## **USA - BARE COPPER, 7-WIRE, CONCENTRIC-LAY**

### STRANDED BARE COPPER CONDUCTORS, 7-WIRE, CONCENTRIC-LAY ASTM Standards B1, B2, B3, B8

Catalog Number	Number and Wire	Area	Approx. Diameter	Appr. Weight	Resistance*
(ID-Size-Wires)	Sizes in Inches (mm)	(Circular Mils)	in Inches (mm)	LBS/Mft (kg/km)	Ohms per Mft
RW-4/0AWG-7W	7 x 0.1739 (4.42)	211,688	0.522 (13.26)	653.3 (973.1)	0.04997
RW-3/0AWG-7W	7 x 0.1548 (3.93)	167,741	0.464 (11.79)	518.0 (771.6)	0.06306
RW-2/0AWG-7W	7 x 0.1379 (3.50)	133,114	0.414 (10.52)	411.0 (612.2)	0.07945
RW-1/0AWG-7W	7 x 0.1228 (3.12)	105,558	0.368 (9.35)	326.0 (485.6)	0.10020
RW-1AWG-7W	7 x 0.1093 (2.78)	83,625	0.328 (8.33)	258.2 (384.6)	0.12650
RW-2AWG-7W	7 x 0.0974 (2.47)	66 407	0.292 (7.42)	204 9 (305 2)	0.15930
RW-3AWG-7W	7 x 0.0868 (2.21)	52,739	0.260 (6.60)	167.0 (248.8)	0.20060
RW-4AWG-7W	7 x 0.0772 (1.96)	41,719	0.232 (5.89)	128.9 (192.0)	0.25360
RW-6AWG-7W	7 x 0.0612 (1.56)	26,218	0.184 (4.67)	81.02 (120.7)	0.40350
RW-8AWG-7W	7 x 0.0486 (1.23)	16,533	0.146 (3.71)	50.98 (75.9)	0.63980

The above data is approximate and subject to normal manufacturing tolerances.

\* Approximate Resistance at 68°F (20°C) in Ohms per 1000 Feet (304.8m) UNCOATED

### **APPLICATION NOTES**

Stranded conductor is normally used in electrical applications where some degree of flexing is encountered either in installation or service. An application with a greater amount of expected service flexing should use a conductor with a larger number of wires and smaller individual wire diameter to make up a given conductor size as compared to a lesser flexing application.

### Some of the stranded conductor types are:

- CONCENTRIC: A conductor constructed with a central wire surrounded by one or more layers of helically laid wires. The direction of lay is reversed in successive layers and generally with an increase in length for successive layers.
- ASTM standards provide for five classes of concentric strand:

Class AA is the coarsest stranding, and Class D the finest. Concentric conductors are available only in the specific numbers of wires necessary to make up the construction in concentric layers. These numbers are 7, 19, 37, and 61. Larger wire counts are possible, but are not in normal use and are not covered by the standards.

PLEASE NOTE: Technical informations are nominal and subject to change without notice. Dimensions inches (mm).

Standard Put-Ups (Request for availability):					
14 AWG	2000 Feet Spool	4 AWG	200 Feet Spool	1 AWG	1000 Feet NRR
12 AWG	1000 Feet Spool	3 AWG	(upon Request)	1/0 AWG	500 or 1000 Feet NRR
10 AWG	1000 Feet Spool	2 AWG	125 Feet Spool	2/0 AWG	500 or 1000 Feet NRR
8 AWG	500 Feet Spool			3/0 AWG	500 or 1000 Feet NRR
6 AWG	315 Feet Spool			4/0 AWG	500 or 1000 Feet NRR

• Medium Hard and Hard Drawn Copper available upon special request.

- Optional put-ups may be available upon request.
- Long Length reels and coils available on all sizes listed above upon special request.
- Insulated wire (e.g. THHN, XHHW, USE etc.) available upon request.



