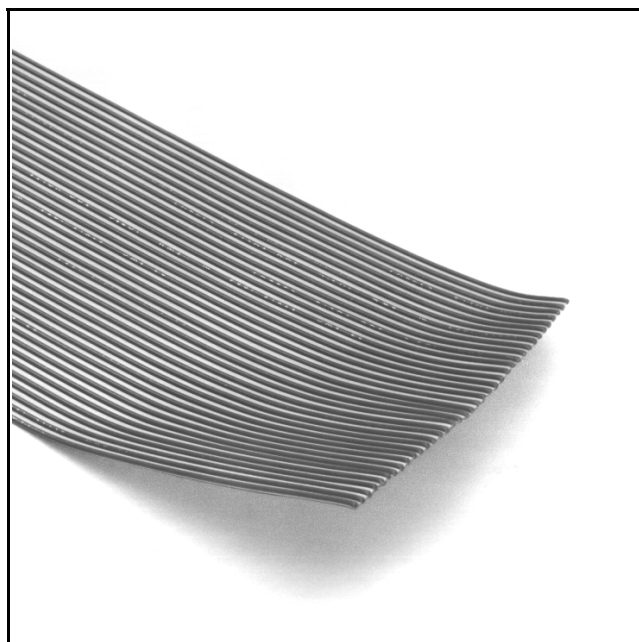


# 3M™ Round Conductor Flat Cable

.100" 22 AWG Stranded, PVC

8124 Series



- Designed for power applications requiring higher current carrying capability
- 22 AWG tinned stranded copper wire provides flexibility and extended product life
- Individually insulated conductors are laminated to a PVC backing which can be zipped apart for branching or discrete terminations
- RoHS\* compliant

Date Modified: June 29, 2005



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## Physical

**Insulation Material:** Polyvinyl Chloride (PVC)

Color: Dark Gray Wires on Light Gray Carrier

**Marking Standard:** None

Canadian Option:  AWM 20462 105C 300V VW1 3M NU  AWM IA 80C 150V FT1  
EU <50V

**Conductors:** 22 AWG 7 × 30 [ 7 × 0.254 ] Tinned Stranded Copper

## Electrical

**Voltage Rating:** USA: 300V

Canada: 150V

EU: <50V

**Insulation Resistance:** >1 x 10<sup>10</sup>Ω /10ft [3m]

**Characteristic Impedance:** Unbalanced: 119 Ω

**Capacitance:** Unbalanced: 11.0 pF/ft. [ 36.1 pF/m ]

**Inductance:** Unbalanced: .15 μH/ft. [ 0.49 μH/m ]

**Propagation Delay:** Unbalanced: 1.30 ns/ft. [ 4.27 ns/m ]

**Velocity of Propagation:** 78%

Note: Unbalanced is measured between ground-signal-ground conductors.

## Environmental

**Temperature Rating:** -20°C to +105°C

Canada: -20°C to +80°C

**Flammability Rating:** USA: VW-1

Canada: FT1

\* RoHS = Directive 2002/95/EC. Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment  
"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

UL File No.: E42769, Style No.: 20462

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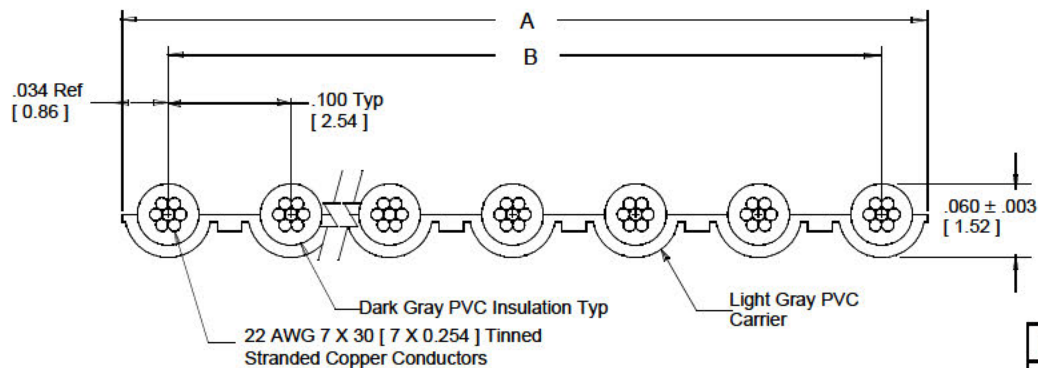
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8124 Series



