## 3M<sup>™</sup> Round Conductor Flat Cable

.100" 22 AWG Stranded, PVC

<ul> <li>Designed for power applications requiring higher current carrying capa</li> <li>22 AWG tinned stranded copper wire provides flexibility and extended produces Individually insulated conductors are lat to a PVC backing which can be zipped branching or discrete terminations</li> <li>RoHS* compliant</li> </ul>	uct life aminated
Date Modified: June 29, 2005	TS-0084-12 Sheet 1 of 2

### Physical

<b>Insulation Material:</b>	Polyvinyl Chloride (PVC)	
Color:	Dark Gray Wires on Light Gray Carrier	
Marking Standard:	None	
Canadian Option:	RIAWM 20462 105C 300V VW1 3M NU CRIAWM 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
<b>Insulation Resistance:</b>	$>1 x 10^{10} \Omega / 10 ft [3m]$		
Characteristic Impedance:	Unbalanced: 119 $\Omega$		
Capacitance:	Unbalanced: 11.0 pF/ft.	. [ 36.1 pF/m ]	
Inductance:	Unbalanced: 15 $\mu$ H/ft.	[ 0.49 µH/m ]	
<b>Propagation Delay:</b>	Unbalanced: 1.30 ns/ft.	[ 4.27 ns/m ]	
Velocity of Propagation:	78%		

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

## Environmental

<b>Temperature Rating:</b>	-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 prolybromianted 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

# 3M<sup>™</sup> Round Conductor Flat Cable

## .100" 22 AWG Stranded, PVC

## 8124 Series

	Number of Conductors	3M Part Number	Dimension A	Dimension B
	05	8124/05	0.468 ± .015 [ 11.89 ]	0.400 ± .010 [ 10.16 ]
	06	8124/06	0.568 ± .015 [ 14.43 ]	0.500 ± .010 [ 12.70 ]
	07	8124/07	0.668 ± .015 [ 16.97 ]	0.600 ± .010 [ 15.24 ]
	08	8124/08	0.768 ± .015 [ 19.51 ]	0.700 ± .010 [ 17.78 ]
6 <b>714 714</b>	09	8124/09	0.868 ± .015 [ 22.05 ]	0.800 ± .010 [ 20.32 ]
(OPTIONAL)	10	8124/10	0.968 ± .015 [ 24.59 ]	0.900 ± .010 [ 22.86 ]
	11	8124/11	1.068 ± .020 [ 27.13 ]	1.000 ± .015 [ 25.40 ]
	12	8124/12	1.168 ± .020 [ 29.67 ]	1.100 ± .015 [ 27.94 ]
	13	8124/13	1.268 ± .020 [ 32.21 ]	1.200 ± .015 [ 30.48 ]
	14	8124/14	1.368 ± .020 [ 34.75 ]	1.300 ± .015 [ 33.02 ]
	15	8124/15	1.468 ± .020 [ 37.29 ]	1.400 ± .015 [ 35.56 ]
	16	8124/16	1.568 ± .020 [ 39.83 ]	1.500 ± .015 [ 38.10 ]
	17	8124/17	1.668 ± .020 [ 42.37 ]	1.600 ± .015 [ 40.64 ]
	18	8124/18	1.768 ± .020 [ 44.91 ]	1.700 ± .015 [ 43.18 ]
	19	8124/19	1.868 ± .020 [ 47.45 ]	1.800 ± .015 [ 45.72 ]
	20	8124/20	1.968 ± .020 [ 49.99 ]	$1.900 \pm .015 [ 48.26 ]$
	21	8124/21	2.068 ± .025 [ 52.53 ]	2.000 ± .020 [ 50.80 ]
	22	8124/21	2.168 ± .025 [ 55.07 ]	2.100 ± .020 [ 53.34 ]
	23	8124/23	2.268 ± .025 [ 57.61 ]	2.200 ± .020 [ 55.88 ]
	24	8124/24	2.368 ± .025 [ 60.15 ]	2.300 ± .020 [ 58.42 ]
	25	8124/25	$2.468 \pm .025 [ 62.69 ]$	$2.400 \pm .020 [ 60.96 ]$
	26	8124/26	$2.568 \pm .025 [ 65.23 ]$	$2.500 \pm .020$ [ 63.50 ]
	27	8124/27	$2.668 \pm .025 [67.77]$	$2.600 \pm .020$ [ 66.04 ]
	28 29	8124/28	$\frac{2.768 \pm .025 [\ 70.31 \ ]}{2.868 \pm .025 [\ 72.85 \ ]}$	$2.700 \pm .020$ [ 68.58 ] $2.800 \pm .020$ [ 71.12 ]
		8124/29	. ,	. ,
	30	8124/30 8124/31	$\frac{2.968 \pm .025 [75.39]}{3.068 \pm .025 [77.93]}$	$2.900 \pm .020 [ 73.66 ]$ $3.000 \pm .020 [ 76.20 ]$
	31	8124/31 8124/32	$3.068 \pm .025 [77.93]$ $3.168 \pm .025 [80.47]$	$3.000 \pm .020$ [ 78.74 ]
	32	8124/32 8124/33	$3.268 \pm .025 [83.01]$	$3.100 \pm .020$ [ $78.74$ ] $3.200 \pm .020$ [ $81.28$ ]
	34	8124/33	$3.368 \pm .025 [85.55]$	$3.300 \pm .020$ [ $81.28$ ]
	35	8124/35	3.468 ± .025 [ 88.09 ]	3.400 ± .020 [ 86.36 ]
	36	8124/35	$3.568 \pm .025 [ 90.63 ]$	$3.500 \pm .020$ [ 88.90 ]
	37	8124/30	$3.668 \pm .025 [93.17]$	$3.600 \pm .020 [ 91.44 ]$
	38	8124/38	$3.768 \pm .025 [95.71]$	$3.700 \pm .020 [ 93.98 ]$
	39	8124/39	3.868 ± .025 [ 98.25 ]	3.800 ± .020 [ 96.52 ]
	40	8124/40	3.968 ± .025 [ 100.79 ]	3.900 ± .020 [ 99.06 ]
.034 Ref [0.86]	3		.060 ± .000 [1.52]	-
	````	Light Gray P		Inch
Dark Gray PVC Insul	• •	Carrier	vc	[m m ]
22 AWG 7 X 30 [ 7 X 0.254 ] Tinne Stranded Copper Conductors	d			Tolerance Unless Noted
Stranded Copper Conductors				.0 .00 .000
				inch ±.1 ±.01 ±.005
Note: Ded modified as and odds of solids during the 10 ft				
Note: Red marking on one edge of cable designates wire #1.				[] Dimensions for Reference Only
				Uniy
Ordering Information		8124/XX		
	andard nadian Certified rsion		er of Conductors e Table)	
ve				TS-0084-12
Note: Standard length is 100 ft/roll.				Sheet 2 of 2

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Minimum 10% Post-Consumer Fiber

Printed in USA.

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