

### 1. Scope

This specification covers the construction and the electrical properties of 22 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		-	10*RG178	12
Inner Conductor	Material	-	Silver plated Copper wire	
	Stranding	No./mm	7/0.105	7/0.127
	Diameter(Nom.)	mm	0.305	0.381
Insulation	Material	-	FEP	FEP
	Thick.(Nom.)	mm	0.29	0.159
	Diameter	mm	0.90±0.02	0.70±0.02
	Color	-	Nature	See Fig.1
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	3.30(See Fig.1)	
Assembly Diameter(Nom.)2			7.00	
Tape1	Material	-	PTFE	
	Thick.(Nom.)	mm	0.05	
	Diameter	mm	7.10	
Braid Shielding	Material	-	TA 0.12	
	Dia.(approx.)	mm	7.58	
	Coverage	%	85%	
Sheath	Material	-	PVC or TPU	
	Thickness (Nom.)	mm	1.00	
	Diameter	mm	9.88±0.30	
	Color	-	White/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		$\Omega$	$50\pm 3$	
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

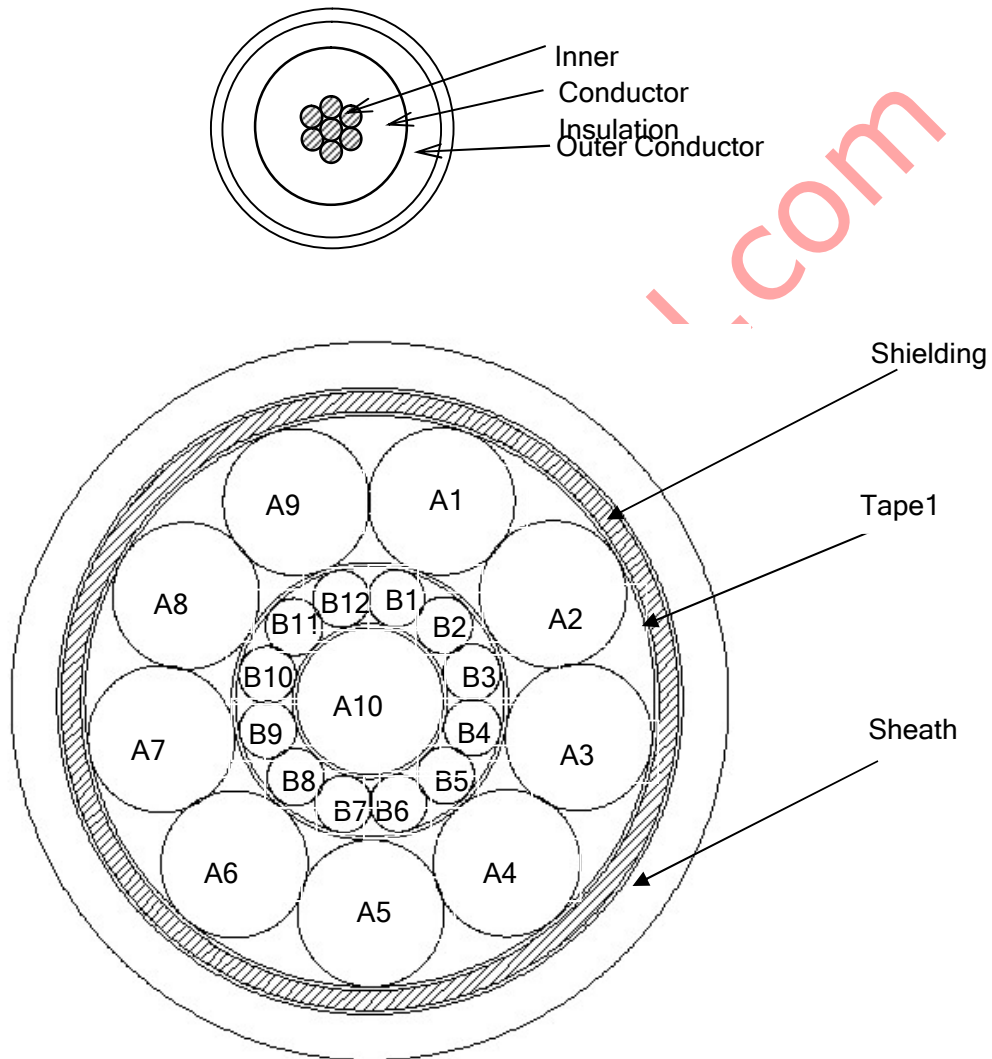


Fig.1 Cross section view of cable

NO	Color	NO	Color	NO	Color
A1	Blue	B1	Blue	B11	Violet
A2	Brown	B2	Brown	B12	Natural
A3	Green	B3	Green		
A4	Yellow	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		

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