

3M™ Round, Shielded/Jacketed, Flat Cable

.050" 28 AWG Stranded, Mass-Term, Halogen Free PO/PO

2069 Series



- Round construction permits easier routing
- 28 AWG wire on .050 inch centers permits mass termination to broad line of IDC connectors
- Continuous split/bond repeat allows for mass termination of IDC connectors
- Dual shielding provides 35 db average shielding
- Primary cable is zippable for branching or discrete terminations
- Halogen free jacket and insulation
- See Regulatory Information Appendix (RI) for chemical compliance information

Date Modified: September 9, 2010

TS-2172-C
Sheet 1 of 2

Physical

Jacket Material: Halogen Free Polyolefin (PO)

Jacket Color: Off-White

Primary Material: Halogen Free Polyolefin (PO)

Primary Color: Off-White

Marking Standard: None

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

Shielding: 0.001 [0.03] Thick Aluminum/Polyester Film Foil and 90% Coverage Tinned Copper Braid

Electrical

Voltage Rating: USA: 30V Canada: 150V EU: <50V

Insulation Resistance: (Primary Cable) > 1 × 10¹⁰ Ω/10 ft. [3 m]

Characteristic Impedance: **Unbalanced** 54 Ω **Balanced** 107 Ω

Capacitance: 28.7 pF/ft [94.2 pF/m] 14.4 pF/ft [47.2 pF/m]

Inductance: 0.08 μH/ft [0.27 μH/m] 0.16 μH/ft [0.52 μH/m]

Propagation Delay: 1.55 ns/ft [5.09 ns/m] 1.54 ns/ft [5.05 ns/m]

Velocity of Propagation: 66% 66%

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

Environmental

Temperature Rating: -40°C to +105°C

Flammability Rating: USA: UL HB

3M

Electronic Solutions Division
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™ Round, Shielded/Jacketed, Flat Cable

.050" 28 AWG Stranded, Mass-Term, Halogen Free PO/PO

2069 Series

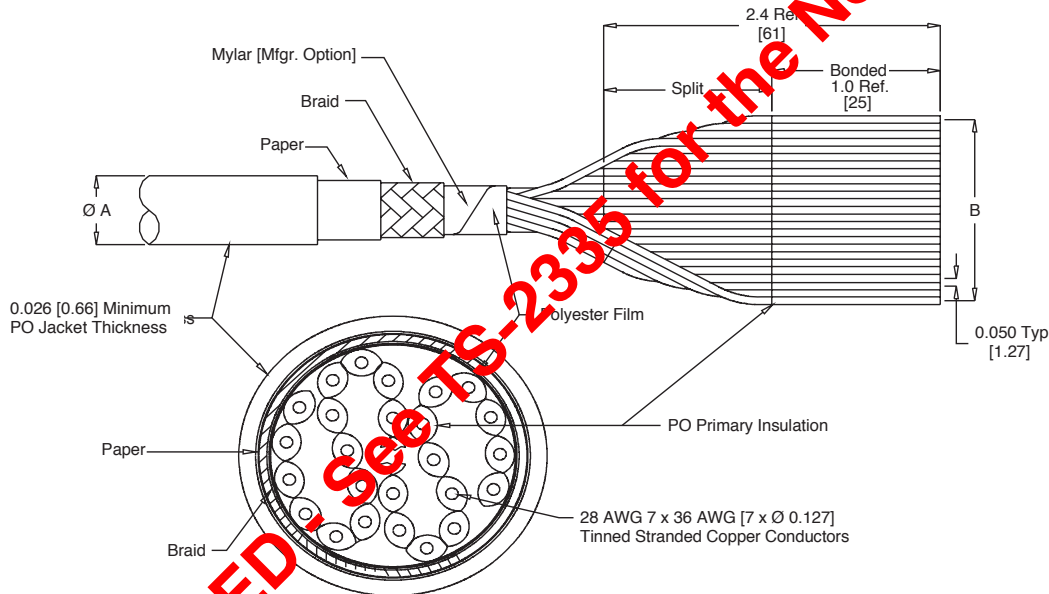


Inch
[mm]

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

[] Dimensions for Reference Only

Number of Conductors	3M Part Number	Diameter A ± .03	Dimension B (See Note 2)
09	2069/09	0.27 [6.9]	0.40 [10.2]
10	2069/10	0.27 [6.9]	0.45 [11.4]
14	2069/14	0.31 [7.9]	0.65 [16.5]
15	2069/15	0.31 [7.9]	0.70 [17.8]
16	2069/16	0.31 [7.9]	0.75 [19.1]
20	2069/20	0.34 [8.6]	0.95 [24.1]
24	2069/24	0.37 [9.4]	1.15 [29.2]
25	2069/25	0.37 [9.4]	1.20 [30.5]
26	2069/26	0.37 [9.4]	1.25 [31.8]
34	2069/34	0.41 [10.4]	1.65 [41.9]
36	2069/36	0.43 [10.9]	1.75 [44.5]
37	2069/37	0.43 [10.9]	1.80 [45.7]
40	2069/40	0.43 [10.9]	1.95 [49.5]
50	2069/50	0.48 [12.2]	2.45 [62.2]
60	2069/60	0.51 [13.0]	2.95 [74.9]
64	2069/64	0.54 [13.7]	3.15 [80.0]



Notes:

1. Red marking on one edge of primary cable designates wire #1.
2. Dimension B pertains to bonded area only.

Ordering Information

2069/XX XX 275 XX (RIA E1 & C1 apply)

Number of Conductors
(See Table)

Blank = Standard
SO = Continuously Bonded Wire
(No Split)

Blank = Standard
SF = Splice Free

Length of Roll in Feet
275 = 275 ft.
Standard

Note: Contact 3M for availability of additional conductor counts and/or custom roll lengths.

TS-2172-C
Sheet 2 of 2



Electronic Solutions Division
Interconnect Solutions
<http://www.3M.com/interconnects/>

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

DISCONTINUED - See TS-2335 for the New HF659 Series

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.3Mconnector.com

Please recycle. Printed in USA.
© 3M 2010. All rights reserved.
RIA-2217B-E

3M is a trademark of 3M Company.