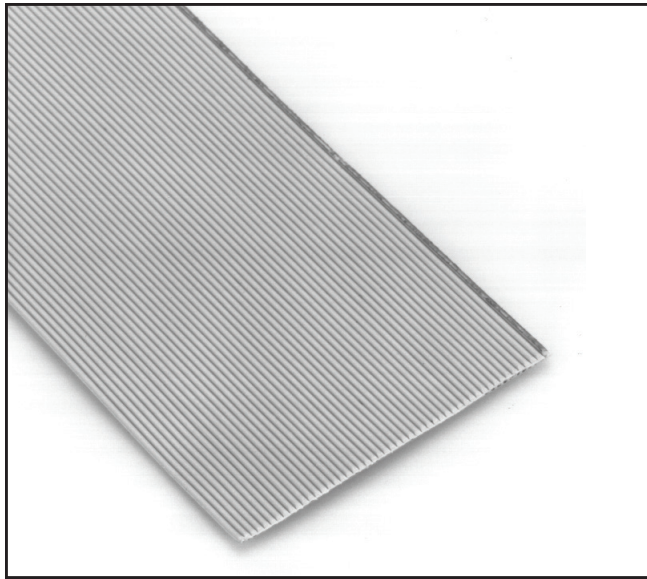


# 3M™ Round Conductor Flat Cable

.025" 30 AWG Stranded, TPE

3756 Series



- .025 inch wire spacing increases signal density
- TPE insulation provides excellent transmission properties
- 30 AWG stranded conductors on .025 inch wire spacing is designed for mass termination and flexibility
- Meets the SCSI-3 characteristic impedance requirements
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3Mconnectors.com](http://www.3Mconnectors.com) for compliance information (RIA E1 & C1 apply)

Date Modified: November 1, 2013

TS-0508-G  
Sheet 1 of 3

## Physical

### Insulation:

Material: Thermoplastic Elastomer (TPE)

Color: Gray

### Marking:

Standard: None

Canadian Option:  AWM 20297 105C 150V HB 3M NU C  AWM IA 105C 150V FT2 EU <50V

**Conductors:** 30 AWG, 7×38 AWG [ 7 ×  $\phi$  0.102 ] Tinned Stranded Copper

## Electrical

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

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

| <b>Characteristic Impedance:</b> | <b>Unbalanced</b> | <b>Balanced</b> |
|----------------------------------|-------------------|-----------------|
|                                  | 82 $\Omega$       | 138 $\Omega$    |

|                     |                          |                          |
|---------------------|--------------------------|--------------------------|
| <b>Capacitance:</b> | 17.3 pF/ft [ 56.8 pF/m ] | 10.0 pF/ft [ 32.8 pF/m ] |
|---------------------|--------------------------|--------------------------|

|                    |                                                |                                                |
|--------------------|------------------------------------------------|------------------------------------------------|
| <b>Inductance:</b> | 0.12 $\mu\text{H/ft}$ [ 0.38 $\mu\text{H/m}$ ] | 0.19 $\mu\text{H/ft}$ [ 0.62 $\mu\text{H/m}$ ] |
|--------------------|------------------------------------------------|------------------------------------------------|

|                           |                          |                          |
|---------------------------|--------------------------|--------------------------|
| <b>Propagation Delay:</b> | 1.42 ns/ft [ 4.66 ns/m ] | 1.38 ns/ft [ 4.53 ns/m ] |
|---------------------------|--------------------------|--------------------------|

|                                 |     |     |
|---------------------------------|-----|-----|
| <b>Velocity of Propagation:</b> | 72% | 74% |
|---------------------------------|-----|-----|

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 Horizontal Canada: FT2

UL File No.: E42769, Style No: 20297



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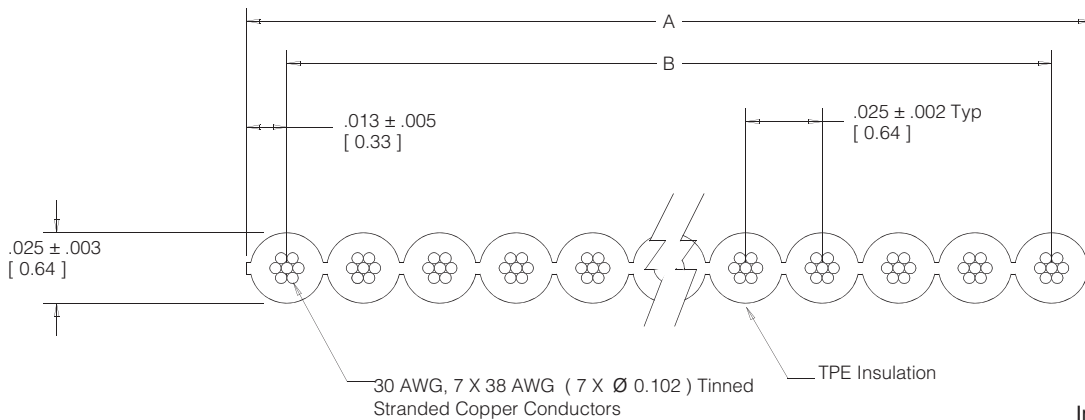
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3756 Series



| Number of Conductors | 3M Part Number | Dimension A          | Dimension B          |
|----------------------|----------------|----------------------|----------------------|
| 10                   | 3756/10        | 0.250 ± .006 [6.35]  | 0.225 ± .004 [5.72]  |
| 12                   | 3756/12        | 0.300 ± .006 [7.62]  | 0.275 ± .004 [6.99]  |
| 14                   | 3756/14        | 0.350 ± .006 [8.89]  | 0.325 ± .004 [8.26]  |
| 16                   | 3756/16        | 0.400 ± .006 [10.16] | 0.375 ± .004 [9.53]  |
| 20                   | 3756/20        | 0.500 ± .006 [12.70] | 0.475 ± .004 [12.07] |
| 26                   | 3756/26        | 0.650 ± .006 [16.51] | 0.625 ± .004 [15.88] |
| 30                   | 3756/30        | 0.750 ± .009 [19.05] | 0.725 ± .006 [18.42] |
| 34                   | 3756/34        | 0.850 ± .009 [21.59] | 0.825 ± .006 [20.96] |
| 36                   | 3756/36        | 0.900 ± .009 [22.86] | 0.875 ± .006 [22.23] |
| 40                   | 3756/40        | 1.000 ± .009 [25.40] | 0.975 ± .006 [24.77] |
| 50                   | 3756/50        | 1.250 ± .009 [31.75] | 1.225 ± .006 [31.12] |
| 60                   | 3756/60        | 1.500 ± .012 [38.10] | 1.475 ± .009 [37.47] |
| 68                   | 3756/68        | 1.700 ± .012 [43.18] | 1.675 ± .009 [42.55] |
| 80                   | 3756/80        | 2.000 ± .015 [50.80] | 1.975 ± .011 [50.17] |
| 100                  | 3756/100       | 2.500 ± .015 [63.50] | 2.475 ± .012 [62.87] |



## Note:

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

Inch  
[mm]

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

[ ] Dimensions for Reference Only

## Ordering Information

**3756/XX XX**

Blank = Standard  
C = Canadian Certified Version

Blank = Standard  
SF = Splice Free

Number of Conductors  
(See Table)

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.

TS-0508-G  
Sheet 2 of 3



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