

Snake Cables (Multicore Microphone Cables)

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Mogami multicore cables are designed for the highest level of audio performance and feature superb electrical and mechanical characteristics while remaining compact, superflexible and easy to use.

- Individually twisted shielded pairs, available in 2 to 48 channels.
- XLPE (Cross Linked Polyethylene) insulation provides superb electrical characteristics and will not melt or shrink back during soldering.
- Rugged and flexible construction that is easy to handle, even at temperatures down to -20°C (-4°F).
- Easy cable identification system:
 - Channel numbers are printed and underlined on each core jacket to ensure correct identification, regardless of which end is stripped.
 - Outer jackets of each pair are colour coded by standard resistor colour code, allowing quick identification of conductor pairs.
 - Inner conductors are also colour coded based on the international standard resistor colour code. Each pair is colour coded by jacket and conductor colour combination.
- Each channel has a drain wire and served (spiral) bare copper shield. The drain wire simplify termination and can be crimped by the same size contact as the inner conductor pair.
- CL2 rated version available. Conductor size of CL2 rated version is thicker #25AWG so that it is also recommended for rugged application and firm and easier crimp terminal connector wiring as well as NEC fire regulation requirement.

STANDARD VERSION

Part No.	No. of Channels	Ov. Dia. (Approx. mm)	Jacket Thickness (Approx. mm)	Weight (kg/100m)(kg/328Ft)	Maximum Length available
W2930	2-ch	7.5(0.295")	1.0(0.039")	7	506m (1,659Ft)
W2931	4-ch	8.6(0.339")	1.0(0.039")	9	
W2932	8-ch	11.5(0.453")	1.2(0.047")	18	
W2933	12-ch	14.3(0.563")	1.5(0.059")	28	
W2934	16-ch	15.8(0.622")	1.5(0.059")	32	305m (1,659Ft)
W2935	19-ch	17.0(0.669")	1.7(0.067")	40	
W2936	24-ch	20.0(0.787")	2.0(0.079")	46	
W2937	27-ch	20.5(0.807")	2.0(0.079")	58	
W2938	32-ch	21.7(0.854")	2.0(0.079")	63	
W2939	48-ch	26.0(1.02")	2.0(0.079")	97	

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CABLE CORE SPECIFICATIONS

Conductor	30/0.08A (0.15mm ²) #26AWG (30×#40AWG)
Insulation	1.0Ø XLPE (Cross Linked Polyethylene) (0.039")
Drain Wire	7/0.18TA (0.18mm ²) #25AWG (7×#33AWG)
Served Shield	Approx. 58/0.10A Served (spiral) Shield
Jacket (Covering)	2.8Ø Flexible PVC (0.110")
Identification	See core number identification table



Figure (1)

ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	Inner Pair Conductor	0.13Ω/m(0.040Ω/Ft)
	Shield	0.031Ω/m(0.0095Ω/Ft)
Capacitance at 1kHz, 20°C (Partial Capacitance Value) See Figure (1)	K ₀	130pF/m(40pF/Ft)
	K ₁	12pF/m(3.7pF/Ft)
Inductance		0.6μH/m(0.18μH/Ft)
Electrostatic Noise (Hum Pick-up)*		2.5mV Max.
Electromagnetic Noise at 10kHz* (Inductance of the toroidal core: 595μH)		0.1mV Max.
Microphonics* Method: Stepping on cable		50mV Max. at 50kΩ/ Load
Voltage Breakdown		Must withstand at DC 500V/15sec.
Insulation Resistance at DC 125V, 20°C		100000 MΩ/ × m Minimum
Tensile Strength of one pair (26°C, 65% RH)		274N

Emigration	Non-emigrant to ABS resin
Applicable Temperature	-20°C~+70°C(-4°F~+158°F)
Standard	UL13 CL2X 60#176;C / UL 20002 AWM 30V 60°C VW-1

* Using standard testing methods of Mogami Wire & Cable Corp.

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CL 2 RATED VERSION

Part No.	No. of Channels	Ov. Dia. (Approx. mm)	Jacket Thickness (Approx. mm)	Weight (kg/100m)(kg/328Ft)	Maximum Lengths available
W3040	2-ch	7.8(0.307")	1.0(0.039")	8	305m (1,659Ft)
W3041	4-ch	9.0(0.354")	1.0(0.039")	10	
W3042	8-ch	12(0.472")	1.2(0.047")	19	
W3043	12-ch	14.6(0.575")	1.3(0.051")	29	
W3044	16-ch	16.3(0.642")	1.4(0.055")	36	
W3045	19-ch	17.5(0.689")	1.7(0.067")	44	
W3046	24-ch	20.5(0.807")	2.0(0.079")	57	
W3047	27-ch	21.0(0.827")	2.0(0.079")	63	
W3048	32-ch	22.4(0.882")	2.0(0.079")	73	
W3049	48-ch	27.0(1.063")	2.0(0.079")	104	

