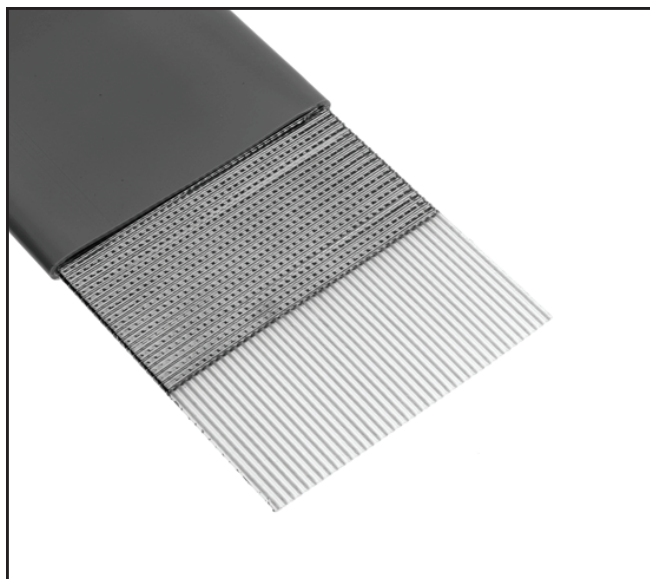


3M™ Pleated Foil Shielded Cable

.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

TS-0285-C
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]
---------------------	--------------------------	--------------------------

Inductance:	0.08 $\mu\text{H/ft [0.26 } \mu\text{H/m]}$	0.16 $\mu\text{H/ft [0.52 } \mu\text{H/m]}$
--------------------	---	---

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



Interconnect Solutions

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

3M is a trademark of 3M Company.
For technical, sales or ordering information call

800-225-5373

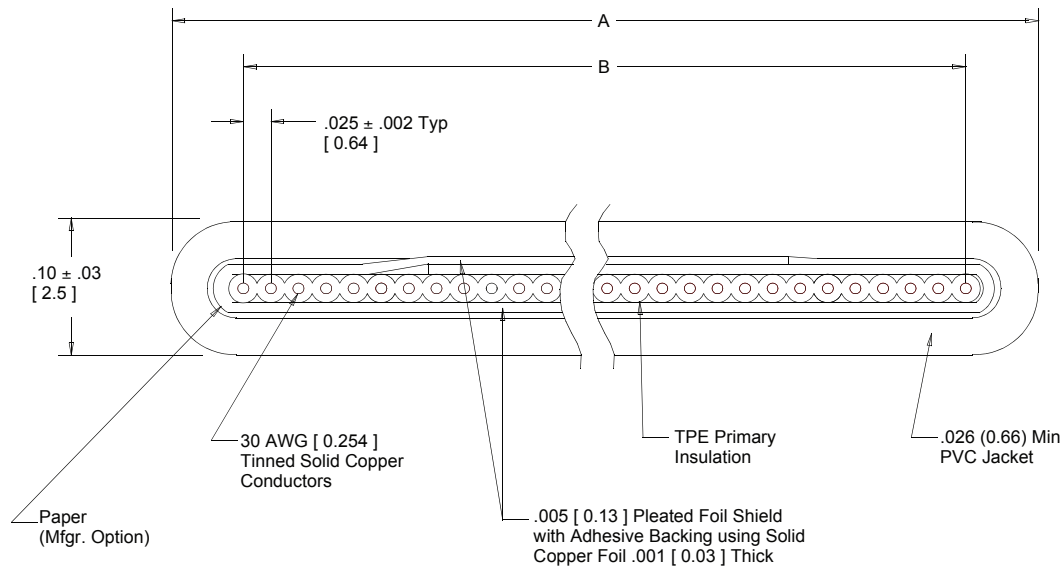
3M™ Pleated Foil Shielded Cable

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

90101 Series



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.

TS-0285-C
Sheet 2 of 2

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



3M Electronics Solutions Division

6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3mconnectors.com

Please recycle. Printed in USA.
© 3M 2009. All rights reserved.

3M is a trademark of 3M Company.