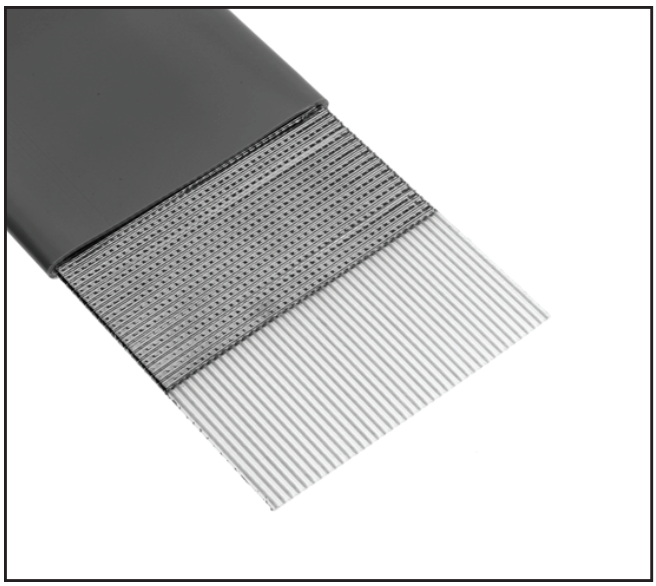
3M™ Pleated Foil Shielded Cable

.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)
- 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.3Mconnectors.com for compliance information (RIA E1 & C1 apply)

Date Modified: September 3, 2013

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) > 1×10^{10} Ω/10 ft. [3 m]		
Characteristic Impedance:	**Unbalanced** 53 Ω	**Balanced** 104 Ω	
Capacitance:	28.4 pF/ft [93.2 pF/m]	14.5 pF/ft [47.6 pF/m]	
Inductance:	0.08 µH/ft [0.26 µH/m]	0.16 µH/ft [0.52 µH/m]	
Propagation Delay:	1.52 ns/ft [4.99 ns/m]	1.51 ns/ft [4.95 ns/m]	
Velocity of Propagation:	67%	67%	

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

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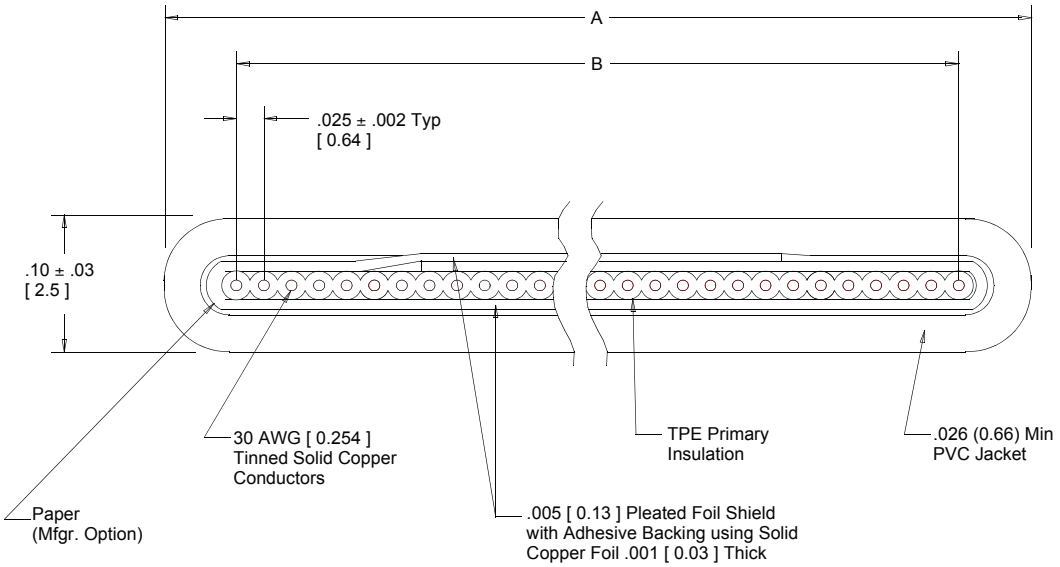
Number of Conductors	3M Part Number	Dimension A	Dimension B
20	90101/20	0.60 [15.2]	0.475 ± .006 [12.07]
26	90101/26	0.75 [19.1]	0.625 ± .006 [15.88]
36	90101/36	1.00 [25.4]	0.875 ± .009 [22.23]
40	90101/40	1.10 [27.9]	0.975 ± .009 [24.77]
50	90101/50	1.35 [34.3]	1.225 ± .009 [31.12]
68	90101/68	1.80 [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

- XX (Number of Conductors): Number of Conductors (See Table)
- XX (Blank = Standard / SF = Splice Free): Blank = Standard; SF = Splice Free

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

3M
Interconnect Solutions
http://www.3Mconnectors.com

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For technical, sales or ordering information call
800-225-5373

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