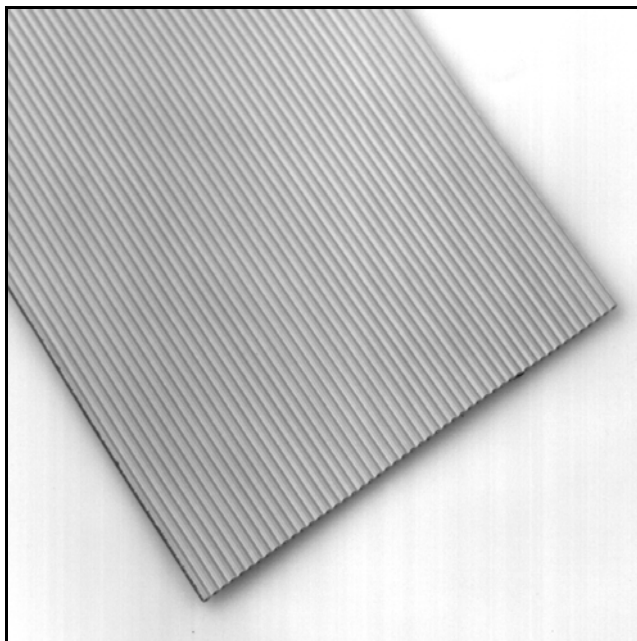


# 3M™ Round Conductor Flat Cable

.050" 28 AWG Solid, PVC

3709 Series



- 28 AWG solid wire
- .050 inch centers permit mass termination to a broad line of IDC connectors
- Zippable for branching or discrete termination
- RoHS\* compliant

Date Modified: December 12, 2006

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## Physical

### Insulation

Material: Polyvinyl Chloride (PVC)

Color: Gray

### Marking

Standard: None

Canadian Option:  AWM 2651 105C 300V VW1 3M NU C  AWM IA 105C 300V FT1 EU <50V

Conductors: 28 AWG [ Ø 0.32 ] Tinned Solid Copper

## Electrical

**Voltage Rating:** USA: 300V

Canada: 300V

EU: <50V

**Insulation Resistance:**  $>1 \times 10^{10} \Omega / 10\text{ft [3m]}$

### Unbalanced

### Balanced

**Characteristic Impedance:** 114  $\Omega$

188  $\Omega$

**Capacitance:** 12.8 pF/ft [ 42.0 pF/m ]

7.4 pF/ft [ 24.3 pF/m ]

**Inductance:** 0.17  $\mu\text{H/ft}$  [ 0.54  $\mu\text{H/m}$  ]

0.26  $\mu\text{H/ft}$  [ 0.87  $\mu\text{H/m}$  ]

**Propagation Delay:** 1.45 ns/ft [ 4.76 ns/m ]

1.40 ns/ft [ 4.59 ns/m ]

**Velocity of Propagation:** 70%

73%

Note: Unbalanced is measured between ground-signal-ground conductors. Balanced is measured between signal conductors within a pair.

## Environmental

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

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

Canada: FT1

"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.: 2651



Interconnect Solutions

<http://www.3M.com/interconnects/>

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For technical, sales or ordering information call

