

FLAMROX™ HIGH PERFORMANCE CABLE

Flamrox - Premium High Temperature Single Conductor Cable, 600V, Temp Rating 450°C, Non-UL 538°C



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** flexible stranded 27% nickel plated, annealed copper
2. **Insulation:** A phlogopite mica tape
3. **Braid:** Fiberglass braid jacket
4. **Tape:** Phlogopite mica tape thermal barrier
5. **Tape:** Fluoropolymer tape moisture barrier
6. **Jacket:** An overall fiberglass braid is treated with a high temperature saturant

APPLICATIONS AND FEATURES:

Used in critical areas where standard high temperature lead wire is not sufficient to maintain circuit integrity due to extreme temperatures, or exposure to open flame. Used for equipment wiring in iron mills, steel mills, glass plants, and cement kilns. Excellent flame resistance, TFE tape provides a moisture barrier, and produces minimal smoke when exposed to flames. Can withstand up to 2400°F short term. Available with stainless steel braid. Available with insulated or uninsulated ground conductors.

SPECIFICATIONS:

- UL 1277 Vertical Cable Tray Flame Tests (70,000 BTU/Hr)
- ICEA T-29-520 Flame Test (210,000 BTU/Hr)
- IEEE 383 modified 210,000 BTU vertical tray flame test at 1800° F, with circuit integrity for 2 1/2 hours minimum. Provides Circuit Integrity in conduit for up to 30 hours under direct exposure to flame
- RoHS-3 Complies with European Directive 2015/863



Table 1 – Weights and Measurements

| Stock Number | Cond. Size AWG/Kcmil | Cond. Number No. | Approx. OD inch | Approx. Weight lb/1000ft | Temp. Rating °C | Standard (UL or other) Style/Type |
|--------------|-------------------------|---------------------|--------------------|-----------------------------|--------------------|--------------------------------------|
| C55000 | 20 | 2 | 0.285 | 33 | 450 | UL |
| C55005 | 20 | 3 | 0.299 | 45 | 450 | UL |
| C55010 | 20 | 4 | 0.304 | 58 | 450 | UL |
| C55015 | 20 | 5 | 0.360 | 71 | 450 | UL |
| C55020 | 20 | 7 | 0.392 | 94 | 450 | UL |
| C55030 | 20 | 12 | 0.520 | 156 | 450 | UL |
| C55100 | 18 | 2 | 0.308 | 39 | 450 | UL |
| C55105 | 18 | 3 | 0.327 | 55 | 450 | UL |
| C55110 | 18 | 4 | 0.352 | 69 | 450 | UL |
| C55115 | 18 | 5 | 0.391 | 85 | 450 | UL |
| C55120 | 18 | 7 | 0.426 | 114 | 450 | UL |
| C55130 | 18 | 12 | 0.568 | 186 | 450 | UL |
| C55200 | 16 | 2 | 0.326 | 48 | 450 | UL |
| C55205 | 16 | 3 | 0.346 | 66 | 450 | UL |
| C55210 | 16 | 4 | 0.379 | 84 | 450 | UL |
| C55215 | 16 | 5 | 0.415 | 106 | 450 | UL |
| C55220 | 16 | 7 | 0.453 | 144 | 450 | UL |
| C55230 | 16 | 12 | 0.605 | 242 | 450 | UL |
| C55300 | 14 | 2 | 0.366 | 66 | 450 | UL |
| C55305 | 14 | 3 | 0.390 | 93 | 450 | UL |
| C55310 | 14 | 4 | 0.428 | 120 | 450 | UL |
| C55315 | 14 | 5 | 0.469 | 147 | 450 | UL |
| C55320 | 14 | 7 | 0.513 | 198 | 450 | UL |
| C55330 | 14 | 12 | 0.689 | 332 | 450 | UL |
| C55400 | 12 | 2 | 0.400 | 87 | 450 | UL |
| C55405 | 12 | 3 | 0.426 | 120 | 450 | UL |
| C55410 | 12 | 4 | 0.469 | 156 | 450 | UL |
| C55415 | 12 | 5 | 0.515 | 191 | 450 | UL |
| C55420 | 12 | 7 | 0.564 | 261 | 450 | UL |
| C55430 | 12 | 12 | 0.759 | 434 | 450 | UL |
| C55500 | 10 | 2 | 0.516 | 139 | 450 | UL |
| C55505 | 10 | 3 | 0.552 | 198 | 450 | UL |
| C55510 | 10 | 4 | 0.609 | 257 | 450 | UL |
| C55515 | 10 | 5 | 0.671 | 314 | 450 | UL |
| C55520 | 10 | 7 | 0.738 | 425 | 450 | UL |
| C55530 | 10 | 12 | 1.000 | 681 | 450 | UL |
| C55600 | 8 | 2 | 0.596 | 33 | 450 | UL |
| C55605 | 8 | 3 | 0.638 | 45 | 450 | UL |
| C55610 | 8 | 4 | 0.706 | 58 | 450 | UL |
| C55625 | 6 | 2 | 0.686 | 202 | 450 | UL |
| C55630 | 6 | 3 | 0.735 | 286 | 450 | UL |



| Stock Number | Cond. Size AWG/Kcmil | Cond. Number No. | Approx. OD inch | Approx. Weight lb/1000ft | Temp. Rating °C | Standard (UL or other) Style/Type |
|--------------|-------------------------|---------------------|--------------------|-----------------------------|--------------------|--------------------------------------|
| C55635 | 6 | 4 | 0.820 | 369 | 450 | UL |
| C55650 | 4 | 2 | 0.802 | 421 | 450 | UL |
| C55655 | 4 | 3 | 0.861 | 604 | 450 | UL |
| C55660 | 4 | 4 | 0.960 | 792 | 450 | UL |
| C55675 | 2 | 2 | 0.975 | 607 | 450 | UL |
| C55680 | 2 | 3 | 1.047 | 879 | 450 | UL |
| C55685 | 2 | 4 | 1.164 | 1153 | 450 | UL |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Dimensions and weights for other cable configurations are available upon request.



