## $3 \mathrm{M}^{\mathrm{TM}}$ Round Conductor Flat Cable

## .156" 18 AWG Stranded, PVC



- Designed for power applications requiring higher current carrying capability
- 18 AWG tinned stranded copper wire provides flexibility and extended product life
- Individually insulated conductors are laminated to a PVC backing which can be zipped apart for branching or discrete terminations
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3M.com/ Interconnects for compliance information (RIAE1 \& C1 apply)


## Physical

## Insulation:

Material: Polyvinyl Chloride (PVC)
Color: Dark Gray Wires

## Marking:

Standard: None
Canadian Option: $\boldsymbol{\int} \mathbf{J}_{\text {AWM }} 20462$ 105C 300V VW1 3M NU C $\boldsymbol{\int}$ AWM IA 80C 150V FT1 EU <50V
Conductors: 18 AWG $19 \times 30$ AWG [ $19 \times \emptyset 0.254]$ Tinned Stranded Copper

## Electrical

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

Insulation Resistance: $>1 \times 10^{10} \Omega / 10 \mathrm{ft}$. [ 3 m ]
Characteristic Impedance: Unbalanced: 127
Capacitance: Unbalanced: $9.6 \mathrm{pF} / \mathrm{ft}[31.5 \mathrm{pF} / \mathrm{m}]$
Inductance: Unbalanced: $0.15 \mu \mathrm{H} / \mathrm{ft}[0.49 \mu \mathrm{H} / \mathrm{m}]$
Propagation Delay: Unbalanced: $1.22 \mathrm{~ns} / \mathrm{ft}[4.00 \mathrm{~ns} / \mathrm{m}$ ]
Velocity of Propagation: Unbalanced: $83 \%$
Note: Unbalanced is measured between ground-signal-ground conductors.

## Environmental

Temperature Rating: $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C} \quad$ Canada: $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$
Flammability Rating: USA: VW-1 Canada: FT1

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| Number of <br> Conductors | 3M Part <br> Number | Dimension A | Dimension B |
| :---: | :---: | :---: | :---: |
| 4 | $8132 / 04$ | $0.564 \pm .015[14.33]$ | $0.468 \pm .010[11.89]$ |
| 5 | $8132 / 05$ | $0.720 \pm .015[18.29]$ | $0.624 \pm .010[15.85]$ |
| 6 | $8132 / 06$ | $0.876 \pm .015[22.25]$ | $0.780 \pm .010[19.81]$ |
| 7 | $8132 / 07$ | $1.032 \pm .015[26.21]$ | $0.936 \pm .010[23.77]$ |
| 8 | $8132 / 08$ | $1.188 \pm .015[30.18]$ | $1.092 \pm .010[27.74]$ |
| 9 | $8132 / 09$ | $1.344 \pm .020[34.14]$ | $1.248 \pm .015[31.70]$ |
| 10 | $8132 / 10$ | $1.500 \pm .020[38.10]$ | $1.404 \pm .015[35.66]$ |
| 11 | $8132 / 11$ | $1.656 \pm .020[42.06]$ | $1.560 \pm .015[39.62]$ |
| 12 | $8132 / 12$ | $1.812 \pm .020[46.02]$ | $1.716 \pm .015[43.59]$ |
| 13 | $8132 / 13$ | $1.968 \pm .020[49.99]$ | $1.872 \pm .015[47.55]$ |
| 14 | $8132 / 14$ | $2.124 \pm .020[53.95]$ | $2.028 \pm .015[51.51]$ |
| 15 | $8132 / 15$ | $2.280 \pm .025[57.91]$ | $2.184 \pm .020[55.47]$ |
| 16 | $8132 / 16$ | $2.436 \pm .025[61.87]$ | $2.340 \pm .020[59.44]$ |
| 17 | $8132 / 17$ | $2.592 \pm .025[65.84]$ | $2.496 \pm .020[63.40]$ |
| 18 | $8132 / 18$ | $2.748 \pm .025[69.80]$ | $2.652 \pm .020[67.36]$ |
| 19 | $8132 / 19$ | $2.904 \pm .025[73.76]$ | $2.808 \pm .020[71.32]$ |
| 20 | $8132 / 20$ | $3.060 \pm .025[77.72]$ | $2.964 \pm .020[75.29]$ |
| 21 | $8132 / 21$ | $3.216 \pm .025[81.69]$ | $3.120 \pm .020[79.25]$ |
| 22 | $8132 / 22$ | $3.372 \pm .025[85.65]$ | $3.276 \pm .020[83.21]$ |
| 23 | $8132 / 23$ | $3.528 \pm .025[89.61]$ | $3.432 \pm .020[87.17]$ |
| 24 | $8132 / 24$ | $3.684 \pm .025[93.57]$ | $3.588 \pm .020[91.14]$ |

Note: Contact 3M for availability of additional conductor counts.


[] Dimensions for Reference Only

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

## Ordering Information



3M

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