

3M™ Shielded/Jacketed, Flat Cable

.050" 28 AWG Stranded, PVC/PVC

3517 Series



- Meets external wiring requirements of National Electrical Code, Article 725 (CL2)
- UL listed for USA and Canadian markets
- 28 AWG stranded wire on .050 inch centers permits mass termination to broad line of IDC connectors
- 360 degree expanded copper shielding provides 20 db average shielding effectiveness
- Primary cable is zippable for branching or discrete terminations
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3M.com/Interconnects for compliance information (RIA E1 & C1 apply)

Date Modified: December 8, 2009

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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 20879 3M NU C  AWM IIA/B 80C 300V FT1 EU <50V

Conductors: 28 AWG, 7 × 36 AWG [7 × Ø 0.127] Tinned Stranded Copper

Shielding Material: Expanded Copper

Electrical

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

Insulation Resistance: (Primary Cable) > 1 × 10¹⁰ Ω/10 ft. [3 m]

Characteristic Impedance:	Unbalanced	Balanced
	70 Ω	119 Ω

Capacitance:	21.5 pF/ft [70.5 pF/m]	12.7 pF/ft [41.7 pF/m]
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Inductance:	0.11 μH/ft [0.35 μH/m]	0.18 μH/ft [0.59 μH/m]
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Propagation Delay:	1.51 ns/ft [4.95 ns/m]	1.51 ns/ft [4.95 ns/m]
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Velocity of Propagation:	67%	67%
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Note: Unbalanced is measured between ground-signal-ground conductors, with shield grounded. Balanced is measured between signal conductors within a pair, with the shield floating.

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 20879)

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Inch
[mm]

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

[] Dimensions for Reference Only

Number of Conductors	3M Part Number	Dimension A ± .040"	Dimension B
09	3517/09	.58 [14.7]	0.400 ± .007 [10.16]
10	3517/10	.63 [16.0]	0.450 ± .007 [11.43]
14	3517/14	.83 [21.1]	0.650 ± .007 [16.51]
15	3517/15	.88 [22.4]	0.700 ± .007 [17.78]
16	3517/16	.93 [23.6]	0.750 ± .011 [19.05]
20	3517/20	1.13 [28.7]	0.950 ± .011 [24.13]
24	3517/24	1.33 [33.8]	1.150 ± .011 [29.21]
25	3517/25	1.38 [35.0]	1.200 ± .011 [30.48]
26	3517/26	1.43 [36.3]	1.250 ± .011 [31.75]
30	3517/30	1.63 [41.4]	1.450 ± .015 [36.83]
34	3517/34	1.83 [46.5]	1.650 ± .015 [41.91]
36	3517/36	1.93 [49.0]	1.750 ± .015 [44.45]
37	3517/37	1.98 [50.3]	1.800 ± .015 [45.72]
40	3517/40	2.13 [54.1]	1.950 ± .015 [49.53]
50	3517/50	2.63 [66.8]	2.450 ± .015 [62.23]
60	3517/60	3.13 [79.5]	2.950 ± .015 [74.93]
64	3517/64	3.38 [85.9]	3.150 ± .015 [80.01]



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

Ordering Information

3517/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.

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