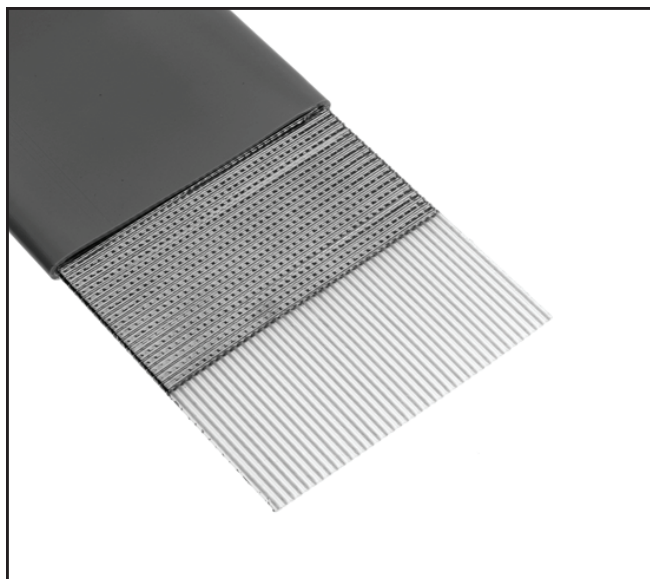


3M™ Pleated Foil Shielded Cable

.025" 30 AWG Solid, TPE Primary, PVC Jacket

90101 Series



- Compatible with IDC mass termination connectors
- Functions with applications requiring standard impedance of 100 Ω balanced (differential)
- Extremely low crosstalk, used in the all-signal mode to quadruple signal density as compared to standard .025 inch flat ribbon cable
- Solid pleated copper foil provides flexibility and 35 db average shielding effectiveness
- CL2 rated, rugged design and high reliability for peripheral applications
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3M.com/Interconnect for compliance information (RIA E1 & C1 apply)

Date Modified: July 16, 2009

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Sheet 1 of 2

Physical

Jacket:

Material: Polyvinyl Chloride (PVC)

Color: Gray

Primary Material: Thermoplastic Elastomer (TPE)

Marking:

Standard: (UL) CL2 75C 30 AWG 3M NU C  AWM IIA/B 80C 150V FT1 EU <50V

Conductors: 30 AWG [0.254] Tinned Solid Copper

Shielding: Solid, Pleated, Copper Foil

Electrical

Voltage Rating: USA: N.E.C. 725, CL2 Canada: 150V EU: <50V

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

Characteristic Impedance:	Unbalanced	Balanced
	53 Ω	104 Ω

Capacitance:	28.4 pF/ft [93.2 pF/m]	14.5 pF/ft [47.6 pF/m]
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Inductance:	0.08 $\mu\text{H/ft}$ [0.26 $\mu\text{H/m}$]	0.16 $\mu\text{H/ft}$ [0.52 $\mu\text{H/m}$]
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Propagation Delay:	1.52 ns/ft [4.99 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 Canada: 80°C

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

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



Interconnect Solutions

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

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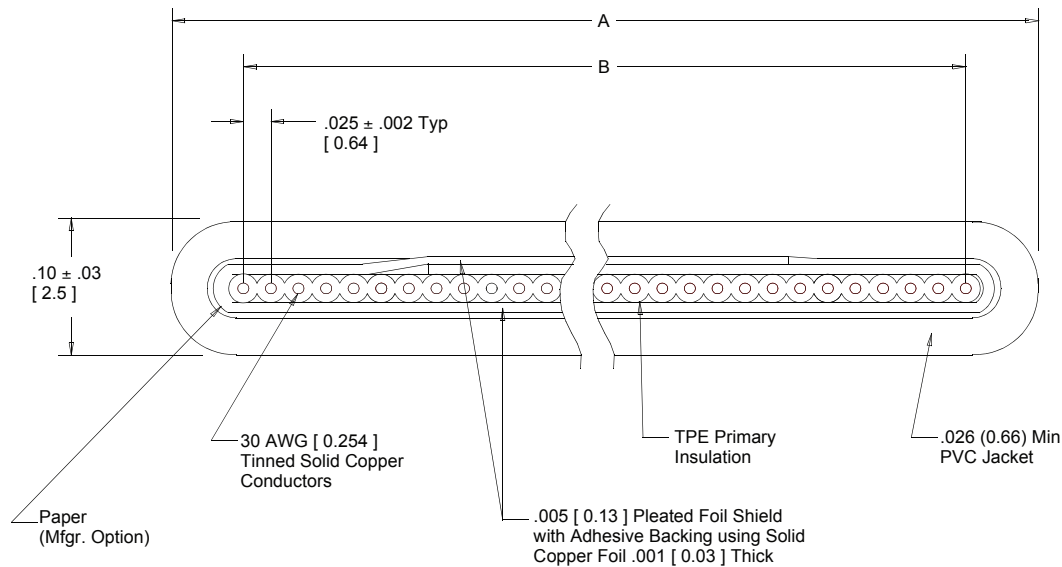
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Number of Conductors	3M Part Number	Dimension A	Dimension B
20	90101/20	0.60 [15.2]	0.475 ± .006 [12.07]
26	90101/26	0.75 [19.1]	0.625 ± .006 [15.88]
36	90101/36	1.00 [25.4]	0.875 ± .009 [22.23]
40	90101/40	1.10 [27.9]	0.975 ± .009 [24.77]
50	90101/50	1.35 [34.3]	1.225 ± .009 [31.12]
68	90101/68	1.80 [45.7]	1.675 ± .012 [42.55]
80	90101/80	2.10 [53.3]	1.975 ± .015 [50.17]
100	90101/100	2.60 [66.0]	2.475 ± .017 [62.87]



Inch
[mm]

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

[] Dimensions for Reference Only

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

Ordering Information

90101/XX XX

Number of Conductors
(See Table)

Blank = Standard
SF = Splice Free

Note: Standard lengths are 100 ft, 150 ft, and 300 ft rolls.
Please specify when ordering.

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