

Ultraflexible Miniature Cables

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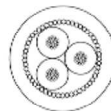
W2912



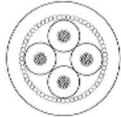
W2943



W2784



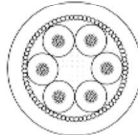
W2754



W2739



W2780



W2880

Most of these miniature cables were developed as custom cables for magnetic head leads for computer drives, which must be moved rapidly and precisely with very low force. All are very soft and highly flexible with excellent shielding.

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LEAD WIRE

Part No.	Conductor Size	Ov. Dia. (mm)	Available Colour
2680-0X	#33AWG (0.0314mm ²)	0.6mm (0.0236)	Standard 10 Colors
2912-0X	#28AWG (0.0854mm ²)	0.85mm (0.0335)	

SHIELDED CABLES

Nos. of Conductor	#33 AWG SERIES		#32 AWG SERIES		#28 AWG SERIES	
	Part No.	Ov. Dia. (mm)	Part No.	Ov. Dia. (mm)	Part No.	Ov. Dia. (mm)
1	-	-	2444-0X	1.0mm (0.0394")	2943	1.5mm (0.0591")
2	2784-0X	1.8mm (0.0709")	2490-08	1.7mm (0.0669")	2794-00	2.3mm (0.0906")
3	2754-08	1.95mm (0.0768")	2879-08	1.8mm (0.0709")	2790-00	2.45mm (0.0965")
4	2739-0X	2.1mm (0.0827")	2769-0X	2.0mm (0.0787")	2929-00	2.7mm (0.106")
5	2780-00	2.2mm (0.0866")	-	-	-	-
6	2880-00	2.5mm (0.0984")	-	-	-	-
Flexibility / Flex Life	1		3		2	
Easiness of cable end treatment	3		2		1	
Low cost	2		1		3	

ESTIMATION: 1: TOP 2: MEDIUM 3: LOW

REMARKS: Part No. W2880-00 is basically custom order.

CAUTION: Extremely weak against Tensile Strength.

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LEAD WIRE

CONSTRUCTION

Part	Conductor	Insulation	Shield
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No.	Details	Size (mm²)	Ov. Dia. (mm)	Material	
W2680	25/0.04A	0.0314mm² (#33AWG)	0.60Ø (0.0236")	Flexible PVC	0.52kg
W2912	17/0.08A	0.0854mm² (#28AWG)	0.85Ø (0.0335")	Flexible PVC	1.03kg
Common Construction		Roll Size	Color	Details of Colors	
		2,000 Ft spool	10 colours	Black/Brown/Red/Orange /Yellow/ Green/Blue/Violet /Gray/White	

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.	DC Resistance at 20°C	Tensile Strength	Flex Life (cycles)
W2680	0.6W/m(0.183W/Ft)	8.3 N	21,000
W2912	0.22W/m(0.0672W/Ft)	21 N	32,000

COMMON CHARACTERISTICS

Voltage Breakdown	Must withstand at DC 500V/15sec.
Insulation Resistance	1000 MW × m Min. at DC 250V , 20°C
Emigration	Non-emigrant to ABS resin
Applicable Temperature	-20°C ~ +80°C(-4°F ~ +176°F)
Standard	UL758 STYLE 1571 80°C 30V VW-1SC

SHIELDED WIRE #32AWG SERIES**CONSTRUCTION**

Common Construction		Conductor			Insulation		
		Details	Size (mm²)	Ov. Dia.(mm)	Material		
		7/0.08TA	0.0351mm² (#32AWG)	0.53Ø (0.0209")	Flexible PVC		
Part No.	Nos. of Conductor	Shield Served Shield	Jacket		Color	Roll Size	Weight
			Ov. Dia. (mm)	Material			
W2444	1	Approx. 23/0.08A	1.0Ø (0.0394")	Flexible PVC	Black/Gray	305m (1,000Ft)	0.75kg
W2490	2	Approx. 30/0.10A	1.7Ø (0.0669")		Gray		1.55kg
W2879	3	Approx. 30/0.10A	1.8Ø (0.0709")		Gray		1.83kg
W2769	4	Approx. 40/0.10A	2.0Ø (0.0787")		Black/Gray		2.28kg

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Part No.	DC Resistance at 20°C		Flex Life (cycles)
	Inner Conductor	Shield Conductor	
W2444	0.53W/m(0.162W/Ft)	0.16W/m(0.0488W/Ft)	13,000
W2490		0.08W/m(0.0244W/Ft)	9,100
W2879	0.55W/m(0.168W/Ft)	0.08W/m(0.0244W/Ft)	22,000
W2769		0.06W/m(0.0183W/Ft)	20,000

COMMON CHARACTERISTICS

Voltage Breakdown	Must withstand at DC 250V/15sec.
Insulation Resistance	1000 MW × m Min. at DC 250V , 20°C

Tensile strength (26°C, 65%RH)	9.8 N (Per One Core Conductor)
Emigration	Non-emigrant to ABS resin
Applicable Temperature	-20°C ~ +80°C (-4°F ~ +176°F)
Standard	UL758 STYLE 2844 80#176;C 30V VW-1SC 32AWG

Exception: UL approval of Part No.2444 is STYLE 1682 60°C 30V VW-1SC 32AWG.

