

# WIRE AMPACITY OVERVIEW

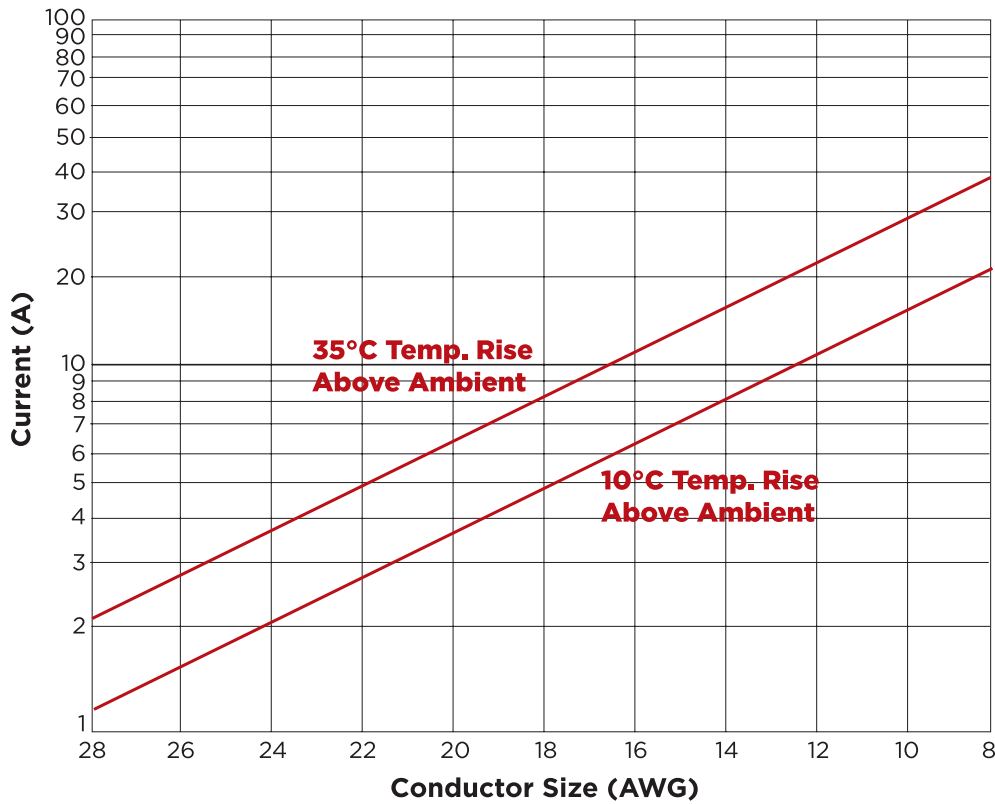
## Wire Ampacity

Using the chart below, first identify the size wire (AWG), number of conductors being used, and the temperature environment in use. Then use the current rating factor chart to multiply the number you found in the chart to obtain current rating.

**Example 1:** A single conductor 14 AWG wire that can rise to 10°C above the ambient temperature. Using the Factor from the chart below, multiply  $1.6 \times 8 \text{ A} = 12.8 \text{ A}$ .

**Example 2:** A 3 conductor, 22 AWG cable that can rise to 35°C above the ambient temperature. Using the Factor from chart below, multiply  $1.0 \times 5 \text{ A} = 5 \text{ A}$ .

Current Ratings for Cable/Wires



Current Ratings

Number of Conductors	Factor
1	1.6
2 to 3	1.0
4 to 5	0.8
6 to 15	0.7
16 to 30	0.5

Note: Current ratings are intended as general guidelines for low power electronic communications and control applications. Current ratings for power applications generally are set by regulatory agencies such as UL, CSA, NEC, and others.

\* Do not count shields unless used as conductor.

Source: Alpha Wire

