



SPECIFICATION

Ultrasound Probe Cable, 198C x 42AWG (60pF)

Date: 2022/11/26

SHEN ZHEN YONG QIANG FU INDUSTRY CO.,LTD			CUSTOMER APPROVAL (SIGNATURE)
ENGINEER	CHECKED	APPROVED	APPROVAL BY:
			DATE:

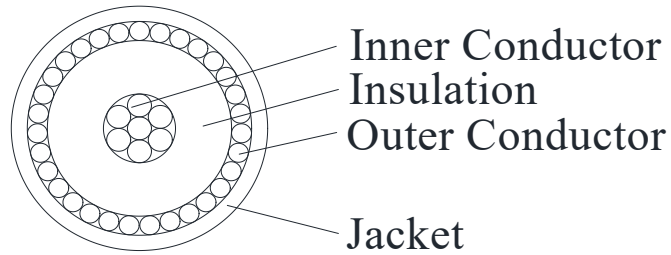
1. Multi Micro-Coaxial Cable for Ultrasound Equipment.

2. Construction

Table1

Single Coax		Unit	Specification
Number of Cores		-	198C
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	6.6
Tape	Material	-	PTFE
	Overlap (Nom.)	%	25%
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	8.30 ± 0.30

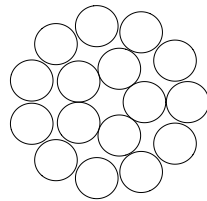
Figure 1 Cable Cross-Section



Cross Section of Single Coax

12 × Unit-A(16C)

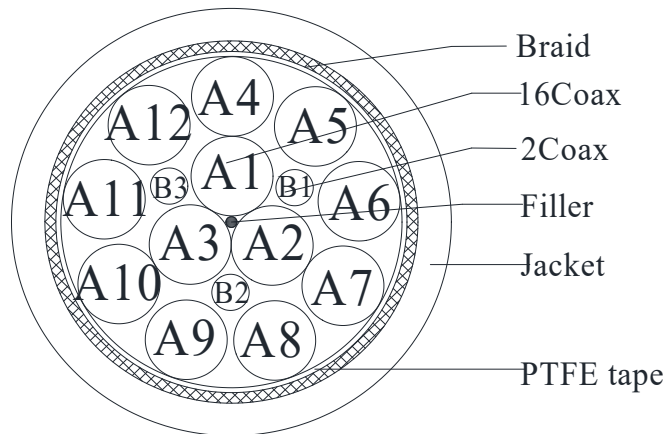
3 × Unit-B(2C)



(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
Bending test		Flexing angle: Left 90°, right 90°, total180°; Speed:30cycles/min. Weight:500g Bending radius:25.4mm during test of 250,000 cycles. (No short circuit or open circuit)
Twinsting test		Twinsting angle: Left 180°, right180°,total360°; holding length 500mm Speed:30cycles/min. Weight:500g during test of 250,000 cycles. (No damage on the outer surface, core wire no breakage or short circuit)
Rotarod test		Trolley weight: 56.7kg Speed:20cycles/min. Repeated implementation:20cycles (No damage on the outer surface, core wire no breakage or short circuit)



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Table 3 Co-axial Jacket Color

UnitA No.	Color
A1/A2	Black
A3/A4	Brown
A5/A6	Red
A7/A8	Orange
A9/A10	Yellow
A11/A12	Green
UnitB No.	Color
B1~B3	Blue