800-225-5373

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.050" 28 AWG Solid, PVC

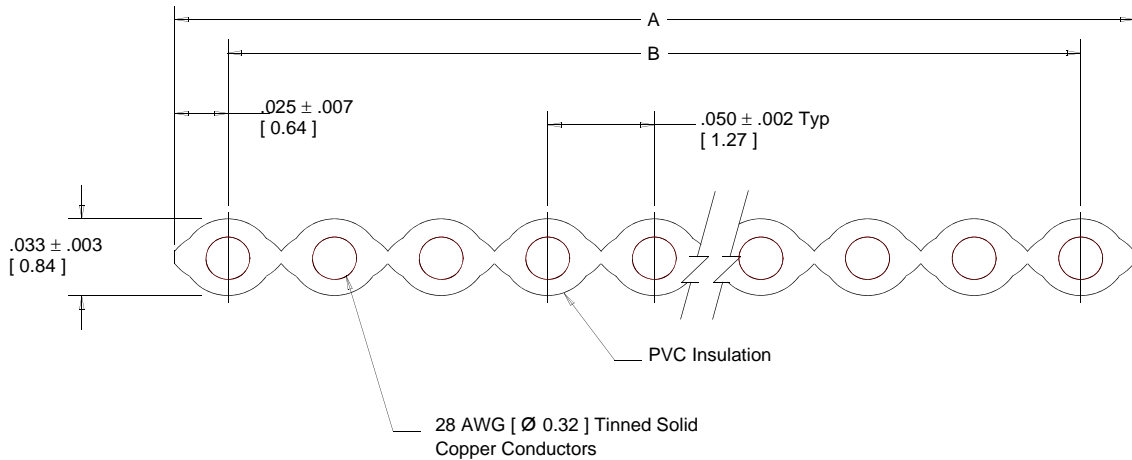
3709 Series

Number of Conductors	3M Part Number	Dimension A	Dimension B
09	<b>3709/09</b>	0.450 ± .010 [ 11.43 ]	0.400 ± .007 [ 10.18 ]
10	<b>3709/10</b>	0.500 ± .010 [ 12.70 ]	0.450 ± .007 [ 11.43 ]
14	<b>3709/14</b>	0.700 ± .010 [ 17.78 ]	0.650 ± .007 [ 16.51 ]
15	<b>3709/15</b>	0.750 ± .010 [ 19.05 ]	0.700 ± .007 [ 17.78 ]
16	<b>3709/16</b>	0.800 ± .015 [ 20.32 ]	0.750 ± .011 [ 19.05 ]
18	<b>3709/18</b>	0.900 ± .015 [ 22.86 ]	0.850 ± .011 [ 21.59 ]
20	<b>3709/20</b>	1.000 ± .015 [ 25.40 ]	0.950 ± .011 [ 24.13 ]
24	<b>3709/24</b>	1.200 ± .015 [ 30.48 ]	1.150 ± .011 [ 29.21 ]
25	<b>3709/25</b>	1.250 ± .015 [ 31.75 ]	1.200 ± .011 [ 30.48 ]
26	<b>3709/26</b>	1.300 ± .015 [ 33.02 ]	1.250 ± .011 [ 31.75 ]
30	<b>3709/30</b>	1.500 ± .020 [ 38.10 ]	1.450 ± .015 [ 36.83 ]
34	<b>3709/34</b>	1.700 ± .020 [ 43.18 ]	1.650 ± .015 [ 41.91 ]
36	<b>3709/36</b>	1.800 ± .020 [ 45.72 ]	1.750 ± .015 [ 44.45 ]
37	<b>3709/37</b>	1.850 ± .020 [ 46.99 ]	1.800 ± .015 [ 45.72 ]
40	<b>3709/40</b>	2.000 ± .020 [ 50.80 ]	1.950 ± .015 [ 49.53 ]
50	<b>3709/50</b>	2.500 ± .020 [ 63.50 ]	2.450 ± .015 [ 62.23 ]
60	<b>3709/60</b>	3.000 ± .020 [ 76.20 ]	2.950 ± .015 [ 74.93 ]
64	<b>3709/64</b>	3.200 ± .020 [ 81.28 ]	3.150 ± .015 [ 80.01 ]

Inch  
[mm]

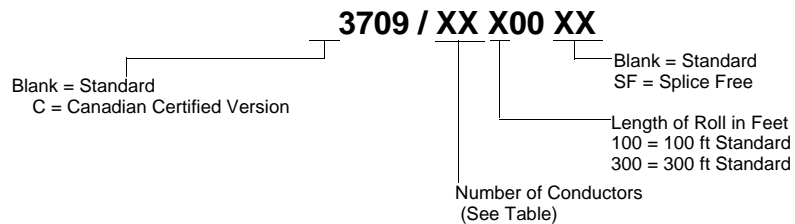
Tolerance Unless Noted			
	.0	.00	.000
inch	±.1	±.01	±.005

[ ] Dimensions for Reference Only



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

## Ordering Information



Note: Contact 3M for availability of additional conductor counts and/or custom roll lengths.

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## Important Notice

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### 3M Electronics

6801 River Place Blvd.  
Austin, TX 78726-9000  
800/225-5373  
[www.3M.com/electronics](http://www.3M.com/electronics)

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Minimum 10%  
Post-Consumer Fiber

Printed in USA.

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