Table 2 – Weights and Measurements (Metric)

| Stock Number | Cond. Size AWG/Kcmil | Cond. Number No. | Approx. OD mm | Approx. Weight kg/km | Temp. Rating °C | Standard (UL or other) Style/Type |
|--------------|-------------------------|---------------------|------------------|-------------------------|--------------------|--------------------------------------|
| C55000 | 20 | 2 | 7.24 | 49 | 450 | UL |
| C55005 | 20 | 3 | 7.59 | 67 | 450 | UL |
| C55010 | 20 | 4 | 7.72 | 86 | 450 | UL |
| C55015 | 20 | 5 | 9.14 | 106 | 450 | UL |
| C55020 | 20 | 7 | 9.96 | 140 | 450 | UL |
| C55030 | 20 | 12 | 13.21 | 232 | 450 | UL |
| C55100 | 18 | 2 | 7.82 | 58 | 450 | UL |
| C55105 | 18 | 3 | 8.31 | 82 | 450 | UL |
| C55110 | 18 | 4 | 8.94 | 103 | 450 | UL |
| C55115 | 18 | 5 | 9.93 | 126 | 450 | UL |
| C55120 | 18 | 7 | 10.82 | 170 | 450 | UL |
| C55130 | 18 | 12 | 14.43 | 277 | 450 | UL |
| C55200 | 16 | 2 | 8.28 | 71 | 450 | UL |
| C55205 | 16 | 3 | 8.79 | 98 | 450 | UL |
| C55210 | 16 | 4 | 9.63 | 125 | 450 | UL |
| C55215 | 16 | 5 | 10.54 | 158 | 450 | UL |
| C55220 | 16 | 7 | 11.51 | 214 | 450 | UL |
| C55230 | 16 | 12 | 15.37 | 360 | 450 | UL |
| C55300 | 14 | 2 | 9.30 | 98 | 450 | UL |
| C55305 | 14 | 3 | 9.91 | 138 | 450 | UL |
| C55310 | 14 | 4 | 10.87 | 179 | 450 | UL |
| C55315 | 14 | 5 | 11.91 | 219 | 450 | UL |
| C55320 | 14 | 7 | 13.03 | 295 | 450 | UL |
| C55330 | 14 | 12 | 17.50 | 494 | 450 | UL |
| C55400 | 12 | 2 | 10.16 | 129 | 450 | UL |
| C55405 | 12 | 3 | 10.82 | 179 | 450 | UL |
| C55410 | 12 | 4 | 11.91 | 232 | 450 | UL |
| C55415 | 12 | 5 | 13.08 | 284 | 450 | UL |
| C55420 | 12 | 7 | 14.33 | 388 | 450 | UL |
| C55430 | 12 | 12 | 19.28 | 646 | 450 | UL |
| C55500 | 10 | 2 | 13.11 | 207 | 450 | UL |
| C55505 | 10 | 3 | 14.02 | 295 | 450 | UL |
| C55510 | 10 | 4 | 15.47 | 382 | 450 | UL |
| C55515 | 10 | 5 | 17.04 | 467 | 450 | UL |
| C55520 | 10 | 7 | 18.75 | 632 | 450 | UL |
| C55530 | 10 | 12 | 25.40 | 1013 | 450 | UL |
| C55600 | 8 | 2 | 15.14 | 49 | 450 | UL |
| C55605 | 8 | 3 | 16.21 | 67 | 450 | UL |
| C55610 | 8 | 4 | 17.93 | 86 | 450 | UL |
| C55625 | 6 | 2 | 17.42 | 301 | 450 | UL |
| C55630 | 6 | 3 | 18.67 | 426 | 450 | UL |



| Stock Number | Cond. Size AWG/Kcmil | Cond. Number No. | Approx. OD mm | Approx. Weight kg/km | Temp. Rating °C | Standard (UL or other) Style/Type |
|--------------|-------------------------|---------------------|------------------|-------------------------|--------------------|--------------------------------------|
| C55635 | 6 | 4 | 20.83 | 549 | 450 | UL |
| C55650 | 4 | 2 | 20.37 | 627 | 450 | UL |
| C55655 | 4 | 3 | 21.87 | 899 | 450 | UL |
| C55660 | 4 | 4 | 24.38 | 1179 | 450 | UL |
| C55675 | 2 | 2 | 24.76 | 903 | 450 | UL |
| C55680 | 2 | 3 | 26.59 | 1308 | 450 | UL |
| C55685 | 2 | 4 | 29.57 | 1716 | 450 | UL |