#28AWG SERIES

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CONSTRUCTION

Common Construction		Conductor		Insulation		Color	Roll Size	Weight
		Details	Size (mm²)	Ov. Dia.(mm)	Material			
	17/0.08TA	0.0854mm² (#28AWG)	0.83Ø (0.0327")	Flexible PVC				
Part No.	Nos. of Conductor	Filler	Shield Served Shield	Jacket		Color	Roll Size	Weight
				Ov. Dia. (mm)	Material			
W2943	1	-	Approx. 35/0.08A	1.5Ø (0.0591")	Flexible PVC	Black	305m (1,000Ft)	1.37kg
W2794	2	-	Approx. 52/0.08A	2.3Ø (0.0906")		Black		2.55kg
W2790	3	-	Approx. 70/0.08A	2.45Ø (0.0965")		Black		3.25kg
W2929	4	Polypropylene	Approx. 83/0.08A	2.7Ø (0.1063")		Black		4.0kg

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.	DC Resistance at 20°C		Flex Life (cycles)
	Inner Conductor	Shield Conductor	
W2943	0.22W/m(0.0671W/Ft)	0.11W/m(0.0336W/Ft)	36,000
W2794		0.07W/m(0.0214W/Ft)	16,000
W2790		0.053W/m(0.0162W/Ft)	28,000
W2929		0.045W/m(0.0137W/Ft)	21,000

COMMON CHARACTERISTICS

Voltage Breakdown	Must withstand at DC 250V/15sec.
Insulation Resistance	1000 MW × m Min. at DC 250V , 20°C
Tensile strength (26°C, 65%RH)	21 N (Per One Core Conductor)
Emigration	Non-emigrant to ABS resin
Applicable Temperature	-20°C ~ +80°C (-4°F ~ +176°F)
Standard	UL758 STYLE 2844 80°C 30V VW-1SC 28AWG

#33AWG SERIES

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CONSTRUCTION

Common Construction		Conductor		Insulation		Color	Roll Size	Weight
		Details	Size (mm²)	Ov. Dia.(mm)	Material			
		25/0.04A	0.0314mm² (#33AWG)	0.60Ø (0.0236")	Flexible PVC			
Part No.	Nos. of Conductor	Filler	Shield Served Shield	Jacket		Color	Roll Size	Weight
				Ov. Dia. (mm)	Material			

W2784	2	-	Approx. 35/0.08A	1.8Ø (0.0709")	Flexible PVC	Black/Gray	305m (1,000Ft)	1.56kg
W2754	3	-	Approx. 54/0.08A	1.95Ø (0.0768")		Gray		2.05kg
W2739	4	Polypropylene	Approx. 60/0.08A	2.1Ø (0.0827")		Black/Gray		2.44kg
W2780	5	Polypropylene	Approx. 65/0.08A	2.2Ø (0.0866")		Black		2.85kg
W2880	6	Polypropylene	Approx. 68/0.08A	2.5Ø (0.0984")		Black		3.24kg

ELECTRICAL & MECHANICAL CHARACTERISTICS

Part No.	DC Resistance at 20°C		Flex Life (cycles)
	Inner Conductor	Shield Conductor	
W2784	0.6W/m(0.183W/Ft)	0.1W/m(0.0305W/Ft)	20,000
W2754		0.07W/m(0.021W/Ft)	36,000
W2739		0.06W/m(0.0184W/Ft)	57,000
W2780		0.057W/m(0.0174W/Ft)	35,000
W2880		0.05W/m(0.0153W/Ft)	50,000

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Voltage Breakdown	Must withstand at DC 250V/15sec.
Insulation Resistance	1000 MW × m Min. at DC 250V , 20°C
Tensile strength (26°C, 65%RH)	8.3 N (Per One Core Conductor)
Emigration	Non-emigrant to ABS resin
Applicable Temperature	-20°C ~ +80°C (-4°F ~ +176°F)
Standard	UL758 STYLE 2844 80°C 30V VW-1SC 33AWG

STANDARD COLOUR COMBINATION OF SHIELDED CORES

Nos. of Cores	1	2	3	4	5	6
Core Colour	White	White/Red	White/Red/ Black	White/Red/ Black/Yellow	White/Red /Black/ Yellow/Blue	White/Red /Black/ Yellow/Blue /Green
Exception	Part No. W2769		White/Yellow/Blue/Green			

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