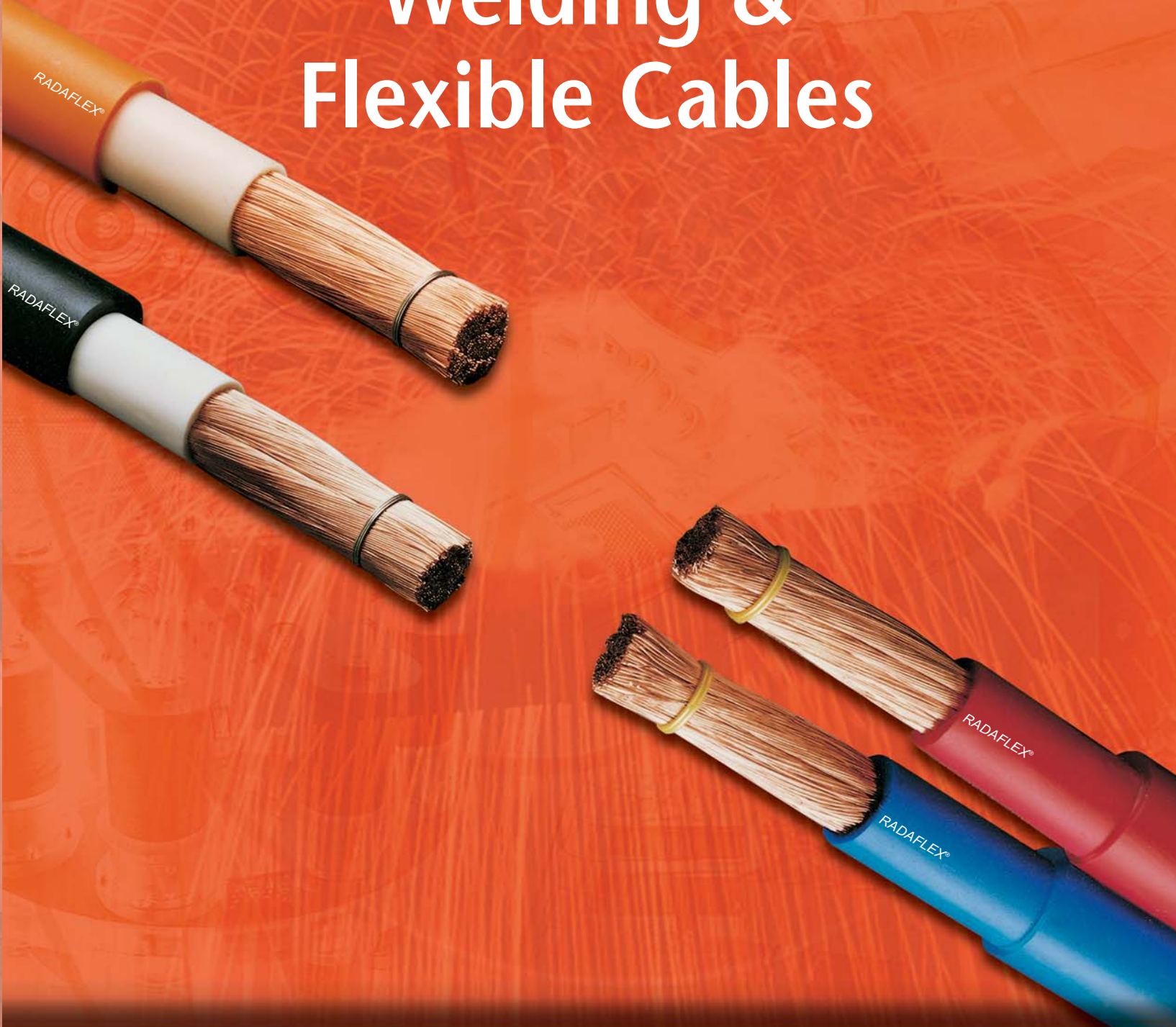


RADAFLEX®

Welding & Flexible Cables



www.radaflex.com

Tel. (877) 263 2807 Fax (877) 263 2817



QUALITY, CREDIBILITY & ACCOUNTABILITY

ABOVE ALL

Our 70-year tradition of responsiveness to worldwide electrical market standards, continue to drive our customized solutions.

