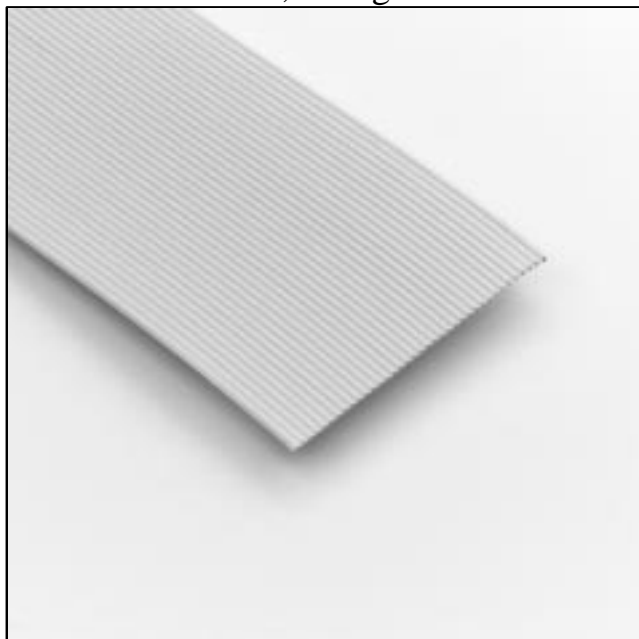


# .050" Round Conductor Flat Cable

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 ( $\text{pH} \approx 6.0$ ) 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

Date Modified: December 28, 1999

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## Physical

### Insulation

Material: Halogen Free Polyolefin ( PO )  
Color: off-white

### Marking

Standard: None

**Conductors:** 28 AWG  $7 \times 36$  [  $7 \times 0.127$  ] Tinned Stranded Copper

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## Electrical

<b>Voltage Rating:</b>	USA: 30V	EU: <50V
<b>Insulation Resistance:</b>	$>1 \times 10^{10} \Omega / 10 \text{ ft}$ [ 3 m ]	
	<b>Unbalanced</b>	<b>Balanced</b>
<b>Characteristic Impedance:</b>	107 $\Omega$	176 $\Omega$
<b>Capacitance:</b>	14.0 pF/ft (45.93 pF/m)	8.2 pF/ft (26.95 pF/m)
<b>Inductance:</b>	.16 $\mu\text{H}/\text{ft}$ (0.53 $\mu\text{H}/\text{m}$ )	.25 $\mu\text{H}/\text{ft}$ (0.84 $\mu\text{H}/\text{m}$ )
<b>Propagation Delay:</b>	1.50 ns/ft (4.92 ns/m)	1.45 ns/ft (4.76 ns/m)
<b>Velocity of Propagation:</b>	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:**  $-40^\circ \text{C}$  to  $+105^\circ \text{C}$   
**Flammability Rating:** UL: Horizontal IEC 332-1, -2, & -3

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

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### 3M Interconnect Solutions Division

6801 River Place Blvd.  
Austin, TX 78726-9000

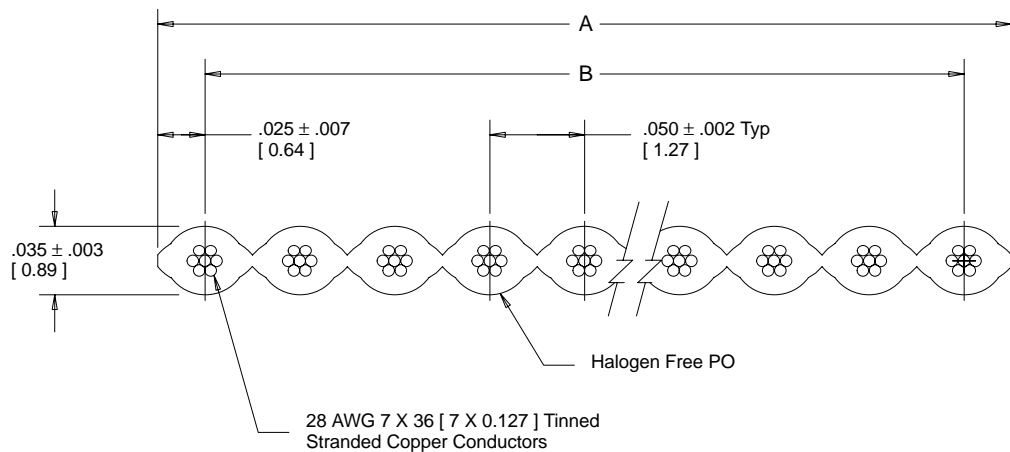
For technical, sales or ordering information call  
**800-225-5373**

# .050" Round Conductor Flat Cable

## 28 AWG Stranded, Halogen Free Insulation

2010 Series

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



Inch  
[mm]

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**

Number of Conductors  
(See Table)

Note:

- Available in standard lengths of 100 feet or 300 feet per roll, please specify when ordering.

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Sheet 2 of 2

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Austin, TX 78726-9000

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