CABLE CORE SPECIFICATIONS

Conductor	7/0.18A (0.178mm ²) #25AWG (7×#33AWG)
Insulation	1.05Ø XLPE (Cross Linked Polyethylene) (0.0413")
Drain Wire	7/0.18A (Exactly same as conductor)
Shield	Approx. 58/0.10A Served (spiral) Shield
Jacket (Covering)	2.8Ø Flexible PVC (0.110")
Identification	See core number identification table

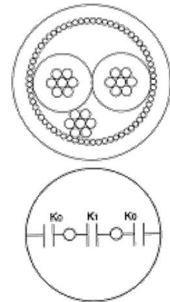


Figure (2)

ELECTRICAL & MECHANICAL CHARACTERISTICS

DC Resistance at 20°C	Inner Pair Conductor	0.11Ω/m(0.0336Ω/Ft)
	Shield	0.031Ω/m(0.0095Ω/Ft)
Capacitance at 1kHz, 20°C (Partial Capacitance Value) See Figure (2)	K ₀	140pF/m(42.7pF/Ft)
	K ₁	12pF/m(3.7pF/Ft)
Inductance		0.6μH/m(0.18μH/Ft)
Electrostatic Noise (Hum Pick-up)*		2.5mV Max.
Electromagnetic Noise at 10kHz* (Inductance of the toroidal core: 595μH)		0.1mV Max.
Microphonics* Method: Stepping on cable		50mV Max. at 50kΩ/ Load
Voltage Breakdown		Must withstand at DC 500V/15sec.
Insulation Resistance at DC 125V, 20°C		100000 MΩ × m Minimum
Tensile Strength of one pair (26°C, 65% RH)		274N
Emigration		Non-emigrant to ABS resin
Applicable Temperature		-20°C~+70°C(-4°F~+158°F)
Standard		UL13 CL2 60#176;C

* Using standard testing methods of Mogami Wire & Cable Corp.

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CORE NUMBER IDENTIFICATION TABLE

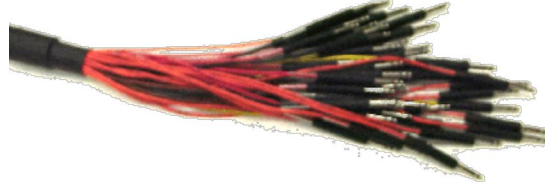
Core No.	Color of One of the Pair	Core Jacket Color	Core No.	Color of One of the Pair	Core Jacket Color	Core No.	Color of One of the Pair	Core Jacket Color		
1	Brown	Black (White)	17	Purple	Brown (White)	33	Orange	Orange (Black)		
2	Red		18	Gray		34	Yellow			
3	Orange		19	White	35	Green				
4	Yellow		20	Black	36	Blue				
5	Green		21	Brown	37	Purple				
6	Blue		22	Red	38	Gray				
7	Purple		23	Orange	39	White				
8	Gray		24	Yellow	40	Black				
9	White		25	Green	41	Brown				
10	Black		26	Blue	42	Red				
11	Brown	Brown (White)	27	Purple	Red (White)	43	Orange	Yellow (Black)		
12	Red		28	Gray		44	Yellow			
13	Orange		29	White		45	Green			
14	Yellow		30	Black		46	Blue			
15	Green		31	Brown		47	Purple			
16	Blue		32	Red		48	Gray			
						Orange (Black)				

- Colour identification is based on the resistor colour code.
- Colours indicated in parenthesis indicate the print colour on the core jacket.
- Insulation colour of other wire in all pairs is clear.
- Colour of outer cable jacket is black.
- How to read core jacket channel numbers
Each number printed on the core jacket is underlined (as shown below) in order to prevent mis-reading of cable numbers.

EXAMPLE

- 1) $\begin{matrix} \overline{9} \\ \underline{6} \end{matrix}$ means SIX
- 2) $\begin{matrix} \overline{6} \\ \underline{9} \end{matrix}$ means NINE
- 3) $\begin{matrix} \overline{8} \\ 1 \\ 1 \\ \underline{8} \end{matrix}$ means EIGHTEEN, not EIGHTY-ONE

ASSEMBLY OF SNAKE CABLE



- Customised connections and cable assemblies are available to special order.
- Connection diagram and detailed specification sheet are necessary for all order.
- Delivery: 4 weeks excluding shipping time.
- For details, consult your Mogami dealer.