A world leader in High Voltage Cables, with state-of-the-art testing and production equipment. Manned by highly trained teams and headed by experienced engineers in this field.

By leveraging complementary capabilities, turnkey projects, we have formed several highly productive strategic alliances and are vigorously seeking additional joint ventures and cooperation agreements that will expand horizons by building on mutual synergies and strengths.

We at Synergy Cables recognize that our name commits us to higher standards of production, quality control and logistics. We are determined to deliver cost-effective responses that meet our customer's dynamic present and future demands. A proven address for tailored solutions, complying to our customers needs, budgets and missions.



WELDING & FLEXIBLE CABLES



Radaflex Sheathed
Welding Cable
Double Insulated
Extra Flexible
Based upon ICEA/NEMA

WELDING CABLES 600V

USE:

For secondary side connection of power sources for hand or automatic metal-arc welding and suitable for fixed protected installation in a variety of applications where flexible connection to power equipment is required.

In dry, wet and oil environment. Maximum permissible conductor temperature 90°C.

Rated voltage: For secondary voltage typical of welding equipment and for fixed protected laying up to 600 V.



SPECIFICATION:

H.C. bare soft copper high flexible conductors, separator made of specially developed dielectric compound and RADAFLEX TPE coloured outer sheath (see detailed properties of RADAFLEX TPE)

CURRENT RATING:

See technical information for RADAFLEX WELDING CABLES

PUT UP:

In coils or drums. Coils are individually wrapped in polyethylene tape.

| Catalog No. | Size of conductor | Approx. number of wires in conductor | Size of wire in conductor | Approx. overall diameter | Approx. shipping weight | Maximum conductor resistance at 20°C |
|-------------|-------------------|--------------------------------------|---------------------------|--------------------------|-------------------------|--------------------------------------|
| | AWG/MCM | | AWG | | | |
| F2067360-A | 6 | 406 | 32 | 0.38 | 65 | 0.423 |
| F2067350-A | 4 | 636 | 32 | 0.43 | 90 | 0.266 |
| F2067340-A | 3 | 826 | 32 | 0.46 | 114 | 0.213 |
| F2067330-A | 2 | 1000 | 32 | 0.50 | 132 | 0.169 |
| F2067320-A | 1 | 1254 | 32 | 0.58 | 175 | 0.134 |
| F2067380-A | 1/0 | 1580 | 32 | 0.62 | 210 | 0.106 |
| F2067390-A | 2/0 | 1994 | 32 | 0.67 | 255 | 0.084 |
| F2067400-A | 3/0 | 2508 | 32 | 0.72 | 310 | 0.067 |
| F2067410-A | 4/0 | 3154 | 32 | 0.77 | 380 | 0.053 |

