approx.)	mm	0.10
	Dia.(approx.)	mm	1.30
	Coverage	%	90%
Sheath	Material	-	FEP
	Thick.(Nom.)	mm	0.05
	Diameter	mm	1.80±0.10
	Color	-	See Fig.1
Assembly Diameter(Nom.)1	mm	5.25(See Fig.1)	
Assembly Diameter(Nom.)2		8.82	
Tape1	Material	-	PTFE
	Thick.(Nom.)	mm	0.05
	Diameter	mm	9.0
Braid Shielding	Material	-	TA 0.12
	Dia.(approx.)	mm	9.48
	Coverage	%	85%
Sheath	Material	-	TPU or PVC
	Thickness (Nom.)	mm	1.00
	Diameter	mm	11.8±0.30
	Color	-	White or Grey

3. Electrical Properties

Item	Unit	Specified Value	
		30AWG RG178 Coaxial	28AWG Wire
Rating temperature	°C	80	80
Rating voltage	V	30	30
Conductor Resistance (20°C)	Ω/km	Max.377	Max.223
Insulation Resistance* (20°C)	MΩ-km	Min. 1,524	Min. 1,524
Dielectric Strength	VAC/Min	500	100

Characteristic Impedance		Ω	50 ± 3	
Attenuation	12MHz	DB/M		-
	63 MHz			
	123 MHz			
	135 MHz			
	300 MHz			
VSWR		-	<1.3	

4. Packing

- (1) Unit length(Min) : 100m(Min.10)
(2) Package : Coiled into carton box

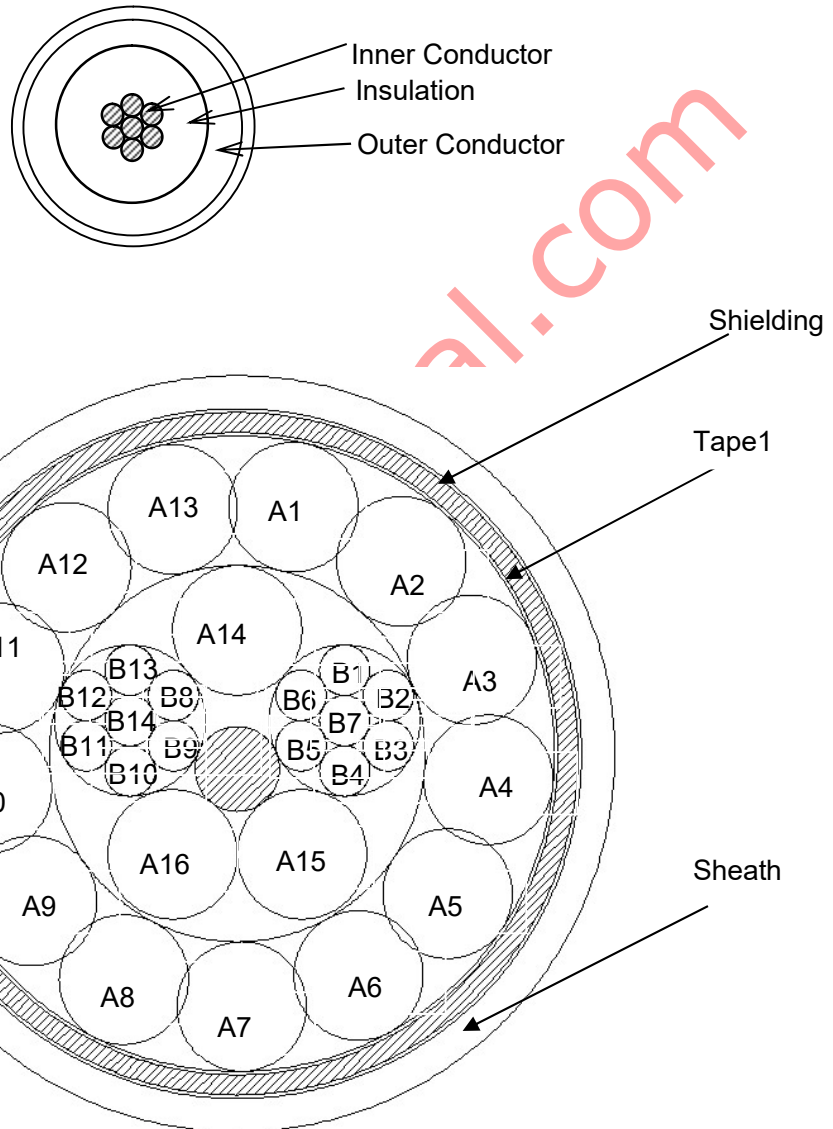


Fig.1 Cross section view of cable

NO	Color	NO	Color	NO	Color
A1	Blue	A14	Blue	B1	Blue
A2	Brown	A15	Brown	B2	Brown
A3	Green	A16	Green	B3	Green
A4	Yellow	B14	Red	B4	Yellow
A5	Black			B5	Black
A6	Red			B6	Red
A7	White			B7	White
A8	Gray			B8	Gray
A9	Orange			B9	Orange
A10	Pink			B10	Pink
A11	Violet			B11	Violet
A12	Natural			B12	Natural
A13	Dark Blue			B13	Dark Blue

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