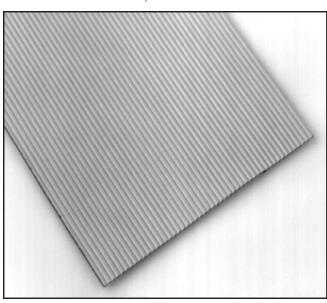
# 3M<sup>™</sup> Round Conductor Flat Cable

.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
- See Regulatory Information Appendix (RIA) for chemical compliance information (RIA E1 & C1 apply)

Date Modified: February 24, 2012

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# **Physical**

**Insulation:** 

Material: Polyvinyl Chloride (PVC)

Color: Gray

Marking:

Standard: None

Canadian Option: AVAWM 2651 105C 300V VW1 3M NU C AVAWM 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:** >  $1 \times 10^{10} \Omega/10$  ft. [3 m]

Characteristic Impedance: Unbalanced Balanced

 $114\,\Omega \qquad \qquad 188\,\Omega$ 

 Capacitance:
 12.8 pF/ft [ 42.0 pF/m ]
 7.4 pF/ft [ 24.3 pF/m ]

 Inductance:
 0.17 μH/ft [ 0.54 μH/m ]
 0.26 μH/ft [ 0.87 μH/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

UL File No.: E42769, Style No: 2651

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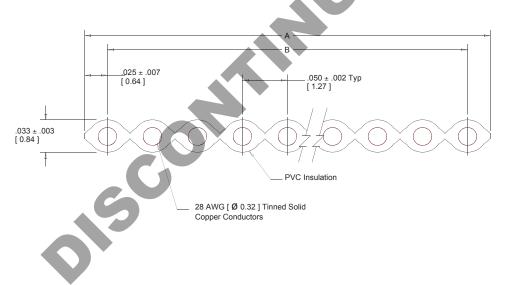


Inch [mm]

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

[] Dimensions for Reference Only

Number of Conductors	3M Part Number	Dimension A	Dimension B
09	3709/09	0.450 ± .010 [ 11.43 ]	0.400 ± .007 [ 10.18 ]
10	3709/10	0.500 ± .010 [ 12.70 ]	0.450 ± .007 [ 11.43 ]
14	3709/14	0.700 ± .010 [ 17.78 ]	0.650 ± .007 [ 16.51 ]
15	3709/15	0.750 ± .010 [ 19.05 ]	0.700 ± .007 [ 17.78 ]
16	3709/16	0.800 ± .015 [ 20.32 ]	0.750 ± .011 [ 19.05 ]
18	3709/18	0.900 ± .015 [ 22.86 ]	0.850 ± .011 [ 21.59 ]
20	3709/20	1.000 ± .015 [ 25.40 ]	0.950 ± .011 [ 24.13 ]
24	3709/24	1.200 ± .015 [ 30.48 ]	1.150 ± .011 [ 29.21 ]
25	3709/25	1.250 ± .015 [ 31.75 ]	1.200 ± .011 [ 30.48 ]
26	3709/26	1.300 ± .015 [ 33.02 ]	1.250 ± .011 [ 31.75 ]
30	3709/30	1.500 ± .020 [ 38.10 ]	1.450 ± .015 [ 36.83 ]
34	3709/34	1.700 ± .020 [ 43.18 ]	1.650 ± .015 [ 41.91 ]
36	3709/36	1.800 ± .020 [ 45.72 ]	1.750 ± .015 [ 44.45 ]
37	3709/37	1.850 ± .020 [ 46.99 ]	1.800 ± .015 [ 45.72 ]
40	3709/40	2.000 ± .020 [ 50.80 ]	1.950 ± .015 [ 49.53 ]
50	3709/50	2.500 ± .020 [ 63.50 ]	2.450 ± .015 [ 62.23 ]
60	3709/60	3.000 ± .020 [ 76,20 ]	2.950 ± .015 [ 74.93 ]
64	3709/64	3.200 ± .020 [ 81.28 ]	3.150 ± .015 [ 80.01 ]



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

## **Ordering Information**

Blank = Standard Blank = Standard SF = Splice Free

Number of Conductors (See Table)

Note: Available in standard 100 ft or 300 ft rolls, please specify when ordering. Contact 3M for availability of additional conductor counts and/or custom roll lengths.

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