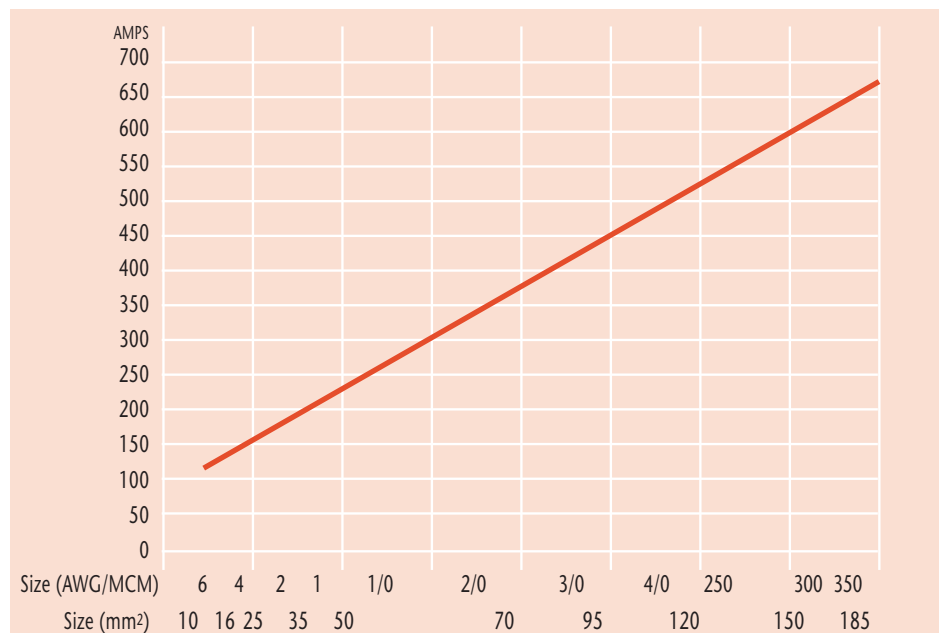
WELDING CABLES 600V

LOADING CAPACITIES

LOADING CURRENT VALUES

| AWG/MCM | Loading current in amps for the following duty cycles | | | | |
|---------|---|-----|-----|------|------|
| | 100% | 85% | 60% | 30% | 20% |
| 6 | 125 | 135 | 161 | 228 | 280 |
| 4 | 160 | 174 | 207 | 292 | 358 |
| 3 | 188 | 204 | 243 | 343 | 420 |
| 2 | 220 | 239 | 284 | 402 | 492 |
| 1 | 250 | 271 | 323 | 456 | 560 |
| 1/0 | 300 | 325 | 387 | 548 | 670 |
| 2/0 | 350 | 380 | 452 | 639 | 782 |
| 3/0 | 400 | 434 | 516 | 730 | 894 |
| 4/0 | 470 | 510 | 607 | 858 | 1050 |
| 250 | 520 | 564 | 671 | 949 | 1163 |
| 300 | 580 | 629 | 749 | 1059 | 1297 |
| 350 | 640 | 694 | 826 | 1168 | 1431 |
| 400 | 700 | 759 | 904 | 1278 | 1565 |

CURRENT RATING (100% duty cycle based on a 5 minute period)



Temperature Variation Rating Factors

| | | | | | | |
|--------------------|------|------|------|------|------|------|
| Ambient temp: (°C) | 20 | 25 | 30 | 35 | 40 | 45 |
| Rating factor | 1.04 | 1.00 | 0.96 | 0.91 | 0.87 | 0.82 |

Radaflex® Parallel
 Battery Cable
 Twin 300/500 Volts
 Based on
 VDE 0250.

TWIN CABLES

USE

For indoor and outdoor, in dry as well as wet locations on motorized vehicles, or battery powered equipment such as fork lifts, field conveyors etc. Also as high quality booster cables. The cable properties permit use within a wide temperature range from -25°C to +70°C.

SPECIFICATION

Extra flexible H.C. copper conductor, insulated in red and blue or black RADAFLEX® TPE and transparent PVC sheathed overall. (See detailed properties of RADAFLEX® TPE).

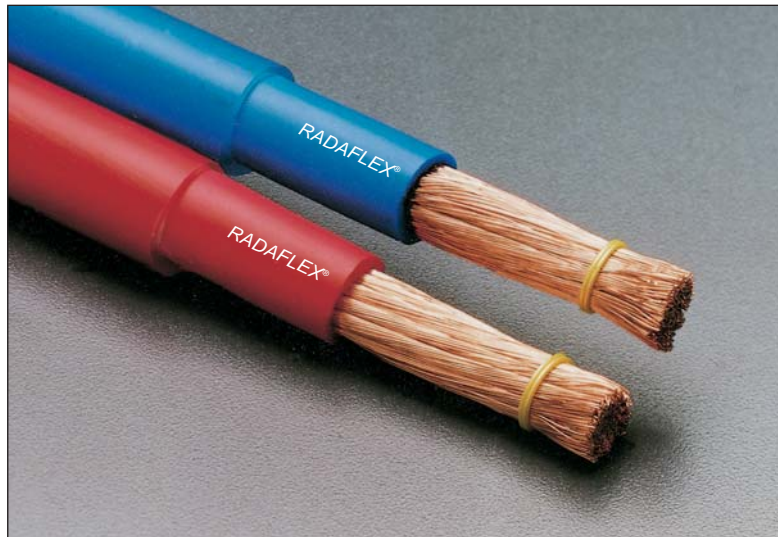
CURRENT RATING

The maximum current rating based on an ambient air temperature of 25°C and on the length of the duty cycle.

