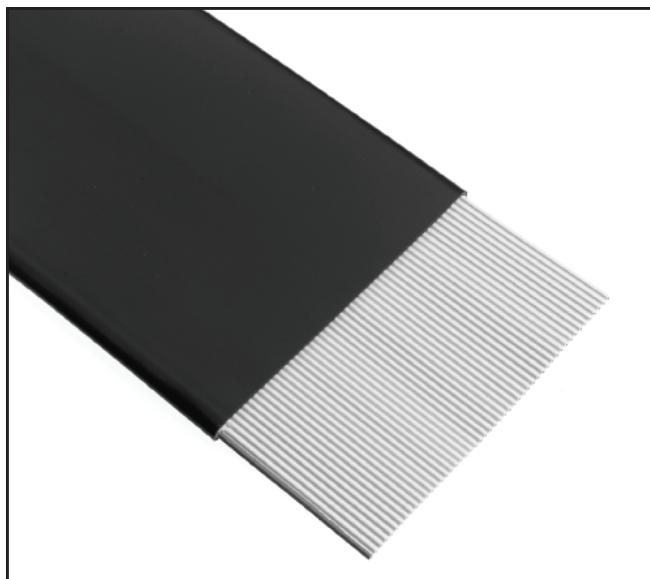


# 3M™ Jacketed, Flat Cable

.050" 28 AWG Stranded, PVC/PVC

3603 Series



- Meets external wiring requirements of National Electrical Code, Article 725 (CL2)
- UL listed for USA and Canadian markets
- 28 AWG stranded wire on .050 inch centers permits mass termination to broad line of IDC connectors
- PVC outer jacket prevents damage to cable
- Primary cable is zippable for branching or discrete terminations
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3M.com/Interconnects](http://www.3M.com/Interconnects) for compliance information (RIA E1 & C1 apply)

Date Modified: December 8, 2009

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## Physical

**Jacket Material:** Polyvinyl Chloride (PVC)

Color: Black

Primary Material: PVC

Color: Gray

### Marking:

Standard: (UL) CL2 75C 28 AWG OR AWM 20879 3M NU

C  AWM IIA/B 80C 300V FT1 EU <50V

**Conductors:** 28 AWG, 7 × 36 AWG [ 7 × 0.127 ] Tinned Stranded Copper

## Electrical

**Voltage Rating:** USA: N.E.C. 725, CL2 or AWM 300V      Canada: 300V      EU: <50V

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

|                                  | Unbalanced  | Balanced     |
|----------------------------------|-------------|--------------|
| <b>Characteristic Impedance:</b> | 95 $\Omega$ | 160 $\Omega$ |

|                     |                          |                         |
|---------------------|--------------------------|-------------------------|
| <b>Capacitance:</b> | 15.5 pF/ft [ 62.3 pF/m ] | 9.4 pF/ft [ 36.4 pF/m ] |
|---------------------|--------------------------|-------------------------|

|                    |                                                |                                                |
|--------------------|------------------------------------------------|------------------------------------------------|
| <b>Inductance:</b> | 0.14 $\mu\text{H/ft}$ [ 0.43 $\mu\text{H/m}$ ] | 0.24 $\mu\text{H/ft}$ [ 0.79 $\mu\text{H/m}$ ] |
|--------------------|------------------------------------------------|------------------------------------------------|

|                           |                          |                          |
|---------------------------|--------------------------|--------------------------|
| <b>Propagation Delay:</b> | 1.47 ns/ft [ 4.82 ns/m ] | 1.50 ns/ft [ 4.92 ns/m ] |
|---------------------------|--------------------------|--------------------------|

|                                 |     |     |
|---------------------------------|-----|-----|
| <b>Velocity of Propagation:</b> | 69% | 68% |
|---------------------------------|-----|-----|

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

## Environmental

**Temperature Rating:** USA: CL2; 75°C or AWM; -20°C to +80°C      Canada: 80°C

**Flammability Rating:** USA: N.E.C. 725, CL2      Canada: FT1

UL File No.: E118773, Power Limited Circuit Cable: CL2 (or AWM Style No: 20879)

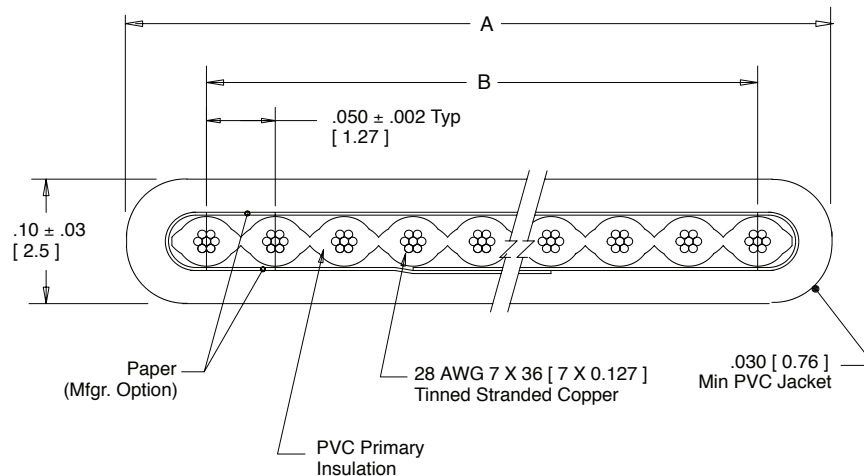
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3603 Series



| Number of Conductors | 3M Part Number | Dimension A<br>± .040" | Dimension B            |
|----------------------|----------------|------------------------|------------------------|
| 10                   | 3603/10        | .58 [ 14.70 ]          | 0.450 ± .007 [ 11.43 ] |
| 16                   | 3603/16        | .88 [ 22.40 ]          | 0.750 ± .011 [ 19.05 ] |
| 20                   | 3603/20        | 1.08 [ 27.40 ]         | 0.950 ± .011 [ 24.13 ] |
| 25                   | 3603/25        | 1.33 [ 33.80 ]         | 1.200 ± .011 [ 30.48 ] |
| 26                   | 3603/26        | 1.38 [ 35.10 ]         | 1.250 ± .011 [ 31.75 ] |
| 34                   | 3603/34        | 1.78 [ 45.20 ]         | 1.650 ± .015 [ 41.91 ] |
| 36                   | 3603/36        | 1.88 [ 47.80 ]         | 1.750 ± .015 [ 44.45 ] |
| 37                   | 3603/37        | 1.93 [ 49.02 ]         | 1.800 ± .015 [ 45.72 ] |
| 40                   | 3603/40        | 2.08 [ 52.83 ]         | 1.950 ± .015 [ 49.53 ] |
| 50                   | 3603/50        | 2.58 [ 65.53 ]         | 2.450 ± .015 [ 62.23 ] |
| 60                   | 3603/60        | 3.08 [ 78.20 ]         | 2.950 ± .015 [ 74.93 ] |
| 64                   | 3603/64        | 3.28 [ 83.30 ]         | 3.150 ± .015 [ 80.01 ] |



Inch  
[mm]

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

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

[ ] Dimensions for Reference Only

## Ordering Information

**3603/XX XX**

Number of Conductors  
(See Table)

Blank = Standard  
SF = Splice Free

Note: Available in standard 100 ft or 300 ft rolls, please specify when ordering. Contact 3M for availability of additional conductor counts and/or custom roll lengths.

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RIA-2217B-E

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