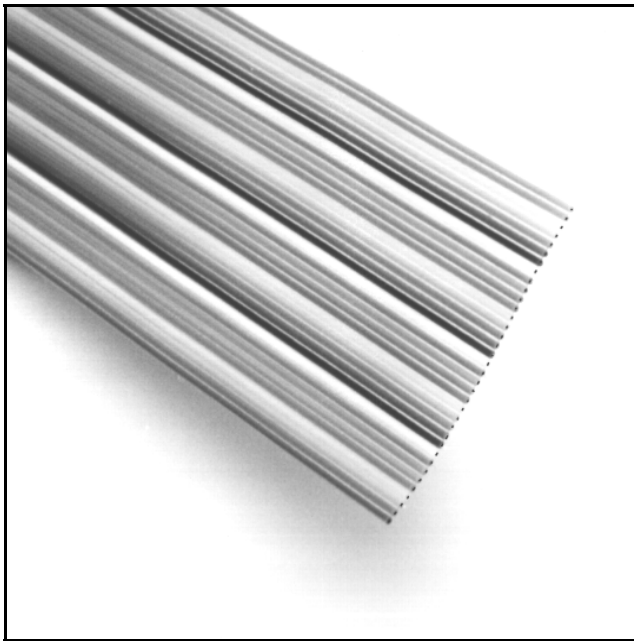


# 3M™ Color Coded Flat Cable

.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

Date Modified: January 17, 2005

TS-0123-12  
Sheet 1 of 2

## Physical



### Insulation

Material: Polyvinyl Chloride (PVC)

Color: 10 Color Repeat, Clear Carrier

### Marking:

Standard: None

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

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

## Electrical

**Voltage Rating:** USA: 300V

Canada: 150V

EU: <50V

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

### Unbalanced

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

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

**Inductance:** Unbalanced: .15  $\mu\text{H}/\text{ft}$ . [ 0.49  $\mu\text{H}/\text{m}$  ]

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

**Velocity of Propagation:** 69%

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

## Environmental

**Temperature Rating:** -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

RoHS = Directive 2002/95/EC,  
Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

**3M**

Interconnect Solutions

<http://www.3M.com/interconnects/>

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For technical, sales or ordering information call

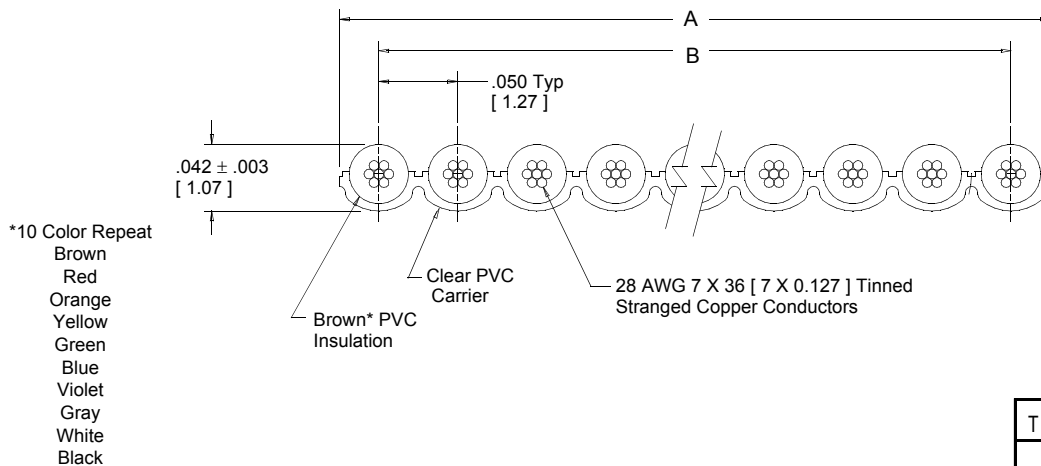
800-225-5373

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3302 Series

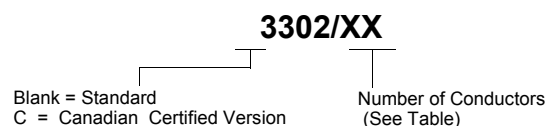
Number of Conductors	3M Part Number	Dimension A	Dimension B
09	3302/09	0.450 ± .015 [ 11.43 ]	0.400 ± .010 [ 10.18 ]
10	3302/10	0.500 ± .015 [ 12.70 ]	0.450 ± .010 [ 11.43 ]
14	3302/14	0.700 ± .015 [ 17.78 ]	0.650 ± .010 [ 16.51 ]
15	3302/15	0.750 ± .015 [ 19.05 ]	0.700 ± .010 [ 17.78 ]
16	3302/16	0.800 ± .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

## Ordering Information



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

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Sheet 2 of 2

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## Electronic Solutions Division

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[www.3M.com/esd](http://www.3M.com/esd)



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