- For starting trials a maximum duration is 15 seconds and a pause of at least 1 minute.
- For welding process the duty cycle is 100% (the current flows for the whole 5 minutes)

STANDARD DELIVERY LENGTHS

On 500 ft. spool. Special lengths on drums upon request. Spools are individually wrapped in polyethylene tape.



| Catalog No | AWG | Approx. number of | Dia. of wires max | Insulation wall thickness | Approx. outer dia. | Approx. weight lb/1000ft | Start cycle Amp. | Welding cycle Amp. |
|-------------|-------|-------------------|-------------------|---------------------------|--------------------|-----------------------------|---------------------|-----------------------|
| | | | AWG | mils | mils | | | |
| F29740020-A | 2x10 | 168 | 32 | 31 | 245 x 530 | 108 | 148 | 53 |
| F29740120-A | 2x8 | 266 | 32 | 39 | 310 x 650 | 171 | 209 | 69 |
| F29740220-A | 2x6 | 424 | 32 | 39 | 355 x 750 | 245 | 287 | 94 |
| F29740320-A | 2x4 | 674 | 32 | 47 | 435 x 910 | 383 | 386 | 125 |
| F29740420-A | 2x3 | 849 | 32 | 47 | 475 x 990 | 464 | 434 | 140 |
| F29740520-A | 2x2 | 1071 | 32 | 47 | 515 x 1065 | 564 | 511 | 161 |
| F29740620-A | 2x1 | 1351 | 32 | 51 | 555 x 1145 | 695 | 580 | 191 |
| F29740720-A | 2x1/0 | 1704 | 32 | 55 | 610 x 1280 | 857 | 652 | 215 |
| F29740820-A | 2X2/0 | 2147 | 32 | 55 | 650 x 1380 | 1048 | 716 | 251 |

TECHNICAL INFORMATION

Radaflex is a special Thermoplastic Elastomer (TPE) developed by Synergy Cables as a sheathing material for flexible cables such as welding cables, flexible cords, conveyor and trailing cables - any application where outstanding toughness and durability are essential.

Cables sheathed with Radaflex compound have a number of advantages:

- Ability to withstand a wide range of service temperatures from -30 to +90°C.
- High resistance to wear and tear.
- Outstanding chemical resistance, oil resistance & improved weatherability.
- High flexibility.

Radaflex offers a competitive alternative to many general purpose and speciality rubbers such as Polychloropene, CSP, EPR, Polyurethane TPU, and others.

| R E Q U I R E M E N T S | | | | |
|-------------------------|---|----------------------------|------------------------------|----------|
| PARAMETERS | UNIT | CENELEC HD 22.6 1992 | ICEA/S-19- 81 NEMA WC3 | RADAFLEX |
| MECHANICAL PROPERTIES | As delivered. | | | |
| | Tensile strength, min. | N/mm ² | 10.0 | 12.5 |
| | Elongation at break, min. | % | 300.0 | 300.0 |
| | After air oven test at 100 °C for 336 hours | | | |
| | Tensile strength, percentage of value for unaged sample, min. | % | 70.0 | 90.0 |
| | Elongation at break, percentage of value for unages sample, min. | % | 60.0 | 90.0 |
| | After air oven test at 100°C for 168 hours | | | |
| | Tensile strength and elongation percentage of value for unaged sample, min. | % | | 50.0 |
| | | | | 95.0 |
| OIL RESISTANCE | After oil-immersion test at 100°C for 24 hours | | | |
| | Tensile strength, percentage of value for unaged sample, min. | % | 60.0 | 90.0 |
| | Elongation at break, percentage of value for unaged sample, min. | % | 60.0 | 70.0 |
| | After oil-immersion test at 121°C for 18 hours | | | |
| | Tensile strength, percentage of value for unaged sample, min. | % | | 60.0 |
| | Elongation at break, percentage of value for unaged sample, min. | % | | 60.0 |
| PERMISSIBLE OPE TEMP. | Maximum permissible | °C | 90.0 | 90.0 |
| | Minimum permissible | °C | | (-)30.0 |
| FLAME RETARDANCE | Flame not to proceed more than | mm | 425.0 | 100.0 |

Production Plant



Commissioned 1996
Enlarged: 2008
Covered: 600,000 sq.ft
Machinery: 3 Rotating CCVLines
Production Capacity 3,000,000'/month of
5-46kV medium voltage cables

Houston, TX

&

Walterboro, SC



2 Regional Distribution
Centers fully automated
with cutting and
paralleling capabilities

No Job Too Large



For Stock and Availability:

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Fax (877) 263 2817