

# 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 ~~AWM~~ II A/B 80C 300V FT1 EU <50V  
**Conductors:** 28 AWG, 7 × 36 AWG [ 7 × ø 0.217 ] Tinned Stranded Copper  
**Inner Wrap:** Polyester Film

## Electrical

<b>Voltage Rating:</b>	USA: N.E.C. 725, CL2 or AWM; 300V	Canada: 300V	EU: <50V
<b>Insulation Resistance:</b>	(Primary Cable) > 1 × 10 <sup>10</sup> Ω/10 ft. [ 3m ]		
<b>Characteristic Impedance:</b>	<b>Unbalanced</b> 90 Ω	<b>Balanced</b> 133 Ω	
<b>Capacitance:</b>	16.7 pF/ft [ 54.8 pF/m ]	11.9 pF/ft [ 39.0 pF/m ]	
<b>Inductance:</b>	0.13 μH/ft [ 0.44 μH/m ]	0.21 μH/ft [ 0.69 μH/m ]	
<b>Propagation Delay:</b>	1.50 ns/ft [ 4.92 ns/m ]	1.58 ns/ft [ 5.18 ns/m ]	
<b>Velocity of Propagation:</b>	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)

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Inch  
[mm]

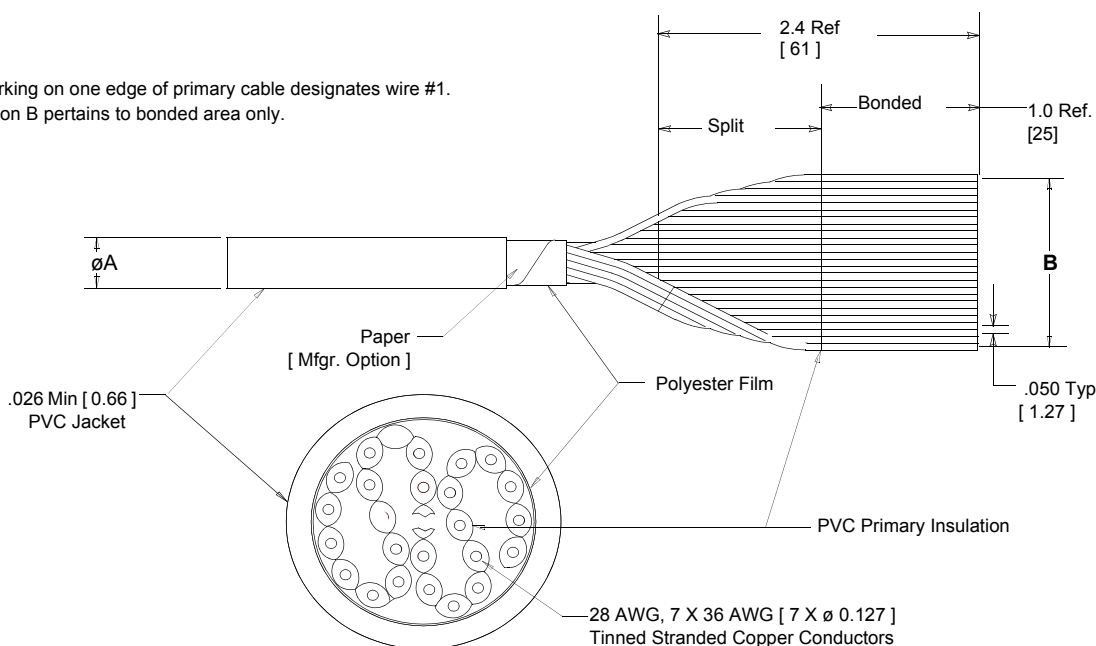
Tolerance Unless Noted			
Inch	.0	.00	.000
	±.1	±.05	±.010

[ ] Dimensions for Reference only

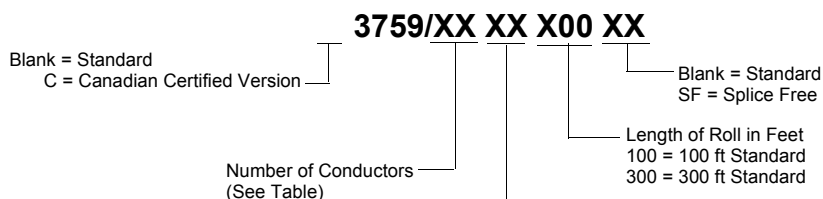
Number of Conductors	3M Part Number	Diameter A ± .03	Dimension B (See Note 2)
09	3759/09	0.26 [ 6.6 ]	0.40 [ 10.2 ]
10	3759/10	0.26 [ 6.6 ]	0.45 [ 11.4 ]
14	3759/14	0.27 [ 6.9 ]	0.65 [ 16.5 ]
15	3759/15	0.27 [ 6.9 ]	0.70 [ 17.8 ]
16	3759/16	0.27 [ 6.9 ]	0.75 [ 19.1 ]
20	3759/20	0.30 [ 7.6 ]	0.95 [ 24.1 ]
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.

Blank = Continuous Split/Bonded Wire (Standard)  
SO = Continuously Bonded Wire (No Split)

TS-0070-22  
Sheet 2 of 2

## Important Notice

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*Minimum 10%  
Post-Consumer Fiber*

Printed in USA.

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