# **USA - BARE COPPER, 19-WIRE, CONCENTRIC-LAY**

**STRANDED BARE COPPER CONDUCTORS, 19-WIRE, CONCENTRIC-LAY** ASTM Standards B1, B2, B3, B8, B787 (8GA - 4/0)

Catalog Number	Number and Wire	Area	Approx. Diameter	Appr. Weight	Resistance*
(ID-Size-Wires)	Sizes in Inches (mm)	(Circular Mils)	in Inches (mm)	LBS/Mft (kg/km)	Ohms per Mft
RW-350MCM-19W	19 x 0.1357 (3.45)	349,875	0.679 (17.25)	1080.0 (1608.7)	0.03023
RW-300MCM-19W	19 x 0.1257 (3.19)	300,209	0.629 (15.98)	926.9 (1380.6)	0.03523
RW-250MCM-19W	19 x 0.1147 (2.91)	249,966	0.574 (14.58)	771.9 (1149.8)	0.04231
RW-4/0AWG-19W	19 x 0.1055 (2.68)	211,475	0.528 (13.41)	653.3 (973.1)	0.05002
RW-3/0AWG-19W	19 x 0.0940 (2.39)	167,884	0.470 (11.94)	518.0 (771.6)	0.06301
RW-2/0AWG-19W	19 x 0.0837 (2.13)	133,108	0.419 (10.64)	411.0 (612.2)	0.07947
RW-1/0AWG-19W	19 x 0.0745 (1.89)	105,455	0.373 (9.47)	326.0 (485.6)	0.10030
RW-2AWG-19W	19 x 0.0591 (1.50)	66,360	0.292 (7.42)	204.9 (305.2)	0.1594
RW-3AWG-19W	19 x 0.0526 (1.34)	52,620	0.260 (6.60)	167.0 (248.8)	0.2010
RW-4AWG-19W	19 x 0.0469 (1.19)	41,740	0.232 (5.89)	128.9 (192.0)	0.2540
RW-6AWG-19W	19 x 0.0372 (0.95)	26,240	0.184 (4.67)	81.02 (120.7)	0.4030
RW-8AWG-19W	19 x 0.0295 (0.75)	18,510	0.146 (3.71)	50.98 (75.9)	0.6408

The above data is approximate and subject to normal manufacturing tolerances.

\* Approximate Resistance at 68°F (20°C) in Ohms per 1000 Feet (304.8m) UNCOATED

## **APPLICATION NOTES**

Stranded conductor is normally used in electrical applications where some degree of flexing is encountered either in installation or service. An application with a greater amount of expected service flexing should use a conductor with a larger number of wires and smaller individual wire diameter to make up a given conductor size as compared to a lesser flexing application.

### Some of the stranded conductor types are:

- CONCENTRIC: A conductor constructed with a central wire surrounded by one or more layers of helically laid wires.
- ASTM standards provide for five classes of concentric strand:

Class AA is the coarsest stranding, and Class D the finest. Concentric conductors are available only in the specific numbers of wires necessary to make up the construction in concentric layers. These numbers are 7, 19, 37, and 61. Larger wire counts are possible, but are not in normal use and are not covered by the standards.

PLEASE NOTE: Technical informations are nominal and subject to change without notice. Dimensions inches (mm).

Standard Pu	ut-Ups (Request for	availability):		2/0 AWG	500 or 1000 Feet NRR
14 AWG	2000 Feet Spool	4 AWG	200 Feet Spool	3/0 AWG	500 or 1000 Feet NRR
12 AWG	1000 Feet Spool	3 AWG	(upon Request)	4/0 AWG	500 or 1000 Feet NRR
10 AWG	1000 Feet Spool	2 AWG	125 Feet Spool	250 MCM	1000 Feet NRR
8 AWG	500 Feet Spool	1 AWG	1000 Feet NRR	350 MCM	1000 Feet NRR
6 AWG	315 Feet Spool	1/0 AWG	500 or 1000 Feet NRR	500 MCM	1000 Feet NRR

• Medium Hard and Hard Drawn Copper available upon special request.

• Optional put-ups may be available upon request.

• Long Length reels and coils available on all sizes listed above upon special request.

• Insulated wire (e.g. THHN, XHHW, USE etc.) available upon request.



## **USA - BARE COPPER, 37-WIRE, CONCENTRIC-LAY**

### STRANDED BARE COPPER CONDUCTORS, 37-WIRE, CONCENTRIC-LAY ASTM Standards B1, B2, B3, B8

Catalog Number (ID-Size-Wires)	Number and Wire Sizes in Inches (mm)	Area (Circular Mils)	Approx. Diameter in Inches (mm)	Appr. Weight LBS/Mft (kg/km)	Resistance* Ohms per Mft
RW-500MCM-37W	37 x 0.1162 (2.95)	500,000	0.813 (20.65)	1544.0 (2299.8)	0.02116
RW-400MCM-37W	37 x 0.1040 (2.64)	400,000	0.720 (18.29)	1235.2 (1839.8)	0.02644
RW-350MCM-37W	37 x 0.0973 (2.47)	350,000	0.679 (17.25)	1080.0 (1608.7)	0.03023
RW-300MCM-37W	37 x 0.0900 (2.29)	300,000	0.629 (15.98)	926.9 (1380.6)	0.03523
RW-250MCM-37W	37 x 0.0822 (2.09)	250,000	0.574 (14.58)	771.9 (1149.8)	0.04231
RW-4/0AWG-37W	37 x 0.0756 (1.92)	211,600	0.528 (13.41)	653.3 (973.1)	0.05002

The above data is approximate and subject to normal manufacturing tolerances.

