

# 3M™ Round Conductor Flat Cable

.025" 30 AWG Solid, TPE

3749 Series



- Close spacing permits higher signal density
- TPE insulation provides excellent transmission properties
- 30 AWG solid conductors on .025 inch spacing allows for mass termination
- Zippable for branching or discrete termination
- Meets SCSI-3 Fast-20 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

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## 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 [ Ø 0.254 ] Tinned Solid Copper

## Electrical

**Voltage Rating:** USA: 150V                      Canada: 150V

**Insulation Resistance:** (Primary Cable) > 1 × 10<sup>10</sup> Ω/10 ft. [ 3 m ]

### Unbalanced

**Characteristic Impedance:** 90 Ω

**Capacitance:** 16.5 pF/ft [ 54.1 pF/m ]

**Inductance:** 0.13 μH/ft [ 0.43 μH/m ]

**Propagation Delay:** 1.48 ns/ft [ 4.86 ns/m ]

**Velocity of Propagation:** 69%

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

## 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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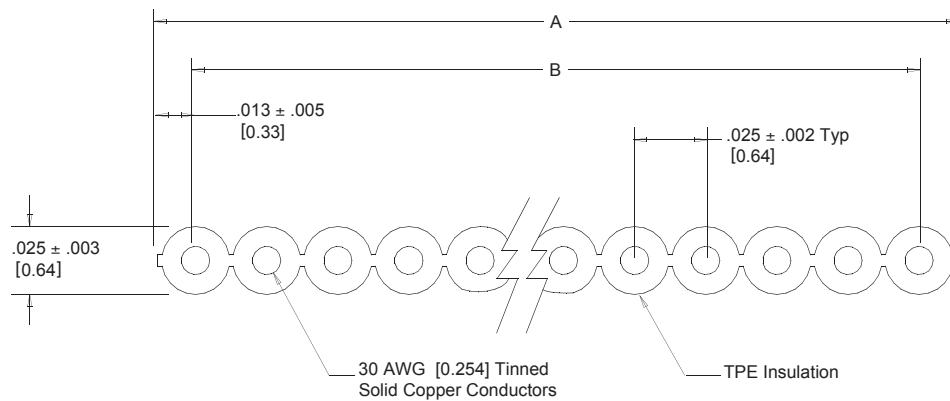
3749 Series



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

[ ] Dimensions for Reference Only

Number of Conductors	3M Part Number	Dimension A	Dimension B
10	3749/10	0.250 +/- .006 [6.35]	0.225 +/- .004 [5.72]
12	3749/12	0.300 ± .006 [7.62]	0.275 ± .004 [6.99]
14	3749/14	0.350 ± .006 [8.89]	0.325 ± .004 [8.26]
16	3749/16	0.400 +/- .006 [10.16]	0.375 +/- .004 [9.53]
20	3749/20	0.500 ± .006 [12.70]	0.475 ± .004 [12.07]
24	3749/24	0.600 +/- .006 [15.24]	0.575 +/- .004 [14.61]
26	3749/26	0.650 ± .006 [16.51]	0.625 ± .004 [15.88]
30	3749/30	0.750 +/- .009 [19.05]	0.725 +/- .006 [18.42]
34	3749/34	0.850 ± .009 [21.59]	0.825 ± .006 [20.96]
36	3749/36	0.900 ± .009 [22.86]	0.875 ± .006 [22.23]
40	3749/40	1.000 ± .009 [25.40]	0.975 ± .006 [24.77]
50	3749/50	1.250 ± .009 [31.75]	1.225 ± .006 [31.12]
60	3749/60	1.500 ± .012 [38.10]	1.475 ± .009 [37.47]
68	3749/68	1.700 ± .012 [43.18]	1.675 ± .009 [42.55]
80	3749/80	2.000 ± .015 [50.80]	1.975 ± .011 [50.17]
100	3749/100	2.500 ± .015 [63.50]	2.475 ± .012 [62.87]



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

## Ordering Information

**3749 / 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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