

Ultrasound Probe Cable

SPECIFICATION

Ultrasound Probe Cable, 130C x 42AWG (60pF)
Date: 2022/11/26

			CUSTOMER APPROVAL (SIGNATURE)
ENGINEER	CHECKED	APPROVED	APPROVAL BY: DATE:
Zach Shawn	Ian Strong	Zach Shawn	

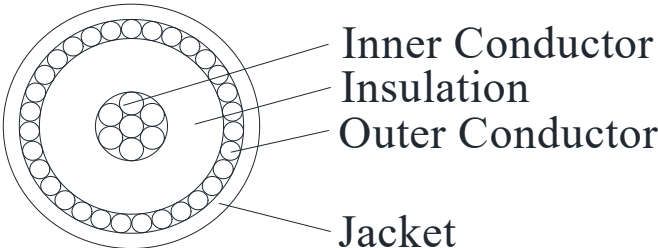
1. Multi Micro-Coaxial Cable for Ultrasound Equipment.

2. Construction

Table1

Single Coax		Unit	Specification
Number of Cores		-	130C
Inner Conductor	AWG Size	-	42
	Material	-	Silver plated copper alloy
	Stranding	No./mm	7/0.025
	Diameter (Nom.)	mm	0.075
Insulation	Material	-	Foam PFA
	Colour	-	Black color
	Thickness (Nom.)	mm	0.09
	Diameter (Nom.)	mm	0.24±0.02
Outer Conductor	Type	-	Spiral
	Material	-	Tinned plated copper alloy
	Size (Nom.)	mm	0.025
	Coverage (Nom.)		95%
Jacket	Material	-	Polyester Tape
	Thickness (nom.)	mm	0.02
	Colors	-	See table 3
	Diameter (Nom.)	mm	0.34±0.02
Unit Twisting	Cabling	-	See figure 1
Assembly	Filler	-	KEVLAR
	Diameter (Nom.)	mm	5.3
Tape	Material	-	PTFE
	Overlap (Nom.)	%	30%
Braiding	Material	-	Tinned spiral copper tinsel
	Size (Nom.)	mm	0.11mm
	Coverage	%	≥90%
Sheath	Material	-	Non-migration PVC (color:Cool gray 2C)
	Thickness (Nom.)	mm	0.60
	Diameter (Nom.)	mm	7.00±0.30

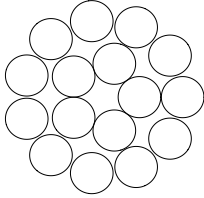
Figure 1 Cable Cross-Section



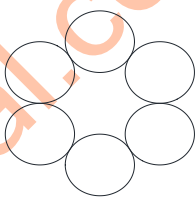
Cross Section of Single Coax

7× Unit-A(16C)

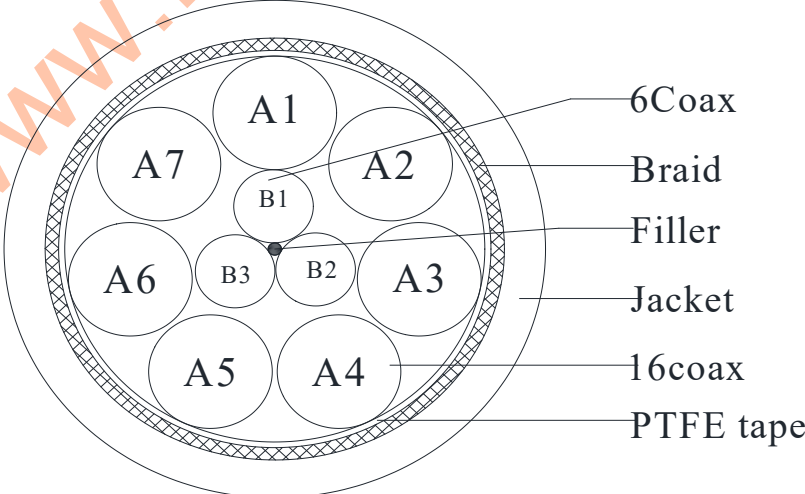
3× Unit-B(6C)



(5+11)



Twisting



Cross Section of Cable

3. Properties

Table 2 Electrical Properties

Item	Unit	Specification
AWG Size	-	42
Rated Temperature	°C	60
Voltage rating	V	30
Conductor Resistance(@ 20°C)	Ω/km	Max. 6800
Insulation Resistance (@ 20 C)	MΩ *km	Min. 1524
Dielectric Strength	-	500VAC for 1min.
Capacitance (@ 1kHz)	pF/m	60±7
Characteristic Impedance (@ 10 MHz)	Ω	Nom. 75
Environmental requirement	-	RoHS

Table 3 Co-axial Jacket Color

UnitA No.	Color
A1	Black
A2	Brown
A3	Red
A4	Orange
A5	Yellow
A6	Green
A7	Blue
UnitB No.	Color
B1~B3	White