

3M™ Round, Jacketed, Flat Cable

.050" 28 AWG Stranded, Mass-Term, PVC/PVC

3759 Series



- Round construction permits easier routing
- 28 AWG wire on .050 inch centers permits mass termination to broad line of IDC connectors
- Continuous bond and continuous split/bond allows for mass termination of IDC connectors
- Available in continuous bond (non-split) wire for ease of cable fabrication
- Meets external wiring requirements of National Electrical Code, Article 725 (CL2)
- Primary cable is zippable for branching or discrete terminations
- UL listed for USA and Canadian markets
- RoHS* compliant

Date Modified: November 15, 2006

TS-0070-22
Sheet 1 of 2

Physical

Jacket Material: Polyvinyl Chloride (PVC); **Color:** Black
Primary Material: PVC; **Color:** Gray
Marking Standard: (UL) CL2 75C 28 AWG or AWM 20267 3M NU C  WM II A/B 80C 300V FT1 EU <50V
Conductors: 28 AWG, 7 x 36 AWG [7 x ϕ 0.217] Tinned Stranded Copper
Inner Wrap: Polyester Film

Electrical

Voltage Rating:	USA: N.E.C. 725, CL2 or AWM; 300V	Canada: 300V	EU: <50V
Insulation Resistance:	(Primary Cable) $> 1 \times 10^{10} \Omega/10 \text{ ft. [3m]}$		
	Unbalanced	Balanced	
Characteristic Impedance:	90 Ω	133 Ω	
Capacitance:	16.7 pF/ft [54.8 pF/m]	11.9 pF/ft [39.0 pF/m]	
Inductance:	0.13 $\mu\text{H/ft}$ [0.44 $\mu\text{H/m}$]	0.21 $\mu\text{H/ft}$ [0.69 $\mu\text{H/m}$]	
Propagation Delay:	1.50 ns/ft [4.92 ns/m]	1.58 ns/ft [5.18 ns/m]	
Velocity of Propagation:	68%	64%	

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

Environmental

Temperature Rating: USA: CL2; 75°C or AWM; -20°C to + 80°C Canada: 80°C
Flammability Rating: USA: N.E.C. 725, CL2 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.: E118773, Power Limited Circuit Cable: CL2 (or AWM Style 20267)

3M™ Round, Jacketed, Flat Cable

.050" 28 AWG Stranded, Mass-Term, PVC/PVC

3759 Series



Inch
[mm]

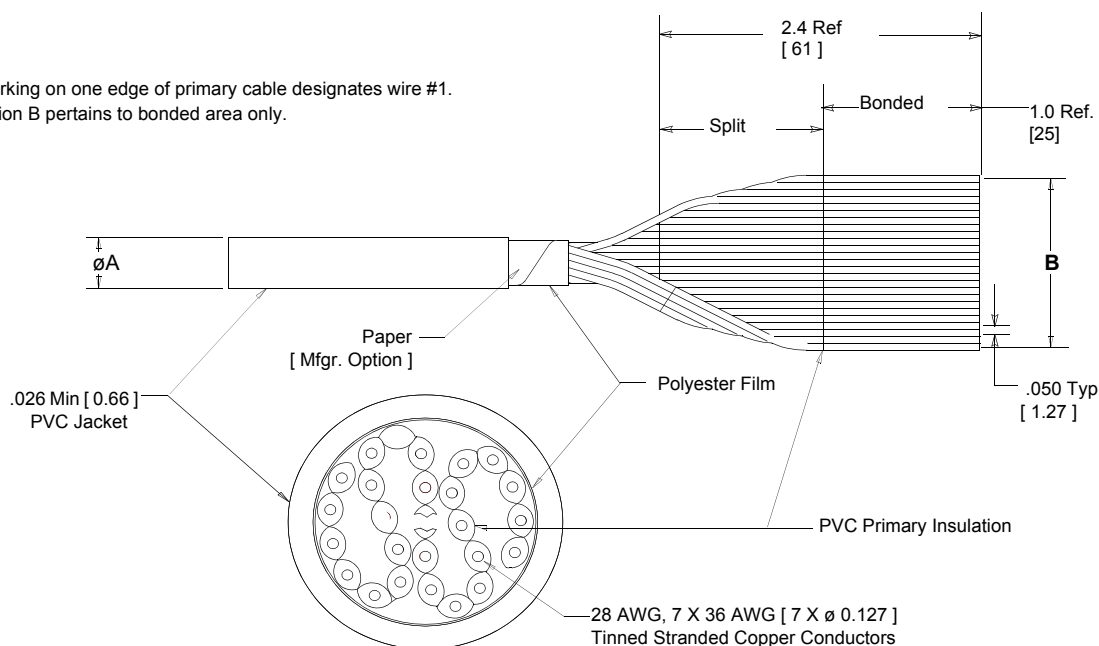
Tolerance Unless Noted			
Inch	.0	.00	.000
	±.1	±.05	±.010

[] Dimensions for
Reference only

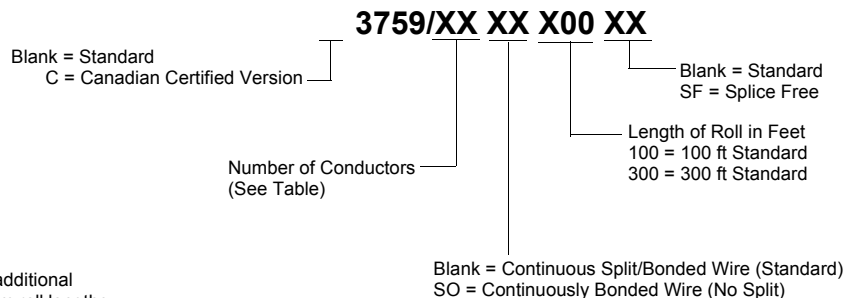
Number of Conductors	3M Part Number	Diameter A ± .03	Dimension B (See Note 2)
09	3759/09	0.26 [6.6]	0.40 [10.2]
10	3759/10	0.26 [6.6]	0.45 [11.4]
14	3759/14	0.27 [6.9]	0.65 [16.5]
15	3759/15	0.27 [6.9]	0.70 [17.8]
16	3759/16	0.27 [6.9]	0.75 [19.1]
20	3759/20	0.30 [7.6]	0.95 [24.1]
24	3759/24	0.33 [8.4]	1.15 [29.2]
25	3759/25	0.33 [8.4]	1.20 [30.5]
26	3759/26	0.33 [8.4]	1.25 [31.8]
30	3759/30	0.37 [9.4]	1.45 [36.8]
34	3759/34	0.37 [9.4]	1.65 [41.9]
36	3759/36	0.39 [9.9]	1.75 [44.5]
37	3759/37	0.39 [9.9]	1.80 [45.7]
40	3759/40	0.39 [9.9]	1.95 [49.5]
50	3759/50	0.44 [11.2]	2.45 [62.2]
60	3759/60	0.47 [11.9]	2.95 [74.9]
64	3759/64	0.50 [12.7]	3.15 [80.0]

Notes:

1. Red marking on one edge of primary cable designates wire #1.
2. Dimension B pertains to bonded area only.



Ordering Information



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

TS-0070-22
Sheet 2 of 2



Interconnect Solutions

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

3M is a trademark of 3M Company.

For technical, sales or ordering information call

800-225-5373

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.



3M Electronics

6801 River Place Blvd.
Austin, TX 78726-9000
800/225-5373
www.3M.com/electronics

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.**



Minimum 10%
Post-Consumer Fiber

Printed in USA.

© 3M 2006