

24 Volt Cable Sizing Chart

Chart A

24 Volt Conductor Sizes (mm²) for 3% Volt Drop

| Amps | 2m | 4m | 6m | 8m | 10m | 12m | 14m | 16m | 18m | 20m | 22m | 24m | 26m | 28m | 30m | 35m | 40m | 45m | 50m |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 5 | 0.75 | 0.75 | 1.0 | 1.5 | 1.5 | 2.5 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 10.0 | 10.0 |
| 10 | 0.75 | 1.5 | 2.5 | 2.5 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 |
| 15 | 1.0 | 2.5 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 |
| 20 | 1.5 | 2.5 | 4.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 | 25.0 | 35.0 |
| 25 | 1.5 | 4.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 35.0 | 35.0 | 35.0 |
| 30 | 2.5 | 4.0 | 6.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 35.0 | 35.0 | 50.0 | 50.0 |
| 40 | 2.5 | 6.0 | 10.0 | 10.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 35.0 | 35.0 | 35.0 | 35.0 | 50.0 | 50.0 | 50.0 | 70.0 |
| 50 | 4.0 | 6.0 | 10.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 50.0 | 50.0 | 50.0 | 70.0 | 70.0 | 70.0 |
| 60 | 4.0 | 0.0 | 10.0 | 16.0 | 25.0 | 25.0 | 25.0 | 35.0 | 35.0 | 35.0 | 35.0 | 50.0 | 50.0 | 50.0 | 50.0 | 70.0 | 70.0 | 95.0 | 95.0 |
| 70 | 4.0 | 10.0 | 16.0 | 16.0 | 25.0 | 25.0 | 35.0 | 35.0 | 35.0 | 50.0 | 50.0 | 50.0 | 50.0 | 70.0 | 70.0 | 70.0 | 95.0 | 95.0 | 120.0 |
| 80 | 6.0 | 10.0 | 16.0 | 25.0 | 25.0 | 35.0 | 35.0 | 35.0 | 50.0 | 50.0 | 50.0 | 70.0 | 70.0 | 70.0 | 70.0 | 95.0 | 95.0 | 120.0 | 120.0 |
| 90 | 6.0 | 10.0 | 16.0 | 25.0 | 25.0 | 35.0 | 35.0 | 50.0 | 50.0 | 50.0 | 70.0 | 70.0 | 70.0 | 70.0 | 95.0 | 95.0 | 95.0 | 120.0 | 150.0 |
| 100 | 6.0 | 16.0 | 25.0 | 25.0 | 35.0 | 35.0 | 50.0 | 40.0 | 70.0 | 70.0 | 70.0 | 95.0 | 95.0 | 95.0 | 95.0 | 120.0 | 120.0 | 120.0 | 150.0 |

Chart B

24 Volt Conductor Sizes (mm²) for 10% Volt Drop

| Amps | 2m | 4m | 6m | 8m | 10m | 12m | 14m | 16m | 18m | 20m | 22m | 24m | 26m | 28m | 30m | 35m | 40m | 45m | 50m |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 5 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 1.0 | 1.0 | 1.0 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 | 2.5 | 2.5 | 2.5 |
| 10 | 0.75 | 0.75 | 0.75 | 0.75 | 1.0 | 1.0 | 1.5 | 1.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 | 4.0 | 6.0 |
| 15 | 0.75 | 0.75 | 1.0 | 1.0 | 1.5 | 2.5 | 2.5 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 10.0 |
| 20 | 0.75 | 0.75 | 1.0 | 1.5 | 2.5 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 |
| 25 | 0.75 | 1.0 | 1.5 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 10.0 | 16.0 |
| 30 | 0.75 | 1.0 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 |
| 40 | 1.0 | 1.5 | 2.5 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 25.0 |
| 50 | 1.0 | 2.5 | 4.0 | 4.0 | 6.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 |
| 60 | 1.0 | 2.5 | 4.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 35.0 | 35.0 |
| 70 | 1.5 | 2.5 | 4.0 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 | 25.0 | 35.0 | 35.0 |
| 80 | 1.5 | 2.5 | 6.0 | 6.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 | 25.0 | 35.0 | 35.0 | 35.0 |
| 90 | 2.5 | 4.0 | 6.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 35.0 | 35.0 | 35.0 | 50.0 |
| 100 | 2.5 | 4.0 | 6.0 | 10.0 | 10.0 | 10.0 | 16.0 | 16.0 | 16.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 35.0 | 35.0 | 50.0 | 50.0 |

NOTE: For DC applications the distance of cable run measured is from the source to device and back to source.

Firstflex has taken every precaution to ensure accurate information in this catalogue, but accept no liability for any errors or omissions. Firstflex reserves the right to modify specifications at any time.