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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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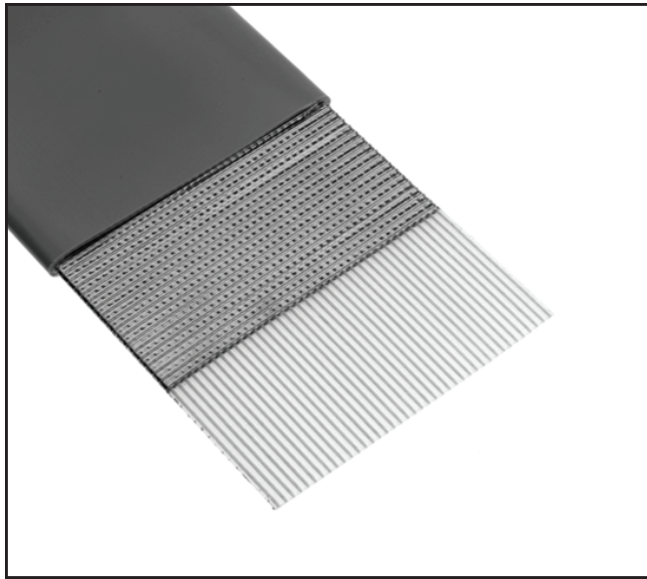
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



3M™ Pleated Foil Shielded Cable

.050" 28 AWG Stranded, TPE Primary, PVC Jacket

90104 Series



- Can be used with IDC mass termination connectors
- Can be used in applications requiring standard impedance of 100 Ω balanced (differential)
- 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

TS-0288-D
Sheet 1 of 2

Physical

Jacket Material: Polyvinyl Chloride (PVC) **Color:** Gray

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

Marking:

Standard: (UL) CL2 75C 28 AWG 3M NU C  AWM IIA/B 80C 150V FT1 EU <50V

Conductors: 28 AWG, 7 x 36 AWG [7 x \varnothing 0.127] Tinned Stranded 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	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 $\mu\text{H}/\text{ft}$ [0.26 $\mu\text{H}/\text{m}$]	0.16 $\mu\text{H}/\text{ft}$ [0.52 $\mu\text{H}/\text{m}$]
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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: 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

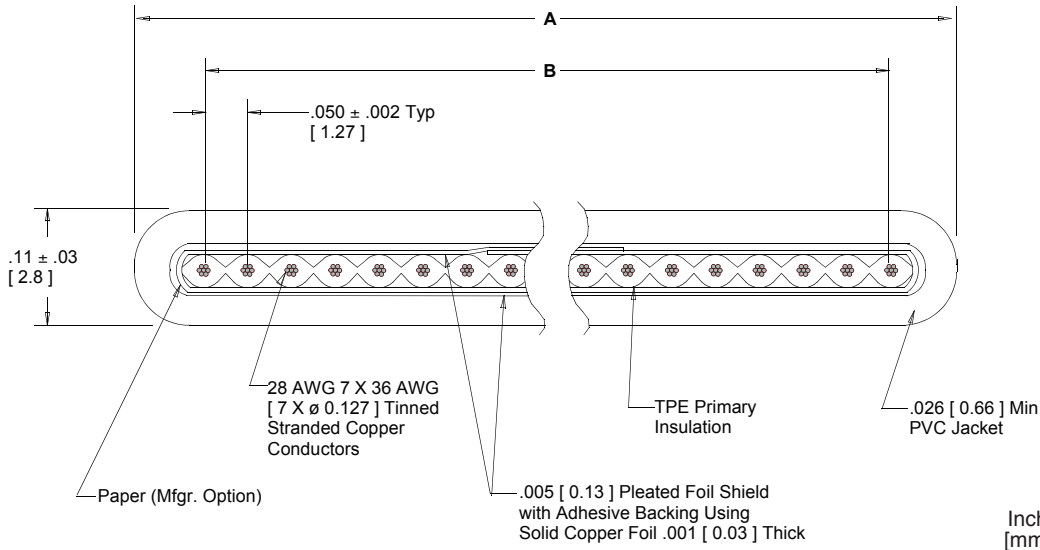
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Number of Conductors	3M Part Number	Dimension A	Dimension B
15	90104/15	86 [21.8]	0.700 ± .007 [17.78]
20	90104/20	1.11 [28.2]	0.950 ± .011 [24.13]
25	90104/25	1.34 [34.0]	1.200 ± .011 [30.48]
26	90104/26	1.40 [35.6]	1.250 ± .011 [31.75]
30	90104/30	1.60 [40.6]	1.450 ± .011 [36.83]
34	90104/34	1.80 [45.7]	1.650 ± .015 [41.91]
36	90104/36	1.90 [48.3]	1.750 ± .015 [44.45]
37	90104/37	1.95 [49.5]	1.800 ± .015 [45.72]
40	90104/40	2.10 [53.4]	1.950 ± .015 [49.53]
50	90104/50	2.60 [66.0]	2.450 ± .015 [62.23]
60	90104/60	3.10 [78.7]	2.950 ± .015 [74.93]
64	90104/64	3.32 [84.3]	3.150 ± .015 [80.01]



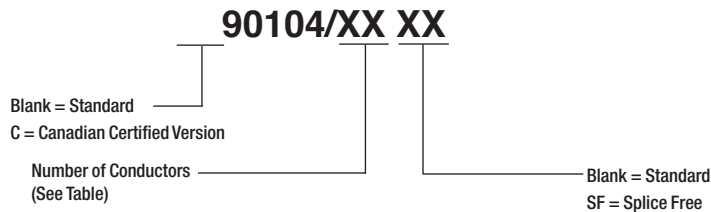
Inch
[mm]

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



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

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