Number of Conductors	3M Part Number	Dimension A	Dimension B
05	8124/05	0.468 ± 0.015 [ 11.89 ]	0.400 ± 0.010 [ 10.16 ]
06	8124/06	0.568 ± 0.015 [ 14.43 ]	0.500 ± 0.010 [ 12.70 ]
07	8124/07	0.668 ± 0.015 [ 16.97 ]	0.600 ± 0.010 [ 15.24 ]
08	8124/08	0.768 ± 0.015 [ 19.51 ]	0.700 ± 0.010 [ 17.78 ]
09	8124/09	0.868 ± 0.015 [ 22.05 ]	0.800 ± 0.010 [ 20.32 ]
10	8124/10	0.968 ± 0.015 [ 24.59 ]	0.900 ± 0.010 [ 22.86 ]
11	8124/11	1.068 ± 0.020 [ 27.13 ]	1.000 ± 0.015 [ 25.40 ]
12	8124/12	1.168 ± 0.020 [ 29.67 ]	1.100 ± 0.015 [ 27.94 ]
13	8124/13	1.268 ± 0.020 [ 32.21 ]	1.200 ± 0.015 [ 30.48 ]
14	8124/14	1.368 ± 0.020 [ 34.75 ]	1.300 ± 0.015 [ 33.02 ]
15	8124/15	1.468 ± 0.020 [ 37.29 ]	1.400 ± 0.015 [ 35.56 ]
16	8124/16	1.568 ± 0.020 [ 39.83 ]	1.500 ± 0.015 [ 38.10 ]
17	8124/17	1.668 ± 0.020 [ 42.37 ]	1.600 ± 0.015 [ 40.64 ]
18	8124/18	1.768 ± 0.020 [ 44.91 ]	1.700 ± 0.015 [ 43.18 ]
19	8124/19	1.868 ± 0.020 [ 47.45 ]	1.800 ± 0.015 [ 45.72 ]
20	8124/20	1.968 ± 0.020 [ 49.99 ]	1.900 ± 0.015 [ 48.26 ]
21	8124/21	2.068 ± 0.025 [ 52.53 ]	2.000 ± 0.020 [ 50.80 ]
22	8124/21	2.168 ± 0.025 [ 55.07 ]	2.100 ± 0.020 [ 53.34 ]
23	8124/23	2.268 ± 0.025 [ 57.61 ]	2.200 ± 0.020 [ 55.88 ]
24	8124/24	2.368 ± 0.025 [ 60.15 ]	2.300 ± 0.020 [ 58.42 ]
25	8124/25	2.468 ± 0.025 [ 62.69 ]	2.400 ± 0.020 [ 60.96 ]
26	8124/26	2.568 ± 0.025 [ 65.23 ]	2.500 ± 0.020 [ 63.50 ]
27	8124/27	2.668 ± 0.025 [ 67.77 ]	2.600 ± 0.020 [ 66.04 ]
28	8124/28	2.768 ± 0.025 [ 70.31 ]	2.700 ± 0.020 [ 68.58 ]
29	8124/29	2.868 ± 0.025 [ 72.85 ]	2.800 ± 0.020 [ 71.12 ]
30	8124/30	2.968 ± 0.025 [ 75.39 ]	2.900 ± 0.020 [ 73.66 ]
31	8124/31	3.068 ± 0.025 [ 77.93 ]	3.000 ± 0.020 [ 76.20 ]
32	8124/32	3.168 ± 0.025 [ 80.47 ]	3.100 ± 0.020 [ 78.74 ]
33	8124/33	3.268 ± 0.025 [ 83.01 ]	3.200 ± 0.020 [ 81.28 ]
34	8124/34	3.368 ± 0.025 [ 85.55 ]	3.300 ± 0.020 [ 83.82 ]
35	8124/35	3.468 ± 0.025 [ 88.09 ]	3.400 ± 0.020 [ 86.36 ]
36	8124/36	3.568 ± 0.025 [ 90.63 ]	3.500 ± 0.020 [ 88.90 ]
37	8124/37	3.668 ± 0.025 [ 93.17 ]	3.600 ± 0.020 [ 91.44 ]
38	8124/38	3.768 ± 0.025 [ 95.71 ]	3.700 ± 0.020 [ 93.98 ]
39	8124/39	3.868 ± 0.025 [ 98.25 ]	3.800 ± 0.020 [ 96.52 ]
40	8124/40	3.968 ± 0.025 [ 100.79 ]	3.900 ± 0.020 [ 99.06 ]

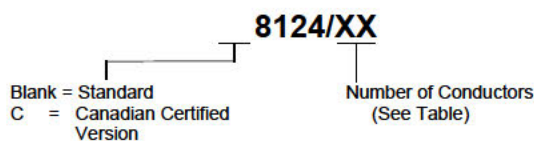


Inch [mm]			
Tolerance Unless Noted			
	.0	.00	.000
inch	±.1	±.01	±.005

Note: Red marking on one edge of cable designates wire #1.

[ ] Dimensions for Reference Only

## Ordering Information



Note: Standard length is 100 ft/roll.

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 Sheet 2 of 2

## Important Notice

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*Minimum 10%  
Post-Consumer Fiber*

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