

## DESIGN AIDS 2

CONDUCTOR		INSULATED WIRE TEMPERATURE RATING (AMPS)							
AWG	Diameter	50°C	80°C	90°C	105°C	125°C	150°C	200°C	250°C
30	0.0124	1.3	2.0	2.0	3.0	3.5	4.3	4.8	5.9
28	0.0146	2.0	3.0	3.0	4.0	4.5	5.5	6.3	8.0
26	0.0188	3.0	4.0	4.0	5.0	6.0	7.0	9.0	11
24	0.0235	4.5	5.5	5.5	7.0	8.5	10	12	14
22	0.0296	6.0	7.5	7.5	10	11	13	16	20
20	0.0376	8.0	10	10	13	14	18	22	27
18	0.0403	11	14	14	18	19	25	30	36
16	0.0531	16	19	19	24	26	34	38	45
14	0.0667	22	27	27	33	37	45	50	57
12	0.0856	30	36	36	45	50	60	65	75
10	0.1080	40	47	47	58	65	80	90	100
8	0.1610	60	65	65	80	90	105	125	145
6	0.2020	80	95	95	110	125	145	165	205
4	0.2550	105	125	125	155	170	190	220	270
2	0.3310	135	160	160	200	220	240	280	350
1	0.3670	165	195	195	245	270	290	340	430
1/0	0.4160	195	230	230	290	320	340	400	510
2/0	0.4690	225	260	260	330	370	390	465	590

Chart approximates the current carrying capacity of a single 19-strand copper conductor in free air at 30° ambient temperature.

STANDARD FREQUENCY DESIGNATIONS	
HF	3 MHz - 30 MHz
VHF	30 MHz - 300 MHz
UHF	300 MHz - 1 GHz
L	1 GHz - 2 GHz
S	2 GHz - 4 GHz
C	4 GHz - 8 GHz
X	8 GHz - 12 GHz
Ku	12 GHz - 18 GHz
K	18 GHz - 27 GHz
Ka	27 GHz - 40 GHz
mm	40 GHz - 100 GHz

RECOMMENDED TORQUE VALUES			
Connector Type	Torque Nominal Value (in-lbs)	Connector Type	Torque Nominal Value (in-lbs)
1.85 mm	7	N	23
SMA	9	SC	23
2.4 mm	9	HN	24
2.9 mm	9	MEIA™-875	70
3.5 mm	9	LC/LT	75
7 mm	9	MEIA™-1625	165
ATNC	23	7-16	246
TNC	23		

TRU Corporation