\* Approximate Resistance at 68°F (20°C) in Ohms per 1000 Feet (304.8m) UNCOATED

### **APPLICATION NOTES**

Stranded conductor is normally used in electrical applications where some degree of flexing is encountered either in installation or service. An application with a greater amount of expected service flexing should use a conductor with a larger number of wires and smaller individual wire diameter to make up a given conductor size as compared to a lesser flexing application.

### Some of the stranded conductor types are:

- CONCENTRIC: A conductor constructed with a central wire surrounded by one or more layers of helically laid wires. The direction of lay is reversed in successive layers and generally with an increase in length for successive layers.
- ASTM standards provide for five classes of concentric strand:

Class AA is the coarsest stranding, and Class D the finest. Concentric conductors are available only in the specific numbers of wires necessary to make up the construction in concentric layers. These numbers are 7, 19, 37, and 61. Larger wire counts are possible, but are not in normal use and are not covered by the standards.

PLEASE NOTE: Technical informations are nominal and subject to change without notice. Dimensions inches (mm).

Standard Put-Ups(Request for availability):250 MCM1000 Feet NRR350 MCM1000 Feet NRR500 MCM1000 Feet NRR	<i>Special Order:</i> 750 MCM 1000 MCM	1000 Feet NRR (61-Wire), 2316 LBS/Mft 1000 Feet NRR (61-Wire), 3088 LBS/Mft
500 MCM 1000 Feet NRR		

• Medium Hard and Hard Drawn Copper available upon special request.

- Optional put-ups may be available upon request.
- Long Length reels and coils available on all sizes listed above upon special request.
- Insulated wire (e.g. THHN, XHHW, USE etc.) available upon request.



## **USA - BARE COPPER, SOLID, ROUND**

#### SOLID BARE COPPER CONDUCTORS, ROUND ASTM Standards B1, B2, B3, B258

Catalog Number	Approx. Diameter	Area	Appr. Weight	Resistance*
(ID-Size-Wires)	in Inches (mm)	(Circular Mils)	LBS/Mft (kg/km)	Ohms per Mft
RW-2AWG-SOL	0.2576 (6.54)	66,360	200.90 (299.2)	0.15630
RW-4AWG-SOL	0.2043 (5.19)	41,740	126.30 (188.1)	0.24850
RW-6AWG-SOL	0.1620 (4.12)	26,240	79.44 (118.3)	0.39520
RW-8AWG-SOL	0.1285 (3.26)	16,510	49.98 (74.5)	0.62810
RW-10AWG-SOL	0.1019 (2.59)	10,380	31.43 (46.8)	0.99910
RW-12AWG-SOL	0.0808 (2.05)	6,530	19.80 (29.5)	1.59000
RW-14AWG-SOL	0.0641 (1.63)	4,110	12.40 (18.5)	2.52000

The above data is approximate and subject to normal manufacturing tolerances.

\* Approximate Resistance at 68°F (20°C) in Ohms per 1000 Feet (304.8m) SOFT (ANNEALED)

### **APPLICATION NOTES**

Some typical applications of bare round copper wire are for grounding wires, conductors for building wire, telecommunications cables and for subsequent fabrication into metallic coated and stranded conductors, redrawing to smaller sizes and a multitude of mechanical forming operations.

PLEASE NOTE: Technical informations are nominal and subject to change without notice. Dimensions inches (mm).

Standard Pu	It-Ups (Request for av	/ailability):	
14 AWG	2000 Feet Spool	6 AWG	315 Feet Spool
12 AWG	1000 Feet Spool	4 AWG	200 Feet Spool
10 AWG	1000 Feet Spool	2 AWG	125 Feet Spool
8 AWG	500 Feet Spool		

• Medium Hard and Hard Drawn Copper available upon special request.

• Optional put-ups may be available upon request.

- Long Length reels and coils available on all sizes listed above upon special request.
- Insulated wire (e.g. THHN, XHHW, USE etc.) available upon request.

