

# 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  $\mu\text{H/ft}$  [ 0.49  $\mu\text{H/m}$  ]

**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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Inch  
[mm]

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

[ ] Dimensions for Reference Only

| 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 ] |



## Ordering Information



### Note:

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

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