

# 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. See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of [www.3Mconnectors.com](http://www.3Mconnectors.com) for compliance information (RIA E1 & C1 apply)

Date Modified: JUNE 1, 2012

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## 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  $\phi$  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) $>1 \times 10^{10} \Omega / 10 \text{ ft}$ [ 3 m ]		
<b>Characteristic Impedance:</b>	<b>Unbalanced</b>	<b>Balanced</b>	
	90 $\Omega$	133 $\Omega$	
<b>Capacitance:</b>	16.7 pF/ft [ 54.8 pF/m ]	11.9 pF/ft [ 39.0 pF/m ]	
<b>Inductance:</b>	0.13 $\mu\text{H}/\text{ft}$ [ 0.44 $\mu\text{H}/\text{m}$ ]	0.21 $\mu\text{H}/\text{ft}$ [ 0.69 $\mu\text{H}/\text{m}$ ]	
<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

UL File No.: E118773, Power Limited Circuit Cable: CL2 (or AWM Style 20267)

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Inch  
[Imm]

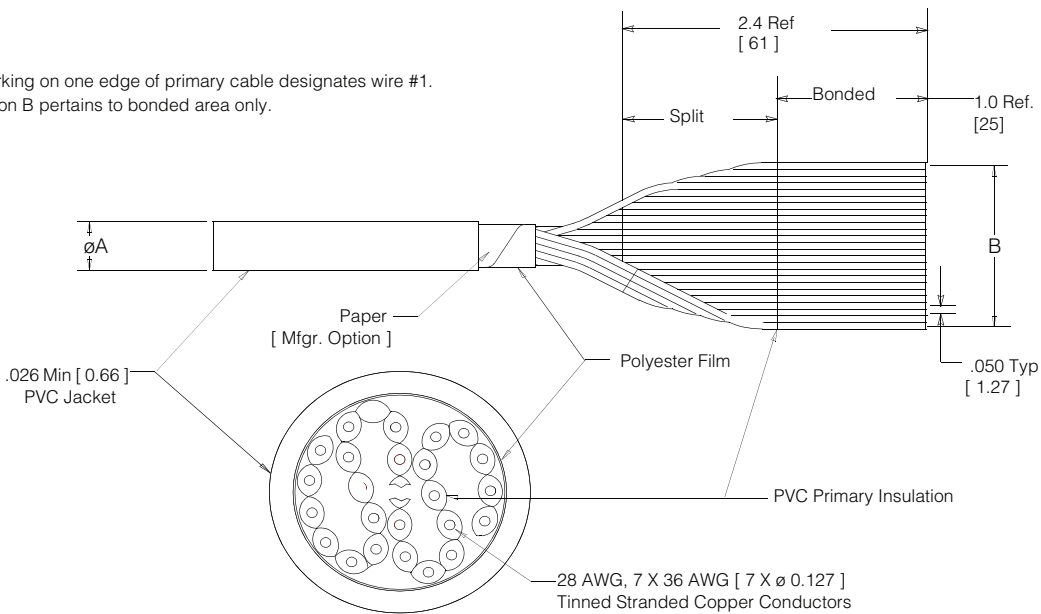
Tolerance Unless Noted			
Inch	.0	.00	.000
	±.1	±.05	±.010

[ ] 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

**3759/XX XX XX**

Number of Conductors  
(See Table)

Blank = Standard  
SF = Splice Free

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

Note: Available in common lengths of 100 ft/roll or 300 ft/roll ( 30 m/roll or 91 m/roll), please specify when ordering.

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