

# 3M™ Color Coded Flat Cable

.050" 28 AWG Stranded, PVC

3302 Series



- 28 AWG wire on .050 inch centers permits mass termination to a broad line of IDC connectors
- Stranded wire provides flexibility and extended product life
- Zippable for branching or discrete termination
- Color coded for wire identification
- 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 & C1 apply)

Date Modified: May 1, 2012

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## Physical

### Insulation:

Material: Polyvinyl Chloride (PVC)

Color: 10 Color Repeat, Clear Carrier

### Marking:

Standard: None

Canadian Option:  AWM 20462 105C 300V VW1 3M NU C  AWM IA 80C 150V FT1 EU <50V

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

## Electrical

**Voltage Rating:** USA: 300V    Canada: 150V    EU: <50V

**Insulation Resistance:**  $> 1 \times 10^9 \Omega/10 \text{ ft.}$  [ 3 m ]

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

**Capacitance:** 14.1 pF/ft [ 46.3 pF/m ]

**Inductance:** 0.15  $\mu\text{H}/\text{ft}$  [ 0.49  $\mu\text{H}/\text{m}$  ]

**Propagation Delay:** 1.47 ns/ft [ 4.82 ns/m ]

**Velocity of Propagation:** 69%

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

## Environmental

**Temperature Rating:** USA: -20°C to +105°C    Canada: -20°C to +80°C

**Flammability Rating:** USA: VW-1    Canada: FT1

UL File No.: E42769, Style No: 20462

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Number of Conductors	3M Part Number	Dimension A	Dimension B
09	3302/09	0.450 ± .015 [ 11.43 ]	0.400 ± .010 [ 10.18 ]
10	3302/10	0.500 ± .015 [ 12.70 ]	0.450 ± .010 [ 11.43 ]
14	3302/14	0.700 ± .015 [ 17.78 ]	0.650 ± .010 [ 16.51 ]
15	3302/15	0.750 ± .015 [ 19.05 ]	0.700 ± .010 [ 17.78 ]
16	3302/16	0.800 ± .020 [ 20.32 ]	0.750 ± .015 [ 19.05 ]
18	3302/18	0.900 ± .020 [ 22.86 ]	0.850 ± .015 [ 21.59 ]
20	3302/20	1.000 ± .020 [ 25.40 ]	0.950 ± .015 [ 24.13 ]
24	3302/24	1.200 ± .020 [ 30.48 ]	1.150 ± .015 [ 29.21 ]
25	3302/25	1.250 ± .020 [ 31.75 ]	1.200 ± .015 [ 30.48 ]
26	3302/26	1.300 ± .020 [ 33.02 ]	1.250 ± .015 [ 31.75 ]
30	3302/30	1.500 ± .025 [ 38.10 ]	1.450 ± .020 [ 36.83 ]
34	3302/34	1.700 ± .025 [ 43.18 ]	1.650 ± .020 [ 41.91 ]
36	3302/36	1.800 ± .025 [ 45.72 ]	1.750 ± .020 [ 44.45 ]
37	3302/37	1.850 ± .025 [ 46.99 ]	1.800 ± .020 [ 45.72 ]
40	3302/40	2.000 ± .025 [ 50.80 ]	1.950 ± .020 [ 49.53 ]
50	3302/50	2.500 ± .025 [ 63.50 ]	2.450 ± .020 [ 62.23 ]
60	3302/60	3.000 ± .025 [ 76.20 ]	2.950 ± .020 [ 74.93 ]
64	3302/64	3.200 ± .025 [ 81.28 ]	3.150 ± .020 [ 80.01 ]

Inch  
[mm]

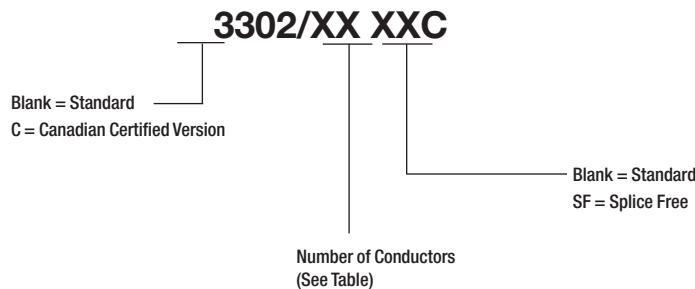
Tolerance Unless Noted			
	.0	.00	.000
Inch	±.1	±.01	±.005

[ ] Dimensions for Reference Only



- \* 10 Color Repeat
- Brown
  - Red
  - Orange
  - Yellow
  - Green
  - Blue
  - Violet
  - Gray
  - White
  - Black

## Ordering Information



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

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