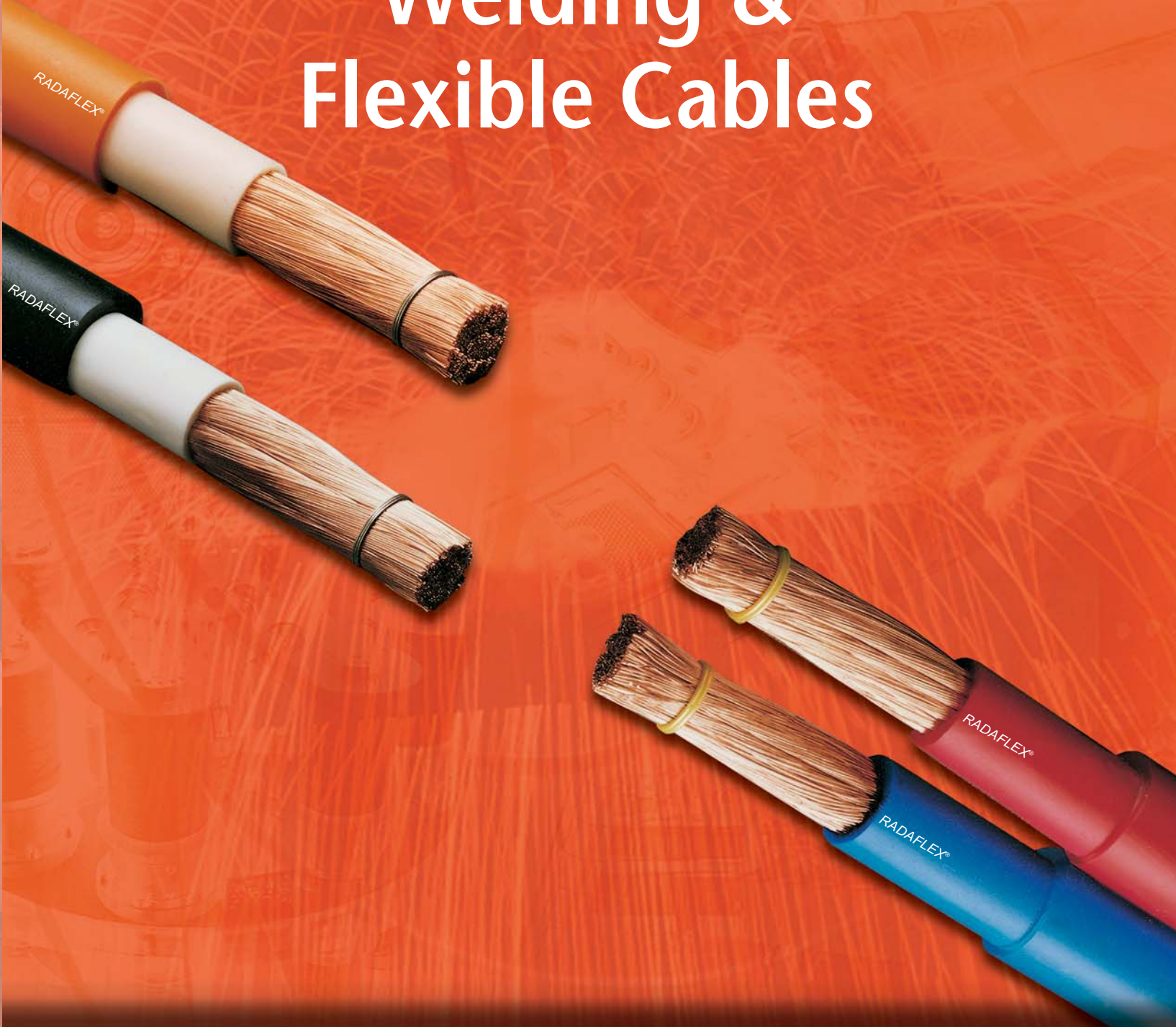


RADAFLEX®

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

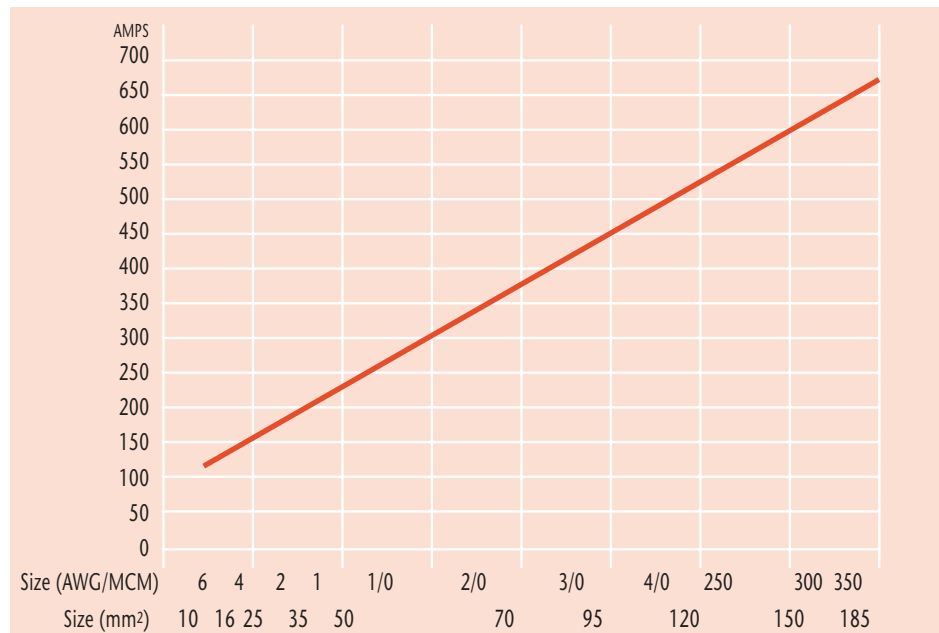
WELDING CABLES 600V

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).

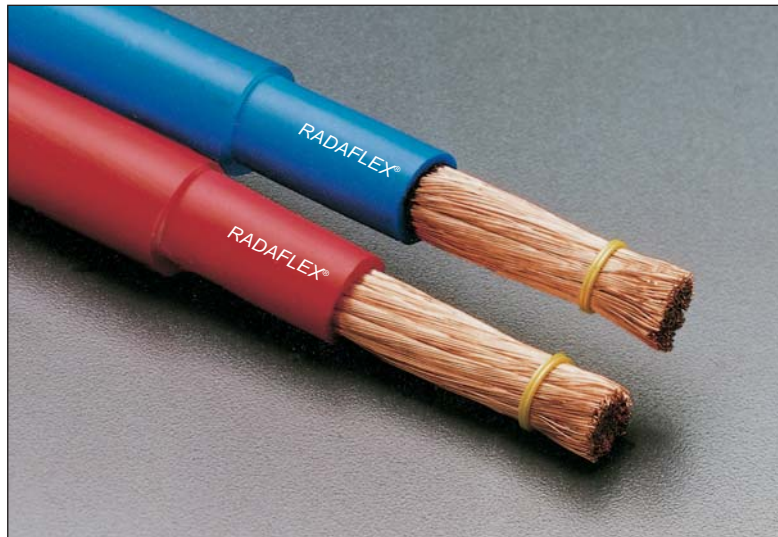
CURRENT RATING

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
OIL RESISTANCE	After air oven test at 100°C for 168 hours			
	Tensile strength and elongation percentage of value for unaged sample, min.	%		50.0
	After oil-immersion test at 100°C for 24 hours			
	Tensile strength, percentage of value for unaged sample, min.	%	60.0	90.0
OIL RESISTANCE	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:

info@radaflex.com
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