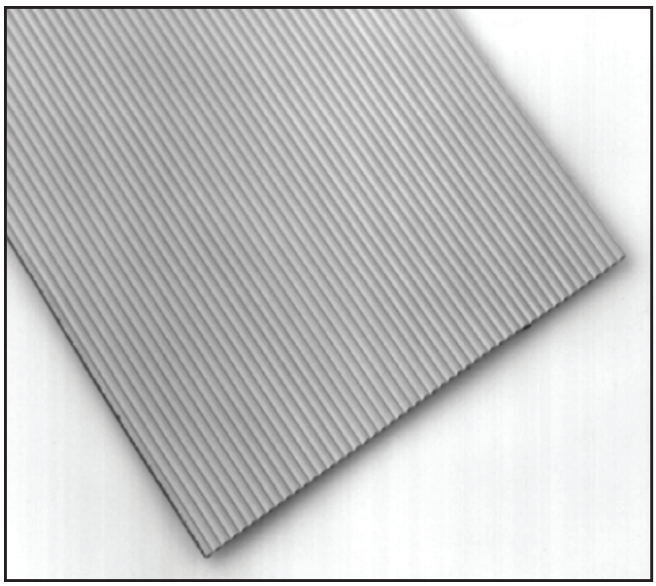
3M™ Round Conductor Flat Cable

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

Date Modified: February 24, 2012

TS-0419-C
Sheet 1 of 2

DISCONTINUED

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:	> 1×10^{10} Ω/10 ft. [3 m]		
Characteristic Impedance:	**Unbalanced**	**Balanced**	
	114 Ω	188 Ω	
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

3M is a trademark of 3M Company.

3M™ Round Conductor Flat Cable

.050" 28 AWG Solid, PVC

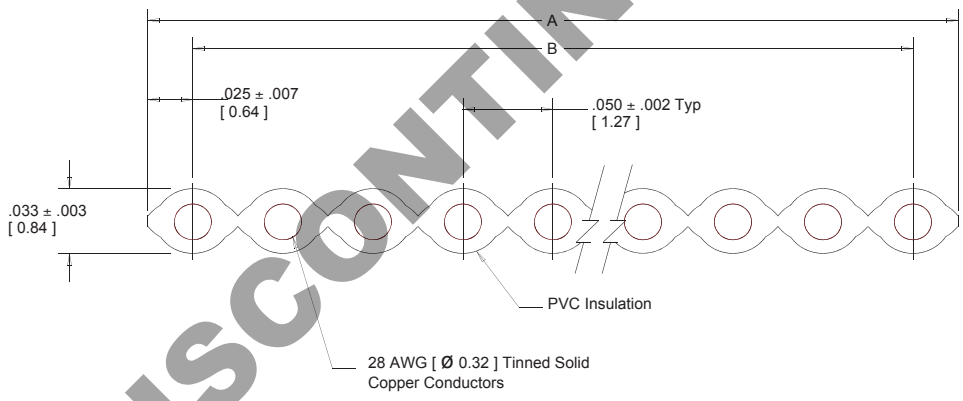
3709 Series

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]

Inch
[mm]

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

[ ] Dimensions for Reference Only



DISCONTINUED

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

Ordering Information

3709 / XX XX

- Blank = Standard
- C = Canadian Certified Version

- Number of Conductors (See Table)

- Blank = Standard
- SF = Splice Free

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.

3M
Interconnect Solutions
http://www.3M.com/interconnects/

3M is a trademark of 3M Company.

For technical, sales or ordering information call
800-225-5373

DISCONTINUED

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

3M Electronics Solutions Division
6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3Mconnectors.com

Please recycle. Printed in USA.
© 3M 2012. All rights reserved.
RIA-2217B-E

3M is a trademark of 3M Company.