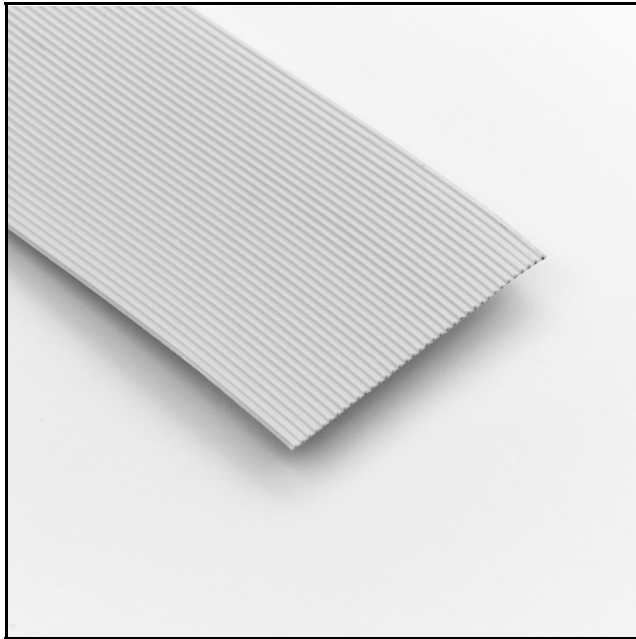


# 3M™ Round Conductor Flat Cable

.050" 28 AWG Stranded, Halogen Free Insulation

2010 Series



- Advantage of this halogen free insulation are low smoke (BSS 7238) and low toxicity of combustion gases (NES 713) reducing the risk to firefighters and low corrosivity of combustion gases (pH approximately 6.0) reducing damage to nearby equipment
- 28 AWG stranded conductors on .050 inch pitch permits mass terminations to a broad line of IDC connectors
- Zippable for branching or discrete termination
- Please contact your 3M sales representative for variations not described in this specification
- RoHS\* compliant

Date Modified: December 12, 2006

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## Physical

### Insulation

Material: Halogen Free Polyolefin ( PO )

Color: off-white

### Marking:

Standard: None

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

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## Electrical

**Voltage Rating:** USA: 30V                      EU: <50V

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

### Unbalanced

### Balanced

**Characteristic Impedance:** 107  $\Omega$

176  $\Omega$

**Capacitance:** 14.0 pF/ft [ 45.93 pF/m ]      8.2 pF/ft [ 26.95 pF/m ]

**Inductance:** 0.16  $\mu\text{H}/\text{ft}$  [ 0.53  $\mu\text{H}/\text{m}$  ]      0.26  $\mu\text{H}/\text{ft}$  [ 0.84  $\mu\text{H}/\text{m}$  ]

**Propagation Delay:** 1.50 ns/ft [ 4.92 ns/m ]      1.45 ns/ft [ 4.76 ns/m ]

**Velocity of Propagation:** 68%                      70%

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

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## Environmental

**Temperature Rating:** -20°C to +105°C

**Flammability Rating:** UL: Horizontal    IEC 332-1, -2, & -3

"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

UL File No.: E42769, Style No.: 20930

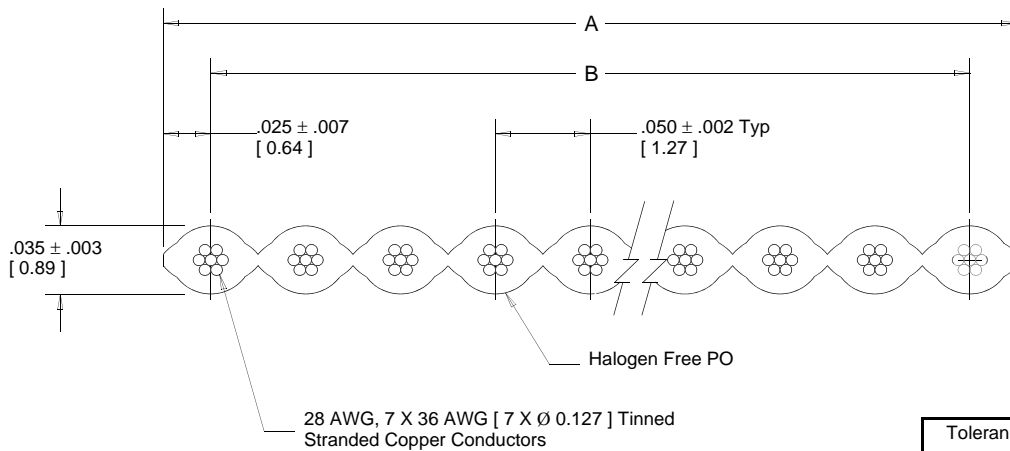
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Number of Conductors	3M Part Number	Dimension A	Dimension B
09	2010/09	.450 ± .010 [ 11.43 ]	.400 ± .007 [ 10.16 ]
10	2010/10	.500 ± .010 [ 12.70 ]	.450 ± .007 [ 11.43 ]
14	2010/14	.700 ± .010 [ 17.78 ]	.650 ± .007 [ 16.51 ]
15	2010/15	.750 ± .010 [ 19.05 ]	.700 ± .007 [ 17.78 ]
16	2010/16	.800 ± .015 [ 20.32 ]	.750 ± .011 [ 19.05 ]
18	2010/18	.900 ± .015 [ 22.88 ]	.850 ± .011 [ 21.59 ]
20	2010/20	1.000 ± .015 [ 25.40 ]	0.950 ± .011 [ 24.13 ]
24	2010/24	1.200 ± .015 [ 30.48 ]	1.150 ± .011 [ 29.21 ]
25	2010/25	1.250 ± .015 [ 31.75 ]	1.200 ± .011 [ 30.48 ]
26	2010/26	1.300 ± .015 [ 33.02 ]	1.250 ± .011 [ 31.75 ]
30	2010/30	1.500 ± .020 [ 38.10 ]	1.450 ± .015 [ 36.83 ]
34	2010/34	1.700 ± .020 [ 43.18 ]	1.650 ± .015 [ 41.91 ]
36	2010/36	1.800 ± .020 [ 45.72 ]	1.750 ± .015 [ 44.45 ]
37	2010/37	1.850 ± .020 [ 46.99 ]	1.800 ± .015 [ 45.72 ]
40	2010/40	2.000 ± .020 [ 50.80 ]	1.950 ± .015 [ 49.53 ]
50	2010/50	2.500 ± .020 [ 63.50 ]	2.450 ± .015 [ 62.23 ]
60	2010/60	3.000 ± .020 [ 76.20 ]	2.950 ± .015 [ 74.93 ]
64	2010/64	3.200 ± .020 [ 81.28 ]	3.150 ± .015 [ 80.01 ]



Tolerance Unless Noted			
	.0	.00	.000
Inch	±.1	±.01	±.005

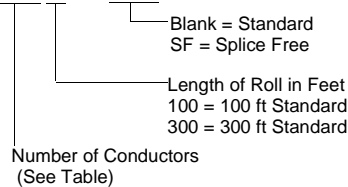
[ ] Dimensions for Reference only

**Note:**

- Blue marking on one edge of cable designates wire #1.

## Ordering Information

**2010 / XX X00 XX**



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

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## Important Notice

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*Minimum 10%  
Post-Consumer Fiber*

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