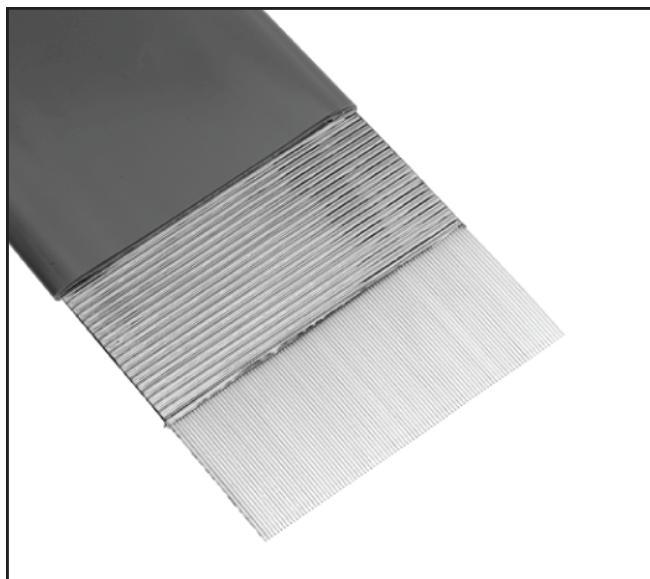


# 3M™ Pleated Foil Shielded Cable

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

90111 Series



- Can be used with IDC mass termination connectors
- Can be used in applications requiring standard impedance of 75  $\Omega$  single ended
- CL2 rated, rugged design, and high reliability for peripheral applications
- Solid pleated copper foil provides flexibility and 35 db average shielding effectiveness
- See Regulatory Information Appendix (RIA) for chemical compliance information (RIA E1 & C1 apply)

Date Modified: September 3, 2013

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## Physical

**Cover 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**  
72  $\Omega$       129  $\Omega$

**Capacitance:** 21.0 pF/ft [ 68.9 pF/m ]      11.6 pF/ft [ 38.1 pF/m ]

**Inductance:** 0.11  $\mu\text{H}/\text{ft}$  [ 0.36  $\mu\text{H}/\text{m}$  ]      0.19  $\mu\text{H}/\text{ft}$  [ 0.62  $\mu\text{H}/\text{m}$  ]

**Propagation Delay:** 1.51 ns/ft [ 4.95 ns/m ]      1.50 ns/ft [ 4.92 ns/m ]

**Velocity of Propagation:** 67%      68%

Note: Unbalanced is measured between ground-signal-ground conductors. Balanced is measured between signal 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

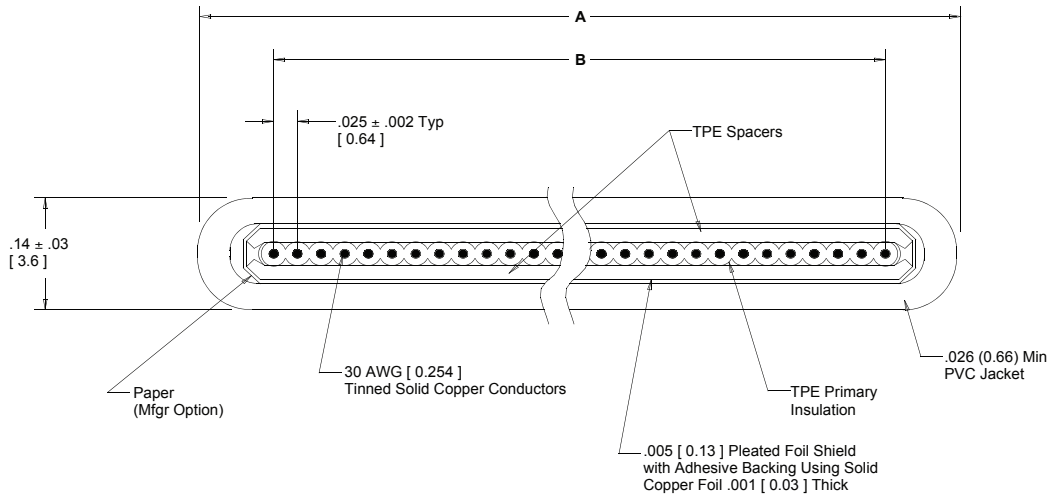
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90111 Series



Number of Conductors	3M Part Number	Dimension A	Dimension B
20	90111/20	.65 [ 16.5 ]	0.475 ± .004 [ 12.07 ]
26	90111/26	.80 [ 20.3 ]	0.625 ± .004 [ 15.88 ]
36	90111/36	1.05 [ 26.7 ]	0.875 ± .006 [ 22.23 ]
40	90111/40	1.15 [ 29.2 ]	0.975 ± .006 [ 24.77 ]
50	90111/50	1.40 [ 35.6 ]	1.225 ± .009 [ 31.12 ]
68	90111/68	1.85 [ 47.0 ]	1.675 ± .012 [ 42.55 ]
80	90111/80	2.15 [ 54.6 ]	1.975 ± .012 [ 50.17 ]
100	90111/100	2.65 [ 67.3 ]	2.475 ± .015 [ 62.87 ]



Inch  
[mm]

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

[ ] Dimensions for Reference Only

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

## Ordering Information

**90111/XX**

Number of Conductors  
(See Table)

Note: Standard length is 100 ft/roll.

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Sheet 2 of 2

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