

# 3M™ Round, Jacketed, Flat Cable

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

3834 Series



- High flex life cable product in a round jacketed construction permits flexing
- Round construction permits easier routing
- 28 AWG wire on .050 inch wire spacing permits mass termination to broad line of IDC connectors
- Continuous split/bond repeat allows for mass termination on 2.4 inch centers (approximate)
- 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
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3Mconnector.com](http://www.3Mconnector.com) for compliance information (RIA E1 & C1 apply)

Date Modified: July 13, 2010

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## Physical

**Jacket Material:** Polyvinyl Chloride (PVC)

Color: Black

Primary Material: PVC

**Marking Standard:** (UL) CL2 75C 28 AWG 3M NU AWM IIA/B 80C 300V FT1 EU <50V  
28 AWG, 19 × 40 AWG [ 19 × ø 0.79 ] Silver Plated Stranded Copper Alloy

**Conductors:** (89% conductivity)

**Inner Wrap:** Polyester Film

## Electrical

**Voltage Rating:** USA: N.E.C. 725, CL2    Canada: 300V    EU: <50V

**Insulation Resistance:** (Primary Cable) >  $1 \times 10^{10} \Omega/10 \text{ ft. [ 3 m ]}$

Characteristic Impedance:	Unbalanced	Balanced
	75 $\Omega$	128 $\Omega$

<b>Capacitance:</b>	22.4 pF/ft [ 73.5 pF/m ]	12.8 pF/ft [ 42.00 pF/m ]
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<b>Inductance:</b>	0.12 $\mu\text{H/ft}$ [ 0.41 $\mu\text{H/m}$ ]	0.21 $\mu\text{H/ft}$ [ 0.69 $\mu\text{H/m}$ ]
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<b>Propagation Delay:</b>	1.67 ns/ft [ 1.57 ns/m ]	1.64 ns/ft [ 5.38 ns/m ]
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<b>Velocity of Propagation:</b>	61%	62%
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Note: Unbalanced is measured between ground-signal-ground conductors. Balanced is measured between conductors within a pair.

## Environmental

**Temperature Rating:** USA: CL2: 75°C; Canada: 80°C

**Flammability Rating:** USA: N.E.C. 725, CL2; Canada: FT1

UL File No.: E118773, Power Limited Circuit Cable: CL2

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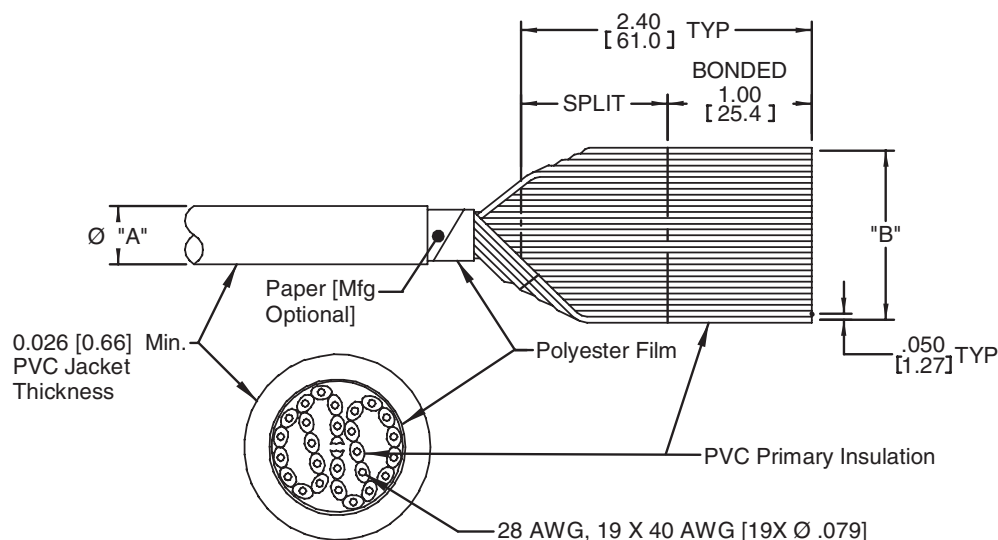


Inch  
[mm]

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

[ ] Dimensions for Reference Only

Number of Conductors	3M Part Number	Dimension A ± .03	Dimension B (See Note 2)
10	3834/10	0.26 [ 6.6 ]	0.45 [ 11.4 ]
14	3834/14	0.27 [ 6.9 ]	0.65 [ 16.5 ]
16	3834/16	0.27 [ 6.9 ]	0.75 [ 19.1 ]
20	3834/20	0.30 [ 7.6 ]	0.95 [ 24.1 ]
24	3834/24	0.33 [ 8.4 ]	1.15 [ 29.2 ]
26	3834/26	0.33 [ 8.4 ]	1.25 [ 31.8 ]
34	3834/34	0.37 [ 9.4 ]	1.65 [ 41.9 ]
40	3834/40	0.39 [ 9.9 ]	1.95 [ 49.5 ]
50	3834/50	0.44 [ 11.2 ]	2.45 [ 62.2 ]
60	3834/60	0.47 [ 11.9 ]	2.95 [ 74.9 ]
64	3834/64	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

**3834/XX XX XX**

Number of Conductors  
(See Table)

Blank = Standard  
S0 = Continuously Bonded Wire (No Split)

Blank = Standard  
SF = Splice Free

## Note3:

Available in standard 275 ft. Contact 3M for availability of additional conductor counts and/or custom roll lengths.

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