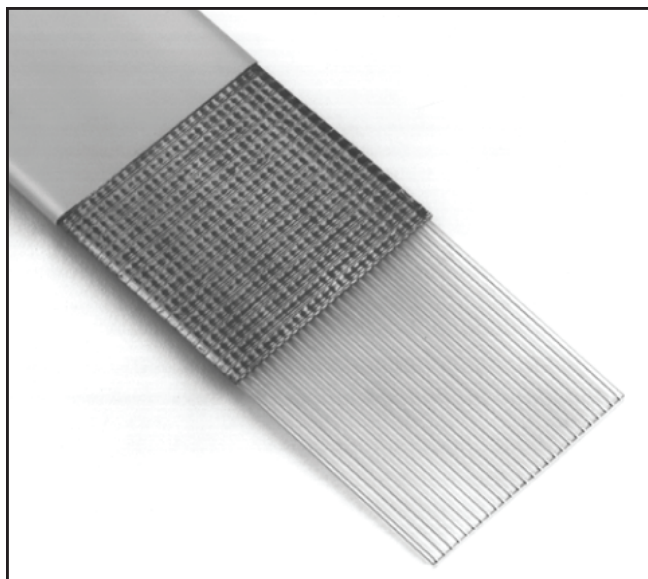


3M™ Pleated Foil Shielded Cable

.050" 28 AWG Stranded, TPE Primary, Thin TPE Cover

90204 Series



- Can be used with IDC mass termination connectors
- Can be used in applications requiring standard impedance of 100Ω balanced (differential)
- Perfect for board-to-board applications within electronic equipment, TPE covering prevents pleated copper foil from accidental shorting
- 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

TS-0403-D
Sheet 1 of 2

Physical

Cover Material: Thermoplastic Elastomer (TPE) **Color:** Gray

Primary Material: Thermoplastic Elastomer (TPE) **Color:** Natural

Marking Standard: None

Canadian Option:  AWM 20674 105C 300V VW1 3M NU C  AWM IA 105C 150V FT1 EU <50V

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

Shielding: Solid, Pleated, Copper Foil

Electrical

Voltage Rating: USA: 300V Canada: 150V EU: <50V

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

Characteristic Impedance:	Unbalanced	Balanced
	53 Ω	110 Ω

Capacitance:	28.1 pF/ft [92.2 pF/m]	13.4 pF/ft [44.0 pF/m]
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Inductance:	0.08 μH/ft [0.26 μH/m]	0.16 μH/ft [0.54 μH/m]
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Propagation Delay:	1.49 ns/ft [4.89 ns/m]	1.48 ns/ft [4.86 ns/m]
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Velocity of Propagation:	68%	69%
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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: -20°C to +105°C

Flammability Rating: USA: VW-1 Canada: FT1

UL File No.: E42769, Style No.: 20674

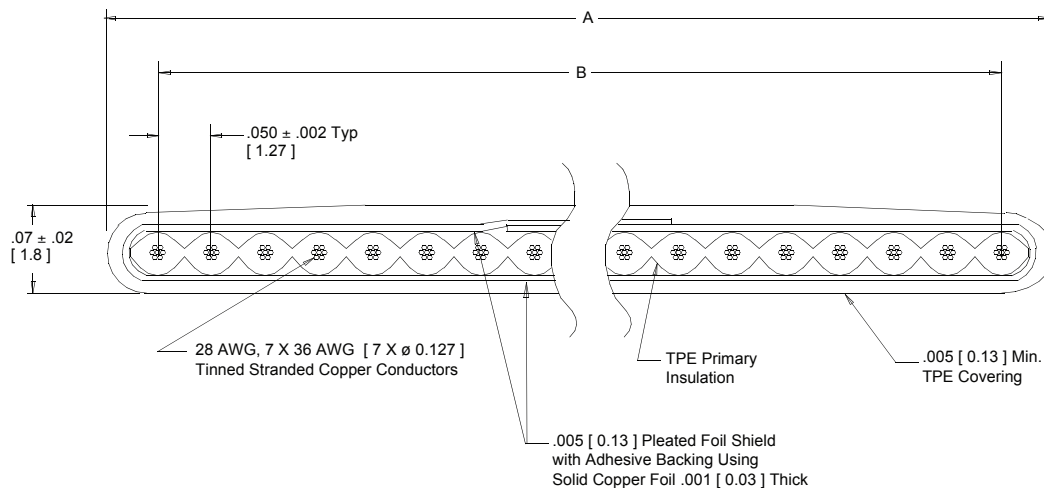
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Number of Conductors	3M Part Number	Dimension A	Dimension B
15	90204/15	0.79 [20.1]	0.700 ± .007 [17.78]
20	90204/20	1.04 [26.5]	0.950 ± .011 [24.13]
25	90204/25	1.29 [32.8]	1.200 ± .011 [30.48]
26	90204/26	1.34 [34.1]	1.250 ± .011 [31.75]
34	90204/34	1.74 [44.3]	1.650 ± .015 [41.91]
37	90204/37	1.89 [48.1]	1.800 ± .015 [45.72]
40	90204/40	2.04 [51.9]	1.950 ± .015 [49.53]
50	90204/50	2.54 [64.6]	2.450 ± .015 [62.23]
60	90204/60	3.04 [77.3]	2.950 ± .015 [74.93]
64	90204/64	3.24 [82.4]	3.150 ± .015 [80.01]



Inch
[mm]

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

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

[] Dimensions for Reference Only

Ordering Information

90204/XX XX

Blank = Standard
C = Canadian Certified Version

Number of Conductors
(See Table)

Blank = Standard
SF = Splice Free

Note: Available in standard 100 ft rolls. Contact 3M for availability of additional conductor counts and/or custom roll lengths.

TS-0403-D
Sheet 2 of 2

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