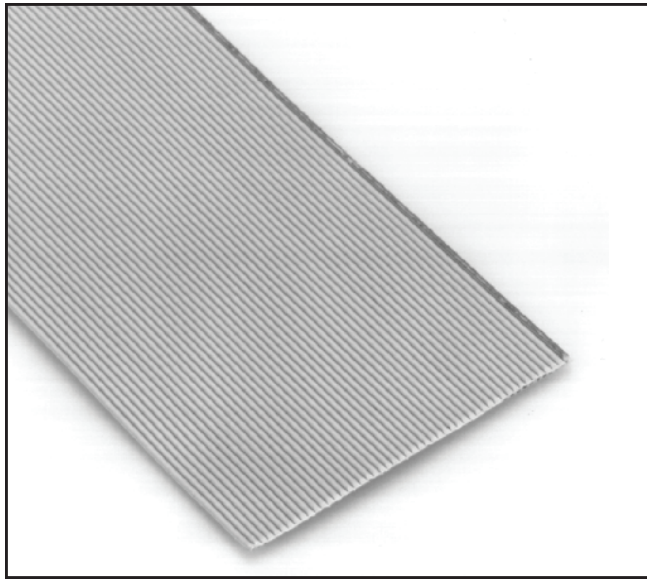


# 3M™ Round Conductor Flat Cable

.025" 30 AWG Stranded, FEP

3609 Series



- FEP insulation is compatible with most insulation displacement connectors
- .025 inch pitch parallel conductors for mass termination
- Low dielectric constant
- Excellent abrasion and chemical resistance
- Excellent mechanical durability
- Nonflammable
- UL Recognized to 150°C
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the “RoHS Compliance” section of [www.3Mconnectors.com](http://www.3Mconnectors.com) for compliance information (RIA E1 and C1 apply)

Date Modified: October 31, 2013

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## Physical

### Insulation:

Material: Fluorinated Ethylene Propylene (FEP)

Color: Opaque White

### Marking:

Standard: None

**Conductors:** 30 AWG 7 × 38 AWG [ 7 × .102 ] Silver Plated Stranded Copper

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## Electrical

**Voltage Rating:** USA: 150V EU: <50V

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

**Characteristic Impedance:** Unbalanced: 91  $\Omega$

**Capacitance:** Unbalanced: 14.7 pF/ft [ 48.2 pF/m ]

**Inductance:** Unbalanced: 0.12  $\mu\text{H/ft}$  [ 0.39  $\mu\text{H/m}$  ]

**Propagation Delay:** Unbalanced: 1.34 ns/ft [ 4.40 ns/m ]

**Velocity of Propagation:** 76%

Note: Unbalanced is measured between ground-signal-ground conductors.

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## Environmental

**Temperature Rating:** -55°C to +150°C

**Flammability Rating:** USA: VW-1

UL File No.: E42769, Style No: 20726

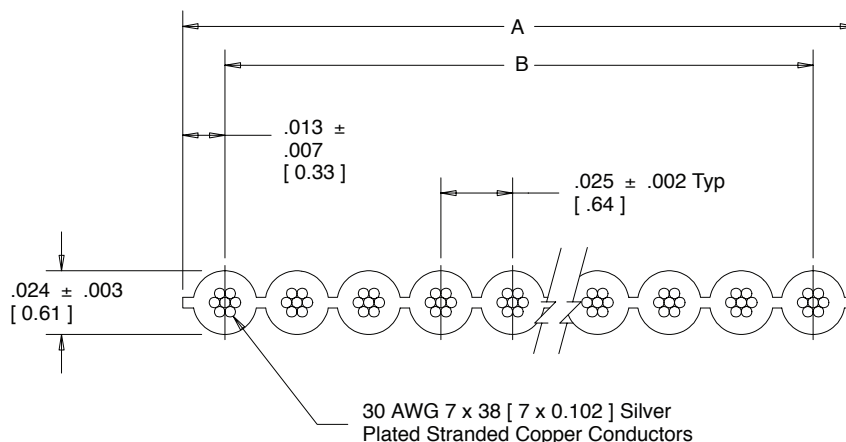
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.025" 30 AWG Stranded, FEP

3609 Series



| Number of Conductors | 3M Part Number | Dimension A          | Dimension B          |
|----------------------|----------------|----------------------|----------------------|
| 04                   | 3609/04        | 0.100 ± .006 [2.54]  | 0.075 ± .004 [1.91]  |
| 06                   | 3609/06        | 0.150 ± .006 [3.81]  | 0.125 ± .004 [3.18]  |
| 08                   | 3609/08        | 0.200 ± .006 [5.08]  | 0.175 ± .004 [4.45]  |
| 10                   | 3609/10        | 0.250 ± .007 [6.35]  | 0.225 ± .005 [5.72]  |
| 12                   | 3609/12        | 0.300 ± .007 [7.62]  | 0.275 ± .005 [6.99]  |
| 14                   | 3609/14        | 0.350 ± .007 [8.89]  | 0.325 ± .005 [8.26]  |
| 16                   | 3609/16        | 0.400 ± .007 [10.16] | 0.375 ± .005 [9.53]  |
| 20                   | 3609/20        | 0.500 ± .007 [12.70] | 0.475 ± .005 [12.07] |
| 26                   | 3609/26        | 0.650 ± .007 [16.51] | 0.625 ± .005 [15.88] |
| 30                   | 3609/30        | 0.750 ± .007 [19.05] | 0.725 ± .005 [18.42] |
| 34                   | 3609/34        | 0.850 ± .007 [21.59] | 0.825 ± .005 [20.96] |
| 36                   | 3609/36        | 0.900 ± .007 [22.86] | 0.875 ± .005 [22.23] |
| 40                   | 3609/40        | 1.000 ± .010 [25.40] | 0.975 ± .006 [24.77] |
| 50                   | 3609/50        | 1.250 ± .010 [31.75] | 1.225 ± .006 [31.12] |
| 60                   | 3609/60        | 1.500 ± .010 [38.10] | 1.475 ± .006 [37.47] |
| 64                   | 3609/64        | 1.600 ± .010 [40.64] | 1.575 ± .006 [40.01] |
| 68                   | 3609/68        | 1.700 ± .010 [43.18] | 1.675 ± .006 [42.55] |
| 80                   | 3609/80        | 2.000 ± .010 [50.80] | 1.975 ± .006 [50.17] |
| 100                  | 3609/100       | 2.500 ± .010 [63.50] | 2.475 ± .006 [62.87] |



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

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

[ ] Dimensions for Reference Only

## Ordering Information

3609/XX

Number of Conductors  
(See Table)

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

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